City of Louisville
COLORADO • SINCE 1878

City Council

Agenda

Tuesday, October 21, 2025
Council Chambers
749 Main Street
6:00 PM

Members of the public are welcome to attend and give comments remotely; however, the in-person meeting may continue even if technology issues prevent remote participation.

- *You can call in to +1 719 359 4580 or 877 853 5247 (toll free)*
  Webinar ID #876 9127 0986.
- *You can log in via your computer. Please visit the City's website here to link to the meeting: www.louisvilleco.gov/council*

The Council will accommodate public comments during the meeting. Anyone may also email comments to the Council prior to the meeting at Council@LouisvilleCO.gov.

1. CALL TO ORDER & ROLL CALL

2. PLEDGE OF ALLEGIANCE

3. APPROVAL OF AGENDA

4. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA AND ITEMS ON THE CONSENT AGENDA

Public comments are limited to 3 minutes per speaker. When several people wish to speak on the same position on a given item, Council requests they select a spokesperson to state that position.

5. CONSENT AGENDA

The following items on the City Council Agenda are considered routine by the City Manager and shall be approved, adopted, accepted, etc., by motion of the City Council and voice vote unless the Mayor or a City Council person specifically requests an item be considered under "Regular Business." In such an event the item shall be removed from the "Consent Agenda" and Council action taken separately on said item in the order appearing on the Agenda. Those items so approved under the heading "Consent Agenda" will appear in the Council Minutes in their proper order.

A. Approval of Minutes: January 6, 2026; January 14, 2025; February 18, 2025; March 18, 2025

B. Resolution No. 81, Series 2025 – A Resolution Approving a Master Services Agreement with Eide Bailly LLP for Audit Services

C. Resolution No. 82, Series 2025 – A Resolution Approving an Intergovernmental Agreement with the Colorado Department of Transportation Concerning a Grant in Connection with the City's CO42 Bike/Pedestrian Underpass at South Street Project

D. CO42 Design and Right-of-Way Project

i. Resolution No. 83, Series 2025 – A Resolution Approving a Second Amendment to the Intergovernmental Agreement with CDOT Concerning a Grant in Connection with the City's State Highway 42 Multimodal Improvements Project

ii. Resolution No. 85, Series 2025 – A Resolution Approving a Second Addendum to the Agreement with Kimley-Horn & Associates for the CO42 Project

iii. Resolution No. 86, Series 2025 – A Resolution Approving an Intergovernmental Agreement with the City of Lafayette for Sharing of Costs of 30% Design Plans for Improvements to State Highway CO-42 from Paschal Drive to Baseline Road

6. COUNCIL INFORMATIONAL COMMENTS AND COMMITTEE REPORTS

7. CITY MANAGER'S REPORT

8. REGULAR BUSINESS

A. PRESENTATION – ROCKY MOUNTAIN METROPOLITAN AIRPORT (RMMA)

- Introduction
- Presentation
- Council Questions
- Public Comments (Please limit to three minutes each)
- Council Discussion

B. ORDINANCE NO. 1908, SERIES 2025 – AN ORDINANCE REZONING LOT 1, BLOCK 3, JEFFERSON PLACE SUBDIVISION FROM RESIDENTIAL MEDIUM DENSITY (R-M) TO COMMUNITY COMMERCIAL (C-C) ZONE DISTRICT – 2ND READING, PUBLIC HEARING (advertised City of Louisville website 10/08/2025)

- Mayor Opens the Public Hearing
- Staff Presentation
- Applicant Presentation (if applicable)
- Public Comments (Please limit to three minutes each)
- Council Questions
- Public Comments (Please limit to three minutes each)
- Council Discussion
- Mayor Closes the Public Hearing
- Action

C. ORDINANCE NO. 1909, SERIES 2025 – AN ORDINANCE AUTHORIZING THE SALE AND CONVEYANCE OF THE CITY-OWNED PROPERTY AT 1016 MAIN STREET – 1ST READING, SET PUBLIC HEARING

- Introduction
- Staff Presentation
- Action-Set Public Hearing

D. DISCUSSION / DIRECTION – CITY MANAGER'S PROPOSED 2026 OPERATING AND CAPITAL BUDGET, 2025-2030 CAPITAL IMPROVEMENT PLAN AND 2025-2030 LONG-TERM FINANCIAL PLAN – PUBLIC HEARING (advertised *Boulder Daily Camera* 10/12/25)

- Mayor Opens the Public Hearing
- Staff Presentation
- Public Comments (Please limit to three minutes each)
- Council Questions & Discussion
- Mayor Closes the Public Hearing
- Action

E. RESOLUTION NO. 84, SERIES 2025 – A RESOLUTION AMENDING THE 2025 BUDGET BY AMENDING APPROPRIATIONS IN THE GENERAL FUND, PARKING IMPROVEMENT FUND, HISTORIC PRESERVATION FUND, CAPITAL PROJECTS FUND, WATER UTILITY FUND, WASTEWATER UTILITY FUND, STORM WATER UTILITY FUND AND GOLF COURSE FUND AND ADJUSTING BUDGETED REVENUE IN THE GENERAL FUND, PARKING IMPROVEMENT FUND AND GOLF COURSE FUND (advertised *Boulder Daily Camera* 10/12/2025)

- Mayor Opens Public Hearing
- Staff Presentation
- Public Comments (Please limit to three minutes each)
- Council Questions & Comments
- Mayor Closes Public Hearing
- Action

F. AVISTA ADVENTIST HOSPITAL

i. ORDINANCE NO. 1904, SERIES 2025 – AN ORDINANCE APPROVING THE CONOCOPHILLIPS CAMPUS GDP AMENDMENT NO. 1 – 2ND READING, PUBLIC HEARING (advertised City of Louisville website 10/08/2025)

ii. ORDINANCE NO. 1905, SERIES 2025 – AN ORDINANCE APPROVING THE AVISTA ADVENTIST HOSPITAL GDP AMENDMENT NO. 2 – 2ND READING, PUBLIC HEARING (advertised City of Louisville website 10/08/2025)

- Mayor Opens the Public Hearing
- Staff Presentation
- Applicant Presentation (if applicable)
- Public Comments (Please limit to three minutes each)
- Council Questions
- Public Comments (Please limit to three minutes each)
- Council Discussion
- Mayor Closes the Public Hearing
- Action

G. CONCEPT PLAN REVIEW – AN AMENDMENT TO THE CONOCOPHILLIPS GENERAL DEVELOPMENT PLAN

- Staff Presentation
- Applicant Presentation
- Public Comments (Please limit to three minutes each)
- Council Questions & Comments

9. CITY ATTORNEY'S REPORT

10. UPCOMING AGENDA ITEMS AND IDENTIFICATION OF FUTURE AGENDA ITEMS

11. ADJOURN

UPCOMING AGENDA ITEMS
11/03/2025 MEETING

This list is not inclusive; items are subject to change; additional items may be added.

- Natural Medicine Amendment – 2nd Reading
- Adoption of 2026 Budget & Mill Levy Certification
- Community Event Sponsorships – January 26 to June 26
- Ordinance to sell 1016 Main Street – 2nd Reading
- 2024 Building Code Adoption – 2nd Reading
- Golf Course Club House Improvement Contract
- BAP Amendment – TGR Group
- Fee, Rate and Charges Update
- LRC Annual Budget for 2026
- Generator Replacement

Citizen Information

If you wish to speak at the City Council meeting in person, please fill out a sign-up card and present it to the City Clerk at the meeting. If you are attending remotely, please use the "raise hand" icon to show you wish to speak in public comments.

Persons planning to attend the meeting who need sign language interpretation, translation services, assisted listening systems, Braille, taped material, or special transportation, should contact the City Clerk's Office (303.335.4574) or ClerksOffice@LouisvilleCO.gov. A forty-eight-hour notice is requested.

Si requiere una copia en español de esta publicación o necesita un intérprete durante la reunión del Consejo, por favor llame a la Ciudad al 303.335.4574 o email ClerksOffice@LouisvilleCO.gov.

City of Louisville
COLORADO • SINCE 1878

City Council

Meeting Minutes

January 6, 2025
City Hall, Council Chambers
749 Main Street
5:00 PM

Call to Order – Mayor Leh called the meeting to order at 5:02 p.m. Roll Call was taken, and the following members were present:

City Council:	***Mayor Chris Leh***
	Mayor Pro Tem Caleb Dickinson (joined remotely at 6pm)
	Councilmember Tim Bierman
	Councilmember Deborah Fahey
	Councilmember Barbara Hamlington
	Councilmember Dietrich Hoefner
	Councilmember Judi Kern (arrived at 5:06pm)
Staff Present:	***Samma Fox, Interim City Manager***
	Meredyth Muth, Interim Deputy City Manager
	Kathleen Kelly, City Attorney
	Genny Kline, Interim City Clerk

EXECUTIVE SESSION - RECRUITMENT / PERSONNEL MATTER

Mayor Leh introduced the executive session.

City Attorney Kelly stated she and the mayor are requesting the executive session concerning presentation by the Council committee for the City Manager recruitment of application materials submitted by the applicants, none of whom are finalists.

Interim City Clerk Kline read Section 2.90.050 of the Louisville Municipal Code.

City Attorney Kelly stated the authority for the executive session, Sections 5-2(a) and 5-2(b) of the Home Rule Charter authorizes an executive session for the purpose of the Mayor addressing the City Council on personnel matters for informational purposes.

State law, specifically the Colorado Open Records Act, provides at C.R.S. Section 24-72-204(3)(a)(XI) that records submitted by the City Manager applicants who are not finalists are confidential and not subject to disclosure. An executive session for this purpose is also authorized by the Colorado Open Meetings Law, Sections 24-6-402(4)(f) and (g) of the Colorado Revised Statutes, as it is a personnel matter that

DRAFT

involves consideration of document protected by the mandatory nondisclosure provisions of the Colorado Open Records Act.

Mayor Leh moved to enter executive session for the purpose of discussing recruitment / a personnel matter. The session will include all members of the City Council, Recruiter Valerie Phillips of Bob Murray and Associates, City Attorney Kathleen Kelly, Interim City Manager Samma Fox, and Interim Deputy City Manager Meredyth Muth. Councilmember Fahey seconded the motion.

Aye: Ley, Dickinson, Cooperman, Fahey, Kern, Hamlington, Hoefner
Nay: None
Absent: None

Council adjourned into executive session at 5:07 pm.

The Council reconvened at 8:22 pm.

REPORT – DISCUSSION / DIRECTION / ACTION – RECRUITMENT/PERSONNEL MATTER

City Attorney Kelly reported that the executive session was held to review records of City Manager applicants, none of whom are finalists. To maintain confidentiality, applicants were assigned numbers, and Council should refer only to those numbers when deciding who remains in the pool.

Mayor Leh noted that Council has been reviewing six candidates and will determine how many to retain in the pool. He suggested keeping four to allow flexibility in case one withdraws.

Councilmember Hoefner selected candidates 1, 2, 4 and 6.

Councilmember Kern agreed and selected 1, 2, 4 and 6.

Councilmember Fahey selected 1, 2, 4 and 6.

Councilmember Hamlington thanked her fellow councilmembers, staff and the consultant for their work and agreed with 1, 2, 4, and 6.

Councilmember Cooperman expressed appreciation for interviewing four candidates and indicated his preference to move forward with candidates 2, 4, and 6, with candidate 1 as a backup.

Mayor Pro Tem Dickinson agreed on candidates 2, 4, and 6 and supported selecting an alternate during the hiring process. While he preferred candidate 5 as the alternate, he was comfortable with candidate 1 based on the consensus.

DRAFT

Mayor Leh noted the strong candidate pool and thanked the recruiter for assistance identifying candidates and first round of interviews. Based on Council feedback, candidates 1, 2, 4, and 6 will remain in the applicant pool, and Recruiter Valerie will follow up to confirm their availability for interviews.

ADJOURN

Members adjourned at 8:34 pm.

_____
Christopher M. Leh, Mayor

_____
Genny Kline, City Clerk

DRAFT

City of Louisville
COLORADO • SINCE 1878

City Council

Special Meeting Minutes

January 14, 2025
Library Meeting Room
951 Spruce Street
5:00 PM

Mayor Pro Tem Dickinson called the meeting to order at 5:02 p.m. Roll Call was taken, and the following members were present:

City Council:	***Mayor Chris Leh (arrived at 5:10)***
	Mayor Pro Tem Caleb Dickinson
	Councilmember Josh Cooperman
	Councilmember Deborah Fahey
	Councilmember Barbara Hamlington
	Councilmember Dietrich Hoefner
	Councilmember Judi Kern (arrived at 5:10)
Staff Present:	***Samma Fox, Interim City Manager***
	Kathleen Kelly, City Attorney
	Kurt Kowar, Public Works Director
	Rob Zuccaro, Community Development Director
	Ryder Bailey, Finance Director
	Adam Blackmore, Parks, Recreation, & Open Space Director
	Sharon Nemechek, Cultural Services Director
	Rafael Gutierrez, Police Chief
	Paulina Bennett, Information Technology Director
	Meredyth Muth, City Clerk

2025 CITY COUNCIL WORK PLAN

Mayor Pro Tem Dickinson introduced the item.

Public Comment:

- Ann Brennen
- Larry Donner
- Michael Reis

Mayor Leh thanked attendees and staff, noted the evolving process and updated form.

DRAFT

Interim City Manager Fox presented the staff presentation.

Council Discussion

Council agreed that the 2025 Work Plan should focus on big-picture goals, not everyday services; and reflect what residents care about, like economic growth, safety, housing, and core services. These priorities will be shaped by values like equity and sustainability. Council asked the Interim City Manager to carry out the plan and emphasized that housing should include all types, not just affordable. They also want to make sure the plan is clear, doable, and tied to the budget and community feedback.

Council recessed for dinner.

Council directed staff to move forward with the 2025 Work Plan by broadening the housing priority to include all types, reinforcing equity and sustainability across all areas, and refining the structure and descriptions under each priority. They agreed not to add or remove priorities but asked for clearer alignment with community values and guiding documents. Specific actions include creating a historic preservation fund and commission, revisiting downtown street closure planning, and expanding the scope of transportation and economic vitality efforts.

ADJOURN

Members adjourned at 8:37 pm.

_____
Christopher M. Leh, Mayor

_____
Genny Kline, Interim City Clerk

DRAFT

City of Louisville
COLORADO • SINCE 1878

City Council

Meeting Minutes

February 18, 2025
City Hall, Council Chambers
749 Main Street
6:00 PM

Mayor Leh called the meeting to order at 6:00 p.m. Roll Call was taken, and the following members were present:

City Council:	***Mayor Chris Leh***
	Mayor Pro Tem Caleb Dickinson
	Councilmember Josh Cooperman
	Councilmember Deborah Fahey
	Councilmember Barbara Hamlington
	Councilmember Dietrich Hoefner
	Councilmember Judi Kern
Staff Present:	***Samma Fox, Interim City Manager***
	Meredyth Muth, Interim Deputy City Manager
	Kathleen Kelly, City Attorney
	Ryder Bailey, Finance Director
	Sharon Nemechek, Cultural Services Director
	Kristen Bodine, Library Youth Services Supervisor
	Peggy Norris, Library Adult Services Manager
	Kurt Kowar, Public Works Director

APPROVAL OF AGENDA (00:1:20)

Councilmember Fahey moved to approve the agenda; seconded by Councilmember Kern.

Aye: Ley, Dickinson, Cooperman, Fahey, Kern, Hamlington, Hoefner
Nay: None
Absent: None

DRAFT

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA AND ON THE CONSENT AGENDA (00:1:30)

- Christian Dino - Resigned from the Building Code Board of Appeals
- Chris Allred - Rocky Mountain Greenway Trail at Rocky Flats.
- Claire McLean – Rocky Flats
- Monica Ramunda - Natural medicine restrictions

APPROVAL OF THE CONSENT AGENDA (00:16:29)

A. Approval of Bills
B. Approval of Resolution No. 5, Series 2025 – A Resolution Approving an Agreement with Ready to Work, LLC for General Landscape and Maintenance Services
C. Approval of Resolution No. 6, Series 2025 – A Resolution Approving a Structure Lease Agreement for Wireless Equipment at the Louisville Recreation and Senior Center
D. Approval of 2025 On Call Geographic Information System and Asset Management System Support Services Contract with Invision GIS, LLC
E. Approval of Resolution No. 7, Series 2025 – A Resolution Approving the BOCC Intergovernmental Agreement Amendment with Boulder County for 2025 Co-Responder Services
F. Approval of Letter of Engagement with SGR, LLC for Safe to Report Process
G. Approval of Second Amendment to Employment Agreement for Interim City Manager

Councilmember Fahey moved to approve the consent agenda; seconded by Councilmember Hamlington.

Aye: Ley, Dickinson, Cooperman, Fahey, Kern, Hamlington, Hoefner
Nay: None
Absent: None

COUNCIL INFORMATIONAL COMMENTS ON PERTINENT ITEMS NOT ON THE AGENDA (00:16:35)

Mayor Leh stated the EVC meeting was rescheduled for Friday, February 21 at 1:30 pm. He provided an update on the passenger rail service, and the governor is attempting to authorize the use of the FasTrack Tax and potentially route it to three stations, one being Louisville.

CITY MANAGER'S REPORT (00:19:15)

DRAFT

Interim City Manager Fox stated the water team was recently highlighted in an AP article on water and fire systems. The Skate with a Cop program was successful; and the World Music Art Series at the Louisville Art Center is on Friday at 7:00 p.m.

REGULAR BUSINESS

DISCUSSION / DIRECTION - ROCKY MOUNTAIN METROPOLITAN AIRPORT TASK FORCE UPDATE (00:19:54)

Mayor Leh introduced the item.

City Attorney Kelly informed Council that there would be no formal presentation and noted that the Council Communication included in the packet provides an overview of the task force meetings and outlines topics for discussion.

Council Discussion
Council discussed engaging in special counsel; concerns regarding lead, noise levels, and obtaining flight data.

City Attorney Kelly provided special council information, who is familiar with airports, Margaret Martin with the Thompson Burton Firm in Nashville.

Council Comments

Public Comments:

- Sherry Sommer - Recommended Brie Layman of the Boulder Quiet Skies Group
- Chris Allred – Westminster and Broomfield community concerned with contamination issues

Council Comments
The analysis should cover what the City is able and unable to do, given that it does not have authority over the airport, concerns about lead, Part 150 Study on noise levels, and obtaining flight data. The goal is to create a public meeting and a public document. The consensus was to move forward with the proposal to obtain special counsel.

PURCHASING POLICY UPDATES (00:45:57)

RESOLUTION NO. 8 SERIES 2025 – A RESOLUTION AMENDING THE CITY OF LOUISVILLE PURCHASING POLICIES

DRAFT

ORDINANCE NO. 1890, SERIES 2025 – AN ORDINANCE AMENDING CERTAIN SECTIONS OF CHAPTER 3.08 OF THE LOUISVILLE MUNICIPAL CODE PERTAINING TO THE PROCUREMENT OF GOODS, SERVICES AND CONTRACTS FOR PUBLIC WORKS – 2ND READING, PUBLIC HEARING (advertised City of Louisville Website 02/07/25)

Mayor Leh introduced the item by title and opened the public hearing.

Finance Director Bailey presented the staff report.

Council Questions

Public Comments – None

Council Comments
Council requested updates to the local purchasing preference to ensure vendors are licensed, in good standing with sales tax, include a formalized sustainability preference, and are reviewed more regularly.

Public Comments – None

Councilmember Fahey moved to approve Resolution No. 8; seconded by Mayor Pro Tem Dickinson.

Aye: Ley, Dickinson, Cooperman, Fahey, Kern, Hamlington, Hoefner
Nay: None
Absent: None

Councilmember Fahey moved to approve Ordinance No.1890; seconded by Councilmember Kern.

Aye: Ley, Dickinson, Cooperman, Fahey, Kern, Hamlington, Hoefner
Nay: None
Absent: None

AWARD CONTRACT TO BLUE SPRUCE CONSTRUCTION SERVICES FOR PUBLIC LIBRARY INTERIOR IMPROVEMENTS (01:01:88)

Mayor Leh introduced the item and asked for a staff presentation.

Youth Services Supervisor Bodine provided the staff report.

Council Questions

DRAFT

Council and staff discussed the use of impact fees for the library project, including timing, staff impacts, funding sources, and scope adjustments. Questions were raised about VOC materials and ventilation, the role of the Foundation, potential use of Capital Funds, and trade-offs involved. Staff clarified that impact fees have no minimum balance requirement but must be spent within a set timeframe

City Attorney Kelly stated the impact fee funds are required to be spent within six years.

Public Comments – None.

Council Comments

Mayor Pro Tem Dickinson moved to award the contract as presented; seconded by Councilmember Fahey.

Aye: Ley, Dickinson, Cooperman, Fahey, Kern, Hamlington, Hoefner
Nay: None
Absent: None

EXECUTIVE SESSION – PENDING LITIGATION (01:20:26)

Mayor Leh introduced the executive session concerning pending litigation regarding obligations under an agreement.

City Attorney Kelly stated she is requesting the executive session pursuant to Sections 5-2(d) of the City's Home Rule Charter and C.R.S. § 24-6-402(4)(b) for the purpose of legal advice on specific legal questions concerning pending litigation regarding a city contract.

Interim Deputy City Manager read Section 2.90.050 of the Louisville Municipal Code.

City Attorney Kelly read Section 5-2(d) of the Home Rule Charter authorizing an executive session, and authorized by the Open Meetings Law, Section 24-6-402(4)(b) of the Colorado Revised Statutes. The request involves discussion of potential litigation involving a City contract.

Mayor Leh moved to go into executive session for the purpose of discussing pending litigation and that the executive session includes all members of the City Council, Interim City Manager Samma Fox, Interim Deputy City Manager Meredyth Muth, Finance Director Ryder Bailey, and City Attorney Kathleen Kelly. Councilmember Kern seconded the motion.

Aye: Ley, Dickinson, Cooperman, Fahey, Kern, Hamlington, Hoefner
Nay: None
Absent: None

DRAFT

Council adjourned into executive session at 7:24 pm.

The Council reconvened at 8:13 pm.

REPORT – DISCUSSION / DIRECTION / ACTION – PENDING LITIGATION (02:13:44)

City Attorney Kelly reported the executive session was for the purpose of discussion of pending litigation and no further action is requested.

CITY ATTORNEY'S REPORT (2:13:04) - None

COUNCIL COMMENTS, COMMITTEE REPORTS, AND IDENTIFICATION OF FUTURE AGENDA ITEMS (02:13:17)

Councilmember Fahey suggested Council schedule a discussion of the Rocky Mountain Greenway trail on March 4. The consensus was, given the current capacity, the item should not be prioritized ahead of other items already in progress.

Councilmember Cooperman asked to revisit Sec. 8.08 regarding weeds and remove any species native to the region. Staff will share additional information with Council to help determine whether the item should be placed on a future agenda.

ADJOURN (02:25:31)

Mayor Leh moved to adjourn the meeting; seconded by Councilmember Hamlington.

Aye: Ley, Cooperman, Fahey, Kern, Hamlington, Hoefner
Nay: Dickinson
Absent: None

Members adjourned at 8:25 pm.

_____
Christopher M. Leh, Mayor

_____
Genny Kline, City Clerk

DRAFT

City of Louisville
COLORADO • SINCE 1878

City Council

Meeting Minutes

Tuesday, March 18, 2024
City Hall, Council Chambers
749 Main Street
6:00 PM

Mayor Leh called the meeting to order at 6:00 p.m. Roll Call was taken, and the following members were present:

City Council:	***Mayor Chris Leh***
	Mayor Pro Tem Caleb Dickinson
	Councilmember Josh Cooperman
	Councilmember Deborah Fahey
	Councilmember Barbara Hamlington
	Councilmember Dietrich Hoefner
	Councilmember Judi Kern
Staff Present:	***Samma Fox, Interim City Manager***
	Meredyth Muth, Interim Deputy City Manager
	Kathleen Kelly, City Attorney
	Kurt Kowar, Public Works Director
	Rob Zuccaro, Community Development Director
	Ryder Bailey, Finance Director
	Adam Blackmore, Parks, Recreation, & Open Space Director
	Paulina Bennett, Information Technology Director
	Genny Kline, Interim City Clerk

APPROVAL OF AGENDA (00:02:14)

Councilmember Fahey moved to approve the agenda; seconded by Councilmember Cooperman.

Aye: Leh, Dickinson, Fahey, Cooperman, Hoefner, Kern, Hamlington
Nay: None
Absent: None

DRAFT

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA AND ON THE CONSENT AGENDA (00:06:10)

- Helmut Lestinski – Noise issue with potential Pickleball courts
- Adlin – Supports keeping the rink
- Owen Cheesbrow – Supports keeping the rink
- Kyle Cheesebrow – Public Involvement of Inline Skating Rink conversion project
- Jenny Zurall – Pickleball
- Ryan Patterson, pooled time with George (in the audience) – Opposed converting Hockey Rink to Pickleball court
- Brian Ball – Hockey Rink utilized for skateboarding instruction
- Steven Gioielli – Opposed removing kid's space for Pickleball
- Susan Kennedy – Inline Rink a vital place
- Jan Willem Debruyn Kops – Multiuse vs. single use of rink
- Cam Koelsch – Opposed to removing the rink

APPROVAL OF THE CONSENT AGENDA (00:33:33)

Mayor Leh moved to approve the consent agenda with the exception of Item C, which was moved to Item 8G; the motion was seconded by Councilmember Hoefner.

Aye: Leh, Dickinson, Fahey, Cooperman, Hoefner, Kern, Hamlington
Nay: None
Absent: None

A. Approval of Bills
B. Resolution No. 15, Series 2025 – A Resolution Authorizing Changes to the Approved Signers for the City's Banking and Financial Accounts
C. Parks, Recreation, and Open Space (PROS) Long-Range Plan and Trails Master Plan Award
  - ◊ Award the Parks, Recreation and Open Space Department Long-Range Plan and Trails Master Plan Projects to DTJ Design, Inc.
  - ◊ Approve a Not-to-Exceed Consulting Contract with DTJ Design, Inc. and Authorize Staff to Execute Change Orders Within the Identified Budget of $400,000.00

  Item C. was removed from the Consent Agenda and placed on regular agenda, 8G.
D. Resolution No. 16, Series 2025 – A Resolution Setting the 2025 Sewer Use Regulation Fees & Charges for the City of Louisville, Colorado
E. Resolution No. 17, Series 2025 – A Resolution Setting Sewer Tap Fees for the City of Louisville, Colorado

DRAFT

F. Approval of a Sole Source Agreement with Spronk Water Engineers for 2025 Water Rights Administration

COUNCIL INFORMATIONAL COMMENTS ON PERTINENT ITEMS NOT ON THE AGENDA - None

CITY MANAGER'S REPORT (00:33:56)

Interim City Manager Fox expressed gratitude to Council, the community, and staff for their support during her time as Interim City Manager and extended special thanks and recognition to Meredyth Muth for her 27 years of dedicated service to the City of Louisville.

REGULAR BUSINESS (50:37)

ORDINANCE NO. 1892, SERIES 2025 – AN ORDINANCE AMENDING TITLE 17 AND TITLE 3 OF THE LOUISVILLE MUNICIPAL CODE CONCERNING THE REGULATION OF ACCESSORY DWELLING UNITS IN THE CITY OF LOUISVILLE (1ST READING, SET PUBLIC HEARING FOR 04/15/2025) (50:40)

Mayor Pro Tem Dickinson moved to approve Ordinance No. 1892, Series 2025, and set the public hearing for April 15, 2025; seconded by Councilmember Kern.

Aye: Leh, Dickinson, Fahey, Cooperman, Hoefner, Kern, Hamlington
Nay: None
Absent: None

ORDININACE NO. 1893, SERIES 2025 – AN ORDINANCE AMENDING TITLE 17 OF THE LOUISVILLE MUNICIPAL CODE TO MODIFY THE DEFINITION OF FAMILY (1ST READING, SET PUBLIC HEARING FOR 04/15/2025) (00:51:47)

Mayor Pro Tem Dickinson moved to approve Ordinance No. 1893, Series 2025, and set the public hearing for April 15, 2025; seconded by Councilmember Kern.

Aye: Leh, Dickinson, Fahey, Cooperman, Hoefner, Kern, Hamlington
Nay: None
Absent: None

LANDMARK DESIGNATION AND GRANT REQUEST – 509 LAFARGE AVENUE

DRAFT

RESOLUTION NO. 18, SERIES 2025 – A RESOLUTION APPROVING A LANDMARK DESIGNATION FOR A HISTORICAL RESIDENTIAL PROPERTY LOCATED AT 509 LAFARGE AVENUE

RESOLUTION NO. 19, SERIES 2025 – A RESOLUTION APPROVING A PRESERVATION AND RESTORATION GRANT FOR THE LECOMTE HOUSE LOCATED AT 509 LAFARGE AVENUE (00:52:09)

Planner Emily Cline-Gibson presented the staff report.

Council Questions

Public Comment – None

Council Comments

Councilmember Fahey moved to approve Resolution No. 18, Series 2025; seconded by Councilmember Kern.

Aye: Leh, Fahey, Dickinson, Cooperman, Hoefner, Kern, Hamlington
Nay: None
Absent: None

Mayor Pro Tem Dickinson moved to approve Resolution No.19, Series 2025; seconded by Councilmember Hamlington

Aye: Leh, Fahey, Dickinson, Cooperman, Hoefner, Kern, Hamlington
Nay: None
Absent: None

RESOLUTION NO. 20, SERIES 2025 – A RESOLUTION APPROVING THE TEMPORARY WAIVER OF CERTAIN FEES FOR THE DOWNTOWN SEASONAL PATIO PROGRAM (01:00:47)

Interim City Manager Fox presented the staff report.

Council Questions

Public Comment – None

Council Comments

Mayor Pro Tem Dickinson made a motion to reduce the fee to $500 permanently; seconded by Councilmember Hamlington.

DRAFT

Council Discussion

Mayor Leh offered a friendly amendment, including the previous motion plus limit the wavier of half the fee this year. The final whereas in the resolution to read “by waiving one half the city-imposed fees of $1,000 for those downtown businesses participating in the patio program for the 2025 season and intends to charge fees in 2026 unless further action is taken by council.” The friendly amendment is seconded by Councilmember Kern.

Aye: Leh, Fahey, Dickinson, Cooperman, Hoefner, Kern,
Nay: Hamlington
Absent: None

WILDFIRE MITIGATION CAMPAIGN DEVELOPMENT CONTRACT WITH FORS MARSH (01:42:41)

Interim Deputy City Manager Muth and Community Development Director Zuccaro presented the staff report.

Council Questions

Public Comment

- Margaret Falco

Council Comments

Councilmember Fahey moved to approve the contract with Fors Marsh; seconded by Councilmember Cooperman.

Aye: Leh, Fahey, Dickinson, Cooperman, Hoefner, Kern, Hamlington
Nay: None
Absent: None

Council recessed briefly.

DISCUSSION / DIRECTION – COMCAST CABLE FRANCHISE RENEWAL (02:36:42)

Interim Deputy City Manager Muth Meredyth presented the staff report.

Council Questions

Public Comment

DRAFT

- Bill Cardell
- Andy Davis

Council Discussion

Council directed staff to shorten the period of the franchise renewal to an eight-and-a-half-year franchise.

PARKS, RECREATION, AND OPEN SPACE (PROS) LONG-RANGE PLAN AND TRAILS MASTER PLAN AWARD (02:55:11)

I. AWARD THE PARKS, RECREATION AND OPEN SPACE DEPARTMENT LONG-RANGE PLAN AND TRAILS MASTER PLAN PROJECTS TO DTJ DESIGN, INC.

II. APPROVE A NOT-TO-EXCEED CONSULTING CONTRACT WITH DTJ DESIGN, INC. AND AUTHORIZE STAFF TO EXECUTE CHANGE ORDERS WITHIN THE IDENTIFIED BUDGET OF $400,000.00
(MOVED FROM THE CONSENT AGENDA)

No staff presentation, Parks Project Manager, Bryon Weber was available to answer questions.

Council Questions

Council Discussion

Public Comment

- Cathern Smith

Council Comments

Council reached consensus and provided direction to compile the data and place the item on the consent agenda, targeting the April 1st or 15th meeting.

CITY ATTORNEY'S REPORT (3:41:45)

None

COUNCIL COMMENTS, COMMITTEE REPORTS, AND IDENTIFICATION OF FUTURE AGENDA ITEMS (3:42:51)

DRAFT

Councilmember Kern spoke regarding the Inline Skate Rink/ Pickleball courts.

ADJOURN

Councilmember Kern moved to adjourn the meeting; seconded by Councilmember Hamlington.

Aye: Leh, Fahey, Dickinson, Cooperman, Hoefner, Kern, Hamlington
Nay: None
Absent: None

Members adjourned at 9:43 pm.

_____
Christopher M. Leh, Mayor

_____
Genny Kline, City Clerk

DRAFT

SUBJECT: **RESOLUTION NO. 81, SERIES 2025 – A RESOLUTION APPROVING A MASTER SERVICES AGREEMENT WITH EIDE BAILLY LLP FOR AUDIT SERVICES**

DATE: **OCTOBER 21, 2025**

PREPARED BY: **RYDER BAILEY, CPA, FINANCE DIRECTOR**

PRESENTED BY: **RYDER BAILEY, CPA, FINANCE DIRECTOR**

SUMMARY:

An annual audit of City Finances is required by Louisville City Charter, Section 3.04.120 and by Colorado State Law (C.R.S. § 29-1-601).

BACKGROUND:

The Finance Department last issued a Request for Proposals (RFP) for Auditing Services on June 30, 2017. At that time, the Finance Department review team evaluated each proposal based on the criteria outlined within the RFP. Based upon the review team's evaluation of the technical and cost proposals, the Finance Committee recommended the City award the seven-year bid to Eide Bailly, LLP, which the City Council approved on October 17, 2017.

On May 5th, staff posted a Request for Proposals (RFP) for Professional Auditing Services on the City website and the City's Official Bidding Site to solicit bids for a multi-year contract for professional audit services.

The City received five (5) responses by the June 2, 2025 deadline. After reviewing all submissions for RFP requirements and completeness, the Selection Committee (comprised of Finance Department Staff and the Finance Committee Chair) interviewed the top two (2) firms.

On July 17, 2025 , Staff presented this item and recommendation to engage Eide Bailly, LLC, to the City Council Finance Committee, which was unanimously supported.

ANALYSIS:

The Selection Committee and City Council Finance Committee recommend engaging the firm Eide Bailly, beginning in the audit year 2025, with up to four optional one-year extensions through the audit year 2029. This is a recurring and planned budgeted expense.

Staff is seeking delegated authority for the City Manager to execute future one-year renewals from 2026 to 2029, if deemed in the best interest of the City via Attachment 2 – Resolution.

2025 COUNCIL WORK PLAN:

Core Services - An annual audit of City Finances is required by Louisville City Charter, Section 3.04.120, and by Colorado State Law (C.R.S. § 29-1-601).

FISCAL IMPACT:

Budgeted?: **Yes**
The 2025 base audit expense is anticipated at $69,825, including the additional 5% technology fee, and is budgeted. This amount represents a 0% increase when compared to the 2024 base fee.

Additional major programs, subject to the Single Audit Act, will be billed at $10,500 per program, if deemed necessary. At this time, Staff anticipates being subject to the Single Audit Act and, therefore, will likely incur the $10,500 cost for 2025.

In keeping with previous cost allocation methodology, audit fees are allocated across to the City's largest operating funds – the General Fund and Utility Funds.

ALTERNATIVES:

After an extensive request for proposal and selection process, no alternatives are being offered for consideration.

RECOMMENDATION:

Authorize the execution of a Master Services Agreement for professional auditing services with Eide Bailly, LLC for the 2025 audit year and delegate authority to the City Manager to annually renew the Agreement for audit years 2026- 2029.

ATTACHMENT(S):

1. Resolution No. 81, Series 2025
2. Master Services Agreement, dated August 2025.

RESOLUTION NO. 81
SERIES 2025

A RESOLUTION APPROVING A MASTER SERVICES AGREEMENT WITH EIDE BAILLY LLP FOR AUDIT SERVICES

WHEREAS, a Master Services Agreement for auditing services has been proposed between the City and Eide Bailly LLP; and

WHEREAS, by this resolution the City Council desires to approve the Agreement.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Master Services Agreement by and between the City of Louisville and Eide Bailly for auditing services for the audit year 2025 (the "Agreement") in substantially the same form as the copy of such Agreement accompanying this Resolution.

Section 2. The Mayor is hereby authorized to execute the Agreement on behalf of the City, and the Mayor is hereby further authorized to negotiate and approve such revisions to the Contract as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Agreement are not altered.

Section 3. The City Manager is hereby authorized to renew the Agreement on an annual basis for audit years 2026-2029 if the City Manager finds that renewal is in the best interest of the City.

PASSED AND ADOPTED this ____ day of _____, 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

EIDE BAILLY LLP
MASTER SERVICES AGREEMENT

GENERAL

1) This Master Services Agreement ("Agreement") describes Eide Bailly LLP's standard terms and conditions applicable to the provision of Eide Bailly's services to the Client. For the purposes of this Master Services Agreement, any reference to "Eide Bailly" is a reference to Eide Bailly LLP. Any reference to "Client" is a reference to the party or parties that have engaged Eide Bailly to provide services and the party or parties ultimately responsible for payment of Eide Bailly's fees and costs. Client acknowledges and agrees that Eide Bailly is not in a fiduciary relationship with it and Eide Bailly has no fiduciary responsibilities to Client in the performance of its services described herein or in any applicable Statement of Work. As between this Agreement and any applicable Statement of Work, the language in this Agreement will control.

BILLING, PAYMENT, & TERMINATION

2) Billing and Payment Terms. Eide Bailly will bill Client for its professional fees and costs as provided in a Statement of Work. All bills are payable upon receipt and will include actual out-of-pocket expenses, administrative charges, and a technology fee. If collection action is necessary, expenses and reasonable attorney's fees will be added to the amount due.

Should our relationship terminate before the services provided for in a separate Statement of Work are completed, Client will be billed for services to the date of termination.

3) Termination. Either party may terminate this Agreement by written notice to the other party at any time for any reason, except Eide Bailly shall not terminate in a manner that causes undue harm to Client. Nothing in this Agreement shall prohibit Eide Bailly from terminating this Agreement or any Statement of Work where termination is required by applicable professional standards.

INFORMATION AND DATA

4) Sharing of Information. During the course of the engagement, Eide Bailly will only provide confidential engagement documentation to Client via Eide Bailly's secure portal or other secure methods, and request that Client uses the same or similar tools in providing information to Eide Bailly. Should Client choose not to utilize secure communication applications, Client acknowledges that such communication contains a risk of the information being made available to unintended third parties. Similarly, Eide Bailly may communicate with Client or its personnel via e-mail or other electronic methods. Client acknowledges that communication in those mediums contains a risk of misdirected or intercepted communications.

5) Remote Access. Should Client provide Eide Bailly with remote access to its information technology environment, including but not limited to its financial reporting system, Client agrees to (1) assign unique usernames and passwords for use by Eide Bailly's personnel in accessing the system and to provide this information in a secure manner; (2) limit access to "read only" to prevent any unintentional deletion or alteration of Client's data; (3) limit access to the areas of Client's technology environment necessary to perform the procedures agreed upon; and (4) disable all usernames and passwords provided to Eide Bailly upon the completion of procedures for which access was provided. Eide Bailly agrees to only access Client's technology environment to the extent necessary to perform the identified procedures.

6) Electronic Sites. Regarding the electronic dissemination of audited financial statements, including financial statements published electronically on Client's website or elsewhere, Client understands that electronic sites are a means to distribute information and, therefore, Eide Bailly is not required to read the information contained in these sites or to consider the consistency of other information in the electronic site with the original document.

7) Data and Records. Eide Bailly cannot agree to be the sole host and/or the sole storage for Client's financial and nonfinancial data. It is Client's responsibility to maintain Client's original data and records and Eide Bailly cannot be responsible to maintain such original information. By signing this Agreement, Client affirms that it has all the data and records required to make its books and records complete.

8) Mandatory Disclosures. Eide Bailly may be requested to make certain engagement

documentation available to outside parties, including regulators, pursuant to authority provided by law or regulation or applicable professional standards. If requested, access to such engagement documentation will be provided under the supervision of Eide Bailly's personnel. Furthermore, upon request, Eide Bailly may provide copies of selected engagement documentation to the outside party, who may intend, or decide, to distribute the copies of information contained therein to others, including other governmental agencies. Eide Bailly will be compensated for any time and expenses, including time and expenses of legal counsel, it may incur in making such documentation available or in conducting or responding to discovery requests or participating as a witness or otherwise in any legal, regulatory, or other proceedings as a result of Eide Bailly's performance of these services. Client and its attorney will receive, if lawful, a copy of every subpoena Eide Bailly is asked to respond to on its behalf. Wherever possible and as permitted under applicable court rules, Eide Bailly will work with Client to limit costs Client may incur."

9) Service Providers. Eide Bailly may use third-party service providers and/or affiliated entities (including Eide Bailly Shared Services Private Limited) (collectively, "service providers") in order to facilitate delivering its services to Client. Eide Bailly's use of service providers may require access to Client information by the service provider. Eide Bailly will take reasonable precautions to determine that such service providers have the appropriate procedures in place to prevent the unauthorized release of confidential information to others. Eide Bailly will remain responsible for the confidentiality of Client information accessed by such service provider and any work performed by such service provider. Client acknowledges that its information may be disclosed to such service providers, including those outside the United States.

10) Use of Artificial Intelligence. While providing the services set forth in this Agreement, in order to enhance the quality and efficiency of services provided, Eide Bailly may use tools incorporating artificial intelligence, including, but not limited to, algorithms, machine learning, and automated processes ("AI"). The use of such technologies will comply with applicable laws and regulations. Eide Bailly will use appropriate due diligence and best practices to ensure that any AI tools and methods are secure.

11) Confidential Information. Neither of us may use or disclose the other's confidential information for any purpose except as permitted under this Agreement or as otherwise necessary for Eide Bailly to provide the services. Client's confidential information is defined as any information it provides to Eide Bailly that is not available to the public. Eide Bailly's confidential information includes its engagement documentation for engagements performed under this Agreement but shall not include any information that Client is required to disclose by court order or applicable law, including without limitation the Colorado Open Records Act, C.R.S. § 24-72-201, et seq. Eide Bailly's engagement documentation, including all workpapers, shall at all times remain the property of Eide Bailly. The confidentiality obligations described in this paragraph shall supersede and replace any and all prior confidentiality and/or nondisclosure agreements (NDAs) between us.

12) Retention Period. Eide Bailly agrees to retain its documentation or work papers for a period of at least eight years from the date of a report, other engagement deliverables, and/or completion of the engagement.

DISPUTES & LIMITATIONS

13) Mediation. Any disagreement, controversy, or claim arising out of or related to any aspect of Eide Bailly's services or relationship with Client (hereafter a "Dispute") shall, as a precondition to litigation in court, first be submitted to mediation. In mediation, the parties attempt to reach an amicable resolution of the Dispute with the aid of an impartial mediator. Mediation shall begin by service of a written demand. The mediator will be selected by mutual agreement. If we cannot agree on a mediator, one shall be designated by the American Arbitration Association ("AAA"). Mediation shall be conducted with the parties in person in Denver or Boulder, Colorado. Each party will bear its own costs in the mediation. The fees and expenses of the mediator will be shared equally by the parties. Neither party may commence a lawsuit until the mediator declares an impasse.

14) Limitation of Liability. Unless disallowed by law or regulation, the exclusive remedy available to Client for any alleged loss arising from or related to Eide Bailly's services shall be the right to pursue claims for actual damages that are directly caused by Eide Bailly's breach of this Agreement or Eide Bailly's violation of applicable professional standards. Unless disallowed by law or regulation, in no event shall Eide

Bailly's aggregate liability to Client exceed two times fees paid under the applicable Statement of Work, nor shall Eide Bailly ever be liable to Client for indirect, special, incidental, consequential, punitive, or exemplary damages, or attorneys' fees.

15) Time Limitation. Intentionally Omitted.

16) Limited Indemnity. Eide Bailly shall not be responsible for any misstatements in its deliverables to Client that it may fail to detect as a result of misrepresentations or concealment of information by any of Client's owners, directors, officers, or employees. Unless disallowed by law, regulation, or applicable professional standards, Client shall indemnify and hold Eide Bailly harmless from any claims, losses, settlements, judgments, awards, damages, and attorneys' fees arising from any such misstatement or concealment of information.

If, through no fault of Eide Bailly, it is named as a party to a dispute between Client and a third party, Unless disallowed by law or regulation, , Client shall indemnify and hold Eide Bailly harmless against any losses, damages, settlements, judgments, awards, and the costs of litigation (including attorneys' fees) it incurs in connection with the dispute.

Eide Bailly shall not be entitled to indemnification under this Agreement unless the services were performed in accordance with professional standards in all material respects.

To the fullest extent permitted by law, regulation, and applicable professional standards, Eide Bailly agrees to indemnify and hold harmless the City, and its elected and appointed officers and its employees, from and against all liability, claims, and demands, on account of any injury, loss, or damage, which arise out of or are connected with the services hereunder, if and to the extent such injury, loss, or damage is caused by the negligent act, omission, or other fault of Eide Bailly or any subcontractor of Eide Bailly, or any officer, employee, or agent of Eide Bailly or any subcontractor, or any other person for whom Eide Bailly is responsible Eide Bailly shall further bear all other costs and expenses incurred by the City or Eide Bailly and related to any such liability, claims and demands, including but not limited to court costs, expert witness fees and attorneys' fees only if the court determines that these incurred costs and expenses are related to such negligent acts, errors, and omissions or other fault of Eide Bailly.

Eide Bailly's indemnification obligation shall not be construed to extend to any injury, loss, or damage which is caused by the act, omission, or other fault of the City. The parties understand and agree that the City is relying on, and does not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, § 24-10-101 et seq., C.R.S., as from time to time amended, or otherwise available to the City, its officers, or its employees.

17) Governing Law and Venue. Any Dispute between us, including any Dispute related to the engagement contemplated by this Agreement, shall be governed by Colorado law. Any unresolved Dispute shall be submitted to a federal court in Denver, Colorado or state court located in Boulder County, Colorado.

18) Assignment. Client shall not assign, sell, barter, or transfer any legal rights, causes of actions, claims, or Disputes it may have against Eide Bailly to any person.

OTHER

19) U.S. Securities and Exchange Commission ("SEC") and other Regulatory Bodies. Where Eide Bailly is providing services either for (a) an entity that is registered with the SEC, (b) an affiliate of such registrant, or (c) an entity or affiliate that is subject to rules, regulations, or standards beyond those of the American Institute of Certified Public Accountants ("AICPA"), any term of this contract that would be prohibited by or impair our independence under applicable law or regulation shall not apply to the extent necessary only to avoid such prohibition or impairment.

20) HLB International. Eide Bailly is a member of HLB International, a worldwide organization of accounting firms and business advisors ("HLB"). Each member firm of HLB, including Eide Bailly, is a separate and independent legal entity and is not owned or controlled by any other member of HLB. Each member firm of HLB is solely responsible for its own acts and omissions, and no other member assumes any liability for such acts or omissions. Neither Eide Bailly nor any of its affiliates are responsible or liable for any acts or omission of HLB or any other member firm of HLB and hereby specifically disclaim any and all responsibility, even if Eide Bailly or any of its affiliates are aware of such acts or omissions of another member of HLB.

Engagements referred among HLB member firms may result in the payment and receipt of a referral fee.

21) Eide Bailly Alliance. Eide Bailly formed the Eide Bailly Alliance, a network for small to mid-sized CPA firms across the nation. Each member firm of The Eide Bailly Alliance, including Eide Bailly, is a separate and independent legal entity and is not owned or controlled by any other member of The Eide Bailly Alliance. Each member firm of The Eide Bailly Alliance is solely responsible for its own acts and omissions, and no other member assumes any liability for such acts or omissions. Neither Eide Bailly, nor any of its affiliates, are responsible or liable for any acts or omission of The Eide Bailly Alliance or any other member firm of The Eide Bailly Alliance and hereby specifically disclaim any and all responsibility, even if Eide Bailly, or any of its affiliates are aware of such acts or omissions of another member of The Eide Bailly Alliance.

22) Severability. In the event that any term or provision of this Agreement shall be held to be invalid, void, or unenforceable, the remainder of this Agreement shall not be affected, and each such term and provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law.

23) Use of Deliverables and Drafts. Client agrees it will not modify any deliverables or drafts prepared by Eide Bailly for internal use or for distribution to third parties. Client also understands that Eide Bailly may, on occasion, send Client documents marked as draft and understand that those are for Client's review purpose only, should not be distributed in any way, and should be destroyed as soon as possible. When the engagement provides for the issuance of a report on financial or non-financial information, and/or other deliverables, Client may make copies of the report and/or other deliverables, but only if the entirety of the relevant underlying information, exactly as accompanying our report and/or deliverable, as appropriate, are reproduced and distributed with the report and/or other deliverables. Client agrees not to reproduce or associate our report and/or other deliverables with any other financial or non-financial information, or portions thereof, that are not the subject of our engagement.

24) Insurance. Eide Bailly agrees to obtain appropriate insurance under each Statement of Work as agreed upon by the parties.

25) Independent Contractor. It is the expressed intent of the parties that Eide Bailly is an independent contractor and not the agent, employee or servant of the City, and that:

Eide Bailly shall satisfy all tax and other governmentally imposed responsibilities including but not limited to, payment of state, federal, and social security taxes, unemployment taxes, worker's compensation and self-employment taxes. No state, federal or local taxes of any kind owed by Eide Bailly shall be withheld or paid by the City.

Eide Bailly is not entitled to worker's compensation benefits except as may be provided by Eide Bailly nor to unemployment insurance benefits unless unemployment compensation coverage is provided by Eide Bailly or some entity other than the City.

Eide Bailly does not have the authority to act for the City, or to bind the City in any respect whatsoever, or to incur any debts or liabilities in the name of or on behalf of the City.

Eide Bailly has and retains control of and supervision over the performance of Eide Bailly's obligations hereunder and control over any persons employed by Eide Bailly for performing the services hereunder.

The City will not provide training or instruction to Eide Bailly or any of its employees regarding the performance of the services hereunder.

Neither Eide Bailly nor any of its officers or employees will receive benefits of any type from the City.

Eide Bailly represents that it is engaged in providing similar services to other clients and/or the general public and is not required to work exclusively for the City.

All services are to be performed solely at the risk of Eide Bailly and Eide Bailly shall take all precautions necessary for the proper and sole performance thereof.

Eide Bailly will not combine its business operations in any way with the City's business operations and each party shall maintain their operations as separate and distinct.

26) Nothing in this Agreement is intended or shall be deemed or construed as creating any multiple-fiscal year direct or indirect debt or financial obligation on the part of the City within the meaning of Colorado Constitution Article X, Section 20 or any other constitutional or statutory provision. All financial obligations of the City under this Agreement are subject to annual budgeting and appropriation by the Louisville City Council, in its sole discretion.

Acknowledged and agreed:

EIDE BAILLY LLP

CLIENT

_____
Signature

_____
Name

_____
Title

_____
Date

Eide Bailly Use:
Client ID: 80119
Account Name: City of Louisville
Address: 749 Main St, Louisville, CO 80027
SR ID: SR-0069892

EIDE BAILLY LLP
TECHNOLOGY CONSULTING ADDENDUM
to MASTER SERVICES AGREEMENT

GENERAL

1) This Addendum only applies in conjunction with an associated Statement of Work for technology consulting services. All terms of the Master Services Agreement shall remain in full force and effect.

SERVICES AND DELIVERABLES

2) **Incorporation of Design Documentation**. The Deliverables identified in a Statement of Work may include Design Documentation. Any Design Documentation shall be submitted to Client for written approval. Upon Client's written approval, any Design Documentation shall be incorporated into the Deliverables described in a Statement of Work. If the Design Documentation conflicts with any such Deliverables, the Design Documentation shall control.

3. Work Outside of Scope. Eide Bailly shall have no obligation to provide any Deliverables or perform any Services not specifically set forth in a Statement of Work or Design Documentation. Client may request additional Deliverables and Services only pursuant to the Change Control procedures described immediately below.

4. Change Control. If either Party identifies a need to supplement or revise the Services or Deliverables described in a Statement of Work, the Party may create a change request ("Change Request"). The Change Request shall include relevant details such as changes to scope, assumptions, cost estimates, timelines, risks, and the like. Both Parties shall accept the terms of a Change Request before work outside the scope of a Statement of Work may continue. Eide Bailly shall charge Client, and Client shall pay Eide Bailly, on an hourly basis at Eide Bailly's normal hourly rates for any services or deliverables requested by Client that are not specified in a Statement of Work or an accompanying Change Request. Any signed Change Request shall thereafter be incorporated into the Statement of Work to which it refers.

5. HIPAA. Unless agreed by Eide Bailly in a separate signed writing:

a) Client has not relied on Eide Bailly to opine upon Eide Bailly's actual or potential status as a Business Associate (as that term is defined in the Health Insurance Portability and Accountability Act of 1996, as amended and supplemented ("HIPAA"));

b) In providing the Services, Eide Bailly is not acting as a Business Associate on Client's behalf;

c) The Services and Deliverables may not be used to store, maintain, process, or transmit protected health information ("PHI") (as that term is defined in HIPAA); and

d) The Services and Deliverables will not be used in any manner that would require the Services or Deliverables to be HIPAA compliant.

OWNERSHIP RIGHTS

6. Eide Bailly's Ownership Rights. Eide Bailly retains all rights, titles, and interests, including Intellectual Property Rights, in any Preexisting Materials, including the right to use, reuse, or otherwise exploit any Preexisting Materials for its other clients. In addition, Eide Bailly retains all rights, titles, and interests, including all Intellectual Property Rights, in the Services, Software, Design Documentation, and Deliverables, including the right to provide similar services and deliverables to other clients.

7. Client Ownership Rights. Client retains all rights, titles, and interests, including all Intellectual Property Rights, in the Client Materials. Client grants Eide Bailly the right to use the Client Materials to provide the Services and Deliverables to Client. Eide Bailly shall not market, distribute, reproduce, or seek to commercially exploit the Client Materials.

8. Contingent License. Provided Client has fulfilled its obligations under this Agreement, Eide Bailly grants Client a perpetual, non-exclusive, transferable, worldwide, and royalty free license to use, reproduce, copy, perform, display, modify or have modified by third parties, create or have created by third parties derivative works of, the Services, Software, Design Documentation, and/or Deliverables.

CLIENT ENGAGEMENT RESPONSIBILITIES

9. Appointment of Coordinator. Client shall designate one individual and one alternate to serve as Eide Bailly's primary point of contact for the relationship contemplated by this Agreement (the "Coordinator"). The Coordinator shall have the authority to act for Client as to all aspects of this Agreement. Eide Bailly shall be entitled to rely on all statements and agreements made by the Coordinator during the term of this Agreement.

10. Third-Party Products and License Terms. In connection with the receipt of any services or the use of any third-party products, software, tools, or components incorporated into or referenced in any applicable Statement of Work, Client expressly acknowledges and agrees to be bound by the terms and conditions of any applicable third-party license agreements, whether such terms are provided directly by the third party or referenced by Eide Bailly. Client further agrees that:

a) **No Objection**. Client shall not contest, object to, or otherwise challenge, the enforceability or applicability of any such third-party license terms.

b) **Deemed Receipt**. Client acknowledges that it has received, reviewed, and understood all applicable third-party license agreements, or, where such agreements are publicly available or referenced in the Statement of Work, that it has had a reasonable opportunity to do so. Client shall not assert any claim or defense based on non-receipt or lack of awareness of such terms.

c) **Indemnification**. Eide Bailly shall not be responsible for claims, liabilities, damages, losses, or expenses (including reasonable attorneys' fees) arising out of or related to Client's breach of any third-party license terms.

d) **Survival**. The provisions of this section shall survive the termination or expiration of the applicable Statement of Work or this Agreement.

WARRANTIES

11) **Express Warranty**. Eide Bailly shall perform all Services, and the Deliverables shall have been prepared in a workmanlike manner.

12) **Warranty Against Non-Infringement**. Any Services, Software, or Deliverables, when properly used as contemplated by this Agreement, shall not infringe or misappropriate any United States copyright, trademark, patent, or other trade secrets of any third parties. Eide Bailly has any necessary rights and permissions to use any Third-Party Software in the manner contemplated by this Agreement.

13) **Warranty Disclaimers**. Except as specifically described in this Warranties section, all Services, Software, Third-Party Software, Deliverables, and any other product or service provided by Eide Bailly to Client are furnished "as is" and without any other express or implied warranties of any kind. Eide Bailly expressly disclaims any and all such warranties, such as, but without limitation, any implied warranties of merchantability, or fitness for a particular purpose. Eide Bailly does not warrant that any Services, Software, Third-Party Software, or Deliverables will be uninterrupted or error free.

14) **Remedies for Breach of Warranty**. The exclusive remedy to Client for a breach of any warranty arising under this Agreement shall be the repair or replacement of the Services, Software, Deliverables, or any other product or service provided to Client by Eide Bailly. If a court of competent jurisdiction determines that this remedy fails of its essential purpose, Client's damages for breach of warranty shall be limited as described in the Master Services Agreement.

DEFINITIONS

15) As used in this Addendum:

a) "**Client Materials**" means all of Client's proprietary business information, methodologies, procedures, utilities, algorithms, models, documents, and concepts, and any Intellectual Property Rights therein, which are provided by Client to Eide Bailly in furtherance of this Agreement.

b) "**Deliverables**" means only those tangible items Eide Bailly agrees in writing to provide to Client in a Statement of Work.

c) "**Design Documentation**" means a written description of requirements or functionality created through a collaborative process between Eide Bailly and Client for the purpose of analysis, planning, and implementation of the Services and/or Deliverables.

d) "**Intellectual Property Rights**" means patents, patent applications, patent rights, trademarks, trademark registrations, trademark applications, service marks, business marks, trade names, brand names, all other names and slogans embodying business or product goodwill (or both), copyright registrations, copyrights (including those in computer programs, software such as source code and object code, development documentation, programming tools, drawings, specifications and data), trade secrets, proprietary information, know-how, mask works, industrial designs, processes and technical information and all related rights now existing or hereafter created.

e) "**Preexisting Materials**" means Eide Bailly's proprietary business information, methodologies, programming, tools, know-how, procedures, utilities, algorithms, models, software libraries, source code, design, products, platform, and documents, and all Intellectual Property Rights therein.

f) "**Services**" means only those technology consulting services Eide Bailly agrees in writing to provide to Client in a Statement of Work.

g) "**Software**" means all computer code and related uses of information technology including but not limited to, all documentation, manuals, and instructions, that is used, designed, developed, and/or implemented by Eide Bailly for Client under this Agreement.

h) "**Third-Party Software**" means all software that is owned by an entity other than Eide Bailly or Client and is being used by Eide Bailly to provide the Services and/or Deliverables to Client.

16. Usage. All terms defined herein shall include the plural as well as the singular. Any undefined term shall be defined according to its plain English definition.

SUBJECT: **RESOLUTION NO. 82, SERIES 2025 - A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT WITH THE COLORADO DEPARTMENT OF TRANSPORTATION CONCERNING A GRANT IN CONNECTION WITH THE CITY'S CO42 BIKE/PEDESTRIAN UNDERPASS AT SOUTH STREET PROJECT**

DATE: **OCTOBER 21, 2025**

PREPARED BY: **JORDAN JEFFERIES, ASSISTANT CITY ENGINEER**

PRESENTED BY: **KURT KOWAR, PUBLIC WORKS DIRECTOR**

SUMMARY:
Staff requests that City Council approve an Intergovernmental Agreement (IGA) with the Colorado Department of Transportation (CDOT) to receive $1,900,000 in state funding for the construction of the South Street Underpass project.

BACKGROUND / PRIOR DISCUSSIONS:
Earlier this year, Engineering staff coordinated with the City of Lafayette Public Works Department to jointly request that the Colorado Department of Transportation (CDOT) commit the remaining $2.8 million from CDOT's 10-Year Strategic Project Pipeline to advance two priority Colorado 42 (CO 42) corridor improvements. Louisville requested $1.9 million to close a funding gap for construction of the South Street Underpass, a key multimodal connection beneath CO 42. Lafayette requested $870,000 to extend the current CO 42 Design and Right-of-Way (ROW) project from Paschal Drive to Baseline Road and to provide 30% design for this segment, better positioning them for future grant opportunities. Staff were formally notified in June that the funding was awarded for these projects as requested.

The City must enter into an Intergovernmental Agreement (IGA) with CDOT in order to receive the $1.9 million construction funding for the South Street Underpass.

The South Street Underpass project is currently in the design phase. City Council voted on September 16, 2025, to keep South Street open to vehicular traffic so the design team is currently developing and evaluating alternative layouts that will allow South Street to remain open. Upon selection of a preferred alternative, the design team will proceed with detailed design of the project. It is anticipated that construction of the project will begin in late 2026.

ANALYSIS:
City Council must approve the attached Intergovernmental Agreement (IGA) with CDOT to receive the construction funding. Note that CDOT requires signature of IGAs via Docusign and a signature request will typically be sent to signatories via email.

FISCAL IMPACT:
Budgeted?: **Yes**

The project is currently projected to meet the 2025/2026 budget based on the most recent engineer's cost estimates. A detailed breakdown is provided below:

City Project Funding

Description	Account	Budget Amount
SOUTH STREET UNDERPASS (2025)	301312-660309	$1,163,876
SOUTH STREET UNDERPASS (2026)	301312-660309	$9,119,378
TOTAL:		$10,283,254*

*With approval of this $1,900,000 state funding and a previously approved $3,000,000 TIP grant, total grant funding for the project will be $4,900,000. The net city funding is $5,383,254 per the approved budget.

Project Expenses

Description	Account	Budget Amount
South Street Underpass Design/ROW/Contingency	301312-660309	($2,128,492.48)
South Street Underpass Construction/Contingency	301312-660309	($8,413,020.00)
TOTAL PROJECT COST (Estimated):		**($10,541,512.48)***

*The total project shortfall is estimated to be $258,258,48. Staff will work with the design consultant to try and reduce costs and minimize or eliminate any funding shortfalls during the design process. NOTE: requirement for IGA to be docusigned and it will come from CDOT.

However, the budget may change with an alternative layout for the South Street Underpass.

RECOMMENDATION:
Staff recommends that City Council approve the IGA with CDOT to receive $1,900,000 for construction of the South Street Underpass project.

ATTACHMENT(S):
1. Resolution 82, Series 2025
2. State of Colorado Intergovernmental Agreement with CDOT

RESOLUTION NO. 82
SERIES 2025

A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT WITH THE COLORADO DEPARTMENT OF TRANSPORTATION CONCERNING A GRANT IN CONNECTION WITH THE CITY'S CO42 BIKE/PEDESTRIAN UNDERPASS AT SOUTH STREET PROJECT

WHEREAS, the State of Colorado through the Colorado Department of Transportation, ("CDOT") administers federal funds and grants under the Surface Transportation Improvement Program for local transportation programs; and

WHEREAS, the City of Louisville has applied for and been awarded a grant for the design and construction of a bike/pedestrian underpass under CO42 at South Street, subject to the execution of an Intergovernmental Agreement for the grant; and

WHEREAS, the City desires to accept such grant and authorize execution of a grant contract for such funds.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby accepts the grant in the amount of $1,900,000.00 (the "Grant") from the State of Colorado, Department of Transportation, to be used in the design and construction of the City's CO42 Bike/Pedestrian Underpass at South Street Project, Project No. STU M825-018 (26013) (the "Project").

Section 2. The City Council hereby approves that certain Intergovernmental Agreement (the "Agreement") by and between the State of Colorado, acting by and through the Colorado Department of Transportation, and the City of Louisville, for the Grant awarded to the City for the Project, in substantially the same form as the copy of such Agreement accompanying this Resolution.

Section 3. The Mayor and City Clerk are hereby authorized to execute the Agreement on behalf of the City Council of the City of Louisville, and the Mayor is hereby further authorized to negotiate and approve such revisions to the Agreement as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Agreement are not altered.

Section 4. The Mayor, City Manager, and City Staff are hereby authorized and directed to do all things necessary on behalf of the City to perform the obligations of the City under the Agreement, including without limitation that the Mayor or City Manager are authorized to execute and deliver any certifications, reports, forms, option letters, contract amendments and other documents appropriate or required in connection with the

Agreement and completion of the Project to be funded in part with funds received under the Agreement.

PASSED AND ADOPTED this _____ day of _____, 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

STATE OF COLORADO INTERGOVERNMENTAL AGREEMENT
Signature and Cover Page

State Agency Department of Transportation			**Agreement Routing Number** 26-HA4-XC-00012
Local Agency CITY OF LOUISVILLE			**Agreement Effective Date** The later of the effective date or July 18, 2025
Agreement Description CO42 Bike/Ped Underpass at South St			**Agreement Expiration Date** July 17, 2035
Project # STU M825-018 (26013)	**Region #** 4	**Contract Writer** TCH	**Agreement Maximum Amount** $5,523,626.00

THE PARTIES HERETO HAVE EXECUTED THIS AGREEMENT

Each person signing this Agreement represents and warrants that he or she is duly authorized to execute this Agreement and to bind the Party authorizing his or her signature.

LOCAL AGENCY CITY OF LOUISVILLE By:_____ *Signature Name:_____ (Print Name) Title:_____ (Print Title) Date:	**STATE OF COLORADO** Jared S. Polis, Governor Department of Transportation Shoshana M. Lew, Executive Director _____ Keith Stefanik, P.E., Chief Engineer Date: _____
SECOND LOCAL AGENCY SIGNATURE, IF NEEDED CITY OF LOUISVILLE By:_____ *Signature Name:_____ (Print Name) Title:_____ (Print Title) Date:	**LEGAL REVIEW** Philip J. Weiser, Attorney General _____ Assistant Attorney General _____ By: (Print Name and Title) Date: _____

In accordance with §24-30-202 C.R.S., this Agreement is not valid until signed and dated below by the State Controller or an authorized delegate.

STATE CONTROLLER
Robert Jaros, CPA, MBA, JD

By: _____
Department of Transportation

Effective Date: _____

TABLE OF CONTENTS

1. PARTIES 2
2. TERM AND EFFECTIVE DATE 2
3. AUTHORITY 3
4. PURPOSE 4
5. DEFINITIONS 4
6. SCOPE OF WORK 7
7. PAYMENTS 11
8. REPORTING - NOTIFICATION 15
9. LOCAL AGENCY RECORDS 16
10. CONFIDENTIAL INFORMATION-STATE RECORDS 17
11. CONFLICTS OF INTEREST 18
12. INSURANCE 18
13. BREACH 20
14. REMEDIES 21
15. DISPUTE RESOLUTION 22
16. NOTICES AND REPRESENTATIVES 23
17. RIGHTS IN WORK PRODUCT AND OTHER INFORMATION 23
18. GOVERNMENTAL IMMUNITY 24
19. STATEWIDE CONTRACT MANAGEMENT SYSTEM 24
20. GENERAL PROVISIONS 25
21. COLORADO SPECIAL PROVISIONS (COLORADO FISCAL RULE 3-3) 27
22. FEDERAL REQUIREMENTS 29
23. DISADVANTAGED BUSINESS ENTERPRISE (DBE) 29

EXHIBIT A, SCOPE OF WORK
EXHIBIT B, SAMPLE OPTION LETTER
EXHIBIT C, FUNDING PROVISIONS (Budget)
EXHIBIT D, LOCAL AGENCY RESOLUTION
EXHIBIT E, LOCAL AGENCY AGREEMENT ADMINISTRATION CHECKLIST
EXHIBIT F, CERTIFICATION FOR FEDERAL-AID AGREEMENTS
EXHIBIT G, DISADVANTAGED BUSINESS ENTERPRISE
EXHIBIT H, LOCAL AGENCY PROCEDURES FOR CONSULTANT SERVICES
EXHIBIT I, FEDERAL-AID AGREEMENT PROVISIONS FOR CONSTRUCTION AGREEMENTS
EXHIBIT J, ADDITIONAL FEDERAL REQUIREMENTS
EXHIBIT K, FFATA SUPPLEMENTAL FEDERAL PROVISIONS
EXHIBIT L, SAMPLE SUBRECIPIENT MONITORING AND RISK ASSESSMENT FORM
EXHIBIT M, OMB UNIFORM GUIDANCE FOR FEDERAL AWARDS
EXHIBIT N, FEDERAL TREASURY PROVISIONS
EXHIBIT O, AGREEMENT WITH SUBRECIPIENT OF FEDERAL RECOVERY FUNDS
EXHIBIT P, SLFRF SUBRECIPIENT QUARTERLY REPORT
EXHIBIT Q, SLFRF REPORTING MODIFICATION FORM
EXHIBIT R, APPLICABLE FEDERAL AWARDS
EXHIBIT S, PII CERTIFICATION
EXHIBIT T, CHECKLIST OF REQUIRED EXHIBITS DEPENDENT ON FUNDING SOURCE

1. PARTIES

This Agreement is entered into by and between Local Agency named on the Signature and Cover Page for this Agreement (“Local Agency”), and the STATE OF COLORADO acting by and through the State agency named on the Signature and Cover Page for this Agreement (the “State” or “CDOT”). Local Agency and the State agree to the terms and conditions in this Agreement.

2. TERM AND EFFECTIVE DATE

A. Effective Date

This Agreement shall not be valid or enforceable until the Effective Date, and Agreement Funds shall be expended within the dates shown in **Exhibit C** for each respective phase ("Phase Performance Period(s)"). The State shall not be bound by any provision of this Agreement before the Effective Date, and shall have no obligation to pay Local Agency for any Work performed or expense incurred before 1) the Effective Date of this original Agreement; except as described in **§7.D**; 2) before the encumbering document for the respective phase *and* the official Notice to Proceed for the respective phase; or 3) after the Final Phase Performance End Date, as shown in **Exhibit C**. Additionally, the State shall have no obligation to pay Local Agency for any Work performed or expense incurred after the Agreement Expiration Date or after required billing deadline specified in **§7.B.i.e**., or the expiration of "Special Funding" if applicable, whichever is sooner. The State's obligation to pay Agreement Funds exclusive of Special Funding will continue until the Agreement Expiration Date. If Agreement Funds expire before the Agreement Expiration Date, then no payments will be made after expiration of Agreement Funds.

B. Initial Term and Extension

The Parties' respective performances under this Agreement shall commence on the Agreement Effective Date shown on the Signature and Cover Page for this Agreement and shall terminate on July 17, 2035 as shown on the Signature and Cover Page for this Agreement, unless sooner terminated or further extended in accordance with the terms of this Agreement. Upon request of Local Agency, the State may, in its sole discretion, extend the term of this Agreement by Option Letter pursuant **§7.E.iv**. If the Work will be performed in multiple phases, the period of performance start and end date of each phase is detailed under the Project Schedule in **Exhibit C**.

C. Early Termination in the Public Interest

The State is entering into this Agreement to serve the public interest of the State of Colorado as determined by its Governor, General Assembly, or Courts. If this Agreement ceases to further the public interest of the State, and this ARPA Award is not appropriated, or otherwise become unavailable to fund this ARPA Award the State, in its discretion, may terminate this Agreement in whole or in part. This subsection shall not apply to a termination of this Agreement by the State for breach by Local Agency, which shall be governed by **§14.A.i.**

i. Method and Content

The State shall notify Local Agency by providing written notice to Local Agency of the termination and be in accordance with **§16.** The notice shall specify the effective date of the termination and whether it affects all or a portion of this Agreement.

ii. Obligations and Rights

Upon receipt of a termination notice for termination in the public interest, Local Agency shall be subject to **§14.A.i.a**

iii. Payments

If the State terminates this Agreement in the public interest, the State shall pay Local Agency an amount equal to the percentage of the total reimbursement payable under this Agreement that corresponds to the percentage of Work satisfactorily completed and accepted, as determined by the State, less payments previously made. Additionally, if this Agreement is less than 60% completed, as determined by the State, the State may reimburse Local Agency for a portion of actual out-of-pocket expenses, not otherwise reimbursed under this Agreement, incurred by Local Agency which are directly attributable to the uncompleted portion of Local Agency's obligations, provided that the sum of any and all reimbursement shall not exceed the maximum amount payable to Local Agency hereunder. This subsection shall not apply to a termination of this ARPA Award by the State for breach by Local Agency.

D. Local Agency Termination Under Federal Requirements

Local Agency may request termination of the ARPA Award by sending notice to the State, which includes the effective date of the termination. If this ARPA Award is terminated in this manner, then Local Agency shall return any advanced payments made for work that will not be performed prior to the effective date of the termination.

3. AUTHORITY

Authority to enter into this Agreement exists in the law as follows:

A. Federal Authority

Pursuant to Title I, Subtitle A, of the "Fixing America's Surface Transportation Act" (FAST Act) of 2015, and to applicable provisions of Title 23 of the United States Code and implementing regulations at Title 23 of the Code of Federal Regulations, as may be amended, (collectively referred to hereinafter as the "Federal Provisions"), certain federal funds have been and are expected to continue to be allocated for transportation projects requested by Local Agency and eligible under the Surface Transportation Improvement Program that has been proposed by the State and approved by the Federal Highway Administration ("FHWA").

Pursuant to Title VI of the Social Security Act, Section 602 of the "Coronavirus State and Local Fiscal Recovery Funds", a part of the American Rescue Plan, provides state, local and Tribal governments with the resources needed to respond to the pandemic and its economic effects and to build a stronger, more equitable economy during the recovery.

B. State Authority

Pursuant to CRS §43-1-223 and to applicable portions of the Federal Provisions, the State is responsible for the general administration and supervision of performance of projects in the Program, including the administration of federal funds for a Program project performed by a Local Agency under a contract with the State. This Agreement is executed under the authority of CRS §§29-1-203, 43-1-110; 43-1-116, 43-2-101(4)(c) and 43-2-104.5.

4. PURPOSE

The purpose of this Agreement is to disburse Federal funds to the Local Agency pursuant to CDOT's Stewardship Agreement with the FHWA and/or USDT as shown in **Exhibit C**.

5. DEFINITIONS

The following terms shall be construed and interpreted as follows:

A. "**Agreement**" means this agreement, including all attached Exhibits, all documents incorporated by reference, all referenced statutes, rules and cited authorities, and any future modifications thereto.

B. "**Agreement Funds**" means the funds that have been appropriated, designated, encumbered, or otherwise made available for payment by the State under this Agreement.

C. "**ARPA**" means American Rescue Plan Act, funded by the US Department of the Treasury ("USDT"). See "SLFRF" below.

D. "**Award**" means an award by a Recipient to a Subrecipient funded in whole or in part by a Federal Award. The terms and conditions of the Federal Award flow down to the Award unless the terms and conditions of the Federal Award specifically indicate otherwise.

E. "**Budget**" means the budget for the Work described in **Exhibit C**.

F. "**Business Day**" means any day in which the State is open and conducting business, but shall not include Saturday, Sunday or any day on which the State observes one of the holidays listed in §24-11-101(1) C.R.S..

G. "**Chief Procurement Officer**" means the individual to whom the Executive Director has delegated his or her authority pursuant to §24-102-202 to procure or supervise the procurement of all supplies and services needed by the State.

H. "**CJI**" means criminal justice information collected by criminal justice agencies needed for the performance of their authorized functions, including, without limitation, all information defined as criminal justice information by the U.S. Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services Security Policy, as amended and all Criminal Justice Records as defined under §24-72-302, C.R.S.

I. "**Consultant**" means a professional engineer or designer hired by Local Agency to design the Work Product.

J. "**Contractor**" means the general construction contractor hired by Local Agency to construct the Work.

K. "**CORA**" means the Colorado Open Records Act, §§24-72-200.1 *et. seq.*, C.R.S.

L. "**Effective Date**" means the date on which this Agreement is approved and signed by the Colorado State Controller or designee, as shown on the Signature and Cover Page for this Agreement.

M. "**Evaluation**" means the process of examining Local Agency's Work and rating it based on criteria established in **§6, Exhibit A** and **Exhibit E**.

N. "**Exhibits**" means the following exhibits attached to this Agreement:

i. **Exhibit A**, Scope of Work.
ii. **Exhibit B**, Sample Option Letter.
iii. **Exhibit C**, Funding Provisions
iv. **Exhibit D**, Local Agency Resolution
v. **Exhibit E**, Local Agency Contract Administration Checklist
vi. **Exhibit F**, Certification for Federal-Aid Contracts
vii. **Exhibit G**, Disadvantaged Business Enterprise
viii. **Exhibit H**, Local Agency Procedures for Consultant Services
ix. **Exhibit I**, Federal-Aid Contract Provisions for Construction Contracts
x. **Exhibit J**, Additional Federal Requirements
xi. **Exhibit K**, The Federal Funding Accountability and Transparency Act of 2006 (FFATA) Supplemental Federal Provisions
xii. **Exhibit L**, Sample Sub-Recipient Monitoring and Risk Assessment Form
xiii. **Exhibit M**, Supplemental Provisions for Federal Awards Subject to The Office of Management and Budget Uniform Administrative Requirements, Cost principles, and Audit Requirements for Federal Awards (the "Uniform Guidance")
xiv. **Exhibit N**, Federal Treasury Provisions
xv. **Exhibit O**, Agreement with Subrecipient of Federal Recovery Funds
xvi. **Exhibit P**, SLFRF Subrecipient Quarterly Report
xvii. **Exhibit Q**, SLFRF Reporting Modification Form
xviii. **Exhibit R**, Applicable Federal Awards
xix. **Exhibit S**, PII Certification
xx. **Exhibit T**, Checklist of Required Exhibits Dependent on Funding Source

O. "**Expiration Date**" means the date on which this Agreement expires, as shown on the Signature and Cover Page for this Agreement.

P. "**Extension Term**" means the period of time by which the ARPA Expiration Date is extended by the State through delivery of an updated ARPA Letter.

Q. "**Federal Award**" means an award of Federal financial assistance or a cost-reimbursement contract under the Federal Acquisition Requirements by a Federal Awarding Agency to a Recipient. "Federal Award" also means an agreement setting forth the terms and conditions of the Federal Award. The term does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program.

R. "**Federal Awarding Agency**" means a Federal agency providing a Federal Award to a Recipient. The US Department of the Treasury is the Federal Awarding Agency for the Federal Award, which may be the subject of this Agreement.

S. "**FHWA**" means the Federal Highway Administration, which is one of the twelve administrations under the Office of the Secretary of Transportation at the U.S. Department of Transportation. FHWA provides stewardship over the construction, maintenance and preservation of the Nation's highways and tunnels. FHWA is the Federal Awarding Agency for the Federal Award which is the subject of this Agreement.

T. "**Goods**" means any movable material acquired, produced, or delivered by Local Agency as set forth in this Agreement and shall include any movable material acquired, produced, or delivered by Local Agency in connection with the Services.

U. "**Incident**" means any accidental or deliberate event that results in or constitutes an imminent threat of the unauthorized access or disclosure of State Confidential Information or of the unauthorized modification, disruption, or destruction of any State Records.

V. "**Initial Term**" means the time period defined in **§2.B**.

W. "**Local Funds**" means the funds provided by the Local Agency as their obligated contribution to the federal and/or State Awards to receive the federal and/or State funding.

X. "**Notice to Proceed**" means the letter issued by the State to the Local Agency stating the date the Local Agency can begin work subject to the conditions of this Agreement.

Y. "**OMB**" means the Executive Office of the President, Office of Management and Budget.

Z. "**Oversight**" means the term as it is defined in the Stewardship Agreement between CDOT and the FHWA.

AA. "**Party**" means the State or Local Agency, and "**Parties**" means both the State and Local Agency.

BB. "**PCI**" means payment card information including any data related to credit card holders' names, credit card numbers, or the other credit card information as may be protected by state or federal law.

CC. "**PHI**" means any protected health information, including, without limitation any information whether oral or recorded in any form or medium: **(i)** that relates to the past, present or future physical or mental condition of an individual; the provision of health care to an individual; or the past, present or future payment for the provision of health care to an individual; and **(ii)** that identifies the individual or with respect to which there is a reasonable basis to believe the information can be used to identify the individual. PHI includes, but is not limited to, any information defined as Individually Identifiable Health Information by the federal Health Insurance Portability and Accountability Act.

DD. "**PII**" means personally identifiable information including, without limitation, any information maintained by the State about an individual that can be used to distinguish or trace an individual's identity, such as name, social security number, date and place of birth, mother's maiden name, or biometric records; and any other information that is linked or linkable to an individual, such as medical, educational, financial, and employment information. PII includes, but is not limited to, all information defined as personally identifiable information in §24-72-501 C.R.S. "PII" shall also mean "personal identifying information" as set forth at § 24-74-102, et. seq., C.R.S.

EE. "**Recipient**" means the Colorado Department of Transportation (CDOT) for this Federal Award.

FF. "**Services**" means the services to be performed by Local Agency as set forth in this Agreement and shall include any services to be rendered by Local Agency in connection with the Goods.

GG. "**SLFRF**" means State and Local Fiscal Recovery Funds, provided by ARPA, funded by the US Treasury Department.

HH. "**Special Funding**" means an award by Federal agency or the State which may include but is not limited to one or a combination of Multimodal Transportation & Mitigation Options Funding, Revitalizing Main Streets, Safer Main Streets, Stimulus Funds, Coronavirus Response and Relief Supplemental Funds, ARPA, SLFRF, or COVID Relief.

II. "**State Confidential Information**" means any and all State Records not subject to disclosure under CORA. State Confidential Information shall include, but is not limited to, PII and State personnel records not subject to disclosure under CORA.

JJ. "**State Fiscal Rules**" means the fiscal rules promulgated by the Colorado State Controller pursuant to §24-30-202(13)(a).

KK. "**State Fiscal Year**" means a 12-month period beginning on July 1 of each calendar year and ending on June 30 of the following calendar year. If a single calendar year follows the term, then it means the State Fiscal Year ending in that calendar year.

LL. "**State Purchasing Director**" means the position described in the Colorado Procurement Code and its implementing regulations.

MM. "**State Records**" means any and all State data, information, and records, regardless of physical form, including, but not limited to, information subject to disclosure under CORA.

NN. "**Sub-Award**" means this Award by the State to Local Agency funded in whole or in part by a Federal Award. The terms and conditions of the Federal Award flow down to this Sub-Award unless the terms and conditions of the Federal Award specifically indicate otherwise.

OO. "**Subcontractor**" means third parties, if any, engaged by Local Agency to aid in performance of the Work.

PP. "**Subrecipient**" means a non-Federal entity that receives a sub-award from a Recipient to carry out part of a Federal program but does not include an individual that is a beneficiary of such program. A Subrecipient may also be a recipient of other Federal Awards directly from a Federal Awarding Agency.

QQ. "**Tax Information**" means Federal and State of Colorado tax information including, without limitation, Federal and State tax returns, return information, and such other tax-related information as may be protected by Federal and State law and regulation. Tax Information includes but is not limited to all information defined as Federal tax Information in Internal Revenue Service Publication 1075.

RR. "**Uniform Guidance**" means the Office of Management and Budget Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, which supersedes requirements from OMB Circulars A-21, A-87, A-110, A-122, A-89, A-102, and A-133, and the guidance in Circular A-50 on Single Audit Act follow-up.

SS. "**USDT**" The United States Department of the Treasury (**USDT**) is the national treasury and finance department of the federal government of the United States where it serves as an executive department. The USDT funds ARPA.

TT. "**Work**" means the delivery of the Goods and performance of the Services in compliance with CDOT's Local Agency Manual described in this Agreement.

UU. "**Work Product**" means the tangible and intangible results of the Work, whether finished or unfinished, including drafts. Work Product includes, but is not limited to, documents, text, software (including source code), research, reports, proposals, specifications, plans, notes, studies, data, images, photographs, negatives, pictures, drawings, designs, models, surveys, maps, materials, ideas, concepts, know-how, and any other results of the Work. "Work Product" does not include any material that was developed prior to the Effective Date that is used, without modification, in the performance of the Work.

Any other term used in this Agreement that is defined in an Exhibit shall be construed and interpreted as defined in that Exhibit.

6. SCOPE OF WORK

Local Agency shall complete the Work as described in this Agreement and in accordance with the provisions of **Exhibit A**, and the Local Agency Manual. The State shall have no liability to compensate Local Agency for the delivery of any Goods or the performance of any Services that are not specifically set forth in this Agreement. Work may be divided into multiple phases that have separate periods of performance. The State may not compensate for Work that Local Agency performs outside of its designated phase performance period. The performance period of phases, including, but not limited to Design, Construction, Right of Way, Utilities, or Environment phases, are identified in **Exhibit C**. The State may unilaterally modify **Exhibit C** from time to time, at its sole discretion, to extend the Agreement Expiration Date and/or to extend the period of performance for a phase of Work authorized under this Agreement. To exercise these options to extend the Agreement Expiration Date and/or to update the phase performance period extension option, the State will provide written notice to Local Agency in a form substantially equivalent to **Exhibit B.** The State's unilateral extension of the Agreement Expiration Date and/or the phase performance periods will not amend or alter in any way the funding provisions or any other terms specified in this Agreement, notwithstanding the options listed under **§7.E**

A. Local Agency Commitments

i. Design

If the Work includes preliminary design, final design, design work sheets, or special provisions and estimates (collectively referred to as the "Plans"), Local Agency shall ensure that it and its Contractors comply with and are responsible for satisfying the following requirements:

a. Perform or provide the Plans to the extent required by the nature of the Work.

b. Prepare final design in accordance with the requirements of the latest edition of the American Association of State Highway Transportation Officials (AASHTO) manual or other standard, such as the Uniform Building Code, as approved by the State.

c. Prepare provisions and estimates in accordance with the most current version of the State's Roadway and Bridge Design Manuals and Standard Specifications for Road and Bridge Construction or Local Agency specifications if approved by the State.

d. Include details of any required detours in the Plans in order to prevent any interference of the construction Work and to protect the traveling public.

e. Stamp the Plans as produced by a Colorado registered professional engineer.

f. Provide final assembly of Plans and all other necessary documents.

g. Ensure the Plans are accurate and complete.

h. Make no further changes in the Plans following the award of the construction contract to Contractor unless agreed to in writing by the Parties. The Plans shall be considered final when approved in writing by CDOT, and when final, they will be deemed incorporated herein.

ii. Local Agency Work

a. Local Agency shall comply with the requirements of the Americans With Disabilities Act (ADA) 42 U.S.C. § 12101, et. seq., and applicable federal regulations and standards as contained in the document "ADA Accessibility Requirements in CDOT Transportation Projects".

b. Local Agency shall afford the State ample opportunity to review the Plans and shall make any changes in the Plans that are directed by the State to comply with FHWA requirements.

c. Local Agency may enter into a contract with a Consultant to perform all or any portion of the Plans and/or construction administration. Provided, however, if federal-aid funds are involved in the cost of such Work to be done by such Consultant, such Consultant contract (and the performance provision of the Plans under the contract) must comply with all applicable requirements of 23 C.F.R. Part 172 and with any procedures implementing those requirements as provided by the State, including those in **Exhibit H**. If Local Agency enters into a contract with a Consultant for the Work:

1) Local Agency shall submit a certification that procurement of any Consultant contract complies with the requirements of 23 C.F.R. 172.5(1) prior to entering into such Consultant contract, subject to the State's approval. If not approved by the State, Local Agency shall not enter into such Consultant contract.

2) Local Agency shall ensure that all changes in the Consultant contract have prior approval by the State and FHWA and that they are in writing. Immediately after the Consultant contract has been awarded, one copy of the executed Consultant contract and any amendments shall be submitted to the State.

3) Local Agency shall require that all billings under the Consultant contract comply with the State's standardized billing format. Examples of the billing formats are available from the CDOT Agreements Office.

4) Local Agency (and any Consultant) shall comply with 23 C.F.R. 172.5(b) and (d) and use the CDOT procedures described in **Exhibit H** to administer the Consultant contract.

5) Local Agency may expedite any CDOT approval of its procurement process and/or Consultant contract by submitting a letter to CDOT from Local Agency's attorney/authorized representative certifying compliance with **Exhibit H** and 23 C.F.R. 172.5(b)and (d).

6) Local Agency shall ensure that the Consultant contract complies with the requirements of 49 CFR 18.36(i) and contains the following language verbatim:

(a) The design work under this Agreement shall be compatible with the requirements of the contract between Local Agency and the State (which is incorporated herein by this

reference) for the design/construction of the project. The State is an intended third-party beneficiary of this agreement for that purpose.

(b) Upon advertisement of the project work for construction, the consultant shall make available services as requested by the State to assist the State in the evaluation of construction and the resolution of construction problems that may arise during the construction of the project.

(c) The consultant shall review the construction Contractor's shop drawings for conformance with the contract documents and compliance with the provisions of the State's publication, Standard Specifications for Road and Bridge Construction, in connection with this work.

(d) The State, in its sole discretion, may review construction plans, special provisions and estimates and may require Local Agency to make such changes therein as the State determines necessary to comply with State and FHWA requirements.

iii. Construction

If the Work includes construction, Local Agency shall perform the construction in accordance with the approved design plans and/or administer the construction in accordance with **Exhibit E**. Such administration shall include Work inspection and testing; approving sources of materials; performing required plant and shop inspections; documentation of contract payments, testing and inspection activities; preparing and approving pay estimates; preparing, approving and securing the funding for contract modification orders and minor contract revisions; processing construction Contractor claims; construction supervision; and meeting the quality control requirements of the FHWA/CDOT Stewardship Agreement, as described in **Exhibit E**.

a. The State may, after providing written notice of the reason for the suspension to Local Agency, suspend the Work, wholly or in part, due to the failure of Local Agency or its Contractor to correct conditions which are unsafe for workers or for such periods as the State may deem necessary due to unsuitable weather, or for conditions considered unsuitable for the prosecution of the Work, or for any other condition or reason deemed by the State to be in the public interest.

b. Local Agency shall be responsible for the following:

1) Appointing a qualified professional engineer, licensed in the State of Colorado, as Local Agency Project Engineer (LAPE), to perform engineering administration. The LAPE shall administer the Work in accordance with this Agreement, the requirements of the construction contract and applicable State procedures, as defined in the CDOT Local Agency Manual (https://www.codot.gov/business/designsupport/bulletins_manuals/2006-local-agency-manual).

2) For the construction Services, advertising the call for bids, following its approval by the State, and awarding the construction contract(s) to the lowest responsible bidder(s).

(a) All Local Agency's advertising and bid awards pursuant to this Agreement shall comply with applicable requirements of 23 U.S.C. §112 and 23 C.F.R. Parts 633 and 635 and C.R.S. § 24-92-101 et seq. Those requirements include, without limitation, that Local Agency and its Contractor(s) incorporate Form 1273 (Exhibit I) in its entirety, verbatim, into any subcontract(s) for Services as terms and conditions thereof, as required by 23 C.F.R. 633.102(e).

(b) Local Agency may accept or reject the proposal of the apparent low bidder for Work on which competitive bids have been received. Local Agency must accept or reject such bids within three (3) working days after they are publicly opened.

(c) If Local Agency accepts bids and makes awards that exceed the amount of available Agreement Funds, Local Agency shall provide the additional funds necessary to complete the Work or not award such bids.

(d) The requirements of **§6.A.iii.b.2** also apply to any advertising and bid awards made by the State.

(e) The State (and in some cases FHWA) must approve in advance all Force Account Construction, and Local Agency shall not initiate any such Services until the State issues a written Notice to Proceed.

iv. Right of Way (ROW) and Acquisition/Relocation

a. If Local Agency purchases a ROW for a State highway, including areas of influence, Local Agency shall convey the ROW to CDOT promptly upon the completion of the project/construction.

b. Any acquisition/relocation activities shall comply with all applicable federal and State statutes and regulations, including but not limited to, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Uniform Relocation Assistance and Real Property Acquisition Policies for Federal and Federally Assisted Programs, as amended (49 C.F.R. Part 24), CDOT's Right of Way Manual, and CDOT's Policy and Procedural Directives.

c. The Parties' respective responsibilities for ensuring compliance with acquisition, relocation and incidentals depend on the level of federal participation as detailed in CDOT's Right of Way Manual (located at http://www.codot.gov/business/manuals/right-of-way); however, the State always retains oversight responsibilities.

d. The Parties' respective responsibilities at each level of federal participation in CDOT's Right of Way Manual, and the State's reimbursement of Local Agency costs will be determined pursuant the following categories:

1) Right of way acquisition (3111) for federal participation and non-participation;

2) Relocation activities, if applicable (3109);

3) Right of way incidentals, if applicable (expenses incidental to acquisition/relocation of right of way – 3114).

v. Utilities

If necessary, Local Agency shall be responsible for obtaining the proper clearance or approval from any utility company that may become involved in the Work. Prior to the Work being advertised for bids, Local Agency shall certify in writing to the State that all such clearances have been obtained.

vi. Railroads

If the Work involves modification of a railroad company's facilities and such modification will be accomplished by the railroad company, Local Agency shall make timely application to the Public Utilities Commission ("PUC") requesting its order providing for the installation of the proposed improvements. Local Agency shall not proceed with that part of the Work before obtaining the PUC's order. Local Agency shall also establish contact with the railroad company involved for the purpose of complying with applicable provisions of 23 C.F.R. 646, subpart B, concerning federal-aid projects involving railroad facilities, and:

a. Execute an agreement with the railroad company setting out what work is to be accomplished and the location(s) thereof, and which costs shall be eligible for federal participation.

b. Obtain the railroad's detailed estimate of the cost of the Work.

c. Establish future maintenance responsibilities for the proposed installation.

d. Proscribe in the agreement the future use or dispositions of the proposed improvements in the event of abandonment or elimination of a grade crossing.

e. Establish future repair and/or replacement responsibilities, as between the railroad company and the Local Agency, in the event of accidental destruction or damage to the installation.

vii. Environmental Obligations

Local Agency shall perform all Work in accordance with the requirements of current federal and State environmental regulations, including the National Environmental Policy Act of 1969 (NEPA) as applicable.

viii. Maintenance Obligations

Local Agency shall maintain and operate the Work constructed under this Agreement at its own cost and expense during their useful life, in a manner satisfactory to the State and FHWA. Local Agency shall conduct such maintenance and operations in accordance with all applicable statutes, ordinances, and regulations pertaining to maintaining such improvements. The State and FHWA may make periodic inspections to verify that such improvements are being adequately maintained.

ix. Monitoring Obligations

Local Agency shall respond in a timely manner to and participate fully with the monitoring activities described in **§7.F.vi.**

B. State's Commitments

i. The State will perform a final project inspection of the Work as a quality control/assurance activity. When all Work has been satisfactorily completed, the State will sign the FHWA Form 1212.

ii. Notwithstanding any consents or approvals given by the State for the Plans, the State shall not be liable or responsible in any manner for the structural design, details or construction of any Work constituting major structures designed by, or that are the responsibility of, Local Agency, as identified in **Exhibit E**.

7. PAYMENTS

A. Maximum Amount

Payments to Local Agency are limited to the unpaid, obligated balance of the Agreement Funds set forth in **Exhibit C**. The State shall not pay Local Agency any amount under this Agreement that exceeds the Agreement Maximum set forth in **Exhibit C**.

B. Payment Procedures

i. Invoices and Payment

a. The State shall pay Local Agency in the amounts and in accordance with conditions set forth in **Exhibit C**.

b. Local Agency shall initiate payment requests by invoice to the State, in a form and manner approved by the State.

c. The State shall pay each invoice within 45 days following the State's receipt of that invoice, so long as the amount invoiced correctly represents Work completed by Local Agency and previously accepted by the State during the term that the invoice covers. If the State determines that the amount of any invoice is not correct, then Local Agency shall make all changes necessary to correct that invoice.

d. The acceptance of an invoice shall not constitute acceptance of any Work performed or deliverables provided under the Agreement.

e. If a project is funded in part with Federal or State special funding there may be an expiration date for the funds. The expiration date applies to grants and local funds used to match grants. To receive payment or credit for the match, Work must be completed or substantially completed, as outlined in the terms of the grant, prior to the expiration date of the special funding and invoiced in compliance with the rules outlined in the award of the funding. The acceptance of an invoice shall not constitute acceptance of any Work performed or deliverables provided under the Agreement.

ii. Interest

Amounts not paid by the State within 45 days after the State's acceptance of the invoice shall bear interest on the unpaid balance beginning on the 46th day at the rate of 1% per month, as required by §24-30-202(24)(a), C.R.S., until paid in full; provided, however, that interest shall not accrue on unpaid amounts that the State disputes in writing. Local Agency shall invoice the State separately for accrued interest on delinquent amounts, and the invoice shall reference the delinquent payment, the number of days interest to be paid and the interest rate.

iii. Payment Disputes

If Local Agency disputes any calculation, determination, or amount of any payment, Local Agency shall notify the State in writing of its dispute within 30 days following the earlier to occur of Local Agency's receipt of the payment or notification of the determination or calculation of the payment by the State. The State will review the information presented by Local Agency and may make changes to its determination based on this review. The calculation, determination, or payment amount that results from the State's review shall not be subject to additional dispute under this subsection. No payment subject to a dispute under this subsection shall be due until after the State has concluded its review, and the State shall not pay any interest on any amount during the period it is subject to dispute under this subsection.

iv. Available Funds-Contingency-Termination

a. The State is prohibited by law from making commitments beyond the term of the current State Fiscal Year. Payment to Local Agency beyond the current State Fiscal Year is contingent on the appropriation and continuing availability of Agreement Funds in any subsequent year (as provided in the Colorado Special Provisions). If federal funds or funds from any other non-State funds constitute all or some of the Agreement Funds, the State's obligation to pay Local Agency shall be contingent upon such non-State funding continuing to be made available for payment. Payments to be made pursuant to this Agreement shall be made only from Agreement Funds, and the State's liability for such payments shall be limited to the amount remaining of such Agreement Funds. If State, federal or other funds are not appropriated, or otherwise become unavailable to fund this Agreement, the State may, upon written notice, terminate this Agreement, in whole or in part, without incurring further liability. The State shall, however, remain obligated to pay for Services and Goods that are delivered and accepted prior to the effective date of notice of termination, and this termination shall otherwise be treated as if this Agreement were terminated in the public interest as described in **§2.C**.

b. If the agreement funds are terminated, the State can terminate the contract early. Payment due for work done to the date of termination will be processed in a manner consistent with **§2.C**.

v. Erroneous Payments

The State may recover, at the State's discretion, payments made to Local Agency in error for any reason, including, but not limited to, overpayments or improper payments, and unexpended or excess funds received by Local Agency. The State may recover such payments by deduction from subsequent payments under this Agreement, deduction from any payment due under any other contracts, grants or agreements between the State and Local Agency, or by any other appropriate method for collecting debts owed to the State. The close out of a Federal Award does not affect the right of FHWA or the State to disallow costs and recover funds on the basis of a later audit or other review. Any cost disallowance recovery is to be made within the Record Retention Period (as defined below in **§9.A**.).

vi. Federal Recovery

The close-out of a Federal Award does not affect the right of the Federal Awarding Agency or the State to disallow costs and recover funds on the basis of a later audit or other review. Any cost disallowance recovery is to be made within the Record Retention Period, as defined below.

C. Local Agency Funds

Local Agency shall provide their obligated contribution funds as outlined in **§7.A**. and **Exhibit C**. Local Agency shall have raised the full amount of their funds prior to the Effective Date and shall report to the State regarding the status of such funds upon request. Local Agency's obligation to pay all or any part of any matching funds, whether direct or contingent, only extend to funds duly and lawfully appropriated for the purposes of this Agreement by the authorized representatives of Local Agency and paid into Local Agency's treasury. Local Agency represents to the State that the amount designated "Local Agency Funds" in **Exhibit C** has been legally appropriated for the purpose of this Agreement by its authorized representatives and paid into its treasury. Local Agency may evidence such obligation by an appropriate ordinance/resolution or other authority letter expressly authorizing Local Agency to enter into this Agreement and to expend its match share of the Work. A copy of any such ordinance/resolution or authority letter is attached hereto as **Exhibit D** if applicable. Local Agency does not by this Agreement irrevocably pledge present cash reserves for payments in future fiscal years, and this Agreement is not intended to create a multiple-fiscal year debt of

Local Agency. Local Agency shall not pay or be liable for any claimed interest, late charges, fees, taxes, or penalties of any nature, except as required by Local Agency's laws or policies.

D. Reimbursement of Local Agency Costs

The State shall reimburse Local Agency's allowable costs, not exceeding the maximum total amount described in **Exhibit C** and **§7**. However, any costs incurred by Local Agency prior to the Effective Date shall not be reimbursed absent specific allowance of pre-award costs and indication that the Federal Award funding is retroactive. The State shall pay Local Agency for costs or expenses incurred or performance by the Local Agency prior to the Effective Date, only if (1) the Grant Funds involve federal funding and (2) federal laws, rules, and regulations applicable to the Work provide for such retroactive payments to the Local Agency. Any such retroactive payments shall comply with State Fiscal Rules and be made in accordance with the provisions of this Agreement. The applicable principles described in 2 C.F.R. Part 200 shall govern the State's obligation to reimburse all costs incurred by Local Agency and submitted to the State for reimbursement hereunder, and Local Agency shall comply with all such principles. The State shall reimburse Local Agency for the federal-aid share of properly documented costs related to the Work after review and approval thereof, subject to the provisions of this Agreement and **Exhibit C**. Local Agency costs for Work performed prior to the Effective Date shall not be reimbursed absent specific allowance of pre-award costs and indication that the Federal Award funding is retroactive. Local Agency costs for Work performed after any Performance Period End Date for a respective phase of the Work, is not reimbursable. Allowable costs shall be:

i. Reasonable and necessary to accomplish the Work and for the Goods and Services provided.

ii. Actual net cost to Local Agency (i.e. the price paid minus any items of value received by Local Agency that reduce the cost actually incurred).

E. Unilateral Modification of Agreement Funds Budget by State Option Letter

The State may, at its discretion, issue an "Option Letter" to Local Agency to add or modify Work phases in the Work schedule in **Exhibit C** if such modifications do not increase total budgeted Agreement Funds. Such Option Letters shall amend and update **Exhibit C**, Sections 2 or 4 of the Table, and sub-sections B and C of the **Exhibit C**. Option Letters shall not be deemed valid until signed by the State Controller or an authorized delegate. **This is NOT a Notice to Proceed**. Modification of **Exhibit C** by unilateral Option Letter is permitted only in the specific scenarios listed below. The State will exercise such options by providing Local Agency a fully executed Option Letter, in a form substantially equivalent to **Exhibit B**. Such Option Letters will be incorporated into this Agreement. This applies to the entire Scope of Work.

i. Option to Begin a Phase and/or Increase or Decrease the Encumbrance Amount

The State may require by Option Letter that Local Agency begin a new Work phase that may include Design, Construction, Environmental, Utilities, ROW Incidentals or Miscellaneous Work (but may not include Right of Way Acquisition/Relocation or Railroads) as detailed in **Exhibit A.** Such Option Letters may not modify the other terms and conditions stated in this Agreement and must decrease the amount budgeted and encumbered for one or more other Work phases so that the total amount of budgeted Agreement Funds remains the same. The State may also change the funding sources so long as the amount budgeted remains the same and the Local Agency contribution does not increase. The State may also issue a unilateral Option Letter to increase and/or decrease the total encumbrance amount of two or more existing Work phases, as long as the total amount of budgeted Agreement Funds remains the same, replacing the original Agreement Funding exhibit (**Exhibit C**) with an updated **Exhibit C-1** (with subsequent exhibits labeled **C-2**, **C-3**, etc.).

ii. Option to Transfer Funds from One Phase to Another Phase.

The State may require or permit Local Agency to transfer Agreement Funds from one Work phase (Design, Construction, Environmental, Utilities, ROW Incidentals or Miscellaneous) to another phase as a result of changes to State, federal, and local match funding. In such case, the original funding exhibit (**Exhibit C**) will be replaced with an updated **Exhibit C-1** (with subsequent exhibits labeled **C-2**, **C-3**, etc.) attached to the Option Letter. The Agreement Funds transferred from one Work phase to another are subject to the same terms and conditions stated in the original Agreement with the total budgeted Agreement Funds remaining the same. The State may unilaterally exercise this option by providing a

fully executed Option Letter to Local Agency within thirty (30) days before the initial targeted start date of the Work phase, in a form substantially equivalent to **Exhibit B**.

iii. Option to Exercise Options i and ii.

The State may require Local Agency to add a Work phase as detailed in **Exhibit A**, and encumber and transfer Agreement Funds from one Work phase to another. The original funding exhibit (**Exhibit C**) in the original Agreement will be replaced with an updated **Exhibit C-1** (with subsequent exhibits labeled **C-2**, **C-3**, etc.) attached to the Option Letter. The addition of a Work phase and encumbrance and transfer of Agreement Funds are subject to the same terms and conditions stated in the original Agreement with the total budgeted Agreement Funds remaining the same. The State may unilaterally exercise this option by providing a fully executed Option Letter to Local Agency within 30 days before the initial targeted start date of the Work phase, in a form substantially equivalent to **Exhibit B**.

iv. Option to Extend Agreement/Phase Term and/or modify the OMB Uniform Guidance. The State, at its discretion, shall have the option to extend the term of this Agreement and/or update a Work Phase Performance Period and/or modify information required under the OMB Uniform Guidance, as outlined in **Exhibit C**. Any updated version of **Exhibit C** shall be attached to any executed Option Letter as **Exhibit C-1** (with subsequent exhibits labeled **C-2**, **C-3**, etc.). In order to exercise this option, the State shall provide written notice to the Local Agency in a form substantially equivalent to **Exhibit B**.

F. Accounting

Local Agency shall establish and maintain accounting systems in accordance with generally accepted accounting standards (a separate set of accounts, or as a separate and integral part of its current accounting scheme). Such accounting systems shall, at a minimum, provide as follows:

i. Local Agency Performing the Work

If Local Agency is performing the Work, it shall document all allowable costs, including any approved Services contributed by Local Agency or subcontractors, using payrolls, time records, invoices, contracts, vouchers, and other applicable records.

ii. Local Agency-Checks or Draws

Checks issued or draws made by Local Agency shall be made or drawn against properly signed vouchers detailing the purpose thereof. Local Agency shall keep on file all checks, payrolls, invoices, contracts, vouchers, orders, and other accounting documents in the office of Local Agency, clearly identified, readily accessible, and to the extent feasible, separate and apart from all other Work documents.

iii. State-Administrative Services

The State may perform any necessary administrative support services required hereunder. Local Agency shall reimburse the State for the costs of any such services from the budgeted Agreement Funds as provided for in **Exhibit C**. If FHWA Agreement Funds are or become unavailable, or if Local Agency terminates this Agreement prior to the Work being approved by the State or otherwise completed, then all actual incurred costs of such services and assistance provided by the State shall be reimbursed to the State by Local Agency at its sole expense.

iv. Local Agency-Invoices

Local Agency's invoices shall describe in detail the reimbursable costs incurred by Local Agency for which it seeks reimbursement, the dates such costs were incurred and the amounts thereof, and Local Agency shall not submit more than one invoice per month.

v. Invoicing Within 60 Days

The State shall not be liable to reimburse Local Agency for any costs invoiced more than 60 days after the date on which the costs were incurred, including costs included in Local Agency's final invoice. The State may withhold final payment to Local Agency at the State's sole discretion until completion of final audit. Any costs incurred by Local Agency that are not allowable under 2 C.F.R. Part 200 shall be Local Agency's responsibility, and the State will deduct such disallowed costs from any payments due to Local Agency. The State will not reimburse costs for Work performed after the Performance Period End Date for a respective Work phase. The State will not reimburse costs for Work performed prior to Performance

Period End Date, but for which an invoice is received more than 60 days after the Performance Period End Date.

vi. Risk Assessment & Monitoring

Pursuant to 2 C.F.R. 200.331(b), – CDOT will evaluate Local Agency's risk of noncompliance with federal statutes, regulations, and terms and conditions of this Agreement. Local Agency shall complete a Risk Assessment Form (**Exhibit L**) when that may be requested by CDOT. The risk assessment is a quantitative and/or qualitative determination of the potential for Local Agency's non-compliance with the requirements of the Federal Award. The risk assessment will evaluate some or all of the following factors:

- Experience: Factors associated with the experience and history of the Subrecipient with the same or similar Federal Awards or grants.
- Monitoring/Audit: Factors associated with the results of the Subrecipient's previous audits or monitoring visits, including those performed by the Federal Awarding Agency, when the Subrecipient also receives direct federal funding. Include audit results if Subrecipient receives single audit, where the specific award being assessed was selected as a major program.
- Operation: Factors associated with the significant aspects of the Subrecipient's operations, in which failure could impact the Subrecipient's ability to perform and account for the contracted goods or services.
- Financial: Factors associated with the Subrecipient's financial stability and ability to comply with financial requirements of the Federal Award.
- Internal Controls: Factors associated with safeguarding assets and resources, deterring and detecting errors, fraud and theft, ensuring accuracy and completeness of accounting data, producing reliable and timely financial and management information, and ensuring adherence to its policies and plans.
- Impact: Factors associated with the potential impact of a Subrecipient's non-compliance to the overall success of the program objectives.
- Program Management: Factors associated with processes to manage critical personnel, approved written procedures, and knowledge of rules and regulations regarding federal-aid projects.

Following Local Agency's completion of the Risk Assessment Tool (**Exhibit L**), CDOT will determine the level of monitoring it will apply to Local Agency's performance of the Work. This risk assessment may be re-evaluated after CDOT begins performing monitoring activities.

G. Close Out

Local Agency shall close out this Award within 90 days after the Final Phase Performance End Date. If SLFRF Funds are used the Local Agency shall close out that portion of the Award within 45 days after the ARPA Award Expiration Date. Close out requires Local Agency's submission to the State of all deliverables defined in this Agreement, and Local Agency's final reimbursement request or invoice. The State will withhold 5% of allowable costs until all final documentation has been submitted and accepted by the State as substantially complete. If FHWA or US Treasury has not closed this Federal Award within one (1) year and 90 days after the Final Phase Performance End Date due to Local Agency's failure to submit required documentation, then Local Agency may be prohibited from applying for new Federal Awards through the State until such documentation is submitted and accepted.

8. REPORTING - NOTIFICATION

A. Quarterly Reports

In addition to any reports required pursuant to **§19** or pursuant to any exhibit, for any contract having a term longer than 3 months, Local Agency shall submit, on a quarterly basis, a written report specifying progress made for each specified performance measure and standard in this Agreement. Such progress report shall be in accordance with the procedures developed and prescribed by the State. Progress reports shall be submitted to the State not later than ten (10) Business Days following the end of each calendar quarter or at such time as otherwise specified by the State. If SLFRF Funds are used the report must be in the format of **Exhibit P**.

B. Litigation Reporting

If Local Agency is served with a pleading or other document in connection with an action before a court or other administrative decision making body, and such pleading or document relates to this Agreement or may affect Local Agency's ability to perform its obligations under this Agreement, Local Agency shall, within 10 days after being served, notify the State of such action and deliver copies of such pleading or document to the State's principal representative identified in **§16**.

C. Performance and Final Status

Local Agency shall submit all financial, performance and other reports to the State no later than 60 calendar days after the Final Phase Performance End Date or sooner termination of this Agreement, containing an Evaluation of Subrecipient's performance and the final status of Subrecipient's obligations hereunder.

D. Violations Reporting

Local Agency must disclose, in a timely manner, in writing to the State and FHWA, all violations of federal or State criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal Award. Penalties for noncompliance may include suspension or debarment (2 CFR Part 180 and 31 U.S.C. 3321).

9. LOCAL AGENCY RECORDS

A. Maintenance

Local Agency shall make, keep, maintain, and allow inspection and monitoring by the State of a complete file of all records, documents, communications, notes and other written materials, electronic media files, and communications, pertaining in any manner to the Work or the delivery of Services (including, but not limited to the operation of programs) or Goods hereunder. Local Agency shall maintain such records for a period (the "Record Retention Period") pursuant to the requirements of the funding source and for a minimum of three (3) years following the date of submission to the State of the final expenditure report, whichever is longer, or if this Award is renewed quarterly or annually, from the date of the submission of each quarterly or annual report, respectively. If any litigation, claim, or audit related to this Award starts before expiration of the Record Retention Period, the Record Retention Period shall extend until all litigation, claims, or audit findings have been resolved and final action taken by the State or Federal Awarding Agency. The Federal Awarding Agency, a cognizant agency for audit, oversight or indirect costs, and the State, may notify Local Agency in writing that the Record Retention Period shall be extended. For records for real property and equipment, the Record Retention Period shall extend three (3) years following final disposition of such property.

B. Inspection

Records during the Record Retention Period. Local Agency shall make Local Agency Records available during normal business hours at Local Agency's office or place of business, or at other mutually agreed upon times or locations, upon no fewer than two (2) Business Days' notice from the State, unless the State determines that a shorter period of notice, or no notice, is necessary to protect the interests of the State.

C. Monitoring

The State will monitor Local Agency's performance of its obligations under this Agreement using procedures as determined by the State. The State shall monitor Local Agency's performance in a manner that does not unduly interfere with Local Agency's performance of the Work. Local Agency shall allow the State to perform all monitoring required by the Uniform Guidance, based on the State's risk analysis of Local Agency. The State shall have the right, in its sole discretion, to change its monitoring procedures and requirements at any time during the term of this Agreement. The State shall monitor Local Agency's performance in a manner that does not unduly interfere with Local Agency's performance of the Work. If Local Agency enters into a subcontract with an entity that would also be considered a Subrecipient, then the subcontract entered into by Local Agency shall contain provisions permitting both Local Agency and the State to perform all monitoring of that Subcontractor in accordance with the Uniform Guidance.

D. Final Audit Report

Local Agency shall promptly submit to the State a copy of any final audit report of an audit performed on Local Agency's records that relates to or affects this Agreement or the Work, whether the audit is conducted

by Local Agency or a third party. Additionally, if Local Agency is required to perform a single audit under 2 CFR 200.501, *et seq.*, then Local Agency shall submit a copy of the results of that audit to the State within the same timelines as the submission to the federal government.

10. CONFIDENTIAL INFORMATION-STATE RECORDS

A. Confidentiality

Local Agency shall hold and maintain, and cause all Subcontractors to hold and maintain, any and all State Records that the State provides or makes available to Local Agency for the sole and exclusive benefit of the State, unless those State Records are otherwise publicly available at the time of disclosure or are subject to disclosure by Local Agency under CORA. Local Agency shall not, without prior written approval of the State, use for Local Agency's own benefit, publish, copy, or otherwise disclose to any third party, or permit the use by any third party for its benefit or to the detriment of the State, any State Records, except as otherwise stated in this Agreement. Local Agency shall provide for the security of all State Confidential Information in accordance with all policies promulgated by the Colorado Office of Information Security and all applicable laws, rules, policies, publications, and guidelines. Local Agency shall immediately forward any request or demand for State Records to the State's principal representative. If Local Agency or any of its Subcontractors will or may receive the following types of data, Local Agency or its Subcontractors shall provide for the security of such data according to the following: **(i)** the most recently promulgated IRS Publication 1075 for all Tax Information and in accordance with the Safeguarding Requirements for Federal Tax Information attached to this Award as an Exhibit, if applicable, **(ii)** the most recently updated PCI Data Security Standard from the PCI Security Standards Council for all PCI, **(iii)** the most recently issued version of the U.S. Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services Security Policy for all CJI, and **(iv)** the federal Health Insurance Portability and Accountability Act for all PHI and the HIPAA Business Associate Agreement attached to this Award, if applicable. Local Agency shall immediately forward any request or demand for State Records to the State's principal representative.

B. Other Entity Access and Nondisclosure Agreements

Local Agency may provide State Records to its agents, employees, assigns and Subcontractors as necessary to perform the Work, but shall restrict access to State Confidential Information to those agents, employees, assigns and Subcontractors who require access to perform their obligations under this Agreement. Local Agency shall ensure all such agents, employees, assigns, and Subcontractors sign nondisclosure agreements with provisions at least as protective as those in this Agreement, and that the nondisclosure agreements are in force at all times the agent, employee, assign or Subcontractor has access to any State Confidential Information. Local Agency shall provide copies of those signed nondisclosure agreements to the State upon request.

C. Use, Security, and Retention

Local Agency shall use, hold and maintain State Confidential Information in compliance with any and all applicable laws and regulations in facilities located within the United States, and shall maintain a secure environment that ensures confidentiality of all State Confidential Information wherever located. Local Agency shall provide the State with access, subject to Local Agency's reasonable security requirements, for purposes of inspecting and monitoring access and use of State Confidential Information and evaluating security control effectiveness. Upon the expiration or termination of this Agreement, Local Agency shall return State Records provided to Local Agency or destroy such State Records and certify to the State that it has done so, as directed by the State. If Local Agency is prevented by law or regulation from returning or destroying State Confidential Information, Local Agency warrants it will guarantee the confidentiality of, and cease to use, such State Confidential Information.

D. Incident Notice and Remediation

If Local Agency becomes aware of any Incident, it shall notify the State immediately and cooperate with the State regarding recovery, remediation, and the necessity to involve law enforcement, as determined by the State. Unless Local Agency can establish that none of Local Agency or any of its agents, employees, assigns, or Subcontractors are the cause or source of the Incident, Local Agency shall be responsible for the cost of notifying each person who may have been impacted by the Incident. After an Incident, Local Agency shall take steps to reduce the risk of incurring a similar type of Incident in the future as directed by the State, which

may include, but is not limited to, developing, and implementing a remediation plan that is approved by the State at no additional cost to the State.

E. Safeguarding Personally Identifying Information "PII"

If Local Agency or any of its Subcontracts will or may receive PII under this agreement, Local Agency shall provide for the security for such PII, in a manner and form acceptable to the State, including, without limitation, State non-disclosure requirements, use of appropriate technology, security practices, computer access security, data access security, data storage encryption, data transmission encryption, security inspections, and audits. Local Agency shall be a "Third Party Service Provider" as defined in §24-73-103(1)(i), C.R.S. and shall maintain security procedures and practices consistent with §§24-73-101 et seq., C.R.S. In addition, as set forth in § 24-74-102, et. seq., C.R.S., Contractor, including, but not limited to, Contractor's employees, agents and Subcontractors, agrees not to share any PII with any third parties for the purpose of investigating for, participating in, cooperating with, or assisting with Federal immigration enforcement. If Contractor is given direct access to any State databases containing PII, Contractor shall execute, on behalf of itself and its employees, the certification attached hereto as **Exhibit S** on an annual basis Contractor's duty and obligation to certify as set forth in **Exhibit S** shall continue as long as Contractor has direct access to any State databases containing PII. If Contractor uses any Subcontractors to perform services requiring direct access to State databases containing PII, the Contractor shall require such Subcontractors to execute and deliver the certification to the State on an annual basis, so long as the Subcontractor has access to State databases containing PII.

11. CONFLICTS OF INTEREST

A. Actual Conflicts of Interest

Local Agency shall not engage in any business or activities or maintain any relationships that conflict in any way with the full performance of the obligations of Local Agency under this Agreement. Such a conflict of interest would arise when a Local Agency or Subcontractor's employee, officer or agent were to offer or provide any tangible personal benefit to an employee of the State, or any member of his or her immediate family or his or her partner, related to the award of, entry into or management or oversight of this Agreement. Officers, employees, and agents of Local Agency may neither solicit nor accept gratuities, favors or anything of monetary value from contractors or parties to subcontracts.

B. Apparent Conflicts of Interest

Local Agency acknowledges that, with respect to this Agreement, even the appearance of a conflict of interest shall be harmful to the State's interests. Absent the State's prior written approval, Local Agency shall refrain from any practices, activities or relationships that reasonably appear to be in conflict with the full performance of Local Agency's obligations under this Agreement.

C. Disclosure to the State

If a conflict or the appearance of a conflict arises, or if Local Agency is uncertain whether a conflict or the appearance of a conflict has arisen, Local Agency shall submit to the State a disclosure statement setting forth the relevant details for the State's consideration. Failure to promptly submit a disclosure statement or to follow the State's direction in regard to the actual or apparent conflict constitutes a breach of this Agreement.

12. INSURANCE

Local Agency shall obtain and maintain, and ensure that each Subcontractor shall obtain and maintain, insurance as specified in this section at all times during the term of this Agreement. All insurance policies required by this Agreement that are not provided through self-insurance shall be issued by insurance companies with an AM Best rating of A-VIII or better.

A. Local Agency Insurance

Local Agency is a "public entity" within the meaning of the Colorado Governmental Immunity Act, §24-10-101, *et seq.*, C.R.S. (the "GIA") and shall maintain at all times during the term of this Agreement such liability insurance, by commercial policy or self-insurance, as is necessary to meet its liabilities under the GIA.

B. Subcontractor Requirements

Local Agency shall ensure that each Subcontractor that is a public entity within the meaning of the GIA, maintains at all times during the terms of this Agreement, such liability insurance, by commercial policy or self-insurance, as is necessary to meet the Subcontractor's obligations under the GIA. Local Agency shall ensure that each Subcontractor that is not a public entity within the meaning of the GIA, maintains at all times during the terms of this Agreement all of the following insurance policies:

i. Workers' Compensation

Workers' compensation insurance as required by state statute, and employers' liability insurance covering all Local Agency or Subcontractor employees acting within the course and scope of their employment.

ii. General Liability

Commercial general liability insurance written on an Insurance Services Office occurrence form, covering premises operations, fire damage, independent contractors, products and completed operations, blanket contractual liability, personal injury, and advertising liability with minimum limits as follows:

a. $1,000,000 each occurrence;

b. $1,000,000 general aggregate;

c. $1,000,000 products and completed operations aggregate; and

d. $50,000 any one (1) fire.

iii. Automobile Liability

Automobile liability insurance covering any auto (including owned, hired and non-owned autos) with a minimum limit of $1,000,000 each accident combined single limit.

iv. Protected Information (this insurance requirement only applies if the Subcontractor has or will have access to State Confidential Information)

Liability insurance covering all loss of State Confidential Information, such as PII, PHI, PCI, Tax Information, and CJI, and claims based on alleged violations of privacy rights through improper use or disclosure of protected information with minimum limits as follows:

a. $1,000,000 each occurrence; and

b. $2,000,000 general aggregate.

v. Professional Liability Insurance (this insurance requirement only applies if the Subcontractor is providing professional services including but not limited to engineering, architectural, landscape architectural, professional surveying, industrial hygiene services, or any other commonly understood professional service)

Professional liability insurance covering any damages caused by an error, omission or any negligent act with minimum limits as follows:

a. $1,000,000 each occurrence; and

b. $1,000,000 general aggregate.

vi. Crime Insurance

Crime insurance including employee dishonesty coverage with minimum limits as follows:

a. $1,000,000 each occurrence; and

b. $1,000,000 general aggregate.

vii. Cyber/Network Security and Privacy Liability

Liability insurance covering all civil, regulatory and statutory damages, contractual damages, data breach management exposure, and any loss of State Confidential Information, such as PII, PHI, PCI, Tax Information, and CJI, and claims based on alleged violations of breach, violation or infringement of right to privacy rights through improper use or disclosure of protected consumer data protection law,

confidentiality or other legal protection for personal information, as well as State Confidential Information with minimum limits as follows:

a. $1,000,000 each occurrence; and

b. $2,000,000 general aggregate.

C. Additional Insured

The State shall be named as additional insured on all commercial general liability policies (leases and construction contracts require additional insured coverage for completed operations) required of Local Agency and Subcontractors. In the event of cancellation of any commercial general liability policy, the carrier shall provide at least 10 days prior written notice to CDOT.

D. Primacy of Coverage

Coverage required of Local Agency and each Subcontractor shall be primary over any insurance or self-insurance program carried by Local Agency or the State.

E. Cancellation

All commercial insurance policies shall include provisions preventing cancellation or non-renewal, except for cancellation based on non-payment of premiums, without at least 30 days prior notice to Local Agency and Local Agency shall forward such notice to the State in accordance with **§16** within 7 days of Local Agency's receipt of such notice.

F. Subrogation Waiver

All commercial insurance policies secured or maintained by Local Agency or its Subcontractors in relation to this Agreement shall include clauses stating that each carrier shall waive all rights of recovery under subrogation or otherwise against Local Agency or the State, its agencies, institutions, organizations, officers, agents, employees, and volunteers.

G. Certificates

For each commercial insurance plan provided by Local Agency under this Agreement, Local Agency shall provide to the State certificates evidencing Local Agency's insurance coverage required in this Agreement within seven (7) Business Days following the Effective Date. Local Agency shall provide to the State certificates evidencing Subcontractor insurance coverage required under this Agreement within seven (7) Business Days following the Effective Date, except that, if Local Agency's subcontract is not in effect as of the Effective Date, Local Agency shall provide to the State certificates showing Subcontractor insurance coverage required under this Agreement within seven (7) Business Days following Local Agency's execution of the subcontract. No later than 15 days before the expiration date of Local Agency's or any Subcontractor's coverage, Local Agency shall deliver to the State certificates of insurance evidencing renewals of coverage. At any other time during the term of this Agreement, upon request by the State, Local Agency shall, within seven (7) Business Days following the request by the State, supply to the State evidence satisfactory to the State of compliance with the provisions of this **§12**.

13. BREACH

A. Defined

The failure of a Party to perform any of its obligations in accordance with this Agreement, in whole or in part or in a timely or satisfactory manner, shall be a breach. The institution of proceedings under any bankruptcy, insolvency, reorganization, or similar law, by or against Local Agency, or the appointment of a receiver or similar officer for Local Agency or any of its property, which is not vacated or fully stayed within 30 days after the institution of such proceeding, shall also constitute a breach.

B. Notice and Cure Period

In the event of a breach, the aggrieved Party shall give written notice of breach to the other Party. If the notified Party does not cure the breach, at its sole expense, within 30 days after the delivery of written notice, the Party may exercise any of the remedies as described in **§14** for that Party. Notwithstanding any provision of this Agreement to the contrary, the State, in its discretion, need not provide notice or a cure period and

may immediately terminate this Agreement in whole or in part or institute any other remedy in the Agreement in order to protect the public interest of the State.

14. REMEDIES

A. State's Remedies

If Local Agency is in breach under any provision of this Agreement and fails to cure such breach, the State, following the notice and cure period set forth in **§13.B,** shall have all of the remedies listed in this **§14.A.** in addition to all other remedies set forth in this Agreement or at law. The State may exercise any or all of the remedies available to it, in its discretion, concurrently or consecutively.

i. Termination for Breach

In the event of Local Agency's uncured breach, the State may terminate this entire Agreement or any part of this Agreement. Local Agency shall continue performance of this Agreement to the extent not terminated, if any.

a. Obligations and Rights

To the extent specified in any termination notice, Local Agency shall not incur further obligations or render further performance past the effective date of such notice and shall terminate outstanding orders and subcontracts with third parties. However, Local Agency shall complete and deliver to the State all Work not canceled by the termination notice and may incur obligations as necessary to do so within this Agreement's terms. At the request of the State, Local Agency shall assign to the State all of Local Agency's rights, title, and interest in and to such terminated orders or subcontracts. Upon termination, Local Agency shall take timely, reasonable, and necessary action to protect and preserve property in the possession of Local Agency but in which the State has an interest. At the State's request, Local Agency shall return materials owned by the State in Local Agency's possession at the time of any termination. Local Agency shall deliver all completed Work Product and all Work Product that was in the process of completion to the State at the State's request.

b. Payments

Notwithstanding anything to the contrary, the State shall only pay Local Agency for accepted Work received as of the date of termination. If, after termination by the State, the State agrees that Local Agency was not in breach or that Local Agency's action or inaction was excusable, such termination shall be treated as a termination in the public interest, and the rights and obligations of the Parties shall be as if this Agreement had been terminated in the public interest under **§2.C**.

c. Damages and Withholding

Notwithstanding any other remedial action by the State, Local Agency shall remain liable to the State for any damages sustained by the State in connection with any breach by Local Agency, and the State may withhold payment to Local Agency for the purpose of mitigating the State's damages until such time as the exact amount of damages due to the State from Local Agency is determined. The State may withhold any amount that may be due Local Agency as the State deems necessary to protect the State against loss including, without limitation, loss as a result of outstanding liens and excess costs incurred by the State in procuring from third parties replacement Work as cover.

ii. Remedies Not Involving Termination

The State, in its discretion, may exercise one or more of the following additional remedies:

a. Suspend Performance

Suspend Local Agency's performance with respect to all or any portion of the Work pending corrective action as specified by the State without entitling Local Agency to an adjustment in price or cost or an adjustment in the performance schedule. Local Agency shall promptly cease performing Work and incurring costs in accordance with the State's directive, and the State shall not be liable for costs incurred by Local Agency after the suspension of performance.

b. Withhold Payment

Withhold payment to Local Agency until Local Agency corrects its Work.

c. Deny Payment

Deny payment for Work not performed, or that due to Local Agency's actions or inactions, cannot be performed or if they were performed are reasonably of no value to the state; provided, that any denial of payment shall be equal to the value of the obligations not performed.

d. Removal

Demand immediate removal from the Work of any of Local Agency's employees, agents, or Subcontractors from the Work whom the State deems incompetent, careless, insubordinate, unsuitable, or otherwise unacceptable or whose continued relation to this Agreement is deemed by the State to be contrary to the public interest or the State's best interest.

e. Intellectual Property

If any Work infringes a patent, copyright, trademark, trade secret, or other intellectual property right, Local Agency shall, as approved by the State (a) secure that right to use such Work for the State or Local Agency; (b) replace the Work with non infringing Work or modify the Work so that it becomes non infringing; or, (c) remove any infringing Work and refund the amount paid for such Work to the State.

B. Local Agency's Remedies

If the State is in breach of any provision of this Agreement and does not cure such breach, Local Agency, following the notice and cure period in **§13.B** and the dispute resolution process in **§15** shall have all remedies available at law and equity.

15. DISPUTE RESOLUTION

A. Initial Resolution

Except as herein specifically provided otherwise, disputes concerning the performance of this Agreement which cannot be resolved by the designated Agreement representatives shall be referred in writing to a senior departmental management staff member designated by the State and a senior manager designated by Local Agency for resolution.

B. Resolution of Controversies

If the initial resolution described in §15.A fails to resolve the dispute within 10 Business Days, Contractor shall submit any alleged breach of this Contract by the State to the Procurement Official of CDOT as described in §24-101-301(30), C.R.S. for resolution in accordance with the provisions of §§24-106-109, 24-109-101.1, 24-109-101.5, 24-109-106, 24-109-107, 24-109-201 through 24-109-206, and 24-109-501 through 24-109-505, C.R.S., (the "Resolution Statutes"), except that if Contractor wishes to challenge any decision rendered by the Procurement Official, Contractor's challenge shall be an appeal to the executive director of the Department of Personnel and Administration, or their delegate, under the Resolution Statutes before Contractor pursues any further action as permitted by such statutes. Except as otherwise stated in this Section, all requirements of the Resolution Statutes shall apply including, without limitation, time limitations.

C. Questions of Fact

Except as otherwise provided in this Agreement, any dispute concerning a question of fact arising under this Agreement which is not disposed of by agreement shall be decided by the Chief Engineer of the Department of Transportation. The decision of the Chief Engineer will be final and conclusive unless, within 30 calendar days after the date of receipt of a copy of such written decision, Local Agency mails or otherwise furnishes to the State a written appeal addressed to the Executive Director of CDOT. In connection with any appeal proceeding under this clause, Local Agency shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending final decision of a dispute hereunder, Local Agency shall proceed diligently with the performance of this Agreement in accordance with the Chief Engineer's decision. The decision of the Executive Director or his duly authorized representative for the determination of such appeals shall be final and conclusive and serve as final agency action. This dispute clause does not preclude consideration of questions of law in connection with decisions provided for herein. Nothing in this Agreement, however, shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

16. NOTICES AND REPRESENTATIVES

Each individual identified below shall be the principal representative of the designating Party. All notices required or permitted to be given under this Agreement shall be in writing and shall be delivered **(i)** by hand with receipt required, **(ii)** by certified or registered mail to such Party's principal representative at the address set forth below or **(iii)** as an email with read receipt requested to the principal representative at the email address, if any, set forth below. If a Party delivers a notice to another through email and the email is undeliverable, then, unless the Party has been provided with an alternate email contact, the Party delivering the notice shall deliver the notice by hand with receipt required or by certified or registered mail to such Party's principal representative at the address set forth below. Either Party may change its principal representative or principal representative contact information by notice submitted in accordance with this **§16** without a formal amendment to this Agreement. Unless otherwise provided in this Agreement, notices shall be effective upon delivery of the written notice.

For the State

Colorado Department of Transportation (CDOT)
Gary Stimson, EiT - I
CDOT Region 4
10601 10th Street
Greeley, CO 80634
970-502-1270
gary.stimson@state.co.us

For the Local Agency

City of Louisville
Cameron Fowlkes, PE, City Engineer
749 Main Street
Louisville, CO 80027
509-302-5692
cfowlkes@louisvilleco.gov

17. RIGHTS IN WORK PRODUCT AND OTHER INFORMATION

A. Work Product

Local Agency hereby grants to the State a perpetual, irrevocable, non-exclusive, royalty free license, with the right to sublicense, to make, use, reproduce, distribute, perform, display, create derivatives of and otherwise exploit all intellectual property created by Local Agency or any Subcontractors. Local Agency assigns to the State and its successors and assigns, the entire right, title, and interest in and to all causes of action, either in law or in equity, for past, present, or future infringement of intellectual property rights related to the Work Product and all works based on, derived from, or incorporating the Work Product. Whether or not Local Agency is under contract with the State at the time, Local Agency shall execute applications, assignments, and other documents, and shall render all other reasonable assistance requested by the State, to enable the State to secure patents, copyrights, licenses and other intellectual property rights related to the Work Product. The Parties intend the Work Product to be works made for hire.

i. Copyrights

To the extent that the Work Product (or any portion of the Work Product) would not be considered works made for hire under applicable law, Local Agency hereby assigns to the State, the entire right, title, and interest in and to copyrights in all Work Product and all works based upon, derived from, or incorporating the Work Product; all copyright applications, registrations, extensions, or renewals relating to all Work Product and all works based upon, derived from, or incorporating the Work Product; and all moral rights or similar rights with respect to the Work Product throughout the world. To the extent that Local Agency cannot make any of the assignments required by this section, Local Agency hereby grants to the State a perpetual, irrevocable, royalty-free license to use, modify, copy, publish, display, perform, transfer, distribute, sell, and create derivative works of the Work Product and all works based upon, derived from,

or incorporating the Work Product by all means and methods and in any format now known or invented in the future. The State may assign and license its rights under this license.

ii. Patents

In addition, Local Agency grants to the State (and to recipients of Work Product distributed by or on behalf of the State) a perpetual, worldwide, no-charge, royalty-free, irrevocable patent license to make, have made, use, distribute, sell, offer for sale, import, transfer, and otherwise utilize, operate, modify and propagate the contents of the Work Product. Such license applies only to those patent claims licensable by Local Agency that are necessarily infringed by the Work Product alone, or by the combination of the Work Product with anything else used by the State.

iii. Assignments and Assistance

Whether or not the Local Agency is under Agreement with the State at the time, Local Agency shall execute applications, assignments, and other documents, and shall render all other reasonable assistance requested by the State, to enable the State to secure patents, copyrights, licenses and other intellectual property rights related to the Work Product. The Parties intend the Work Product to be works made for hire. Local Agency assigns to the State and its successors and assigns, the entire right, title, and interest in and to all causes of action, either in law or in equity, for past, present, or future infringement of intellectual property rights related to the Work Product and all works based on, derived from, or incorporating the Work Product.

B. Exclusive Property of the State

Except to the extent specifically provided elsewhere in this Agreement, any pre-existing State Records, State software, research, reports, studies, photographs, negatives, or other documents, drawings, models, materials, data, and information shall be the exclusive property of the State (collectively, "State Materials"). Local Agency shall not use, willingly allow, cause or permit Work Product or State Materials to be used for any purpose other than the performance of Local Agency's obligations in this Agreement without the prior written consent of the State. Upon termination of this Agreement for any reason, Local Agency shall provide all Work Product and State Materials to the State in a form and manner as directed by the State.

C. Exclusive Property of Local Agency

Local Agency retains the exclusive rights, title, and ownership to any and all pre-existing materials owned or licensed to Local Agency including, but not limited to, all pre-existing software, licensed products, associated source code, machine code, text images, audio and/or video, and third-party materials, delivered by Local Agency under this Agreement, whether incorporated in a Deliverable or necessary to use a Deliverable (collectively, "Local Agency Property"). Local Agency Property shall be licensed to the State as set forth in this Agreement or a State approved license agreement: (i) entered into as exhibits to this Agreement, (ii) obtained by the State from the applicable third-party vendor, or (iii) in the case of open source software, the license terms set forth in the applicable open source license agreement.

18. GOVERNMENTAL IMMUNITY

Liability for claims for injuries to persons or property arising from the negligence of the Parties, their departments, boards, commissions committees, bureaus, offices, employees and officials shall be controlled and limited by the provisions of the GIA; the Federal Tort Claims Act, 28 U.S.C. Pt. VI, Ch. 171 and 28 U.S.C. 1346(b), and the State's risk management statutes, §§24-30-1501, *et seq.* C.R.S. The following applies through June 30, 2022: no term or condition of this Contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, contained in these statutes.

19. STATEWIDE CONTRACT MANAGEMENT SYSTEM

If the maximum amount payable to Local Agency under this Agreement is $100,000 or greater, either on the Effective Date or at any time thereafter, this **§19** shall apply. Local Agency agrees to be governed by and comply with the provisions of §24-106-103, §24-102-206, §24-106-106, §24-106-107 C.R.S. regarding the monitoring of vendor performance and the reporting of contract performance information in the State's contract management system ("Contract Management System" or "CMS"). Local Agency's performance shall be subject to evaluation and review in accordance with the terms and conditions of this Agreement, Colorado statutes governing CMS, and State Fiscal Rules and State Controller policies.

20. GENERAL PROVISIONS

A. Assignment

Local Agency's rights and obligations under this Agreement are personal and may not be transferred or assigned without the prior, written consent of the State. Any attempt at assignment or transfer without such consent shall be void. Any assignment or transfer of Local Agency's rights and obligations approved by the State shall be subject to the provisions of this Agreement

B. Subcontracts

Local Agency shall not enter into any subcontract in connection with its obligations under this Agreement without the prior, written approval of the State. Local Agency shall submit to the State a copy of each such subcontract upon request by the State. All subcontracts entered into by Local Agency in connection with this Agreement shall comply with all applicable federal and state laws and regulations, shall provide that they are governed by the laws of the State of Colorado, and shall be subject to all provisions of this Agreement.

C. Binding Effect

Except as otherwise provided in **§20.A.** all provisions of this Agreement, including the benefits and burdens, shall extend to and be binding upon the Parties' respective successors and assigns.

D. Authority

Each Party represents and warrants to the other that the execution and delivery of this Agreement and the performance of such Party's obligations have been duly authorized.

E. Captions and References

The captions and headings in this Agreement are for convenience of reference only, and shall not be used to interpret, define, or limit its provisions. All references in this Agreement to sections (whether spelled out or using the § symbol), subsections, exhibits or other attachments, are references to sections, subsections, exhibits or other attachments contained herein or incorporated as a part hereof, unless otherwise noted.

F. Counterparts

This Agreement may be executed in multiple, identical, original counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

G. Digital Signatures

If any signatory signs this agreement using a digital signature in accordance with the Colorado State Controller Contract, Grant and Purchase Order Policies regarding the use of digital signatures issued under the State Fiscal Rules, then any agreement or consent to use digital signatures within the electronic system through which that signatory signed shall be incorporated into this Contract by reference.

H. Entire Understanding

This Agreement represents the complete integration of all understandings between the Parties related to the Work, and all prior representations and understandings related to the Work, oral or written, are merged into this Agreement. Prior or contemporaneous additions, deletions, or other changes to this Agreement shall not have any force or effect whatsoever, unless embodied herein.

I. Jurisdiction and Venue

All suits or actions related to this Agreement shall be filed and proceedings held in the State of Colorado and exclusive venue shall be in the City and County of Denver.

J. Modification

Except as otherwise provided in this Agreement, any modification to this Agreement shall only be effective if agreed to in a formal amendment to this Agreement, properly executed and approved in accordance with applicable Colorado State law and State Fiscal Rules. Modifications permitted under this Agreement, other than contract amendments, shall conform to the policies promulgated by the Colorado State Controller.

K. Statutes, Regulations, Fiscal Rules, and Other Authority.

Any reference in this Agreement to a statute, regulation, State Fiscal Rule, fiscal policy or other authority shall be interpreted to refer to such authority then current, as may have been changed or amended since the Effective Date of this Agreement.

L. Order of Precedence

In the event of a conflict or inconsistency between this Agreement and any exhibits or attachment such conflict or inconsistency shall be resolved by reference to the documents in the following order of priority:

i. The provisions of the other sections of the main body of this Agreement.
ii. **Exhibit N**, Federal Treasury Provisions.
iii. **Exhibit F**, Certification for Federal-Aid Contracts.
iv. **Exhibit G**, Disadvantaged Business Enterprise.
v. **Exhibit I**, Federal-Aid Contract Provisions for Construction Contracts.
vi. **Exhibit J**, Additional Federal Requirements.
vii. **Exhibit K**, Federal Funding Accountability and Transparency Act of 2006 (FFATA) Supplemental Federal Provisions.
viii. **Exhibit L**, Sample Sub-Recipient Monitoring and Risk Assessment Form.
ix. **Exhibit M**, Supplemental Provisions for Federal Awards Subject to The Office of Management and Budget Uniform Administrative Requirements, Cost principles, and Audit Requirements for Federal Awards (the "Uniform Guidance").
x. **Exhibit O**, Agreement with Subrecipient of Federal Recovery Funds.
xi. **Exhibit R**. Applicable Federal Awards.
xii Colorado Special Provisions in the main body of this Agreement.
xiii. **Exhibit A**, Scope of Work.
xiv. **Exhibit H**, Local Agency Procedures for Consultant Services.
xv. **Exhibit B**, Sample Option Letter.
xvi. **Exhibit C**, Funding Provisions.
xvii. **Exhibit P**, SLFRF Subrecipient Quarterly Report.
xviii. **Exhibit Q**, SLFRF Reporting Modification Form.
xix. **Exhibit D**, Local Agency Resolution.
xx. **Exhibit E**, Local Agency Contract Administration Checklist.
xxi. **Exhibit S**, PII Certification.
xxii. **Exhibit T**, Checklist of Required Exhibits Dependent on Funding Source.
xxiii. Other exhibits in descending order of their attachment.

M. Severability

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect, provided that the Parties can continue to perform their obligations under this Agreement in accordance with the intent of the Agreement.

N. Survival of Certain Agreement Terms

Any provision of this Agreement that imposes an obligation on a Party after termination or expiration of the Agreement shall survive the termination or expiration of the Agreement and shall be enforceable by the other Party.

O. Third Party Beneficiaries

Except for the Parties' respective successors and assigns described in **§20.C,** this Agreement does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Agreement and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Agreement are incidental to the Agreement, and do not create any rights for such third parties.

P. Waiver

A Party's failure or delay in exercising any right, power, or privilege under this Agreement, whether explicit or by lack of enforcement, shall not operate as a waiver, nor shall any single or partial exercise of any right, power, or privilege preclude any other or further exercise of such right, power, or privilege.

Q. CORA Disclosure

To the extent not prohibited by federal law, this Agreement and the performance measures and standards required under §24-106-107 C.R.S., if any, are subject to public release through the CORA.

R. Standard and Manner of Performance

Local Agency shall perform its obligations under this Agreement in accordance with the highest standards of care, skill and diligence in Local Agency's industry, trade, or profession.

S. Licenses, Permits, and Other Authorizations.

Local Agency shall secure, prior to the Effective Date, and maintain at all times during the term of this Agreement, at its sole expense, all licenses, certifications, permits, and other authorizations required to perform its obligations under this Agreement, and shall ensure that all employees, agents and Subcontractors secure and maintain at all times during the term of their employment, agency or subcontract, all license, certifications, permits and other authorizations required to perform their obligations in relation to this Agreement.

T. Compliance with State and Federal Law, Regulations, and Executive Orders

Local Agency shall comply with all State and Federal law, regulations, executive orders, State and Federal Awarding Agency policies, procedures, directives, and reporting requirements at all times during the term of this Agreement.

U. Accessibility

i. Local Agency shall comply with and the Work Product provided under this Agreement shall be in compliance with all applicable provisions of §§24-85-101, et seq., C.R.S., and the Accessibility Standards for Individuals with a Disability, as established by the Governor's Office of Information Technology (OIT), pursuant to Section §24-85-103 (2.5), C.R.S. Local Agency shall also comply with all State of Colorado technology standards related to technology accessibility and with Level AA of the most current version of the Web Content Accessibility Guidelines (WCAG), incorporated in the State of Colorado technology standards.

ii. Each Party agrees to be responsible for its own liability incurred as a result of its participation in and performance under this Agreement. In the event any claim is litigated, each Party will be responsible for its own attorneys' fees, expenses of litigation, or other costs. No provision of this Agreement shall be deemed or construed to be a relinquishment or waiver of any kind of the applicable limitations of liability provided to either the Local Agency or the State by the Colorado Governmental Immunity Act, C.R.S. § 24-10-101, et seq. and Article XI of the Colorado Constitution. Nothing in the Agreement shall be construed as a waiver of any provision of the State Fiscal Rules.

iii. The State may require Local Agency's compliance to the State's Accessibility Standards to be determined by a third party selected by the State to attest to Local Agency's Work Product and software is in compliance with §§24-85-101, et seq., C.R.S., and the Accessibility Standards for Individuals with a Disability as established by OIT pursuant to Section §24-85-103 (2.5), C.R.S.

V. Taxes

The State is exempt from federal excise taxes under I.R.C. Chapter 32 (26 U.S.C., Subtitle D, Ch. 32) (Federal Excise Tax Exemption Certificate of Registry No. 84-730123K) and from State and local government sales and use taxes under §§39-26-704(1), *et seq.,* C.R.S. (Colorado Sales Tax Exemption Identification Number 98-02565). The State shall not be liable for the payment of any excise, sales, or use taxes, regardless of whether any political subdivision of the state imposes such taxes on Local Agency. Local Agency shall be solely responsible for any exemptions from the collection of excise, sales or use taxes that Local Agency may wish to have in place in connection with this Agreement.

21. COLORADO SPECIAL PROVISIONS (COLORADO FISCAL RULE 3-3)

These Special Provisions apply to all contracts. Contractor refers to Local Agency and Contract refers to Agreement.

A. STATUTORY APPROVAL. §24-30-202(1), C.R.S.

This Contract shall not be valid until it has been approved by the Colorado State Controller or designee. If this Contract is for a Major Information Technology Project, as defined in §24-37.5-102(19), then this Contract shall not be valid until it has been approved by the State's Chief Information Officer or designee.

B. FUND AVAILABILITY. §24-30-202(5.5), C.R.S., applicable Local Agency law, rule or regulation.

Financial obligations of the Parties payable after the current State Fiscal Year or fiscal year are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available.

C. GOVERNMENTAL IMMUNITY.

Liability for claims for injuries to persons or property arising from the negligence of the Parties, its departments, boards, commissions committees, bureaus, offices, employees and officials shall be controlled and limited by the provisions of the Colorado Governmental Immunity Act, §24-10-101, et seq., C.R.S.; the Federal Tort Claims Act, 28 U.S.C. Pt. VI, Ch. 171 and 28 U.S.C. 1346(b), and the State's risk management statutes, §§24-30-1501, et seq. C.R.S. No term or condition of this Contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, contained in these statutes.

D. INDEPENDENT CONTRACTOR

Contractor shall perform its duties hereunder as an independent contractor and not as an employee. Neither Contractor nor any agent or employee of Contractor shall be deemed to be an agent or employee of the State. Contractor shall not have authorization, express or implied, to bind the State to any agreement, liability or understanding, except as expressly set forth herein. **Contractor and its employees and agents are not entitled to unemployment insurance or workers compensation benefits through the State and the State shall not pay for or otherwise provide such coverage for Contractor or any of its agents or employees. Contractor shall pay when due all applicable employment taxes and income taxes and local head taxes incurred pursuant to this Contract. Contractor shall (i) provide and keep in force workers' compensation and unemployment compensation insurance in the amounts required by law, (ii) provide proof thereof when requested by the State, and (iii) be solely responsible for its acts and those of its employees and agents.**

E. COMPLIANCE WITH LAW.

Contractor shall comply with all applicable federal and State laws, rules, and regulations in effect or hereafter established, including, without limitation, laws applicable to discrimination and unfair employment practices.

F. CHOICE OF LAW, JURISDICTION, AND VENUE.

Colorado law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Contract. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. All suits or actions related to this Contract shall be filed and proceedings held in the State of Colorado and exclusive venue shall be in the City and County of Denver.

G. PROHIBITED TERMS.

Any term included in this Contract that requires the Parties to indemnify or hold Contractor harmless; requires the Parties to agree to binding arbitration; limits Contractor's liability for damages resulting from death, bodily injury, or damage to tangible property; or that conflicts with this provision in any way shall be void ab initio. Nothing in this Contract shall be construed as a waiver of any provision of §24-106-109 C.R.S. Any term included in this Contract that limits Contractor's liability that is not void under this section shall apply only in excess of any insurance to be maintained under this Contract, and no insurance policy shall be interpreted as being subject to any limitations of liability of this Contract.

H. SOFTWARE PIRACY PROHIBITION.

State or other public funds payable under this Contract shall not be used for the acquisition, operation, or maintenance of computer software in violation of federal copyright laws or applicable licensing restrictions. Contractor hereby certifies and warrants that, during the term of this Contract and any extensions, Contractor has and shall maintain in place appropriate systems and controls to prevent such improper use of public funds. If the State determines that Contractor is in violation of this provision, the State may exercise any remedy

available at law or in equity or under this Contract, including, without limitation, immediate termination of this Contract and any remedy consistent with federal copyright laws or applicable licensing restrictions.

I. EMPLOYEE FINANCIAL INTEREST/CONFLICT OF INTEREST. §§24-18-201 and 24-50-507, C.R.S.

The signatories aver that to their knowledge, no employee of the State has any personal or beneficial interest whatsoever in the service or property described in this Contract. Contractor has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of Contractor's services and Contractor shall not employ any person having such known interests.

22. FEDERAL REQUIREMENTS

Local Agency and/or their contractors, subcontractors, and consultants shall at all times during the execution of this Agreement strictly adhere to, and comply with, all applicable federal and State laws, and their implementing regulations, as they currently exist and may hereafter be amended. A summary of applicable federal provisions are attached hereto as **Exhibit F**, **Exhibit I**, **Exhibit J**, **Exhibit K**, **Exhibit M, Exhibit N** and **Exhibit O** are hereby incorporated by this reference.

23. DISADVANTAGED BUSINESS ENTERPRISE (DBE)

Local Agency will comply with all requirements of **Exhibit G** and **Exhibit E,** Local Agency Contract Administration Checklist, regarding DBE requirements for the Work, except that if Local Agency desires to use its own DBE program to implement and administer the DBE provisions of 49 C.F.R. Part 26 under this Agreement, it must submit a copy of its program's requirements to the State for review and approval before the execution of this Agreement. If Local Agency uses any State- approved DBE program for this Agreement, Local Agency shall be solely responsible to defend that DBE program and its use of that program against all legal and other challenges or complaints, at its sole cost and expense. Such responsibility includes, without limitation, determinations concerning DBE eligibility requirements and certification, adequate legal and factual bases for DBE goals and good faith efforts. State approval (if provided) of Local Agency's DBE program does not waive or modify the sole responsibility of Local Agency for use of its program.

THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK

EXHIBIT A

SCOPE OF WORK

Name of Project: CO42 Bike/Ped Underpass at South St
Project Number: STU M825-018
SubAccount #: 26013

The Colorado Department of Transportation ("CDOT") will oversee the City of Louisville ("City") when the City completes the CO42 Bike/Pedestrian Underpass at South Street project (hereinafter referred to as "this work"). CDOT and the City of Louisville believe it will be beneficial to perform this work because it provides beneficial bike and pedestrian connections. The City has completed the necessary preliminary studies to implement this proposal. All work will conform to the MUTCD.

This work will consist of construction of a concrete pedestrian and bicycle underpass under CO42. The design phase of this work is anticipated to begin during federal fiscal year 2025. The design phase will identify more exact requirements, qualities, and attributes for this work (hereinafter referred to as "the exact work"). The exact work shall be used to complete the construction phase of the project. The construction phase of the project is estimated to begin in federal fiscal year 2026 and shall finish as soon as reasonably possible.

This work will conform to the parameters articulated in the Colorado Department of Transportation Standard Specifications for Road and Bridge Construction, AASHTO "A Policy on Geometric Design of Highways and Streets", AASHTO "Roadside Design Guide", and the CDOT Project Development Manual, CDOT M&S Standards, CDOT Design Guide, CDOT Construction Manual, Manual on Uniform Traffic Control Devices, Highway Capacity Manual, along with all applicable State and Federal guidelines

By accepting funds for this Scope of Work, Local Agency acknowledges, understands, and accepts the continuing responsibility for the safety of the traveling public after initial acceptance of the project. Local Agency is responsible for maintaining and operating the scope of work described in this Exhibit A constructed under this Agreement at its own cost and expense during its useful life.

THE REST OF THIS PAGE IS INTENTIONALLY LEFT BLANK

EXHIBIT B

SAMPLE IGA OPTION LETTER

Date	State Fiscal Year	Option Letter No.
Project Code	**Original Agreement #**	

Vendor Name:

Option to unilaterally add phasing to include Design, Construction, Environmental, Utilities, ROW incidentals or Miscellaneous and to update encumbrance amount(s).

Option to unilaterally transfer funds from one phase to another phase.

Option to unilaterally add phasing to include Design, Construction, Environmental, Utilities, ROW incidentals or Miscellaneous, to update encumbrance amount(s), and to unilaterally transfer funds from one phase to another phase.

Option to unilaterally extend the term of this Agreement and/or update a Work Phase Performance Period and/or modify OMB Guidance.

Option A

In accordance with the terms of the original Agreement between the State of Colorado, Department of Transportation and the Local Agency, the State hereby exercises the option to authorize the Local Agency to add a phase and to encumber funds for the phase based on changes in funding availability and authorization. The total encumbrance is (or increased) by $0.00. A new **Exhibit C-1** is made part of the original Agreement and replaces **Exhibit C**.

Option B

In accordance with the terms of the original Agreement between the State of Colorado, Department of Transportation and the Local Agency, the State hereby exercises the option to transfer funds based on variance in actual phase costs and original phase estimates. A new **Exhibit C-1** is made part of the original Agreement and replaces **Exhibit C**.

Option C

In accordance with the terms of the original Agreement between the State of Colorado, Department of Transportation and the Local Agency, the State hereby exercises the option to 1) release the Local Agency to begin a phase; 2) to encumber funds for the phase based upon changes in funding availability and authorization; and 3) to transfer funds from phases based on variance in actual phase costs and

original phase estimates. A new **Exhibit C-1** is made part of the original Agreement and replaces **Exhibit C**.

Option D

In accordance with the terms of the original Agreement between the State of Colorado, Department of Transportation and the Local Agency, the State hereby exercises the option extend the term of this Agreement and/or update a Work Phase Performance Period and/or modify information required under the OMB Uniform Guidance, as outlined in **Exhibit C**. This is made part of the original Agreement and replaces the Expiration Date shown on the Signature and Cover Page. Any updated version of **Exhibit C** shall be attached to any executed Option Letter as **Exhibit C-1** (with subsequent exhibits labeled **C-2**, **C-3**, etc.).

The effective date of this option letter is upon approval of the State Controller or delegate.

STATE OF COLORADO
Jared S. Polis
Department of Transportation

By:_____
Keith Stefanik, P.E., Chief Engineer
(For) Shoshana M. Lew, Executive Director

Date: _____

ALL AGREEMENTS MUST BE APPROVED BY THE STATE CONTROLLER

CRS §24-30-202 requires the State Controller to approve all State Agreements. This Agreement is not valid until signed and dated below by the State Controller or delegate. Contractor is not authorized to begin performance until such time. If the Local Agency begins performing prior thereto, the State of Colorado is not obligated to pay the Local Agency for such performance or for any goods and/or services provided hereunder.

STATE OF COLORADO
STATE CONTROLLER
Robert Jaros, CPA, MBA, JD

By: _____
Colorado Department of Transportation

Date:_____

EXHIBIT C - FUNDING PROVISIONS

City of Louisville - STU M825-018 (26013)

A. Cost of Work Estimate

The Local Agency has estimated the total cost of the Work to be $5,523,626.00, which is to be funded as follows:

1. FUNDING

a. Federal Funds (82.79% of STBG Award)	$3,000,000.00
b. Local Agency Funds (17.21% of STBG Award)	$623,626.00
c. State Funds (100% of 10 Year Plan Award)	$1,900,000.00
d. Local Agency Funds (0% of 10 Year Plan Award)	$0.00
TOTAL FUNDS ALL SOURCES	**$5,523,626.00**

2. OMB UNIFORM GUIDANCE

a. Federal Award Identification Number (FAIN):	TBD
b. Name of Federal Awarding Agency:	FHWA
c. Local Agency Unique Entity Identifier	QWGUQ6YPC8Z8
d. Assistance Listing # Highway Planning and Construction	ALN 20.205
e. Is the Award for R&D?	No
f. Indirect Cost Rate (if applicable)	N/A
g. Amount of Federal Funds Obligated by this Action:	$0.00
h. Amount of Federal Funds Obligated to Date (including this Action):	$0.00

3. ESTIMATED PAYMENT TO LOCAL AGENCY

a. Federal Funds Budgeted		$3,000,000.00
b. State Funds Budgeted		$1,900,000.00
c. Less Estimated Federal Share of CDOT-Incurred Costs		$0.00
TOTAL ESTIMATED PAYMENT TO LOCAL AGENCY	**88.71%**	**$4,900,000.00**
TOTAL ESTIMATED FUNDING BY LOCAL AGENCY	**11.29%**	**$623,626.00**
TOTAL PROJECT ESTIMATED FUNDING	**100.00%**	**$5,523,626.00**

4. FOR CDOT ENCUMBRANCE PURPOSES

STBG Fed Funds

a. Total Encumbrance Amount (Federal funds + Local Agency funds)	$3,623,626.00
b. Less ROW Acquisition 3111 and/or ROW Relocation 3109	$0.00

10 Year Plan State Funds

a. Total Encumbrance Amount (Only State funds are encumbered)	$1,900,000.00

b.	Less ROW Acquisition 3111 and/or ROW Relocation 3109	$0.00
	NET TO BE ENCUMBERED BY CDOT IS AS FOLLOWS	**$5,523,626.00**

Note: No funds are currently available. Design and Construction funds will become available after execution of an Option letter (Exhibit B) or formal Amendment.

STBG Fed Fund		
Design 3020		
WBS Element 26013.10.30	Performance Period Start*/End Date TBD-TBD	$0.00
Const. 3301		
WBS Element 26013.20.10	Performance Period Start*/End Date TBD-TBD	$0.00
10 Year Plan State Fund		
Design 3020		
WBS Element 26013.10.30	Performance Period Start**/End Date N/A-N/A	$0.00
Const. 3301		
WBS Element 26013.20.10	Performance Period Start**/End Date N/A-N/A	$0.00

*The Local Agency should not begin work until all three (3) of the following are in place: 1) Phase Performance Period Start Date; 2) the execution of the document encumbering funds for the respective phase; and 3) Local Agency receipt of the official Notice to Proceed. Any work performed before these three (3) milestones are achieved will not be reimbursable.

**The Local Agency should not begin work until both of the following are in place: 1) the execution of the document encumbering funds for the respective phase; and 2) Local Agency receipt of the official Notice to Proceed. Any work performed before these two (2) milestones are achieved will not be reimbursable.

B. Funding Ratios

The funding ratio for the federal & State funds for this Work is 88.71% federal & State funds to 11.29% Local Agency funds, and this ratio applies only to the $5,523,626.00 that is eligible for federal & State funding. All other costs are borne by the Local Agency at 100%. If the total cost of performance of the Work exceeds $5,523,626.00, and additional federal & State funds are not available, the Local Agency shall pay all such excess costs. If the total cost of performance of the Work is less than $5,523,626.00, then the amounts of Local Agency and federal & State funds will be decreased in accordance with the funding ratio described in **A1**. **This applies to the entire scope of Work.**

C. Maximum Amount Payable

The maximum amount payable to the Local Agency under this Agreement shall be $4,900,000.00. For CDOT accounting purposes, the federal funds of $3,000,000.00, State funds of $1,900,000.00 and the Local Agency funds of $623,626.00 will be encumbered, but the Local Agency funds of $0.00 will NOT be encumbered for a total encumbrance of $5,523,626.00. The total budget of this project is $5,523,626.00, unless this amount is increased by an executed amendment before any increased cost is incurred. The total cost of the Work is the best estimate available, based on the design data as approved at the time of execution of this Agreement, and that any cost is subject to revisions agreed to by the parties prior to bid and award. **This applies to the entire scope of Work.**

D. Single Audit Act Amendment

All state and local government and non-profit organizations receiving $750,000 or more from all funding sources defined as federal financial assistance for Single Audit Act Amendment purposes shall comply with the audit requirements of 2 CFR part 200, subpart F (Audit Requirements) see also, 49 CFR 18.20 through 18.26. The Single Audit Act Amendment requirements applicable to the Local Agency receiving federal funds are as follows:

i. **Expenditure less than $750,000**
If the Local Agency expends less than $750,000 in Federal funds (all federal sources, not just Highway funds) in its fiscal year then this requirement does not apply.

ii. **Expenditure of $750,000 or more-Highway Funds Only**
If the Local Agency expends $750,000 or more, in Federal funds, but only received federal Highway funds (Catalog of Federal Domestic Assistance, CFDA 20.205) then a program specific audit shall be performed. This audit will examine the “financial” procedures and processes for this program area.

iii. **Expenditure of $750,000 or more-Multiple Funding Sources**
If the Local Agency expends $750,000 or more in Federal funds, and the Federal funds are from multiple sources (FTA, HUD, NPS, etc.) then the Single Audit Act applies, which is an audit on the entire organization/entity.

iv. **Independent CPA**
Single Audit shall only be conducted by an independent CPA, not by an auditor on staff. An audit is an allowable direct or indirect cost.

THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK

EXHIBIT D

LOCAL AGENCY RESOLUTION (IF APPLICABLE)

Exhibit E
Colorado Department of Transportation
Local Agency Contract Administration Checklist

Project Number	STIP Number	Project Code	Region
STU M825-018	SDR6717	26013	04

Project Location	Date
City of Louisville	07/17/2025

Project Description

CO42 Bike/Ped Underpass at South St

Local Agency	Local Agency Project Manager
City of Louisville	Cameron Fowlkes

CDOT Resident Engineer	CDOT Project Manager
Bryce Reeves	Gary Stimson

Instructions:

This checklist shall be used to establish the contractual administrative responsibilities of the individual parties to this agreement. The checklist becomes an attachment to the Local Agency Agreement. Section numbers (No.) correspond to the applicable chapters of the CDOT Local Agency Manual (formerly referred to as the Local Agency Desk Reference). Local Agency Web Resource (LAWR) numbers correspond to the applicable flowchart in the Local Agency Web Resource.

The checklist shall be prepared by placing an X under the responsible party, opposite each of the tasks. The X denotes the party responsible for initiating and executing the task. It is preferred that only one responsible party be selected, however a number of items may have both parties selected based on judgement. When neither CDOT nor the Local Agency is responsible for a task, not applicable (N/A) shall be marked. In addition, # will be marked to denote that CDOT must concur or approve.

The Regions, in accordance with established policies and procedures, will determine who will perform tasks that are the responsibility of CDOT.

The checklist shall be prepared by the CDOT Resident Engineer or the CDOT Project Manager, in cooperation with the Local Agency Project Manager, and submitted to the Region Program Engineer. If contract administration responsibilities change, the CDOT Resident Engineer, in cooperation with the Local Agency Project Manager, will prepare and distribute a revised checklist.

Note:

Failure to comply with applicable Federal and State requirements may result in the loss of Federal or State participation in funding.

Acronyms:

Colorado Department of Transportation – CDOT

Disadvantaged Business Enterprise – DBE

Colorado Department of Transportation – CDOT

Disadvantaged Business Enterprise – DBE

Equal Employment Opportunity - EEO

Federal Highway Administration – FHWA

Field Inspection Review – FIR

Final Office Review – FOR

Hot Mix Asphalt – HMA

Independent Assurance Testing - IAT

Intergovernmental Agreement – IGA

Local Agency - LA

Local Agency Web Resource – LAWR

Not Applicable – N/A

Number – No.

On-The-Job - OJT

Plans, Specifications, and Estimate – PS&E

Professional Engineer - PE

Right-of-Way – ROW

Statewide Transportation Improvement Program - STIP

Transportation Improvement Program – TIP

TIP / STIP Long-Range Plans

LAWR	No.	Description of Task	Responsible Party LA	CDOT
	2.1	Review Project to ensure it is consistent with Statewide Plan and amendments thereto		X

Subrecipient Monitoring

LAWR	No.	Description of Task	Responsible Party LA	CDOT
	3.1	Preparation of Subrecipient Monitoring Compliance Documents		
		• Subrecipient Determination Tool		X
		• Subrecipient Risk Assessment	X	X
		• Subrecipient Notification Letter		X
		• Subrecipient Project Update Report (Formerly "Performance Report to CDOT")	X	
		• CDOT Monitoring Report of Subrecipients (If applicable)		X

Federal Funding Obligation and Authorization

LAWR	No.	Description of Task	Responsible Party LA	CDOT
	4.1	Authorize funding by phases (Requires FHWA Concurrence if Federal-aid Highway funded project.). Please check N/A, if Not applicable.		X

Project Development

LAWR	No.	Description of Task	Responsible Party LA	CDOT
	5.1	Determine Delivery Method		X
1	5.2	Prepare Design Data – CDOT Form 463	X	
	5.3	Prepare Local Agency/CDOT Inter-Governmental Agreement (see also Chapter 3)		X
2	5.4	Conduct Consultant Selection/Execute Consultant Agreement		
		• Project Development	X	
		• Construction Contract Administration (including Fabrication Inspection Services)	X	
3,3A	5.5	Conduct Design Scoping Review Meeting	X	
3,6	5.6	Conduct Public Involvement	X	

LAWR	No.	Description of Task	Responsible Party LA	CDOT
3	5.7	Conduct Field Inspection Review (FIR)	X	
4	5.8	Conduct Environmental Process (may require FHWA concurrence /involvement)	X	#
5	5.9	Acquire Right-of-Way (may require FHWA concurrence /involvement)	X	
3	5.10	Obtain Utility and Railroad Agreements	X	
3	5.11	Conduct Final Office Review (FOR)	X	
3A	5.12	Justify Force Account Work by the Local Agency	X	
3B	5.13	Justify Proprietary, Sole Source, or Local Agency Furnished Items	X	
3	5.14	Document Design Exceptions – CDOT Form 464	X	
	5.15	Seek Permission for use of Guaranty and Warranty Clauses	X	#
3	5.18	Prepare Plans, Specifications, Construction Cost Estimates and Submittals	X	
	5.19	Comply with Requirements for Off-and On-System Bridges & Other Structural Work	X	
	5.20	Update Approvals on PS&E Package if Project Schedule Delayed	X	
	5.21	Ensure Authorization of Funds for Construction		X
	5.22	Use Electronic Signatures	X	#
	5.23	File Project Development Records/Documentation in ProjectWise (PW)		X

Project Development Civil Rights and Labor Compliance

LAWR	No.	Description of Task	Responsible Party LA	CDOT
3	6.1	Set Disadvantaged Business Enterprise (DBE) Goals for Consultant and Construction Contracts (CDOT Region Civil Rights Office)		X
	6.2	Determine Applicability of Davis-Bacon Act This project ☐ is ☑ is not exempt from Davis-Bacon Requirements as determined by the functional classification of the project location (Projects located on local roads and rural minor collectors may be exempt.)		X

CDOT Resident Engineer	Date
Bryce Reeves	10/02/2024

LAWR	No.	Description of Task	Responsible Party LA	CDOT
	6.3	Set On-the-Job Training Goals (CDOT Region Civil Rights Office) "NA", if Not Applicable		X
	6.4	Enforce Prompt Payment Requirements	X	
	6.5	Use Electronic Tracking and Submission Systems B2Gnow ☑ LCPTracker ☑	X	#
3	6.6	Prepare/submit Title VI Plan and Incorporate Title VI Assurances	X	
6,7		Ensure the correct Federal Wage Decision, all required Disadvantaged Business Enterprise/On-the-Job Training Special provisions and FHWA Form 1273 are included in the Contract (CDOT Resident Engineer)	X	

Advertise, Bid and Award of Construction Projects

Federal Project (use 7.1 series in Chapter 7) ☑
Non-Federal Project (Use 7.2 series in Chapter 7) ☐

LAWR	No.	Description of Task	Responsible Party LA	CDOT
6,7		Obtain Approval for Advertisement Period of Less Than Three Weeks	X	
7		Advertise for Bids	X	
7		Concurrence to Advertise		X
7		Distribute "Advertisement Set" of Plans and Specifications	X	
7		Review Worksite & Plan Details w/ Prospective Bidders While Project is Under Advertisement	X	
7		Open Bids	X	
7		Process Bids for Compliance		
		Check CDOT Form 1415 – Commitment Confirmation when the Low bidder meets DBE goals. ("N/A" if Not Applicable)		X
		Evaluate CDOT Form 1416 – Good Faith Effort Report and determine if the Contractor has made a good faith effort when the low bidder does not meet DBE goals. ("N/A" if Not Applicable)		X
		Submit required documentation for CDOT award concurrence	X	
		Concurrence from CDOT to Award		X
		Approve Rejection of Low Bidder		X
7,8		Award Contract (Federal)	X	
8		Provide "Award" and "Record" Sets of Plans and Specifications (Federal)	X	

Construction Management

LAWR	No.	Description of Task	Responsible Party: LA	Responsible Party: CDOT
8	Intro	File Project Construction Records/Documentation in PW or as Directed	X	
8	8.1	Issue Notice to Proceed to the Contractor	X	
8	8.2	Project Safety	X	
8	8.3	Conduct Conferences		
		• Preconstruction Conference (Appendix B)	X	
		○ Fabrication Inspection Notifications	X	
		• Pre-Survey	X	
		○ Construction Staking	X	
		○ Monumentation	X	
		• Partnering (Optional)	X	
		• Structural Concrete Pre-Pour (Agenda is in the CDOT Construction Manual)	X	
		• Concrete Pavement Pre-Paving (Agenda is in the CDOT Construction Manual)	X	
		• HMA Pre-Paving (Agenda is in the CDOT Construction Manual)	X	
8	8.4	Develop and distribute Public Notice of Planned Construction to media and local residents	X	
9	8.5	Supervise Construction		
		A Professional Engineer (PE) registered in Colorado, who will be "in responsible charge of construction supervision"	X	
		Local Agency Professional Engineer or CDOT Resident Engineer: Cameron Fowlkes — Phone Number: 509-302-5692		
		Provide competent, experienced staff who will ensure the Contract work is constructed in accordance with the plans and specifications	X	
		Construction inspection and documentation (including Projects with structures)	X	
		Fabrication Inspection and Documentation	X	
9	8.6	Review and Approve Shop Drawings	X	
9	8.7	Perform Traffic Control Inspections	X	
9	8.8	Perform Construction Surveying	X	
9	8.9	Monument Right-of-Way	X	

LAWR	No.	Description of Task	Responsible Party LA	CDOT
9,9A	8.10	Prepare and Approve Interim and Final Contractor Pay Estimates. Collect and review CDOT Form 1418 (or equivalent) or use compliance software system. Provide the name and phone number of the person authorized for this task.	X	

Local Agency Representative	Phone Number
Cameron Fowlkes	509-302-5692

9	8.11	Prepare and Approve Interim and Final Utility and Railroad Billings	X	
9B	8.12	Prepare and Authorize Change Orders	X	#
9B	8.13	Submit Change Order Package to CDOT	X	
9A	8.14	Prepare Local Agency Reimbursement Requests	X	
9	8.15	Monitor Project Financial Status	X	
9	8.16	Prepare and Submit Monthly Progress Reports	X	
9	8.17	Resolve Contractor Claims and Disputes	X	
	8.18	Conduct Routine and Random Project Reviews. Provide the name and phone number of the person responsible for this task.		X

CDOT Resident Engineer	Phone Number
Bryce Reeves	719-314-6337

9	8.19	Ongoing Oversight of DBE Participation	X	

Materials

LAWR	No.	Description of Task	Responsible Party LA	CDOT
9,9C	9.1	Discuss Materials at Pre-Construction Meeting	X	
		• Buy America documentation required prior to Installation of steel	X	
		• Buy America, Build America documentation required prior to installation of materials	X	

LAWR	No.	Description of Task	Responsible Party LA	CDOT
9,9C	9.2	Complete CDOT Form 250 – Materials Documentation Record		
		• Generate form, which includes determining the Minimum number of required tests and applicable Material submittals for all materials placed on the project	☐	X
		• Update the form as work progresses	X	☐
		• Complete and distribute form after work is completed	X	☐
9C	9.3	Perform Project Acceptance Samples and Tests	X	☐
9C	9.4	Perform Laboratory Acceptance Tests	X	☐
9C	9.6	Accept Manufactured Products	X	☐
		Inspection of structural components:		
		• Fabrication of structural steel and pre-stressed concrete structural components	X	☐
		• Bridge modular expansion devices (0” to 6” or greater)	X	☐
		• Fabrication of bearing devices	X	☐
9C	9.6	Approve Sources of Materials	X	☐
9C	9.7	Independent Assurance Testing (IAT)		
		Local Agency Procedures ☐ CDOT Procedures ☑		
		• Generate IAT schedule	☐	X
		• Schedule and provide notification	X	☐
		• Conduct IAT	X	☐
9C	9.8	Approve mix designs		
		• Concrete	X	☐
		• Hot Mix Asphalt	X	☐
9C	9.9	Check Final Materials Documentation	X	☐
9C	9.10	Complete and Distribute Final Materials Documentation	X	☐

Construction Civil Rights and Labor Compliance

LAWR	No.	Description of Task	Responsible Party LA	CDOT
9	10.1	Fulfill Project Bulletin Board and Pre-Construction Packet Requirements	X	☐

LAWR	No.	Description of Task	Responsible Party LA	CDOT
8,9	10.2	Process CDOT Form 205 – Sublet Permit Application and CDOT Form 1425 – Supplier Application Approval Request. Review & sign completed forms, or review/approve in compliance software system, as applicable, & submit to Region Civil Rights Office.	X	
9	10.3	Conduct Equal Employment Opportunity and Labor Compliance Verification Employee Interviews. Complete CDOT Form 280	X	
9	10.4	Monitor Disadvantaged Business Enterprise Participation to Ensure Compliance with the "Commercially Useful Function" Requirements.	X	
9	10.5	Conduct Interviews when Project Utilizes On-the-Job Trainees.		
		• Complete CDOT Form 1337 – Contractor Commitment to Meet OJT Requirements.	X	
		• Complete CDOT Form 838 – OJT Trainee / Apprentice Record.	X	
		• Complete CDOT Form 200 – OJT Training Questionnaire.	X	
9	10.6	Check Certified Payrolls (Contact the Region Civil Rights Office for training requirements)	X	
9	10.7	Submit FHWA Form 1391 – Highway Construction Contractor's Annual EEO Report	X	
	10.8	Contract Compliance and Project Site Reviews		X

Finals

LAWR	No.	Description of Task	Responsible Party LA	CDOT
	11.1	Conduct Final Project Inspection & Final Inspection of Structures, if applicable		X
10	11.2	Write Final Project Acceptance Letter	X	
10	11.3	Advertise for Final Settlement	X	
11	11.4	Prepare and Distribute Final As-Constructed Plans	X	
11	11.5	Prepare EEO Certification and Collect EEO Forms	X	
11	11.6	Check Final Quantities, Plans, and Pay Estimate; Check Project Documentation; and submit Final Certifications	X	
11	11.7	Check Material Documentation and Accept Final Material Certification (See Chapter 9)	X	
	11.8	Review CDOT Form 1419		X
	11.9	Submit CDOT Professional Services Closeout Report Form	X	

LAWR	No.	Description of Task	Responsible Party LA	CDOT
	11.10	Complete and Submit CDOT Form 1212 LA – Final Acceptance Report (by CDOT)		X
11	11.11	Process Final Payment	X	#
	11.12	Close out Local Project	X	#
	11.13	Complete and Submit CDOT Form 950 – Project Closure		X
11	11.14	Retain Project Records	X	#
11	11.15	Retain Final Version of Local Agency Contract Administration Checklist	X	#

Cc: CDOT Resident Engineer/Project Manager
CDOT Region Program Engineer
CDOT Region Civil Rights Office
CDOT Region Materials Engineer
CDOT Contracts and Market Analysis Branch
Local Agency Project Manager

EXHIBIT F

CERTIFICATION FOR FEDERAL-AID CONTRACTS

The Local Agency certifies, by signing this Agreement, to the best of its knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer oremployee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, Agreement, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer of Congress, or an employee of a Member of Congress in connection with this Federalcontract, Agreement, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such sub-recipients shall certify and disclose accordingly.

EXHIBIT G

DISADVANTAGED BUSINESS ENTERPRISES

SECTION 1. Policy

It is the policy of the Colorado Department of Transportation (CDOT) that Disadvantaged Business Enterprises (DBEs) shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement, pursuant to 49 CFR Part 26. Accordingly, CDOT's federally approved DBE Program Plan shall apply to this agreement.

SECTION 2. Subrecipient and Participant Obligation.

The Local Agency and its subrecipients agrees to ensure that DBEs certified through the Colorado Unified Certification Program have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement.

All participants on contracts and subcontracts financed in whole or in part with Federal funds provided under this Agreement shall take all necessary and reasonable steps in accordance with the CDOT's federally approved DBE Program Plan to ensure that DBEs have the maximum opportunity to compete for and perform contracts.

Local Agency subrecipients and their contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of CDOT and federally assisted contracts.

SECTION 3. DBE Program.

The Local Agency subrecipient shall be responsible for complying with CDOT's FHWA-approved DBE Program Plan.

Local Agency requirements can be found at:

https://www.codot.gov/business/civilrights

EXHIBIT H

LOCAL AGENCY PROCEDURES FOR CONSULTANT SERVICES

Title 23 Code of Federal Regulations (CFR) 172 applies to a federally funded Local Agency project agreement administered by CDOT that involves professional consultant services. 23 CFR 172.1 states “The policies and procedures involve federally funded contracts for engineering and design related services for projects subject to the provisions of 23 U.S.C. 112(a) and are issued to ensure that a qualified consultant is obtained through an equitable selection process, that prescribed work is properly accomplished in a timely manner, and at fair and reasonable cost” and according to 23 CFR 172.5 “Price shall not be used as a factor in the analysis and selection phase.” Therefore, local agencies must comply with these CFR requirements when obtaining professional consultant services under a federally funded consultant contract administered by CDOT.

CDOT has formulated its procedures in Procedural Directive (P.D.) 400.1 and the related operations guidebook titled "Obtaining Professional Consultant Services". This directive and guidebook incorporate requirements from both Federal and State regulations, i.e., 23 CFR 172 and CRS §24-30-1401 et seq. Copies of the directive and the guidebook may beobtained upon request from CDOT's Agreements and Consultant Management Unit. [Local agencies should have theirown written procedures on file for each method of procurement that addresses the items in 23 CFR 172].

Because the procedures and laws described in the Procedural Directive and the guidebook are quite lengthy, the subsequent steps serve as a short-hand guide to CDOT procedures that a Local Agency must follow in obtaining professional consultant services. This guidance follows the format of 23 CFR 172. The steps are:

1. The contracting Local Agency shall document the need for obtaining professional services.

2. Prior to solicitation for consultant services, the contracting Local Agency shall develop a detailed scope of work and a list of evaluation factors and their relative importance. The evaluation factors are those identified in C.R.S. 24-30-1403. Also, a detailed cost estimate should be prepared for use during negotiations.

3. The contracting agency must advertise for contracts in conformity with the requirements of C.R.S. 24-30- 1405. The public notice period, when such notice is required, is a minimum of 15 days prior to the selection of the three most qualified firms and the advertising should be done in one or more daily newspapers of general circulation.

4. The Local Agency shall not advertise any federal aid contract without prior review by the CDOT Regional Civil Rights Office (RCRO) to determine whether the contract shall be subject to a DBE contract goal. If

the RCRO determines a goal is necessary, then the Local Agency shall include the goal and the applicable provisions within the advertisement. The Local Agency shall not award a contract to any Contractor or Consultant without the confirmation by the CDOT Civil Rights and Business Resource Center that the Contractor or Consultant has demonstrated good faith efforts. The Local Agency shall work with the CDOT RCRO to ensure compliance with the established terms during the performance of the contract.

5. The Local Agency shall require that all contractors pay subcontractors for satisfactory performance of work no later than 30 days after the receipt of payment for that work from the contractor. For construction projects, this time period shall be reduced to seven days in accordance with Colorado Revised Statute 24-91-103(2). If the Local Agency withholds retainage from contractors and/or allows contractors to withhold retainage from subcontractors, such retainage provisions must comply with 49 CFR 26.29.

6. Payments to all Subconsultants shall be made within thirty days of receipt of payment from [the Local Agency] or no later than ninety days from the date of the submission of a complete invoice from the Subconsultant, whichever occurs first. If the Consultant has good cause to dispute an amount invoiced by a Subconsultant, the Consultant shall notify [the Local Agency] no later than the required date for payment. Such notification shall include the amount disputed and justification for the withholding. The Consultant shall maintain records of payment that show amounts paid to all Subconsultants. Good cause does not include the Consultant's failure to submit an invoice to the Local Agency or to deposit payments made.

7. The analysis and selection of the consultants shall be done in accordance with CRS §24-30-1403. This section of the regulation identifies the criteria to be used in the evaluation of CDOT pre-qualified prime consultants and their team. It also shows which criteria are used to short-list and to make a final selection.

The short-list is based on the following evaluation factors:

a. Qualifications,

b. Approach to the Work,

c. Ability to furnish professional services.

d. Anticipated design concepts, and

e. Alternative methods of approach for furnishing the professional services.

Evaluation factors for final selection are the consultant's:

a. Abilities of their personnel,

b. Past performance,

c. Willingness to meet the time and budget requirement,

d. Location,

e. Current and projected work load,

f. Volume of previously awarded contracts, and

g. Involvement of minority consultants.

8. Once a consultant is selected, the Local Agency enters into negotiations with the consultant to obtain a fair and reasonable price for the anticipated work. Pre-negotiation audits are prepared for contracts expected to be greater than $50,000. Federal reimbursements for costs are limited to those costs allowable under the cost principles of 48 CFR 31. Fixed fees (profit) are determined with consideration given to size, complexity, duration, and degree of risk involved in the work. Profit is in the range of six to 15 percent of the total direct and indirect costs.

9. A qualified Local Agency employee shall be responsible and in charge of the Work to ensure that the workbeing pursued is complete, accurate, and consistent with the terms, conditions, and specifications of the contract. At the end of Work, the Local Agency prepares a performance evaluation (a CDOT form is available) on the consultant.

CRS §§24-30-1401 THROUGH 24-30-1408, 23 CFR PART 172, AND P.D. 400.1, PROVIDE ADDITIONALDETAILS FOR COMPLYING WITH THE PRECEEDING EIGHT (8) STEPS.

EXHIBIT I

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Non-segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

> "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* $31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)
This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

EXHIBIT J

ADDITIONAL FEDERAL REQUIREMENTS

Federal laws and regulations that may be applicable to the Work include:

Executive Order 11246

Executive Order 11246 of September 24, 1965 entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967 and as supplemented in Department of Labor regulations (41 CFRChapter 60) (All construction contracts awarded in excess of $10,000 by the Local Agencies and their contractors or the Local Agencies).

Copeland "Anti-Kickback" Act

The Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29CFR Part 3) (All contracts and sub-Agreements for construction or repair).

Davis-Bacon Act

The Davis-Bacon Act (40 U.S.C. 276a to a-7) as supplemented by Department of Labor regulations (29 CFRPart 5) (Construction contracts in excess of $2,000 awarded by the Local Agencies and the Local Agencies when required by Federal Agreement program legislation. This act requires that all laborers and mechanics employed by contractors or sub-contractors to work on construction projects financed by federal assistance must be paid wages not less than those established for the locality of the project by the Secretary of Labor).

Contract Work Hours and Safety Standards Act

Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5). (Construction contracts awarded by the Local Agency's in excess of $2,000, and in excess of $2,500 for other contracts which involve the employmentof mechanics or laborers).

Clean Air Act

Standards, orders, or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h), section 508 of the Clean Water Act (33 U.S.C. 1368). Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15) (contracts, subcontracts, and sub-Agreements of amounts more than $100,000).

Energy Policy and Conservation Act

Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163).

OMB Circulars

Office of Management and Budget Circulars A-87, A-21 or A-122, and A-102 or A-110, whichever is applicable.

Hatch Act

The Hatch Act (5 USC 1501-1508) and Public Law 95-454 Section 4728. These statutes state that federal funds cannot be used for partisan political purposes of any kind by any person or organization involved in the administration of federally assisted programs.

Nondiscrimination

The Local Agency shall not exclude from participation in, deny the benefits of, or subject to discrimination any person in the United States on the ground of race, color national origin, sex, age or disability. Prior to thereceipt of any Federal financial assistance from CDOT, the Local Agency shall execute the attached StandardDOT Title VI assurance. As appropriate, the Local Agency shall include Appendix A, B, or C to the StandardDOT Title VI assurance

in any contract utilizing federal funds, land, or other aid. The Local Agency shall alsoinclude the following in all contract advertisements:

> *The [Local Agency], in accordance with the provisions of Title VI of the Civil Rights Actof 1964 (79 Stat. 252, 42 US.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifiesall bidders that it will affirmatively ensure that any contract entered into pursuant to thisadvertisement, DBEs will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for any award.*

ADA

In any contract utilizing federal funds, land, or other federal aid, the Local Agency shall require the federal- aid recipient or contractor to provide a statement of written assurance that they will comply with Section 504and not discriminate on the basis of disability.

Uniform Relocation Assistance and Real Property Acquisition Policies Act

The Uniform Relocation Assistance and Real Property Acquisition Policies Act, as amended (Public Law 91- 646, as amended and Public Law 100-17, 101 Stat. 246-256). (If the contractor is acquiring real property and displacing households or businesses in the performance of the Agreement).

Drug-Free Workplace Act

The Drug-Free Workplace Act (Public Law 100-690 Title V, subtitle D, 41 USC 701 et seq.).

Age Discrimination Act of 1975

The Age Discrimination Act of 1975, 42 U.S.C. Sections 6101 et. seq. and its implementing regulation, 45

C.F.R. Part 91; Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, as amended, and implementingregulation 45 C.F.R. Part 84.

23 C.F.R. Part 172

23 C.F.R. Part 172, concerning "Administration of Engineering and Design Related Contracts".

23 C.F.R Part 633

23 C.F.R Part 633, concerning "Required Contract Provisions for Federal-Aid Construction Contracts".

23 C.F.R. Part 635

23 C.F.R. Part 635, concerning "Construction and Maintenance Provisions".

Title VI of the Civil Rights Act of 1964 and 162(a) of the Federal Aid Highway Act of 1973

Title VI of the Civil Rights Act of 1964 and 162(a) of the Federal Aid Highway Act of 1973. The requirements for which are shown in the Nondiscrimination Provisions, which are attached hereto and made a part hereof.

Nondiscrimination Provisions:

In compliance with Title VI of the Civil Rights Act of 1964 and with Section 162(a) of the Federal AidHighway Act of 1973, the Contractor, for itself, its assignees, and successors in interest, agree as follows:

i. **Compliance with Regulations**

The Contractor will comply with the Regulations of the Department of Transportation relative to nondiscrimination in Federally assisted programs of the Department of Transportation (Title 49, Codeof Federal Regulations, Part 21, hereinafter referred to as the "Regulations"), which are herein incorporated by reference and made a part of this Agreement.

ii. **Nondiscrimination**

The Contractor, with regard to the work performed by it after award and prior to

completion of the contract work, will not discriminate on the ground of race, color, sex, mental or physical handicap or national origin in the selection and retention of Subcontractors, including procurement of materials and leases of equipment. The Contractor will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix C of the Regulations.

iii. **Solicitations for Subcontracts, Including Procurement of Materials and Equipment**

In all solicitations either by competitive bidding or negotiation made by the Contractor for work to beperformed under a subcontract, including procurement of materials or equipment, each potential Subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this Agreement and the Regulations relative to nondiscrimination on the ground of race, color, sex, mentalor physical handicap or national origin.

iv. **Information and Reports**

The Contractor will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto and will permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the State or the FHWA to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of the Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the State, or the FHWA as appropriate and shall set forthwhat efforts have been made to obtain the information.

v. **Sanctions for Noncompliance**

In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Agreement, the State shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to: **a.** Withholding of payments to the Contractor under the contract until the Contractor complies, and/or **b.** Cancellation, termination or suspension of the contract, in whole or in part.

Incorporation of Provisions §22

The Contractor will include the provisions of this Exhibit J in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, orders, or instructions issued pursuant thereto. The Contractor will take such action with respect to any subcontract or procurement as the State or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance; provided,however, that, in the event the Contractor becomes involved in, or is threatened with, litigation with a Subcontractor or supplier as a result of such direction, the Contractor may request the State to enter into such litigation to protect the interest of the State and in addition, the Contractor may request the FHWA to enter into such litigation to protect the interests of the United States.

THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK

SAMPLE

The United States Department of Transportation (USDOT) Standard Title VI/Non-Discrimination Assurances for Local Agencies

DOT Order No. 1050.2A

The [Local Agency] (herein referred to as the "Recipient"), **HEREBY AGREES THAT**, as a condition to receiving any Federal financial assistance from the U.S. Department of Transportation (DOT), through the Colorado Department of Transportation and the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), and Federal Aviation Administration (FAA), is subject to and will comply with the following:

Statutory/Regulatory Authorities

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 C.F.R. Part 21 (entitled Non-discrimination In Federally-Assisted Programs Of The Department Of Transportation-Effectuation Of Title VI Of The Civil Rights Act Of 1964);
- 28 C.F.R. section 50.3 (U.S. Department of Justice Guidelines for Enforcement of Title VI of the Civil Rights Act of 1964);

The preceding statutory and regulatory cites hereinafter are referred to as the "Acts" and "Regulations," respectively.

General Assurances

In accordance with the Acts, the Regulations, and other pertinent directives, circulars, policy, memoranda, and/or guidance, the Recipient hereby gives assurance that it will promptly take any measures necessary to ensure that:

> *"No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity, "for which the Recipient receives Federal financial assistance from DOT, including the FHWA, FTA, or FAA.*

The Civil Rights Restoration Act of 1987 clarified the original intent of Congress, with respect to Title VI and other Non-discrimination requirements (The Age Discrimination Act of 1975, and Section 504 of the Rehabilitation Act of 1973), by restoring the broad, institutional-wide scope and coverage of these non- discrimination statutes and requirements to include all programs and activities of the Recipient, so long as any portion of the program is Federally assisted.

Specific Assurances

More specifically, and without limiting the above general Assurance, the Recipient agrees with and gives the following Assurances with respect to its Federally assisted FHWA, FTA, and FAA assisted programs:

1. The Recipient agrees that each "activity," "facility," or "program," as defined in §§ 21.23(b) and 21.23(e) of 49 C.F.R. § 21 will be (with regard to an "activity") facilitated or will be (with regard to a "facility") operated or will be (with regard to a "program") conducted in compliance with all requirements imposed by, or pursuant to the Acts and the Regulations.
2. The Recipient will insert the following notification in all solicitations for bids, Requests for Proposals for work, or material subject to the Acts and the Regulations made in connection with all FHWA, FTA and FAA programs and, in adapted form, in all proposals for negotiated agreements regardless of funding source:
3. "The [Local Agency] in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 US.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity

4. to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award."
5. The Recipient will insert the clauses of Appendix A and E of this Assurance in every contract or agreement subject to the Acts and the Regulations.

6. The Recipient will insert the clauses of Appendix B of this Assurance, as a covenant running with the land, in any deed from the United States effecting or recording a transfer of real property, structures, use, or improvements thereon or interest therein to a Recipient.

7. That where the Recipient receives Federal financial assistance to construct a facility, or part of a facility, the Assurance will extend to the entire facility and facilities operated in connection therewith.

8. That where the Recipient receives Federal financial assistance in the form, or for the acquisition of real property or an interest in real property, the Assurance will extend to rights to space on, over, or under such property.

9. That the Recipient will include the clauses set forth in Appendix C and Appendix D of this Assurance, as a covenant running with the land, in any future deeds, leases, licenses, permits, or similar instruments entered into by the Recipient with other parties:

    a. for the subsequent transfer of real property acquired or improved under the applicable activity, project, or program; and
    b. for the construction or use of, or access to, space on, over, or under real property acquired or improved under the applicable activity, project, or program.

10. That this Assurance obligates the Recipient for the period during which Federal financial assistance is extended to the program, except where the Federal financial assistance is to provide, or is in the form of, personal property, or real property, or interest therein, or structures or improvements thereon, in which case the Assurance obligates the Recipient, or any transferee for the longer of the following periods:

    a. the period during which the property is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
    b. the period during which the Recipient retains ownership or possession of the property.

11. The Recipient will provide for such methods of administration for the program as are found by the Secretary of Transportation or the official to whom he/she delegates specific authority to give reasonable guarantee that it, other recipients, sub-recipients, sub-grantees, contractors, subcontractors, consultants, transferees, successors in interest, and other participants of Federal financial assistance under such program will comply with all requirements imposed or pursuant to the Acts, the Regulations, and this Assurance.

12. The Recipient agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the Acts, the Regulations, and this Assurance.

By signing this ASSURANCE, the [Local Agency] also agrees to comply (and require any sub-recipients, sub-grantees, contractors, successors, transferees, and/or assignees to comply) with all applicable provisions governing the FHWA, FTA, and FAA's access to records, accounts, documents, information, facilities, and staff. You also recognize that you must comply with any program or compliance reviews, and/or complaint investigationsconducted by CDOT, FHWA, FTA, or FAA. You must keep records, reports, and submit the material for review

upon request to CDOT, FHWA, FTA, or FAA, or its designee in a timely, complete, and accurate way. Additionally, you must comply with all other reporting, data collection, and evaluation requirements, as prescribed by law or detailed in program guidance.

[Local Agency] gives this ASSURANCE in consideration of and for obtaining any Federal grants, loans, contracts, agreements, property, and/or discounts, or other Federal-aid and Federal financial assistance extended after the date hereof to the recipients by the U.S. Department of Transportation under the FHWA, FTA, and FAA. This ASSURANCE is binding on [Local Agency], other recipients, sub-recipients, sub-grantees, contractors, subcontractors and their subcontractors', transferees, successors in interest, and any other participants in the FHWA, FTA, and FAA funded programs. The person(s) signing below is authorized to sign this ASSURANCE on behalf of the Recipient.

_____

(***Name of Recipient***)

by_____

(***Signature of Authorized Official***)

DATED_____

APPENDIX A

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations**: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, FHWA, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Non-discrimination**: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment**: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. **Information and Reports**: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the [Local Agency], CDOT or FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the [Local Agency], CDOT or FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance**: In the event of a contractor's noncompliance with the non-discrimination provisions of this contract, the [Local Agency] will impose such contract sanctions as it, CDOT or FHWA may determine to be appropriate, including, but not limited to:

   a. withholding payments to the contractor under the contract until the contractor complies; and/or
   b. cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions**: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the [Local Agency], CDOT or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

APPENDIX B

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the [Local Agency] will accept title to the lands and maintain the project constructed thereon in accordance with (***Name of Appropriate Legislative Authority***), the Regulations for the Administration of (***Name of Appropriate Program***), and the policies and procedures prescribed by the FHWA of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the [Local Agency] all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto [Local Agency] and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the [Local Agency] its successors and assigns.

The [Local Agency], in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the [Local Agency] will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX C

CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE ACTIVITY, FACILITY, OR PROGRAM

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the [Local Agency] pursuant to the provisions of Assurance 7(a):

A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:

    1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, [Local Agency] will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued. *

C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the [Local Agency] will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the [Local Agency] and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX D

CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE ACTIVITY, FACILITY OR PROGRAM

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by [Local Agency] pursuant to the provisions of Assurance 7(b):

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.

B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non- discrimination covenants, [Local Agency] will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued. *

C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, [Local Agency] will there upon revert to and vest in and become the absolute property of [Local Agency] of Transportation and its assigns. *

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination onthe basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601),(prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis ofsex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on thebasis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, orsex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability ofTitle VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all ofthe programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation,and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

EXHIBIT K

FFATA SUPPLEMENTAL FEDERAL PROVISIONS

State of Colorado Supplemental Provisions for
Federally Funded Contracts, Grants, and Purchase Orders
Subject to
The Federal Funding Accountability and Transparency Act of 2006 (FFATA),
As Amended
Revised as of 3-20-13

The contract, grant, or purchase order to which these Supplemental Provisions are attached has been funded, in whole or in part, with an Award of Federal funds. In the event of a conflict between the provisions of these Supplemental Provisions, the Special Provisions, the contract or any attachments or exhibits incorporated into and made a part of the contract, the provisions of these Supplemental Provisions shall control.

1. **Definitions.** For the purposes of these Supplemental Provisions, the following terms shall have the meanings ascribed to them below.

   1.1. **"Award"** means an award of Federal financial assistance that a non-Federal Entity receives or administers in the form of:

      1.1.1. Grants;
      1.1.2. Contracts;
      1.1.3. Cooperative agreements, which do not include cooperative research and development agreements (CRDA) pursuant to the Federal Technology Transfer Act of 1986, as amended (15 U.S.C. 3710);
      1.1.4. Loans;
      1.1.5. Loan Guarantees;
      1.1.6. Subsidies;
      1.1.7. Insurance;
      1.1.8. Food commodities;
      1.1.9. Direct appropriations;
      1.1.10. Assessed and voluntary contributions; and
      1.1.11. Other financial assistance transactions that authorize the expenditure of Federal funds by non-Federal Entities.

      Award ***does not*** include:

      1.1.12. Technical assistance, which provides services in lieu of money;
      1.1.13. A transfer of title to Federally-owned property provided in lieu of money; even if the award is called a grant;
      1.1.14. Any award classified for security purposes; or
      1.1.15. Any award funded in whole or in part with Recovery funds, as defined in section 1512 of the American Recovery and Reinvestment Act (ARRA) of 2009 (Public Law 111-5).

   1.2. **"Contract"** means the contract to which these Supplemental

Provisions are attached and includes all Award types in **§1.1.1** through **1.1.11** above.

1.3. **"Contractor"** means the party or parties to a Contract funded, in whole or in part, with Federal financial assistance, other than the Prime Recipient, and includes grantees, subgrantees, Subrecipients, and borrowers. For purposes of Transparency Act reporting, Contractor does not include Vendors.

1.4. **"Data Universal Numbering System (DUNS) Number"** means the nine-digit number established and assigned by Dun and Bradstreet, Inc. to uniquely identify a business entity. Dun and Bradstreet's website may be found at: http://fedgov.dnb.com/webform.

1.5. **"Entity"** means all of the following as defined at 2 CFR part 25, subpart C;

- **1.5.1.** A governmental organization, which is a State, local government, or Indian Tribe;
- **1.5.2.** A foreign public entity;
- **1.5.3.** A domestic or foreign non-profit organization;
- **1.5.4.** A domestic or foreign for-profit organization; and
- **1.5.5.** A Federal agency, but only a Subrecipient under an Award or Subaward to a non-Federal entity.

1.6. **"Executive"** means an officer, managing partner or any other employee in a management position.

1.7. **"Federal Award Identification Number (FAIN)"** means an Award number assigned by a Federal agency to a Prime Recipient.

1.8. **"FFATA"** means the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109- 282), as amended by §6202 of Public Law 110-252. FFATA, as amended, also is referred to as the "Transparency Act."

1.9. **"Prime Recipient"** means a Colorado State agency or institution of higher education that receives an Award.

1.10. **"Subaward"** means a legal instrument pursuant to which a Prime Recipient of Award funds awards all or a portion of such funds to a Subrecipient, in exchange for the Subrecipient's support in the performance of all or any portion of the substantive project or program for which the Award was granted.

1.11. **"Subrecipient"** means a non-Federal Entity (or a Federal agency under an Award or Subaward to a non- Federal Entity) receiving Federal funds through a Prime Recipient to support the performance of the Federal project or program for which the Federal funds were awarded. A Subrecipient is subject to the terms and conditions of the Federal Award to the Prime Recipient, including program compliance requirements. The term "Subrecipient" includes and may be referred to as Subgrantee.

1.12. **"Subrecipient Parent DUNS Number"** means the subrecipient

parent organization's 9-digit Data Universal Numbering System (DUNS) number that appears in the subrecipient's System for Award Management (SAM) profile, if applicable.

1.13. **"Supplemental Provisions"** means these Supplemental Provisions for Federally Funded Contracts, Grants, and Purchase Orders subject to the Federal Funding Accountability and Transparency Act of 2006, As Amended, as may be revised pursuant to ongoing guidance from the relevant Federal or State of Colorado agency or institution of higher education.

1.14. **"System for Award Management (SAM)"** means the Federal repository into which an Entity must enter the information required under the Transparency Act, which may be found at http://www.sam.gov.

1.15. **"Total Compensation"** means the cash and noncash dollar value earned by an Executive during the Prime Recipient's or Subrecipient's preceding fiscal year and includes the following:

1.15.1. Salary and bonus;

1.15.2. Awards of stock, stock options, and stock appreciation rights, using the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2005) (FAS 123R), Shared Based Payments;

1.15.3. Earnings for services under non-equity incentive plans, not including group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of Executives and are available generally to all salaried employees;

1.15.4. Change in present value of defined benefit and actuarial pension plans;

1.15.5. Above-market earnings on deferred compensation which is not tax-qualified;

1.15.6. Other compensation, if the aggregate value of all such other compensation (e.g. severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the Executive exceeds $10,000.

1.16. "**Transparency Act**" means the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by §6202 of Public Law 110-252. The Transparency Act also is referred to as FFATA.

1.17 **"Vendor"** means a dealer, distributor, merchant or other seller providing property or services required for a project or program funded by an Award. A Vendor is not a Prime Recipient or a Subrecipient and is not subject to the terms and conditions of the Federal award. Program compliance requirements do not pass through to a Vendor.

2. **Compliance.** Contractor shall comply with all applicable provisions of the Transparency Act and the regulations issued pursuant thereto, including but not limited to these Supplemental Provisions. Any revisions to such provisions or regulations shall automatically become a part of these Supplemental Provisions, without the necessity of either party executing any further instrument. The State of Colorado may provide written notification to Contractor of such revisions, but such notice shall not be a condition precedent to the effectiveness of such revisions.

3. **System for Award Management (SAM) and Data Universal Numbering System (DUNS) Requirements.**

   3.1. **SAM.** Contractor shall maintain the currency of its information in SAM until the Contractor submits the final financial report required under the Award or receives final payment, whichever is later. Contractor shall review and update SAM information at least annually after the initial registration, and more frequently if required by changes in its information.

   3.2. **DUNS.** Contractor shall provide its DUNS number to its Prime Recipient, and shall update Contractor's information in Dun & Bradstreet, Inc. at least annually after the initial registration, and more frequently if required by changes in Contractor's information.

4. **Total Compensation.** Contractor shall include Total Compensation in SAM for each of its five most highly compensated Executives for the preceding fiscal year if:

   4.1. The total Federal funding authorized to date under the Award is $25,000 or more; and

   4.2. In the preceding fiscal year, Contractor received:

      4.2.1. 80% or more of its annual gross revenues from Federal procurement contracts and subcontracts and/or Federal financial assistance Awards or Subawards subject to the Transparency Act; and

      4.2.2. $25,000,000 or more in annual gross revenues from Federal procurement contracts and subcontracts and/or Federal financial assistance Awards or Subawards subject to the Transparency Act; and

   4.3. The public does not have access to information about the compensation of such Executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d) or § 6104 of the Internal Revenue Code of 1986.

5. **Reporting.** Contractor shall report data elements to SAM and to the Prime Recipient as required in §7 below if Contractor is a Subrecipient for the Award pursuant to the Transparency Act. No direct payment shall be made to Contractor for providing any reports required under these Supplemental

Provisions and the cost of producing such reports shall be included in the Contract price. The reporting requirements in §7 below are based on guidance from the US Office of Management and Budget (OMB), and as such are subject to change at any time by OMB. Any such changes shall be automatically incorporated into this Contract and shall become part of Contractor's obligations under this Contract, as provided in **§2** above. The Colorado Office of the State Controller will provide summaries of revised OMB reporting requirements at http://www.colorado.gov/dpa/dfp/sco/FFATA.htm.

6. **Effective Date and Dollar Threshold for Reporting.** The effective date of these Supplemental Provisions apply to new Awards as of October 1, 2010. Reporting requirements in §7 below apply to new Awards as of October 1, 2010, if the initial award is $25,000 or more. If the initial Award is below $25,000 but subsequent Award modifications result in a total Award of $25,000 or more, the Award is subject to the reporting requirements as of the date the Award exceeds $25,000. If the initial Award is $25,000 or more, but funding is subsequently de- obligated such that the total award amount falls below $25,000, the Award shall continue to be subject to the reporting requirements.

7. **Subrecipient Reporting Requirements.** If Contractor is a Subrecipient, Contractor shall report as set forth below.

   7.1 **To SAM.** A Subrecipient shall register in SAM and report the following data elements in SAM ***for each*** Federal Award Identification Number no later than the end of the month following the month in which the Subaward was made:

      7.1.1 Subrecipient DUNS Number;

      7.1.2 Subrecipient DUNS Number + 4 if more than one electronic funds transfer (EFT) account;

      7.1.3 Subrecipient Parent DUNS Number;

      7.1.4 Subrecipient's address, including: Street Address, City, State, Country, Zip + 4, and Congressional District;

      7.1.5 Subrecipient's top 5 most highly compensated Executives if the criteria in §4 above are met; and

      7.1.6 Subrecipient's Total Compensation of top 5 most highly compensated Executives if criteria in §4 above met.

   7.2 **To Prime Recipient.** A Subrecipient shall report to its Prime Recipient, upon the effective date of the Contract, the following data elements:

      7.2.1 Subrecipient's DUNS Number as registered in **SAM**.

      7.2.2 Primary Place of Performance Information, including: Street Address, City, State, Country, Zipcode + 4, and

Congressional District.

8. Exemptions.

8.1. These Supplemental Provisions do not apply to an individual who receives an Award as a natural person,unrelated to any business or non-profit organization he or she may own or operate in his or her name.

8.2 A Contractor with gross income from all sources of less than $300,000 in the previous tax year is exempt from the requirements to report Subawards and the Total Compensation of its most highly compensated Executives.

8.3 Effective October 1, 2010, "Award" currently means a grant, cooperative agreement, or other arrangementas defined in Section 1.1 of these Special Provisions. On future dates "Award" may include other items to be specified by OMB in policy memoranda available at the OMB Web site; Award also will include other types of Awards subject to the Transparency Act.

8.4 There are no Transparency Act reporting requirements for Vendors.

Event of Default. Failure to comply with these Supplemental Provisions shall constitute an event of default under theContract and the State of Colorado may terminate the Contract upon 30 days prior written notice if the default remains uncured five calendar days following the termination of the 30 day notice period. This remedy will be in addition to any other remedy available to the State of Colorado under the Contract, at law or in equity.

EXHIBIT L

SAMPLE SUBRECIPIENT MONITORING AND RISK ASSESSMENT

CDOT SUBRECIPIENT RISK ASSESSMENT	Date:	
Name of Entity (Subrecipient):		
Name of Project / Program:		
Estimated Award Period:		
Entity Executive Director or VP:		
Entity Chief Financial Officer:		
Entity Representative for this Self Assessment:		

	Instructions: (See "Instructions" tab for more information) *1. Check only one box for each question. All questions are required to be answered.* *2. Utilize the "Comment" section below the last question for additional responses.* *3. When complete, check the box at the bottom of the form to authorize.*	Yes	No	N/A
EXPERIENCE ASSESSMENT		**Yes**	**No**	**N/A**
1	Is your entity new to operating or managing federal funds (has not done so within the past three years)?	☐	☐	
2	Is this funding program new for your entity (managed for less than three years)? *Examples of funding programs include CMAQ, TAP, STP-M, etc.*	☐	☐	
3	Does your staff assigned to the program have at least three full years of experience with this federal program?	☐	☐	
MONITORING/AUDIT ASSESSMENT		**Yes**	**No**	**N/A**
4	Has your entity had an on-site project or grant review from an external entity *(e.g., CDOT, FHWA)* within the last three years?	☐	☐	☐
5	a) Were there non-compliance issues in this prior review?	☐	☐	☐
	b) What were the number and extent of issues in prior review?	☐ *1 to 2*	☐ *> 3*	☐
OPERATION ASSESSMENT		**Yes**	**No**	**N/A**
6	Does your entity have a time and effort reporting system in place to account for 100% of all employees' time, that can provide a breakdown of the actual time spent on each funded project? *If No, in the comment section please explain how you intend to document 100% of hours worked by employees and breakdown of time spent on each funding project.*	☐	☐	
FINANCIAL ASSESSMENT		**Yes**	**No**	**N/A**
7	a) Does your entity have an indirect cost rate that is approved and current?	☐	☐	
	b) If Yes, who approved the rate, and what date was it approved?			
8	Is this grant/award 10% or more of your entity's overall funding?	☐ *>10%*	☐ *<10%*	
9	Has your entity returned lapsed* funds? **Funds "lapse" when they are no longer available for obligation.*	☐	☐	☐
10	Has your entity had difficulty meeting local match requirements in the last three years?	☐	☐	☐
11	What is the total federal funding your entity has been awarded for the last federal fiscal year, and what is your entity's fiscal year end?			

	INTERNAL CONTROLS ASSESSMENT	Yes	No	N/A
12	Has your entity had any significant changes in key personnel or accounting system(s) in the last year? *(e.g., Controller, Exec Director, Program Mgr, Accounting Mgr, etc.) If Yes, in the comment section, please identify the accounting system(s), and / or list personnel positions and identify any that are vacant.*	☐	☐	☐
13	Does your entity have financial procedures and controls in place to accommodate a federal-aid project?	☐	☐	
14	Does your accounting system identify the receipts and expenditures of program funds separately for each award?	☐	☐	
15	Will your accounting system provide for the recording of expenditures for each award by the budget cost categories shown in the approved budget?	☐	☐	
16	Does your agency have a review process for all expenditures that will ensure that all costs are reasonable, allowable and allocated correctly to each funding source? *If Yes, in the comment section, please explain your current process for reviewing costs.*	☐	☐	☐
17	How many total FTE perform accounting functions within your organization?	☐ ≥6	☐ 2 to 5	☐ < 2
	IMPACT ASSESSMENT	**Yes**	**No**	**N/A**
18	For this upcoming federal award or in the immediate future, does your entity have any potential conflicts of interest* in accordance with applicable Federal awarding agency policy? *If Yes, please disclose these conflicts in writing, along with supporting information, and submit with this form. (*Any practices, activities or relationships that reasonably appear to be in conflict with the full performance of the Subrecipient's obligations to the State.)*	☐	☐	
19	For this award, has your entity disclosed to CDOT, in writing, violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the award? *Response options:* ***YES** = Check if have one or more violation(s) and have either disclosed previously to CDOT or as part of this form. In the comment section, list all violations with names of supporting documentation and submit with this form.* ***NO** = Check if have one or more violation(s) and have not disclosed previously or will not disclose as part of this form. Explain in the comment section.* ***N/A** = Check if have no violations.*	☐	☐	☐
	PROGRAM MANAGEMENT ASSESSMENT	**Yes**	**No**	**N/A**
20	Does your entity have a written process/procedure or certification statement approved by your governing board ensuring critical project personnel are capable of effectively managing Federal-aid projects? *If Yes, please submit with this form.*	☐	☐	☐
21	Does your entity have written procurement policies or certification statement for consultant selection approved by your governing board in compliance with 23 CFR 172*? *If Yes, please submit with this form. (*The Brooks Act requires agencies to promote open competition by advertising, ranking, selecting, and negotiating contracts based on demonstrated competence and qualifications, at a fair and reasonable price.)*	☐	☐	☐
22	a) Is your staff familiar with the relevant CDOT manuals and federal program requirements?	☐	☐	☐
	b) Does your entity have a written policy or a certification statement approved by your governing board assuring federal-aid projects will receive adequate inspections? *If Yes, please submit with this form.*	☐	☐	☐
	c) Does your entity have a written process or a certification statement approved by your governing board assuring a contractor's work will be completed in conformance with approved plans and specifications? *If Yes, please submit with this form.*	☐	☐	☐

	d) Does your entity have a written policy or certification statement approved by your governing board assuring that materials installed on the projects are sampled and tested per approved processes. *If Yes, please submit with this form.*	☐	☐	☐
	e) Does your entity have a written policy or certification statement approved by your governing board assuring that only US manufactured steel will be incorporated into the project *(Buy America requirements)? If Yes, please submit with this form.*	☐	☐	☐

Comments *- As needed, include the question number and provide comments related to the above questions. Insert additional rows as needed.*

☐ ***By checking this box, the Executive Director, VP or Chief Financial Officer of this entity certifies that all information provided on this form is true and correct.***

Tool Version: v2.0 (081816)

EXHIBIT M

OMB UNIFORM GUIDANCE FOR FEDERAL AWARDS

Subject to
The Office of Management and Budget Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards ("Uniform Guidance"), Federal Register, Vol. 78, No. 248, 78590

The agreement to which these Uniform Guidance Supplemental Provisions are attached has been funded, in whole or in part, with an award of Federal funds. In the event of a conflict between the provisions of these Supplemental Provisions, the Special Provisions, the agreement or any attachments or exhibits incorporated into and made a part of the agreement, the provisions of these Uniform Guidance Supplemental Provisions shall control. In the event of a conflict between the provisions of these Supplemental Provisions and the FFATA Supplemental Provisions, the FFATA Supplemental Provisions shall control.

1. **Definitions.** For the purposes of these Supplemental Provisions, the following terms shall have the meanings ascribed to them below.

1.1. "Award" means an award by a Recipient to a Subrecipient funded in whole or in part by a Federal Award. The terms and conditions of the Federal Award flow down to the Award unless the terms and conditions of the Federal Award specifically indicate otherwise. 2 CFR §200.38

1.2. "Federal Award" means an award of Federal financial assistance or a cost-reimbursement contract under the Federal Acquisition Requirements by a Federal Awarding Agency to a Recipient. "Federal Award" also means an agreement setting forth the terms and conditions of the Federal Award. The term does not include payments to a contractor or payments to an individual that is a beneficiary of a Federal program.

1.3. "Federal Awarding Agency" means a Federal agency providing a Federal Award to a Recipient. 2CFR §200.37

1.4. "FFATA" means the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by §6202 of Public Law 110-252.

1.5. "Grant" or "Grant Agreement" means an agreement setting forth the terms and conditions of an Award. The term does not include an agreement that provides only direct Federal cash assistance to an individual, a subsidy, a loan, a loan guarantee, insurance, or acquires property or services for the direct benefit of use of the Federal Awarding Agency or Recipient. 2 CFR §200.51.

1.6. "OMB" means the Executive Office of the President, Office of Management and Budget.

1.7. "Recipient" means a Colorado State department, agency or institution of higher education that receives a Federal Award from a Federal Awarding Agency to carry out an activity under a Federal program. The term does not include Subrecipients. 2 CFR §200.86

1.8. "State" means the State of Colorado, acting by and through its departments, agencies and institutions of higher education.

1.9. **"Subrecipient"** means a non-Federal entity receiving an Award from a Recipient to carry out part of a Federal program. The term does not include an individual who is a beneficiary of such program.

1.10. **"Uniform Guidance"** means the Office of Management and Budget Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, which supersedes requirements from OMB Circulars A-21, A-87, A-110, and A-122, OMB Circulars A-89, A-102, and A- 133, and the guidance in Circular A-50 on Single Audit Act follow-up. The terms and conditions of the Uniform Guidance flow down to Awards to Subrecipients unless the Uniform Guidance or the terms and conditions of the Federal Award specifically indicate otherwise.

1.11. **"Uniform Guidance Supplemental Provisions"** means these Supplemental Provisions for Federal Awards subject to the OMB Uniform Guidance, as may be revised pursuant to ongoing guidance from relevant Federal agencies or the Colorado State Controller.

2. **Compliance**. Subrecipient shall comply with all applicable provisions of the Uniform Guidance, including but not limited to these Uniform Guidance Supplemental Provisions. Any revisions to such provisions automatically shall become a part of these Supplemental Provisions, without the necessity of either party executing any further instrument. The State of Colorado may provide written notification to Subrecipient of such revisions, but such notice shall not be a condition precedent to the effectiveness of such revisions.

3. **Procurement Standards.**

3.1 **Procurement Procedures.** Subrecipient shall use its own documented procurement procedures which reflect applicable State, local, and Tribal laws and regulations, provided that the procurements conform to applicable Federal law and the standards identified in the Uniform Guidance, including without limitation,

§§200.318 through 200.326 thereof.

3.2 **Procurement of Recovered Materials**. If Subrecipient is a State Agency or an agency of a political subdivision of a state, its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

4. **Access to Records.** Subrecipient shall permit Recipient and auditors to have access to Subrecipient's records and financial statements as necessary for Recipient to meet the requirements of §200.331 (Requirements for pass through entities), §§200.300 (Statutory and national policy requirements) through 200.309 (Period of performance), and Subpart F-Audit Requirements of the Uniform Guidance. 2 CFR §200.331(a)(5).

5. **Single Audit Requirements.** If Subrecipient expends $750,000 or more in Federal Awards during Subrecipient's fiscal year, Subrecipient shall procure or arrange for a single or program-specific audit conducted for that year in accordance with the

provisions of Subpart F-Audit Requirements of the Uniform Guidance, issued pursuant to the Single Audit Act Amendments of 1996, (31 U.S.C. 7501-7507). 2 CFR §200.501.

5.1 Election. Subrecipient shall have a single audit conducted in accordance with Uniform Guidance §200.514 (Scope of audit), except when it elects to have a program-specific audit conducted in accordance with §200.507 (Program-specific audits). Subrecipient may elect to have a program-specific audit if Subrecipient expends Federal Awards under only one Federal program (excluding research and development) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of Recipient. A program-specific audit may not be elected for research and development unless all of the Federal Awards expended were received from Recipient and Recipient approves in advance a program-specific audit.

5.2 Exemption. If Subrecipient expends less than $750,000 in Federal Awards during its fiscal year, Subrecipient shall be exempt from Federal audit requirements for that year, except as noted in 2 CFR §200.503 (Relation to other audit requirements), but records shall be available for review or audit by appropriate officials of the Federal agency, the State, and the Government Accountability Office.

5.3 Subrecipient Compliance Responsibility. Subrecipient shall procure or otherwise arrange for the audit required by Part F of the Uniform Guidance and ensure it is properly performed and submitted when due in accordance with the Uniform Guidance. Subrecipient shall prepare appropriate financial statements, including the schedule of expenditures of Federal awards in accordance with Uniform Guidance §200.510 (Financial statements) and provide the auditor with access to personnel, accounts, books, records, supporting documentation, and other information as needed for the auditor to perform the audit required by Uniform Guidance Part F-Audit Requirements.

6. Contract Provisions for Subrecipient Contracts. Subrecipient shall comply with and shall include all of the following applicable provisions in all subcontracts entered into by it pursuant to this Grant Agreement.

6.1 Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 shall include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

"During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The

contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments

under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice inconspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965,and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuantthereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspendedin whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided bylaw.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuantto section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontractor purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: *Provided, however,* that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction,the contractor may request the United States to enter into such litigation to protect the interests of the United States."

6.2 Davis-Bacon Act. Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of $2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be

required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractorsmust be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination.The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40

U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or Subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is other wise entitled.

The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

6.3 **Rights to Inventions Made Under a Contract or Agreement.** If the Federal Award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and Subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," Subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and anyimplementing regulations issued by the awarding agency.

6.4 **Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251- 1387), as amended**. Contracts and subgrants of amounts in excess of $150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

6.5 **Debarment and Suspension (Executive Orders 12549 and 12689).** A contract award (see 2 CFR 180.220)must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

6.6 **Byrd Anti-Lobbying Amendment (31 U.S.C. 1352).** Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, oran employee of a member of Congress in connection

with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non- Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

7. **Certifications**. Unless prohibited by Federal statutes or regulations, Recipient may require Subrecipient to submit certifications and representations required by Federal statutes or regulations on an annual basis. 2CFR §200.208. Submission may be required more frequently if Subrecipient fails to meet a requirement of the Federal award. Subrecipient shall certify in writing to the State at the end of the Award that the project or activity was completed or the level of effort was expended. 2 CFR §200.201(3). If the required level of activity or effort was not carried out, the amount of the Award must be adjusted.

   7.1 Event of Default. Failure to comply with these Uniform Guidance Supplemental Provisions shall constitute an event of default under the Grant Agreement (2 CFR §200.339) and the State may terminate the Grant upon 30 days prior written notice if the default remains uncured five calendar days following the termination of the 30 day notice period. This remedy will be in addition to any other remedy available to the State of Colorado under the Grant, at law or in equity.

8. **Effective Date.** The effective date of the Uniform Guidance is December 26, 2013. 2 CFR §200.110. The procurement standards set forth in Uniform Guidance §§200.317-200.326 are applicable to new Awards made by Recipient as of December 26, 2015. The standards set forth in Uniform Guidance Subpart F-Audit Requirements are applicable to audits of fiscal years beginning on or after December 26, 2014.

9. **Performance Measurement**. The Uniform Guidance requires completion of OMB-approved standard information collection forms (the PPR). The form focuses on outcomes, as related to the Federal Award Performance Goals that awarding Federal agencies are required to detail in the Awards.

   Section 200.301 provides guidance to Federal agencies to measure performance in a way that will help the Federal awarding agency and other non-Federal entities to improve program outcomes.

   The Federal awarding agency is required to provide recipients with clear performance goals, indicators, and milestones (200.210). Also, must require the recipient to relate financial data to performance accomplishments of the Federal award.

Exhibit N
Federal Treasury Provisions

1. APPLICABILITY OF PROVISIONS.

1.1. The Grant to which these Federal Provisions are attached has been funded, in whole or in part, with an Award of Federal funds. In the event of a conflict between the provisions of these Federal Provisions, the Special Provisions, the body of the Grant, or any attachments or exhibits incorporated into and made a part of the Grant, the provisions of these Federal Provisions shall control.

1.2. The State of Colorado is accountable to Treasury for oversight of their subrecipients, including ensuring their subrecipients comply with the SLFRF statute, SLFRF Award Terms and Conditions, Treasury's Final Rule, and reporting requirements, as applicable.

1.3. Additionally, any subrecipient that issues a subaward to another entity (2nd tier subrecipient), must hold the 2nd tier subrecipient accountable to these provisions and adhere to reporting requirements.

1.4. These Federal Provisions are subject to the Award as defined in §2 of these Federal Provisions, as may be revised pursuant to ongoing guidance from the relevant Federal or State of Colorado agency or institutions of higher education.

2. DEFINITIONS.

2.1. For the purposes of these Federal Provisions, the following terms shall have the meanings ascribed to them below.

2.1.1. "Award" means an award of Federal financial assistance, and the Grant setting forth the terms and conditions of that financial assistance, that a non-Federal Entity receives or administers.

2.1.2. "Entity" means:

2.1.2.1. a Non-Federal Entity;

2.1.2.2. a foreign public entity;

2.1.2.3. a foreign organization;

2.1.2.4. a non-profit organization;

2.1.2.5. a domestic for-profit organization (for 2 CFR parts 25 and 170 only);

2.1.2.6. a foreign non-profit organization (only for 2 CFR part 170) only);

2.1.2.7. a Federal agency, but only as a Subrecipient under an Award or Subaward to a non-Federal entity (or 2 CFR 200.1); or

2.1.2.8. a foreign for-profit organization (for 2 CFR part 170 only).

2.1.3. "Executive" means an officer, managing partner or any other employee in a management position.

2.1.4. "Expenditure Category (EC)" means the category of eligible uses as defined by the US Department of Treasury in "Appendix 1 of the Compliance and Reporting Guidance, State and Local Fiscal Recovery Funds" report available at www.treasury.gov.

2.1.5. "Federal Awarding Agency" means a Federal agency providing a Federal Award to a Recipient as described in 2 CFR 200.1

2.1.6. "Grant" means the Grant to which these Federal Provisions are attached.

2.1.7. "Grantee" means the party or parties identified as such in the Grant to which these Federal Provisions are attached.

2.1.8. "Non-Federal Entity means a State, local government, Indian tribe, institution of higher education, or nonprofit organization that carries out a Federal Award as a Recipient or a Subrecipient.

2.1.9. "Nonprofit Organization" means any corporation, trust, association, cooperative, or other organization, not including IHEs, that:

2.1.9.1. Is operated primarily for scientific, educational, service, charitable, or similar purposes in the public interest;

2.1.9.2. Is not organized primarily for profit; and

2.1.9.3. Uses net proceeds to maintain, improve, or expand the operations of the organization.

2.1.10. "OMB" means the Executive Office of the President, Office of Management and Budget.

2.1.11. "Pass-through Entity" means a non-Federal Entity that provides a Subaward to a Subrecipient to carry out part of a Federal program.

2.1.12. "Prime Recipient" means the Colorado State agency or institution of higher education identified as the Grantor in the Grant to which these Federal Provisions are attached.

2.1.13. "Subaward" means an award by a Prime Recipient to a Subrecipient funded in whole or in part by a Federal Award. The terms and conditions of the Federal Award flow down to the Subaward unless the terms and conditions of the Federal Award specifically indicate otherwise in accordance with 2 CFR 200.101. The term does not include payments to a Contractor or payments to an individual that is a beneficiary of a Federal program.

2.1.14. "Subrecipient" or "Subgrantee" means a non-Federal Entity (or a Federal agency under an Award or Subaward to a non-Federal Entity) receiving Federal funds through a Prime Recipient to support the performance of the Federal project or program for which the Federal funds were awarded. A Subrecipient is subject to the terms and conditions of the Federal Award to the Prime Recipient, including program compliance requirements. The term does not include an individual who is a beneficiary of a federal program.

2.1.15. "System for Award Management (SAM)" means the Federal repository into which an Entity must enter the information required under the Transparency Act, which may be found at http://www.sam.gov. "Total Compensation" means the cash and noncash dollar value earned by an Executive during the Prime Recipient's or Subrecipient's preceding fiscal year (see 48 CFR 52.204-10, as prescribed in 48 CFR 4.1403(a)) and includes the following:

2.1.15.1. Salary and bonus;

2.1.15.2. Awards of stock, stock options, and stock appreciation rights, using the dollar amount recognized for financial statement reporting purposes with respect to the

fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2005) (FAS 123R), Shared Based Payments;

2.1.15.3. Earnings for services under non-equity incentive plans, not including group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of Executives and are available generally to all salaried employees;

2.1.15.4. Change in present value of defined benefit and actuarial pension plans;

2.1.15.5. Above-market earnings on deferred compensation which is not tax-qualified;

2.1.15.6. Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life insurance paid on behalf of the employee, perquisites or property) for the Executive exceeds $10,000.

2.1.16. "Transparency Act" means the Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by §6202 of Public Law 110-252.

2.1.17. "Uniform Guidance" means the Office of Management and Budget Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. The terms and conditions of the Uniform Guidance flow down to Awards to Subrecipients unless the Uniform Guidance or the terms and conditions of the Federal Award specifically indicate otherwise.

2.1.18. "Unique Entity ID" means the Unique Entity ID established by the federal government for a Grantee at https://sam.gov/content/home.

3. COMPLIANCE.

3.1. Grantee shall comply with all applicable provisions of the Transparency Act and the regulations issued pursuant thereto, all applicable provisions of the Uniform Guidance, and all applicable Federal Laws and regulations required by this Federal Award Any revisions to such provisions or regulations shall automatically become a part of these Federal Provisions, without the necessity of either party executing any further instrument. The State of Colorado, at its discretion, may provide written notification to Grantee of such revisions, but such notice shall not be a condition precedent to the effectiveness of such revisions.

3.2. Per US Treasury Final Award requirements, grantee programs or services must not include a term or conditions that undermines efforts to stop COVID-19 or discourages compliance with recommendations and CDC guidelines.

4. SYSTEM FOR AWARD MANAGEMENT (SAM) AND UNIQUE ENTITY ID (UEI) REQUIREMENTS.

4.1. SAM. Grantee shall maintain the currency of its information in SAM until the Grantee submits the final financial report required under the Award or receives final payment, whichever is later. Grantee shall review and update SAM information at least annually.

4.2. UEI. Grantee shall provide its Unique Entity ID to its Prime Recipient, and shall update Grantee's information in Sam.gov at least annually.

5. TOTAL COMPENSATION.

5.1. Grantee shall include Total Compensation in SAM for each of its five most highly compensated Executives for the preceding fiscal year if:

5.1.1. The total Federal funding authorized to date under the Award is $30,000 or more; and

5.1.2. In the preceding fiscal year, Grantee received:

5.1.2.1. 80% or more of its annual gross revenues from Federal procurement Agreements and Subcontractors and/or Federal financial assistance Awards or Subawards subject to the Transparency Act; and

5.1.2.2. $30,000,000 or more in annual gross revenues from Federal procurement Agreements and Subcontractors and/or Federal financial assistance Awards or Subawards subject to the Transparency Act; and

5.1.2.3. 5.1.2.3 The public does not have access to information about the compensation of such Executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d) or § 6104 of the Internal Revenue Code of 1986.

6. REPORTING.

6.1. If Grantee is a Subrecipient of the Award pursuant to the Transparency Act, Grantee shall report data elements to SAM and to the Prime Recipient as required in this Exhibit. No direct payment shall be made to Grantee for providing any reports required under these Federal Provisions and the cost of producing such reports shall be included in the Grant price. The reporting requirements in this Exhibit are based on guidance from the OMB, and as such are subject to change at any time by OMB. Any such changes shall be automatically incorporated into this Grant and shall become part of Grantee's obligations under this Grant.

7. EFFECTIVE DATE AND DOLLAR THRESHOLD FOR FEDERAL REPORTING.

7.1. Reporting requirements in §8 below apply to new Awards as of October 1, 2010, if the initial award is $30,000 or more. If the initial Award is below $30,000 but subsequent Award modifications result in a total Award of $30,000 or more, the Award is subject to the reporting requirements as of the date the Award exceeds $30,000. If the initial Award is $30,000 or more, but funding is subsequently de-obligated such that the total award amount falls below $30,000, the Award shall continue to be subject to the reporting requirements. If the total award is below $30,000 no reporting required; if more than $30,000 and less than $50,000 then FFATA reporting is required; and, $50,000 and above SLFRF reporting is required.

7.2. The procurement standards in §9 below are applicable to new Awards made by Prime Recipient as of December 26, 2015. The standards set forth in §11 below are applicable to audits of fiscal years beginning on or after December 26, 2014.

8. SUBRECIPIENT REPORTING REQUIREMENTS.

8.1. Grantee shall report as set forth below.

8.1.1. Grantee shall use the SLFRF Subrecipient Quarterly Report Workbook as referenced in Exhibit P to report to the State Agency within ten (10) days following each quarter ended September, December, March and June. Additional information on specific requirements are detailed in the SLFRF Subrecipient Quarterly Report Workbooks and "Compliance and Reporting Guidance, State and Local Fiscal Recovery Funds" report available at www.treasury.gov.

EC 1 – Public Health

All Public Health Projects

a) Description of structure and objectives
b) Description of relation to COVID-19
c) Identification of impacted and/or disproportionately impacted communities
d) Capital Expenditures
    i. Presence of capital expenditure in project
    ii. Total projected capital expenditure
    iii. Type of capital expenditure
    iv. Written justification
    v. Labor reporting

COVID-19 Interventions and Mental Health (1.4, 1.11, 1.12, 1.13)

a) Amount of total project used for evidence-based programs
b) Evaluation plan description

COVID-19 Small Business Economic Assistance (1.8)

a) Number of small businesses served

COVID-19 Assistance to Non-Profits (1.9)

a) Number of non-profits served

COVID-19 Aid to Travel, Tourism, and Hospitality or Other Impacted Industries (1.10)

a) Sector of employer
b) Purpose of funds

EC 2 – Negative Economic Impacts

All Negative Economic Impacts Projects

a) Description of project structure and objectives
b) Description of project's response to COVID-19
c) Identification of impacted and/or disproportionately impacted communities
d) Amount of total project used for evidence-based programs and description of evaluation plan *(not required for 2.5, 2.8, 2.21-2.24, 2.27-2.29, 2.31, 2.34-2.36)*
e) Number of workers enrolled in sectoral job training programs
f) Number of workers completing sectoral job training programs
g) Number of people participating in summer youth employment programs
h) Capital Expenditures
    i. Presence of capital expenditure in project
    ii. Total projected capital expenditure
    iii. Type of capital expenditure
    iv. Written justification
    v. Labor reporting

Household Assistance (2.1-2.8)

a) Number of households served

b) Number of people or households receiving eviction prevention services (2.2 & 2.5 only) *(Federal guidance may change this requirement in July 2022)*
c) Number of affordable housing units preserved or developed (2.2 & 2.5 only) *(Federal guidance may change this requirement in July 2022)*

Healthy Childhood Environments (2.11-2.13)

a) Number of children served by childcare and early learning *(Federal guidance may change this requirement in July 2022)*
b) Number of families served by home visiting *(Federal guidance may change this requirement in July 2022)*

Education Assistance (2.14, 2.24-2.27)

a) National Center for Education Statistics ("NCES") School ID or NCES District ID
b) Number of students participating in evidence-based programs *(Federal guidance may change this requirement in July 2022)*

Housing Support (2.15, 2.16, 2.18)

a) Number of people or households receiving eviction prevention services *(Federal guidance may change this requirement in July 2022)*
b) Number of affordable housing units preserved or developed *(Federal guidance may change this requirement in July 2022)*

Small Business Economic Assistance (2.29-2.33)

a) Number of small businesses served

Assistance to Non-Profits (2.34)

a) Number of non-profits served

Aid to Travel, Tourism, and Hospitality or Other Impacted Industries (2.35-2.36)

a) Sector of employer
b) Purpose of funds
c) If other than travel, tourism and hospitality (2.36) – description of hardship

EC 3 – Public Health – Negative Economic Impact: Public Sector Capacity

Payroll for Public Health and Safety Employees (EC 3.1)

a) Number of government FTEs responding to COVID-19

Rehiring Public Sector Staff (EC 3.2)

a) Number of FTEs rehired by governments

EC 4 – Premium Pay

All Premium Pay Projects

a) List of sectors designated as critical by the chief executive of the jurisdiction, if beyond those listed in the final rule
b) Numbers of workers served
c) Employer sector for all subawards to third-party employers
d) Written narrative justification of how premium pay is responsive to essential work during the public health emergency for non-exempt workers or those making over 150 percent of the state/county's average annual wage

e) Number of workers to be served with premium pay in K-12 schools

EC 5 – Infrastructure Projects

All Infrastructure Projects

a) Projected/actual construction start date (month/year)
b) Projected/actual initiation of operations date (month/year)
c) Location (for broadband, geospatial data of locations to be served)
d) Projects over $10 million
    i. Prevailing wage certification or detailed project employment and local impact report
    ii. Project labor agreement certification or project workforce continuity plan
    iii. Prioritization of local hires
    iv. Community benefit agreement description, if applicable

Water and sewer projects (EC 5.1-5.18)

a) National Pollutant Discharge Elimination System (NPDES) Permit Number (if applicable; for projects aligned with the Clean Water State Revolving Fund)
b) Public Water System (PWS) ID number (if applicable; for projects aligned with the Drinking Water State Revolving Fund)
c) Median Household Income of service area
d) Lowest Quintile Income of the service area

Broadband projects (EC 5.19-5.21)

a) Confirm that the project is designed to, upon completion, reliably meet or exceed symmetrical 100 Mbps download and upload speeds.
    i. If the project is not designed to reliably meet or exceed symmetrical 100 Mbps download and upload speeds, explain why not, and
    ii. Confirm that the project is designed to, upon completion, meet or exceed 100 Mbps download speed and between at least 20 Mbps and 100 Mbps upload speed, and be scalable to a minimum of 100 Mbps download speed and 100 Mbps upload speed.
b) Additional programmatic data will be required for broadband projects and will be defined in a subsequent version of the US Treasury Reporting Guidance, including, but not limited to *(Federal guidance may change this requirement in July 2022)*:
    i. Number of households (broken out by households on Tribal lands and those not on Tribal lands) that have gained increased access to broadband meeting the minimum speed standards in areas that previously lacked access to service of at least 25 Mbps download and 3 Mbps upload, with the number of households with access to minimum speed standard of reliable 100 Mbps symmetrical upload and download and number of households with access to minimum speed standard of reliable 100 Mbps download and 20 Mbps upload
    ii. Number of institutions and businesses (broken out by institutions on Tribal lands and those not on Tribal lands) that have projected increased access to broadband meeting the minimum speed standards in areas that previously

lacked access to service of at least 25 Mbps download and 3 Mbps upload, in each of the following categories: business, small business, elementary school, secondary school, higher education institution, library, healthcare facility, and public safety organization, with the number of each type of institution with access to the minimum speed standard of reliable 100 Mbps symmetrical upload and download; and number of each type of institution with access to the minimum speed standard of reliable 100 Mbps download and 20 Mbps upload.

iii. Narrative identifying speeds/pricing tiers to be offered, including the speed/pricing of its affordability offering, technology to be deployed, miles of fiber, cost per mile, cost per passing, number of households (broken out by households on Tribal lands and those not on Tribal lands) projected to have increased access to broadband meeting the minimum speed standards in areas that previously lacked access to service of at least 25 Mbps download and 3 Mbps upload, number of households with access to minimum speed standard of reliable 100 Mbps symmetrical upload and download, number of households with access to minimum speed standard of reliable 100 Mbps download and 20 Mbps upload, and number of institutions and businesses (broken out by institutions on Tribal lands and those not on Tribal lands) projected to have increased access to broadband meeting the minimum speed standards in areas that previously lacked access to service of at least 25 Mbps download and 3 Mbps upload, in each of the following categories: business, small business, elementary school, secondary school, higher education institution, library, healthcare facility, and public safety organization. Specify the number of each type of institution with access to the minimum speed standard of reliable 100 Mbps symmetrical upload and download; and the number of each type of institution with access to the minimum speed standard of reliable 100 Mbps download and 20 Mbps upload.

All Expenditure Categories

a) Program income earned and expended to cover eligible project costs

8.1.2. A Subrecipient shall report the following data elements to Prime Recipient no later than five days after the end of the month following the month in which the Subaward was made.

8.1.2.1. Subrecipient Unique Entity ID;

8.1.2.2. Subrecipient Unique Entity ID if more than one electronic funds transfer (EFT) account;

8.1.2.3. Subrecipient parent's organization Unique Entity ID;

8.1.2.4. Subrecipient's address, including: Street Address, City, State, Country, Zip + 4, and Congressional District;

8.1.2.5. Subrecipient's top 5 most highly compensated Executives if the criteria in §4 above are met; and

8.1.2.6. Subrecipient's Total Compensation of top 5 most highly compensated Executives if the criteria in §4 above met.

8.1.3. To Prime Recipient. A Subrecipient shall report to its Prime Recipient, the following data elements:

8.1.3.1. Subrecipient's Unique Entity ID as registered in SAM.

8.1.3.2. Primary Place of Performance Information, including: Street Address, City, State, Country, Zip code + 4, and Congressional District.

8.1.3.3. Narrative identifying methodology for serving disadvantaged communities. See the "Project Demographic Distribution" section in the "Compliance and Reporting Guidance, State and Local Fiscal Recovery Funds" report available at www.treasury.gov. This requirement is applicable to all projects in Expenditure Categories 1 and 2.

8.1.3.4. Narrative identifying funds allocated towards evidenced-based interventions and the evidence base. See the "Use of Evidence" section in the "Compliance and Reporting Guidance, State and Local Fiscal Recovery Funds" report available at www.treasury.gov. See section 8.1.1 for relevant Expenditure Categories.

8.1.3.5. Narrative describing the structure and objectives of the assistance program and in what manner the aid responds to the public health and negative economic impacts of COVID-19. This requirement is applicable to Expenditure Categories 1 and 2. For aid to travel, tourism, and hospitality or other impacted industries (EC 2.11-2.12), also provide the sector of employer, purpose of funds, and if not travel, tourism and hospitality a description of the pandemic impact on the industry.

8.1.3.6. Narrative identifying the sector served and designated as critical to the health and well-being of residents by the chief executive of the jurisdiction and the number of workers expected to be served. For groups of workers (e.g., an operating unit, a classification of worker, etc.) or, to the extent applicable, individual workers, other than those where the eligible worker receiving premium pay is earning (with the premium pay included) below 150 percent of their residing state or county's average annual wage for all occupations, as defined by the Bureau of Labor Statistics Occupational Employment and Wage Statistics, whichever is higher, OR the eligible worker receiving premium pay is not exempt from the Fair Labor Standards Act overtime provisions, include justification of how the premium pay or grant is responsive to workers performing essential work during the public health emergency. This could include a description of the essential workers' duties, health or financial risks faced due to COVID-19 but should not include personally identifiable information. This requirement applies to EC 4.1, and 4.2.

8.1.3.7. For infrastructure projects (EC 5), or capital expenditures in any expenditure category, narrative identifying the projected construction start date (month/year), projected initiation of operations date (month/year), and location (for broadband, geospatial location data). For projects over $10 million:

8.1.3.8. Certification that all laborers and mechanics employed by Contractors and Subcontractors in the performance of such project are paid wages at rates not less

than those prevailing, as determined by the U.S. Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code (commonly known as the "Davis-Bacon Act"), for the corresponding classes of laborers and mechanics employed on projects of a character similar to the Agreement work in the civil subdivision of the State (or the District of Columbia) in which the work is to be performed, or by the appropriate State entity pursuant to a corollary State prevailing-wage-in-construction law (commonly known as "baby Davis-Bacon Acts"). If such certification is not provided, a recipient must provide a project employment and local impact report detailing (1) the number of employees of Contractors and sub-contractors working on the project; (2) the number of employees on the project hired directly and hired through a third party; (3) the wages and benefits of workers on the project by classification; and (4) whether those wages are at rates less than those prevailing. Recipients must maintain sufficient records to substantiate this information upon request.

8.1.3.8.1. A Subrecipient may provide a certification that a project includes a project labor agreement, meaning a pre-hire collective bargaining agreement consistent with section 8(f) of the National Labor Relations Act (29 U.S.C. 158(f)). If the recipient does not provide such certification, the recipient must provide a project workforce continuity plan, detailing: (1) how the Subrecipient will ensure the project has ready access to a sufficient supply of appropriately skilled and unskilled labor to ensure high-quality construction throughout the life of the project; (2) how the Subrecipient will minimize risks of labor disputes and disruptions that would jeopardize timeliness and cost-effectiveness of the project; and (3) how the Subrecipient will provide a safe and healthy workplace that avoids delays and costs associated with workplace illnesses, injuries, and fatalities; (4) whether workers on the project will receive wages and benefits that will secure an appropriately skilled workforce in the context of the local or regional labor market; and (5) whether the project has completed a project labor agreement.

8.1.3.8.2. Whether the project prioritizes local hires.

8.1.3.8.3. Whether the project has a Community Benefit Agreement, with a description of any such agreement.

8.1.4. Subrecipient also agrees to comply with any reporting requirements established by the US Treasury, Governor's Office and Office of the State Controller. The State of Colorado may need additional reporting requirements after this agreement is executed. If there are additional reporting requirements, the State will provide notice of such additional reporting requirements via Exhibit Q – SLFRF Reporting Modification Form.

9. PROCUREMENT STANDARDS.

9.1. Procurement Procedures. A Subrecipient shall use its own documented procurement procedures which reflect applicable State, local, and Tribal laws and applicable regulations, provided that the procurements conform to applicable Federal law and the standards identified in the Uniform Guidance, including without limitation, 2 CFR 200.318 through 200.327 thereof.

9.2. Domestic preference for procurements (2 CFR 200.322). As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all Agreements and purchase orders for work or products under this award.

9.3. Procurement of Recovered Materials. If a Subrecipient is a State Agency or an agency of a political subdivision of the State, its Contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247, that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired during the preceding fiscal year exceeded $10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

10. ACCESS TO RECORDS.

10.1. A Subrecipient shall permit Prime Recipient and its auditors to have access to Subrecipient's records and financial statements as necessary for Recipient to meet the requirements of 2 CFR 200.332 (Requirements for pass-through entities), 2 CFR 200.300 (Statutory and national policy requirements) through 2 CFR 200.309 (Period of performance), and Subpart F-Audit Requirements of the Uniform Guidance.

11. SINGLE AUDIT REQUIREMENTS.

11.1. If a Subrecipient expends $750,000 or more in Federal Awards during the Subrecipient's fiscal year, the Subrecipient shall procure or arrange for a single or program-specific audit conducted for that year in accordance with the provisions of Subpart F-Audit Requirements of the Uniform Guidance, issued pursuant to the Single Audit Act Amendments of 1996, (31 U.S.C. 7501-7507). 2 CFR 200.501.

11.1.1. Election. A Subrecipient shall have a single audit conducted in accordance with Uniform Guidance 2 CFR 200.514 (Scope of audit), except when it elects to have a program-specific audit conducted in accordance with 2 CFR 200.507 (Program-specific audits). The Subrecipient may elect to have a program-specific audit if Subrecipient expends Federal Awards under only one Federal program (excluding research and development) and the Federal program's statutes, regulations, or the terms and conditions of the Federal award do not require a financial statement audit of Prime Recipient. A program-specific audit may not be elected for research and development unless all of the Federal Awards expended were received from Recipient and Recipient approves in advance a program-specific audit.

11.1.2. Exemption. If a Subrecipient expends less than $750,000 in Federal Awards during its fiscal year, the Subrecipient shall be exempt from Federal audit requirements for that year, except as noted in 2 CFR 200.503 (Relation to other audit requirements), but records shall be available for review or audit by appropriate officials of the Federal agency, the State, and the Government Accountability Office.

11.1.3. Subrecipient Compliance Responsibility. A Subrecipient shall procure or otherwise arrange for the audit required by Subpart F of the Uniform Guidance and ensure it is properly performed and submitted when due in accordance with the Uniform Guidance. Subrecipient shall prepare appropriate financial statements, including the schedule of expenditures of Federal awards in accordance with 2 CFR 200.510 (Financial statements) and provide the auditor with access to personnel, accounts, books, records, supporting documentation, and other information as needed for the auditor to perform the audit required by Uniform Guidance Subpart F-Audit Requirements.

12. GRANT PROVISIONS FOR SUBRECIPIENT AGREEMENTS.

12.1. In addition to other provisions required by the Federal Awarding Agency or the Prime Recipient, Grantees that are Subrecipients shall comply with the following provisions. Subrecipients shall include all of the following applicable provisions in all Subcontractors entered into by it pursuant to this Grant.

12.1.1. [Applicable to federally assisted construction Agreements.] Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all Agreements that meet the definition of "federally assisted construction Agreement" in 41 CFR Part 60-1.3 shall include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, Office of Federal Agreement Compliance Programs, Equal Employment Opportunity, Department of Labor.

12.1.2. [Applicable to on-site employees working on government-funded construction, alteration and repair projects.] Davis-Bacon Act. Davis-Bacon Act, as amended (40 U.S.C. 3141-3148).

12.1.3. Rights to Inventions Made Under a grant or agreement. If the Federal Award meets the definition of "funding agreement" under 37 CFR 401.2 (a) and the Prime Recipient or Subrecipient wishes to enter into an Agreement with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the Prime Recipient or Subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Agreements and Cooperative Agreements," and any implementing regulations issued by the Federal Awarding Agency.

12.1.4. Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended. Agreements and subgrants of amounts in excess of $150,000 must contain a provision that requires the non-Federal awardees to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Awarding Agency and the Regional Office of the Environmental Protection Agency (EPA).

12.1.5. Debarment and Suspension (Executive Orders 12549 and 12689). A Agreement award (see 2 CFR 180.220) must not be made to parties listed on the government wide exclusions in SAM, in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

12.1.6. Byrd Anti-Lobbying Amendment (31 U.S.C. 1352). Contractors that apply or bid for an award exceeding $100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal Agreement, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

12.1.7. Never Contract with the Enemy (2 CFR 200.215). Federal awarding agencies and recipients are subject to the regulations implementing "Never Contract with the Enemy" in 2 CFR part 183. The regulations in 2 CFR part 183 affect covered Agreements, grants and cooperative agreements that are expected to exceed $50,000 within the period of performance, are performed outside the United States and its territories, and are in support of a contingency operation in which members of the Armed Forces are actively engaged in hostilities.

12.1.8. Prohibition on certain telecommunications and video surveillance services or equipment (2 CFR 200.216). Grantee is prohibited from obligating or expending loan or grant funds on certain telecommunications and video surveillance services or equipment pursuant to 2 CFR 200.216.

12.1.9. Title VI of the Civil Rights Act. The Subgrantee, Contractor, Subcontractor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits recipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this Agreement (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S. C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CRF Part 22, and herein incorporated by reference and made part of this Agreement or agreement.

13. CERTIFICATIONS.

13.1. Subrecipient Certification. Subrecipient shall sign a "State of Colorado Agreement with Recipient of Federal Recovery Funds" Certification Form in Exhibit E and submit to State Agency with signed grant agreement.

13.2. Unless prohibited by Federal statutes or regulations, Prime Recipient may require Subrecipient to submit certifications and representations required by Federal statutes or regulations on an annual basis. 2 CFR 200.208. Submission may be required more frequently if Subrecipient fails to meet a requirement of the Federal award. Subrecipient shall certify in writing to the State at the end of the Award that the project or activity was completed or the level of effort was expended. 2 CFR 200.201(3). If the required level of activity or effort was not carried out, the amount of the Award must be adjusted.

14. EXEMPTIONS.

14.1. These Federal Provisions do not apply to an individual who receives an Award as a natural person, unrelated to any business or non-profit organization he or she may own or operate in his or her name.

14.2. A Grantee with gross income from all sources of less than $300,000 in the previous tax year is exempt from the requirements to report Subawards and the Total Compensation of its most highly compensated Executives.

15. EVENT OF DEFAULT AND TERMINATION.

15.1. Failure to comply with these Federal Provisions shall constitute an event of default under the Grant and the State of Colorado may terminate the Grant upon 30 days prior written notice if the default remains uncured five calendar days following the termination of the 30-day notice period. This remedy will be in addition to any other remedy available to the State of Colorado under the Grant, at law or in equity.

15.2. Termination (2 CFR 200.340). The Federal Award may be terminated in whole or in part as follows:

15.2.1. By the Federal Awarding Agency or Pass-through Entity, if a Non-Federal Entity fails to comply with the terms and conditions of a Federal Award;

15.2.2. By the Federal awarding agency or Pass-through Entity, to the greatest extent authorized by law, if an award no longer effectuates the program goals or agency priorities;

15.2.3. By the Federal awarding agency or Pass-through Entity with the consent of the Non-Federal Entity, in which case the two parties must agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated;

15.2.4. By the Non-Federal Entity upon sending to the Federal Awarding Agency or Pass-through Entity written notification setting forth the reasons for such termination, the effective date, and, in the case of partial termination, the portion to be terminated. However, if the Federal Awarding Agency or Pass-through Entity determines in the case of partial termination that the reduced or modified portion of the Federal Award or Subaward will not accomplish the purposes for which the Federal Award was made, the Federal Awarding Agency or Pass-through Entity may terminate the Federal Award in its entirety; or

15.2.5. By the Federal Awarding Agency or Pass-through Entity pursuant to termination provisions included in the Federal Award.

EXHIBIT O

AGREEMENT WITH SUBSUBRECIPIENT OF FEDERAL RECOVERY FUNDS

Section 602(b) of the Social Security Act (the Act), as added by section 9901 of the American Rescue Plan Act (ARPA), Pub. L. No. 117-2 (March 11, 2021), authorizes the Department of the Treasury (Treasury) to make payments to certain Subrecipients from the Coronavirus State Fiscal Recovery Fund. The State of Colorado has signed and certified a separate agreement with Treasury as a condition of receiving such payments from the Treasury. This agreement is between your organization and the State and your organization is signing and certifying the same terms and conditions included in the State's separate agreement with Treasury. Your organization is referred to as a Subrecipient.

As a condition of your organization receiving federal recovery funds from the State, the authorized representative below hereby (i) certifies that your organization will carry out the activities listed in section 602(c) of the Act and (ii) agrees to the terms attached hereto. Your organization also agrees to use the federal recovery funds as specified in bills passed by the General Assembly and signed by the Governor.

Under penalty of perjury, the undersigned official certifies that the authorized representative has read and understood the organization's obligations in the Assurances of Compliance and Civil Rights Requirements, that any information submitted in conjunction with this assurances document is accurate and complete, and that the organization is in compliance with the nondiscrimination requirements.

Subrecipient Name _____

Authorized Representative: _____

Title: _____

Signature: _____

AGREEMENT WITH SUBRECIPIENT OF FEDERAL RECOVERY FUNDS
TERMS AND CONDITIONS

1. Use of Funds.

   a. Subrecipient understands and agrees that the funds disbursed under this award may only be used in compliance with section 602(c) of the Social Security Act (the Act) and Treasury's regulations implementing that section and guidance.

   b. Subrecipient will determine prior to engaging in any project using this assistance that it has the institutional, managerial, and financial capability to ensure proper planning, management, and completion of such project.

2. Period of Performance. The period of performance for this award begins on the date hereof and ends on December 31, 2026. As set forth in Treasury's implementing regulations, Subrecipient may use award funds to cover eligible costs incurred during the period that begins on March 3, 2021, and ends on December 31, 2024.

3. Reporting. Subrecipient agrees to comply with any reporting obligations established by Treasury as they relate to this award. Subrecipient also agrees to comply with any reporting requirements established by the Governor's Office and Office of the State Controller.

4. Maintenance of and Access to Records
   a. Subrecipient shall maintain records and financial documents sufficient to evidence compliance with section 602(c), Treasury's regulations implementing that section, and guidance issued by Treasury regarding the foregoing.

   b. The Treasury Office of Inspector General and the Government Accountability Office, or their authorized representatives, shall have the right of access to records (electronic and otherwise) of Subrecipient in order to conduct audits or other investigations.

   c. Records shall be maintained by Subrecipient for a period of five (5) years after all funds have been expended or returned to Treasury, whichever is later.

5. Pre-award Costs. Pre-award costs, as defined in 2 C.F.R. § 200.458, may not be paid with funding from this award.

6. Administrative Costs. Subrecipient may use funds provided under this award to cover both direct and indirect costs. Subrecipient shall follow guidance on administrative costs issued by the Governor's Office and Office of the State Controller.

7. Cost Sharing. Cost sharing or matching funds are not required to be provided by Subrecipient.

8. Conflicts of Interest. The State of Colorado understands and agrees it must maintain a conflict of interest policy consistent with 2 C.F.R. § 200.318(c) and that such conflict of interest policy

is applicable to each activity funded under this award. Subrecipient and Contractors must disclose in writing to the Office of the State Controller or the pass-through entity, as appropriate, any potential conflict of interest affecting the awarded funds in accordance with 2 C.F.R. § 200.112. The Office of the State Controller shall disclose such conflict to Treasury.

9. Compliance with Applicable Law and Regulations.
   a. Subrecipient agrees to comply with the requirements of section 602 of the Act, regulations adopted by Treasury pursuant to section 602(f) of the Act, and guidance issued by Treasury regarding the foregoing. Subrecipient also agrees to comply with all other applicable federal statutes, regulations, and executive orders, and Subrecipient shall provide for such compliance by other parties in any agreements it enters into with other parties relating to this award.

   b. Federal regulations applicable to this award include, without limitation, the following:

      i. Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, 2 C.F.R. Part 200, other than such provisions as Treasury may determine are inapplicable to this Award and subject to such exceptions as may be otherwise provided by Treasury. Subpart F – Audit Requirements of the Uniform Guidance, implementing the Single Audit Act, shall apply to this award.

      ii. Universal Identifier and System for Award Management (SAM), 2 C.F.R. Part 25, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 25 is hereby incorporated by reference.

      iii. Reporting Subaward and Executive Compensation Information, 2 C.F.R. Part 170, pursuant to which the award term set forth in Appendix A to 2 C.F.R. Part 170 is hereby incorporated by reference.

      iv. OMB Guidelines to Agencies on Government wide Debarment and Suspension (Nonprocurement), 2 C.F.R. Part 180, including the requirement to include a term or condition in all lower tier covered transactions (Agreements and Subcontractors described in 2 C.F.R. Part 180, subpart B) that the award is subject to 2 C.F.R. Part 180 and Treasury's implementing regulation at 31 C.F.R. Part 19.

      v. Subrecipient Integrity and Performance Matters, pursuant to which the award term set forth in 2 C.F.R. Part 200, Appendix XII to Part 200 is hereby incorporated by reference.

      vi. Government wide Requirements for Drug-Free Workplace, 31 C.F.R. Part 20.

      vii. New Restrictions on Lobbying, 31 C.F.R. Part 21.

      viii. Uniform Relocation Assistance and Real Property Acquisitions Act of 1970 (42 U.S.C. §§ 4601-4655) and implementing regulations.

ix. Generally applicable federal environmental laws and regulations.

c. Statutes and regulations prohibiting discrimination applicable to this award include, without limitation, the following:

i. Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq.) and Treasury's implementing regulations at 31 C.F.R. Part 22, which prohibit discrimination on the basis of race, color, or national origin under programs or activities receiving federal financial assistance;

ii. The Fair Housing Act, Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§ 3601 et seq.), which prohibits discrimination in housing on the basis of race, color, religion, national origin, sex, familial status, or disability;

iii. Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794), which prohibits discrimination on the basis of disability under any program or activity receiving federal financial assistance;

iv. The Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101 et seq.), and Treasury's implementing regulations at 31 C.F.R. Part 23, which prohibit discrimination on the basis of age in programs or activities receiving federal financial assistance; and

v. Title II of the Americans with Disabilities Act of 1990, as amended (42 U.S.C. §§ 12101 et seq.), which prohibits discrimination on the basis of disability under programs, activities, and services provided or made available by state and local governments or instrumentalities or agencies thereto.

10. Remedial Actions. In the event of Subrecipient's noncompliance with section 602 of the Act, other applicable laws, Treasury's implementing regulations, guidance, or any reporting or other program requirements, Treasury may impose additional conditions on the receipt of a subsequent tranche of future award funds, if any, or take other available remedies as set forth in 2 C.F.R. § 200.339. In the case of a violation of section 602(c) of the Act regarding the use of funds, previous payments shall be subject to recoupment as provided in section 602(e) of the Act and any additional payments may be subject to withholding as provided in sections 602(b)(6)(A)(ii)(III) of the Act, as applicable.

11. Hatch Act. Subrecipient agrees to comply, as applicable, with requirements of the Hatch Act (5 U.S.C.§§ 1501-1508 and 7324-7328), which limit certain political activities of State or local government employees whose principal employment is in connection with an activity financed in whole or in part by this federal assistance.

12. False Statements. Subrecipient understands that making false statements or claims in connection with this award is a violation of federal law and may result in criminal, civil, or administrative sanctions, including fines, imprisonment, civil damages and penalties, debarment from participating in federal awards or Agreements, and/or any other remedy available by law.

13. Publications. Any publications produced with funds from this award must display the following language: "This project [is being] [was] supported, in whole or in part, by federal award number SLFRF0126 awarded to the State of Colorado by the U.S. Department of the Treasury."

14. Debts Owed the Federal Government.
    a. Any funds paid to the Subrecipient (1) in excess of the amount to which the Subrecipient is finally determined to be authorized to retain under the terms of this award; (2) that are determined by the Treasury Office of Inspector General to have been misused; or (3) that are determined by Treasury to be subject to a repayment obligation pursuant to sections 602(e) and 603(b)(2)(D) of the Act and have not been repaid by the Subrecipient shall constitute a debt to the federal government.

    b. Any debts determined to be owed to the federal government must be paid promptly by Subrecipient. A debt is delinquent if it has not been paid by the date specified in Treasury's initial written demand for payment, unless other satisfactory arrangements have been made or if the Subrecipient knowingly or improperly retains funds that are a debt as defined in paragraph 14(a). Treasury will take any actions available to it to collect such a debt.

15. Disclaimer.
    a. The United States expressly disclaims any and all responsibility or liability to Subrecipient or third persons for the actions of Subrecipient or third persons resulting in death, bodily injury, property damages, or any other losses resulting in any way from the performance of this award or any other losses resulting in any way from the performance of this award or any Agreement, or Subcontractor under this award.

    b. The acceptance of this award by Subrecipient does not in any way establish an agency relationship between the United States and Subrecipient.

16. Protections for Whistleblowers.
    a. In accordance with 41 U.S.C. § 4712, Subrecipient may not discharge, demote, or otherwise discriminate against an employee in reprisal for disclosing to any of the list of persons or entities provided below, information that the employee reasonably believes is evidence of gross mismanagement of a federal Agreement or grant, a gross waste of federal funds, an abuse of authority relating to a federal Agreement or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a federal Agreement (including the competition for or negotiation of an Agreement) or grant.

    b. The list of persons and entities referenced in the paragraph above includes the following:
        i. A member of Congress or a representative of a committee of Congress;
        ii. An Inspector General;

iii. The Government Accountability Office;
iv. A Treasury employee responsible for Agreement or grant oversight or management;
v. An authorized official of the Department of Justice or other law enforcement agency;
vi. A court or grand jury; or
vii. A management official or other employee of Subrecipient, Contractor, or Subcontractor who has the responsibility to investigate, discover, or address misconduct.

c. Subrecipient shall inform its employees in writing of the rights and remedies provided under this section, in the predominant native language of the workforce.

17. Increasing Seat Belt Use in the United States. Pursuant to Executive Order 13043, 62 FR 19217 (Apr. 18, 1997), Subrecipient should encourage its Contractors to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented or personally owned vehicles.

1. Reducing Text Messaging While Driving. Pursuant to Executive Order 13513, 74 FR 51225 (Oct. 6, 2009), Subrecipient should encourage its employees, Subrecipients, and Contractors to adopt and enforce policies that ban text messaging while driving, and Subrecipient should establish workplace safety policies to decrease accidents caused by distracted drivers.

ASSURANCES OF COMPLIANCE WITH CIVIL RIGHTS REQUIREMENTS

ASSURANCES OF COMPLIANCE WITH TITLE VI
OF THE CIVIL RIGHTS ACT OF 1964

As a condition of receipt of federal financial assistance from the Department of the Treasury, the Subrecipient provides the assurances stated herein. The federal financial assistance may include federal grants, loans and Agreements to provide assistance to the Subrecipient's beneficiaries, the use or rent of Federal land or property at below market value, Federal training, a loan of Federal personnel, subsidies, and other arrangements with the intention of providing assistance. Federal financial assistance does not encompass Agreements of guarantee or insurance, regulated programs, licenses, procurement Agreements by the Federal government at market value, or programs that provide direct benefits.

The assurances apply to all federal financial assistance from or funds made available through the Department of the Treasury, including any assistance that the Subrecipient may request in the future.

The Civil Rights Restoration Act of 1987 provides that the provisions of the assurances apply to all of the operations of the Subrecipient's program(s) and activity(ies), so long as any portion of the Subrecipient's program(s) or activity(ies) is federally assisted in the manner prescribed above.

1. Subrecipient ensures its current and future compliance with Title VI of the Civil Rights Act of 1964, as amended, which prohibits exclusion from participation, denial of the benefits of, or subjection to discrimination under programs and activities receiving federal financial assistance, of any person in the United States on the ground of race, color, or national origin (42 U.S.C. § 2000d *et seq.*), as implemented by the Department of the Treasury Title VI regulations at 31 CFR Part 22 and other pertinent executive orders such as Executive Order 13166, directives, circulars, policies, memoranda, and/or guidance documents.
2. Subrecipient acknowledges that Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency," seeks to improve access to federally assisted programs and activities for individuals who, because of national origin, have Limited English proficiency (LEP). Subrecipient understands that denying a person access to its programs, services, and activities because of LEP is a form of national origin discrimination prohibited under Title VI of the Civil Rights Act of 1964 and the Department of the Treasury's implementing regulations. Accordingly, Subrecipient shall initiate reasonable steps, or comply with the Department of the Treasury's directives, to ensure that LEP persons have meaningful access to its programs, services, and activities. Subrecipient understands and agrees that meaningful access may entail providing language assistance services, including oral interpretation and written translation where necessary, to ensure effective communication in the Subrecipient's programs, services, and activities.
3. Subrecipient agrees to consider the need for language services for LEP persons when Subrecipient develops applicable budgets and conducts programs, services, and activities. As a resource, the Department of the Treasury has published its LEP guidance at 70 FR 6067. For more information on taking reasonable steps to provide meaningful access for LEP persons, please visit http://www.lep.gov.

4. Subrecipient acknowledges and agrees that compliance with the assurances constitutes a condition of continued receipt of federal financial assistance and is binding upon Subrecipient and Subrecipient's successors, transferees, and assignees for the period in which such assistance is provided.

5. Subrecipient acknowledges and agrees that it must require any sub-grantees, contractors, subcontractors, successors, transferees, and assignees to comply with assurances 1-4 above, and agrees to incorporate the following language in every Agreement or agreement subject to Title VI and its regulations between the Subrecipient and the Subrecipient's sub-grantees, Contractors, Subcontractors, successors, transferees, and assignees:

   The sub-grantee, Contractor, Subcontractor, successor, transferee, and assignee shall comply with Title VI of the Civil Rights Act of 1964, which prohibits Subrecipients of federal financial assistance from excluding from a program or activity, denying benefits of, or otherwise discriminating against a person on the basis of race, color, or national origin (42 U.S.C. § 2000d et seq.), as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, which are herein incorporated by reference and made a part of this Agreement (or agreement). Title VI also includes protection to persons with "Limited English Proficiency" in any program or activity receiving federal financial assistance, 42 U.S.C. § 2000d et seq., as implemented by the Department of the Treasury's Title VI regulations, 31 CFR Part 22, and herein incorporated by reference and made a part of this Agreement or agreement.

6. Subrecipient understands and agrees that if any real property or structure is provided or improved with the aid of federal financial assistance by the Department of the Treasury, this assurance obligates the Subrecipient, or in the case of a subsequent transfer, the transferee, for the period during which the real property or structure is used for a purpose for which the federal financial assistance is extended or for another purpose involving the provision of similar services or benefits. If any personal property is provided, this assurance obligates the Subrecipient for the period during which it retains ownership or possession of the property.

7. Subrecipient shall cooperate in any enforcement or compliance review activities by the Department of the Treasury of the aforementioned obligations. Enforcement may include investigation, arbitration, mediation, litigation, and monitoring of any settlement agreements that may result from these actions. The Subrecipient shall comply with information requests, on-site compliance reviews and reporting requirements.

8. Subrecipient shall maintain a complaint log and inform the Department of the Treasury of any complaints of discrimination on the grounds of race, color, or national origin, and limited English proficiency covered by Title VI of the Civil Rights Act of 1964 and implementing regulations and provide, upon request, a list of all such reviews or proceedings based on the complaint, pending or completed, including outcome. Subrecipient also must inform the Department of the Treasury if Subrecipient has received no complaints under Title VI.

9. Subrecipient must provide documentation of an administrative agency's or court's findings of non-compliance of Title VI and efforts to address the non-compliance, including any voluntary compliance or other agreements between the Subrecipient and the administrative agency that made the finding. If the Subrecipient settles a case or matter alleging such discrimination, the Subrecipient must provide documentation of the settlement. If Subrecipient has not been the subject of any court or administrative agency finding of

discrimination, please so state.

10. If the Subrecipient makes sub-awards to other agencies or other entities, the Subrecipient is responsible for ensuring that sub-Subrecipients also comply with Title VI and other applicable authorities covered in this document State agencies that make sub-awards must have in place standard grant assurances and review procedures to demonstrate that that they are effectively monitoring the civil rights compliance of sub- Subrecipients.

The United States of America has the right to seek judicial enforcement of the terms of this assurances document and nothing in this document alters or limits the federal enforcement measures that the United States may take in order to address violations of this document or applicable federal law.

EXHIBIT P

SLFRF SUBRECIPIENT QUARTERLY REPORT

1. **SLFRF SUBRECIPIENT QUARTERLY REPORT WORKBOOK**

1.1 The SLFRF Subrecipient Quarterly Report Workbook must be submitted to the State Agency within ten (10) days following each quarter ended September, December, March and June. The SLFRF Subrecipient Quarterly Report Workbook can be foundat: https://osc.colorado.gov/american-rescue-plan-act (see SLFRF Grant Agreement Templates tab)

EXHIBIT Q

SAMPLE SLFRF REPORTING MODIFICATION FORM

Local Agency:		Agreement No:
Project Title:		Project No:
Project Duration: To:		From:
State Agency:	CDOT	

This form serves as notification that there has been a change to the reporting requirements set forth in theoriginal SLFRF Grant Agreement.

The following reporting requirements have been (add/ remove additional rows as necessary):

Updated Reporting Requirement (Add/Delete/Modify)	Project Number	Reporting Requirement

By signing this form, the Local Agency agrees to and acknowledges the changes to the reporting requirements set forth in the original SLFRF Grant Agreement. All other terms and conditions of the original SLFRF Grant Agreement, with any approved modifications, remain in full force and effect. Grantee shall submit this form tothe State Agency within 10 business days of the date sent by that Agency.

_____ _____

Local Agency Date

_____ _____

CDOT Program Manager Date

Exhibit R
APPLICABLE FEDERAL AWARDS

FEDERAL AWARD(S) APPLICABLE TO THIS GRANT AWARD

Federal Awarding Office	US Department of the Treasury
Grant Program	Coronavirus State and Local Fiscal Recovery Funds
Assistance Listing Number	21.027
Federal Award Number	SLFRP0126
Federal Award Date *	May 18, 2021
Federal Award End Date	December 31, 2024
Federal Statutory Authority	Title VI of the Social Security Act, Section 602
Total Amount of Federal Award (this is not the amount of this grant agreement)	$3,828,761,790

* Funds may not be available through the Federal Award End Date subject to the provisions in §2 and §5 below.

EXHIBIT S

PII Certification

STATE OF COLORADO

LOCAL AGENCY CERTIFICATION FOR ACCESS TO PII THROUGH A DATABASE OR AUTOMATED NETWORK

Pursuant to § 24-74-105, C.R.S., I, _____, on behalf of _____ (legal name of Local Agency) (the "Local Agency"), hereby certify under the penalty of perjury that the Local Agency has not and will not use or disclose any Personal Identifying Information, as defined by § 24-74-102(1), C.R.S., for the purpose of investigating for, participating in, cooperating with, or assisting Federal Immigration Enforcement, including the enforcement of civil immigration laws, and the Illegal Immigration and Immigrant Responsibility Act, which is codified at 8 U.S.C. §§ 1325 and 1326, unless required to do so to comply with Federal or State law, or to comply with a court-issued subpoena, warrant or order.

I hereby represent and certify that I have full legal authority to execute this certification on behalf of the Local Agency.

Signature: _____

Printed Name: _____

Title: _____

Date: _____

EXHIBIT T

CHECKLIST OF REQUIRED EXHIBITS DEPENDENT ON FUNDING SOURCE

Checklist for required exhibits due to funding sources. Required Exhibits are dependent on the source of funding. This is a guide to assist in the incorporation and completion of Exhibits in relation to funding sources.

Exhibit	Funding only from FHWA	Funding only from ARPA	FHWA and ARPA Funding
EXHIBIT A, SCOPE OF WORK	✓	✓	✓
EXHIBIT B, SAMPLE OPTION LETTER	✓	✓	✓
EXHIBIT C, FUNDING PROVISIONS	✓	✓	✓
EXHIBIT D, LOCAL AGENCY RESOLUTION (IF APPLICABLE)	✓	✓	✓
EXHIBIT E, LOCAL AGENCY AGREEMENT ADMINISTRATION CHECKLIST	✓	✓	✓
EXHIBIT F, CERTIFICATION FOR FEDERAL-AID AGREEMENTS	✓		✓
EXHIBIT G, DISADVANTAGED BUSINESS ENTERPRISE	✓		✓
EXHIBIT H, LOCAL AGENCY PROCEDURES FOR CONSULTANT SERVICES	✓		✓
EXHIBIT I, FEDERAL-AID AGREEMENT PROVISIONS FOR CONSTRUCTION AGREEMENTS	✓		✓
EXHIBIT J, ADDITIONAL FEDERAL REQUIREMENTS	✓		✓

EXHIBIT K, FFATA SUPPLEMENTAL FEDERAL PROVISIONS	✓	✓	✓
EXHIBIT L, SAMPLE SUBRECIPIENT MONITORING AND RISK ASSESSMENT FORM	✓	✓	✓
EXHIBIT M, OMB UNIFORM GUIDANCE FOR FEDERAL AWARDS	✓		✓
EXHIBIT N, FEDERAL TREASURY PROVISIONS		✓	✓
EXHIBIT O, AGREEMENT WITH SUBRECIPIENT OF FEDERAL RECOVERY FUNDS		✓	✓
EXHIBIT P, SLFRF SUBRECIPIENT QUARTERLY REPORT		✓	✓
EXHIBIT Q, SLFRF REPORTING MODIFICATION FORM		✓	✓
EXHIBIT R, APPLICABLE FEDERAL AWARDS		✓	✓
EXHIBIT S, PII CERTIFICATAION	✓	✓	✓
EXHIBIT T, CHECKLIST OF REQUIRED EXHIBITS DEPENDENT ON FUNDING SOURCE	✓	✓	✓

SUBJECT: **CO42 DESIGN AND RIGHT-OF-WAY PROJECT**

1. **RESOLUTION NO. 83, SERIES 2025 – A RESOLUTION APPROVING A SECOND AMENDMENT TO THE INTERGOVERNMENTAL AGREEMENT WITH CDOT CONCERNING A GRANT IN CONNECTION WITH THE CITY'S STATE HIGHWAY 42 MULTIMODAL IMPROVEMENTS PROJECT**

2. **RESOLUTION NO. 85, SERIES 2025 – A RESOLUTION APPROVING A SECOND ADDENDUM TO THE AGREEMENT WITH KIMLEY-HORN & ASSOCIATES FOR THE CO42 PROJECT**

3. **RESOLUTION NO. 86, SERIES 2025 – A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT WITH THE CITY OF LAFAYETTE FOR SHARING OF COSTS OF 30% DESIGN PLANS FOR IMPROVEMENTS TO STATE HIGHWAY CO-42 FROM PASCHAL DRIVE TO BASELINE ROAD**

DATE: **OCTOBER 21, 2025**

PREPARED BY: **JORDAN JEFFERIES, ASSISTANT CITY ENGINEER**

PRESENTED BY: **KURT KOWAR, PUBLIC WORKS DIRECTOR**

SUMMARY:
Staff is requesting that City Council execute an Intergovernmental Agreement (IGA) with the Colorado Department of Transportation (CDOT) to allocate $870,000 in additional state funding to the Colorado 42 (CO42) Design and Right-of-Way (ROW) project, execute an amendment to the existing design contract to include additional design work, and execute an IGA with Lafayette to establish the funding arrangement between the two cities.

BACKGROUND / PRIOR DISCUSSIONS:
Earlier this year, Engineering staff coordinated with the City of Lafayette Public Works Department to jointly request that the Colorado Department of Transportation (CDOT) commit the remaining $2.8 million from CDOT's 10-Year Strategic Project Pipeline to advance two priority Colorado 42 (CO 42) corridor improvements. Louisville requested $1.9 million to close a funding gap for construction of the South Street Underpass, a key multimodal connection beneath CO 42. Lafayette requested $870,000 to extend the current CO 42 Design and Right-of-Way (ROW) project from Paschal Drive to Baseline

Road and to provide 30% design for this segment, better positioning them for future grant opportunities. Staff were formally notified in June that the funding was awarded for these projects as requested.

An amendment to the existing CO42 Intergovernmental Agreement (IGA) with CDOT is required to receive the $870,000 for the CO42 Design and ROW project. Louisville will continue as the lead agency managing the project and the design of the Lafayette segment will be amended into Louisville's existing design contract with Kimley-Horn. A proposed Addendum to Kimley Horn's contract for the additional work is included in this packet for Council approval. This coordinated effort ensures a consistent corridor design, leverages prior investments, and advances multimodal safety and connectivity goals for both communities. This design work for the Lafayette segment will be fully reimbursed by CDOT. There is no local match requirement for these funds. An IGA with Lafayette has been drafted to ensure that Lafayette is responsible for any work that exceeds the $870,000 grant funding, which is included in this packet for Council approval.

The CO42 project is currently in the design phase and progressing toward 60% design and final ROW plans.

ANALYSIS:
City Council must approve the attached IGA with CDOT to receive additional funding, sign the addendum to add the design work to the contract, and sign the IGA with Lafayette to establish the funding arrangement. Note that CDOT requires signature of IGAs via Docusign and a signature request will typically be sent to signatories via email.

FISCAL IMPACT:
Budgeted?: **Yes**
The project was originally budgeted in 2023/2024, but funds have been carried over to current budget. A budget amendment of $894,886.28 will be required to add the CO42 Lafayette extension work; however, grants and Lafayette funding will provide 100% reimbursement for this work. A detailed breakdown is provided below:

City Project Funding

Description	Account	Budget Amount
CO42 Corridor Enhancements (2023)	301312-660222	$5,274,780.00
CO42 Corridor Enhancements (2024)	301312-660222	$3,000,000.00
CDOT 10-Yr Strategic Project Funds (This Request)	301312-660222	$870,000.00
Additional Funding from Lafayette	301312-660222	$24,886.28
TOTAL:		**$8,894,886.28***

*The City has been awarded a total of $8,070,000 in TIP grants and state funds. The net project costs to City will be limited to the grant funding match of $800,000 that has been previously approved.

Project Expenses

Description	Account	Budget Amount
Kimley Horn Design Contract and Contingency (Previous Award)	301312-660222	($4,509,927.90)
Kimley Horn Design Addendum #1 (Previous Award)	301312-660222	($15,855.00)
Kimley Horn Design Addendum #2 – Lafayette Extension (This request)	*301312-660222*	*($894,886.28)**
ROW Acquisition & Utility Undergrounding (Estimated)	301312-660222	($3,474,217.10)
TOTAL PROJECT COST (Estimated):		**($8,894,886.28)***

*Budget Amendment required for $894,886.28.

ALTERNATIVE(S):
The alternative is to not pursue the additional funding. If the funding is not pursued, a preliminary design for CO42 from Paschal to Baseline would not be developed likely pushing any potential improvements along that segment further into the future. Additionally, staff has been coordinating with Lafayette on this and the two cities jointly approached CDOT for these funds to ensure that both cities received a portion of the funds. Not pursuing the additional funds may impact future coordination efforts with Lafayette and could compromise the $1.9 million award for the South Street Underpass.

RECOMMENDATION:
Staff recommends that City Council adopt: (1) a resolution approving a Second Amendment to the IGA with CDOT to allocate the additional funding; (2) a resolution approving a second addendum to the Kimley-Horn contract to include the additional design work; and (3) a resolution approving an IGA with Lafayette to establish funding requirements between the two cities.

ATTACHMENT(S):
1. Resolution No. 83, Series 2025
2. Second Amendment to CDOT IGA
3. Resolution No. 85, Series 2025
4. Second Addendum to Kimley-Horn contract
5. Resolution No. 86, Series 2025
6. Lafayette IGA

RESOLUTION NO. 83
SERIES 2025

A RESOLUTION APPROVING A SECOND AMENDMENT TO THE INTERGOVERNMENTAL AGREEMENT WITH CDOT CONCERNING A GRANT IN CONNECTION WITH THE CITY'S STATE HIGHWAY 42 MULTIMODAL IMPROVEMENTS PROJECT

WHEREAS, the City of Louisville ("City") and the Colorado Department of Transportation ("CDOT") are parties to an Intergovernmental Agreement, dated December 16, 2022, and a First Amendment thereto dated March 7, 2023 (the "IGA"), which sets forth the terms and conditions of a grant awarded to the City for the design and construction of the City's State Highway 42 Multimodal Improvements Project (the "Project"); and

WHEREAS, a Second Amendment to the IGA has been proposed to provide an additional $870,000 in State funding for the Project; and

WHEREAS, the City Council desires to accept the additional grant funds and approve the Amendment by this Resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby accepts the grant of additional funds in the amount of $870,000 from the State of Colorado, Department of Transportation, to be used in the design and construction of the City's State Highway 42 Multimodal Improvements Project, Project No. MTF 042A-009 (25380) (the "Project").

Section 2. The City Council hereby approves that certain Second Amendment to Intergovernmental Agreement (the "Amendment") by and between the State of Colorado, acting by and through the Colorado Department of Transportation, and the City of Louisville, in substantially the same form as the copy of such Amendment accompanying this Resolution.

Section 3. The Mayor and City Clerk are hereby authorized to execute the Amendment on behalf of the City Council of the City of Louisville, and the Mayor is hereby further authorized to negotiate and approve such revisions to the Amendment as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Amendment are not altered.

Section 4. The Mayor, City Manager, and City Staff are hereby authorized and directed to do all things necessary on behalf of the City to perform the obligations of the City under the IGA, as amended, including without limitation that the Mayor, City Manager, and City staff are authorized to execute and deliver any certifications, reports, forms, option

letters, contract amendments and other documents appropriate or required in connection with the Agreement and completion of the Project.

PASSED AND ADOPTED this _____ day of _____, 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

STATE OF COLORADO AMENDMENT

Amendment #: 2 **Project #: MTF 042A-009 (25380)**

SIGNATURE AND COVER PAGE

State Agency Department of Transportation		**Amendment Routing Number** 23-HA4-XC-00156-M0002
Local Agency CITY OF LOUISVILLE		**Original Agreement Routing Number** 23-HA4-XC-00156
Agreement Maximum Amount	$8,870,000.00	**Agreement Performance Beginning Date** December 16, 2022
		Initial Agreement Expiration Date November 15, 2032

THE PARTIES HERETO HAVE EXECUTED THIS AMENDMENT

Each person signing this Amendment represents and warrants that he or she is duly authorized to execute this Amendment and to bind the Party authorizing his or her signature.

STATE OF COLORADO
Jared S. Polis, Governor
Department of Transportation
Shoshana M. Lew, Executive Director

_____
Keith Stefanik, P.E., Chief Engineer

Date: _____

LOCAL AGENCY CITY OF LOUISVILLE	**LOCAL AGENCY** **(2nd Signature if Necessary)**
_____ Signature	_____ Signature
_____ By: (Print Name and Title)	_____ By: (Print Name and Title)
Date: _____	Date: _____

In accordance with §24-30-202 C.R.S., this Amendment is not valid until signed and dated below by the State Controller or an authorized delegate.

STATE CONTROLLER
Robert Jaros, CPA, MBA, JD

By:_____
Department of Transportation

Amendment Effective Date:_____

1) PARTIES

This Amendment (the "Amendment") to the Original Agreement shown on the Signature and Cover Page for this Amendment (the "Agreement") is entered into by and between the Local Agency and the State.

2) TERMINOLOGY

Except as specifically modified by this Amendment, all terms used in this Amendment that are defined in the Agreement shall be construed and interpreted in accordance with the Agreement.

3) EFFECTIVE DATE AND ENFORCEABILITY

A. Amendment Effective Date

This Amendment shall not be valid or enforceable until the Amendment Effective Date shown on the Signature and Cover Page for this Amendment. The State shall not be bound by any provision of this Amendment before that Amendment Effective Date, and shall have no obligation to pay the Local Agency for any Work performed or expense incurred under this Amendment either before or after the Amendment term shown in **§3.B** of this Amendment

B. Amendment Term

The Parties' respective performances under this Amendment and the changes to the Agreement contained herein shall commence on the Amendment Effective Date shown on the Signature and Cover Page for this Amendment and shall terminate on the termination of the Agreement.

4) PURPOSE

The Parties entered into the Original Agreement for the CO42 Multimodal Improvements Project. The Parties now desire to update the Funding Provisions.

5) MODIFICATIONS

The Parties now desire to:

a) Increase Total Budgeted Funds of $8,000,000.00 by $870,000.00 to a new Total Budgeted Funds of $8,870,000.00.

b) Replace **Exhibit C-3** with **Exhibit C-4**, which is attached hereto. Any reference in the Agreement to **Exhibit C** shall now be a reference to **Exhibit C-4**.

6) LIMITS OF EFFECT

This Amendment is incorporated by reference into the Agreement, and the Agreement and all prior amendments or other modifications to the Agreement, if any, remain in full force and effect except as specifically modified in this Amendment. Except for the Special Provisions contained in the Agreement, in the event of any conflict, inconsistency, variance, or contradiction between the provisions of this Amendment and any of the provisions of the Agreement or any prior modification to the Agreement, the provisions of this Amendment shall in all respects supersede, govern, and control. The provisions of this Amendment shall only supersede, govern, and control over the Special Provisions contained in the Agreement to the extent that this Amendment specifically modifies those Special Provisions.

THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK

EXHIBIT C-4 - FUNDING PROVISIONS

City of Louisville - MTF 042A-009 (25380) MMO

A. Cost of Work Estimate

The Local Agency has estimated the total cost of the Work to be $8,870,000.00, which is to be funded as follows:

1. FUNDING

Federal STBG

a. Federal Funds
(82.79% of STBG Award of $1,207,875.00) $1,000,000.00

b. Local Agency Funds
(17.21% of STBG Award is $207,875.00 of State SB 267 Funds)

MMO

c. HB1466 General Funds (State)
(50% of MMO Award of $6,400,000.00 is HB1466 General Funds) $3,200,000.00

d. Local Agency Funds
(50% of MMO Award of $6,400,000.00 is $2,400,000.00 of State SB 267 Award + $800,000.00 of Additional Local Agency Funds) $800,000.00

State SB 267

e. State Funds
(100% of SB 267 Award) $3,000,000.00

State 10 Year

f. State Funds
(100% of 10-year Plan Award) $870,000.00

TOTAL FUNDS ALL SOURCES	**$8,870,000.00**

2. OMB UNIFORM GUIDANCE

a.	Federal Award Identification Number (FAIN):	693JJ22430000Y240CO042A009
b.	Name of Federal Awarding Agency:	FHWA
c.	Local Agency Unique Entity Identifier	QWGUQ6YPC8Z8
d.	Assistance Listing #	
	Highway Planning and Construction	ALN 20.205
e.	Is the Award for R&D?	No
f.	Indirect Cost Rate (if applicable)	N/A
g.	Amount of Federal Funds Obligated by this Action:	$0.00
h.	Amount of Federal Funds	
	Obligated to Date (including this Action):	$1,000,000.00

3. ESTIMATED PAYMENT TO LOCAL AGENCY

a.	Federal Funds Budgeted	$1,000,000.00
b.	State Funds Budgeted	$7,070,000.00
c.	Less Estimated Federal Share of CDOT-Incurred Costs	$0.00

TOTAL ESTIMATED PAYMENT TO LOCAL AGENCY	**90.98%**	**$8,070,000.00**

TOTAL ESTIMATED FUNDING BY LOCAL AGENCY	**9.02%**	**$800,000.00**
TOTAL PROJECT ESTIMATED FUNDING	**100.00%**	**$8,870,000.00**

4. FOR CDOT ENCUMBRANCE PURPOSES

STBG Federal Award

a.	Total Encumbrance Amount (Federal funds + Local Agency funds)	$1,000,000.00
b.	Less ROW Acquisition 3111 and/or ROW Relocation 3109	$0.00

State Funds HB1466 + SB267 + 10 Year Plan

a.	Total Encumbrance Amount (Only State funds are encumbered)	$7,070,000.00
b.	Less ROW Acquisition 3111 and/or ROW Relocation 3109	$0.00

NET TO BE ENCUMBERED BY CDOT IS AS FOLLOWS **$8,070,000.00**

Note: Only $4,429,800.00 in funds are currently available. Additional funds will become available after execution of an Option letter (Exhibit B) or formal Amendment.

STBG Federal Award

Design 3020		
WBS Element 25380.10.30	Performance Period Start*/End Date 03/08/2023 – 12/31/2026	$1,000,000.00
ROW 3114		
WBS Element 25380.10.10	Performance Period Start*/End Date TBD-TBD	$0.00

HB1466 State Award

Design 3020		
WBS Element 25380.10.30	Performance Period Start*/End Date 12/16/2022 – 12/31/2026	$3,200,000.00
ROW 3114		
WBS Element 25380.10.10	Performance Period Start*/End Date N/A – N/A	$0.00

SB 267 State Award

Design 3020		
WBS Element 25380.10.30	Performance Period Start**/End Date N/A – N/A	$229,800.00
ROW 3114		
WBS Element 25380.10.10	Performance Period Start**/End Date N/A – N/A	$0.00

10 Year Plan State Award

Design 3020		
WBS Element 25380.10.30	Performance Period Start**/End Date N/A – N/A	$0.00
ROW 3114		
WBS Element 25380.10.10	Performance Period Start**/End Date N/A – N/A	$0.00

*The Local Agency should not begin work until all three (3) of the following are in place: 1) Phase Performance Period Start Date; 2) the execution of the document encumbering funds for the respective phase; and 3) Local Agency receipt of the official Notice to Proceed. Any work performed before these three (3) milestones are achieved will not be reimbursable.

**The Local Agency should not begin work until both of the following are in place: 1) the execution of the document encumbering funds for the respective phase; and 2) Local Agency receipt of the official Notice to Proceed. Any work performed before these two (2) milestones are achieved will not be reimbursable.

B. Funding Ratios

The funding ratio for the federal & State funds for this Work is 90.98% federal & State funds to 9.02% Local Agency funds, and this ratio applies only to the $8,870,000.00 that is eligible for federal & State funding. All other costs are borne by the Local Agency at 100%. If the total cost of performance of the Work exceeds $8,870,000.00, and additional federal & State funds are not available, the Local Agency shall pay all such excess costs. If the total cost of performance of the Work is less than $8,870,000.00, then the amounts of Local Agency and federal & State funds will be decreased in accordance with the funding ratio described in **A1**. **This applies to the entire scope of Work.**

C. Maximum Amount Payable

The maximum amount payable to the Local Agency under this Agreement shall be $8,070,000.00. For CDOT accounting purposes, the federal funds of $1,000,000.00 and State funds of $7,070,000.00 will be encumbered, but the Local Agency funds of $800,000.00 will NOT be encumbered for a total encumbrance of $8,070,000.00. The total budget of this project is $8,870,000.00, unless this amount is increased by an executed amendment before any increased cost is incurred. The total cost of the Work is the best estimate available, based on the design data as approved at the time of execution of this Agreement, and that any cost is subject to revisions agreed to by the parties prior to bid and award. **This applies to the entire scope of Work.**

D. Single Audit Act Amendment

All state and local government and non-profit organizations receiving $750,000 or more from all funding sources defined as federal financial assistance for Single Audit Act Amendment purposes shall comply with the audit requirements of 2 CFR part 200, subpart F (Audit Requirements) see also, 49 CFR 18.20 through 18.26. The Single Audit Act Amendment requirements applicable to the Local Agency receiving federal funds are as follows:

i. **Expenditure less than $750,000**
If the Local Agency expends less than $750,000 in Federal funds (all federal sources, not just Highway funds) in its fiscal year then this requirement does not apply.

ii. **Expenditure of $750,000 or more-Highway Funds Only**
If the Local Agency expends $750,000 or more, in Federal funds, but only received federal Highway funds (Catalog of Federal Domestic Assistance, CFDA 20.205) then a program specific audit shall be performed. This audit will examine the “financial” procedures and processes for this program area.

iii. **Expenditure of $750,000 or more-Multiple Funding Sources**

If the Local Agency expends $750,000 or more in Federal funds, and the Federal funds are from multiple sources (FTA, HUD, NPS, etc.) then the Single Audit Act applies, which is an audit on the entire organization/entity.

iv. Independent CPA

Single Audit shall only be conducted by an independent CPA, not by an auditor on staff. An audit is an allowable direct or indirect cost.

THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK

RESOLUTION NO. 85
SERIES 2025

A RESOLUTION APPROVING A SECOND ADDENDUM TO THE AGREEMENT WITH KIMLEY-HORN & ASSOCIATES FOR THE CO42 PROJECT

WHEREAS, the City and Kimley-Horn & Associates are parties to an Agreement for Consulting Services dated September 5, 2023, and an Addendum thereto dated December 3, 2024 (collectively, the "Original Agreement") for design plans, right-of-way acquisition, and utility coordination for the State Highway 42 project; and

WHEREAS, a Second Addendum to the Original Agreement has been proposed to include thirty percent (30%) design plans for the portion of State Highway 42 from Paschal Drive to Baseline Road in Lafayette; and

WHEREAS, by this resolution the City Council desires to approve the Second Addendum.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Second Addendum to the Original Agreement by and between the City of Louisville and Kimley-Horn & Associates, Inc. for the State Highway 42 project (the "Addendum") in substantially the same form as the copy of such Addendum accompanying this Resolution.

Section 2. The Mayor, City Manager, City Clerk, and/or Public Works Director are hereby authorized to execute the Addendum on behalf of the City, and the Mayor is hereby further authorized to negotiate and approve such revisions to the Addendum as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Addendum are not altered.

PASSED AND ADOPTED this 21st day of October 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

EXHIBIT C

Addendum No. 2 to Service Agreement

This Addendum to that certain Services Agreement dated January 13, 2025 is made effective as of _____, 2025, by and between the undersigned parties.

1. Services to be provided: Additional services include additional conceptual (30%) design, engineering, construction plan preparation, and utility coordination services for the CO42 Design and Right-of-Way Project for the extended project limits of Paschal Drive to Baseline Road. See attached proposal for additional description.

2. Fees: $894,886.28

3. Schedule: No changes to original agreement; December 31, 2026.

Original Agreement (9/5/2023)	$4,309,927.90
Net Change from Previous Addendum	$15,855.00
Contract Value Prior to Addendum #2	$4,325,782.90
Addendum #2 Value	$894,886.28
Current Contract Value	$5,220,669.18

CITY OF LOUISVILLE
749 Main Street
Louisville, CO 80027

By: _____
Kurt Kowar, Public Works Director

Company: Kimley-Horn and Associates, Inc.

Address: 11800 Ridge Parkway, Suite 200

Broomfield, CO 80021

By: _____

Attest: _____

Kimley»Horn

Exhibit 'A'

January 13, 2025

Mr. Geoff Nettleton, PE
City of Louisville
749 Main Street
Louisville, CO 80027

RE: ***CO42 Design and Right-of-Way Project Scope of Work***
Amendment 2 – Lafayette Extension

Dear Mr. Nettleton,

Kimley-Horn and Associates, Inc. (the "Consultant" or "Kimley-Horn") is pleased to submit this Amendment to modify the agreement dated September 5, 2023 (the "Agreement") with the **City of Louisville** (the "Client" or "City") for the CO42 Design and ROW project in Louisville, Colorado (the "Project"). Kimley-Horn has entered into the Agreement with Client for the furnishing of professional services, and the parties now desire to amend the Agreement.

Therefore, it is mutually agreed that the Agreement is amended to include Additional Services to be performed by Consultant and provisions for additional compensation by the Client to the Consultant, all as set forth below. The parties ratify the terms and conditions of the Agreement not inconsistent with this Amendment, all of which are incorporated by reference.

Kimley-Horn will proceed with the following tasks upon receiving written authorization to proceed.

Project Understanding

Kimley-Horn understands that the City of Louisville and the City of Lafayette desires to extend the limits of the scope for the conceptual (30%) design, engineering, construction plan preparation, and utility coordination services for the CO42 Design and Right-of-Way Project from Paschal Drive to Baseline Road (the "Project Limits"). The intent of the project is to prepare preliminary design and construction documents within the Project Limits in accordance with the recommendations provided in the "Future 42 Connecting People and Places Study" (the "Study"). Proposed improvements are anticipated to be those identified in the Study and included roll plot consisting of civil, roadway, drainage, traffic signal, structural, and other improvements.

Scope of Services

Revised Task 1 General Services and Project Management

Revised Task 1.A Project Management Plan

Project Management Plan Kimley-Horn will revise and maintain the Project Management Plan (PMP) based on the additional scope of work included in this Amendment.

Project Management and Oversight Kimley-Horn and the Project Team will provide additional project management and oversight for the project based on the additional project scope and administration

necessary for the project. It is assumed that the scope of work included in this Amendment will be completed within a six (6) month schedule and will be completed within the duration of the 60% design efforts for the City of Louisville limits included in the Agreement.

Revised Task 1.B Project Coordination/Meetings

Kimley-Horn will coordinate, prepare for and attend additional meetings with the PMT, Stakeholders, and the public as outlined in the following tasks.

Revised Task 1.B.2 Progress Meetings

Project Team Meetings Kimley-Horn will prepare for, coordinate, and attend additional bi-weekly virtual meetings with the Project Team (up to twelve (12) two-hour meetings). The purpose of these meetings will be to review the tasks completed, the tasks planned, and to prepare for upcoming PMT, Stakeholder, and other meetings.

Project Management Team (PMT) Meetings Kimley-Horn will prepare for, coordinate, and attend additional monthly virtual meetings with the PMT (up to six (6) two-hour meetings).

City/Consultant Project Manager Coordination Meetings Kimley-Horn will prepare for, coordinate, and attend additional bi-weekly virtual City/Consultant Project Manager Coordination Meetings (up to twelve (12) one-hour meetings). The purpose of these meetings will be to review project status and coordinate on action items.

Revised Task 1.B.3 Stakeholder Meetings

Kimley-Horn will prepare for, coordinate, and attend additional meetings with the Stakeholders (up to two (2) one-hour virtual meetings) to obtain input on project elements. The stakeholders are to be determined. However, it is anticipated that the Project Team will coordinate with the developers of the Indian Peaks project. Kimley-Horn will prepare meeting agendas including an action item tracking list and meeting minutes for each Stakeholder Meeting.

Revised Task 1.B.4 Agency and Stakeholder Coordination

Kimley-Horn will prepare for, coordinate, and attend additional independent coordination with affected agencies and Stakeholders (up to two (2) one-hour virtual meetings).

Revised Task 1.B.5 Design Review, and Issue and/or Comment Resolution Meetings

Kimley-Horn will prepare for, coordinate, and attend design review, and issue and/or virtual comment resolution meetings (up to two (2) two-hour meetings) with City, agencies, or other Stakeholder reviewers and/or decision-makers as needed to present designs and/or issues, and to seek resolution of comments and issues.

Revised Task 1.B.8 CDOT File Keeping and Requests for Reimbursement

Kimley-Horn will track time and invoices and prepare documentation in accordance with CDOT and Federal Aid requirements. Kimley-Horn will assist in preparation of up to two (2) requests for reimbursements (RFRs) for the City of Louisville.

Revised Task 1.B.9 Right-of-Way (ROW) and Easement Acquisition Support Services

Kimley-Horn, through use of a qualified subconsultant, Western States Land Services (WSLS) will perform preliminary value research, property owner meetings and coordination, and support efforts with property owners as needed. Due to the unknown nature of these services, we have assumed up to fifty (50) hours for these services for estimating purposes. In the event that services are extended beyond the estimated fee, an amendment to this Agreement will be processed.

New Task 1.B.11 Right-of-Entry Letters

Kimley-Horn will prepare up to two (2) right-of-entry forms on a City of Lafayette letterhead and distribute to property owners. Kimley-Horn will coordinate with the Project Team on the requirements of right-of-entry. The City will be responsible for leading additional coordination with individual property owners as required.

Assumptions:

- Up to six (6) additional two-hour PMT Meetings
- Up to twelve (12) virtual one-hour bi-weekly City/Consultant PM Coordination Meetings
- Up to two (2) virtual one-hour Stakeholder Meetings
- Up to two (2) virtual one-hour Agency/Stakeholder Meetings
- Up to two (2) virtual two-hour Design Review and Issue and/or Comment Resolution Meetings
- Up to two (2) right-of-entry forms

Deliverables:

- Meeting Minutes
- Monthly Progress Reports in CDOT format

Revised Task 2 Data Collection

Revised Task 2.A Topographic Survey

Kimley-Horn, through use of a qualified subconsultant, 105 West, will complete a topographic survey within the Project Limits in the ROW (yellow) and on private property (magenta) as shown in Figure 1 below.

(The remainder of this page intentionally left blank)

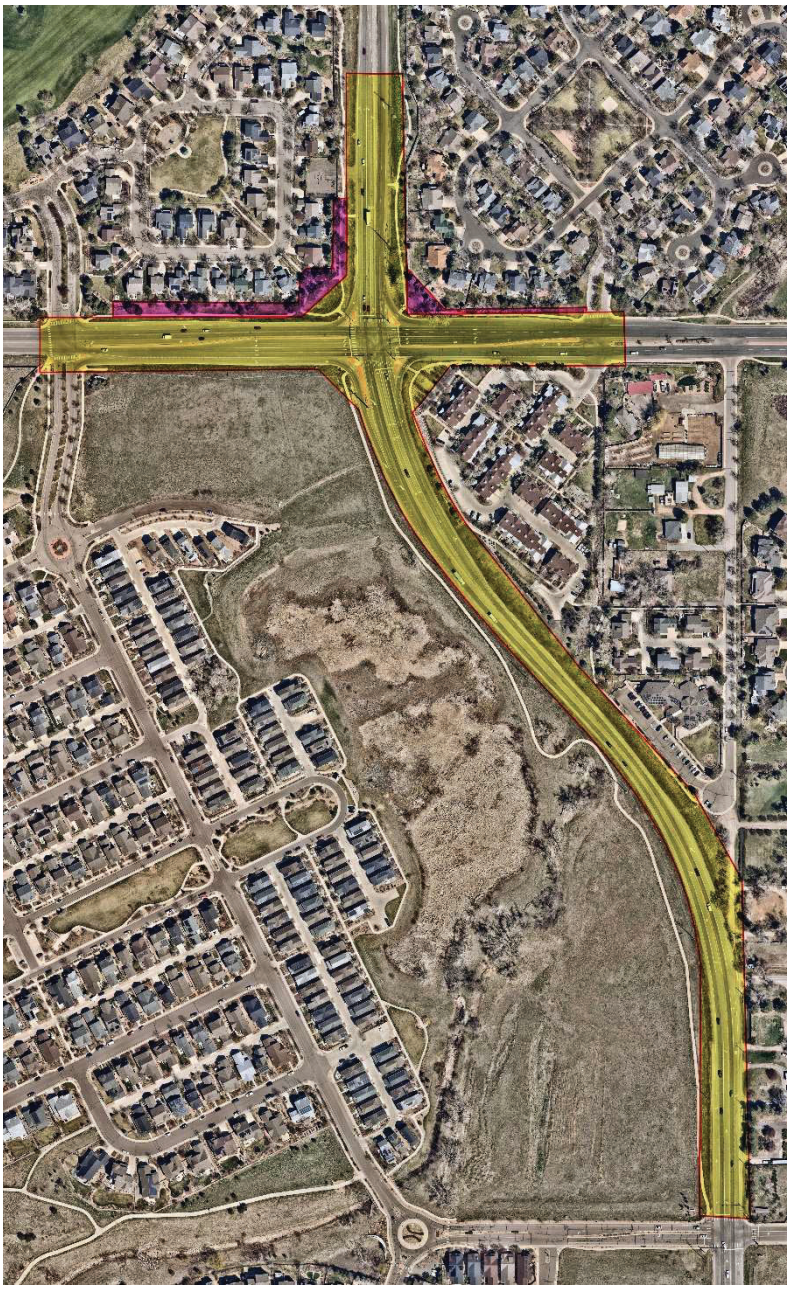


Figure 1 – Survey Limits

105 West will apply for the right-of-way permits from the City of Lafayette to perform survey work within the public rights-of-way. See New Task 1.B.11 for right-of-entry to private properties.

Project Control In order to maintain consistency with previously completed survey for the CO42 Design and ROW Project, 105 West will perpetuate project control from the CO42 Louisville Survey project. 105 West anticipates setting semi-permanent control points to be used for surveying purposes. The preparation of a project control diagram, signed and stamped by a Colorado Professional Land Surveyor, is included in this task.

Topographic Design Survey 105 West will obtain, by field methods, existing, visible planimetric features and topography at a one foot (1') contour interval. The topographic survey will include existing edges of pavement, curb and gutter, flowlines, curb ramps, sidewalks, street lighting, pavement markings, traffic control signs, and above ground utility features within the topographic limits shown in Yellow and Pink in Figure 1. Additionally, 105 West will survey the invert elevation and approximate pipe size at existing found manholes and inlets. Field personnel of 105 West, Inc. are strictly forbidden to enter any manhole or subsurface access to obtain invert elevations, pipe diameters, or directions of flow. Invert measurements must be obtained from outside of the manhole or inlet. All electronic deliverables will be provided in AutoCAD format.

Geotechnical Borehole Survey 105 West will complete the survey for up to sixteen (16) bore hole locations identified during the project. See Task 2.G for additional details on the geotechnical investigation.

Revised Task 2.C Utility Locates and Subsurface Utility Engineering (SUE)

Kimley-Horn, through use of a qualified subconsultant, T2ue Utility Engineers (T2ue), will complete utility locates and Quality Level D (QLD) Subsurface Utility Engineering (SUE) investigation for private utilities within the Project Limits. It is understood that the Quality Level D (QLD) investigation for public utilities within the Project Limits will be completed by the City of Lafayette.

As part of the SUE QLD investigation for this project, T2 UES, Inc. will work on the following tasks:

Utility Records Research

- Submit Subsurface Utility Engineering tickets to Colorado 811 to aid in the identification of Utility Owners that may have facilities on, or be affected by, the project.
- Request, collect, and review applicable utility facility records available through Utility Owner(s), such as one-call notification, service maps, as-built drawings, standard drawings, service plats, construction plans from prior projects, local government or Agency permit exhibit drawings, and oral histories gained through interviews with Utility Owner officials and authorities.
- Compile a list of all utility companies contacted for information. Note information received with contact information for each response and note non-response if applicable.

QA/QC and Professional Services

- Review the QLD investigation documents and records collected as a part of records research.
- Use professional judgment to assign horizontal positions to subsurface utilities based on existing utility records maps.

QLD Utility Investigation Assumptions, Exclusions, and Stipulations

- The City of Lafayette will complete the QLD investigation and deliverable for all publicly owned utilities including but not limited to water, wastewater, stormwater, and irrigation.

- T2 UES, Inc. cannot guarantee we will find all unknown, abandoned, retired, or inactive utilities.
- Utility vault dimensions and/or diagrams are excluded but can be performed at an additional out-of-scope cost to the Client.
- Diagrams of the conduits within vaults are excluded but can be performed at an additional out-of-scope cost to the Client.
- Overhead utility lines will be shown as a singular line running pole to pole. We will attempt to identify both ownership & connections on the poles and incorporate this information into the plans.
- Pole diagrams, images, and/or spreadsheets (or some combination thereof) as best suits this project and existing site conditions are excluded but can be performed at an additional out-of-scope cost to the Client.
- Butterfly diagrams or 3D modeling (with pipe networks) are excluded.
- A Colorado Professional Engineer review, stamp, and signature will not be included in this phase. A Colorado Professional Engineer review, stamp, and signature will be provided after the final review of the QLA phase.

SUE Investigation Deliverables produced from this Subsurface Utility Engineering (SUE) investigation will be:

- A drawing showing the location of the utilities within the investigation area at ASCE 38-22 Quality Level D. Utility line work will be depicted according to the standard APWA utility colors. This drawing will be a digital 11" x 17" PDF plan set.
- An electronic file containing utility line work in AutoCAD format.
- A utility contact list to include the utility provider, contact name, email address, and phone numbers shown in the utility general notes and specifications.

Revised Task 2.D Traffic

Fehr & Peers will lead collection of new peak hour (2-hour AM and 2-hour PM) intersection turning movement counts data at the CO 42 & Baseline Road intersection corridor to be incorporated into the traffic analysis report (see Task 4C).

Fehr & Peers will also collect and review the most recent three years of crash data at this intersection to identify any changes or differences from the safety analysis performed in Phase 1. Outcomes of this analysis will be summarized in the traffic and safety report as part of Task 4C.

Revised Task 2.E Floodplain and Floodway Assessment

Kimley-Horn will obtain and review the Bullhead Gulch FEMA FIS documents and obtain the effective FEMA model from MHFD. In addition to coordinating with MHFD and the City of Lafayette on the ongoing Flood Hazard Delineation Study (FHAD) that MHFD is currently working on for Bullhead Gulch. As part of this task Kimley-Horn will evaluate the hydraulic modeling of the Bullhead Gulch floodplain which over tops County Road 42. Evaluation will include reviewing the hydraulic HEC-RAS model calculations. Kimley-Horn will document the findings of future drainage projects on the final design and ROW acquisitions as well as any potential impacts to adjacent properties and identify potential mitigation measures.

Revised Task 2.F Drainage

Kimley-Horn will perform a review of the existing documents which will be obtained from the City of Lafayette and MHFD. Kimley-Horn will complete an existing conditions analysis for the drainage patterns to assist with preparing a preliminary drainage analysis. This analysis will provide recommendations for water quality features, detention ponds, storm system outfalls, and storm system design sizing and alignments. The drainage analysis will include up to two (2) conceptual level drainage alternatives. This task will include rough grading of the detention ponds (up to two (2)), conceptual sizing of streetside stormwater planter (SSP) water quality features (up to three (3)), producing storm sewer plans (plan view only) construction documents, drainage basin calculations for the 10-year and 100-years storm events utilizing the rational method, storm sewer conceptual design and calculations utilizing StormCAD, detention pond design and calculations, water quality feature design and calculations, and existing and proposed drainage plans. This task will include adding on to the preliminary drainage report that is being developed for the City of Louisville corridor segment which will include recommendations that will lay the framework for the final design and analysis along with supporting documentation for the City of Lafayette segment.

Revised Task 2.G Geotechnical

Kimley-Horn, through use of a qualified subconsultant, Martinez, will complete a geotechnical investigation within the Project Limits. The investigation is anticipated to consist of borings, pavement design, and groundwater monitoring.

Boring and Pavement Design Martinez will drill up to eight (8) pavement borings along the roadway alignment. Up to three (3) borings will be drilled at the locations of the CO42 Baseline Road pedestrian underpasses, up to one (1) at each abutment. Up to five (5) additional borings will be drilled at the locations of proposed retaining walls along the corridor.

Groundwater Monitoring Kimley-Horn, through use of a qualified subconsultant, Pinyon, will complete groundwater monitoring at the location of the CO42 & Baseline Road pedestrian underpasses. Pinyon will run moisture content and dry densities tests on the samples at 10, 15 and 20 feet at up to three (3) borings at the CO42 & Baseline Road underpass abutments. If the samples indicate consistent saturation or near saturation at depths that correlate to the bottom of the underpass, then a monitoring well will be installed and permitted under the Division of Water Resources at each of the abutments of the underpasses. The wells will be equipped with a pressure transducer to record variations in water depth over time. In addition, one additional transducer will be installed in one of the wells to monitor the fluctuation in air pressure. All the transducers will be programmed to take up to two (2) readings each day at the same time. Once a quarter for up to one (1) year, the transducers will be read and a brief summary report prepared for the project. After the fourth quarterly groundwater measurement is collected, Pinyon will abandon the well and submit a Well Abandonment Report. Wells will not be owned by, nor will they be abandoned by Martinez, Pinyon, or the Project Team.

New Task 2.H Multimodal Evaluation

Kimley-Horn will complete a multimodal evaluation of CO42 from Paschal Dr to Baseline Rd. The purpose of the evaluation will be to confirm recommended multimodal improvements at the CO42 & Baseline Road intersection, pedestrian underpasses, on and off-street bicycle facilities, and sidewalk with the goal of enhancing connectivity and safety. This task will evaluate the concepts developed during the Future 42 study. Kimley-Horn will complete an evaluation matrix of up to two (2) conceptual multimodal alternatives. Alternative screening will be based on the project goals, data, and input from the City of Lafayette.

Alternative analysis will be documented in a trade-off matrix. Kimley-Horn will address up to one (1) round of reasonable consolidated comments from the City of Lafayette on the matrix. The recommended alternative identified will used throughout the conceptual design phase for the project.

Deliverables:

- Topographic survey
- Quality Level D Private Utility Subsurface Utility Engineering (SUE) plans
- Traffic analysis
- Multimodal Evaluation Matrix
- Revised geotechnical report
- Preliminary drainage report
- Peak hour intersection turning movement counts at CO 42 & Baseline Road.
- Crash data at CO 42 & Baseline Road for the most recent three years available.

Revised Task 3 Environmental Clearance

Kimley-Horn, through use of a qualified subconsultant, Pinyon Environmental, will advance the environmental clearances in accordance with the National Environmental Policy Act (NEPA) clearances and associated permits and mitigation requirements as necessary for the project. The purpose of this task is to complete environmental clearance and assist the City of Lafayette to advance design for proposed roadway and intersection improvements on CO42 between Paschal Dr and Baseline Rd. Currently there is a study underway for CO42 in the City of Louisville (Louisville), immediately to the south of this section of CO42. The cities of Louisville and Lafayette intend to address the entire length of the corridor in one study. As the Louisville segment has already advanced, this will require additional effort to update materials, such as mapping and existing environment text, with information related to the Lafayette segment. The effort included in this task includes the caveat that should draft reports have been circulated for agency review before the Lafayette-specific information is added to them, additional fee would be required to integrate the Lafayette related materials and recirculate them for another review.

The Project will advance concepts presented in the previous “Future 42: Connecting People and Placed Study” (Future 42 Study) prepared by Kimley Horn, which identified conceptual design for the recommended alternative of two general purpose travel lanes from Arapahoe Road to Hecla Street; one-way northbound and southbound protected bike lanes; pedestrian sidewalks separated by a vegetated buffer throughout the corridor; and intersection improvements at most major intersections in the corridor (i.e., Baseline Road). In support of the Future 42 Study, Pinyon completed an Environmental Existing Conditions Report (September 2022), which identified environmental context, potential constraints, and the location, sensitivity, and potential magnitude of impacts based on the conceptual design. Pinyon assumes preliminary findings from the Future 42 Study, including environmental context, design concepts, and impacts will be carried through to final design.

This Project is receiving funding from the Colorado Department of Transportation (CDOT); therefore, a National Environmental Policy Act (NEPA) study is required. While only the Federal Highway Administration (FHWA), in coordination with CDOT, can determine the appropriate level of NEPA study, Pinyon understands the Project environmental clearance is anticipated to be streamlined to the maximum extent

possible in order to qualify the project as a Documented Categorical Exclusion (Doc CatEx). For this project, Pinyon will support the project by completing technical studies as outlined below.

Pinyon, in coordination with Kimley Horn, is under contract to support 60% design and identify ROW needs for the advancement of the Louisville CO42 segment (Pine Street to Paschal Drive) under the Agreement. The Lafayette section will be brought to a 30% design level and will identify ROW needs. Neither project has construction funding; however, it is assumed that the entire corridor will be built as one construction package. For the purpose of scoping, this proposal assumes the Louisville and Lafayette sections will be cleared as one design (i.e., one NEPA study). Should the projects be uncoupled, scope and fee will need to be revisited.

Revised Task 3.A General Project Management

General project management, contract administration, invoicing, etc. Includes attendance by one Pinyon team member, assumed to be the Pinyon Team Manager, at the following in addition to the meetings held for the Louisville section only: up to five (5) Project progress meetings including a kick-off meeting, (FIR meeting is assumed to be a joint meeting with the Louisville segment) (virtual), up to five (5) progress management team (PMT) meetings (virtual, up to two (2) design review meetings (virtual), up to one (1) small group meeting (virtual), and up to one (1) general public meeting (in person). In support of the project meetings, Pinyon will create displays related to the environmental tasks for the general public meeting (i.e., mapping, process, potential impacts, etc.) The kick-off meeting will be attended in person, others will be attended virtually. Project duration is assumed to be 15 months or less from spring or summer 2025.

Deliverables:

- Public Meeting Materials

Revised Task 3.B Project Progress and Client Meetings

Pinyon assumes monthly progress meetings with the design team during the completion of final design (1 hour/month for 15 months). Meetings will be attended virtually. Pinyon will document environmental resource progress and/or critical path items, data needs, and document clearance status in an Environmental Resources Tracking Matrix for distribution to the team monthly, or as needed during design milestones.

Deliverables:

- Environmental Resource Tracking Matrix

Revised Task 3.C Resource/Agency Meetings

Pinyon will hold an initial scoping meeting with Lafayette, Louisville, CDOT, and FHWA to confirm the environmental scope and schedule. A primary goal is to gain confirmation on the required documentation and scaling the level of effort to the context of the Lafayette segment and then integrating that information with that compiled for the Louisville section, to date. Additionally, the kickoff meeting agenda will include discussion of the appropriate resource-specific study areas, data needs, critical path, and/or high-risk resources (i.e., impacts that may trigger NEPA class of action above a Doc CatEx), and milestones for deliverables and clearances. Pinyon assumes all stakeholders will agree with the FHWA Doc CatEx NEPA class of action. Should design elements require evaluation beyond a Doc CatEx, additional coordination and scoping will be warranted.

Task also includes up to three (3) additional agency meetings including coordination with FHWA and CDOT resource specialists (i.e., CDOT Historian, Noise Specialist). It is assumed that up to one (1) meeting will be held on historic resources and up to one (1) will be held on noise; up to one (1) additional resource-specific meeting will be held based on the project's contexts, anticipated impacts, and/or mitigation opportunities. Meetings will be attended virtually.

Deliverables:

- Coordination, participation, and meeting minutes for up to five (5) resource-specific meetings with CDOT, the City, and the Project Team.

Revised Task 3.D Air Quality

Based on project review, a conformity analysis will be required as the project location is in the Denver Metro/North Front Range ozone nonattainment area. Pinyon will document the conformity findings in an Air Quality Technical Memorandum that complies with CDOT's Air Quality Project-Level Analysis Guidance. The memo will address both the Louisville and Lafayette sections. Up to two (2) rounds of review, a draft and final are included in this scope and fee.

Deliverables:

- Air Quality Technical memorandum

New Task 3.E Greenhouse Gas

This scope does not include a quantitative analysis for greenhouse gas (GHG) emissions as the project is not expected to be considered a "regionally significant transportation capacity project"; however, Pinyon will collaborate with the CDOT environmental staff to confirm GHG evaluation needs. Pinyon assumes a up to one (1) meeting with the CDOT resource specialist to coordinate and that the project will be found not regionally significant; this will be documented in a GHG Memo that will address both the Louisville and Lafayette sections.

Deliverables:

- GHG Technical memorandum

Revised Task 3.F Noise

Based on review of the project, it is likely that the criteria will be met that would classify the proposed action as a Type I project. Therefore, a detailed noise analysis, to include the collection of noise measurements and noise modeling, will be required. Pinyon will meet CDOT Region 4 and EPB up to two (2) times: 1st for project overview and concurrence on noise measurement locations; and 2nd noise modeling results specific to the Lafayette section; up to one (1) of these resource meetings is covered in the Resource/Agency meeting task. Noise modeling for the Louisville section will be completed under a different task order and results of modeling for both the Louisville and Lafayette sections will be documented in up to one (1) noise report.

Pinyon will perform the noise analysis in accordance with applicable highway traffic noise regulations, requirements, and guidelines. Findings will be documented and presented in a technical report that meets

Noise Analysis and Abatement Guidelines (NAAG). The Type I noise analysis will also provide data to inform noise levels within future development locations. This scope includes up to two (2) rounds of review of the report, a draft and a final, which will include results of modeling for both the Louisville and Lafayette sections, by CDOT after which Pinyon will revise the report and submit the final noise technical report.

Based on review of the project, there is the possibility for impacted noise receptors. This scope includes the analysis of up to five (5) barriers, including a feasibility assessment, and final noise design. The analysis does not include a benefitted receptor survey.

Deliverables:

- Type I Noise Report
- Analysis of up to five (5) barriers

Revised Task 3.G Hazardous Materials

Pinyon will complete CDOT Form 881 and an Initial Site Assessment (ISA) Technical Report, which will include obtaining an agency database (i.e., ERIS). Each of these documents will address both the Louisville and Lafayette sections in them. The Study Area will be the project's limits of disturbance. Ideally, the design team will have identified the horizontal and vertical limits of disturbance, including all ROW and easement requirements.

Pinyon will collect up to four (4) paint samples for lead-based paint analysis for project components anticipated to be disturbed (e.g., signal poles, concrete). Depending on the substrate, Pinyon will evaluate the lead content for total lead, or by the Toxicity Characteristic Leachate Procedure. It is not anticipated that asbestos sampling will be required, as the project does not include demolition of any structures and suspect asbestos-containing materials are not likely to be encountered. No soil or water testing is anticipated at this time (if determined necessary, a change order would be required).

Deliverables:

- ISA
- Lead based paint samples and results

Revised Task 3.H Biological Resources

Field Work The field survey for the Lafayette section will be completed by one (1) Pinyon biologist in a one-day period; field work for the Louisville section was previously completed in 2023. Field surveys for biological resources will be completed concurrently, as noted in the following subsections. Geographic Information System (GIS) data will be post-processed by a GIS specialist, and provided for incorporation into the project plans, and for impact analysis during advanced design, as applicable. GIS data will be projected in the local State Plane coordinate system. Pinyon assumes that Kimley Horn will calculate impacts using the provided GIS data.

Deliverables:

- GIS Shapefiles

Wetlands/Waters of the US Pinyon will complete a wetlands/waters of the U.S. (WOTUS) delineation within the Lafayette section in accordance with U.S. Army Corps of Engineers (USACE) and CDOT protocols, where disturbances are expected (e.g., within the project footprint, and along presumed access/haul roads and staging areas). Kimley Horn will provide these study areas prior to field surveys. Fees for the survey equipment (e.g., GPS receivers, waders, forms, camara's) are included with the field work task. Field work for the Louisville section has already been completed.

Pinyon will document the existing conditions for both the Louisville and Lafayette sections regarding WOTUS in the Biological Resources Report (BRR).

Based on preliminary information identified during the Future 42 Study, there are numerous potential WOTUS that intersect the project corridor in the Lafayette section. However, given the linear extent of the project, impacts are presumed to be minimal. It is assumed that impacts will be permitted under USACE Nationwide Permits (NWP) (likely NWP 14 for Linear Transportation Project) for up to two (2) crossing locations. Pinyon anticipates that wetlands, which qualify as "special aquatic resources" could be impacted. As such, we have included two Pre-construction Notification (PCN) submittals to the USACE. An Individual Permit is assumed not required. Impacts to the High Lateral and Goodhue Ditch are exempt from the Colorado Stream Quantification Tool; therefore, no scope or fee is included for that task.

CDOT mitigates permanent wetland impacts regardless of USACE jurisdiction on a 1:1 basis. It is assumed that mitigation (if required) would occur via wetland banking, purchased by the City. If mitigation on-site is desirable, Pinyon does offer full-service wetland mitigation design services; however, additional fee would be required for mitigation design support.

It is assumed that impacts to wetlands will be minimal and a Wetland Finding will not be required for the Lafayette section of this project. If permanent wetland impacts will be greater than 500 square feet (SF) (or combined temporary and permanent impacts greater than 1,000 SF), then a Wetland Finding will be required and additional scope and fee will be required.

Deliverables:

- Documented in BRR
- GIS Shapefiles
- Up to two (2) Section 404 PCN

Vegetation and Noxious Weeds List A and B noxious weeds will be mapped in the Lafayette section, as applicable (i.e., if located in discrete locations); however, if the density of weeds is significant, detailed mapping will be stopped and recommendations regarding weed controls will be presented in the BRR as well as applicable specifications.

It is assumed that an Integrated Noxious Weed Management Plan (INWMP) will not be required for this project. If an INWMP is needed, additional scope and fee would be required.

Deliverables:

- Documented in BRR

Threatened and Endangered Species/Fish and Wildlife Pinyon will conduct a survey for raptors and other migratory birds within the prescribed buffer area/study area per Colorado Parks and Wildlife (CPW) guidelines. The results of the survey will be documented in the BRR that will address both the Louisville and Lafayette sections.

Pinyon will evaluate habitat within the study area for federally and state-listed species, and document within the BRR. Only a habitat assessment will be conducted; a species-specific survey is not included in this scope. If a species-specific survey is required, additional scope and fee would be necessary. Field work for the Louisville section has been completed already.

Given the anticipated limited disturbance that will result from the project, Pinyon assumes that the impact assessment will reveal a *No Effect* to federally listed species. Therefore, coordination with the U.S. Fish and Wildlife Service (USFWS) is not anticipated to be required. If the effects determination is *May Affect, But Not Likely to Adversely Affect*, coordination with USFWS in the form of a letter would be required, and additional scope and fee would be necessary.

Deliverables:

- Documented in BRR

Revised Task 3.I Historic Resources

Pinyon will develop an Area of Potential Effects (APE), in coordination with CDOT. It is assumed that the APE will surround the estimated limits of disturbance in the Lafayette section, as well as all properties that will be impacted by the project (i.e., new right-of-way acquisitions or easements). Pinyon assumes up to one (1) meeting with the CDOT Historian to coordinate APE limits for the Lafayette section (included in Resource/Agency Meetings task, above); coordination specific to the Louisville section will occur under a different scope of work. Once the APE is established, Pinyon will research the Office of Archeology and Historic Preservation (OAHP) COMPASS database, the CDOT Historic Bridge Inventory, topographic maps, and local assessor data for the presence of potential historic resources within the APE.

Based on the evaluation completed during Future 42 Study and COMPASS data obtained in May 2021, up to four (4) potentially eligible historic resources (i.e., properties with structures 45 years or older) and up to two (2) potentially eligible linear resources (i.e., irrigation ditch, roadway) were identified within the anticipated APE for the Lafayette section.

Impacts to historic resources will be refined during this stage of the project phase design advances, including detailed information on acquisition of easements and/or right of way (ROW). Pinyon assumes there are up to four (4) potentially eligible properties and/or structures and up to two (2) linear resources in the Lafayette section that will need to be surveyed for compliance with Section 106 of the National Historic Preservation Act (NHPA). If more than six (6) potential historic resources will be impacted (including temporary and permanent easements), this scope and fee should be revised. Forms for potentially historic resources located within the Louisville section are being prepared under that task order.

Pinyon will coordinate level of effort for evaluation with the CDOT Historian and provide documentation for compliance with Section 106 and historic Section 4(f), including historic site evaluation forms for the Lafayette section; eligibility and effects letter that will address both the Louisville and Lafayette sections; APE map; and historic Section 4(f) *de minimis* form(s) for the Lafayette section. Pinyon will meet with CDOT Region 4 up to two (2) time regarding the Lafayette section: once to review data gathered (i.e., OAHP, assessor's data, etc.) and to establish APE; and a second time to review initial eligibility determinations and anticipated effects; this meeting is included in the resources agency meetings above.

Assumptions:

- Any Right of Entry will be coordinated and provided by the Kimley Horn/Lafayette.
- This scope assumes a Section 106 determination of *no adverse effect*; should the project result in a determination of *adverse effect*, this scope will need to be revisited and additional fee will be required.
- Should more than six (6) resources for historic survey be identified, this scope will need to be revisited.

Deliverables:

- APE Map
- Up to four (4) Architectural Inventory Forms
- Up to two (2) Management Data/Linear Component Forms
- Eligibility and Effects Letter
- Draft Section 4(f) De Minimis Letter (for CDOT to submit)

Revised Task 3.J Non-historic Section 4(f) Resources

The Department of Transportation Act Section 4(f) regulation governs the use of land from publicly owned parks; recreation areas; wildlife and waterfowl refuges; and public or private historic sites. As this project has an FHWA nexus, Section 4(f) will apply.

Impacts to recreational facilities will be refined during this stage of the project phase design advances, including detailed information on acquisition of easements and/or ROW; however, preliminary review during the Future 42 Study indicated the Project is anticipated to impact unnamed recreational trails to the east of CO42. These potential impacts would be slivers of land that would not affect the use of these facilities. The enhanced multi-modal connectivity will improve access and connectivity, and likely to result in an enhancement or temporary use exception as defined under Section 4(f) of the Department of Transportation Act. Approval of this enhancement must be granted by the Official with Jurisdiction (OWJ). Temporary use designation requires Kimley Horn to develop for any trail to avoid closure. Pinyon will prepare a draft OWJ letter for the Lafayette representative with information provided by Kimley Horn regarding design and temporary impacts. Any use of Section 4(f) resource requiring evaluation other than an exception would require additional scope. A separate OWJ letter for impacts to Section 4(f) resources in the Louisville section will be prepared under the task order for that section.

Deliverables:

- OWJ Letter

Revised Task 3.K Environmental Justice

Under Executive Order 12898, each Federal agency must identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. During a preliminary review of the corridor during the Future 42 Study, Pinyon utilized the EPA EJScreen Tool and identified none of the Block Groups within the Project has EJ populations.

For this task, Pinyon will utilize the ACS data or the 2020 census data. The percent of low-income and minority populations as well as populations with limited English proficiency (LEP) and disabled persons in the tracts and blocks adjacent to the corridor with those of both Boulder County and the State of Colorado. It is assumed that impacts, both beneficial and negative, will be borne by all populations equally, meaning that it is assumed that there will be no disproportionally high and adverse effects to low-income and/or minority populations or LEP or disabled persons. Findings will be documented in a memorandum using the soon-to-be-released EJ template provided by CDOT that will address both the Louisville and Lafayette sections. It is assumed to have up to two (2) reviews.

Deliverables:

- Environmental Justice Memorandum

Revised Task 3.L Documented Categorical Exclusion and Mitigation Matrix

Pinyon will use the Documented Categorical Exclusion (CE) template (starting with the CDOT NEPA Neutral Template) to document the findings of the technical analyses outlined above which will include the recommended specifications and environmental notes for inclusion in the plan set. Additionally, the Documented CE will include a Purpose and Need; discussion on the Proposed Action; and Public and Agency Involvement as well as CDOT's standard mitigation matrix. The document will need to be reviewed by CDOT Environmental Programs Branch (EPB) and FHWA. Following the agencies' typical review procedure, we assume that Region 4 will review the document up to two (2) times before it gets submitted to EPB for their review. EPB will review the document up to one (1) time, using the FHWA document as a back check that their comments have been addressed. It is assumed that FHWA will review the Documented CE up to two (2) times, a draft and final, prior to signature. It is assumed that CDOT Region 4 will review each iteration of the document as it progresses through agency review. Up to one (1) comment review meeting will be held virtually after the first Region 4 review, the EPB review, and the first FHWA review (up to three (3) meetings). Ideally agency reviews are 10 working days; however, review duration is beyond Pinyon's control. After each review, Pinyon will provide a redline copy and a clean copy to aid in backchecking that comments have been addressed and resolved.

Pinyon will complete the first six columns of the standard CDOT Mitigation Matrix, as it will be an attachment to the Documented CE.

As this is a Documented CE that will not be published, we assume that the documents do not have to be 508-compliant. Also, no public hearing is required for a Documented CE and as such scope for one is not included in this proposal.

Deliverables:

- Up to four (4) drafts and One Final Documented CEs and the Mitigation Matrix
- Up to four (4) Redline Drafts and Mitigation Matrix

Resources that CDOT will Complete Internally It is understood that CDOT will complete Visual Impact Analysis (VIA), Section 6(f), Paleontology, and Archaeology resources internally based on the scope of the project and that there are no impacts.

Revised Task 4 Preliminary Design (FIR – 30%)

The Project Team will utilize the information gathered during Task 2 and Task 3 to advance the vision of the corridor identified in the Study from a 15% preliminary design to 30% Field Inspection Review (FIR) level plans, reports and Opinion of Probable Construction Costs (OPCC). The FIR submittal is anticipated to consist of preliminary design and plan preparation for improvements along CO42 consistent with the conceptual designs provided in the "Future 42 Connecting People and Places Study" as presented in the City's TIP application to DRCOG. Improvements are anticipated to consist of civil, roadway, drainage, traffic signal, structural, and other improvements.

Revised Task 4.A Preliminary Design Plans and Estimates

The Project Team will prepare preliminary design documentation consisting of plans, OPCC, details, quantities, and reports necessary to develop a preliminary design. The FIR plans will be prepared in accordance with CDOT and City of Lafayette standards. The 30% FIR plans are anticipated to be prepared as a standalone submittal set separate from the City of Louisville CO42 Design and ROW plan submittal but will provide necessary connections and collaboration.

Prior to the development of the 30% FIR submittal, the Project Team will review the project improvements identified Study in conjunction with the traffic analysis to be completed as part of Task 2.D to confirm the design approach. Based on this analysis, the Project Team will identify design elements for revision, coordinate with the City, and update the design as needed. For estimating purposes, we have assumed up to one hundred fifty (150) hours for these services. In the event that services are extended beyond the estimated fee, and amendment to this Agreement will be processed.

Revised Task 4.A.1 30% FIR Plans and Opinion of Probable Construction Costs (OPCC)

The 30% FIR submittal is anticipated to consist of the following additional sheets:

- Title Sheet (up to one (1) sheet);
- Standard Plans List (up to one (1) sheet);
- Abbreviations and Symbols (up to one (1) sheet);
- General Notes (up to one (1) sheet);
- Summary of Approximate Quantities;
- Survey Control;
- Roadway Typical Sections (up to one (1) sheet);
- Underpass Typical Sections (up to two (2) sheets);
- Horizontal Control (up to five (5) sheets);
- Quality Level D (QLD) Subsurface Utility Engineering (SUE) Plans;
- CO42 Removal Plans (up to five (5) sheets);
- CO42 Roadway Plans, Profiles, and Details (up to ten (10) sheets);

- CO42 Grading Plan (up to five (5) sheets);
- CO42 Drainage, Water Quality, and Detention Pond Plans (up to eight (8) sheets);
- Water, Sanitary, and Stormwater Plans, Profiles, and Details (up to five (5) sheets);
- Underpass General Information & SAQ Sheets (up to two (2) sheets);
- Underpass General Layout Sheets (up to two (2) sheets);
- Underpass Typical Section Sheets (up to two (2) sheets);
- Wall & Wingwall Sections & Details Sheets (up to three (3) sheets);
- Underpass Approach Plan and Profile Sheets (up to eight (8) sheets);
- CO42 Signing and Striping Plans (up to five (5) sheets);
- Traffic Signal Plans (up to one (1) sheet);
- Roadway Cross Sections;
- OPCC;
- Revised Drainage Report; and
- Revised Traffic Report.

Traffic Signal Plans Kimley-Horn, through use of a qualified subconsultant, Fehr & Peers, will prepare traffic signal design plans at the following intersections at the 30% FIR level per City of Lafayette and CDOT standards and specifications:

- CO42 & Baseline Road.

Design will be based on guidance from Phase 1 of the Future 42 project and design recommendation changes that emerge as part of analysis in Phase 2.

Fehr & Peers will complete a draft set of 30% traffic signal design sheets for CO 42 & Baseline Road.

The following elements will be incorporated into the 30% traffic signal design plans:

- The new Louisville-specific traffic signal specifications that augment CDOT standards;
- Additional recommended fiber-optic communication upgrades (such as battery backup, detection, and Opticom); and
- Intersection-specific design needs to facilitate recommended traffic operations, safety improvements, and protected intersection design for active transportation users (such as left or right-turn signal operations, pedestrian crossings, and bike signals as appropriate).

Trail Plans and Pedestrian Underpasses and Walls Kimley-Horn, through use of a qualified subconsultant, Otak, will complete the design of trail plans, pedestrian underpasses, and walls within the Project Limits. Otak will develop a conceptual design for up to two (2) underpasses: one at Baseline Road, west of CO42, and one beneath CO42 north of Baseline Road. The final location of each underpass will be refined during the design based on site conditions and the proposed multi-modal improvements at the intersection of CO42 & Baseline Road. Otak will also develop a conceptual design for the underpass approaches that will provide a connection to the existing multi-modal paths and various proposed multi-modal improvements (including associated wingwalls and site walls along CO42).

Otak will revise the previously prepared Structure Selection Report that will outline the various project considerations in support of the proposed underpass, wingwall and retaining wall structures, see Task 4C. We will also submit conceptual plans and a preliminary cost estimate.

Assumptions:

- Our initial understanding of the underpasses, wingwalls and site walls is based on the Kimley-Horn roll plot provided to Otak which was dated November 29, 2022. The roll plot outlines the location and alignment of up to two (2) underpasses and a total of up to four (4) site walls. We assume that up to one (1) additional wall will be required, and the other proposed walls will be expanded to accommodate the underpass approaches. We assume that a total of up to five (5) walls, totally approximately 2000 linear feet will be required.
- We understand that Maintenance of Traffic is beyond the current scope of work expected and is therefore excluded from our scope of work.
- Otak will not prepare specifications. These are to be completed in a future phase.
- The design of a potential drainage lift station is not included in this scope of work.
- Otak will include proposed locations for railings and fencing for the retaining walls.

Water, Sanitary, and Stormwater Plans, Profiles, and Details These plans will include relocations, demolition, and proposed water, storm and sanitary utilities necessary for the construction of underpass improvements. We anticipate a total of approximately of 800 linear feet combined of water and sanitary main improvements. These plans will include plan and profile design, utility relocates, and corresponding details per the City of Louisville or City of Lafayette design and construction standards.

Utility Plans and Matrix Kimley-Horn, through use of a qualified subconsultant, Triunity, will prepare utility plans depicting existing utilities, relevant proposed project elements, utility ID Nos. corresponding to utility matrix, and conceptual relocations as determined through design development and the utility coordination meetings.

- Anticipates up to ten (10) plan sheets, general notes, and utility matrix sheets
- Utility Matrix anticipated to follow CDOT standard format

Design Review The Project Team will address up to one (1) round of reasonable consolidated City comments on the 30% FIR plans, estimates, and reports and up to one (1) round of reasonable consolidated CDOT comments on the 30% FIR plans, estimates. It is understood that the plans will not advance to final design.

Revised Task 4.C Preliminary Reports

Revised Drainage Report Kimley-Horn will revise the previously prepared preliminary drainage report which will describe existing and proposed drainage patterns, drainage criteria, recommendations, existing and proposed drainage basin delineations, storm conveyance sizing calculations, proposed detention and water quality calculations. See Task 4.E for additional details.

Revised Traffic Report Kimley-Horn, through use of a qualified subconsultant, Fehr & Peers will revise the previously prepared traffic report. The following elements are anticipated to be included in the traffic and safety report that summarizes the data, analysis findings, and design implications/recommendations from the traffic and safety study:

- Fehr & Peers will use the current DRCOG Focus model and other future land use data to forecast traffic for years 2028, 2033, and a future date that is TBD.

- The Simtraffic model will be prepared for the CO 42 corridor (from Baseline Road to Lock Street) to include the CO 42 & Baseline Road traffic operations under existing year and future years under the build scenario.
- Fehr & Peers will analyze the most recent three years of crash data along the CO 42 Corridor and identify any new trends not found in the previous analysis including potential new countermeasures not already included.
- Based on findings of the traffic analysis, speed data, and crash analysis as well as the proposed future design, Fehr & Peers will provide recommendations to potentially make small modifications in the design to achieve desired operating speed, improve safety, and improve traffic operations without compromising multimodal comfort.
- Recommendations provided in the technical report to reflect the traffic and safety analysis that include the intersection of CO 42 & Baseline Road.

Revised Utility Impact Report Kimley-Horn, through use of a qualified subconsultant, Triunity, will revise the previously prepared preliminary utility impact report. This report is anticipated to outline utility coordination activities to date, relocations identified and anticipated costs and schedule implications to the project. The report is also anticipated to provide documentation of pertinent information including Reports and memorandums, photographs, mapping, schematics, field notes, as-built plans, and other required information.

Revised Structure Selection Report Kimley-Horn, through use of a qualified subconsultant, Otak, will revise the previously prepared structure selection report. This report is anticipated outline the various project considerations in support of the proposed underpass and wingwall structures.

Revised Task 4.D Coordination of Design

The Project Team will coordinate design as needed with the City's designated project management team as outlined in Task 1. The design will be prepared in compliance with applicable Federal, state, local, and City requirements.

Utility Coordination Kimley-Horn, through use of a qualified subconsultant, Triunity, will coordinate with the Project Team, City, and utility companies during the design of this project. Additionally, utility coordination is anticipated to consist of the following:

- Coordination of potential utility conflicts between existing utilities and proposed improvements with the Project Team and utility owners;
- Identification of design modifications that will minimize impacts to utilities where possible;
- Identification of utility owner operating rights and cost responsibilities;
- Up to two (2) meetings each with up to ten (10) utility companies and jurisdictions as required to discuss project scope, utility conflicts, and mitigation strategies; including development of agendas, exhibits, facilitation of meetings, and preparation of meeting minutes;
- Obtaining copies of existing easements, license agreements, and relocation agreements from utility companies as applicable and providing to the City;
- Conducting coordination/comment resolutions meetings with utility owners after milestone submittal;
- Obtaining estimates of probable cost for any utility relocations that are a cost to the project;
- Draft utility specifications are not anticipated for the 30% submittal; and

- Engineered design of utility relocations is not included.

Revised Task 4.E Drainage

Kimley-Horn will coordinate with Cities of Louisville and Lafayette, CDOT, and Mile High Flood Control District staff and coordinate necessary maintenance agreements. Kimley-Horn will prepare a preliminary drainage report in accordance with the jurisdictional authority indicating the required improvements for the preferred alternative. This task will move forward with one of the alternatives picked by the City from the drainage analysis presented in Task 2.F to 30% percent design. This task will include grading of the detention ponds (up to one (1)), footprints of the streetside stormwater planter and water quality features (up to two (2)), producing storm plan view only construction documents (up to five (5) sheets), details (up to three (3) sheets) for detention ponds and water quality features), drainage basin calculations utilizing rational method for the 10-year and 100-year storm events, storm sewer design and sizing calculations for the 10-year and 100-years storm events utilizing StormCAD, detention pond design and calculations, water quality feature design and calculations, existing and proposed drainage plans (up to six (6) sheets), and revised preliminary drainage report (up to one (1)).

Deliverables:

- 30% FIR Plans and EOPCC
- Drainage Report
- Floodplain Report
- Traffic Report
- Utility Impact Report

Information Provided By City

We shall be entitled to rely on the completeness and accuracy of all information provided by the City or the City's consultants or representatives. The City shall provide all information requested by Kimley-Horn during the project.

Schedule

Kimley-Horn will provide our services as expeditiously as practicable to complete the design and with the goal of completing the design phase based on a mutually agreed upon schedule.

Fee

The attached work plan shows Kimley-Horn's estimated labor effort to complete these tasks. Kimley-Horn will provide the services described within the Scope of Services for a fee of **$889,379.00** for Revised Tasks 1-4 as shown in the attachment following this letter Proposal. The total estimated expenses are **$5,507.28**. The total for all tasks and expenses is **$894,886.28**.

Direct reimbursable expenses as required for the Project such as plan reproduction for deliverables and mileage will be billed. An estimated fee for reimbursable expenses has been provided.

Closure

We appreciate the opportunity to provide these services to you and are excited to work again with the City of Louisville on this project. Please contact me if you have any questions.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

By: Matt Ciarkowski, PE
Project Manager

By: Kory Andryscik, P.E.
Vice President

MP 43

City of Louisville - CO42 Design and ROW - Addendum #2 Lafayette Extension
Exhibit 'B' - Fee Estimate
Monday, January 13, 2025

Total Labor Fee	**$ 889,379.00**
Total Expense Fee	**$ 5,507.28**
Total Contract Amount (Not to Exceed)	**$ 894,886.28**
Total DBE Labor Fee	**$ 121,955.00**
DBE % (Goal = 7%)	**13.7%**

Item	Task	Totals Hours (All Firms)
1	**General Services and Project Management**	
1.A	Project Management/Project Management Plan	192.00
1.B	Project Coordination/Meetings	-
1.B.2	Progress Meetings	259.00
1.B.3	Stakeholder Meetings (up to two (2))	16.00
1.B.4	Agency and Stakeholder Coordination (up to two (2))	19.00
1.B.5	Design Review, and Issue and/or Comment Resolution Meetings (up to two (2))	41.00
1.B.9	Right-of-Way (ROW) and Easement Acquisition Support Services	60.00
1.B.11	Right-of-Entry Letters	24.00
	Total (Hours)	611.00
	Total (Fees)	$ 140,237.00
2	**Data Collection**	
2.A	Survey	546.00
2.C	Subsurface Utility Engineering (SUE)	151.00
2.D	Traffic	12.00
2.E	Floodplain and Floodway Assessment	35.00
2.F	Drainage (Due Diligence, Existing Conditions Analysis, and up to (2) alternatives)	86.00
2.G	Geotechnical	41.00
2.H	Multimodal Evaluation	52.00
	Total (Hours)	923.00
	Total (Fees)	$ 152,834.00
3	**Environmental Clearance**	
3.A	General Project Management	132.00
3.B	Project Progress and Client Meetings	-
3.C	Resource/Agency Meetings (up to five (5))	10.00
3.D	Air Quality	38.00
3.E	Greenhouse Gas	-
3.F	Noise	135.00
3.G	Hazardous Materials	34.00
3.H	Biological Resources	88.00
3.I	Historic Resources	326.00
3.J	Non-historic Section 4(f)	26.00
3.K	Environmental Justice	57.00
3.L	Documented Categorical Exclusion and Mitigation Matrix	118.00
	Total (Hours)	964.00
	Total (Fees)	$ 168,395.00
4	**Preliminary Design (FIR - 30%)**	
4.A	Preliminary Design Plans, Specifications, and Estimates (PS&E)	-
4.A.1	30% FIR Plans and Estimates	1,815.00
4.C	Preliminary Reports	191.00
4.D	Coordination of Design	136.00
4.E	Drainage	100.00
	Total (Hours)	2,242.00
	Total (Fees)	$ 427,913.00
EXP	**Reimbursable Expenses**	
	Reimbursable Expenses	$ 5,507.28
	Total Labor Fee	**$ 889,379.00**
	Total Expense Fee	**$ 5,507.28**
	Total Contract Amount (Not to Exceed)	**$ 894,886.28**

City Of Lockeby – CP&R Energy and PRSR - Middle Income/Collegiate Retirement Review
Exhibit 'B' – Fee Estimate
Monday, January 13, 2025

Total Initial Fees	$28,870.00
Total Additional Fees	$127.00
Total Fees	$28,997.00
Estimate %	0.43%
Total Additional Fees - Estimate	$127.00
Total Fees - Estimate	$28,997.00

Phase	Description	Initial Fees	Additional Fees	Total Fees
1	Pre-Design	$0.00	$0.00	$0.00
2	Schematic Design	$0.00	$0.00	$0.00
3	Design Development	$0.00	$0.00	$0.00
4	Construction Documents	$0.00	$0.00	$0.00
5	Bidding	$0.00	$0.00	$0.00
6	Construction Administration	$0.00	$0.00	$0.00
7	Post-Construction	$0.00	$0.00	$0.00
8	Additional Services	$28,870.00	$127.00	$28,997.00
	Total	$28,870.00	$127.00

RESOLUTION NO. 86
SERIES 2025

A RESOLUTION APPROVING AN INTERGOVERNMENTAL AGREEMENT WITH THE CITY OF LAFAYETTE FOR SHARING OF COSTS OF 30% DESIGN PLANS FOR IMPROVEMENTS TO STATE HIGHWAY CO-42 FROM PASCHAL DRIVE TO BASELINE ROAD

WHEREAS, an intergovernmental agreement has been proposed for the cities of Louisville and Lafayette to share the costs of completing preliminary design plans for the portion of the State Highway 42 corridor extending between Paschal Drive in Louisville and Baseline Road in Lafayette ("IGA"); and

WHEREAS, the City Council desires to approve the IGA by this Resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The proposed Intergovernmental Agreement for the Sharing of Costs of 30% Design Plans for Improvements to State Highway CO-42 from Paschal Drive to Baseline Road, by and between the City of Louisville and the City of Lafayette (the "IGA"), a copy of which is attached hereto and incorporated herein by this reference, is hereby approved.

Section 2. The Mayor is hereby authorized to execute the IGA on behalf of the City Council of the City of Louisville, and the Mayor is hereby further authorized to negotiate and approve such revisions to the IGA as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of such IGA are not altered.

PASSED AND ADOPTED this 21st day of October 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

INTERGOVERNMENTAL AGREEMENT FOR SHARING OF COSTS OF 30% DESIGN FOR IMPROVEMENTS TO STATE HIGHWAY CO-42 FROM PASCHAL DRIVE TO BASELINE ROAD

THIS AGREEMENT is made this _____ day of _____, 2025 by and between the City of Lafayette, a Colorado home rule municipality ("Lafayette"), and the City of Louisville, a Colorado home rule municipality ("Louisville"), each a "Party" and collectively the "Parties."

WHEREAS, the Parties are authorized by § 29-1-203, C.R.S. as amended, to enter into contracts or agreements for the sharing of costs; and

WHEREAS, C.R.S. § 29-1-201, et seq., authorizes and encourages local governments to make the most efficient and effective use of their powers and responsibilities by cooperating and contracting with one another to provide any function, service, or facility lawfully authorized to each; and

WHEREAS, in accordance with § 29-1-203, C.R.S. as amended, each of the Parties is authorized to enter into this Agreement; and

WHEREAS, the Parties desire to complete a plan and initial design for that portion of the State Highway 42 corridor extending between Paschal Drive in Louisville and Baseline Road in Lafayette (the "Plan"); and

WHEREAS, the Plan is intended to examine the road cross section, multi-modal facilities , stormwater and drainage facilities and electric and underground utilities; and

WHEREAS, the Plan will complete preliminary design (30%) for the corridor; and

WHEREAS, Louisville has requested and received CDOT 10-year Strategic Project Pipeline funds in the amount of $870,000 to complete the Plan (the "Grant"), and has entered into a grant agreement with the Colorado Department of Transportation ("CDOT") setting forth the terms of the Grant; and

WHEREAS, the Grant does not require local matching funds; and

WHEREAS, the Parties desire to enter into an IGA to confirm their intent to undertake the Plan; to identify the allocation of the cost of any design work in excess of $870,000 for the Plan; to establish the process by which such allocation and payment will be accomplished; to set forth the agreement by the Parties as to the role of Louisville as the lead agency and executor of the Grant; and to acknowledge the Parties' intent to enter into a future agreement or an amendment to this Agreement if and when the costs exceed what is expected.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the Parties agree as follows:

1. Incorporation of Recitals. The Parties confirm and incorporate the foregoing recitals into this Agreement.

2. Responsibilities of Louisville. Louisville will oversee the completion of the design phase of the Plan, will be the lead agency with respect to contracting and communicating with CDOT, and shall be responsible for all contracting, supervisory and administrative matters related to execution of the Grant and completion of the Plan. The parties agree that Kimley-Horn & Associates has been engaged to complete the Plan. Lafayette shall have the opportunity to review and provide feedback on submittals regarding the design of elements within Lafayette's city limits and annexation boundaries, and the Paschal intersection. Louisville will advise Lafayette of the timeline for the Plan, will provide Lafayette a copy of Louisville's agreement with the consultant engaged to complete Plan, will provide updates of the progress on the Plan upon request, and will provide Lafayette copies of all design drawings, plans and other materials prepared by the consultant for the Plan.

3. Project Costs. The Parties have estimated the Plan to cost $894,886.28 and agree that $870,000 in Grant funds shall be applied toward the development of the Plan. For any costs in excess of $870,000, Lafayette agrees to pay 100% up to a total financial commitment by Lafayette of $24,886.28.

4. Reimbursement of Costs. After 100% of the Grant funds have been utilized, Louisville shall send Lafayette a monthly or quarterly invoice for the Plan costs incurred by Louisville in the prior period, including copies of invoices and pay applications received from the consultant. Lafayette agrees to reimburse Louisville for 100% of the Plan costs in excess of $870,000 up to a maximum of $24,886.28. Lafayette agrees to submit payment within 30 days of receipt of each invoice. The Parties agree that no costs in excess of $894,886.28 set forth in Section 3 shall be incurred for the Plan without prior written approval of both Parties.

5. Cooperation.

a. In the performance of this Agreement or in considering any requested approval, acceptance, or extension of time, the Parties each agree that they will act in good faith and will not act unreasonably, arbitrarily, capriciously, or unreasonably withhold, condition, or delay any approval, acceptance, or extension of time required or requested pursuant to this Agreement. Each Party shall promptly provide any information, approval or document necessary for implementation of this Agreement. Each Party will execute such additional documents and agreements as necessary to effectuate the development of the Plan, including but not limited to cooperating to obtain all required PUC and BNSF approvals, permits and agreements required for the Plan. Each Party shall issue those street cut permits, access permits and other procedural or substantive permits and approvals that are necessary for the Plan, which permits and approval are not to be

conditioned on payment of any fees or costs other than administrative costs for processing. Louisville shall provide periodic progress reports to Lafayette on the Plan and related matters. Lafayette shall coordinate directly with the design consultant to resolve any issues or questions related to the segment of CO42 within Lafayette's city boundary. Each Party shall provide to the other at no additional costs copies of any contracts, drawings, applications for payments, invoices, billing records and other records related to the Plan.

b. While Louisville will be the lead agency, both Parties will mutually participate with the consultant in the performance of the development of the Plan. Louisville shall provide to Lafayette copies of the proposed design plans for the Plan. Both Parties will be present during all meetings and negotiations with the design consultant to provide input as to the scope of the Plan and the consultant's course of the work thereon unless the Parties agree in writing that one of the Party's presence is not required.

c. Lafayette shall be the approving authority regarding the consultant's design of all elements North of the Paschal intersection. Both Parties shall have approval over the Paschal intersection and within 150' of the intersection as shown in Exhibit A. The Plan shall address future maintenance of all shared elements which both parties shall agree to in writing.

6. Contact Persons. The contact persons for administering this Agreement shall be the Public Works Director of each Party. Any approval hereunder required of a Party of any drawings, designs or specifications may be granted or withheld by a writing issued by the Public Works Director of such Party.

7. Unexpected Costs. In the event that costs for the Plan are expected to exceed $894,886.28, the Parties shall enter into good faith negotiations regarding an agreement or an amendment to this Agreement to address allocation of the increased in costs.

8. Cost Recovery. This Agreement is not intended and shall not be construed to affect either Party's ability to obtain cost recovery payments for the Plan from developments within their respective jurisdictions.

9. No Third-Party Beneficiaries. This Agreement is intended to describe the rights and responsibilities only as to the Parties hereto. This Agreement is not intended and shall not be deemed to confer any rights on any person or entity not named as a Party hereto.

10. Assignment. This Agreement shall not be assigned by either Party without the prior written consent of the other Party.

11. Insurance. Each Party agrees, at all times during the term of this Agreement, to maintain such liability insurance, by commercial policy or self-insurance, as is necessary to meet its liabilities under the Colorado Governmental Immunity Act, ("Act") C.R.S. § 24-10-101, et seq. as may be amended, and nothing herein shall be

deemed a waiver of the protections, limitations and immunities afforded the Parties by the Act. Each Party agrees to show proof of such insurance upon request by the other Party.

12. Default and Right to Cure. In the event that either Party shall be in default of this Agreement, the other Party shall provide notice to the defaulting Party specifically describing the default. The Party allegedly in default shall have 30 days from the date of such notice to cure the default. If such default is not so cured then at the election of the non-defaulting Party, this Agreement may be terminated unilaterally by the non-defaulting Party or the non-defaulting Party may pursue an action for specific performance, damages, or both.

13. Integration and Amendment. This Agreement represents the entire agreement between the Parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the Parties. If any provision of this Agreement is held invalid or unenforceable, no other provision shall be affected by such holding, and all of the remaining provisions of this Agreement shall continue in full force and effect.

14. Execution in Counterparts. This Agreement may be executed in several counterparts, each of which shall be deemed an original and all of which shall constitute but one and the same instrument.

15. Effective Date; Term. The effective date of this Agreement shall be the last date on which the Parties' respective governing bodies have approved the Agreement, as set forth below. This Agreement shall remain in effect through completion of the Plan, unless sooner terminated by mutual written agreement.

16. Appropriations. All financial obligations of both Parties for years beyond the fiscal year 2025 shall be subject to the annual appropriation of Project funds by their respective city councils.

17. Non-Substantive Amendments. This Agreement has been approved in substantially the same form submitted to the local governing bodies of the Parties. The Parties' city managers are authorized to approve non-substantive administrative amendments to the Agreement and attached exhibits, if upon the recommendation of each Parties' staff, the city managers deem such amendments necessary and in compliance with the Grant and CDOT requirements.

18. Costs. Each Party shall be responsible for its own legal, accounting, overhead and administrative staffing costs incurred in the negotiation, drafting or performance of this Agreement.

19. Responsibility for Legal Proceedings. Lafayette shall be responsible for defending itself, its officers, and employees in any civil action brought against Lafayette, its officers and employees by any person claiming injury and damages as a result of the performance of this Agreement. Likewise, Louisville shall be responsible for defending

itself, its officer, and employees in any civil action brought against Louisville, its officers, and employees by any person claiming injury and damages as a result of this Agreement. Lafayette, its officers, and employees shall not be deemed to assume any liability for intentional or negligent acts, errors, or omissions of Louisville or any officer or employee thereof, arising out of the performance of this Agreement. Likewise, Louisville, its officers, and employees shall not be deemed to assume any liability for intentional or negligent acts, errors, or omissions of Lafayette or any officer or employee thereof, arising out of the performance of this Agreement.

20. No Joint Venture or Partnership. Nothing contained in this Agreement is intended to create a partnership or joint venture between Lafayette and Louisville and any implication to the contrary is hereby expressly disavowed. It is understood and agreed that this Agreement does not provide for the joint exercise by the Parties of any activity, function or service, nor does it create a joint enterprise, nor does it authorize any Party hereto to act as an agent of the other Party for any purpose whatsoever.

CITY OF LAFAYETTE

By:_____
JD Mangat, Mayor

Date: _____

ATTEST:

_____
Lynnette Beck, City Clerk

CITY OF LOUISVILLE

By:_____
Chris Leh, Mayor

Date: _____

ATTEST:

_____
Genny Kline, City Clerk

APPROVED AS TO FORM:

_____
Mary Lynn Macsalka, City Attorney

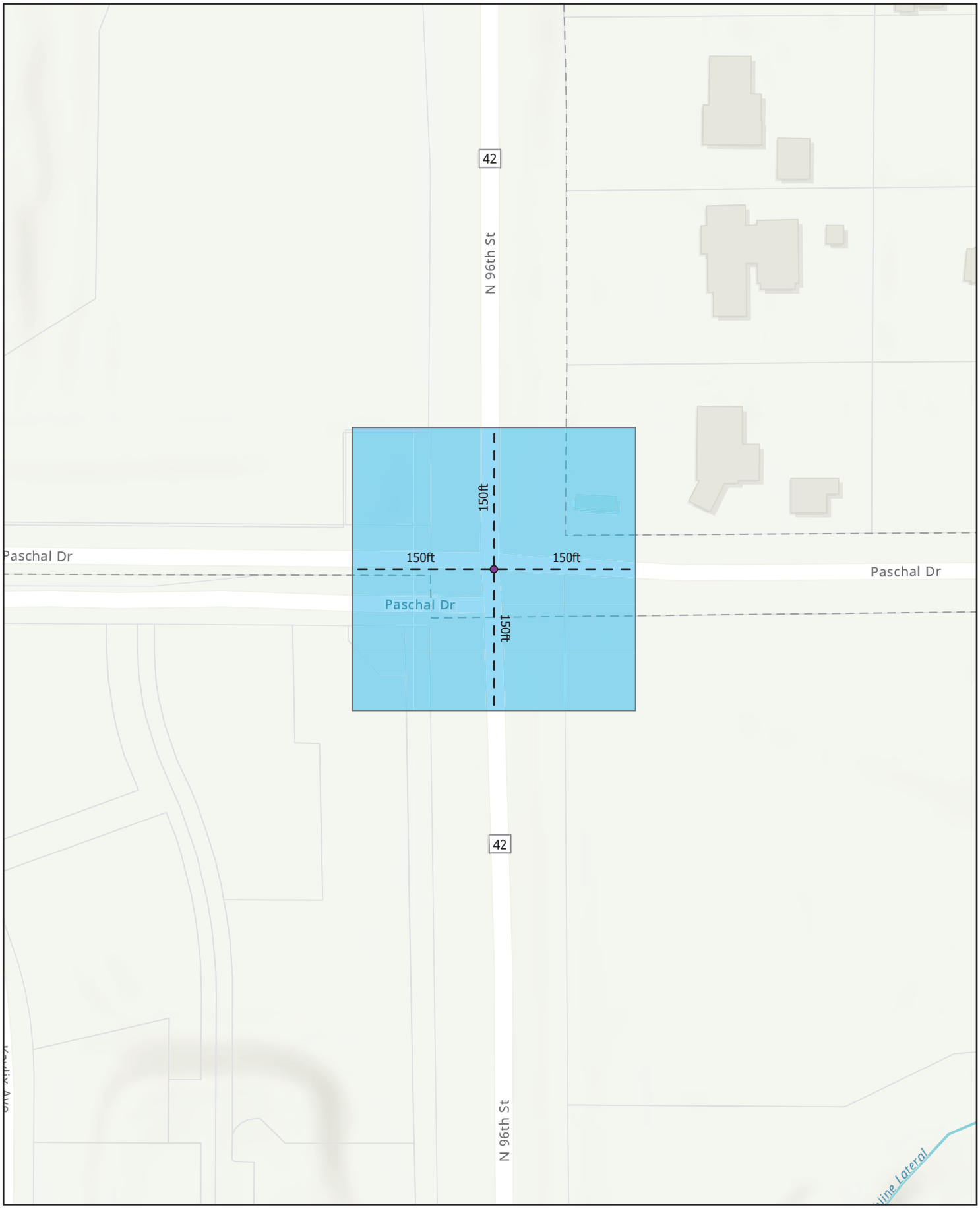

42
N 96th St
150ft
150ft
150ft
Paschal Dr
Paschal Dr
Paschal Dr
42
N 96th St

Exhibit A

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 8A

SUBJECT: **PRESENTATION - ROCKY MOUNTAIN METROPOLITAN AIRPORT ("RMMA")**

DATE: **OCTOBER 21, 2025**

PREPARED BY: **CITY ATTORNEY KATHLEEN KELLY**

PRESENTED BY: **COUNCILMEMBER DIETRICH HOEFNER**
COUNCILMEMBER JUDI KERN
MICHAEL BUREK, LOUISVILLE RESIDENT

SUMMARY:
On November 19, 2024 the City Council designated Councilmembers Dietrich Hoefner and Judi Kern to serve as a "Task Force" to work with City Attorney Kathleen Kelly to gather information and explore strategies to address impacts of the Rocky Mountain Metropolitan Airport ("RMMA") on the City and its residents.

The Task Force has met several times to discuss a two-pronged approach: First, to gather data to evaluate flight patterns and frequencies of take-offs and landings to assess trends; and second, to obtain specialized legal advice regarding the City's ability to affect changes at the airport that could reduce or mitigate the impacts on residents.

Regarding data gathering, Louisville resident Michael Burek has developed software to review flight activity at RMMA using an academic web site to which he also contributes data. The attached RMMA Air Traffic Study reflects how many planes are taking off and landing, at what altitudes they are flying, and how these numbers have changed over time (what is the trend). Mr. Burek provided similar information to the City Council in 2021.

Regarding the City's legal ability to affect changes at the airport that could reduce or mitigate the impacts on residents, earlier this year the City Council retained attorney Margaret Martin to provide specialized legal advice. A memorandum outlining her advice, along with an executive summary, is attached.

Mr. Burek will present his data at the City Council meeting and will be available to answer questions regarding the data.

Mr. Burek's presentation and Ms. Martin's memorandum and executive summary will all be posted on the City's website on a page devoted to RMMA, to enable residents and other interested persons to review

RECOMMENDATION:
City Council to discuss the activities of the Task Force thus far, and provide direction for any next steps. The executive summary from attorney Martin will be posted on the City's web site.

ATTACHMENT(S):
1. RMMA Air Traffic Study by Michael Burek
2. Executive Summary, Aircraft Noise and Aviation Fuel Legal Analysis
3. Memorandum, Aircraft Noise and Aviation Fuel Legal Analysis

THOMPSON BURTON PLLC
ATTORNEYS AT LAW
A PROFESSIONAL LIMITED LIABILITY COMPANY

1801 West End Avenue, Suite 1550
Nashville, TN 37203
www.thompsonburton.com

CITY OF LOUISVILLE
AIRCRAFT NOISE AND AVIATION FUEL LEGAL ANALYSIS
EXECUTIVE SUMMARY

INTRODUCTION

Residents of the City of Louisville (City) have communicated concerns regarding Rocky Mountain Municipal Airport (RMMA) air traffic, particularly regarding aircraft noise and environmental concerns. Aircraft departing and landing at RMMA fly over various points of the City causing noise that disturbs residents and causing environmental concerns from leaded aviation fuel. The City has taken multiple steps to study aircraft noise and engage RMMA to mitigate aircraft noise and environmental concerns, including participating in the now disbanded RMMA Community Roundtable (CNR).

The City requested that we provide an executive summary of legal considerations related to aircraft noise and environmental effects from flights arriving and departing from RMMA. The following executive summary provides an overview of federal aviation law as it relates to aircraft noise and aviation fuel. Following are the key considerations:

- Federal law preempts state and local entities from regulating aircraft operations once those operations are in flight.
- State and local entities that own and operate an airport can take measures in their role as the airport proprietor. These measures are limited, most often involve planning and ensuring compatible land use among other similar measures, and may not restrict access to or use of the airport.
- RMMA has announced they are working to switch to unleaded fuel. Additional federal or state funding may assist RMMA in achieving this transition faster.
- Legal precedent suggests that the City of Louisville would be unlikely to prevail in any attempt to control aircraft operations at RMMA, whether that attempt was of a regulatory nature (such as a City ordinance regarding aircraft activity) or of a legal nature (such as seeking injunctive relief).

FEDERAL LAW CONSIDERATIONS

AIRCRAFT NOISE

The federal government occupies the aviation regulatory space and leaves little room for airport operators and other state and local governments to act. Congress has granted the Federal Aviation Administration exclusive sovereignty over airspace in the U.S. 49 U.S.C. § 40103. The FAA has authority to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise. Federal preemption leaves airport operators little to no room to regulate or influence aircraft noise or the use of aviation fuel.

The U.S. Supreme Court in a 1973 decision, *Burbank v. Lockheed Air Terminal, Inc.*, found that state and local agencies are preempted from enforcing laws that restrict aviation. In *Burbank*, the Court did acknowledge in a footnote that state or local entities acting "as the proprietor of an airport" may regulate aircraft noise if the regulation is nondiscriminatory. Subsequent cases have defined and limited this authority to regulations that are reasonable, non-arbitrary, and non-discriminatory. The U.S. Supreme Court defined an airport's proprietor role in *Griggs v. Allegheny County* as decisions related to "where the airport would be built, what runways it would need, their direction and length, and what land and navigation easement would be needed". Therefore, airport actions to mitigate noise and environmental concerns have

been limited to actions related to their ability to acquire land, ensure compatible land use, and control airport design, scheduling and operations in a reasonable, non-arbitrary, and just way.
Congress has passed multiple pieces of legislation related to airport noise since the 1960s. The legislation has established the FAA's jurisdiction over aircraft noise, required studies to better understand aircraft noise, established noise measurements, created categories of aircraft and restricted the use of noisier aircraft, limited restrictions on certain aircraft, and provided avenues for airport operators to receive funding for noise mitigation measures.

The FAA has historically scrutinized airport restrictions of noise and access challenged through Part 16 complaints. In *Aircraft Owners and Pilots Ass'n v. City of Pompano Beach*, FAA Docket No. 16-04-01, Director's Determination (Dec. 15, 2005) for example, the FAA found the City of Pompano Beach was in violation of its federal obligations because it failed to make the airport accessible to the public on reasonable terms and without unjust discrimination. The City had implemented restrictions on stop-and-go operations, intersection take-offs, touch-and-go operations, taxi-back activity, and prolonged running of aircraft engines. Similarly, the FAA rejected the City of Santa Monica's attempt to restrict the type of aircraft that could land at their facility on preemption grounds and as a violation to their grant assurances. See *City of Santa Monica v. FAA*, 631 F.3d 550 (D.C. Cir. 2011), *aff'g In the Matter of the City of Santa Monica*, FAA Docket No. 16-02-08, Final Agency Decision.

Of note, the City of Superior and Boulder County suit against Jefferson County in the state of Colorado was dismissed on federal preemption grounds on March 28, 2025. See *Town of Superior and Cnty. of Boulder v. Jefferson Cnty.*, No 2024CV30221 (Colo. Dist. Ct. filed Mar. 28, 2025).

AVIATION FUEL

Regarding aviation fuel, the 1970 amendment to the Clean Air Act provides the Environmental Protection Agency (EPA) and FAA the authority to set aircraft emission standards. The act expressly preempts states from imposing stricter emissions standards than the federal government.

The FAA and industry formed the Eliminate Aviation Gasoline Lead Emissions (EAGLE) program in February 2022 to work toward a lead-free aviation system by no later than 2030. In partnership with EAGLE, the FAA is working to obtain the FAA authorization for new fuels through fleet authorization and aircraft certification processes. The fleet authorization process was created in response to the FAA Reauthorization Act of 2018, and will result in qualified unleaded fuel candidates authorized for use in aircraft. Additionally, the FAA will require that specific engine and aircraft models meet specific minimum standards as part of the supplemental type certification (STC) process.

STATE INITIATIVES

In 2024, the State of Colorado enacted the Reduce Aviation Impacts on Communities law that encourages state general aviation airports, like RMMA, to transition to unleaded aviation fuel. CO HB 24-1235. The law provides an income tax credit to aircraft owners that transition to unleaded fuel, guarantees funding for airports to transition to unleaded aviation gasoline, and requires some airports to adopt a plan to phase out the sale of leaded gasoline by 2030. Additionally, the state subjects aviation gas and jet fuel to a tax. Section 39-27-102(1)(a)(IV), C.R.S.

RMMA OPTIONS

A state or local entity acting as an airport operator may carry out its proprietary powers and rights to operate the airport. 49 U.S.C. § 41713(b)(3). These powers include their ability to select an airport site, acquire land, assure compatible land use, and control airport design. FAA Order 5190.6b. RMMA has an opportunity to use these powers as it works to expand the airport's capacity. The airport was recently awarded a grant to construct a new taxiway and refurbish and expand an existing one. In preparing for this

development to expand capacity, RMMA could consider how its design can facilitate noise and environmentally friendly operations. Further, with an understanding that noise will increase with additional operations, RMMA can consider working with local partners to modify compatible land use zoning and potentially acquire land as necessary. However, these are expensive options as the airport and the communities are already established and in place, and communities have multiple residences that are affected.

CITY OF LOUISVILLE OPTIONS

The City has no legal ability to directly regulate RMMA or the operation of aircraft. As addressed earlier in this memo, courts have consistently held that only the airport proprietor has a (limited) ability to regulate aircraft operations. Furthermore, from a practical perspective, even if the City were to decide to implement a noise ordinance attempting to control aircraft within the City's airspace, it would be incredibly unlikely that any pilot or aircraft owner would recognize or accede to the City's attempt to regulate, essentially rendering the regulation ineffective. Finally, it is highly likely that any attempt by the City to regulate aircraft operations would result in prompt challenges to those regulations or ordinances, which could result in costly litigation by the City if it were to defend those regulations.

The strongest action the City can take on behalf of its residents is continued engagement with RMMA and Jefferson County. This may come in the form of direct engagement, participation in meetings, or joining focus groups like the now disbanded CNR.

RESIDENT OPTIONS

Residents of the City of Louisville may consider several options to further engage regarding airport noise. First, residents should use airport noise reporting mechanisms that RMMA and the FAA have established. Reporting noise complaints creates documentation of the issues and may help airport and FAA leaders in developing a solution. Second, residents may consider engaging businesses that use the airport in a grassroots manner. These businesses, like flight schools, rely on the surrounding communities for their businesses to succeed. They may be willing to hear the views of the residents and adjust practices. Third, residents can advocate to their state and federal representatives. Both the state and federal governments have provided funding to help mitigate environmental concerns from aviation fuel. These representatives may be willing to push for more funding or policy changes that may positively affect aircraft noise and environmental effects. Fourth, community members may use FAA's informal or formal complaint procedures if they believe the airport is not in compliance with one of its federal obligations. Title 49 Part 13 and Part 16, respectively, provide for informal and formal complaint processes where an airport is non-compliant with their federal obligations.

THOMPSON BURTON PLLC
ATTORNEYS AT LAW
A PROFESSIONAL LIMITED LIABILITY COMPANY

1801 West End Avenue, Suite 1550
Nashville, TN 37203
www.thompsonburton.com

To: City of Louisville
From: Margaret Martin and Sean Cusson, Thompson Burton PLLC
Date: May 7, 2025
RE: RMMA Aircraft Noise and Pollution Considerations for the City of Louisville

The following report provides considerations for the City of Louisville (City) regarding how aircraft noise and aircraft environmental effects are regulated and options available to the City to address related concerns. Further, we have specified options that the Rocky Mountain Metropolitan Airport (RMMA) may use to mitigate noise and pollution effects. Finally, we have created an executive summary of this report to educate City residents on the legal considerations related to aircraft noise and pollution.

ISSUES

- Whether the City has direct authority to manage aircraft noise and environmental effects caused by flights departing and arriving from RMMA?

- Whether the City can take other measures to affect law and policy related to noise and environmental effects caused by flights departing and arriving from RMMA?

OPPORTUNITIES FOR CITY OF LOUISVILLE ENGAGEMENT

Legal precedent suggests that the City of Louisville would be unlikely to prevail in any attempt to control aircraft operations at RMMA, whether that attempt was of a regulatory nature (such as a City ordinance regarding aircraft activity) or of a legal nature (such as seeking injunctive relief). Other opportunities for City engagement consist of:

- Participating in airport noise groups and studies led by RMMA for their current noise study and any future noise studies and participating in the NEPA process for the proposed RMMA runway expansion.
- Advocating to the State of Colorado in support of additional funding for the transition to unleaded fuel at RMMA.

BACKGROUND

Residents of the City have communicated concerns regarding RMMA air traffic, particularly regarding aircraft noise and environmental concerns from leaded aviation fuel.

The City's southern boundary is approximately one and a half miles to the northwest of RMMA's northwest property boundary.

RMMA is a reliever airport for Denver International Airport, has a large general aviation population, and has multiple flight schools. In 2022, the airport had over 260,000 operations. The Federal Aviation

Administration (FAA) projects the airport will continue to grow through 2050.[1]

In 2019, the City joined the City of Superior's study of aircraft noise resulting from aircraft taking off from and landing at RMMA. The study resulted in recommendations that can be summarized in the following areas: flight procedures, practices, and policies; community outreach and engagement; industry outreach and engagement; land-use planning and development; and regional collaboration.[2]

RMMA published its Fly Quiet Program, voluntary noise abatement procedures, in 2019. The procedures were amended in 2023 to provide recommendations regarding nighttime flight patterns. The Fly Quiet Program's Friendly Flying Measures are a voluntary agreement for aircraft users of RMMA. The airport has published this information on its website and has created a pamphlet to educate aircraft operators. RMMA's Annual Noise Reports from 2019 through 2022 show an increase in noise complaints coinciding with increased operations.[3] The noise reports do not show a positive correlation between the voluntary noise abatement program and a reduction in noise complaints.

The RMMA Community Noise Roundtable (CNR) was formed in 2021 and consisted of eight local government jurisdictions in the surrounding areas. The CNR was created to address community concerns regarding increasing noise from aircraft operations. The CNR worked with a contractor to identify Visual Flight Rules (VFR) to mitigate noise. The contractor identified departure and arrival routes for RMMA aircraft operations to use for travel to and from the typically used flight practice areas in the region. Many of the flight practice areas in the region are located 10 nautical miles north of RMMA and are most often used by operators flying out of RMMA. The contractor collaborated with the FAA in developing these measures to ensure the agency supported the plan. The contractor presented its VFR recommendations to the CNR in March 2024. The final plans were never presented to the FAA and no work was done to implement them.

In April 2024, a majority of the CNR members voted to terminate the Intergovernmental Agreement that formed the CNR. The City supported disbanding the CNR and had planned to rescind its membership if the CNR continued.[4]

In 2023, the Colorado Court of Appeals affirmed a 2022 ruling that RMMA exceeded the proposed future noise contour levels established by the 1988 Master Plan "by the sustained operation of aircraft as shown by the [c]ontours provided in the 2000 Master Plan".[5] This was based off a suit brought by the Rock Creek Master Homeowners Association, Inc. (HOA) against Jefferson County where the HOA claimed that RMMA violated certain avigation easements granted to it that encumbered residential property in the Rock

---

[1] Memorandum from Jason Stoddard and Eugene Reindel, HMMH, to RMMA Community Noise Roundtable (March 7, 2024), https://www.jeffco.us/DocumentCenter/View/42606/HMMH-Project-Recap-and-Presentation?bidId=. (Hereinafter, HMMH Memorandum)

[2] Report from ABXx2.com to Jefferson County (September 2019), https://www.jeffco.us/DocumentCenter/View/27457/SuperiorLouisville-Airport-Noise-Study-Strategy-Recommendations?bidId=.

[3] RMMA published annual noise reports from 2014 through 2022. Annual noise reports for 2023 and 2024 were not found. RMMA noise reports for 2014 through 2022 may be found at: https://www.jeffco.us/Archive.aspx?AMID=44.

[4] Recording of May RMMA Community Noise Roundtable Meetings (May 2, 2024) https://www.jeffco.us/4235/CNR-Meetings.

[5] Staff, *Rock Creek HOA secures a win in lawsuit against RMMA*, Northglenn Thornton Sentinel (May, 19, 2022), https://coloradocommunitymedia.com/2022/05/19/rock-creek-hoa-finds-a-win-in-lawsuit-against-rmma/, (quoting *Rock Creek Master Homeowners Ass'n, Inc. v. Jefferson Cnty*., 22CA0602).

Creek neighborhood.[6] Of the twenty-nine easements the plaintiffs claimed RMMA violated, the court terminated nine of them.

In December 2023, Boulder County homeowners filed a lawsuit in state court against Jefferson County claiming inverse condemnation and seeking compensation for being "substantially deprived of the use and enjoyment of their homes and properties" due to the noise from operations at RMMA.[7] The homeowners asserted three specific claims for relief: (i) RMMA has no right to use the airspace over the Rock Creek neighborhood pursuant to the June 2023 ruling affirming the termination of the nine avigation easements, thus their sustained and increased use thereof constituted a taking of an avigation easement[8]; (ii) RMMA's use of the airspace constituted a taking without just compensation in the form of a physical invasion and occupation of their property due to the lead fuel particulates falling from the aircraft vibrations caused by aircraft noise[9]; and (iii) RMMA's use of the airspace has caused physical harm to the residents due to the constant exposure to noise and to their properties resulting in their diminution in value.[10] As of the date of this memorandum, the Court has not issued a ruling in this case.

In March 2024, the Town of Superior and Boulder County filed a lawsuit in state court against the RMMA Airport Director and Jefferson County seeking injunctive relief to abate the public nuisance caused by piston-engine aircraft performing touch and go operations at RMMA, alleging that unsafe levels of lead particulates and excessive aircraft noise create health and safety hazards for the residents. The Defendants removed the case to federal court and the case was remanded back to state court in October 2024. The Defendants filed a motion to dismiss in December 2024, and on March 28, 2025, the court dismissed the case on federal preemption grounds.[11]

In 2024, the State of Colorado enacted House Bill 1235, seeking to mitigate environmental and noise impacts of aviation for communities in Colorado. The legislation incentivizes the transition from leaded to unleaded gasoline, requires airports to adopt plans to phase out leaded aviation gasoline by 2030, mandates airports create noise abatement plans in coordination with flight schools and pilots, and includes community representation on the Colorado Aeronautical Board.[12]

In October 2023, RMMA announced its intention to transition to unleaded aviation fuel.[13] RMMA is pursuing a Federal Bipartisan Infrastructure Law (BIL) grant for the installation of a new tank for unleaded fuel.[14] RMMA is also working to identify a new fuel supply for the new tank. The airport states it has targeted July 2025 to begin this project dependent upon grant funding.

RMMA has received a grant from the Colorado Department of Transportation of $300,000 to cover the difference in costs per gallon of the current fuel for sale at RMMA and the new fuel provided at the airport. The grant will cover up to $2.00 per gallon difference between RMMA's current fuel and the new fuel. The new fuels under consideration are GAMI 100UL and Swift Fuels UL94 and 100R. The airport is working with the airport users to determine which new fuel best meets their needs.

---

[6] Compl. and Jury Demand at ¶53, *Fuller v. Jefferson County*, No. 2023CV31075 (Colo. Dist. Ct. filed Dec. 21, 2023) (hereinafter *Fuller v. Jefferson County*).
[7] *Id.* at ¶5.
[8] *Fuller v. Jefferson County* at ¶97–101.
[9] *Id.* at ¶112–15.
[10] *Id.* at ¶131.
[11] See *Town of Superior and Cnty. of Boulder v. Jefferson Cnty.*, No 2024CV30221 (Colo. Dist. Ct. filed Mar. 28, 2025)
[12] Colorado-2024-HB1235.
[13] ABC News Denver Coverage of Rocky Mountain Metropolitan Airport Elimination of Leaded Fuel Press Conference (Oct. 4, 2023) https://www.youtube.com/watch?v=6YdtMj2XiPI.
[14] Jefferson County, https://www.jeffco.us/faq.aspx?qid=1436.

RMMA was awarded two federal grants in 2024. One grant of $5,498,829 is for the construction of a new taxiway and to improve an existing taxiway. A second of $1,400,633 is for the RMMA to conduct a noise compatibility study.[15]

On March 25, 2025, a Board of County Commissioners Briefing Paper was released regarding supplemental budget appropriations and focus group assignments for RMMA's Part 150 Noise Study.[16] The briefing paper notes that the airport briefed the Board of County Commissioners on February 25, 2025, regarding the use of focus groups to encourage broad participation from interested community members. The airport has worked with a consultant, created a Part 150 Scope of Work, determined the cost for the change order, and developed a plan to establish each focus group. The airport is planning on having three user groups, including the airport users focus group and community members focus group each with eight members, and a relevant county and city planning and zoning staff focus group with six members.

The City is included in RMMA's Focus Group list of participants but not in the Community Focus Group. The Community Focus Group membership will be determined based on pre-defined zones that the airport believes may be affected by a 65 DNL contour. Community members from the City can request to participate on the focus group. RMMA projects it will solicit focus group participation between April 3 and April 20, 2025 and begin meetings on June 12, 2025.

FEDERAL LAW CONSIDERATIONS

To assess potential actions or remedies available to the City to address aircraft noise and pollution concerns, the City must understand how aircraft and airports are regulated. This includes understanding the rights, responsibilities, and scope of authority of the federal government, airport operators, and surrounding communities.

CONSTITUTIONAL CONSIDERATIONS

SUPREMACY CLAUSE

The federal government occupies the aviation regulatory space and leaves little room for airport operators and other state or local governments to act. Congress has granted the FAA exclusive sovereignty over airspace in the U.S.[17] The FAA has the authority to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise.[18] A state or local entity acting as an airport operator may carry out its proprietary powers and rights to operate the airport.[19]

State and local agencies are preempted from enforcing laws that restrict aviation.[20] In *Burbank v. Lockheed Air Terminal Inc.*, the Supreme Court found that the pervasive nature of federal aircraft noise regulation establishes federal preemption over state and local agencies' police powers.[21] Further, the Supreme Court

---

[15] Press Release from Senator Hickenlooper (January 14, 2025) (available at https://www.hickenlooper.senate.gov/press_releases/hickenlooper-bennet-celebrate-over-20-million-in-additional-federal-funding-to-improve-colorado-airports/).
[16] See Board of County Commissioners Briefing Paper, Topic: Part 150 Noise Study Focus Group Participation (March 25, 2025) available at https://pub-jeffco.escribemeetings.com/filestream.ashx?DocumentId=10504.
[17] 49 U.S.C. § 40103.
[18] 49 U.S.C. §§ 40103, 44502, and 44701- 44735.
[19] 49 U.S.C. § 41713(b)(3)
[20] The Supremacy Clause of the Constitution establishes that state and local laws may not override or interfere with federal law. U.S. Const. art. VI, cl. 2.
[21] *Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 633-34, 93 (1973) (hereinafter *Burbank*) (citing *Rice v. Sante Fe Elevator Corp.*, 31 U.S. 218, 230 (1947), "[t]he scheme of federal regulation may be so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it…" and (citing *Northwest*

pointed to the legislative history where members of Congress argued that state and local entities cannot regulate aircraft noise.[22]

Burbank involved the enforcement of a City Council of Burbank, California, ordinance that prevented certain aircraft from taking off from Hollywood-Burbank Airport between specific times and restricted the airport operator from permitting these aircraft to take off during those periods. Hollywood-Burbank Airport, at the time of the 1973 case, was a privately owned airport.[23] Because the city was not the airport proprietor, the Court upheld the lower courts' decisions that the ordinance was unconstitutional under the Supremacy Clause.[24] On this basis alone a court will likely deem any City of Louisville regulation of aircraft to reduce noise or environmental concerns within its city boundaries preempted by federal law, since the City of Louisville is not the airport proprietor.

The Court in *Burbank* acknowledged in a footnote that state or local entities acting "as the proprietor of an airport" may regulate aircraft noise if the regulation is nondiscriminatory.[25] Subsequent cases have established that airport operator regulations "must be reasonable, non-arbitrary, and non-discriminatory".[26] An airport operator's role as a proprietor provides authorities related to their duties as a planner, developer, and property manager. In *Griggs v. Allegheny County*, the Supreme Court explored the authorities of an airport operator where the Court reviewed an unconstitutional taking claim related to aircraft noise.[27] The Court found the airport authority responsible for the taking because they decided "where the airport would be built, what runways it would need, their direction and length, and what land and navigation easements would be needed".[28]

FAA guidance acknowledges that airport operator powers and authority to control aircraft noise include "the power to select an airport site, acquire land, assure compatible land use, and control airport design, scheduling and operations" while noting the limitations of unreasonableness, arbitrariness, unjust discrimination, and interstate commerce.[29] However, federal preemption has applied where airports have tried to restrict land use runways, taxiways, and runway safety areas.[30] Therefore, RMMA actions that restrict access to or use of existing runways will potentially be preempted if challenged by airport users or the FAA.

RMMA, as the proprietor of the airport, can consider measures affecting aircraft noise that are consistent with its duties as the planner, developer, and property manager. Some measures may help reduce noise within the immediate vicinity of the airport, such as putting up sound barriers or restricting engine-run-up practices in certain areas. Off-airport measure often involve more expensive solutions such as acquiring land, ensuring compatible land use, or installing sound proofing at affected buildings. Often, as is discussed further below, the FAA will find any further measures to restrict aircraft activity unreasonable, arbitrary, or unjustly discriminatory.

Airlines, Inc. v. Minnesota, 322 U.S. 292, 303 (1944), in finding "Congress has recognized the national responsibility for regulating air commerce" the Court stated "[f]ederal control is intensive and exclusive.").

[22] *Burbank*. at 634-37.

[23] *Burbank*, at 651.

[24] *Id*. at 626.

[25] *Id*. at 635 Fn. 14.

[26] *British Airways Board v. The Port Authority of New York and New Jersey (Concorde I)*, 558 F.2d 75, 82 (2d Cir. 1977).

[27] See *Griggs v. Allegheny Cnty.*, 369 U.S. 84, 89, 82 S. Ct. 531, 534 (1962).

[28] *Id*. at 89.

[29] FAA Order 5190.6B

[30] *Burbank-Glendale-Pasadena Airport Auth. v. City of Los Angeles*, 979 F.2d 1338 (9th Cir. 1992), and *Tweed-New Haven Airport Auth. v. Tong*, 930 F.3d 65 (2d Cir. 2019).

COMMERCE CLAUSE

The Commerce Clause provides Congress the power to regulate matters that effect interstate commerce while limiting state and local regulatory authority.[31] State or local regulation cannot discriminate against or unduly burden interstate commerce.[32] State or local regulations must be reasonable, even-handed in achieving a legitimate public interest, and impose incidental effects on interstate commerce.[33] In *NBAA v. Naples*, the court found the dormant commerce clause was not implicated where the city acted within its proprietor's exception under 49 U.S.C. § 41713(b)(3) and followed the processes established by the Airport Noise and Capacity Act of 1990 (ANCA), discussed further below, to ban Stage 2 aircraft.[34]

In developing restrictions that do not restrict access or unjustly discriminate, RMMA must also consider effects of the restrictions on interstate commerce based on the existing or potential operations at RMMA. RMMA does have interstate operations, and while it does not appear that those interstate operations are the primary source of noise complaints, any airport restriction or regulation may be subject to a commerce clause analysis if challenged.

AIRPORT NOISE CONGRESSIONAL AND REGULATORY ACTION

Congress has passed multiple pieces of legislation related to airport noise since the 1960s. The legislation has established the FAA's jurisdiction over aircraft noise, required studies to better understand aircraft noise, established noise measurements, created categories of aircraft and restricted the use of noisier aircraft, limited restrictions on certain aircraft, and provided avenues for airport operators to receive funding for noise mitigation measures.[35] For our discussion here, we will address legislative and regulatory activities related to grant assurances, measuring airport noise and the airport noise compatibility program, the national noise program and review of airport programs, and the most recent requirement of the FAA to study aircraft noise and update regulations.

GRANT ASSURANCES

An airport operator that accepts federal funding must comply with federal Grant Assurances pertaining to the operation and use of their airport.[36] Grant Assurances include requirements to comply with the Airport Noise Compatibility Planning regulations in Part 150, further discussed later in this report, and Grant Assurance 22, Economic Nondiscrimination. Grant Assurance 22, among other obligations, requires that the airport remain available for public use on reasonable conditions and without unjust discrimination.[37] The majority of the Grant Assurances remain in effect through the useful life of the facility improved by the project. This timeframe is limited to 20 years for public owned airports, unless the specific grant or Grant Assurance specifies otherwise.[38] There is no limit on the duration of effect of the Grant Assurances with respect to real property acquired with federal funds.

The Grant Assurance process provides the FAA oversight authority over airport grant recipients as they try

---

[31] *Fulton Corp. v. Faulkner*, 516 U.S. 325, 330 (1996).
[32] *General Motors Corp. v. Tracy*, 519 U.S. 278, (1997).
[33] *Nat'l Bus. Aviation Ass'n v. City of Naples Airport Auth.*, 162 F. Supp. 2d 1343, 1349 (M.D. Fla. 2001) (citing *Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970)).
[34] *Id*. at 1354.
[35] ACRP Report 15, *Aircraft Noise: A Toolkit for Managing Community Expectations*, provides a comprehensive list of legislation and regulations related to aircraft and airport noise. Woodward, et al., ACRP Report 15, *Aircraft Noise: A Toolkit for Managing Community Expectations*, 2009, ch. 6. Transportation Research Board.
[36] 49 U.S.C. §§ 47101 – 47123 (conditioning the receipt of FAA grant funding on compliance with Grant Assurances.).
[37] 49 U.S.C. § 47107(a)(1) *et seq*.
[38] Sean Cusson and Margaret Martin, *Accommodating Federal Agencies at Airports and Related Contractual Concerns*, TRANSPORTATION RESEARCH BOARD AIRPORT COOPERATIVE RESEARCH PROGRAM (2025).

to implement or enforce airport noise restrictions. The FAA, through Part 150, reviews proposed noise restrictions and, through 49 C.F.R. Parts 13 and 16, reviews complaints related to federal obligation and condition compliance to include availability for public use and without unjust discrimination.

Title 49 Parts 13 and 16 provide informal and formal administrative compliance review processes for the FAA to investigate and remediate claims of airport obligation noncompliance. Anyone can file a Part 13 complaint regarding an alleged airport violation of its statutory, safety, and regulatory obligations. The FAA will investigate the Part 13 complaint locally and work with the airport on voluntary compliance solutions. If the airport fails to comply, the FAA will initiate an enforcement action.

Part 16 enumerates the FAA's formal complaint process. A party filing a Part 16 complaint must be substantially affected by the airport's alleged noncompliance with a federal obligation. Reviews of the complaint will be completed by FAA Headquarters. The FAA may issue an order that terminates eligibility for grants, suspends payment of grant funding, withholds approval of any passenger facility charge application, issue a cease-and-desist order, direct the refunding of unlawfully collected fees, and other compliance orders.[39]

The FAA has historically scrutinized airport restrictions of noise and access challenged through Part 16 complaints. In *Aircraft Owners and Pilots Ass'n v. City of Pompano Beach*, FAA Docket No. 16-04-01, Director's Determination (Dec. 15, 2005) for example, the FAA found the City of Pompano Beach was in violation of its federal obligations because it failed to make the airport accessible to the public on reasonable terms and without unjust discrimination. The City had implemented restrictions on stop-and-go operations, intersection take-offs, touch-and-go operations, taxi-back activity, and prolonged running of aircraft engines.[40] Similarly, the FAA rejected the City of Santa Monica's attempt to restrict the type of aircraft that could land at their facility on preemption grounds and as a violation to their grant assurances.[41] Additionally, the FAA, through the discretionary nature of federal funding, can ensure compliance with Grant Assurances by withholding additional federal funding for airports that the FAA believes are not complying with the grant assurances. Through these processes the FAA has limited the types of restrictions an airport can implement to address aircraft noise.

The RMMA most recently reported receiving two federal grants in 2024. One grant for $5,498,829 to construct a new taxiway and improve an existing taxiway. A second of $1,400,633 is for the RMMA to conduct a noise compatibility study. The noise compatibility study is discussed further below.

MEASURING AIRPORT NOISE AND AIRPORT NOISE COMPATIBILITY PROGRAM

The 1979 Aviation Safety and Noise Abatement Act (ANSA) and subsequent FAA rulemaking established the noise measurement level and voluntary process for an airport operator to evaluate noise effects from operations at their airport.[42] ANSA required the FAA to establish a single system of measuring noise and determining noise exposure resulting from airport operations, the noise and noise exposure impacts on individuals, and identify land uses that are incompatible with various noise exposures.[43] The FAA promulgated 49 C.F.R. Part 150 to implement ANSA.[44]

---

[39] 14 C.F.R. Part 16.
[40] *Aircraft Owners and Pilots Ass'n v. City of Pompano Beach*, FAA Docket No. 16-04-01, Director's Determination (Dec. 15, 2005).
[41] See *City of Santa Monica v. FAA*, 631 F.3d 550 (D.C. Cir. 2011), *aff'g In the Matter of the City of Santa Monica*, FAA Docket No. 16-02-08, Final Agency Decision.
[42] 49 U.S.C. § 2101 et seq.
[43] *Id*.
[44] 49 FR 49260, December 18, 1984 (amending and making final the interim regulations promulgated January 19, 1981 (46 FR 8316, January 26, 1981).

An airport operator can voluntarily participate in the FAA's airport noise compatibility program under Part 150. The regulation establishes standards for an airport operator to document noise exposure and identify mitigation measures to reduce or prevent incompatible land uses. Part 150 guides an airport participant in analyzing noise exposure. In reviewing an airports compliance with Part 150 the FAA "must evaluate whether the restriction places an undue burden on interstate or foreign commerce or the national aviation system, and whether the restriction affects the sponsor's ability to meet its federal obligations".[45]

Part 150 creates the noise metric known as the day-night average sound level (DNL) that measures noise levels over a 24-hour period. The rule establishes 65 decibels (dB) as the "significance threshold" of noise effects on the ground and to determine whether residential land uses are compatible with operations at a nearby airport. The DNL adds a 10 dB downward adjustment for evening hours to accommodate the more sensitive time for loud noise.

Airports that choose to participate in the Part 150 noise compatibility program will need to first submit a noise exposure map and a subsequent noise exposure plan. The noise exposure map depicts current and projected noise exposures at the airport and in surrounding areas using noise "contours", like a boundary. For example, a map may depict noise contours at the 65 dB, 70 dB, and 75 dB levels at the airport and at other off-airport noise-impacted areas. The map is then used to identify areas of incompatible land use and is used to identify and propose noise mitigation projects for FAA review and approval.[46]

The FAA requires airport operators working on a noise compatibility program to consider operational and land-use mitigation measures. Operational mitigation measures can include voluntary recommendations directing air traffic over less populated areas and reducing aircraft engine run-up noise. Land-use mitigation measures may include acquiring land, constructing noise barriers, or providing insulation.[47] These mitigation measures are not a required result of a Part 150 study, and may not be approved by the FAA. Further, there is very little available federal funding for mitigation measures such as land acquisition, construction of noise barriers, or soundproofing.

RMMA has started a Part 150 noise compatibility study as part of its 2024 grant to create a noise compatibility plan. The City should engage with RMMA as it creates its noise exposure map and analyzes noise impacts to ensure the City's issues are properly documented and considered in the Part 150 process. Additionally, the City should consider participating on the Planner Focus Group and having a representative appointed to the Community Focus Group.

NATIONAL NOISE PROGRAM AND REVIEW OF AIRPORT RESTRICTIONS

Congress passed ANCA in 1990 establishing a national program to review airport noise and access restrictions.[48] The law codifies the relationship between noise management and airport capacity and the challenge of uncoordinated and inconsistent restrictions across the air transportation system in requiring the management of noise policy at a national level.[49] ANCA provides state and local airport proprietors a carve out from federal Supremacy over airspace regulation.

The FAA implemented ANCA through 14 C.F.R. Part 161, Notice and Approval of Airport Noise Access Restrictions. Part 161 requires that review and approval procedures be completed before an airport may

[45] FAA Order 5190.6b at 13.6.
[46] Rachel Tang, *Federal Airport Noise Regulations and Program*, CONGRESSIONAL RESEARCH SERVICE (Sept. 27, 2021) (Hereinafter CRS Airport Noise).
[47] *Id*.
[48] The law also phases out of certain larger Stage 2 aircraft and grandfathered in certain regulations of Stage 2 and Stage 3 aircraft in place before October 1, 1990. 49 U.S.C. 47521.
[49] 49 U.S.C 47521.

impose restrictions on Stage 2 or Stage 3 aircraft.[50] The FAA recommends using Part 150 studies to fulfill the notice and comment requirements of Part 161.[51]

Restrictions on Stage 3 aircraft require an agreement by the airport and all airport users or notice and comment processes and an analysis of the restrictions by the FAA.[52] The FAA will consider environmental impacts and compliance with grant assurances and Surplus Property Act obligations.[53] The FAA's review will analyze the following six statutory criteria:[54]

- The proposed restriction is reasonable, nonarbitrary, and nondiscriminatory.
- The proposed restriction does not create an undue burden on interstate or foreign commerce.
- The proposed restriction maintains safe and efficient use of navigable airspace.
- The proposed restriction does not conflict with any existing federal statute or regulation.
- The applicant has provided adequate opportunity for public comment on the proposed restriction.
- The proposed restriction does not create an undue burden on the national aviation system.

Airports have not been successful in receiving FAA approval for ANCA Stage 3 restrictions.[55] The federal government has preemption, and the FAA uses its grant assurance and enforcement authorities to protect its interest in regulating the national airspace.

Naples Airport Authority is an outlier in successfully challenging an FAA ruling that their ban on Stage 2 aircraft was unreasonable and contrary to their grant assurance obligations.[56] The DC Circuit Court of Appeals found that the airport justified its decision to ban Stage 2 aircraft in demonstrating that the sound environment in the community supports the decision. Prior to implementing the ban, the airport authority conducted a noise study pursuant to ANCA that found "approximately 1,400 residents were exposed to noise levels in excess of DNL 60dB and that a restriction on all Stage 2 aircraft would affect only one percent of aircraft operations at the airport, while considerably reducing the number of people exposed to significant noise levels."[57] The record that the airport compiled in justifying the ban included multiple items that established Naples was a quiet community where noise in excess of DNL 60 dB was excessive. These justifications included: the City of Naples adopting an ordinance forbidding all noise in excess of DNL 60 dB; that the community was a quiet retirement community; and that the enjoyment of outdoor living was important for the community; and that aircraft noise was the leading cause of noise complaints in Naples.[58] If, as the airport operators, RMMA and Jefferson County, not Louisville, were interested in trying to identify reasonable restrictions regarding the operation of Stage 3 aircraft pursuant to ANCA, the City could consider facilitating the collection and development of documentation justifying the restrictions, as was done in Naples.

FAA REAUTHORIZATION

Congress passed the FAA Reauthorization Act of 2024 on May 16, 2024, and included multiple provisions relevant to airport noise. The legislation calls for the FAA to take multiple actions related to aviation noise,

[50] Of note, Stage 2 aircraft have not been permitted in the U.S. airspace since 2015. See 14 C.F.R. Part 91, and Notice, *Stage 3 Compliance for Jets Weighing 75,000 Pounds or Less After December 31, 2015*, 80 Fed. Reg. 42,021 (July 16, 2015).
[51] FAA Order 5180.6B at 13.5.
[52] *Id*. at 13.14.
[53] FAA Order 5180.6B at 13.14.
[54] *Id*.
[55] See Final Decision, FAA Determination Pursuant to Part 161 – LAWA Application dated January 12, 2013 (Supplemented May 14, 2014) (Nov. 7, 2014) (rejecting application).
[56] *City of Naples Airport Auth. V. FAA*, 366 U.S. App. D.C. 161, 165, 409 F.3d 431, 435 (2005).
[57] *Id*.
[58] *Id*.

three of which are relevant here. First, the act calls on the FAA to review and update Part 150 and Part 161 within one year after passage of the legislation. Congress calls on the FAA to "clarify existing and future noise policies and standards and seek feedback from airports, airport users, and individuals living in the vicinity of airports and in airport adjacent communities".[59]
Second, the legislation specifies actions the FAA shall consider in revising flight procedures to reduce the effects of undesirable aircraft noise. The congressionally recommended actions for the FAA include:

- Implement flight procedures that can mitigate the impact of aircraft noise, based on a consensus community recommendation.
- Work with airport sponsors and potentially impacted neighboring communities in establishing or modifying aircraft arrival and departure routes.
- In collaboration with local governments, discourage local encroachments of residential or other buildings near airports that could create future aircraft noise complaints or impact airport operations or aviation safety.[60]

Third, the legislation calls on the FAA to establish an Aircraft Noise Advisory Committee. The advisory committee will advise the FAA Administrator on issues facing the aviation community related to aircraft noise exposure and existing FAA noise policies and regulations. The membership of the committee shall include representatives of airport-adjacent communities from geographically diverse regions.[61]

As of this writing, the FAA has not published any information showing their work to implement these requirements.

The City and the larger community and community-members can consider federal advocacy efforts to ensure the FAA acts on these requirements. These advocacy efforts can include working with your congressional delegation, reaching out directly to the FAA, engaging with industry groups, building partnership, or grassroots efforts.

AVIATION FUEL CONGRESSIONAL AND REGULATORY ACTION

AIRCRAFT EMISSIONS

The 1970 amendment to the Clean Air Act provides the Environmental Protection Agency (EPA) and FAA the authority to set aircraft emission standards.[62] The act expressly preempts states from imposing or enforcing stricter emissions standards than the federal government.[63] In 2023, the EPA took the first step in regulating leaded avgas by making a finding of endangerment from aviation fuel lead emissions.[64] The EPA finalized the Finding in October 2023 which encompasses both endangerment and cause or contribute findings.[65] Of note, no standards or further restrictions on the use, sale, distribution, and general availability of leaded fuel have been promulgated to date.

---

[59] Public Law 118-63, §786.
[60] *Id*. at 787.
[61] *Id*. at 797.
[62] 42 U.S.C. §§ 7571(a)(2) and 7572(a).
[63] "No State or political subdivision thereof may adopt or attempt to enforce any standard respecting emissions of any air pollutant from any aircraft or engine thereof unless such standard is identical to a standard applicable to such aircraft under this part." 42 U.S.C. § 7573.
[64] 88 Fed. Reg. 72372 (Oct. 20, 2023).
[65] 88 FR 72372 (Vol. 88 No. 202

Separately, the FAA and industry formed the Eliminate Aviation Gasoline Lead Emissions (EAGLE) program in February 2022 to work toward a lead-free aviation system by no later than 2030.[66] EAGLE membership is made up of representatives from the FAA, fuel producers and distributers, airport operators, engine and aircraft manufacturers, communities that support general aviation airports, and environmental stakeholders.[67] In partnership with EAGLE, the FAA is working to obtain FAA authorization for new fuels through fleet authorization and aircraft certification processes. The fleet authorization process was created in response to the FAA Reauthorization Act of 2018, and will result in qualified unleaded fuel candidates authorized for use in aircraft.[68] The FAA Reauthorization Act of 2018 requires the FAA to follow specific procedures and make certain findings to approve the use of unleaded avgas. Additionally, the FAA will require that specific engine and aircraft models meet specific minimum standards as part of the supplemental type certification (STC) process.[69]

Although, in the last two FAA Reauthorizations, Congress has also restricted airports' ability to act regarding aviation fuel. In the 2018 FAA Reauthorization, Congress "restricted the ability of airport proprietors to limit the sale and use of aviation fuel."[70] The 2024 FAA Reauthorization "prohibits grant-obligated airports . . . from limiting the sale or use of leaded aviation fuel". P.L. 118-63 (May 16, 2024). Further, the FAA has stated that a "restriction on the sale or use of [leaded avgas] at a federally obligated airport is inconsistent with Grant Assurance 22".[71]

The City of Louisville may consider strategies to assist RMMA in facilitating the adoption of new fuel standards. This may involve advocating for additional federal or state funding. Alternatively, the City may consider supporting the RMMA financially to ensure they acquire and install the new fuel tank.

FAA PART 16 DETERMINATION REGARDING AVGAS

On March 24, 2025, the FAA issued a highly anticipated determination regarding a complaint filed under 14 C.F.R. Part 16 in response to a California County's attempt to ban the sale of avgas at its airports.[72] The FAA found that a countywide ban on the acquisition, storage, and sale of 100LL avgas at two of the County's federally obligated airports violated the County's federal grant obligations. Specifically, the FAA held that: (i) "establishing the exclusive right to sell one or more types of fuel" does not give a federally obligated airport "the right to prohibit the sale or use of all other fuels by commercial service providers" and that "[a]ny attempt to establish such a prohibition is an unreasonable and unjustly discriminatory restriction" in violation of Grant Assurance 22(a)[73]; (ii) the implementation of unreasonable rules, such as restrictive fueling permits, that effectively prevent a user from "self-fueling with the fuel(s) of its preference

[66] FAA, Building an Unleaded Future by 2023, https://www.faa.gov/unleaded.
[67] United States Environmental Protection Agency, *Regulatory Announcement, EPA Finalizes Endangerment Finding for Lead Emissions from Aircraft that Operate on Leaded Fuel*, https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1018JNL.pdf.
[68] PS-AIR-600-20-01, Policy Statement, Enabling the Use of Unleaded Aviation Gasoline in Piston Engine Aircraft and Aircraft Engines through the Piston Aviation Fuels Initiative (PAFI) Fleet Authorization Process. March 20, 2023.
[69] Section 565 of the FAA Reauthorization Act of 2018, allows for the use of an unleaded aviation gasoline if the FAA Administrator "adopts a process (other than the traditional means of certification) to allow eligible aircraft engines to operate using a qualified replacement unleaded gasoline in a manner that ensures safety."
[70] Public Law 115-254, at § 565.
[71] U.S. Federal Aviation Administration, *FAA Unleaded Development FAQs and Definitions*, https://www.faa.gov/sites/faa.gov/files/FAQs_FAA_UL_Fuel_Development.pdf.
[72] *Aircraft Owners and Pilots Association v. County of Santa Clara*, FAA Docket No. 16-22-08, Director's Determination (Nov. 9, 2023).
[73] *Id.* at 14.

from a source of its choosing" is a violation of Grant Assurance 22(f)[74]; and (iii) enacting prohibitions against leaded fuels creates an exclusive right by favoring aircraft that can operate on unleaded fuel to the detriment of those that cannot and by favoring manufacturers and suppliers of unleaded fuel to the detriment of those that manufacture or supply leaded fuel, which qualifies as an "unreasonable restriction on legitimate aeronautical activities . . . in violation of Grant Assurance 23."[75] This decision demonstrates that airports that attempt to ban leaded fuel before a viable alternative is available do so at the risk of facing FAA enforcement actions.

Any action by RMMA to restrict the sale of leaded aviation fuel at its airport may subject them to FAA scrutiny. The RMMA Airport Director told a reporter at the October 2023 press conference that RMMA would keep a small amount of leaded fuel on hand to remain in compliance with the federal requirement.[76] As RMMA continues to take steps to introduce unleaded aviation fuels at its airfield it may consider how those steps affect the ability of aviation fuel companies to service the airport.

COLORADO STATE REGULATION OF AVIATION FUEL

In 2024, the State of Colorado enacted the Reduce Aviation Impacts on Communities law that encourages state general aviation airports, like RMMA, to transition to unleaded aviation fuel.[77] The law provides an income tax credit to aircraft owners that transition to unleaded fuel, guarantees funding for airports to transition to unleaded aviation gasoline, and requires some airports to adopt a plan to phase out the sale of leaded gasoline by 2030.[78] Additionally, the state subjects aviation gas and jet fuel to a tax.[79]

RMMA announced in October 2023 that it would phase out leaded fuel at the airport.[80] RMMA has procured a unleaded fuel truck, has applied for a federal grant for a new unleaded tank, and is working with airport users to identify appropriate unleaded fuels.[81] RMMA and the City can continue to work with state officials to identify opportunities to assist and encourage the adoption of unleaded aviation fuel at RMMA.

POTENTIAL RMMA ACTIONS

AIRCRAFT NOISE

Airport operators have some authority to control the effects of aircraft noise tied to their role as a proprietor. These powers include their ability to select an airport site, acquire land, assure compatible land use, and control airport design.[82]

RMMA has an opportunity to use these powers as it works to expand the airport's capacity. The airport was recently awarded a grant to construct a new taxiway and refurbish and expand an existing one. In preparing for this development to expand capacity, RMMA could consider how its design can facilitate noise friendly and environmentally friendly operations.

---

[74] *Id.* at 20.
[75] *Id.* at 24–25.
[76] *Rocky Mountain Metropolitan Airport announces elimination of leaded fuel*, ABC NEWS DENVER (October 4, 2023), https://www.youtube.com/watch?v=8cp1fMqtHHM.
[77] CO HB 24-1235.
[78] *Id.*
[79] Section 39-27-102 (1)(a)(IV), C.R.S.
[80] John Aguilar, *Jefferson County airport announces full shift to unleaded fuel by 2027 – reducing contamination of neighborhoods*, THE DENVER POST (Oct.4, 2023), https://www.denverpost.com/2023/10/04/rocky-mountain-airport-lead-gasoline-noise/.
[81] RMMA FREQUENTLY ASKED QUESTIONS, [https://www.jeffco.us/FAQ.aspx?QID=1435] (last visited May 6, 2025).
[82] FAA Order 5190.6b.

Further, with an understanding that noise will increase with additional operations, RMMA can consider working with local partners to modify compatible land use zoning and potentially acquire land as necessary. However, these are expensive options as the airport and the communities are already established and in place, and communities have multiple residences that are affected.

RMMA's plans for a taxiway extension will trigger a National Environmental Policy Act (NEPA) review because it is both a federally funded project and requires a change to the RMMA airport layout plan. The NEPA review for these projects will include an evaluation of potential noise and air quality effects, and may provide an avenue for City engagement if a public comment period is required.

AVIATION FUEL

RMMA has received state funding for their transition to unleaded aviation fuel and had requested federal funding for the deployment of a new fuel tank for unleaded fuel. RMMA can work with the State of Colorado to secure additional funding to support this transition.

CITY OPTIONS

ADVOCATE

The City has multiple advocacy options that may produce positive outcomes for its residents affected by RMMA airport noise and environmental effects. These include engaging RMMA directly, working with other city or county governments, engaging state and federal partners, and educating City residents.

LITIGATE

The City may choose to litigate against Jefferson County and RMMA for various state law claims. To date, efforts to sue the county and airport regarding airport noise and environmental effects have proven unsuccessful. The City of Superior and Boulder County suit against Jefferson County in the state of Colorado was dismissed on federal preemption grounds on March 28, 2025. See *Town of Superior and Cnty. of Boulder v. Jefferson Cnty.*, No 2024CV30221 (Colo. Dist. Ct. filed Mar. 28, 2025). The Homeowners Association case is still outstanding.

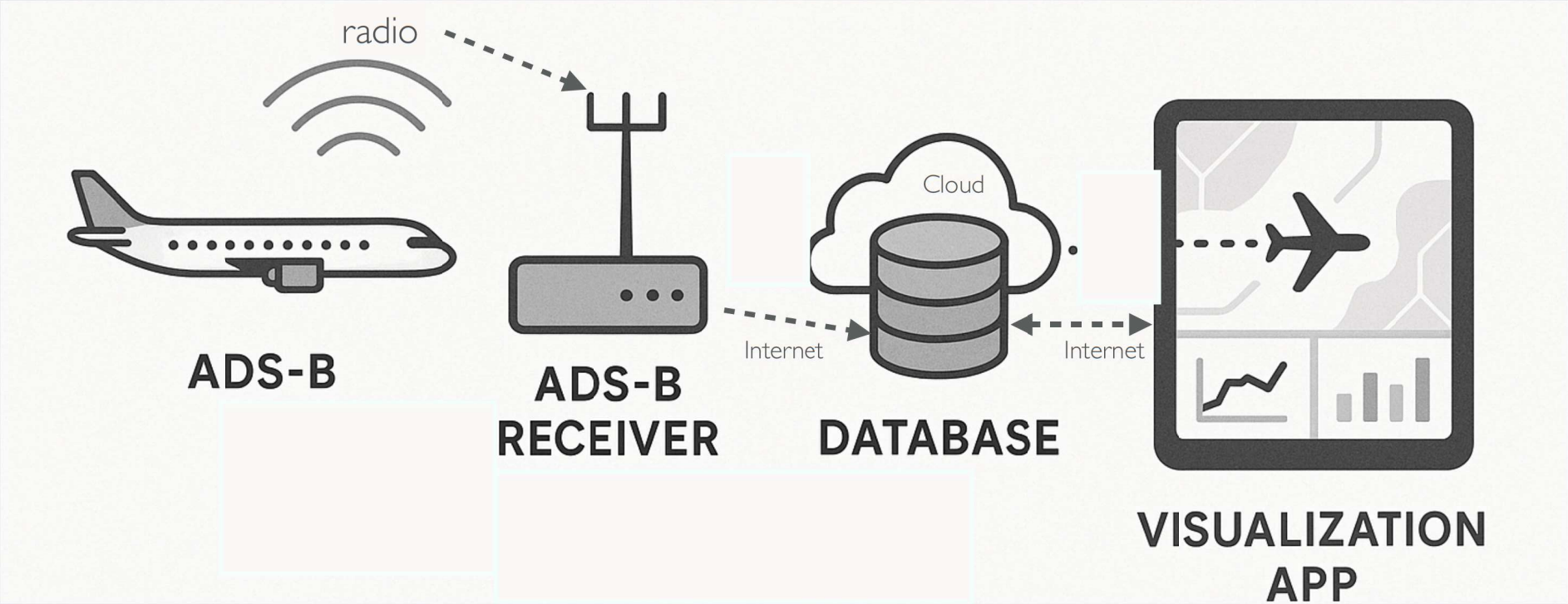
ENFORCE

The City has no legal ability to directly regulate RMMA or the operation of aircraft. As addressed earlier in this memo, courts have consistently held that only the airport proprietor has a (limited) ability to regulate aircraft operations. Furthermore, from a practical perspective, even if the City were to decide to implement a noise ordinance attempting to control aircraft within the City's airspace, it would be incredibly unlikely that any pilot or aircraft owner would recognize or accede to the City's attempt to regulate, essentially rendering the regulation ineffective. Finally, it is highly likely that any attempt by the City to regulate aircraft operations would result in prompt challenges to those regulations or ordinances, which could result in costly litigation by the City if it were to defend those regulations.

RMMA AIR TRAFFIC STUDY

Presented 10/21/25

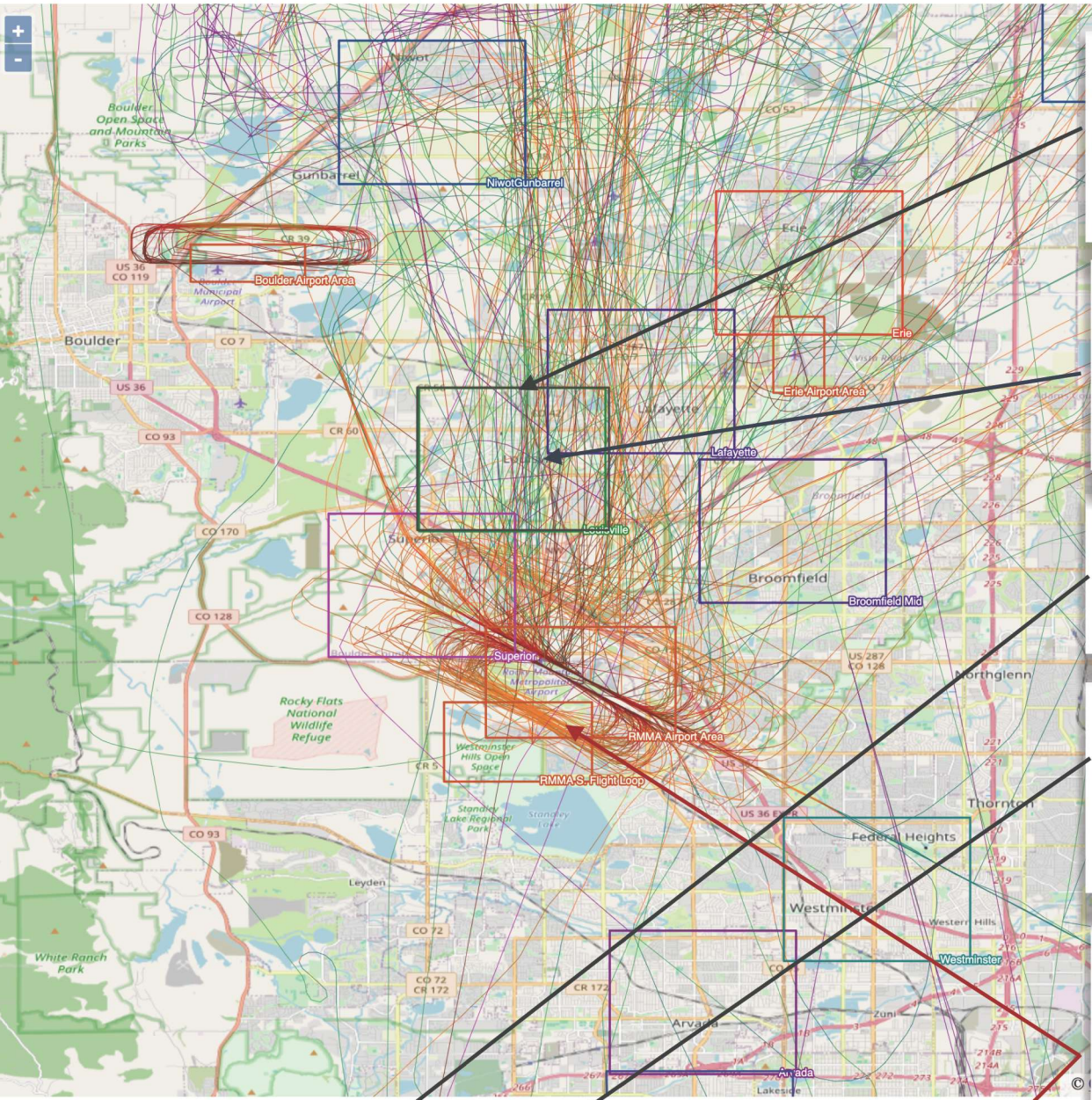
ADS-B data collection



ADS-B records are transmitted once per second from all aircraft to any listening receiver

For the front range area, about 500,000 ADS-B records per day

- `time` - Unix timestamp: The time at which the state vector was valid.
- `icao24` - The unique ICAO 24-bit transponder ID assigned to the aircraft.
- `lat`, `lon` - Latitude and longitude (WGS84 format).
- `velocity` - Speed over ground in meters per second.
- `heading` - The direction of movement in degrees from geographic north.
- `vertrate` - Vertical speed in meters per second (positive = ascending, negative = descending).
- `callsign` - The flight identifier broadcast by the aircraft.
- `baroaltitude` - Barometric altitude measured by the aircraft.
- `geoaltitude` - Geometric altitude determined by GNSS (GPS).



RMMA Airport Area | start time 12:00am | start date 05/01/2025 | 9000ft | 1000x1200
Draw Sample Area | end time 12:00pm | end date 05/01/2025 | 5000ft | submit

aircraft	local	arrivals	departures		
fixed wing	☑	☑	☑	refresh	
jet	☑	☑	☑	clear	
rotorcraft	☐	☐	☐	ff	0

4000-5850	☑		6700-7000	☑	
5850-6100	☑		7000-8000	☑	set
6100-6350	☑		8000-9000	☑	clear
6350-6600	☑		9000-10000	☑	
6600-6700	☑		10000-100000	☑	

flights	overpasses	altitude	aircraft
47	80	0	

Selection Area: One of the 5km square areas shown on the map, Louisville is always selected for this presentation

Traffic density: The more opaque the color, the more flights passed over a particular place on the map

Flights: count of aircraft within the Louisville in the selection area (per day)

Overpasses: A count each time a flight passes over Louisville in the selection area

Color: The color on the map indicates the GPS aircraft altitude corresponding to colors in the legend that are checked

Flights counted: The flights counted are either starting from, or ending in RMMA, or both. Other traffic is not counted.

The FAA defines minimum safe altitudes in 14 CFR § 91.119:

Minimum Altitudes for VFR Flights:

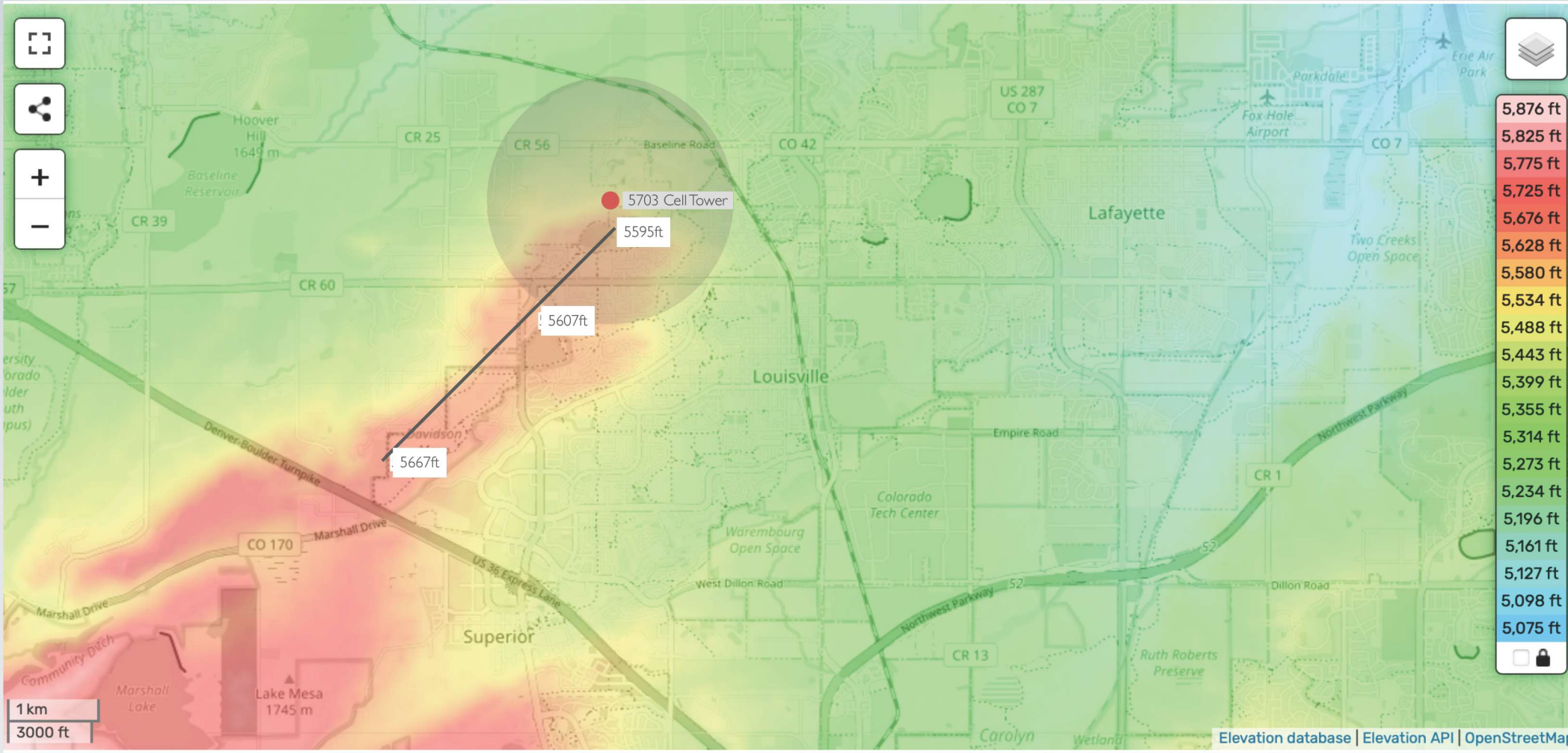
- Anywhere:
  - An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface

- Over congested areas (**cities**, towns, or settlements):
  - **1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet.**

- Over other than congested areas:
  - At least 500 feet above the surface, except over open water or sparsely populated areas.

- Over open water or sparsely populated areas:
  - Aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

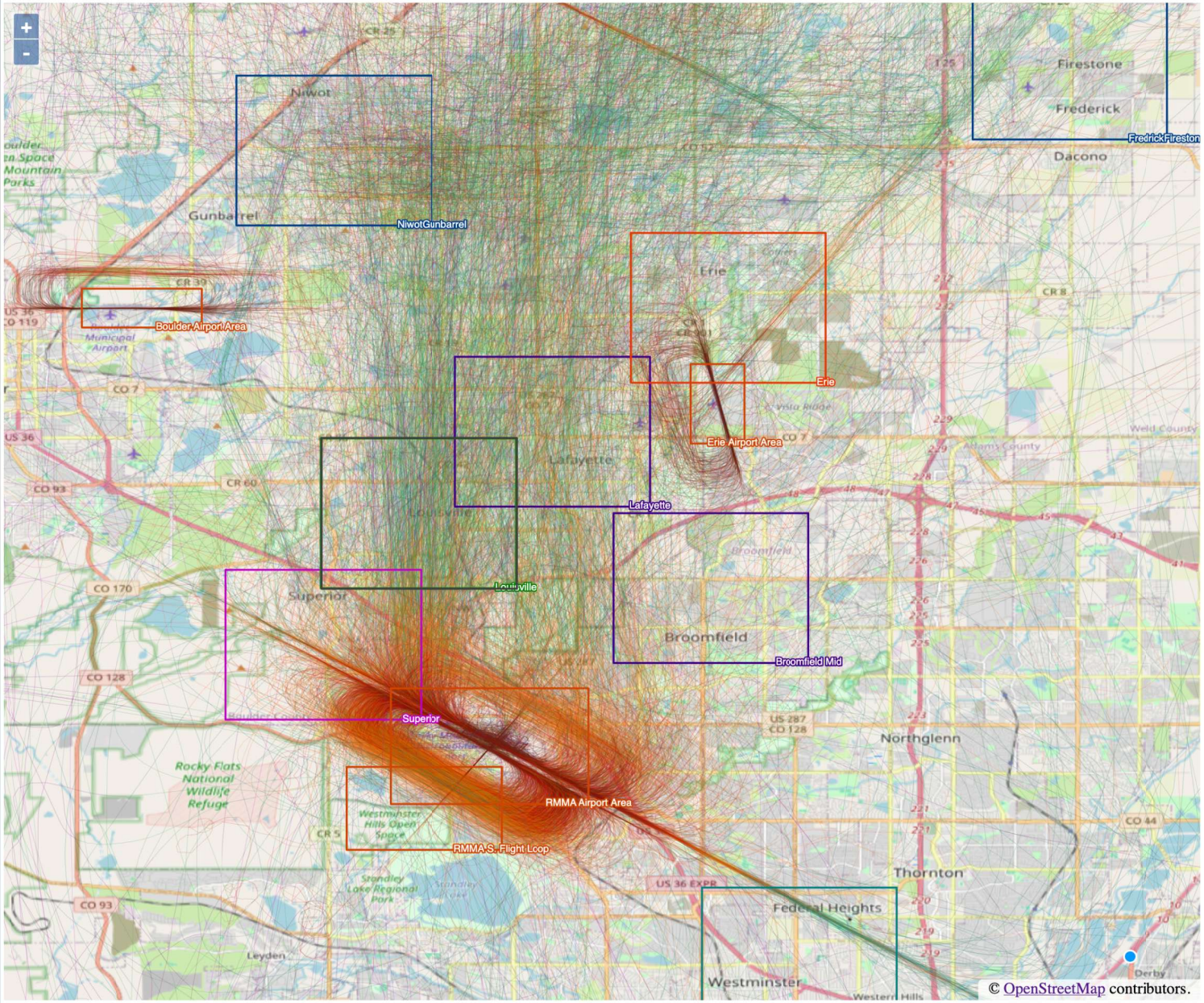
HOW LOUISVILLE ELEVATION ABOVE GROUND LEVEL (AGL) WAS DETERMINED



The image above is a digital elevation map (DEM)
The colors represent ground levels in Louisville
The line on the image follows the higher altitudes in Louisville
Using the above, the minimums above ground level (AGL) are estimated:

Ground level is approximately **5600ft so, 500AGL = 6100ft, 1000AGL = 6600ft**

All flight overpasses over Louisville
From/To RMMA
Month of May in 2018-2025



RMMA Airport Area | start time 12:00am | start date 05/01/2018 | 9000ft | 1000x1200

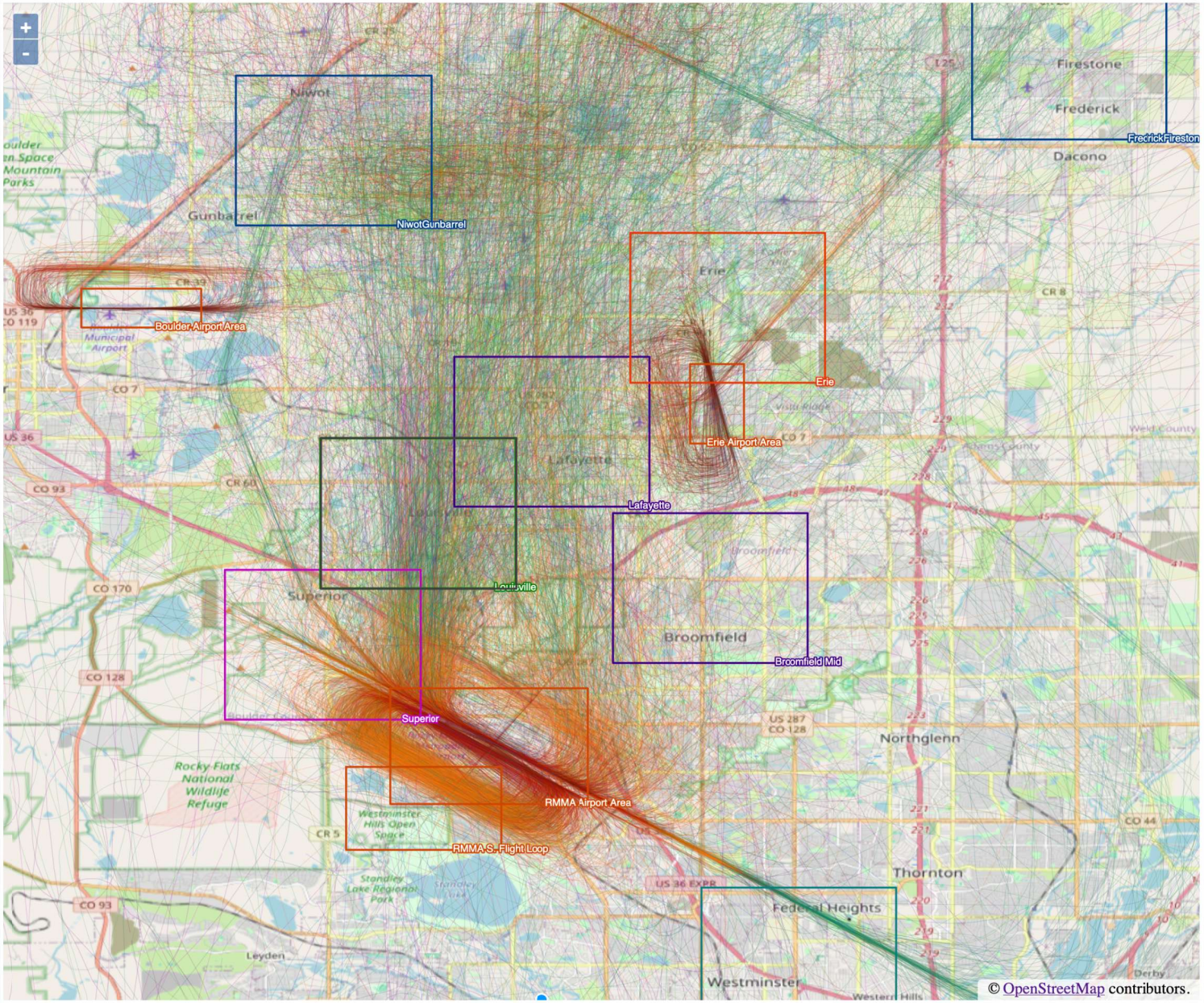
No Selection | end time 12:00pm | end date 05/31/2018 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☑	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☑	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350	☑		8000-9000	☑	clear
					6350-6600	☑		9000-10000	☑	
					6600-6700	☑		10000-100000	☑	

flights	overpasses	overpass duration	altitude	aircraft
679	1132	00:58:45	0	

All Flights
May **2018**

1132 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2019 | 9000ft | 1000x1200

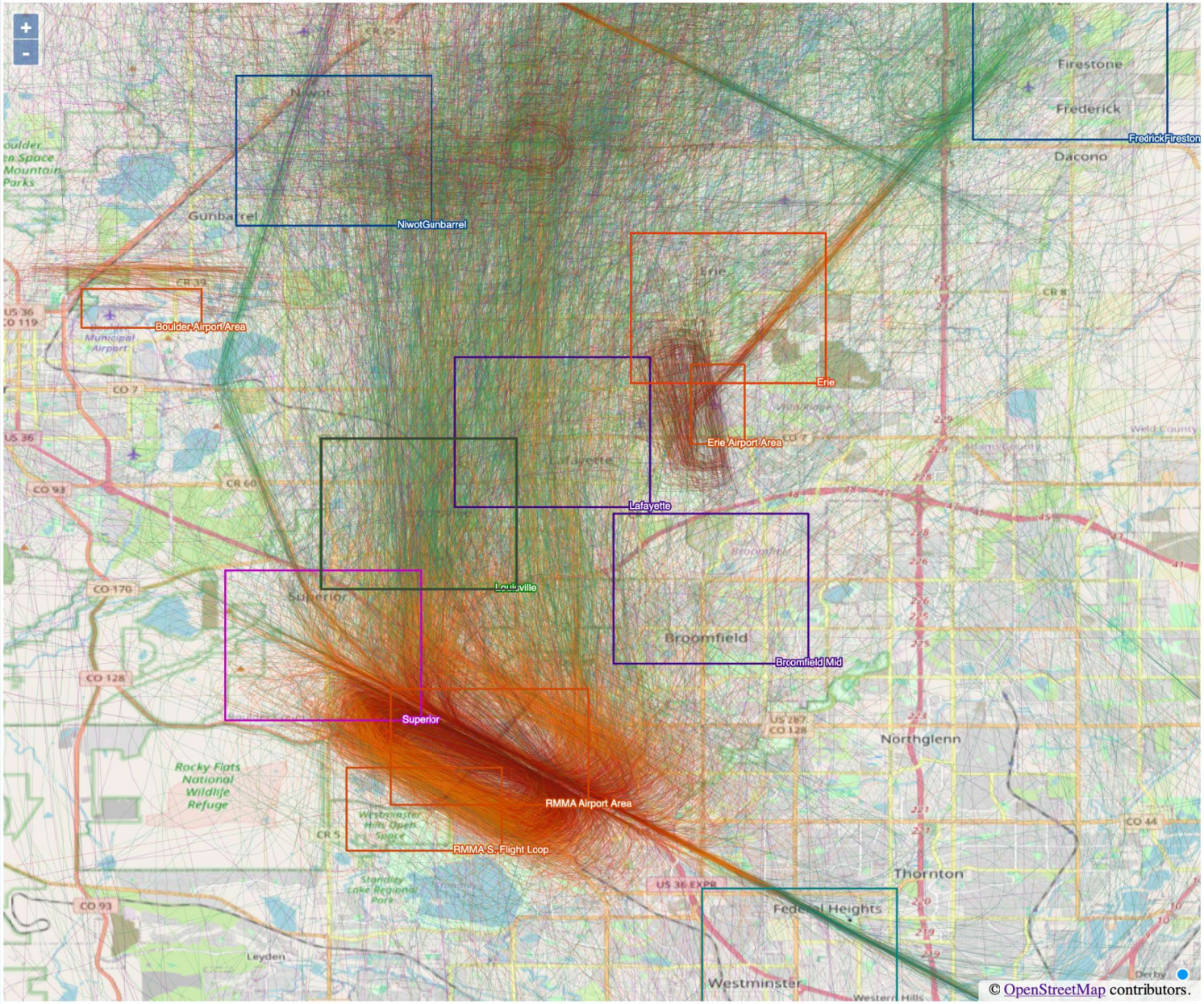
No Selection | end time 12:00pm | end date 05/31/2019 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☑	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☑	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350	☑		8000-9000	☑	clear
					6350-6600	☑		9000-10000	☑	
					6600-6700	☑		10000-100000	☑	

flights	overpasses	overpass duration	altitude	aircraft
806	1223	21:06:40	0	

All Flights
May **2019**

1223 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2020 | 9000ft | 1000x1200

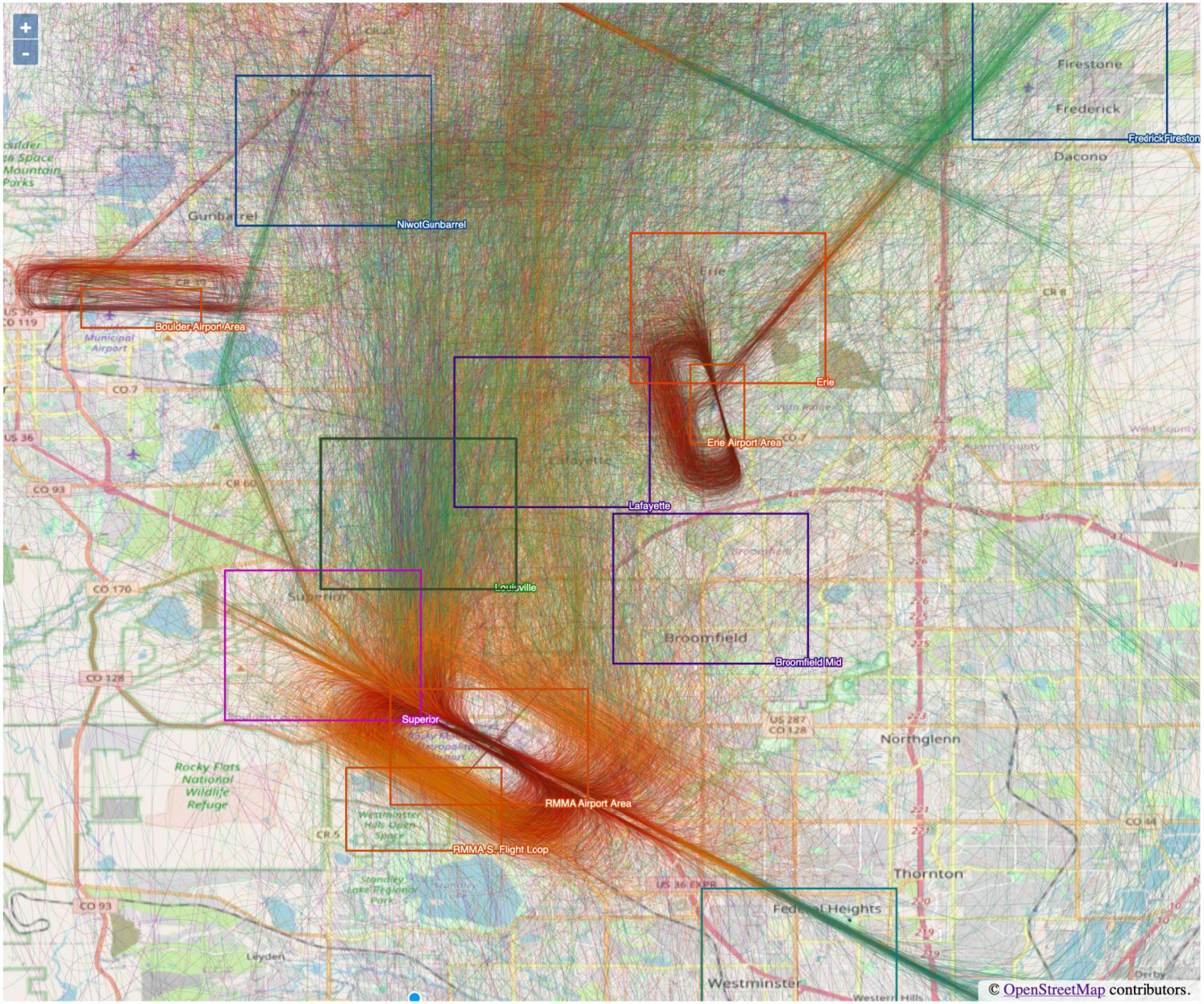
No Selection | end time 12:00pm | end date 05/31/2020 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☑	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☑	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350	☑		8000-9000	☑	clear
					6350-6600	☑		9000-10000	☑	
					6600-6700	☑		10000-100000	☑	

flights	overpasses	overpass duration	altitude	aircraft
1173	1823	08:48:20	0	

All Flights
May **2020**

1823 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2021 | 9000ft | 1000x1200

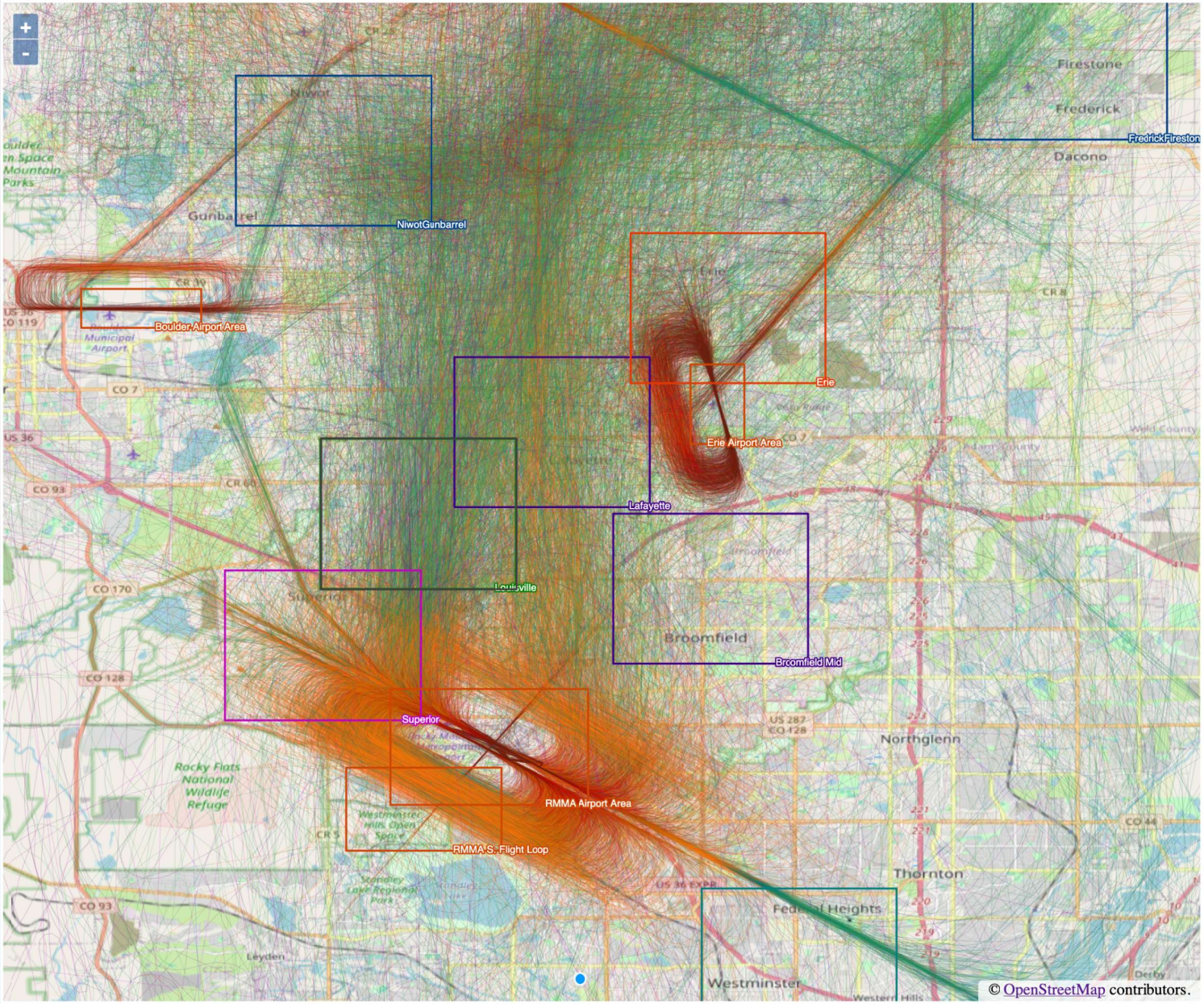
No Selection | end time 12:00pm | end date 05/31/2021 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☑	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☑	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350	☑		8000-9000	☑	clear
					6350-6600	☑		9000-10000	☑	
					6600-6700	☑		10000-100000	☑	

flights	overpasses	overpass duration	altitude	aircraft
1461	2369	08:22:55	0	

All Flights
May **2021**

2369 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2022 | 9000ft | 1000x1200

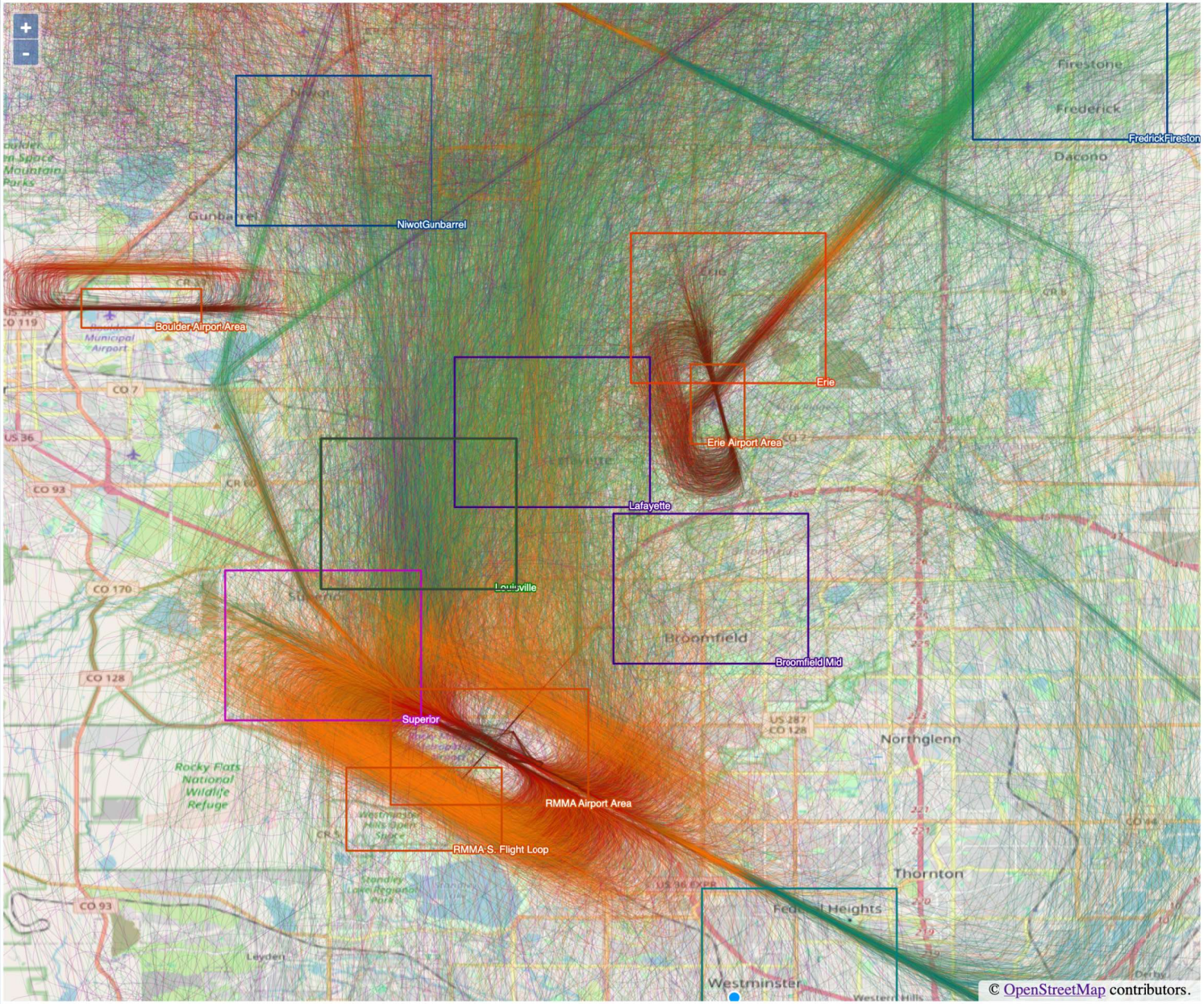
No Selection | end time 12:00pm | end date 05/31/2022 | 5000ft | submit

aircraft	local	arrivals	departures					
fixed wing	☑	☑	☑	refresh	4000-5850 ☑	6700-7000 ☑		
jet	☑	☑	☑	clear	5850-6100 ☑	7000-8000 ☑	set	
rotorcraft	☐	☐	☐	40 / 0	6100-6350 ☑	8000-9000 ☑	clear	
					6350-6600 ☑	9000-10000 ☑		
					6600-6700 ☑	10000-100000 ☑		

flights	overpasses	overpass duration	altitude	aircraft
1391	2288	02:56:20	0	

All Flights
May **2022**

2288 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2023 | 9000ft | 1000x1200

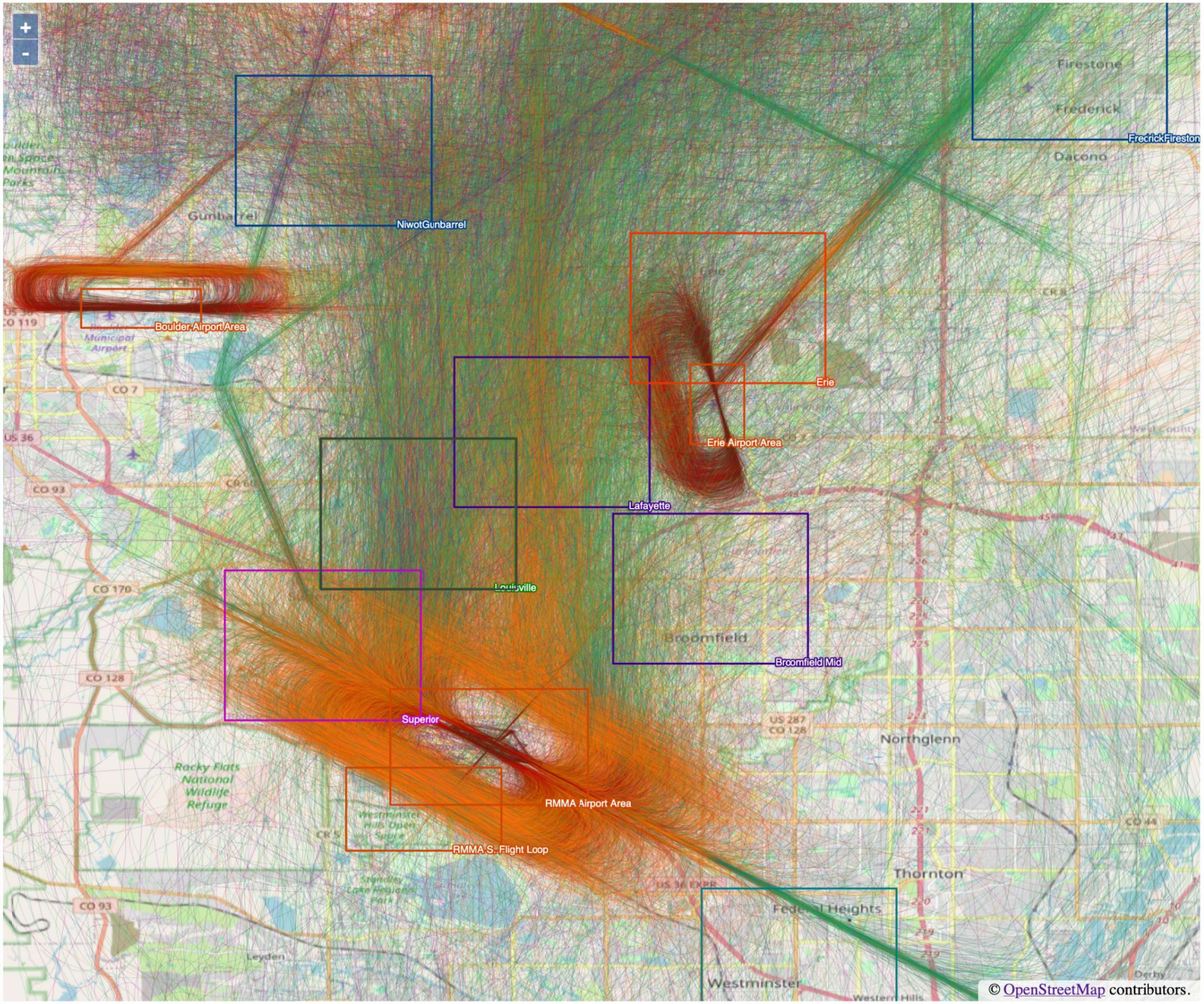
No Selection | end time 12:00pm | end date 05/31/2023 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☑	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☑	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350	☑		8000-9000	☑	clear
					6350-6600	☑		9000-10000	☑	
					6600-6700	☑		10000-100000	☑	

flights	overpasses	overpass duration	altitude	aircraft
1888	3300	12:42:10	0	

All Flights
May **2023**

3300 overpasses



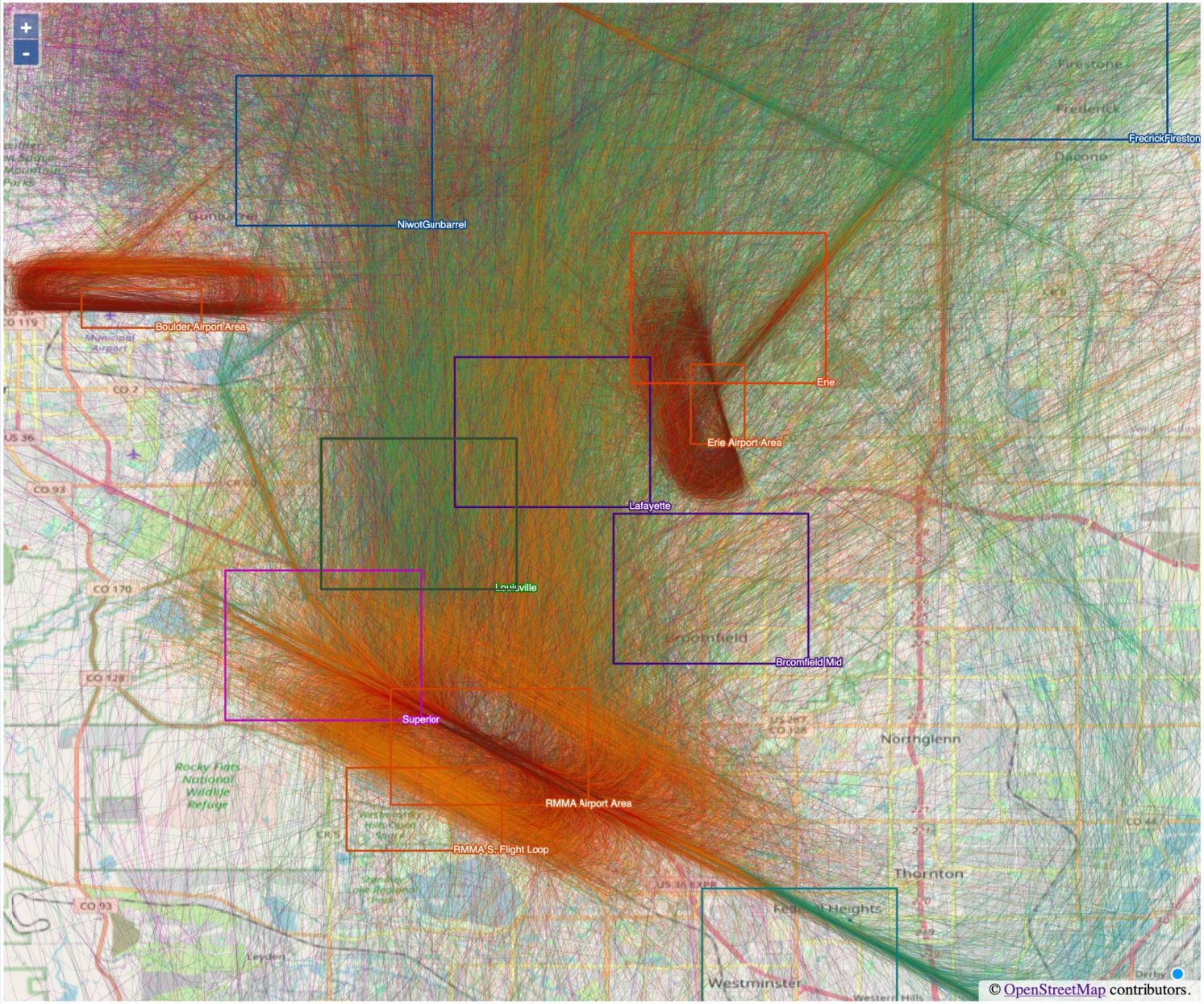
RMMA Airport Area | start time 12:00am | start date 05/01/2024 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2024 | 5000ft | submit

aircraft	local	arrivals	departures					
fixed wing	☑	☑	☑	refresh	4000-5850 ☑	5850-6100 ☑	6100-6350 ☑	6350-6600 ☑
jet	☑	☑	☑	clear	6600-6700 ☑	6700-7000 ☑	7000-8000 ☑	8000-9000 ☑
rotorcraft	☐	☐	☐	40 0	9000-10000 ☑	10000-100000 ☑	set	clear

flights	overpasses	overpass duration	altitude	aircraft
1783	3493	22:53:40	0	

All Flights
May **2024**

3493 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2025 | 9000ft | 1000x1200

Draw Sample Area | end time 12:00pm | end date 05/31/2025 | 5000ft | submit

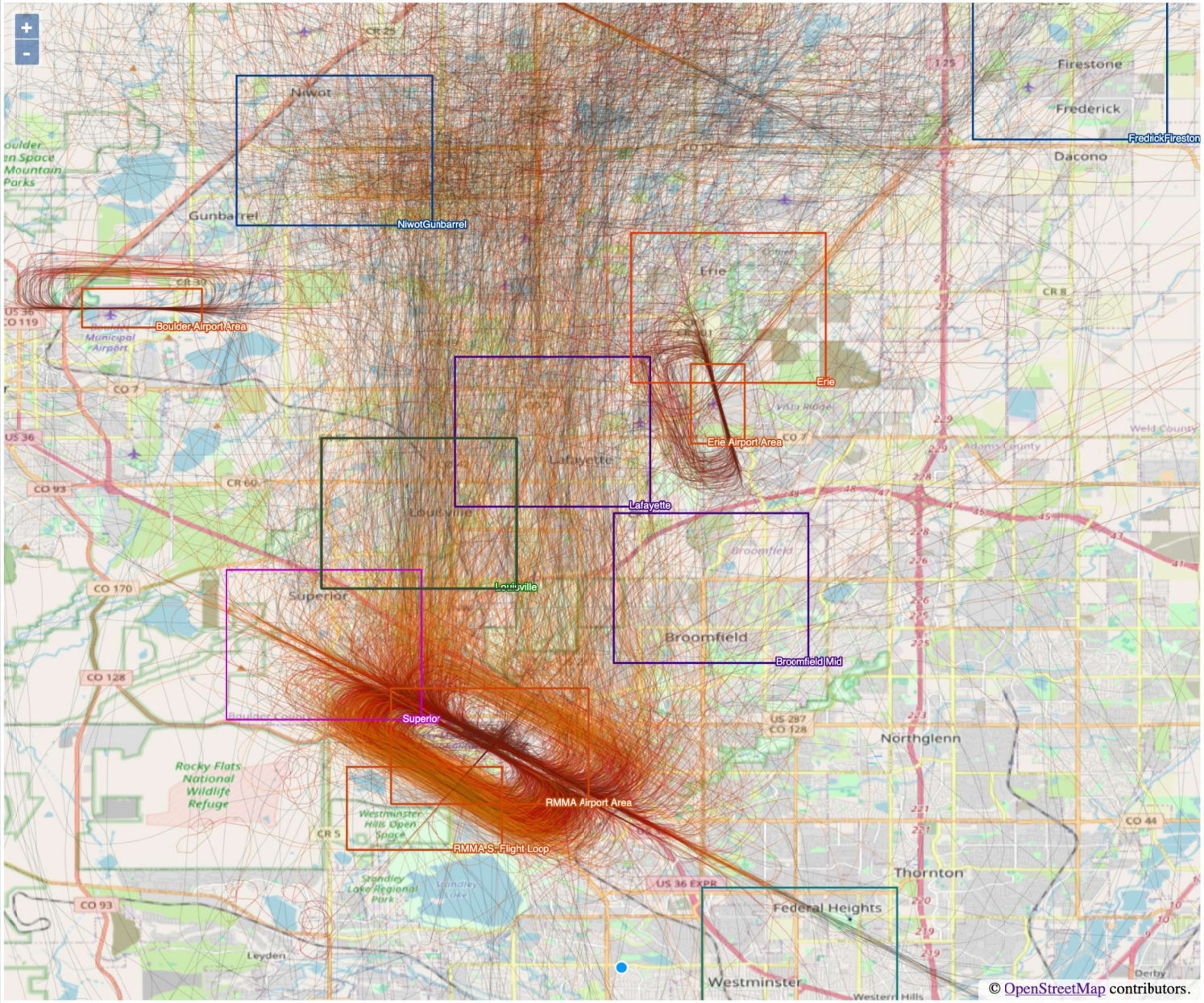
aircraft	local	arrivals	departures		altitude		altitude	
fixed wing	☑	☑	☑	refresh	4000-5850	☑	6700-7000	☑
jet	☑	☑	☑	clear	5850-6100	☑	7000-8000	☑ set
rotorcraft	☐	☐	☐	40 0	6100-6350	☑	8000-9000	☑ clear
					6350-6600	☑	9000-10000	☑
					6600-6700	☑	10000-100000	☑

flights	overpasses	overpass duration	altitude	aircraft
1839	3992	17:16:35	0	

All Flights
May **2025**

3992 overpasses

Flight overpasses over Louisville
From RMMA 2018-2025
with altitudes **less than 1000 ft AGL**



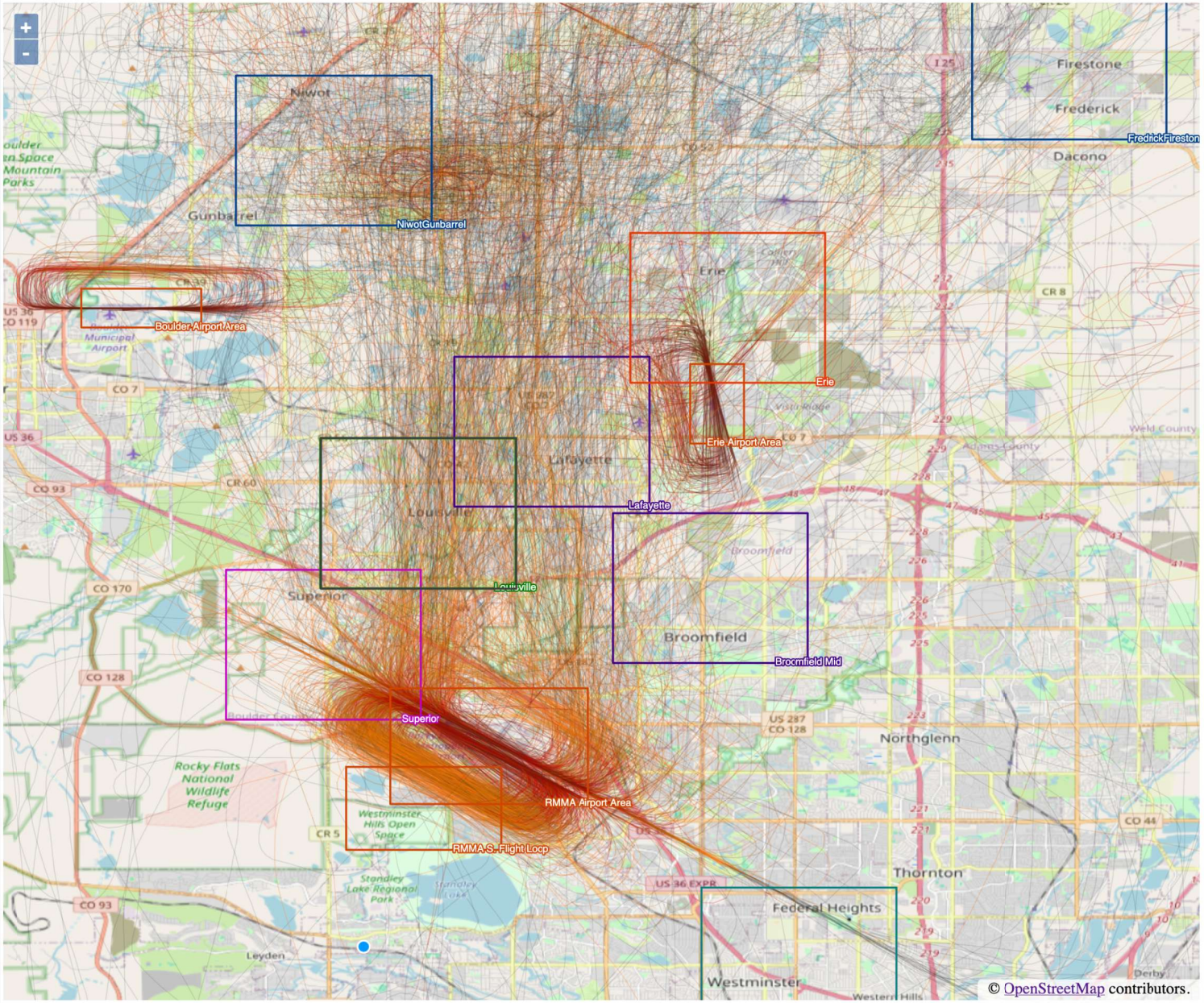
RMMA Airport Area | start time 12:00am | start date 05/01/2018 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2018 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑	6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑	7000-8000	☐	set
rotorcraft	☐	☐	☐	40 0	6100-6350	☑	8000-9000	☐	clear
					6350-6600	☑	9000-10000	☐	
					6600-6700	☐	10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
305	465	06:18:55	0	

May **2018**
less than 1000 ft AGL
(6600ft)

465 overpasses



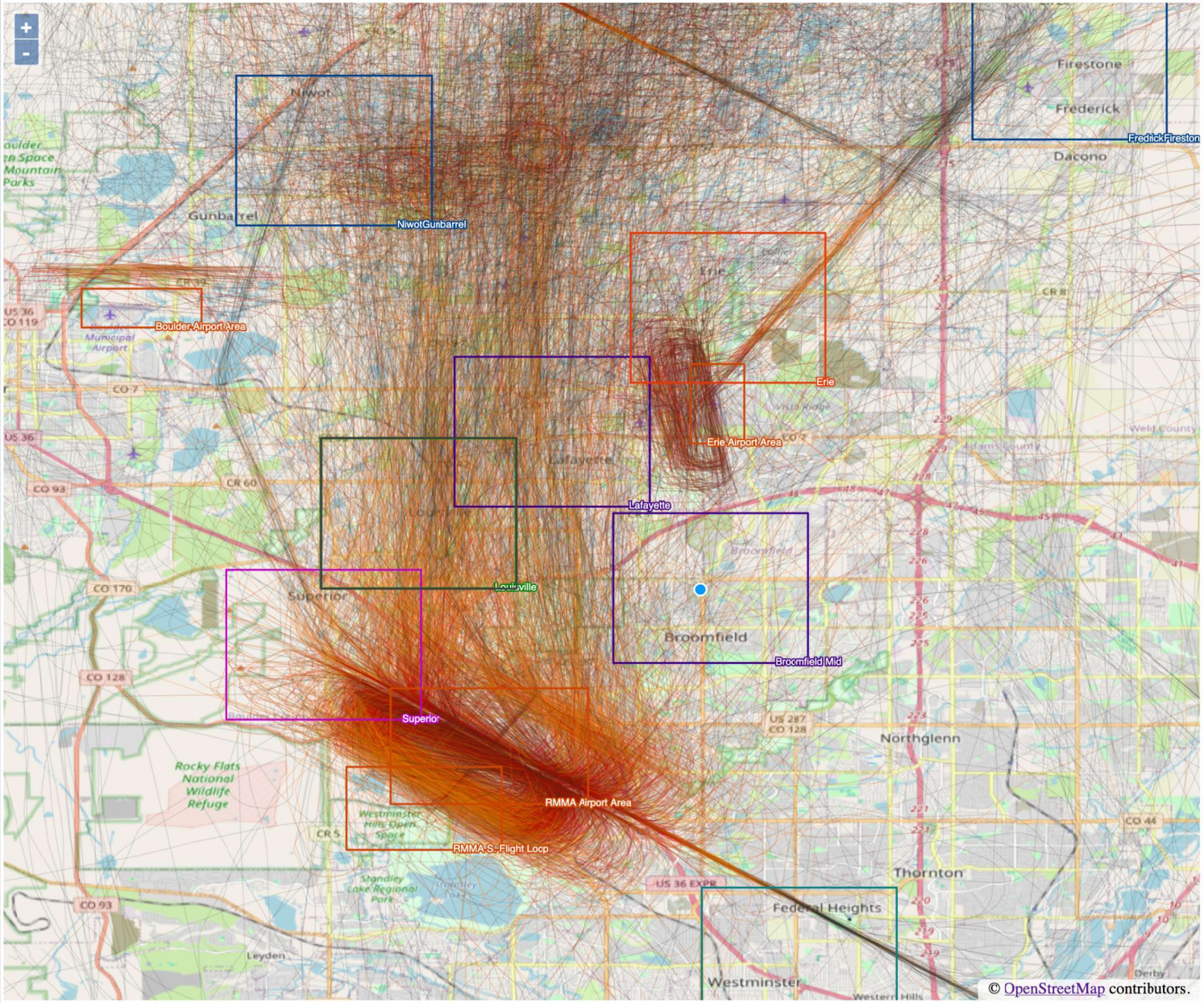
RMMA Airport Area | start time 12:00am | start date 05/01/2019 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2019 | 5000ft | submit

aircraft	local	arrivals	departures							
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350	☑		8000-9000	☐	clear
					6350-6600	☑		9000-10000	☐	
					6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
259	354	19:42:50	0	

May **2019**
less than 1000 ft AGL
(6600ft)

354 overpasses



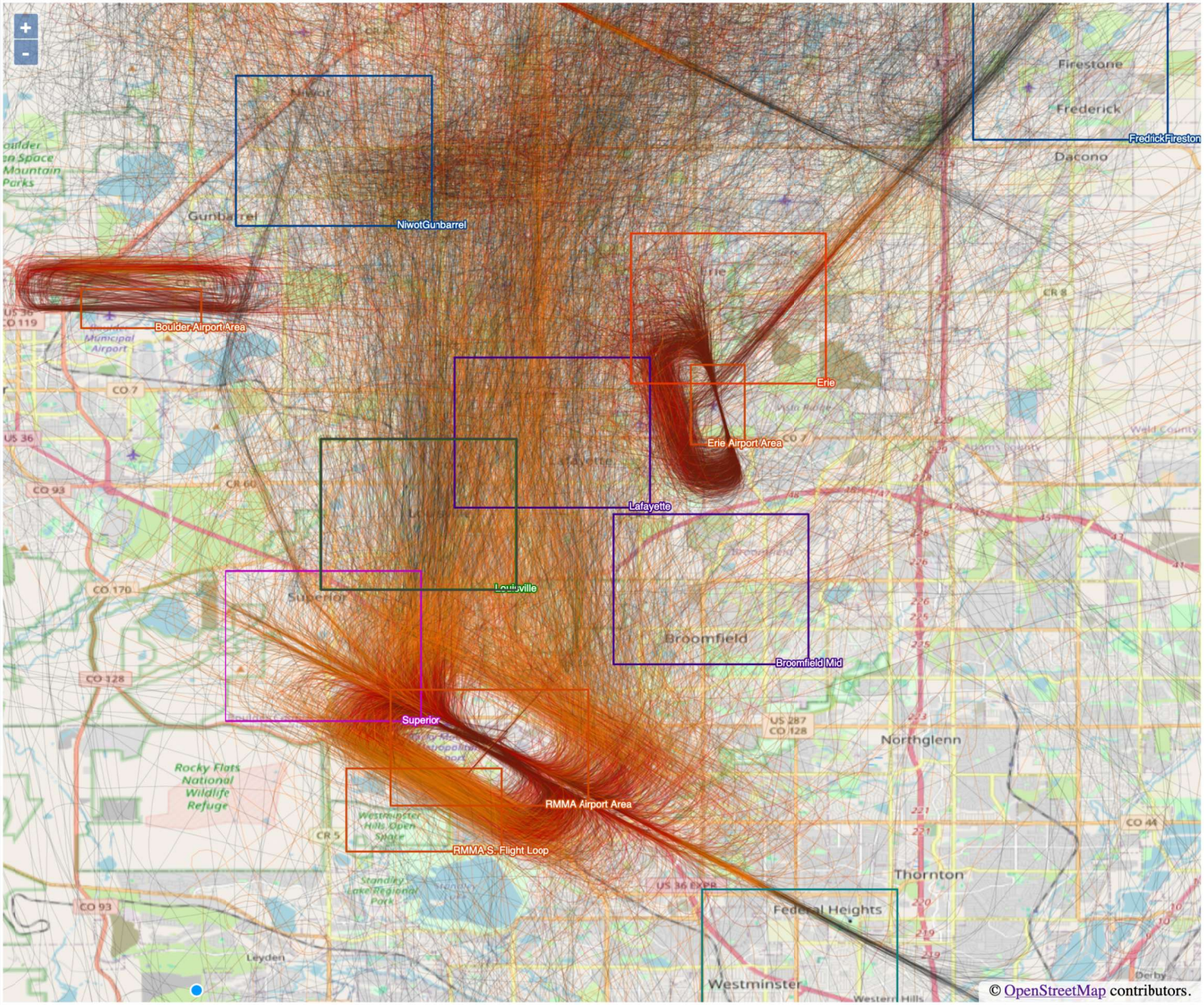
RMMA Airport Area | start time 12:00am | start date 05/01/2020 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2020 | 5000ft | submit

aircraft	local	arrivals	departures							
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	40 0	6100-6350	☑		8000-9000	☐	clear
					6350-6600	☑		9000-10000	☐	
					6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
467	628	16:15:00	0	

May **2020**
less than 1000 ft AGL
(6600ft)

628 overpasses



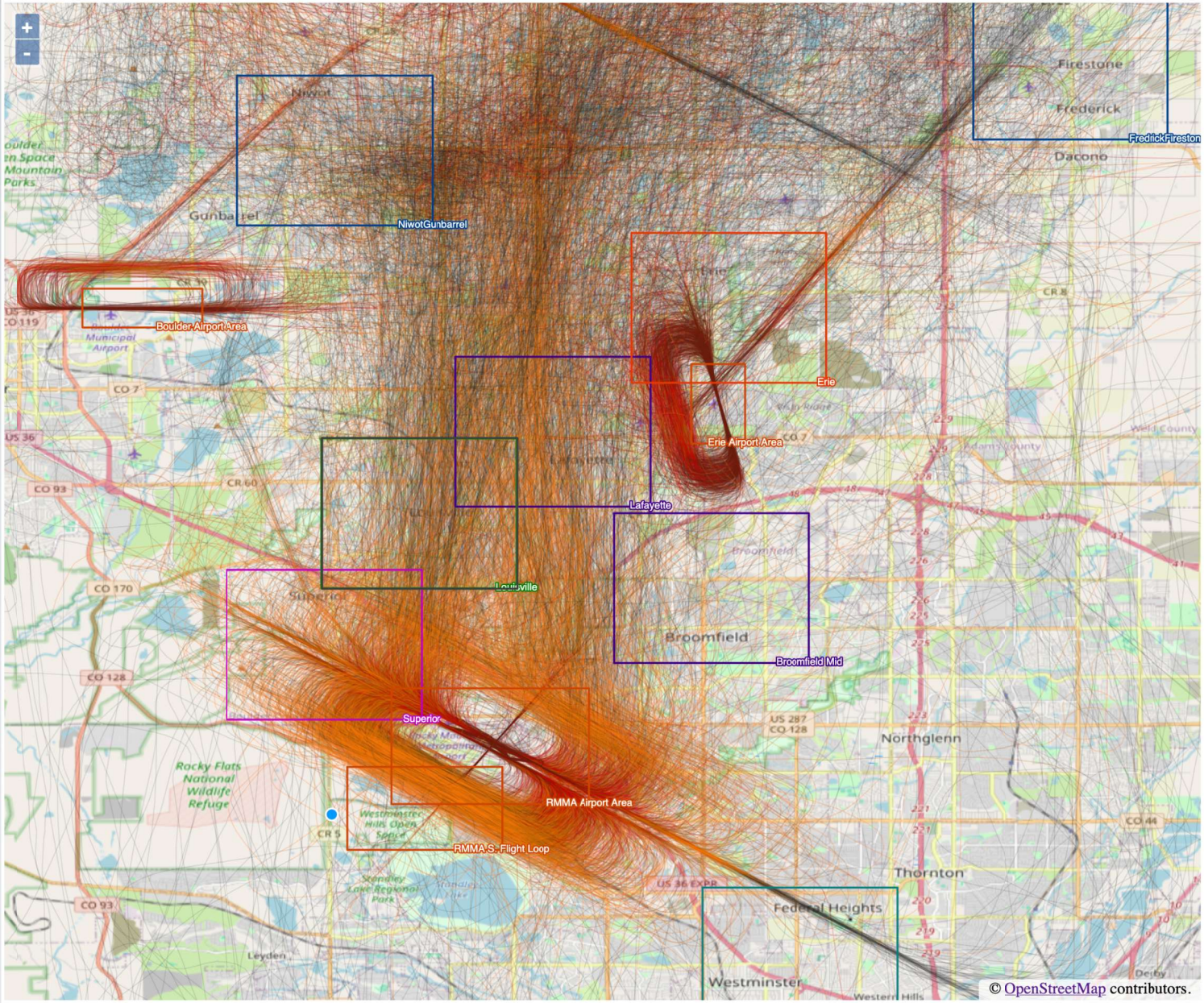
RMMA Airport Area | start time 12:00am | start date 05/01/2021 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2021 | 5000ft | submit

aircraft	local	arrivals	departures					
fixed wing	☑	☑	☑	refresh	4000-5850	☑	6700-7000	☐
jet	☑	☑	☑	clear	5850-6100	☑	7000-8000	☐ set
rotorcraft	☐	☐	☐	40 0	6100-6350	☑	8000-9000	☐ clear
					6350-6600	☑	9000-10000	☐
					6600-6700	☐	10000-100000	☐

flights	overpasses	overpass duration	altitude	aircraft
594	857	00:38:30	0	

May **2021**
less than 1000 ft AGL
(6600ft)

857 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2022 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2022 | 5000ft | submit

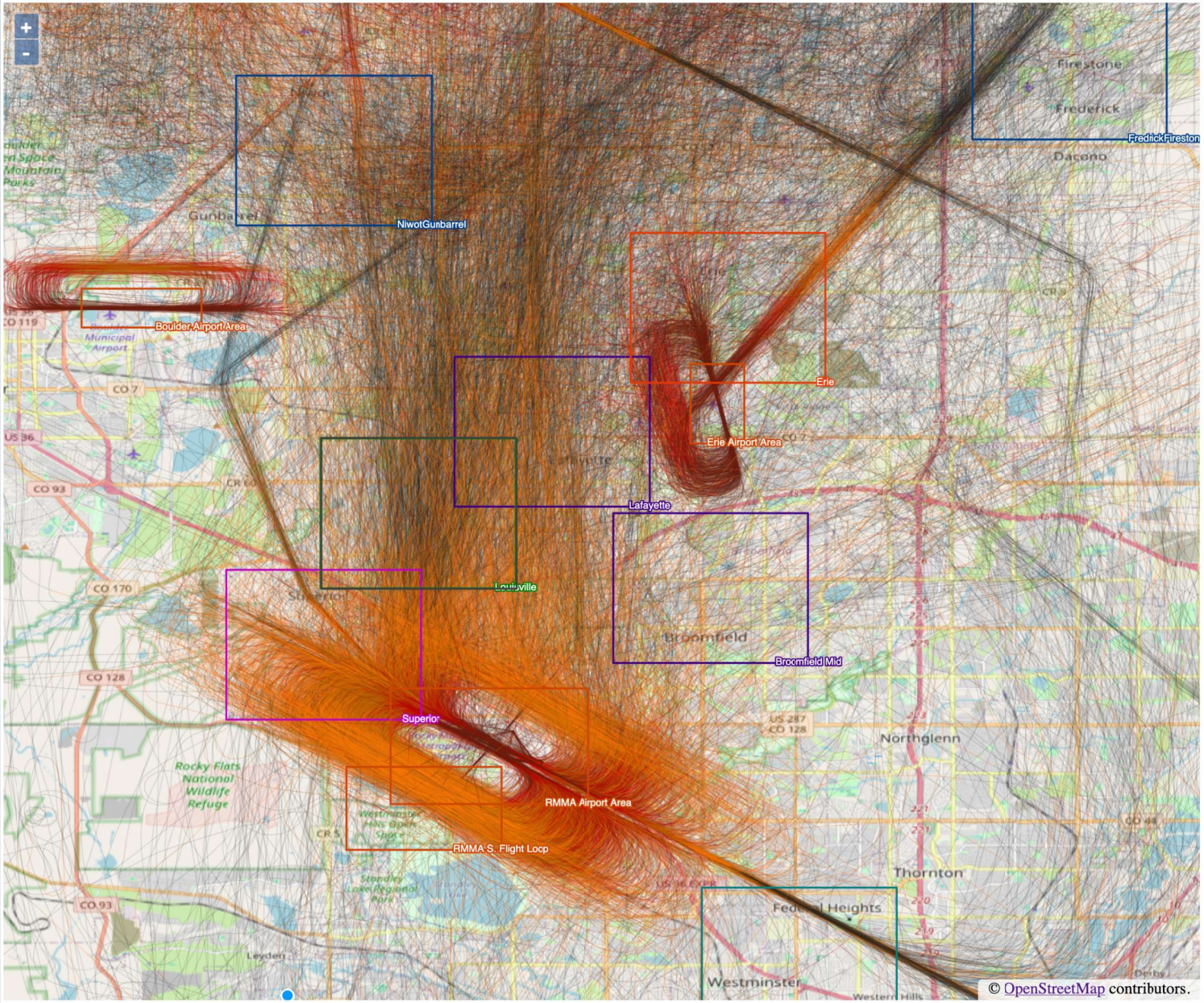
aircraft	local	arrivals	departures		
fixed wing	☑	☑	☑	refresh	
jet	☑	☑	☑	clear	
rotorcraft	☐	☐	☐	40	0

4000-5850	☑	6700-7000	☐
5850-6100	☑	7000-8000	☐ set
6100-6350	☑	8000-9000	☐ clear
6350-6600	☑	9000-10000	☐
6600-6700	☐	10000-100000	☐

flights	overpasses	overpass duration	altitude	aircraft
518	753	19:36:40	0	

May **2022**
less than 1000 ft AGL
(6600ft)

753 overpasses



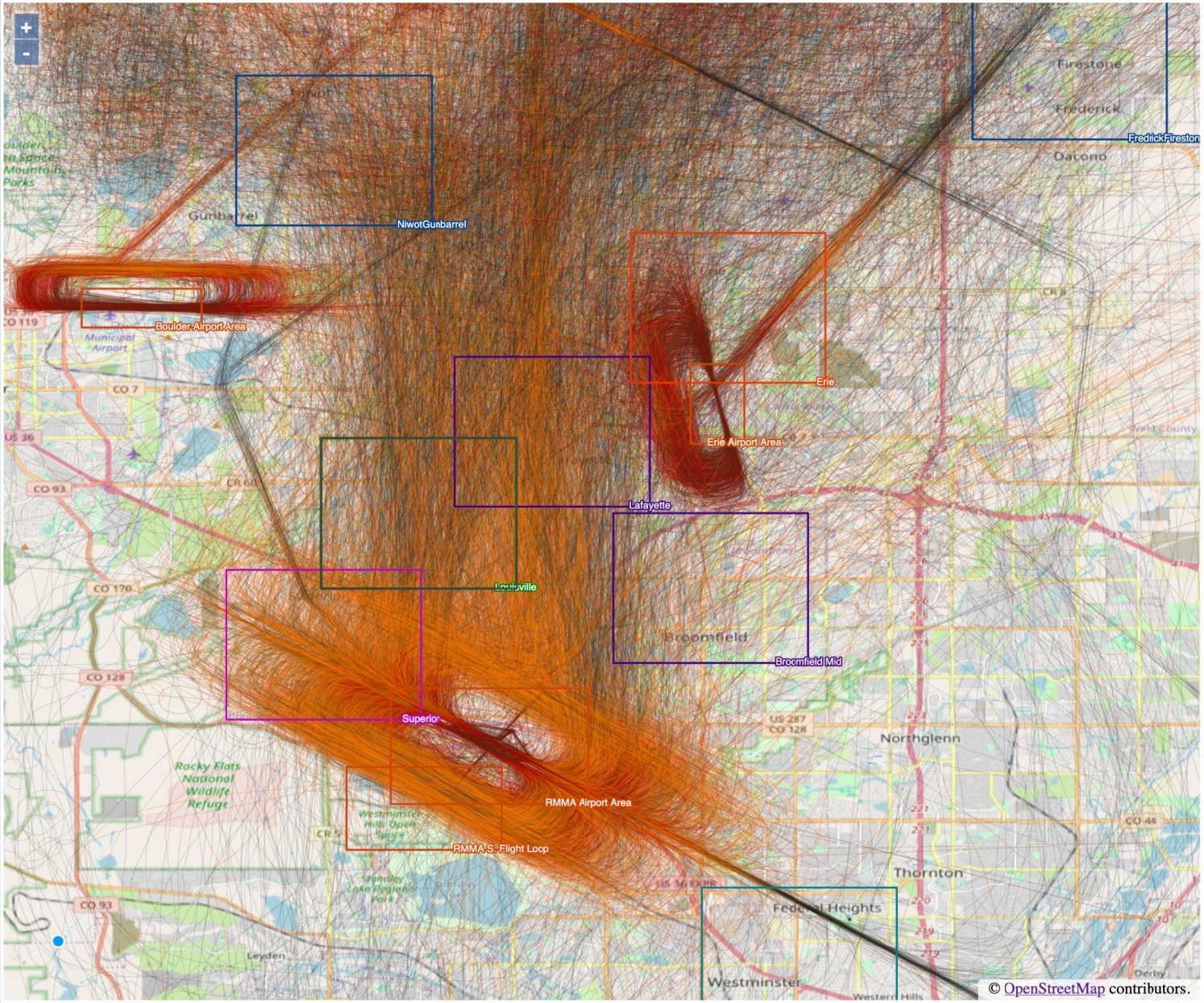
RMMA Airport Area | start time 12:00am | start date 05/01/2023 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2023 | 5000ft | submit

aircraft	local	arrivals	departures							
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	40 0	6100-6350	☑		8000-9000	☐	clear
					6350-6600	☑		9000-10000	☐	
					6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
821	1193	01:02:50	0	

May **2023**
less than 1000 ft AGL
(6600ft)

1193 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2024 | 9000ft | 1000x1200

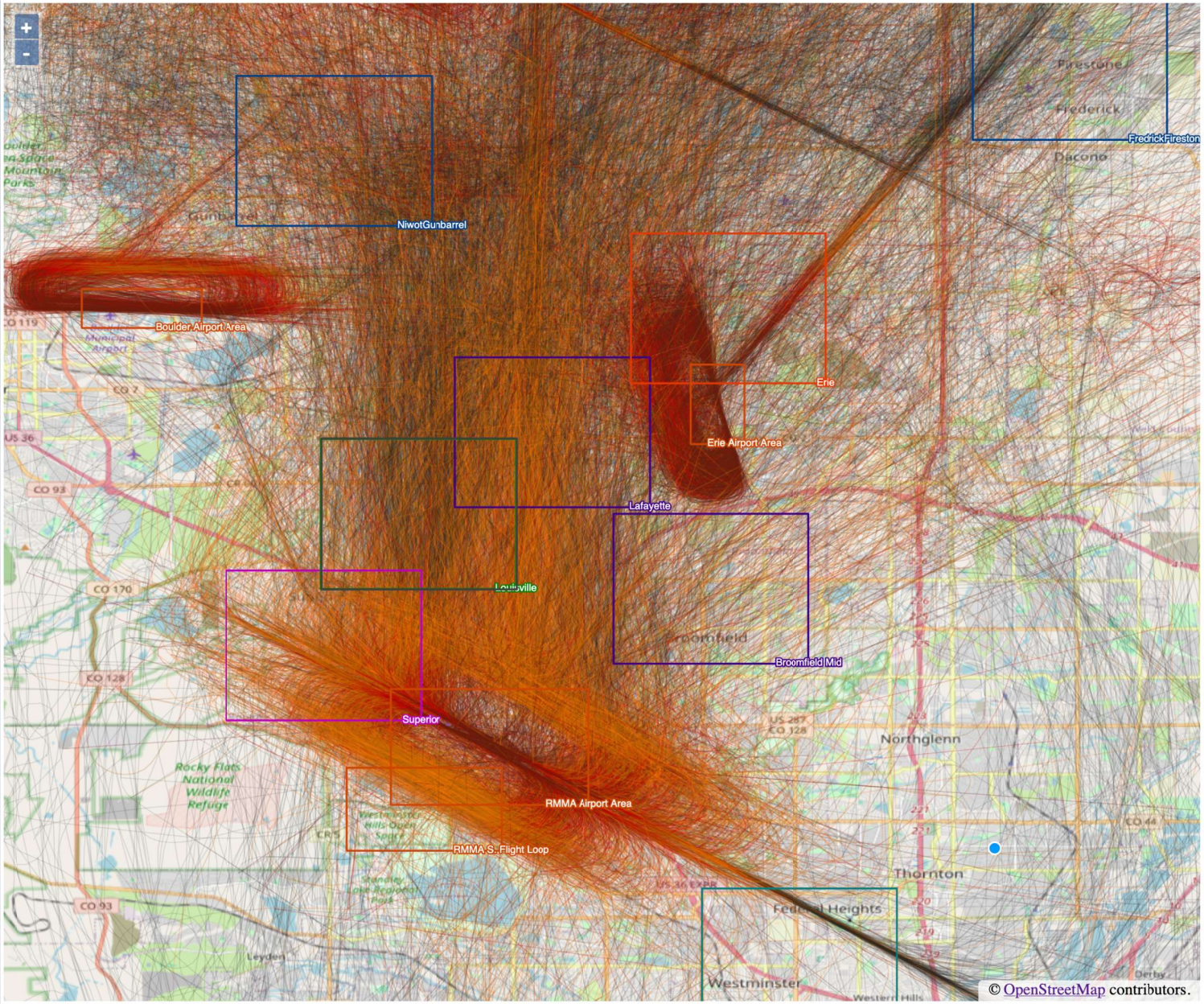
No Selection | end time 12:00pm | end date 05/31/2024 | 5000ft | submit

aircraft	local	arrivals	departures							
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	40 0	6100-6350	☑		8000-9000	☐	clear
					6350-6600	☑		9000-10000	☐	
					6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
788	1253	00:08:00	0	

May **2024**
less than 1000 ft AGL
(6600ft)

1253 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2025 | 9000ft | 1000x1200
Draw Sample Area | end time 12:00pm | end date 05/31/2025 | 5000ft | submit

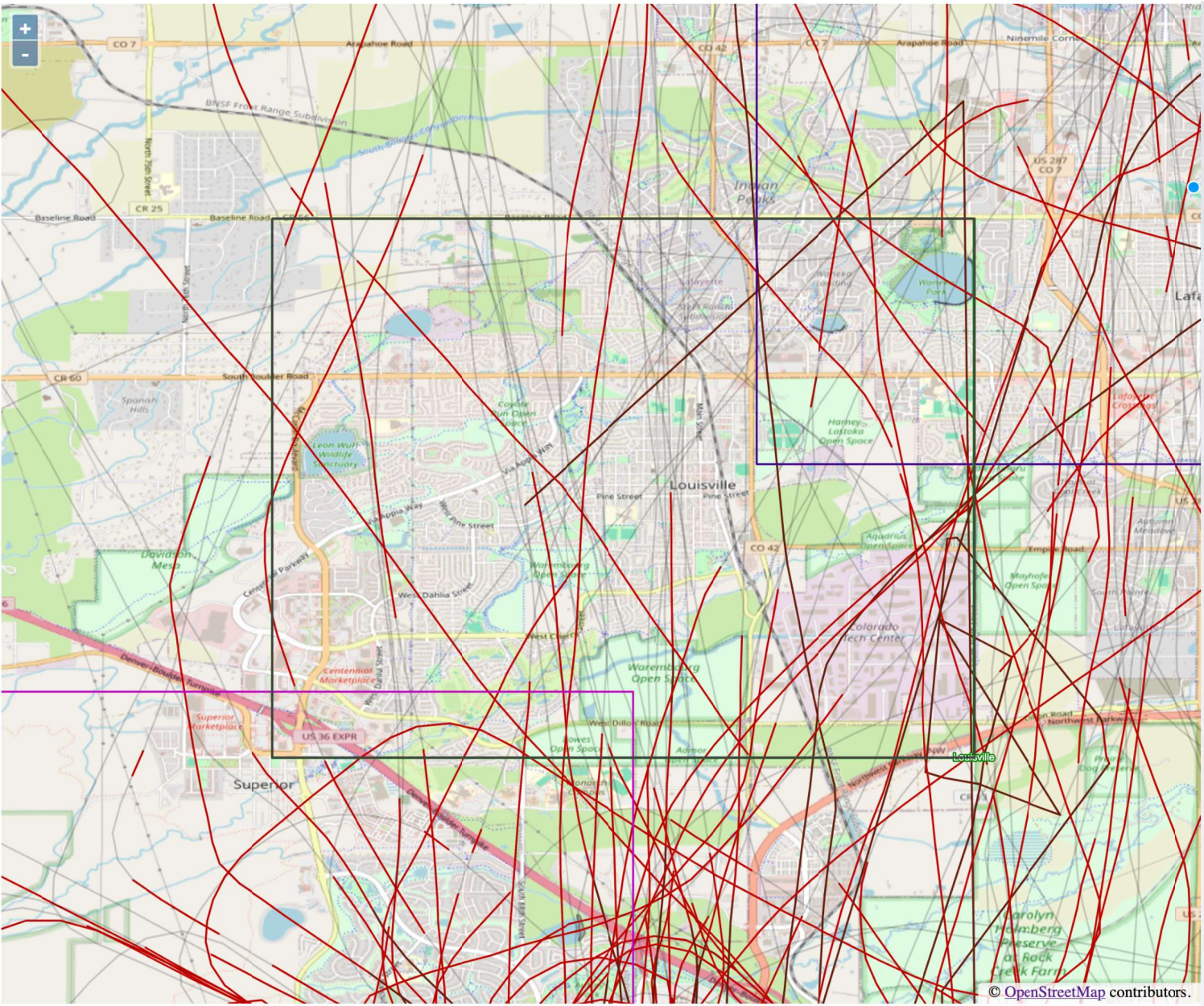
aircraft	local	arrivals	departures							
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	40 0	6100-6350	☑		8000-9000	☐	clear
					6350-6600	☑		9000-10000	☐	
					6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
828	1517	14:29:45	0	

May **2025**
less than 1000 ft AGL
(6600ft)

1517 overpasses

Flight overpasses over Louisville
From RMMA 2018-2025
with altitudes **less than 500 ft AGL**



May 2018

less than 500 ft AGL (6100ft)

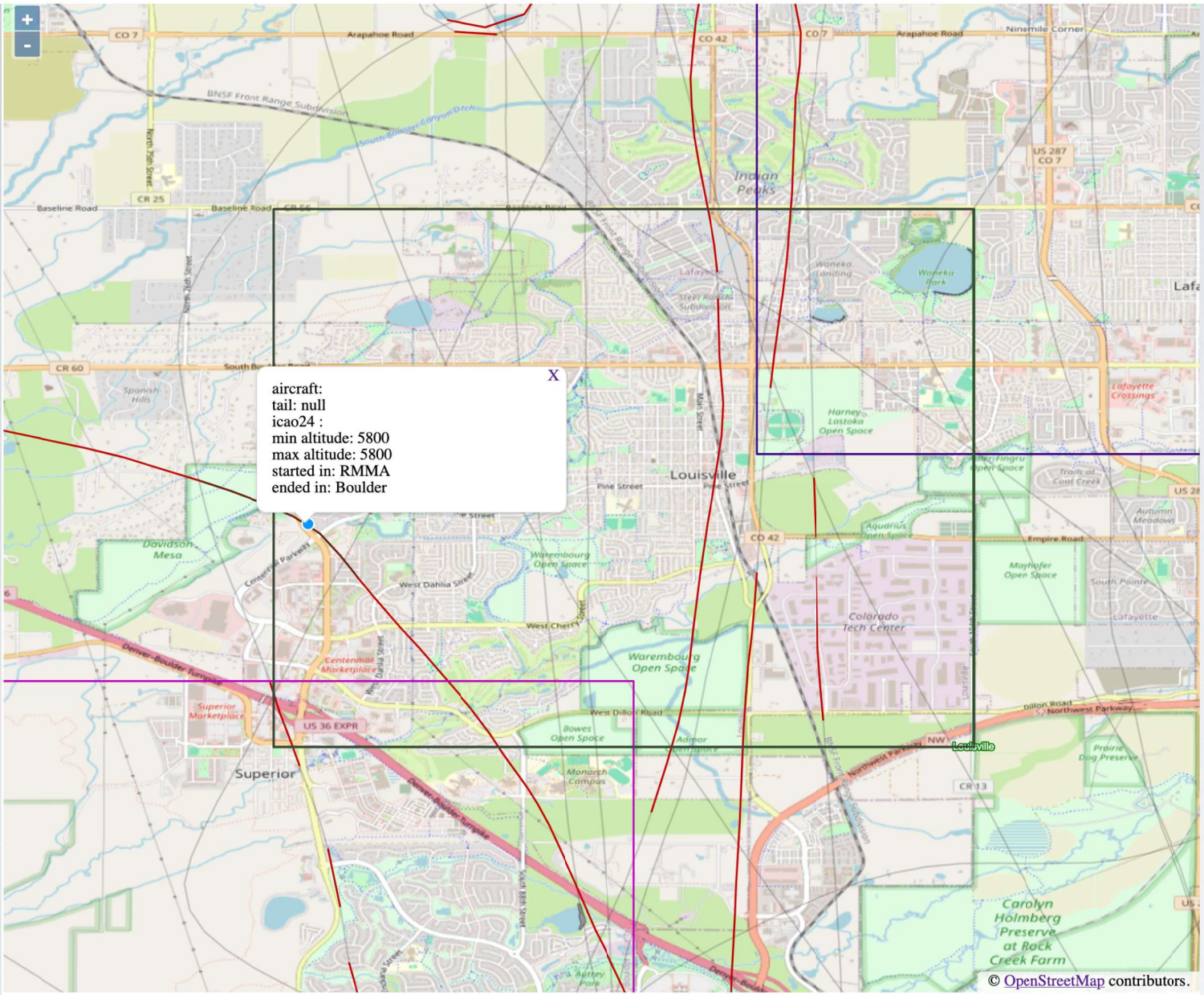
26 overpasses

RMMA Airport Area | start time 12:00am | start date 05/01/2018 | 9000ft | 1000x1200

No Selection | end time 12:00pm | end date 05/31/2018 | 5000ft | submit

aircraft	local	arrivals	departures								
fixed wing	☑	☑	☑	refresh		4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear		5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	ff	2	6100-6350	☐		8000-9000	☐	clear
						6350-6600	☐		9000-10000	☐	
						6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
23	26	07:05:15	0	



RMMA Airport Area | Select Aircraft | start time 12:00am | end time 12:00pm | start date 05/01/2019 | end date 05/31/2019 | 9000ft | 5000ft | 1000x1200 | submit

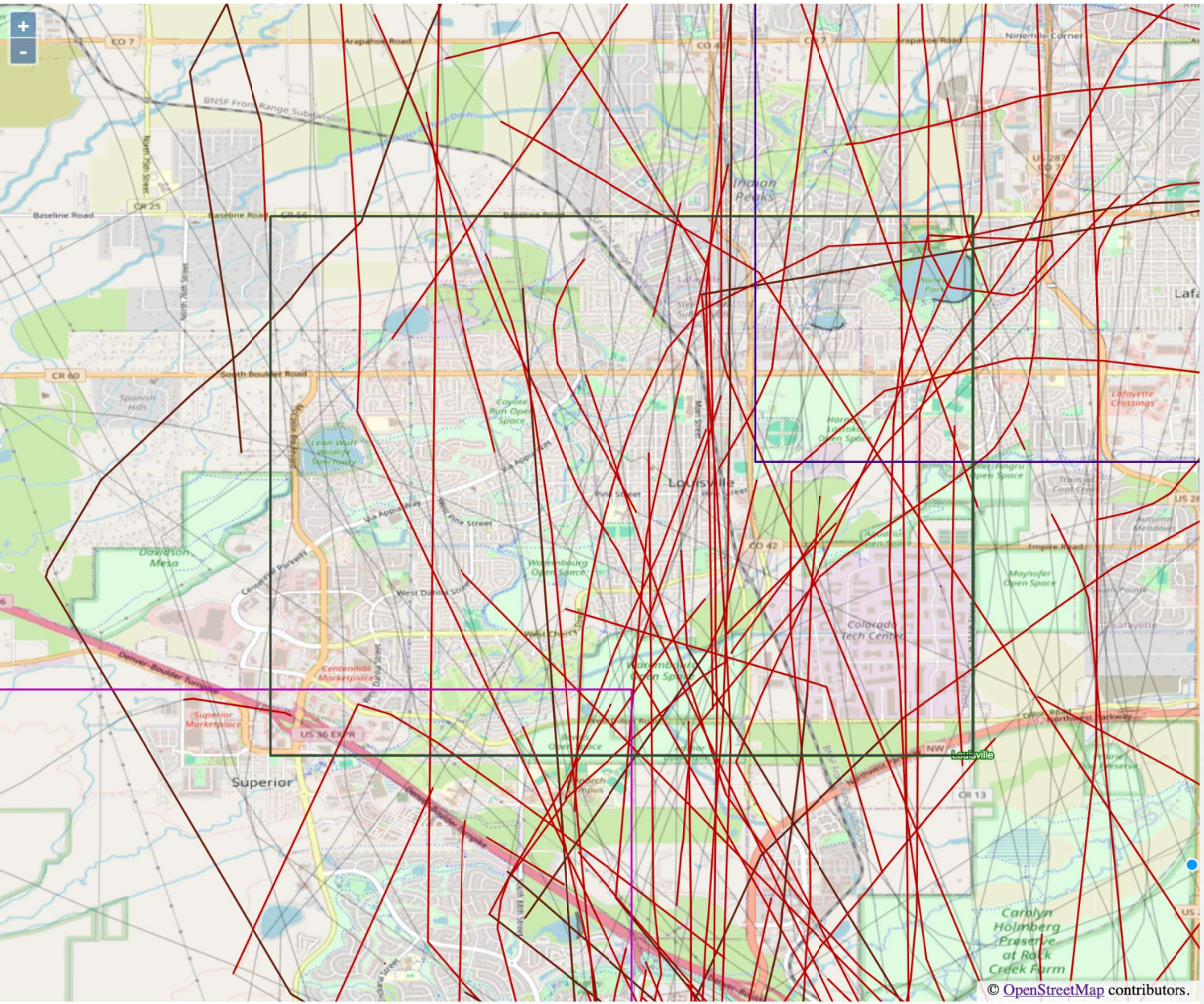
aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	ff 2	6100-6350	☐		8000-9000	☐	clear
					6350-6600	☐		9000-10000	☐	
					6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
5	5	00:00:10	0	

May 2019

less than 500 ft AGL (6100ft)

5 overpasses



May 2020

less than 500 ft AGL (6100ft)

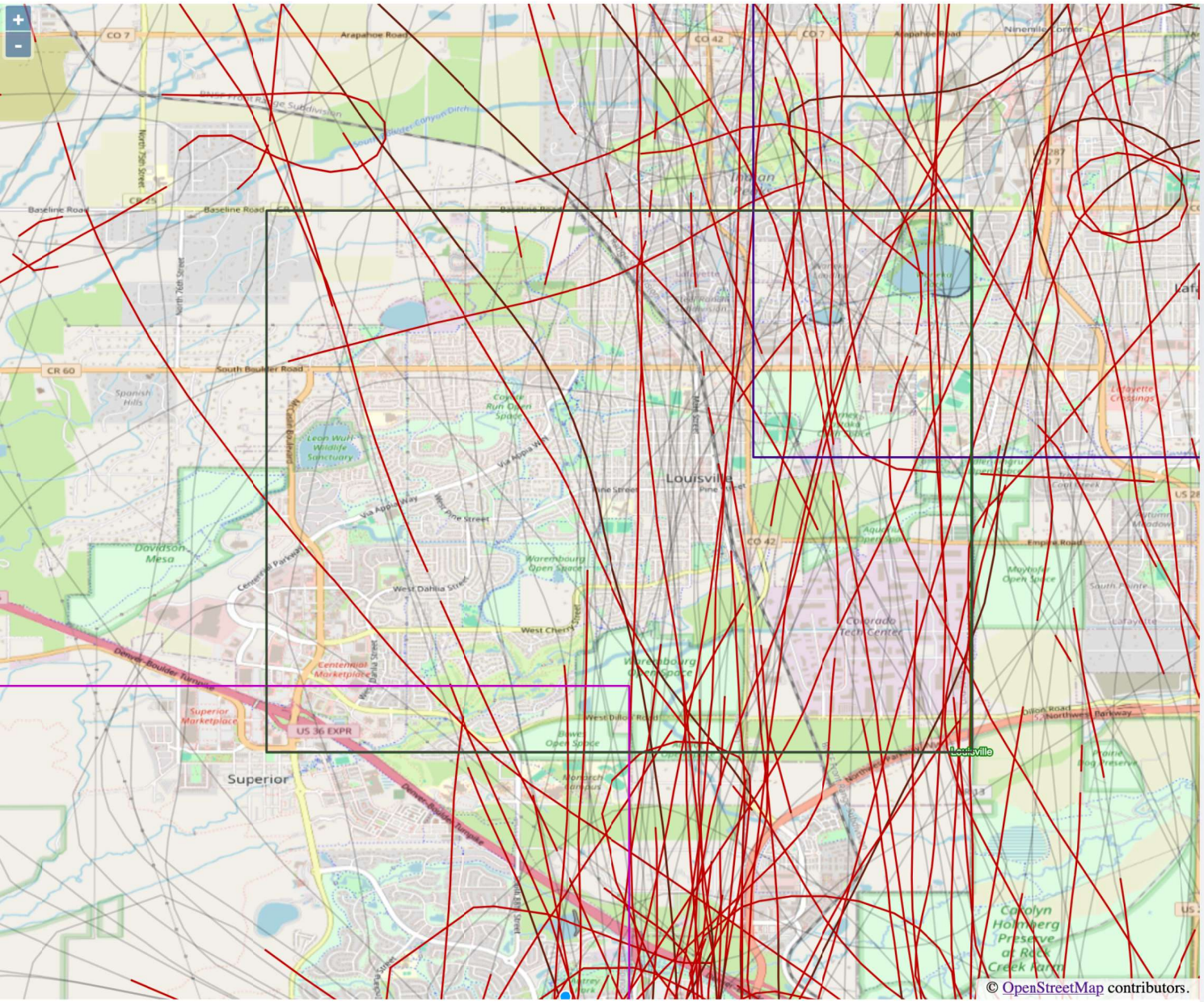
41 overpasses

RMMA Airport Area | start time 12:00am | start date 05/01/2020 | 9000ft | 1000x1200

No Selection | end time 12:00pm | end date 05/31/2020 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	ff 2	6100-6350	☐		8000-9000	☐	clear
					6350-6600	☐		9000-10000	☐	
					6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
38	41	00:25:50	0	



RMMA Airport Area | start time 12:00am | start date 05/01/2021 | 9000ft | 1000x1200

No Selection | end time 12:00pm | end date 05/31/2021 | 5000ft | submit

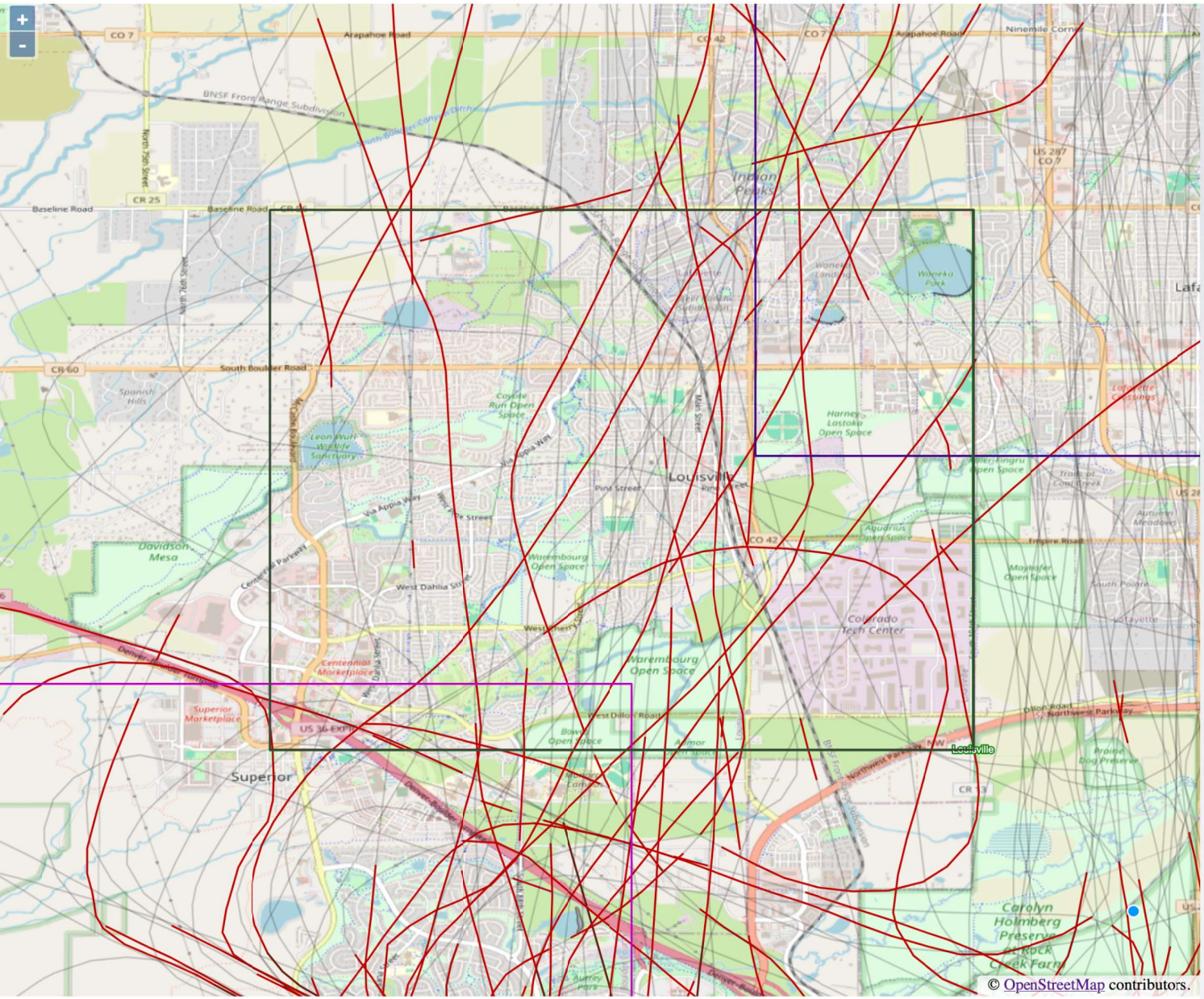
aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑	6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑	7000-8000	☐	set
rotorcraft	☐	☐	☐	ff 2	6100-6350	☐	8000-9000	☐	clear
					6350-6600	☐	9000-10000	☐	
					6600-6700	☐	10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
39	44	00:15:50	0	

May 2021

less than 500 ft AGL (6100ft)

44 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2022 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2022 | 5000ft | submit

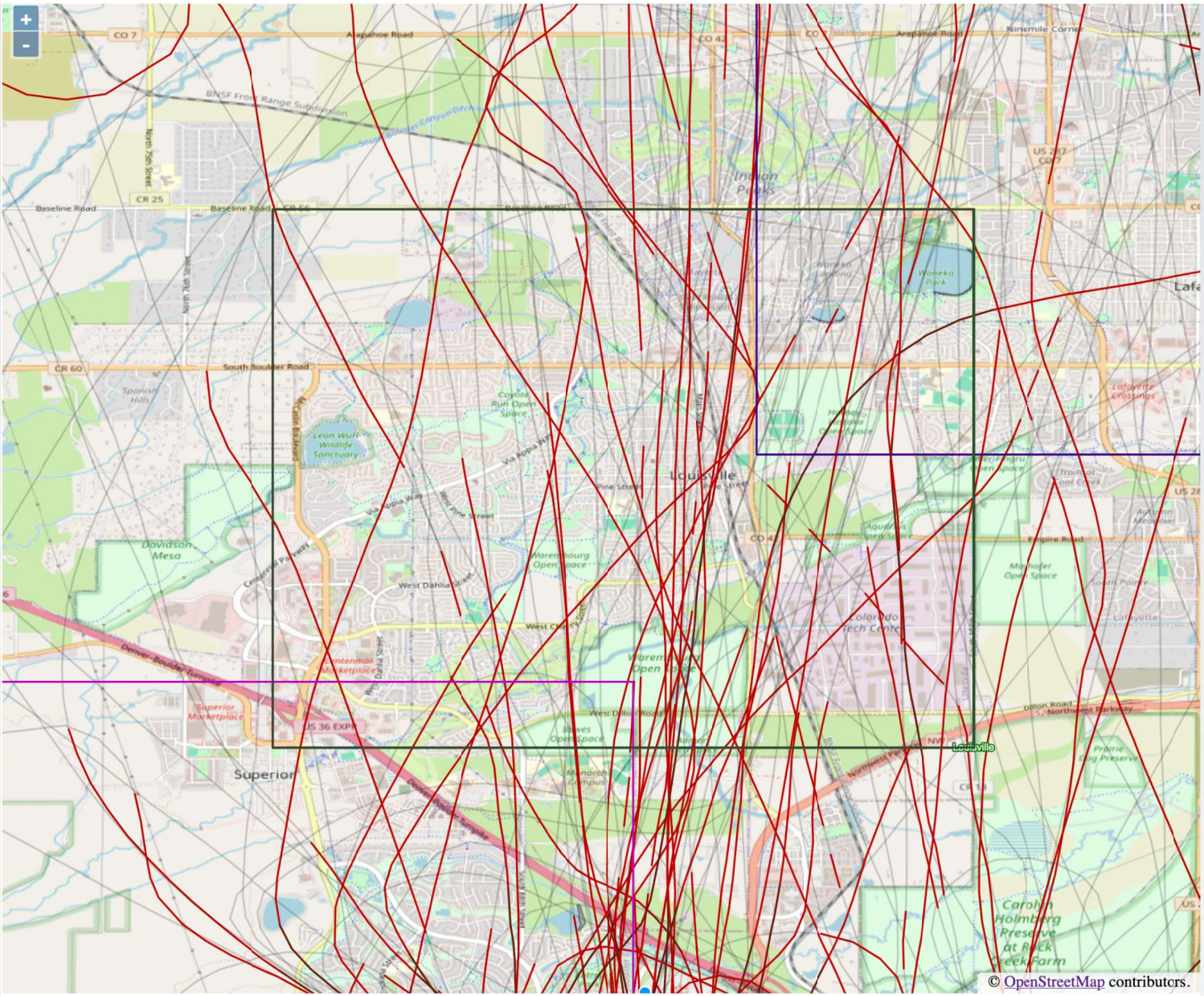
aircraft	local	arrivals	departures							
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑		7000-8000	☐	set
rotorcraft	☐	☐	☐	ff 2	6100-6350	☐		8000-9000	☐	clear
					6350-6600	☐		9000-10000	☐	
					6600-6700	☐		10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
25	27	00:07:10	0	

May 2022

less than 500 ft AGL (6100ft)

27 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2023 | 9000ft | 1000x1200
Nc Selection | end time 12:00pm | end date 05/31/2023 | 5000ft | submit

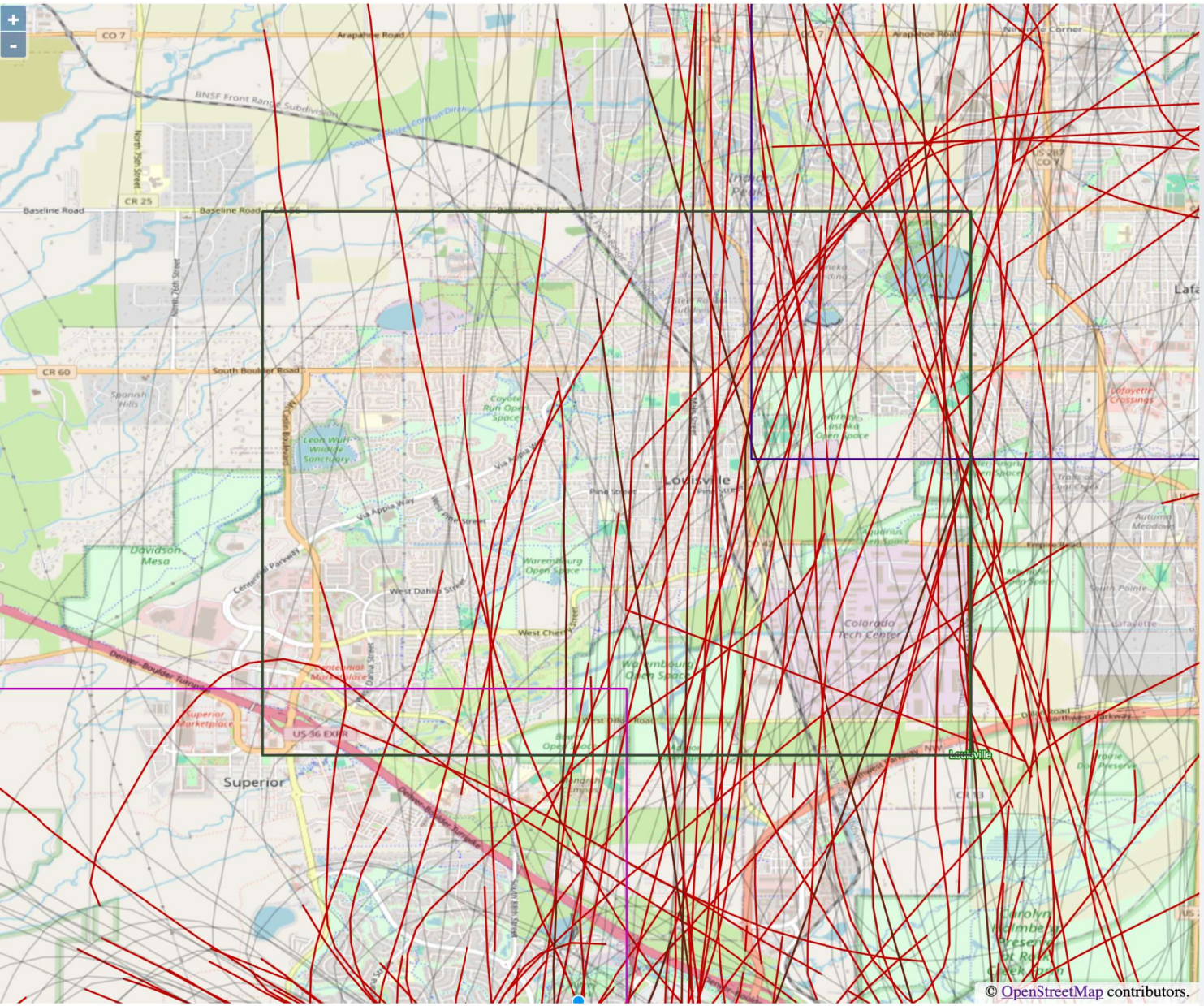
aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑	6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑	7000-8000	☐	set
rotorcraft	☐	☐	☐	ff 2	6100-6350	☐	8000-9000	☐	clear
					6350-6600	☐	9000-10000	☐	
					6600-6700	☐	10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
34	36	00:12:15	0	

May 2023

less than 500 ft AGL (6100ft)

36 overpasses



RMMA Airport Area | start time 12:00am | start date 05/01/2024 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 05/31/2024 | 5000ft | submit

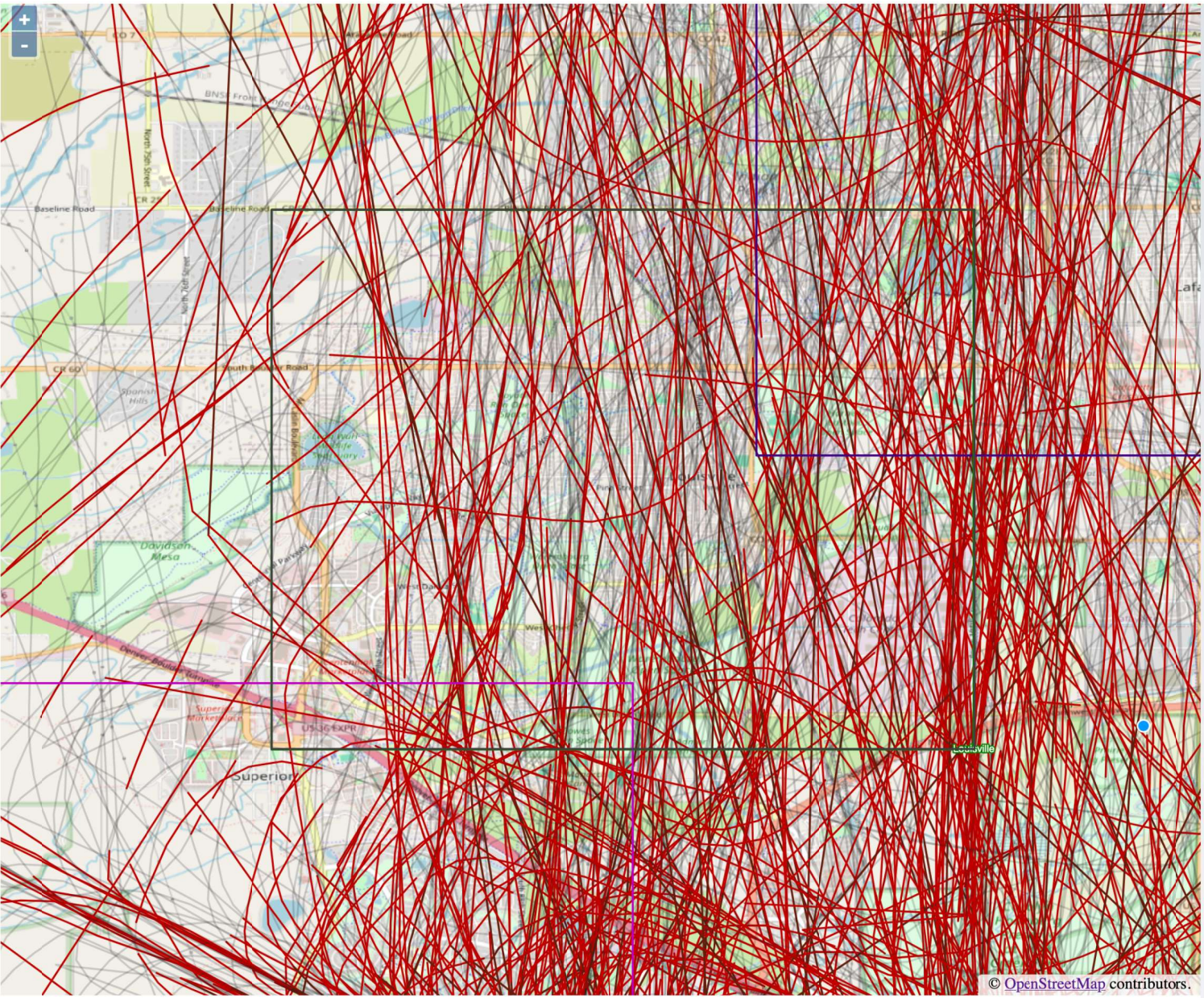
aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑	6700-7000	☐	
jet	☑	☑	☑	clear	5850-6100	☑	7000-8000	☐	set
rotorcraft	☐	☐	☐	ff 2	6100-6350	☐	8000-9000	☐	clear
					6350-6600	☐	9000-10000	☐	
					6600-6700	☐	10000-100000	☐	

flights	overpasses	overpass duration	altitude	aircraft
37	46	10:55:45	0	

May 2024

less than 500 ft AGL (6100ft)

46 overpasses



May 2025

less than 500 ft AGL (6100ft)

141 overpasses

RMMA Airport Area | start time 12:00am | start date 05/01/2025 | 9000ft | 1000x1200

No Selection | end time 12:00pm | end date 05/31/2025 | 5000ft | submit

aircraft	local	arrivals	departures
fixed wing	☑	☑	☑
jet	☑	☑	☑
rotorcraft	☐	☐	☐

refresh | clear | ff 2

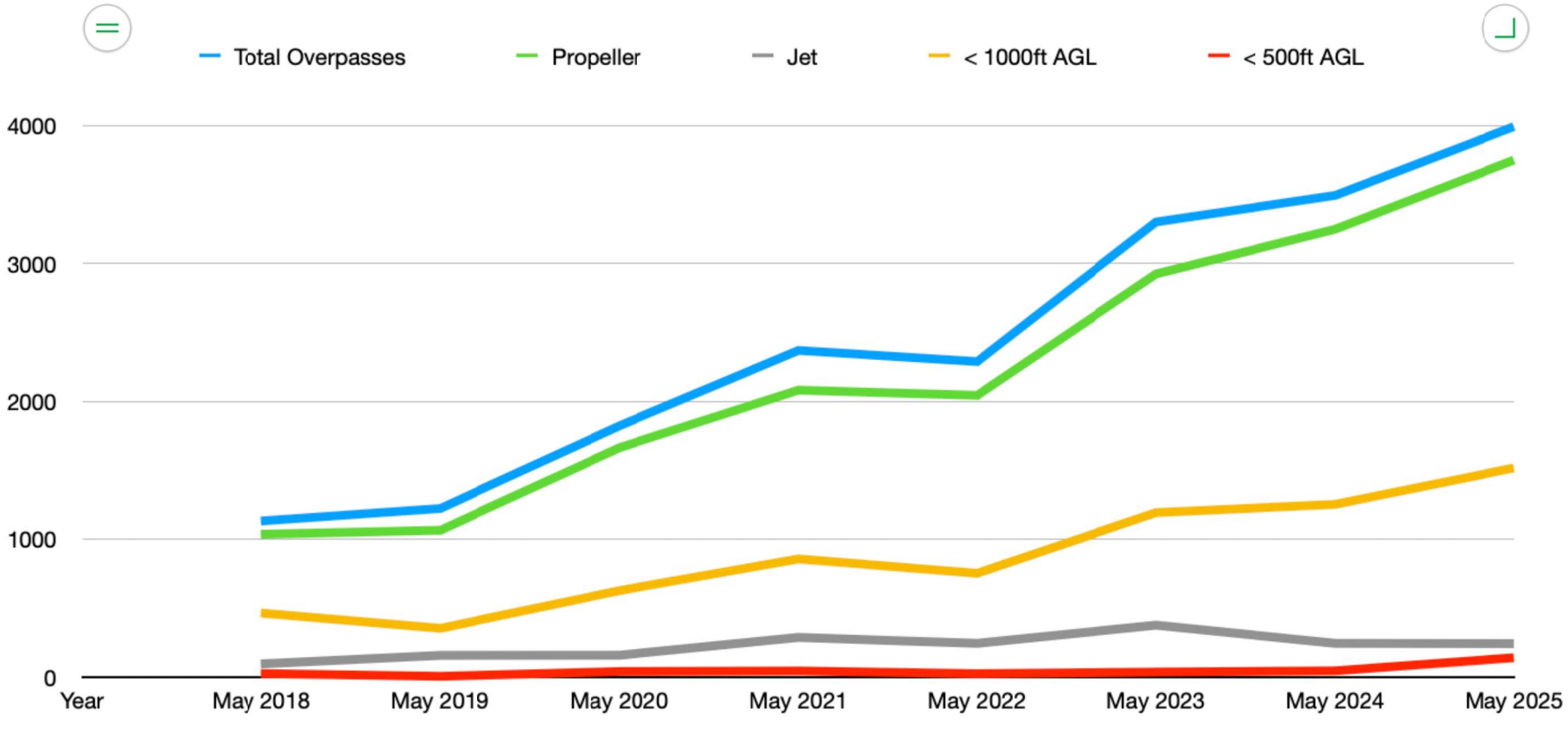
4000-5850	☑	6700-7000	☐
5850-6100	☑	7000-8000	☐
6100-6350	☐	8000-9000	☐
6350-6600	☐	9000-10000	☐
6600-6700	☐	10000-100000	☐

set | clear

flights	overpasses	overpass duration	altitude	aircraft
103	141	16:26:15	0	

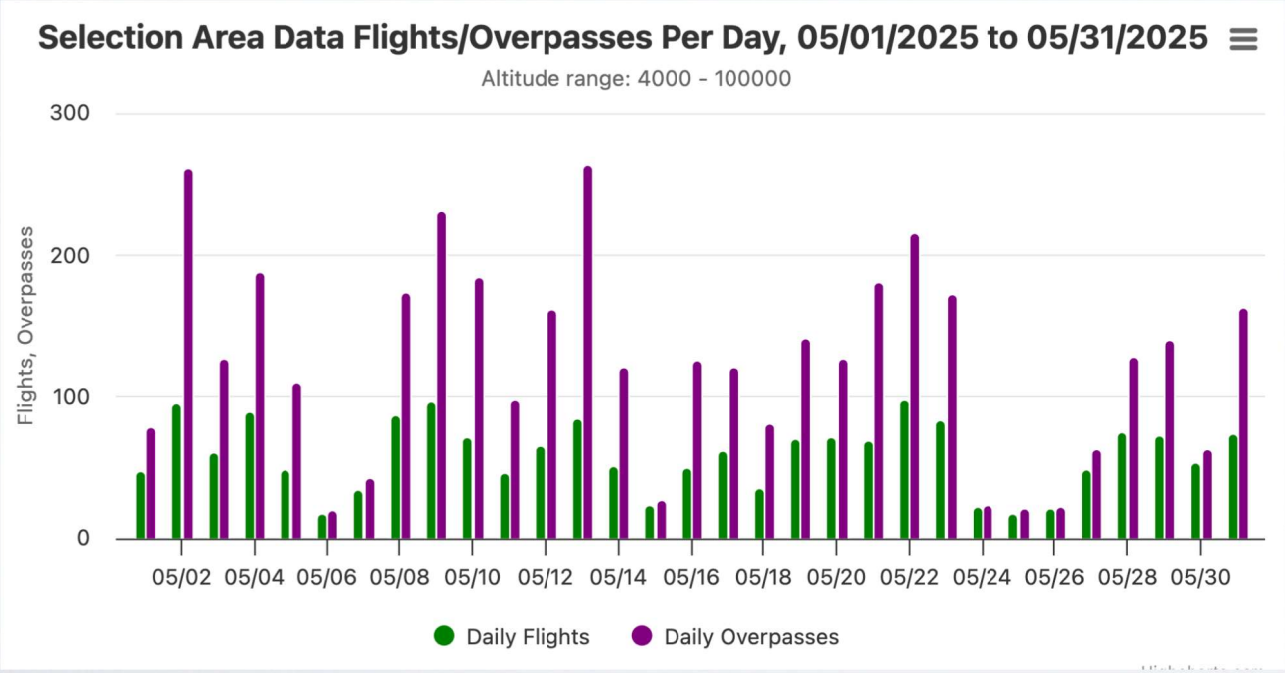
RMMA overpasses above Louisville selection area. Full Months of May

	Total Overpasses	Propeller	Jet	< 1000ft AGL	< 500ft AGL
Year					
May 2018	1132	1036	96	465	26
May 2019	1223	1065	158	354	6
May 2020	1823	1664	159	628	41
May 2021	2369	2081	288	857	45
May 2022	2288	2043	245	753	25
May 2023	3300	2923	377	1193	37
May 2024	3493	3248	245	1253	46
May 2025	3992	3749	243	1517	141

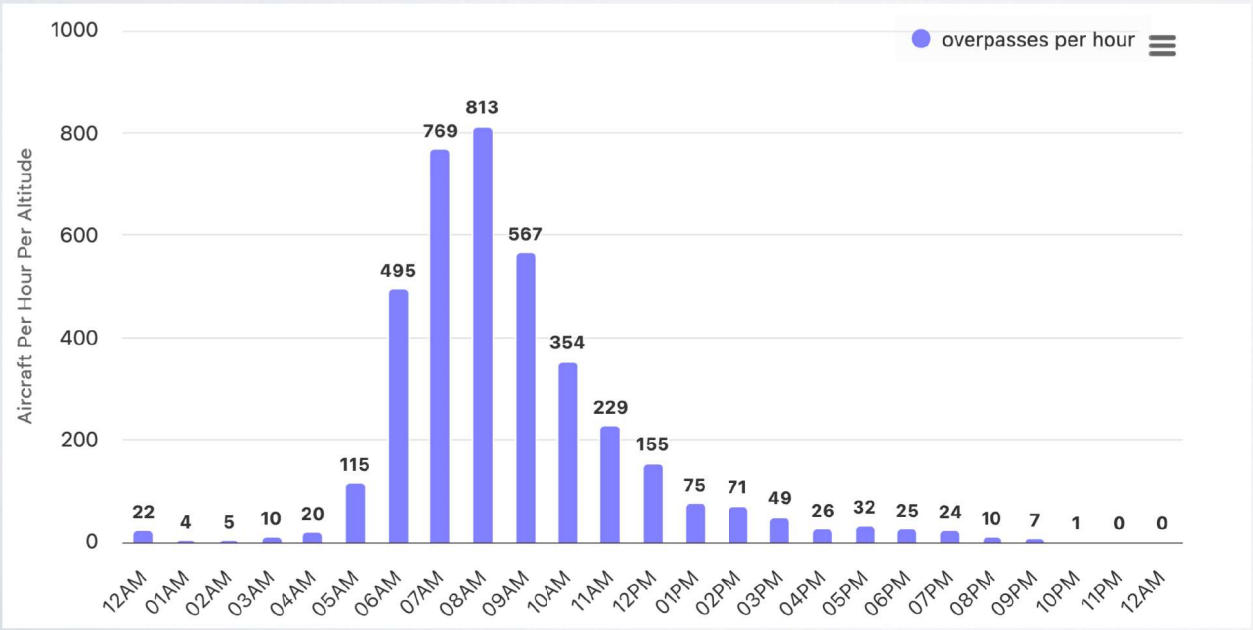


Flights in May 2018-2025

Focus on May 2025



05/13/25 - 264 maximum one day overpasses
In the busiest 10 hours 6AM - 3PM
25 overpasses hour



Averages for all days in May

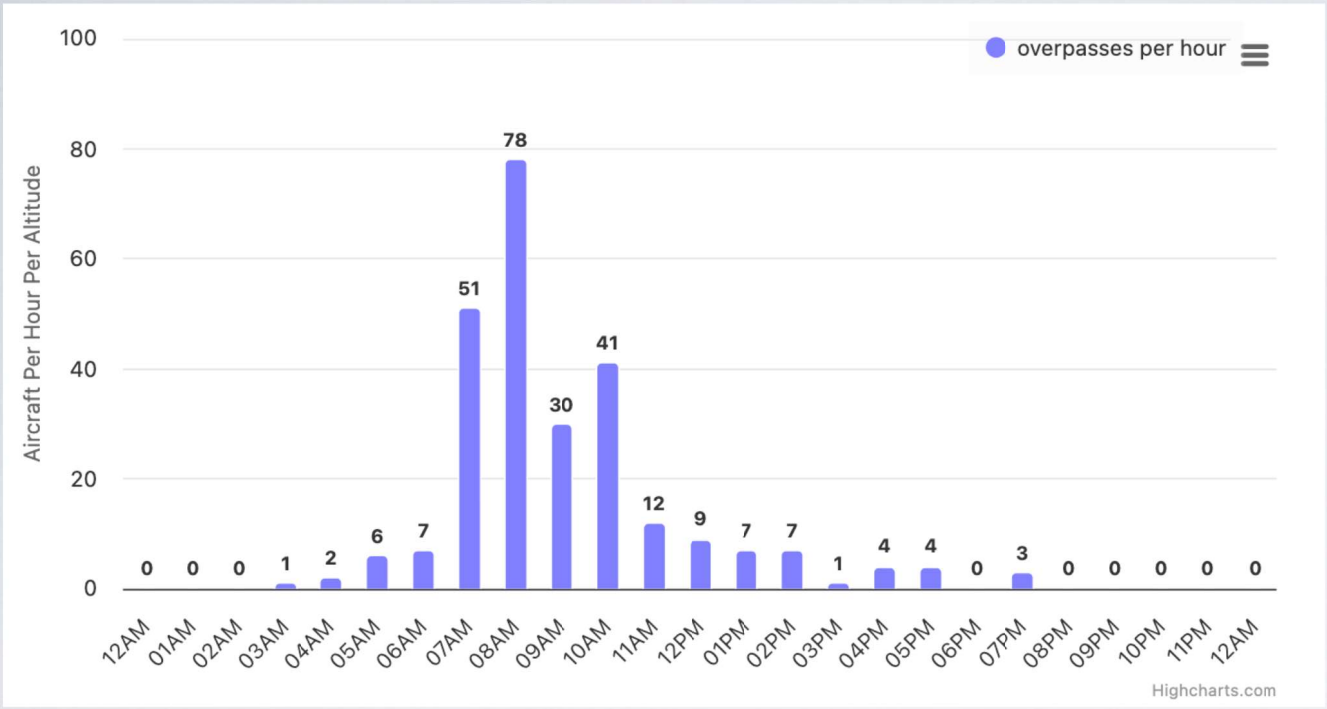
Busiest hour 8-9 AM - 813 overpasses
26.226 per hour
an overpass every 2.5 minutes

Busiest time range - 6AM - 11AM
19.3 per hour
an overpass every three minutes

Earliest time ranges
3AM-5AM one overpass per day
5AM-6AM 3.7 overpasses per hour

Late morning - Afternoons
11 - 6PM - 3.2 overpasses per hour

Focus on May 2025, busiest days 05/02 and 05/13

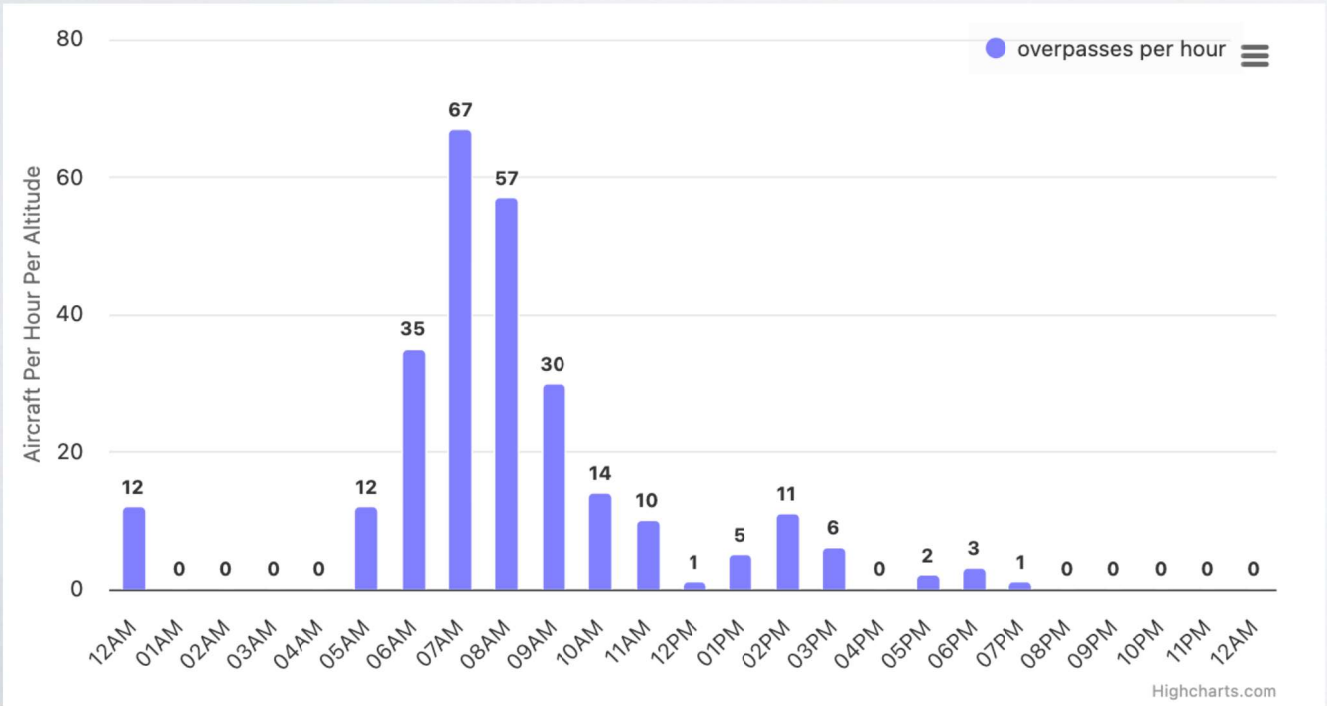


05/02/25

Early flights 7-8AM
An overpass every 70 sec

8AM-9AM peak
An overpass every 45 sec

Average of 7AM-11AM
An overpass every 72 sec



05/13/25

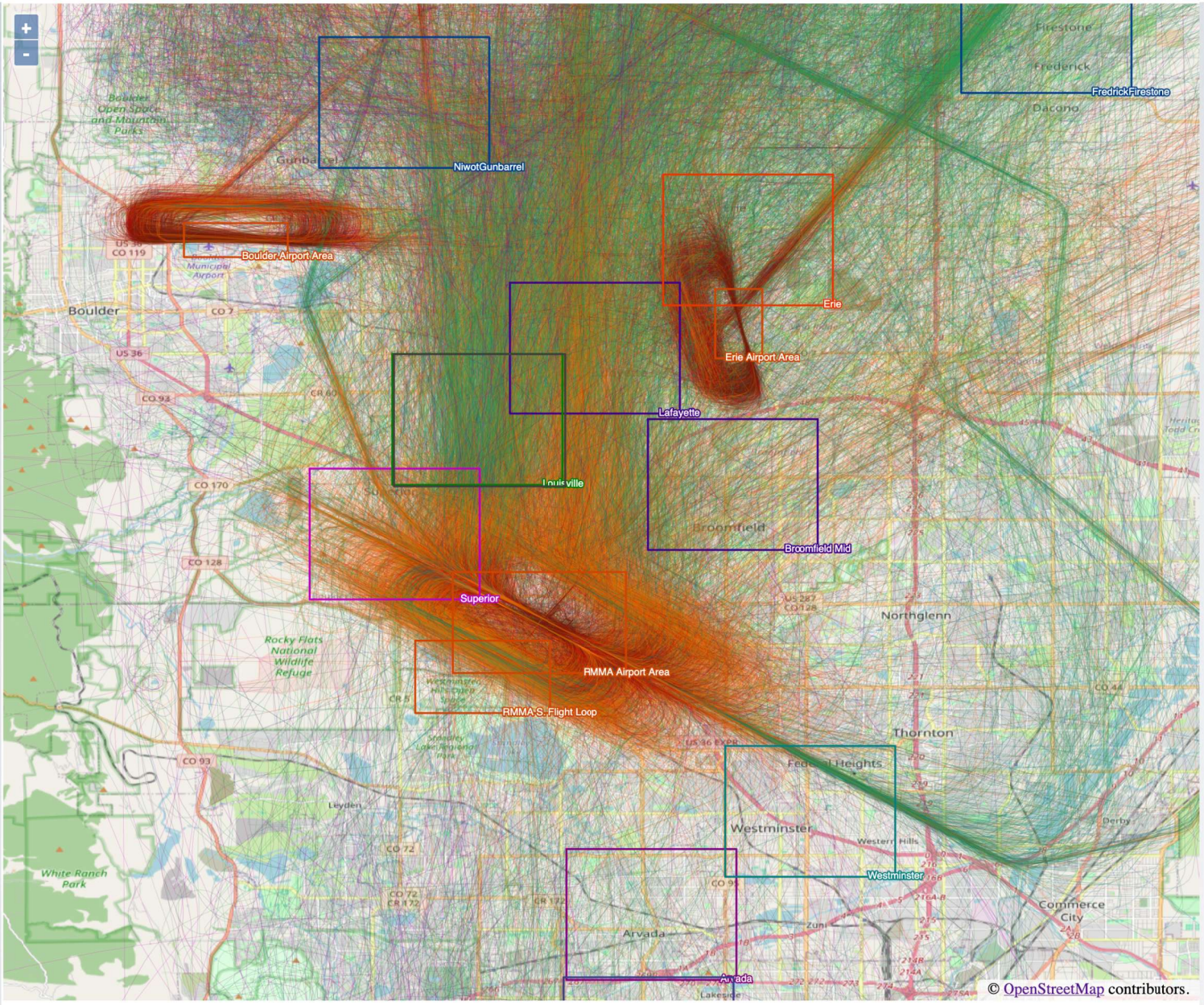
7AM-8AM (one hour earlier)
One overpass every 53 seconds

Average 6AM-10AM (one hour earlier)
An overpass every 78 sec

Early flights

6-7AM
An overpass every 1.7 minutes (102 sec)
5-6AM
An overpass every 5 minutes

Propeller Flight overpasses over Louisville
(Large fraction are flight schools)
From/To RMMA
Month of April to September 2025

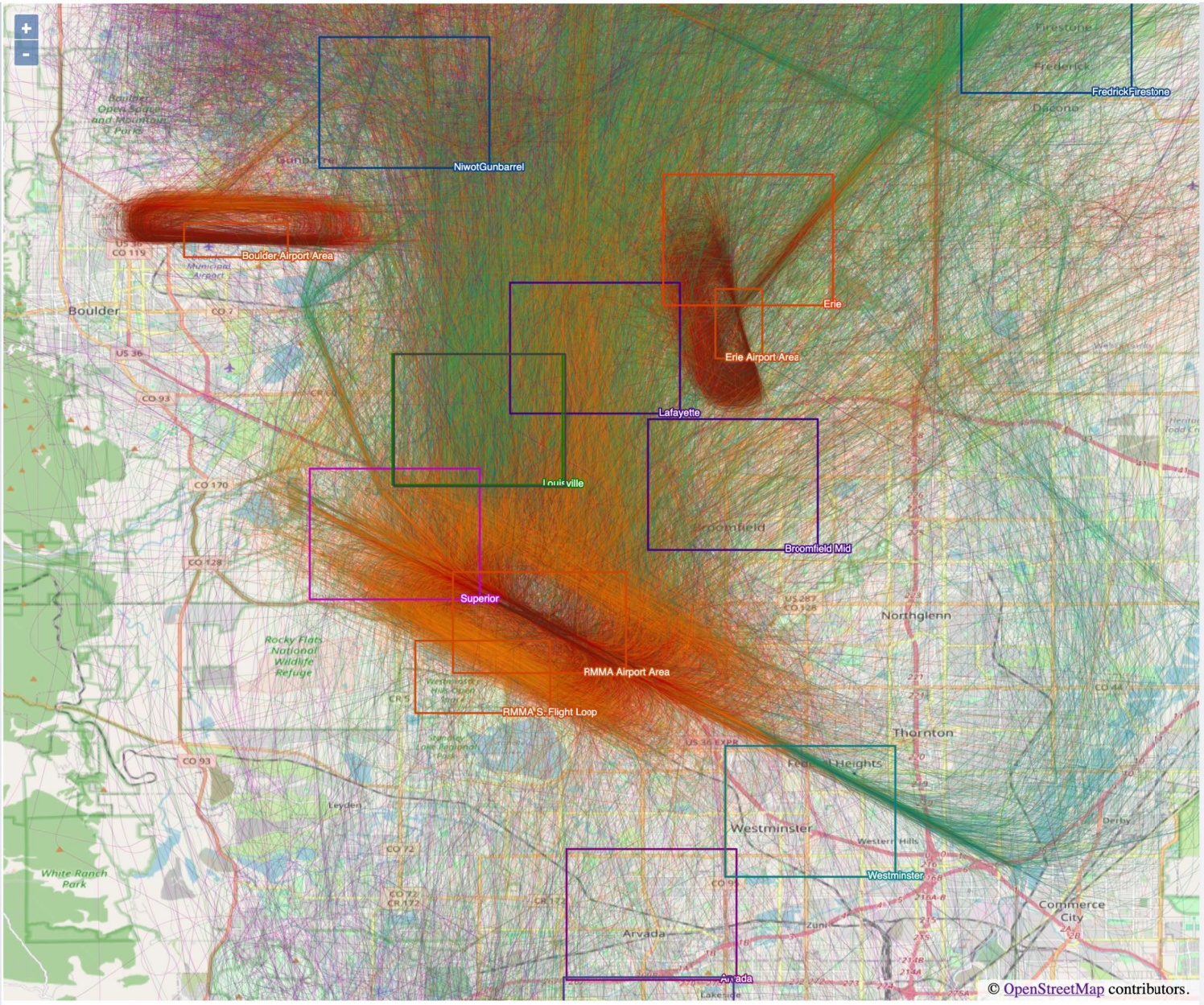


RMMA Airport Area | start time 12:00am | start date 04/01/2025 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 04/30/2025 | 5000ft | submit

aircraft	local	arrivals	departures					
fixed wing	☑	☑	☑	refresh	4000-5850 ☑		6700-7000 ☑	
jet	☐	☐	☐	clear	5850-6100 ☑		7000-8000 ☑	set
rotorcraft	☐	☐	☐	40 0	6100-6350 ☑		8000-9000 ☑	clear
					6350-6600 ☑		9000-10000 ☑	
					6600-6700 ☑		10000-100000 ☑	

flights	overpasses	overpass duration	altitude	aircraft
1478	3121	13:02:30	0	

Propeller Flights
April 2025



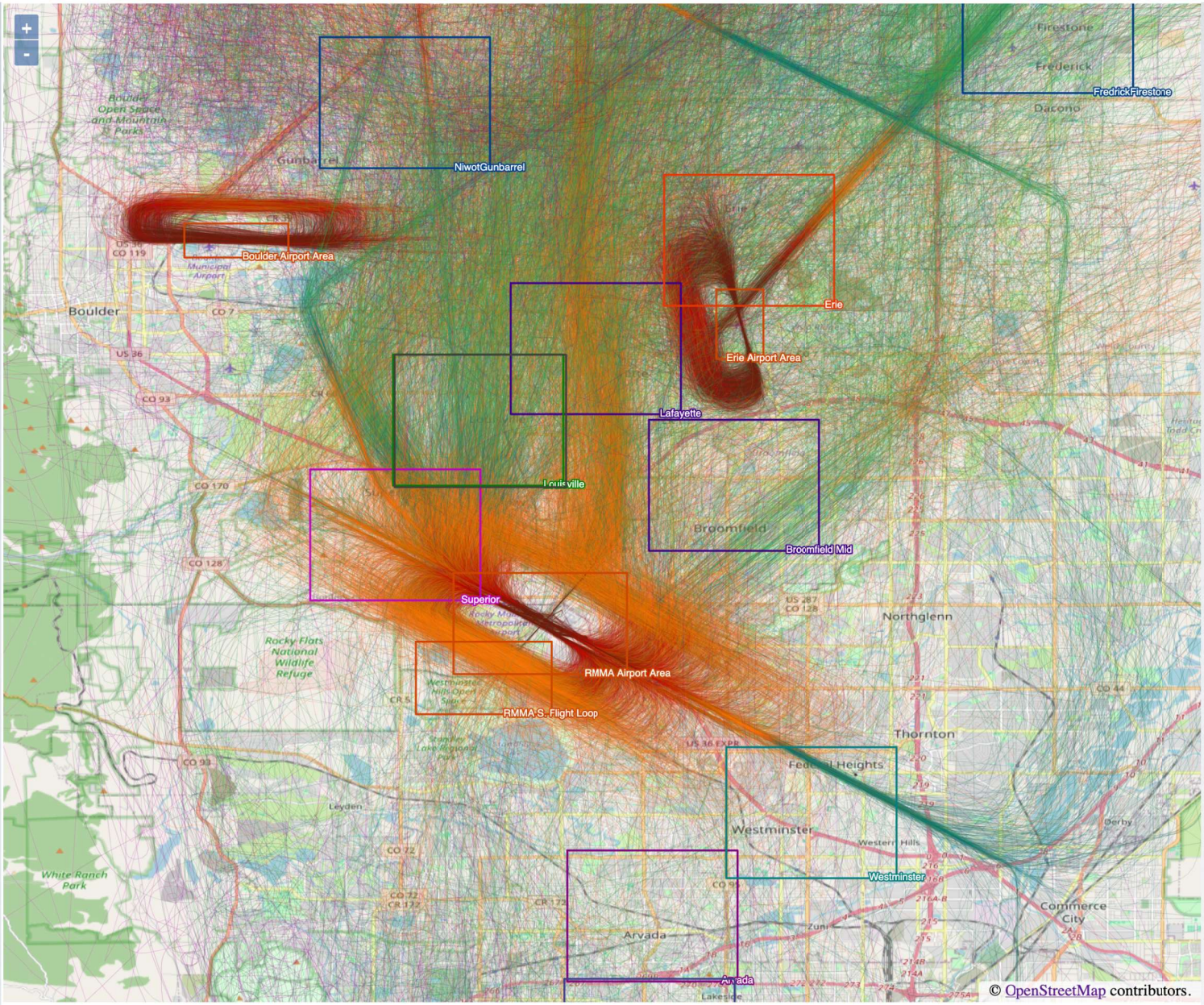
RMMA Airport Area | start time 12:00am | start date 05/01/2025 | 9000ft | 1000x1200

No Selection | end time 12:00pm | end date 05/31/2025 | 5000ft | submit

aircraft	local	arrivals	departures					
fixed wing	☑	☑	☑	refresh	4000-5850 ☑		6700-7000 ☑	
jet	☐	☐	☐	clear	5850-6100 ☑		7000-8000 ☑	set
rotorcraft	☐	☐	☐	40 0	6100-6350 ☑		8000-9000 ☑	clear
					6350-6600 ☑		9000-10000 ☑	
					6600-6700 ☑		10000-100000 ☑	

flights	overpasses	overpass duration	altitude	aircraft
1626	3800	20:49:55	0	

Propeller Flights
May 2025

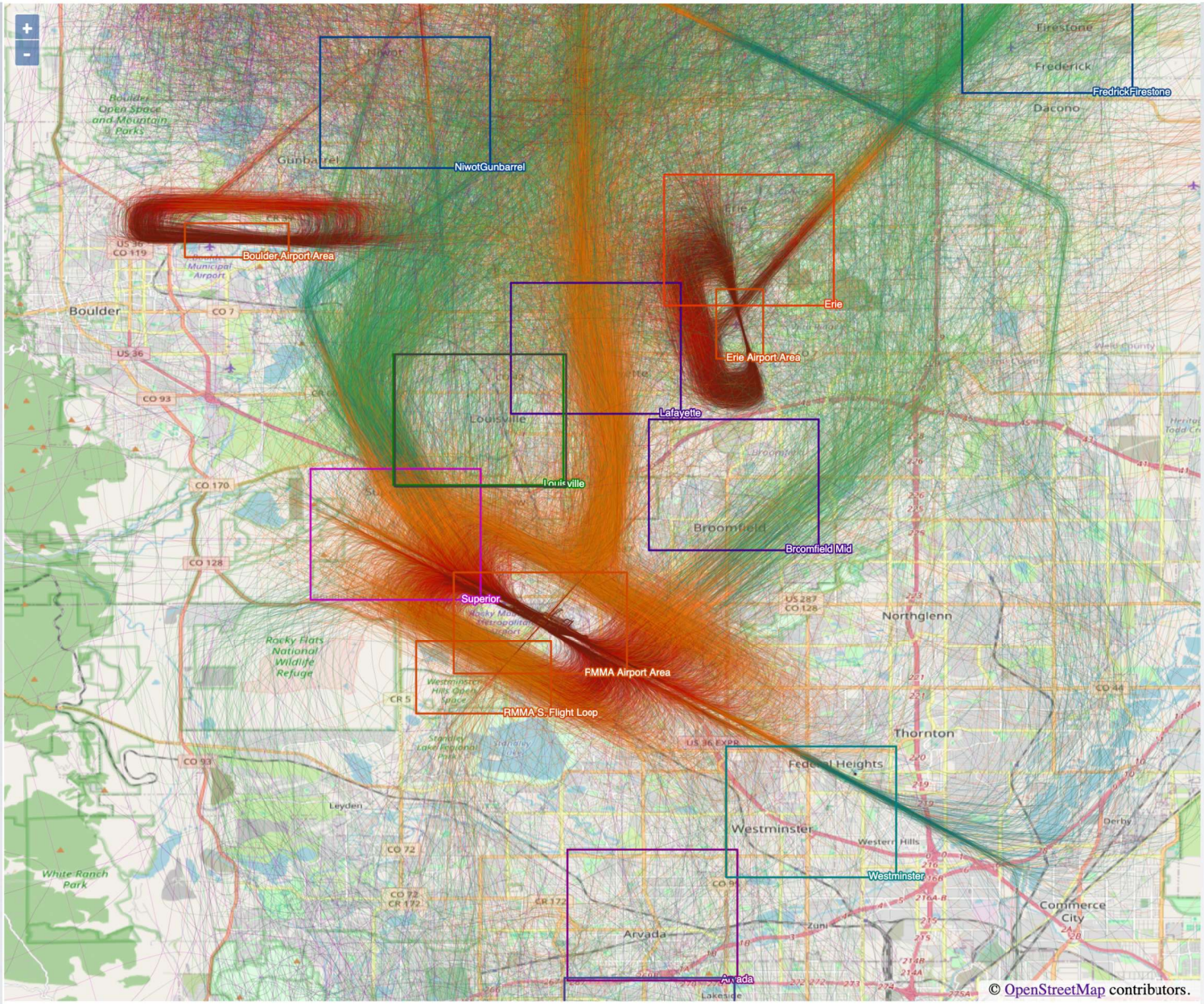


RMMA Airport Area | start time 12:00am | start date 06/01/2025 | 9000ft | 1000x1200
No Selection | end time 12:00pm | end date 06/30/2025 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☑	
jet	☐	☐	☐	clear	5850-6100	☑		7000-8000	☑	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350	☑		8000-9000	☑	clear
					6350-6600	☑		9000-10000	☑	
					6600-6700	☑		10000-100000	☑	

flights	overpasses	overpass duration	altitude	aircraft
1607	2800	09:41:45	0	

Propeller Flights
June 2025



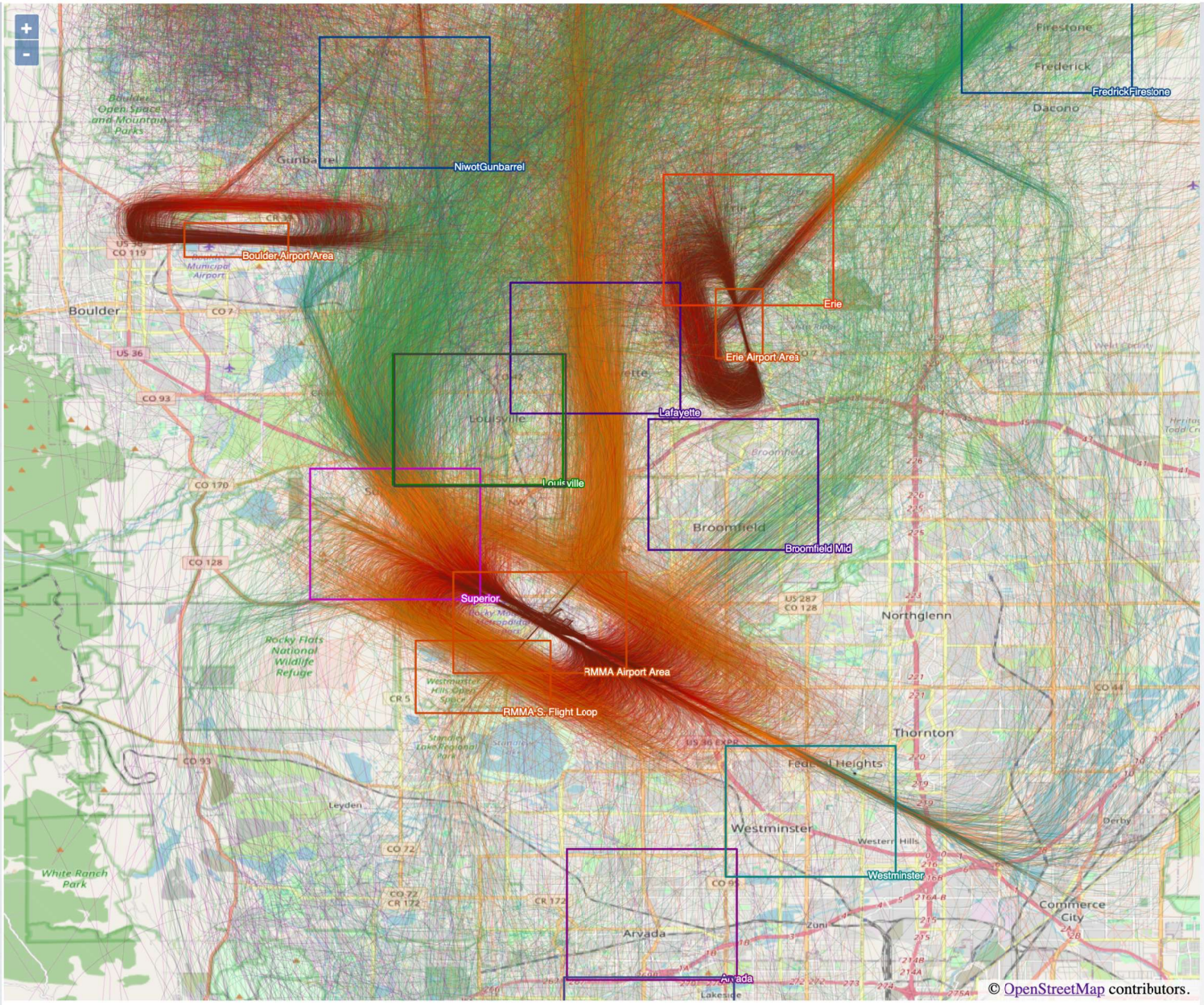
RMMA Airport Area | start time 12:00am | start date 07/01/2025 | 9000ft | 1000x1200

No Selection | end time 12:00pm | end date 07/31/2025 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑		6700-7000	☑	
jet	☐	☐	☐	clear	5850-6100	☑		7000-8000	☑	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350	☑		8000-9000	☑	clear
					6350-6600	☑		9000-10000	☑	
					6600-6700	☑		10000-100000	☑	

flights	overpasses	overpass duration	altitude	aircraft
1464	2249	13:46:20	0	

Propeller Flights
July 2025



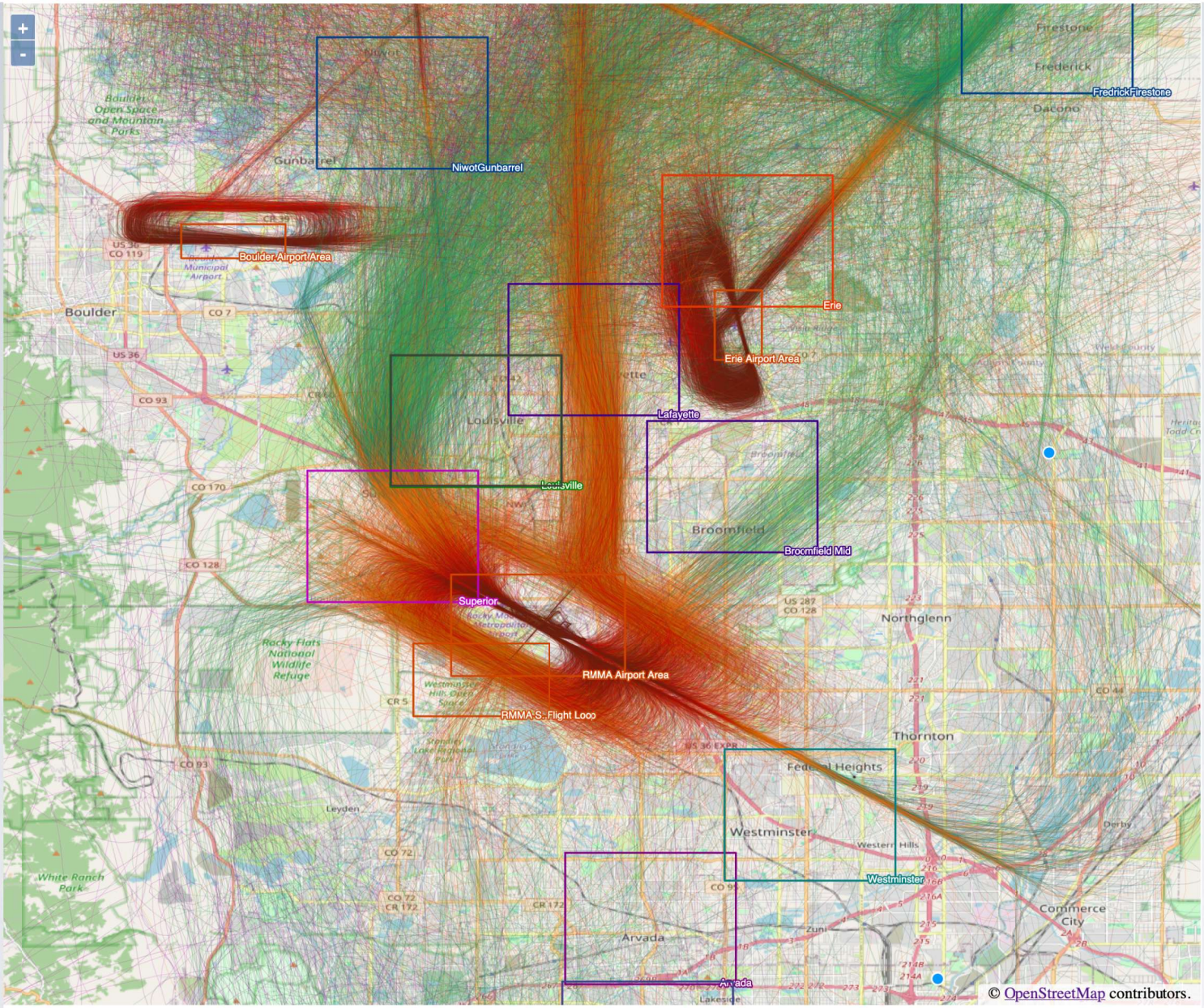
RMMA Airport Area | start time 12:00am | start date 08/01/2025 | 9000ft | 1000x1200

No Selection | end time 12:00pm | end date 08/31/2025 | 5000ft | submit

aircraft	local	arrivals	departures						
fixed wing	☑	☑	☑	refresh	4000-5850	☑	6700-7000	☑	
jet	☐	☐	☐	clear	5850-6100	☑	7000-8000	☑	set
rotorcraft	☐	☐	☐	40 0	6100-6350	☑	8000-9000	☑	clear
					6350-6600	☑	9000-10000	☑	
					6600-6700	☑	10000-100000	☑	

flights	overpasses	overpass duration	altitude	aircraft
1521	2522	23:19:50	0	

Propeller Flights August 2025



RMMA Airport Area | start time 12:00am | start date 09/01/2025 | 9000ft | 1000x1200

Draw Sample Area | end time 12:00pm | end date 09/30/2025 | 5000ft | submit

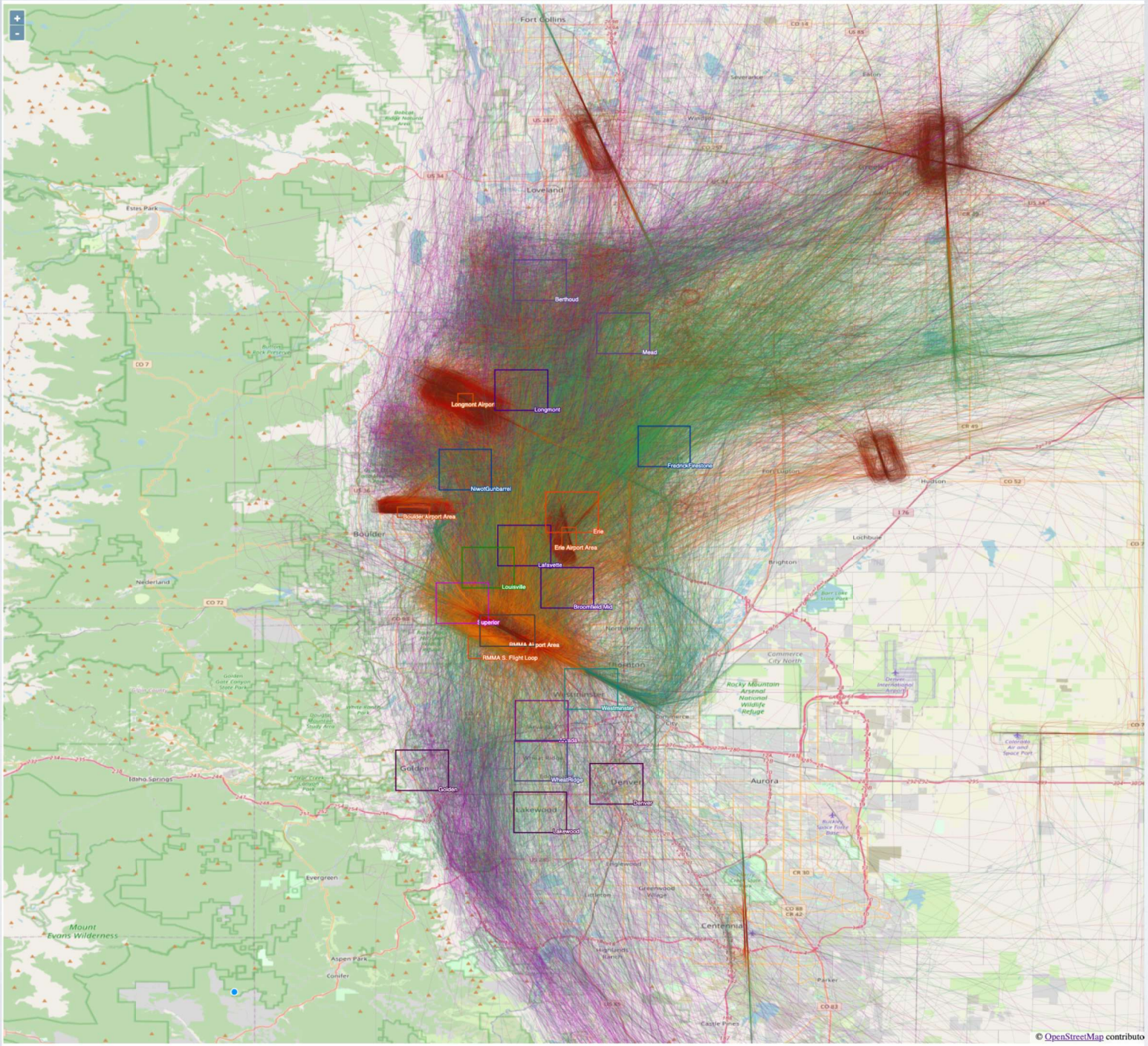
aircraft	local	arrivals	departures					
fixed wing	☑	☑	☑	refresh	4000-5850 ☑		6700-7000 ☑	
jet	☐	☐	☐	clear	5850-6100 ☑		7000-8000 ☑	set
rotorcraft	☐	☐	☐	40 / 0	6100-6350 ☑		8000-9000 ☑	clear
					6350-6600 ☑		9000-10000 ☑	
					6600-6700 ☑		10000-100000 ☑	

flights	overpasses	overpass duration	altitude	aircraft
1437	2485	22:22:00	0	

Propeller Flights
September 2025

Questions?

THANK YOU!



RMMA Airport Area | start time 12:00am | start date 05/01/2025 | 9000ft | 1800x2000

No Selection | end time 12:00pm | end date 05/31/2025 | 5000ft | submit

aircraft	local	arrivals	departures				
fixed wing	☑	☑	☑	refresh	4000-5850 ☑	6700-7000 ☑	
					5850-6100 ☑	7000-8000 ☑	set

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 8B

SUBJECT: ORDINANCE NO. 1908, SERIES 2025 – AN ORDINANCE REZONING LOT 1, BLOCK 3, JEFFERSON PLACE SUBDIVISION FROM RESIDENTIAL MEDIUM DENSITY (R-M) TO COMMUNITY COMMERCIAL (C-C) ZONE DISTRICT – 2nd READING, PUBLIC HEARING (advertised City of Louisville Website 10/08/25)

DATE: OCTOBER 21, 2025

PREPARED BY: EMILY CLINE-GIBSON, PLANNER II

PRESENTED BY: EMILY CLINE-GIBSON, PLANNER II

VICINITY MAP:

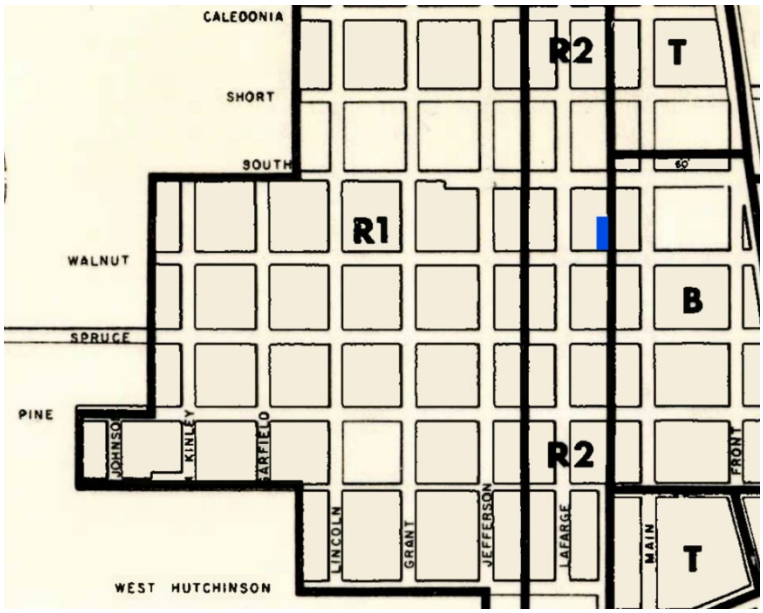
SUMMARY:
The applicant, Jeremy Greene, Living Greene, LLC, is requesting approval of a change in zoning from Residential Medium Density (R-M) to Commercial Community (C-C) for the subject property at 811 Walnut Street. If Council approves a rezone to C-C, staff recommends a follow-up action to initiate a text amendment for Council to consider extending the Downtown Louisville Overlay boundary to include the subject property, making it subject to the standards in the Design Handbook for Downtown Louisville. The rezone request is to allow for a broader range of commercial uses within the existing nonconforming commercial building.

BACKGROUND / PRIOR DISCUSSIONS:
The subject property consists of Lot 1, Block 3 of the Jefferson Place Subdivision, which was platted in 1880. The property is approximately 82 feet long by 25 feet wide. A 10-foot-wide rear alley which extended along the northern property lines of Lots 1-5 was vacated by Ordinance 1959-310, and an approximate 5-foot by 25-foot section of the alley was allotted to the subject property.

The building located on the subject property was constructed around 1954 by the Mountain States Telephone & Telegraph Company and served as a new office for Louisville's switchboard operating center, which was originally located at 913 Main Street. This location was ideal for the new office as Louisville converted from switchboard-operated telephones to unattended dial phones due to the proximity between the two buildings, allowing existing telephone cables to be easily accessed by both buildings as the transition occurred in March 1955.

Location of the original telephone office at 913 Main Street and the subject property.

The establishment of zoning districts in Louisville occurred in 1962 with Ordinance 1962-327B, which placed the subject property into the R2 residential zone district. This zone district allowed *electric transmission and distribution lines, telegraph and telephone lines, telephone exchanges, electric substations and gas regulator stations where no public office and no repair or storage facilities are maintained.*



Zoning District Map dated December 12, 1962

The property was sold in 1975 and converted into two professional offices via a special review use (SRU) certificate issued in November 1975. A citywide rezoning and update to permitted uses occurred in January 1976 with Ordinance 1975-485. The subject property was then placed in the Residential Medium Density (R-M) zone, which remains its current zoning designation. This zone is intended for mid-density residential units, such as duplexes or townhomes, with commercial uses limited to childcare centers, hospitals, and nursing homes.

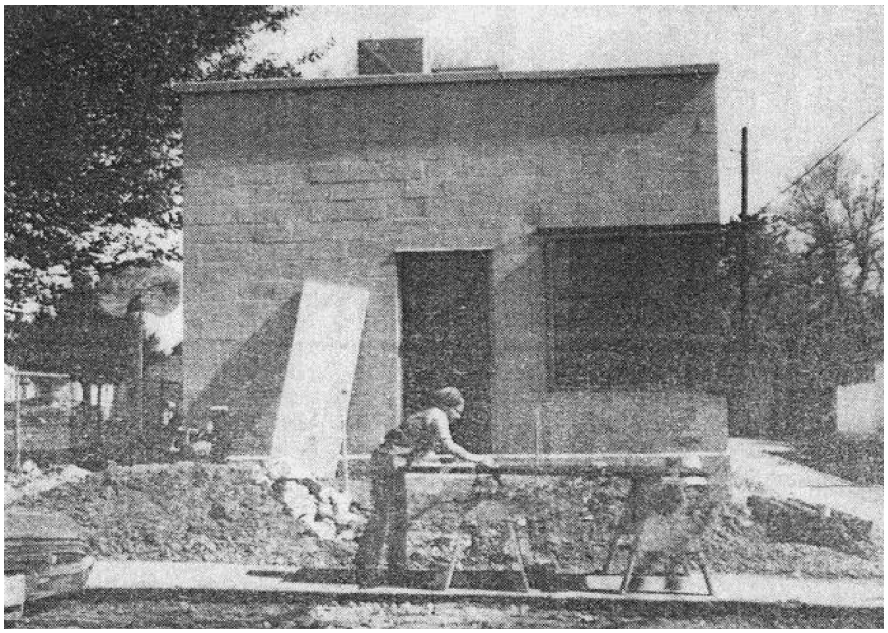


Image of the building being renovated for office use in 1975.

The SRU certificate was later amended in May 1976 to also allow for a beauty salon, and another SRU was approved in 1978 for a pet grooming shop. Prior to the adoption of Ordinance 1975-485, SRU approvals were not guided by specific criteria or procedure in the Municipal Code, and Planning Commission records do not extend far back enough to determine how each use was analyzed for approval. The adoption of the 1976 Ordinance clarified which uses were permitted by-right and which uses required special review, and it also included updated procedures for analyzing SRU applications. According to City Council meeting minutes dated September 20, 1978, Council approved the SRU request for the pet shop. However, it appears that all SRU applications reviewed prior to 1978 were approved at the Planning Commission level.

Current land use allowances provided in Louisville Municipal Code (LMC) Sec. 17.12.030 do not permit any of the above uses at the subject property, and continuance of any previously approved special review uses would be considered nonconforming. LMC Section 17.36.010 states that *if a nonconforming use involving a structure is discontinued from use for a period of one year, further use of the property shall be for a conforming use.* The building is currently being used as an office, and all of the previously approved SRU uses other than the office use have not been active at the property for at least one year. As a result, all other previously approved SRUs are no longer valid.

Surrounding zoning of the area. Red is the C-C zone, orange is the R-M zone, and yellow is the R-L zone.

An existing alley is located along the eastern property line and acts as a division between the C-C zone, which includes the Downtown Louisville Overlay, and the R-M zone, which includes the Old Town Overlay. The Downtown Louisville Overlay represents the predominantly commercial area and the Old Town Louisville overlay represents the predominantly residential area. The building directly east at 815 Walnut Street is commercially zoned and

currently operates as a lock and key business, while the properties to the west along La Farge Avenue are single-family dwellings.

DEVELOPMENT PROPOSAL:
The proposal includes a rezone from R-M to C-C to allow land uses consistent with those permitted in the adjacent Downtown Louisville overlay area. At this time, the applicant does not anticipate any exterior alterations to the property to accommodate future commercial uses. Any interior reconfigurations will be reviewed through the building permit process. Rezoning to C-C would also initiate a text amendment to extend the Downtown Louisville Overlay boundary to include the subject property. This boundary adjustment is consistent with surrounding zoning and overlay boundaries, and would subject the property to the standards set forth in the Design Handbook of Downtown Louisville. Should the property owner seek future redevelopment of the lot, site design must comply with LMC Title 17 and the Design Handbook of Downtown Louisville, and major exterior changes would require a Planned Unit Development (PUD) application. Any PUD would require public hearings before Planning Commission and City Council with notice to surrounding properties.

Current image of the subject property.

ANALYSIS:
The following table outlines commercial uses that would be permitted in the C-C zone either by-right or by Special Review Use (SRU) that are currently not allowed in the subject property's current R-M zone district.

Table 1. Permitted uses in the C-C zone that are not allowed in the R-M zone		
Use Group		**Permitted**
8	Hotels and motels, including restaurants and other incidental commercial uses inside the principal building	SRU
12	Vocational and business schools	SRU
23	Mortuaries and funeral chapels	SRU
24	Personal services, including but not limited to barbershops and beauty shops, dry-cleaning outlets, self-service laundries, shoe repair shops and similar activities or a facility operated by an accredited massage therapist for the purpose of massage therapy as defined in Section 5.16.010	Yes
25	Establishments for retailing of convenience goods, including but not limited to variety stores, supermarkets, hardware stores, sporting good stores, shoe stores and drugstores	Yes
26	Establishments for the retailing of shoppers goods, including but not limited to department stores or major comparison goods stores	Yes
27	Furniture and appliance repair	Yes
29	Medical and dental clinics, professional and business offices, financial institutions, small animal clinics	Yes
31	Indoor eating and drinking establishments	Yes
32	Indoor commercial amusement establishments	Yes
34	Outdoor commercial amusement	SRU
35	Sales and repair of motor vehicles, outdoor sales and repair (appliances, retail goods, eating and drinking establishments, etc.), rental facilities	SRU
37	Automobile parking garages	SRU
38	Gasoline service stations	SRU
39	Public garages	SRU
47	Recreational enterprise	SRU
50	Limited wholesale sales	SRU
51	Pet care business	SRU
58	Live-work	Yes
59	Health or athletic clubs, spas, dance studios, fitness studios	Yes
60	Mobile food court	SRU
61	Banquet or reception hall	SRU

Of the 22 new use groups that would be permitted under the C-C zone district, 9 would be allowed by-right and not require additional review. The remaining 13 use groups would require an SRU application, which includes review by Planning Commission and approval by City Council at public hearings.

All of the by-right uses are low-intensity, indoor commercial services that are consistent with the building's historic use and compatible with nearby uses in the Downtown Overlay district. Additionally, any outdoor dining proposed by a food and beverage establishment would require SRU review and approval, as noted under Use Group 35 in Table 1. This mirrors the process for other exterior or higher-impact uses in the C-C zone, including amusement uses, parking garages, and vehicle sales.

LMC Sec. 17.20.010.E exempts properties within the boundaries of Downtown Louisville from requiring designated off-street parking spaces. On-street parking is located along Walnut Street and throughout downtown, and eight public parking lots are within a quarter-mile radius of the subject property.

Compliance with LMC Sec. 17.44.050 – Rezoning
The rezoning proposal is subject to LMC Sec. 17.44.050 - Declaration of policy for rezoning. One or more of the following criteria must be met to approve a rezoning. Staff analysis of each criterion is found below:

1. *The land to be rezoned was zoned in error and as presently zoned is inconsistent with the policies and goals of the city's comprehensive plan.*

There is no evidence to suggest the property was zoned in error. Since 1962, zoning maps have consistently shown a clear boundary separating the commercial downtown area from adjacent residential zones, following the same alignment from South Street to Elm Street. While the zoning may have originally accommodated the specific telephone office use, it does not constitute a zoning error.

Staff find this criterion is not met.

2. *The area for which rezoning is requested has changed or is changing to such a degree that it is in the public interest to encourage a redevelopment of the area.*

Staff find that the area which the rezoning is requested has changed to a degree that it is in the public's interest to encourage reinvestment of the subject property. The building was originally built for commercial use, but the existing zoning only allows residential use. Due to the costly expense of converting a commercial building into housing, along with limited residential market interest, the property has remained underutilized. Additionally, all previously approved SRU uses besides the office SRU have expired, so the building no longer qualifies for its historical commercial uses under current code.

Current R-M land uses outlined in LMC Sec. 17.12.030 do not include a category that is comparable to the original telephone operations use. Staff find that the existing R-M zoning does not align with the building's historically commercial and office use and does not provide alternative uses that work with the building's existing conditions. Current lot

configurations do not comply with bulk standards for the R-M zone, further discouraging the subject property from being redeveloped for residential use.

The rezone would support investment in an existing downtown building and aligns with Comprehensive Plan Policy ED-5.2, which encourages revitalization of existing buildings that contribute to downtown character and economic diversity (p. 50, Comprehensive Plan). It is also supported by Policy ED-1.3 (p. 49, Comprehensive Plan), which focuses on job creation and increased local revenues.

If the subject property is rezoned to Community Commercial (C-C), the zoning rules in place would provide safeguards for the surrounding neighborhood. Any major changes to the site would require a Planned Unit Development (PUD), which involves public notice and hearings before approval. Similarly, if the property owner wanted to add outdoor seating in the future, that would require a Special Review Use process—again including public notice and public hearings.

While the rezoning would allow a broader range of commercial uses, it does not permit significant redevelopment or expansion of the site without further public process. The building's size and the site's physical boundaries limit the scale and intensity of future commercial uses. As such, staff believe the change represents a reasonable extension of existing downtown zoning rather than a major departure from current neighborhood character.

Staff find this criterion is met.

3. *The proposed rezoning is necessary to provide land for a community-related use which was not anticipated at the time of the adoption of the city's comprehensive plan, and such rezoning will be consistent with the policies and goals of the comprehensive plan.*

The rezoning is not necessary to provide land for a community-related use.

Staff finds this criterion is not met.

4. *The rezoning would only permit development which, if evaluated as a proposed annexation under the annexation standards and procedures codified in Title 16, would qualify for annexation.*

The property is already within the corporate limits of the City of Louisville.

Staff finds this criterion is not applicable.

2025 COUNCIL WORK PLAN:
This item supports the City Council's priority of Economic Vitality.

FISCAL IMPACT:
Budgeted?: **Not Applicable**

ALTERNATIVE(S):
The City Council may approve or deny the application based on its compliance with the applicable review criteria. Approval of the request would rezone the subject property to C-C, allowing all uses permitted in the C-C zone. If approved, staff recommends initiation of a text amendment to formally extend the boundaries of Downtown Louisville to include the subject property. Denial of the request would retain the current R-M zoning designation, limiting the property to uses permitted in the R-M zone.

PLANNING COMMISSION RECOMMENDATION:
At the September 25, 2025 meeting, the Planning Commission passed Resolution 14, Series 2025, recommending approval of the draft ordinance. The resolution can be found in the attachments, and the meeting video can be viewed here: Meeting Videos | City of Louisville, CO

RECOMMENDATION:
Staff recommends City Council approval of Ordinance No. 1908, Series 2025 as drafted.

ATTACHMENT(S):
1. Ordinance No. 1908, Series 2025
2. Application Materials
3. Planning Commission Resolution 14, Series 2025
4. Staff Presentation

ORDINANCE NO. 1908
SERIES 2025

AN ORDINANCE REZONING LOT 1, BLOCK 3, JEFFERSON PLACE SUBDIVISION FROM RESIDENTIAL MEDIUM DENSITY (R-M) TO COMMERCIAL COMMUNITY (C-C) ZONE DISTRICT

WHEREAS, the owner of certain real property, the street address of which is 811 Walnut Street and the legal description of which is Lot 1, Block 3, Jefferson Place subdivision (the "Property"), has filed an application to rezone the Property from Residential Medium Density (R-M) to Commercial Community (C-C) zone district; and

WHEREAS, the Louisville Planning Commission has held a public hearing on the application and has recommended the City Council approve the rezoning; and

WHEREAS, the City Council has duly considered the Commission's recommendation; and

WHEREAS, the City Council has held a public hearing on the application and has provided notice of the public hearing as provided by law; and

WHEREAS, no protests were received by the City pursuant to C.R.S. § 31-23-305; and

WHEREAS, the City Council finds the rezoning is consistent with the City of Louisville 2013 Citywide Comprehensive Plan;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. That certain property, the legal description of which is Lot 1, Block 3, Jefferson Place subdivision (the "Property"), is hereby rezoned Commercial Community (C-C) zone district pursuant to the zoning ordinances and development regulations of the City, and the City zoning map shall be amended accordingly.

Section 2. A copy of this ordinance shall be recorded in the Offices of the Boulder County Clerk and Recorder.

INTRODUCED, READ, PASSED ON FIRST READING, AND ORDERED PUBLISHED THIS 7th DAY OF OCTOBER 2025.

PUBLIC HEARING AND SECOND READING WILL BE THE 21st DAY OF OCTOBER 2025, AT 6:00 P.M. AT LOUISVILLE CITY HALL, 749 MAIN STREET, LOUISVILLE, CO 80027.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

PASSED AND ADOPTED ON SECOND AND FINAL READING, THIS 21ST DAY OF OCTOBER 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

APPROVED AS TO FORM:
Kelly PC

_____
Kathleen Kelly, City Attorney

Project Narrative: Zoning Map Amendment Request – RM to CC

Property Address: 811 Walnut Street, Louisville, CO 80027

Legal Description: LOT 1 & 5 FT ALLEY ADJ ON N BLK 3 JEFFERSON PLACE

Project Scope and Goals

The applicant is requesting a zoning map amendment for the property at 811 Walnut Street from Residential Medium Density (RM) to Commercial Community (CC). This change is intended to allow for a broader and more flexible range of permitted commercial uses within the existing building, consistent with the goals of the CC zoning district.

Importantly, no changes to the existing structure are proposed. The building will remain in its current form and configuration. The intent of this request is to align the property's zoning with its long-standing commercial use and with surrounding properties, many of which are zoned for or used as commercial and office spaces.

Waivers or Modifications Requested

No waivers or modifications to development standards are being requested. The existing structure complies with current zoning and building regulations. Any future tenant or use changes will adhere to the City's development standards under the CC district.

Implementation and Compliance with the Comprehensive Plan

This rezoning request supports multiple key objectives of the **City of Louisville Comprehensive Plan**, including:

The primary purpose of this rezoning is to allow **retail use** within the existing building at **811 Walnut Street**, thereby expanding the property's economic potential and aligning with the surrounding commercial activity. This rezoning directly supports several policies of the **City of Louisville Comprehensive Plan**:

Land Use & Community Form

Rezoning to CC enables retail operations in an established commercial building, enhancing land use efficiency and contributing to a walkable, mixed-use environment near downtown.

- **LU-2.1:** Encourage infill and redevelopment in appropriate areas to strengthen existing neighborhoods and business districts. Allowing retail use in this location supports downtown vitality without requiring new construction.

Economic Vitality & Local Business Support
By permitting retail, the CC zoning designation opens the property to a broader spectrum of neighborhood-serving businesses, fostering economic diversity and creating new opportunities for employment.

- **ED-1.3:** Focus on primary job creation that provides job diversity, employment opportunities, and increased revenue for Louisville. Retail use will attract a wider variety of tenants than the RM designation allows, generating both jobs and local tax revenue.
- **ED-1.4:** Encourage existing businesses to expand and develop in Louisville. Retail flexibility allows local entrepreneurs to establish or grow their presence in the downtown core.

Sustainability
By retaining and adapting the current structure for retail use, this rezoning supports sustainability goals related to infill development, reduced environmental impact, and adaptive reuse of existing buildings.

- **SU-1.1:** Promote land use patterns that reduce environmental impact and make efficient use of infrastructure. Repurposing the building for retail avoids the environmental costs of demolition and new construction.

Compliance with Approval and Review Criteria

This request satisfies the City's zoning map amendment review criteria and meets the policy requirements of **Louisville Municipal Code § 17.44.050**, specifically:

- **Criterion A.2:** The area for which rezoning is requested has changed or is changing to such a degree that it is in the public interest to encourage redevelopment of the area.
- **Criterion A.1:** The land to be rezoned was zoned in error and as presently zoned is inconsistent with the policies and goals of the City's Comprehensive Plan.

1. Conformance with the Comprehensive Plan
The CC zoning designation is consistent with Comprehensive Plan policies promoting active commercial corridors, job diversity, and adaptive reuse of existing buildings near downtown Louisville. Relevant policies include:

- **ED-1.3:** Focus on primary job creation providing job diversity, employment opportunities, and increased revenue for Louisville.
- **ED-1.4:** Encourage existing businesses to expand and develop in Louisville.

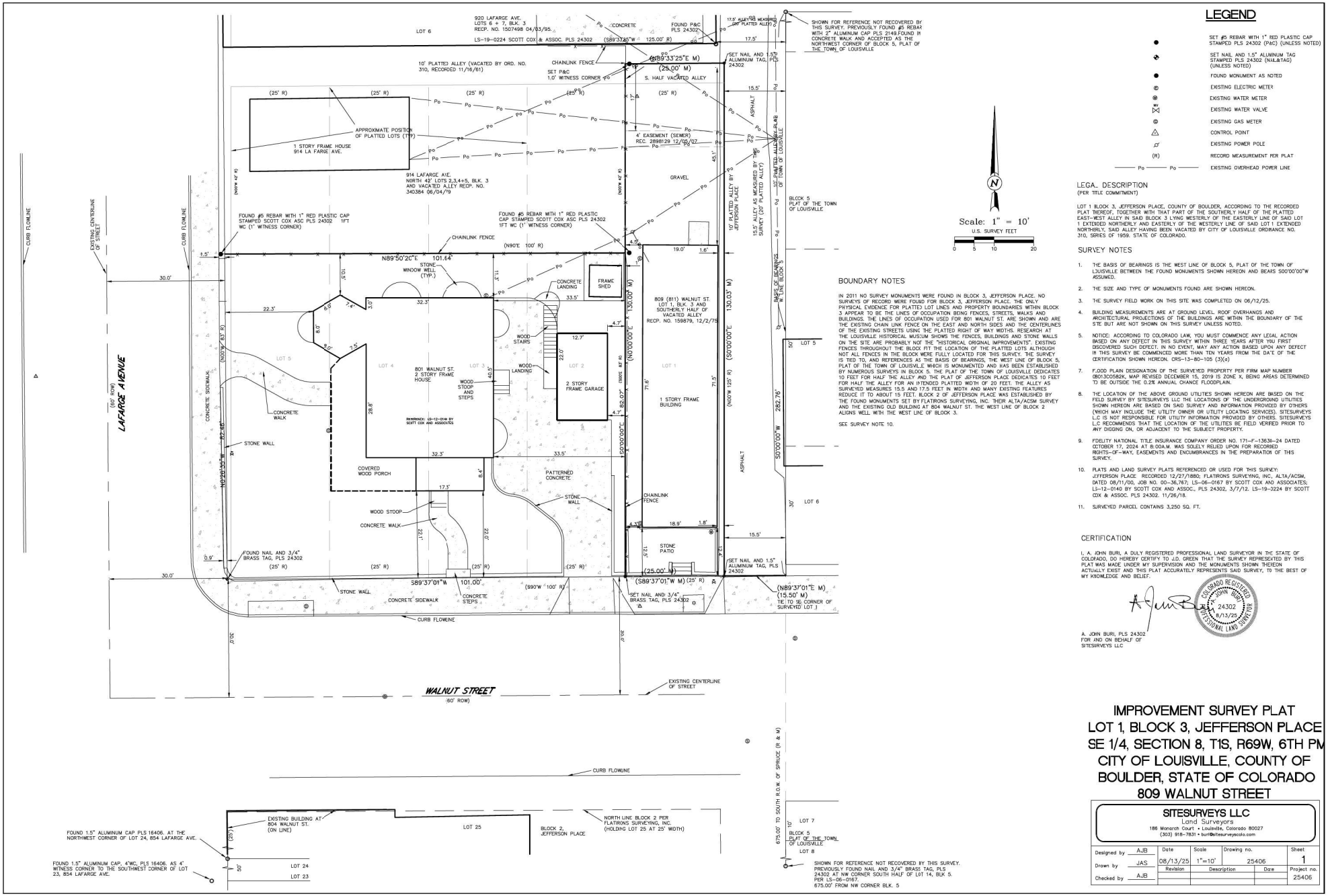
- **LU-2.1:** Encourage infill and redevelopment in appropriate areas to strengthen existing neighborhoods and business districts.
  The RM zoning is inconsistent with these objectives given the property's long-standing commercial use and its location within a commercial activity area.

2. Compatibility with Surrounding Uses
The property is surrounded by a mix of residential and commercial uses, with many nearby parcels already zoned for commercial or office use. Rezoning to CC creates a cohesive, predictable, and compatible land use pattern, supporting the City's goal of vibrant, walkable mixed-use neighborhoods.

3. Infrastructure Availability
The property is fully served by existing public infrastructure, including utilities, roadways, sidewalks, and transit access. No additional public investment or infrastructure expansion will be required, making this rezoning a fiscally responsible action.

4. Promotion of Public Health, Safety, and Welfare
The CC zoning designation supports continued commercial use in a walkable downtown location, increasing access to goods, services, and employment opportunities. By facilitating adaptive reuse instead of new construction, this rezoning minimizes environmental impacts, promotes sustainability, and contributes to the economic vitality of downtown—all of which are in the public interest.

We appreciate the City's thoughtful consideration of this request and look forward to supporting the long-term vitality and commercial goals of downtown Louisville through this proposed zoning amendment.



LEGEND

- SET #5 REBAR WITH 1" RED PLASTIC CAP STAMPED PLS 24302 (P&C) (UNLESS NOTED)
- SET NAIL AND 1.5" ALUMINUM TAG STAMPED PLS 24302 (NAIL&TAG) (UNLESS NOTED)
- FOUND MONUMENT AS NOTED
- EXISTING ELECTRIC METER
- EXISTING WATER METER
- EXISTING WATER VALVE
- EXISTING GAS METER
- CONTROL POINT
- EXISTING POWER POLE
- (R) RECORD MEASUREMENT PER PLAT
- Po Po EXISTING OVERHEAD POWER LINE

LEGAL DESCRIPTION

(PER TITLE COMMITMENT)

LOT 1 BLOCK 3, JEFFERSON PLACE, COUNTY OF BOULDER, ACCORDING TO THE RECORDED PLAT THEREOF, TOGETHER WITH THAT PART OF THE SOUTHERLY HALF OF THE PLATTED EAST-WEST ALLEY IN SAID BLOCK 3 LYING WESTERLY OF THE EASTERLY LINE OF SAID LOT 1 EXTENDED NORTHERLY AND EASTERLY OF THE WESTERLY LINE OF SAID LOT 1 EXTENDED NORTHERLY, SAID ALLEY HAVING BEEN VACATED BY CITY OF LOUISVILLE ORDINANCE NO. 310, SERIES OF 1959. STATE OF COLORADO.

SURVEY NOTES

1. THE BASIS OF BEARINGS IS THE WEST LINE OF BLOCK 5, PLAT OF THE TOWN OF LOUISVILLE BETWEEN THE FOUND MONUMENTS SHOWN HEREON AND BEARS S00°00'00"W ASSUMED.
2. THE SIZE AND TYPE OF MONUMENTS FOUND ARE SHOWN HEREON.
3. THE SURVEY FIELD WORK ON THIS SITE WAS COMPLETED ON 06/12/25.
4. BUILDING MEASUREMENTS ARE AT GROUND LEVEL. ROOF OVERHANGS AND ARCHITECTURAL PROJECTIONS OF THE BUILDINGS ARE WITHIN THE BOUNDARY OF THE SITE BUT ARE NOT SHOWN ON THIS SURVEY UNLESS NOTED.
5. NOTICE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED ON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVERED SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON. CRS-13-80-105 (3)(a)
7. FLOOD PLAIN DESIGNATION OF THE SURVEYED PROPERTY PER FIRM MAP NUMBER 08013C0582K, MAP REVISED DECEMBER 15, 2019 IS ZONE X, BEING AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
8. THE LOCATION OF THE ABOVE GROUND UTILITIES SHOWN HEREON ARE BASED ON THE FIELD SURVEY BY SITESURVEYS LLC THE LOCATIONS OF THE UNDERGROUND UTILITIES SHOWN HEREON ARE BASED ON SAID SURVEY AND INFORMATION PROVIDED BY OTHERS (WHICH MAY INCLUDE THE UTILITY OWNER OR UTILITY LOCATING SERVICES). SITESURVEYS L.C IS NOT RESPONSIBLE FOR UTILITY INFORMATION PROVIDED BY OTHERS. SITESURVEYS L.C RECOMMENDS THAT THE LOCATION OF THE UTILITIES BE FIELD VERIFIED PRIOR TO ANY DIGGING ON, OR ADJACENT TO THE SUBJECT PROPERTY.
9. FDELITY NATIONAL TITLE INSURANCE COMPANY ORDER NO. 171-F-13638-24 DATED OCTOBER 17, 2024 AT 8:00A.M. WAS SOLELY RELIED UPON FOR RECORDED RIGHTS-OF-WAY, EASEMENTS AND ENCUMBRANCES IN THE PREPARATION OF THIS SURVEY.
10. PLATS AND LAND SURVEY PLATS REFERENCED OR USED FOR THIS SURVEY: JEFFERSON PLACE RECORDED 12/27/1880; FLATIRONS SURVEYING, INC, ALTA/ACSM, DATED 08/11/00, JOB NO. 00-36,767; LS-06-0167 BY SCOTT COX AND ASSOCIATES; LS-12-0140 BY SCOTT COX AND ASSOC., PLS 24302, 3/7/12. LS-19-0224 BY SCOTT COX & ASSOC. PLS 24302. 11/06/18.
11. SURVEYED PARCEL CONTAINS 3,250 SQ. FT.

BOUNDARY NOTES

IN 2011 NO SURVEY MONUMENTS WERE FOUND IN BLOCK 3, JEFFERSON PLACE. NO SURVEYS OF RECORD WERE FOUND FOR BLOCK 3, JEFFERSON PLACE. THE ONLY PHYSICAL EVIDENCE FOR PLATTED LOT LINES AND PROPERTY BOUNDARIES WITHIN BLOCK 3 APPEAR TO BE THE LINES OF OCCUPATION BEING FENCES, STREETS, WALKS AND BUILDINGS. THE LINES OF OCCUPATION USED FOR 801 WALNUT ST. ARE SHOWN AND ARE THE EXISTING CHAIN LINK FENCE ON THE EAST AND NORTH SIDES AND THE CENTERLINES OF THE EXISTING STREETS USING THE PLATTED RIGHT OF WAY WIDTHS. RESEARCH AT THE LOUISVILLE HISTORICAL MUSEUM SHOWS THE FENCES, BUILDINGS AND STONE WALLS ON THE SITE ARE PROBABLY NOT THE "HISTORICAL ORIGINAL IMPROVEMENTS". EXISTING FENCES THROUGHOUT THE BLOCK FIT THE LOCATION OF THE PLATTED LOTS ALTHOUGH NOT ALL FENCES IN THE BLOCK WERE FULLY LOCATED FOR THIS SURVEY. THE SURVEY IS TIED TO, AND REFERENCES AS THE BASIS OF BEARINGS, THE WEST LINE OF BLOCK 5, PLAT OF THE TOWN OF LOUISVILLE WHICH IS MONUMENTED AND HAS BEEN ESTABLISHED BY NUMEROUS SURVEYS IN BLOCK 5. THE PLAT OF THE TOWN OF LOUISVILLE DEDICATES 10 FEET FOR HALF THE ALLEY AND THE PLAT OF JEFFERSON PLACE DEDICATES 10 FEET FOR HALF THE ALLEY FOR AN INTENDED PLATTED WIDTH OF 20 FEET. THE ALLEY AS SURVEYED MEASURES 15.5 AND 17.5 FEET IN WIDTH AND MANY EXISTING FEATURES REDUCE IT TO ABOUT 15 FEET. BLOCK 2 OF JEFFERSON PLACE WAS ESTABLISHED BY THE FOUND MONUMENTS SET BY FLATIRONS SURVEYING, INC. THEIR ALTA/ACSM SURVEY AND THE EXISTING OLD BUILDING AT 804 WALNUT ST. THE WEST LINE OF BLOCK 2 ALIGNS WELL WITH THE WEST LINE OF BLOCK 3.

SEE SURVEY NOTE 10.

CERTIFICATION

I, A. JOHN BURI, A DULY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY TO J.D. GREEN THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE UNDER MY SUPERVISION AND THE MONUMENTS SHOWN THEREON ACTUALLY EXIST AND THIS PLAT ACCURATELY REPRESENTS SAID SURVEY, TO THE BEST OF MY KNOWLEDGE AND BELIEF.

COLORADO REGISTERED JOHN BURI PROFESSIONAL LAND SURVEYOR PLS 24302 8/13/25

A. JOHN BURI, PLS 24302
FOR AND ON BEHALF OF
SITESURVEYS LLC

IMPROVEMENT SURVEY PLAT
LOT 1, BLOCK 3, JEFFERSON PLACE
SE 1/4, SECTION 8, T1S, R69W, 6TH PM
CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO
809 WALNUT STREET

SITESURVEYS LLC
Land Surveyors
186 Monarch Court • Louisville, Colorado 80027
(303) 918-7831 • buri@sitesurveyscolo.com

Designed by	AJB	Date	Scale	Drawing no.	Sheet
Drawn by	JAS	08/13/25	1"=10'	25406	1
Checked by	AJB	Revision	Description	Date	Project no.
					25406

V:\SiteSurveys\Projects - Documents\2025 Projects\25406 809 Walnut St\07-Drawings\07.03.01-Survey\25406.dwg, 8/13/2025 4:01:15 PM, Adobe PDF pc3

Windmill Properties
17792 Keller Drive
Berthoud, CO 80513
Phone: 307-220-8021
Email: donna@windmillproperties.com

August 13, 2025

To:
City of Louisville Planning Department
749 Main Street
Louisville, CO 80027

RE: Retail Market Support Analysis — 811 Walnut Street (Rezoning from RM to CC)

Dear Members of the Planning Department,

I am pleased to present this retail market support analysis for **811 Walnut Street**, supporting the rezoning application from Residential Medium Density (RM) to Commercial Community (CC). The primary objective of this rezoning is to authorize **retail use** within the existing commercial structure.

1. Retail Market Overview

Metro Retail Market Overview

The broader Louisville metro retail market has maintained exceptionally low vacancy rates, ranging between 3.2% to 3.3%, reflecting a tight market and persistent demand for retail space.

The market remains stable, with limited speculative construction underway, underscoring the continued scarcity of suitable retail space.

2. Demand for Small-Format Retail

Market trends show that **small-format, street-level retail spaces**—typically under 2,000 sq ft—are in greatest demand. These locations are especially appealing in walkable downtowns like Louisville, where local residents support independent—and neighborhood-serving—retailers.

3. Strategic Advantages of 811 Walnut Street

Proximal Location: One block from Main Street, positioned to benefit from pedestrian traffic and proximity to established shops, cafés, and public events.

Physical Attributes: The 1,349 sq ft interior is ideally suited for boutique retail, café, or specialized service uses.

Parking Asset: Boasts 6–7 off-street parking spaces—an uncommon but valuable amenity for downtown retail locations.

Occupancy Readiness: Existing commercial layout and infrastructure allow for rapid occupancy with minimal tenant improvements.

4. Why CC Zoning Makes Market Sense

Under current RM zoning, retail uses are prohibited by right and would require a Special Review Use (SRU), introducing uncertainty for potential tenants. CC zoning would:

Permit **retail uses by right**, enhancing leasing speed and tenant appeal.

Broaden the tenant pool to include retail operators currently barred under RM zoning.

Enable more efficient transitions between tenants and reduce vacancy downtime.

5. Alignment with City Goals

This rezoning aligns with critical **Comprehensive Plan policies**:

ED-1.3: Enhances job and business diversity by enabling retail activity.

ED-1.4: Promotes the expansion of local businesses within Louisville.

LU-2.1: Encourages infill and adaptive reuse in downtown business districts.

6. Conclusion

The combination of strong regional retail performance—low vacancy and robust demand in comparable markets—and the property's strategic location, physical readiness, and unique parking benefits all underscore **clear market support** for rezoning **811 Walnut Street** to CC. Approving this change will enable the property to respond to community retail demand, contribute to a vibrant downtown economic environment, and uphold the City's objectives for a dynamic, walkable core.

Thank you for your careful consideration. Please feel free to reach out if you would like further market data or clarification.

Sincerely,

Donna Greene
Broker/Owner
Windmill Properties

Donna Greene

RESOLUTION NO. 14
SERIES 2025

A RESOLUTION RECOMMENDING APPROVAL OF A DRAFT ORDINANCE APPROVING A REQUEST FOR A REZONING OF LOT 1 AND 5 FT ALLEY ADJACENT ON N BLOCK 3, JEFFERSON PLACE LOCATED AT 811 WALNUT STREET FROM THE RESIDENTIAL MEDIUM DENSITY (R-M) ZONE DISTRICT TO THE COMMERCIAL COMMUNITY (C-C) ZONE DISTRICT

WHEREAS, there has been submitted to the Louisville Planning Commission an application for a zone change from Residential Medium Density (R-M) to Commercial Community (C-C) for Lot 1 and 5 Feet of Alley Adjacent on N Block 3, Jefferson Place located at 811 Walnut Street; and

WHEREAS, City staff has reviewed the information submitted and found that the application complies with the Louisville zoning regulations and other applicable sections of the Louisville Municipal Code; and

WHEREAS, the Planning Commission has considered the application at a duly noticed public hearing on September 25, 2025, where evidence and testimony were entered into the record, including the findings in the Louisville Planning Commission staff report dated September 25, 2025; and

NOW THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Louisville, Colorado does hereby recommend approval of a draft ordinance approving a request for a zone change from Residential Medium Density (R-M) to Commercial Community (C-C) for Lot 1 and 5 Feet of Alley Adjacent on N Block 3, Jefferson Place located at 811 Walnut Street.

PASSED AND ADOPTED this 25th day of September, 2025.

By: Steve Brauneis
Steve Brauneis, Chair
Planning Commission

Attest: Cullen Choi
Cullen Choi, Secretary
Planning Commission

City of Louisville
COLORADO • SINCE 1878

City Council

October 21st, 2025
Public Hearing

811 Walnut Street

ORDINANCE NO. 1908, SERIES 2025; AN ORDINANCE REZONING LOT 1, BLOCK 3, JEFFERSON PLACE SUBDIVISION FROM RESIDENTIAL MEDIUM DENSITY (R-M) TO COMMERCIAL COMMUNITY (C-C) ZONE DISTRICT

City of Louisville

Background

- Building constructed for switchboard operations
- Converted from switchboard operations to offices via SRU
- Final SRU for pet grooming

1954 | 1962 | 1975 | 1976 | 1978 | 2025

- Citywide zoning established
- Residential R2 zone district
- City-wide rezoning
- Residential R-M zone district (current)
- Amended SRU for salon use
- Office use
- Rezone request

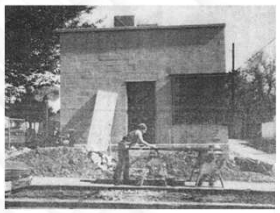


Image of the building being renovated for office use in 1975.

Vicinity Map

City of Louisville

Proposal

- Rezone from R-M to C-C (Commercial Community)
- Consistency with Downtown Louisville zoning
- Allows broader range of commercial uses
- No exterior alterations at this time

Surrounding zoning of the area. Red is the C-C zone, orange is the R-M zone, and yellow is the R-L zone.

City of Louisville

Analysis

- 22 new use groups by-right or by SRU
- All by-right uses are contained indoors
- Outdoor, high-intensity uses require SRU with additional public hearings

City of Louisville

Table 1. Permitted uses in the C-C zone that are not allowed in the R-M zone

	Use Group	Permitted
8	Hotels and motels, including restaurants and other incidental commercial uses inside the principal building	SRU
12	Vocational and business schools	SRU
23	Mortuaries and funeral chapels	SRU
24	Personal services, including but not limited to barbershops and beauty shops, dry-cleaning outlets, self-service laundries, shoe repair shops and similar activities or a facility operated by an accredited massage therapist for the purpose of massage therapy as defined in Section 5.16.010	Yes
25	Establishments for retailing of convenience goods, including but not limited to variety stores, supermarkets, hardware stores, sporting good stores, shoe stores and drugstores	Yes
26	Establishments for the retailing of shoppers goods, including but not limited to department stores or major comparison goods stores	Yes
27	Furniture and appliance repair	Yes
29	Medical and dental clinics, professional and business offices, financial institutions, small animal clinics	Yes
31	Indoor eating and drinking establishments	Yes
32	Indoor commercial amusement establishments	Yes
34	Outdoor commercial amusement	SRU
35	Sales and repair of motor vehicles, outdoor sales and repair (appliances, retail goods, eating and drinking establishments, etc.), rental facilities	SRU
37	Automobile parking garages	SRU
38	Gasoline service stations	SRU
39	Public garages	SRU
47	Recreational enterprise	SRU
50	Limited wholesale sales	SRU
51	Pet care business	SRU
58	Live-work	Yes
59	Health or athletic clubs, spas, dance studios, fitness studios	Yes
60	Mobile food court	SRU
61	Banquet or reception hall	SRU

Analysis

LMC Sec. 17.44.050

The area for which rezoning is requested has changed or is changing to such a degree that it is in the public interest to encourage a redevelopment of the area.

- Building originally constructed for commercial use
- Broader commercial uses permitted with the rezone
- Limited market interest for costly conversion to residential. Lot also nonconforming to residential zoning standards
- Rezone supported by Comprehensive Plan Policy ED-1.3 & ED-5.2
- Any significant development, expansion, or exterior uses would require additional land use applications and public hearings

City of Louisville

Recommendation

Planning Commission

Planning Commission unanimously recommended approval as presented at a public hearing on September 25th, 2025.

Staff

Staff recommend approval of Ordinance No. 1908, Series 2025.

City of Louisville

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 8C

SUBJECT: **ORDINANCE NO. 1909, SERIES 2025 – AN ORDINANCE AUTHORIZING THE SALE AND CONVEYANCE OF THE CITY-OWNED PROPERTY AT 1016 MAIN STREET – FIRST READING, SET PUBLIC HEARING**

DATE: **OCTOBER 21, 2025**

PREPARED BY: **ROB ZUCCARO, COMMUNITY DEVELOPMENT DIRECTOR**

PRESENTED BY: **ROB ZUCCARO, COMMUNITY DEVELOPMENT DIRECTOR**

SUMMARY:
Attached for consideration is an ordinance authorizing the sale of 1016 Main Street to Marike and Gregory Fitzgerald for $1,400,000 (Attachment No. 1).

BACKGROUND / PRIOR DISCUSSIONS:
The City recently purchased the single-family residential property on September 30, 2025 for $1,400,000 using Historic Preservation Funds (HPF) with the intent to resell the property after it is designated as a local historic landmark. On October 7, 2025, the City entered into a contract to sell the property to new owners for $1,400,000 (Attachment No. 2, Resolution No. 75, Series 2025). The contract provides that the transfer of property to the new owners will take place after the property is approved for landmark status while still under City ownership.

ANALYSIS:
State law requires the sale of City-owned property to be approved by ordinance. Therefore, this ordinance is necessary in support of the approved contract to sell the property.

2025 COUNCIL WORK PLAN:
This item is not on the 2025 City Council Work Plan.

FISCAL IMPACT:
Budgeted?: **Not Applicable**
The estimated unencumbered HPF fund balance is approximately $2.1M following the purchase of 1016 Main Street, with around $1M in revenues each year. Following the sale of 1016 Main Street, the unencumbered fund balance will be restored to approximately $3.5M.

ALTERNATIVE(S):
1. Approval of Ordinance No. 1909, Series 2025 authorizing the sale of 1016 Main Street.
2. Terminate the contract to sell the property and provide direction as to the utilization of the property.

RECOMMENDATION:
Staff recommends approval of Ordinance No 1909, Series 2025, authorizing the sale of 1016 Main Street.

ATTACHMENT(S):
1. Ordinance 1909, Series 2025
2. Resolution No. 75, Series 2025
3. Presentation

ORDINANCE NO. 1909
SERIES 2025

AN ORDINANCE AUTHORIZING THE SALE AND CONVEYANCE OF THE CITY-OWNED PROPERTY AT 1016 MAIN STREET

WHEREAS, the City of Louisville is the owner of the real property located at 1016 Main Street, Louisville, Colorado and legally described as Lot 10, Block 17, CALEDONIA PLACE, County of Boulder, State of Colorado (the "Property"); and

WHEREAS, the Property, which contains a historic home, was acquired with Historic Preservation Funds as a historic property contributing to the historic character of the City; and

WHEREAS, the Property is not needed and is not being held or used for any park, open space, municipal or governmental purposes; and

WHEREAS, the City Council desires to sell the Property and pursuant to Resolution No. 75, Series 2025, the City Council approved a Contract to Buy and Sell Real Estate (the "Purchase Contract") for the sale of the Property to Marike and Gregory Fitzgerald for $1.4 million on the condition that the Property receive historic landmark designation prior to closing; and

WHEREAS, pursuant to C.R.S. § 31-15-713, the City Council desires to authorize the sale and conveyance of the Property in accordance with the terms and conditions of the Purchase Contract; and

WHEREAS, the City Council has determined it is in the best interest of the City and its citizens to sell and convey the Property upon the terms and conditions set forth herein.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves and authorizes the sale and conveyance of the Property from the City to Marike and Gregory Fitzgerald (the "Purchaser") for a purchase price of $1.4 million.

Section 2. The sale and conveyance of the Property shall be upon the terms and conditions set forth in the Purchase Contract between the City and the Purchaser, which was approved by City Council Resolution No. 75, Series 2025, and the terms and conditions of which are incorporated herein by reference as though set forth in full.

Section 3. If any portion of this ordinance is held to be invalid for any reason, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares that it would have passed this ordinance and each part hereof irrespective of the fact that any one part be declared invalid.

INTRODUCED, READ, PASSED ON FIRST READING AND ORDERED PUBLISHED THIS 21st DAY OF OCTOBER 2025.

PUBLIC HEARING AND SECOND READING WILL BE THE 3RD DAY OF NOVEMBER 2025, AT 6:00 P.M. AT LOUISVILLE CITY HALL, 749 MAIN STREET, LOUISVILLE, CO 80027.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

PASSED AND ADOPTED ON SECOND AND FINAL READING, THIS 3RD DAY OF NOVEMBER 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

APPROVED AS TO FORM:
KELLY PC

By: _____
Melinda Culley, Deputy City Attorney

RESOLUTION NO. 75
SERIES 2025

A RESOLUTION APPROVING A PURCHASE CONTRACT TO BUY AND SELL REAL ESTATE FOR THE SALE OF THE CITY-OWNED PROPERTY AT 1016 MAIN STREET

WHEREAS, the City Council approved Resolution No. 55, Series 2025 on August 5, 2025, which authorized the use of Historic Preservation Fund (HPF) monies to purchase the historic property located at 1016 Main Street (the "Property"); and

WHEREAS, the City plans to apply for historic landmarking designation for the house located on the Property; and

WHEREAS, the City has received an offer to sell the Property for $1.4 million, and a Purchase Contract to Buy and Sell Real Estate has been proposed; and

WHEREAS, the City desires to sell the Property upon the terms and conditions set forth in the Purchase Contract, including the condition that the Property receives historic landmark designation prior to closing.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. That certain Contract to Buy and Sell Real Estate between the City of Louisville and Marike and Gregory Fitzgerald for the City's sale of the Property (the "Purchase Contract"), a copy of which Purchase Contract accompanies this resolution, is hereby approved.

Section 2. The Mayor is authorized to execute the Purchase Contract, and the Mayor is hereby further granted the authority to negotiate and approve such revisions to the Purchase Contract as determined necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Purchase Contract are not altered.

Section 3. The Mayor, City Manager, City Clerk and City staff are further authorized to do all things necessary on behalf of the City to perform the obligations of the City under the Purchase Contract and this resolution, and are further authorized to execute and deliver any and all documents necessary to effect the sale of the Property under the terms and conditions of said Purchase Contract and this resolution, including but not limited to execution and delivery of closing documents required by the Purchase Contract or the title company in connection with closing.

PASSED AND ADOPTED this 7th day of October 2025.

Christopher M. Leh, Mayor

ATTEST:

G. Kline
Genny Kline, City Clerk

PURCHASE CONTRACT TO BUY AND SELL REAL ESTATE

THIS CONTRACT is made and entered into this 1 day of October, 2025 (the "**Effective Date**"), by and between MARIKE FITZGERALD and GREGORY FITZGERALD. (collectively, "**Purchaser**") and the CITY OF LOUISVILLE, a Colorado home rule municipal corporation (**"Seller"** or **"City"**). Purchaser and Seller are collectively referred to as the "**Parties.**"

WHEREAS, the City owns that certain real property and improvements located at Lot 10, Block 17, Caledonia Place, City of Louisville, County of Boulder, State of Colorado, also known as 1016 Main Street (the "Property"); and

WHEREAS, Purchaser desires to purchase the Property from the City; and

WHEREAS, the City is willing to sell the Property to Purchaser on the condition that the house located on the Property is first designated as a historic landmark by the City and a Historic Landmark Agreement is executed and recorded as a covenant running with the Property.

NOW, THEREFORE, for and in consideration of the promises, payment, covenants, and undertakings hereinafter set forth, and other good and valuable consideration, which is hereby acknowledged and receipted for, the City and Seller agree as follows:

1. **Sale of Property.** Subject to the terms and conditions of this Contract, the Purchaser hereby agrees to purchase, and Seller agrees to sell, the following described property and interests in real estate (collectively referred to as the "**Property**"):

> Lot 10, Block 17, Caledonia Place, City of Louisville, County of Boulder, State of Colorado, also known as 1016 Main Street, together with all easements and other appurtenances thereto; all oil, gas, and other minerals owned by Seller and appurtenant thereto; and all improvements, fixtures and structures thereon at the time of delivery of possession to the City.

2. **Purchase Price.** The total purchase price of the Property (the "**Purchase Price**") shall be ONE MILLION FOUR HUNDRED THOUSAND DOLLARS ($1,400,000.00), which shall be payable by the Purchaser in cash, certified funds, wire transfer, or cashier's check (if acceptable as "good funds" under Colorado law) as follows:

a. Five Thousand Dollars ($5,000.00) (the "**Earnest Money**") shall be paid by Purchaser to First American Title Company, 636 Coffman Street, Suite 101, Longmont, CO 80501 (the "**Title Company**") within three (3) business days following the Effective Date.

b. The balance of the Purchase Price shall be paid by Purchaser at the closing of the purchase and sale provided for in Section 9 (the **"Closing"**).

3. **Documents to be Obtained by or Delivered to Purchaser.**

a. **Survey.** On or before ten (10) calendar days following the Effective Date, Seller will provide Purchaser with any existing survey(s) of the Property. The Purchaser may at its sole expense contract for an ALTA engineering survey of the Property, which shall be certified to Purchaser, Seller and the Title Company ("Survey").

b. **Title Commitment.** Within fifteen (15) days after the Effective Date, Seller shall furnish to the Purchaser, at Seller's expense, a title insurance commitment issued by the Title Company showing the status of record title to the Property ("Commitment") and committing to insure, subject to the exceptions and requirements set forth therein, title to the Property in Purchaser in an amount mutually agreed to by the Parties and Title Company (but not to exceed the Purchase Price). The Commitment shall be on a form acceptable to the Parties and shall include copies of all documents identified in the schedule of exceptions. Extended title coverage or endorsements will be issued only at the request of Purchaser and will be at Purchaser's sole expense. The Commitment, together with the Schedule B-2 documents referenced therein are referred to collectively herein as "**Title Documents.**" The Title Documents, Survey, and any other document, report or information relative to the Property that is delivered to or obtained by Purchaser are sometimes collectively referred to herein as "**Property Information.**"

4. **Condition Precedent to Seller's Performance.** Purchaser acknowledges that Seller's obligation to close on the sale of the Property is expressly contingent upon the following conditions precent on or before Closing:

a. **Historic Landmarking.** Seller will apply for and obtain historic landmarking designation for the house located on Property in accordance with Chapter 15.36 of the Louisville Municipal Code prior to Closing. The landmark resolution and/or a historic landmark agreement shall be recorded prior to the recording of the deed conveying the Property and will encumber the Property. Purchaser acknowledges and agree that upon landmark designation and Closing:

i. Purchaser and its successor in ownership will be required to submit to the review process of the Historic Preservation Commission of the City of Louisville pursuant to Chapter 15.36 of the Louisville Municipal Code prior to alteration, reconstruction, demolition, or relocation of any improvement which constitutes all or part of the landmarked structure.

ii Purchaser will receive a landmark bonus grant of $5,000 upon Closing. Purchaser may apply for additional Historic Preservation Fund grants and loans in accordance with City's program guidelines. The time period for applying for such loans and grants shall commence when the Property is conveyed to Purchaser.

b. **Ordinance.** Closing shall further be contingent upon adoption by the City Council and final effectiveness of an ordinance authorizing transfer of the Property to the Purchaser.

c. **Right to Terminate.** In addition to all other rights and remedies of Purchaser and Seller hereunder, either party shall have the right to terminate this Contract and make the same of no further force and effect in the event that: (i) the historic landmark designation is not obtained prior to Closing; (ii) the ordinance authorizing transfer of the Property is not finally effective as of the Closing; or (iii) in the event any action whatsoever is commenced to defeat or enjoin the Seller's performance under this Contract. If the Contract is terminated for any such reason, the Earnest Money shall be returned to the Purchaser, and the Parties will be released from all obligations hereunder other than those provisions hereof which expressly contemplate survival of termination.

5. **Condition Precedent to Purchaser's Performance.** The obligation of Purchaser to purchase the Property is subject to the satisfaction of the following conditions precedent on or before the expiration of the Examination Period (defined below) or expiration of the title objection deadline, and if the conditions are not so satisfied, the unsatisfactory conditions may either be waived by Purchaser in writing designated as a waiver, or Purchaser may terminate this Contract in which event the Earnest Money shall be returned in full to Purchaser, and the parties will be released from all obligations hereunder other than those provisions hereof which expressly contemplate survival of termination.

a. **Examination Period.** Purchaser shall have sixty (60) calendar days following the Effective Date (the **"Examination Period"**), in which to inspect and evaluate the Property to determine the suitability of the Property for Purchaser's intended use.

i. At any and all times during the term of this Contract, Purchaser and Purchaser's representatives, agents, consultants and designees shall have the right to enter upon the Property, at Purchaser's own cost, for any purpose in connection with its proposed purchase, development or operation of the Property, including, without limitation, the right to make such inspections, investigations and tests as Purchaser may elect to make or obtain. In the event Purchaser does not close on the purchase of the Property pursuant to this Contract, then Purchaser shall promptly restore the Property to the condition existing prior to performing any tests or activities on the Property, by Purchaser or at Purchaser's instance or request. Purchaser shall exercise care not to damage trees, curb or landscaping on the Property prior to Closing.

ii. Purchaser shall pay promptly when due for all work performed on the Property by Purchaser, or at Purchaser's instance or request, including, without limitation, all inspection fees, appraisal fees, engineering fees and other expenses of any kind incurred by Purchaser relating to the inspection of the Property, all of which shall be the sole expense of the Purchaser. Any and all liens, whether threatened or actually filed, against any portion of the Property resulting from

Purchaser's inspection of the Property, or as a result of work performed or materials supplied at Purchaser's instance or request, shall be satisfied and removed by Purchaser within five (5) business days after notice thereof is given to Purchaser. Purchaser shall indemnify, defend, protect and hold Seller harmless from any claims, injuries, losses, liens, judgments, liabilities, damages or expenses (including reasonable attorney's fees and costs) arising out of or incurred in connection with the activities of Purchaser, its agents, designees, or representatives, including entering onto or otherwise inspecting the Property hereunder, or arising from or in connection with any and all mechanic's liens and physical damage to property or persons arising out of any such entry by Purchaser or its agents, designees or representatives. The indemnification obligation of Purchaser hereunder shall survive the termination of this Contract.

iii. If on or before the expiration of the Examination Period, Purchaser determines for any reason or for no reason not to proceed with the acquisition of the Property, Purchaser may elect by written notice to Seller given on or before expiration of the Examination Period to terminate this Contract, and upon giving such notice this Contract shall terminate, the Earnest Money shall be returned to Purchaser by the Title Company, and the parties shall be released of all further obligations under this Contract, except for those obligations which expressly survive termination hereof. If, however, Purchaser fails to give such notice, then the conditions precedent set forth in this Section 5 shall be deemed satisfied and this Contract will continue in full force and effect. Upon termination of this Contract, Purchaser will deliver to Seller all reports, studies, and similar documents (except for financial analysis prepared by Purchaser for the Property which are considered proprietary and shall not be provided to Seller by Purchaser) prepared for or by Purchaser concerning the Property at no cost to Seller and Seller may use such work product for any and all purposes.

b. **Title Documents and Survey.** Purchaser shall have thirty (30) calendar days after Purchaser's receipt of the Title Documents to object, in a writing delivered to Seller, to any matters shown on the Title Documents. Purchaser shall have thirty (30) calendar days after Purchaser's receipt of the Survey contemplated in Section 3.a in which to object, in a writing delivered to Seller, to any matters shown on the Survey.

i. If Seller is willing to cause the cure or removal of any of the matters to which Purchaser objects upon terms acceptable to Purchaser in Purchaser's sole and absolute discretion, which cure may, with Purchaser's consent, include insuring over such objectionable title matters, then Seller shall so notify Purchaser within ten (10) calendar days of Seller's receipt of Purchaser's notice. If Seller does not respond, or chooses not to cure or remedy all of Purchaser's objections, or if Seller is unable to remove any such matters, Purchaser may elect either: (i) to terminate this Contract by delivery of written notice to Seller within ten (10) calendar days after Purchaser's receipt of Seller's notice and receive a full refund of the Earnest Money from the Title Company; or (ii) to modify such objection and

to complete the transaction as otherwise contemplated by this Contract, with any reduction of the Purchase Price as may be mutually agreed upon by Purchaser and Seller. If Seller elects to cure or remove any title or survey matters objected to by Purchaser, and Seller cannot thereafter cure or remove the same by Closing, Seller shall have the right, but not the obligation, to extend the Closing for a period of up to sixty (60) calendar days to attempt to cure, insure over or remove such exceptions or defects to the satisfaction of Purchaser.

ii. In the event of Purchaser's election to terminate this Contract pursuant to this Section, upon Seller's receipt of Purchaser's written notice of such election, this Contract shall terminate, the Earnest Money shall be returned to Purchaser from the Title Company, and the parties shall be released of all further obligations under this Contract, except for those obligations which expressly survive termination hereof. If Purchaser does not elect to terminate this Contract in accordance with this Section, Purchaser shall thereby be deemed to have indicated its acceptance of, and waiver of any and all objection to all matters, exceptions and requirements set forth on the Commitment or the Survey, and its acceptance of the status of title to the Property generally. At such time, all matters then shown on Schedule B-2 of the Title Commitment and the Survey shall be deemed **"Permitted Exceptions,"** except that there shall be no exception for leases or tenancies.

6. **Seller's Representations and Warranties.** Seller represents and warrants to Purchaser as of the Effective Date of this Contract as follows:

a. Seller is a municipal corporation duly organized and legally existing under the laws of the State of Colorado. The person executing this Contract on behalf of Seller has the authority so to act.

b. To Seller's actual, present knowledge, the performance by Seller under this Contract is consistent with and not in violation of, and will not create any default under, any contract, agreement or other instrument to which Seller is a party, any judicial order or judgment of any nature by which Seller or the Property is bound.

c. To Seller's actual, present knowledge, there is no litigation pending or, to Seller's actual, present knowledge, threatened, which would affect the Property or Seller's ownership thereof.

d. Seller is not a "foreign person" within the meaning of Sections 1445(f)(3) and 7701(a)(30) of the Internal Revenue Code and Seller will furnish to Purchaser at Closing an affidavit confirming the same.

e. The Property will be conveyed by Seller to Purchaser free and clear of all leases or tenancies by other parties claiming through Seller.

f. Seller shall notify Purchaser in writing if, at any time prior to Closing, there

are any material changes to the foregoing representations and warranties adverse to Purchaser and in such event Purchaser has the right, but not the obligation to terminate this Contract within ten (10) business days after said notice is delivered by Seller, whereupon the Earnest Money shall be returned to Purchaser in full from the Title Company.

7. **Purchaser's Representations.** Purchaser hereby represents and warrants to Seller as of the Effective Date of this Contract as follows:

a. This Contract constitutes the legal, valid and binding obligation of Purchaser and is enforceable against Purchaser in accordance with its terms. The execution and delivery of this Contract, and Purchaser's performance under this Contract, are within Purchaser's powers and have been duly authorized by all necessary company action. The person(s) executing this Contract on behalf of Purchaser has the authority to so act.

8. **Disclaimer of Certain Representations and Warranties.**

a. Purchaser acknowledges that Seller is affording Purchaser the opportunity for full and complete investigations, examinations and inspections of the Property. Except as specifically set forth herein, Purchaser acknowledges and agrees that Seller has not made any independent investigation or verification of, nor has any knowledge of, the accuracy or completeness of any of the Property Information and the Property Information is being furnished to Purchaser at its request and for the convenience of Purchaser. Purchaser is relying solely on its own investigations of the Property and is not relying in any way on Property Information furnished by Seller. Seller expressly disclaims any representations or warranties with respect to the accuracy or completeness of the Property Information and any duty of disclosure provided in this Contract, and Purchaser releases Seller and Seller's officers, employees, agents and representatives, from any and all liability with respect to the Property Information and the Property, except for the warranty of title set forth in the special warranty deeds delivered at Closing.

b. Purchaser acknowledges that it is purchasing the Property based solely on its inspection and investigation of the Property and that Purchaser will be purchasing the Property "AS IS" and "WITH ALL FAULTS" based upon the condition of the Property as of the date of the Closing. Without limiting the foregoing, Purchaser acknowledges that, except as expressly set forth in this Contract, Seller, its officers, employees, agents and representatives have not made, do not make and specifically negate and disclaim any representations, warranties, promises, covenants, agreements or guaranties of any kind or character whatsoever, whether express or implied, oral or written, with respect to the Property, including, without limitation, the condition of the Property, the existence or nonexistence of Hazardous Materials (defined below), water or water rights, development rights, taxes, bonds, covenants, conditions and restrictions, topography, drainage, soil, subsoil, utilities, zoning, or other rules and regulations affecting the Property. SELLER MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, OR ARISING BY OPERATION OF LAW, INCLUDING, BUT NOT LIMITED TO, ANY

WARRANTY OF CONDITION, HABITABILITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE PROPERTY. As used herein, the term "Hazardous Materials" means (i) hazardous wastes, hazardous substances, hazardous constituents, toxic substances or related materials, whether solids, liquids or gases, including, but not limited to substances defined as "hazardous wastes," "hazardous substances," "toxic substances," "pollutants," "contaminants," "radioactive materials," or other similar designations in, or otherwise subject to regulation under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C. § 9601 et seq.; the Toxic Substance Control Act, 15 U.S.C. § 2601 et seq.; the Hazardous Materials Transportation Act, 49 U.S.C. § 1802; the Resource Conservation and Recovery Act, 42 U.S.C. § 9601 et seq.; the Clean Water Act, 33 U.S.C. § 1251 et seq.; the Safe Drinking Water Act, 42 U.S.C. § 300(f) et seq.; the Clean Air Act, 42 U.S.C. § 7401 et seq.; and in any permits, licenses, approvals, plans, rules, regulations or ordinance adopted, or other criteria and guidelines promulgated pursuant to the preceding laws or other similar federal, state or local laws, regulations, rules or ordinances now or hereafter in effect relating to environmental matters (collectively the "**Environmental Laws**"); and (ii) any other substances, constituents or wastes subject to any applicable federal, state or local law, regulation or ordinance, including any Environmental Law now or hereafter in effect, including but not limited to petroleum, refined petroleum products, waste oil, waste aviation or motor vehicle fuel, and asbestos.

c. Purchaser's failure to elect to waive the conditions pursuant to Sections 4 and 5 shall be deemed an acknowledgment by Purchaser that Purchaser has inspected the Property, is thoroughly acquainted with and accepts its condition, and has reviewed, to the extent necessary, in its discretion, all the Property Information and Seller shall not be liable or bound in any manner by any oral or written information pertaining to the Property furnished by Seller, Seller's officers, employees, agents or representatives.

d. Upon Closing, Purchaser shall assume the risk that adverse physical, environmental, governmental compliance, geotechnical and other conditions from whatever source may have been revealed by Purchaser's investigations, and Purchaser, upon closing, shall be deemed to have waived, relinquished and released Seller, and Seller's officers, employees, agents and representatives, from and against any and all claims, demands, causes of action, losses, damages, liabilities, costs and expenses of any kind or character, known or unknown, which Purchaser might have asserted or alleged against Seller or Seller's officers, employees, agents and representatives at any time by reason of or arising out of any latent or patent physical conditions, violations of applicable laws (including without limitation any Environmental Laws) and any and all other acts, omissions, events, circumstances or matters regarding the condition of the Property.

9. <u>Closing.</u>

a. The closing for Property (the "**Closing**") shall be held within ninety (90) days of the Effective Date. In the event that the conditions set forth in Section 4 have not been

satisfied by the date for Closing, the Parties hereby agree that the Seller shall have the right, but not the obligation to extend the Closing for a period of up to sixty (60) calendar days to attempt satisfy the conditions.

b. The specific time of the Closing shall be set by mutual written agreement of the parties. The place of Closing shall be the offices of the Title Company or such other place as may be designated by mutual written agreement of the parties.

10. Obligations of Seller at Closing. Seller shall have the following obligations at Closing:

a. Seller shall execute, have acknowledged and deliver to Purchaser a special warranty deed conveying title to Purchaser free and clear of leases, tenancies and parties in possession and subject only to the Permitted Exception

b. Seller shall cause the Title Company to deliver to Purchaser either: (i) a current Owner's Policy on the Property to be issued pursuant to the Commitment showing no lien, encumbrance or other restriction other than the Permitted Exceptions; or (ii) an unqualified written commitment from the Title Company to deliver such an Owner's Policy.

c. Seller shall deliver to Purchaser an affidavit setting forth Seller's federal tax identification number and certification that it is not a "foreign person" within the meaning of the Internal Revenue Code.

d. Seller shall execute such other documents as are reasonably required by the Title Company to effectuate the transaction contemplated herein.

e. Possession of the Property shall be delivered to the City on or before the date and time of Closing.

11. Obligations of Purchaser at Closing. Purchaser shall deliver the Purchase Price less the amount of the Earnest Money to Seller, subject only to the adjustments set forth in Section 12. Purchaser shall execute such other documents as are reasonably required by the Title Company to effectuate the transaction contemplated herein.

12. Closing Costs. Closing costs and adjustments shall be allocated as follows:

a. Seller will pay the cost of the Owner's Policy of Title Insurance to be provided pursuant to the terms of this Contract, one-half of any escrow or other Title Company closing fees.

b. All real property taxes levied against the Property and other regular expenses, if any, affecting the Property shall be paid by Purchaser.

c. Purchaser shall pay the cost of recording the special warranty deed and other conveyance documents, all documentary fees and taxes, and any other documents to be recorded in connection with the Closing, one-half of the escrow fees or other Title Company closing fees.

13. Time of Essence. Time is of the essence of the obligations of the Parties.

14. Purchaser Default. If Purchaser shall fail to terminate this Contract as provided herein and thereafter fails to consummate this Contract for any reason other than Seller's default hereunder or following a condemnation under Section 17 or if Purchaser is otherwise in default of performing its obligations hereunder, then following written notice of such default given by Seller to Purchaser and the failure of Purchaser to cure such default within five (5) business days following receipt of such notice, Seller shall be entitled to terminate this Contract and have the Earnest Money paid to Seller as liquidated damages as Seller's sole and exclusive remedy. THE PARTIES HERETO ACKNOWLEDGE THAT SELLER'S DAMAGES DUE TO PURCHASER'S DEFAULT HEREUNDER ARE DIFFICULT TO ASCERTAIN AND AGREE THAT THE AMOUNT OF THE EARNEST MONEY REPRESENTS A REASONABLE ESTIMATE OF SELLER'S DAMAGES.

15. Seller Default. If Seller shall fail to consummate this Contract for any reason other than Purchaser's default hereunder or termination of this Contract by a party hereto or if Seller is otherwise in default of performing its obligations hereunder and fails to cure such default within five (5) business days following written notice thereof, Purchaser, as its sole and exclusive remedy, shall either: (a) elect to terminate this Contract and have the Earnest Money returned to Purchaser; or (b) elect to seek specific performance of this Contract from Seller because of such default. PURCHASER ACKNOWLEDGES THAT SPECIFIC PERFORMANCE OF SELLER'S OBLIGATIONS HEREUNDER IS PURCHASER'S SOLE REMEDY, AND PURCHASER SHALL NOT BE ENTITLED TO OR CLAIM ANY FORM OF DAMAGES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS, ECONOMIC DAMAGES, OR INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES.

16. Effect of Termination. Upon termination of this Contract pursuant to Sections 14 or 15, neither party shall thereafter have any further obligations to the other party except as contemplated by said Sections and except for any provisions of this Contract which expressly survive such termination.

17. Condemnation. Promptly upon learning of the institution, prior to Closing, of any proceedings for the condemnation of any part of the Property, Seller or Purchaser will immediately notify the other in writing of the pendency of such proceedings. At Purchaser's election which shall be made within sixty (60) calendar days following Purchaser's receipt of written notice of such condemnation or eminent domain proceedings Purchaser may at its option either: (a) terminate this Contract by notifying Seller within the sixty (60) calendar day period and receive a full refund of the Earnest

Money from the Title Company and the parties shall be relieved of all obligations hereunder except those that expressly survive termination hereof; or (b) elect to consummate the transaction provided for herein. In the event Purchaser so elects to consummate the transaction then this Contract shall remain in full force and effect and Seller shall assign to Purchaser any and all of its right, title and interest in and to any award or other benefits made or to be made in connection with such condemnation or eminent domain proceeding to the extent affecting the Property. Purchaser shall be entitled to participate with Seller in all negotiations and dealings with the condemning authority in respect of such matter; provided, however, that Purchaser shall have the right to finally approve any agreement with the condemning authority. Purchaser shall take title to the remainder of the Property with the assignment of such proceeds and subject to such condemnation or eminent domain proceeding and without reduction in the Purchase Price.

18. Survival of Representations and Warranties. No representations or warranties whatever are made by any party to this Contract except as specifically set forth in this Contract. The representations, warranties and indemnities made by the parties to this Contract and the covenants and agreements to be performed or complied with by the respective parties under this Contract before Closing shall be deemed to be continuing and shall survive the Closing; provided, however, the representations and warranties of Seller and Purchaser shall terminate on the date which is twenty-four (24) months after the Closing date. Nothing in this Section shall affect the obligations and indemnities of the parties with respect to covenants and agreements contained in this Contract that are permitted or required to be performed in whole or in part after the Closing date.

19. Effect of Headings. The subject headings of articles, paragraphs and subparagraphs of this Contract are included for purposes of convenience only, and shall not affect the construction or interpretation of any of its provisions.

20. Entire Agreement/Survival of Contract. This Contract constitutes the entire agreement between the Parties and supersedes all prior and contemporaneous agreements, representations and understandings of the parties regarding the subject matter of this Contract. This Contract and all provisions hereof shall survive the Closing contemplated hereunder except as expressly set forth herein to the contrary.

21. Counterparts. This Contract may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

22. Assignment. This Contract may not be assigned by Purchaser without the prior written consent of Seller, which consent may be granted or withheld at the sole discretion of Seller.

23. Notice. Whenever notice is required to be given hereunder, it shall be in writing and delivered to the party entitled thereto or mailed to the party entitled thereto, by hand delivery, facsimile transmission, e-mail or certified mail, return receipt requested. If

delivered, said notice shall be effective and complete upon delivery. If e-mailed or faxed, said notice shall be effective upon receipt as evidenced by sender's transmission receipt. If mailed, said notice shall be effective and complete three (3) days after mailing. Until changed by notice in writing, notice shall be given as follows:

To the Seller:	City Manager City of Louisville 749 Main Street Louisville, CO 80027 e-mail: dlangley@louisvilleco.gov
With a copy to:	City Attorney Kelly PC 1801 Wewatta St, Ste 1100 Denver, CO 80202 email: melinda@kellypc.com
To the Purchaser:	Marike and Gregory Fitzgerald 2770 Arapahoe Rd Ste 132-629 Lafayette, CO 80026 Email: tori@nomurabloom.com

24. Governing Law. This Contract shall be governed by and construed in accordance with the laws of the State of Colorado.

25. Time Calculations. Unless otherwise indicated, all periods of time referred to in this Contract shall refer to calendar days and shall include all Saturdays, Sundays and state or national holidays; provided that if the date to perform any act or give any notice with respect to this Contract shall fall on a Saturday, Sunday, or state or national holiday in Louisville, Colorado, such act or notice may be timely performed or given on the next succeeding day which is not a Saturday, Sunday or state or national holiday in Louisville, Colorado. Each day shall be deemed to expire at 5:00 p.m. Mountain Standard Time.

26. Broker's Fees. Each of the parties represents and warrants to the other that it has not employed, retained or otherwise utilized any broker or finder in connection with any of the transactions contemplated by this Contract and no broker or person is entitled to any commission or finder's fees in connection with the transaction. The parties each agree to indemnify and hold harmless one another against any loss, liability, damage, cost, claim or expense incurred by reason of any brokerage commission or finder's fee alleged to be payable because of any act, omission or statement of the indemnifying party.

27. **Costs.** If any legal action or any arbitration or other proceeding is brought for the enforcement of this Contract, or because of an alleged dispute, breach, default, or misrepresentation in connection with any of the provisions of this Contract, the successful or prevailing party shall be entitled to recover reasonable attorneys' fees and other costs incurred in that action or proceeding, in addition to any other relief to which it or they may be entitled.

28. **Partial Invalidity.** In the event that any condition or covenant herein contained is held to be invalid or void by any court of competent jurisdiction, the same shall be deemed severable from the remainder of this Contract and shall in no way affect any other covenant or condition herein contained. If such condition, covenant or other provision shall be deemed invalid due to its scope or breadth, such provision shall be deemed valid to the extent of the scope or breadth permitted by law.

29. **Special Taxing Districts. SPECIAL TAXING DISTRICTS MAY BE SUBJECT TO GENERAL OBLIGATION INDEBTEDNESS THAT IS PAID BY REVENUES PRODUCED FROM ANNUAL TAX LEVIES ON THE TAXABLE PROPERTY WITHIN SUCH DISTRICTS. PROPERTY OWNERS IN SUCH DISTRICTS MAY BE PLACED AT RISK FOR INCREASED MILL LEVIES AND EXCESSIVE TAX BURDENS TO SUPPORT THE SERVICING OF SUCH DEBT WHERE CIRCUMSTANCES ARISE RESULTING IN THE INABILITY OF SUCH A DISTRICT TO DISCHARGE SUCH INDEBTEDNESS WITHOUT SUCH AN INCREASE IN MILL LEVIES. PURCHASER SHOULD INVESTIGATE THE DEBT FINANCING REQUIREMENTS OF THE AUTHORIZED GENERAL OBLIGATION INDEBTEDNESS OF SUCH DISTRICTS, EXISTING MILL LEVIES OF SUCH DISTRICT SERVICING SUCH INDEBTEDNESS, AND THE POTENTIAL FOR AN INCREASE IN SUCH MILL LEVIES.**

30. **Potable Water. THE SOURCE OF POTABLE WATER FOR THIS REAL ESTATE IS: ☐ A WELL; X A WATER PROVIDER, WHICH CAN BE CONTACTED AS FOLLOWS: City of Louisville, 749 Main Street. Louisville, CO 80027 , www.louisvilleco.gov. 303-666-6656 ☐ NEITHER A WELL NOR A WATER PROVIDER. THE SOURCE IS [DESCRIBE]. SOME WATER PROVIDERS RELY, TO VARYING DEGREES, ON NONRENEWABLE GROUNDWATER. YOU MAY WISH TO CONTACT YOUR PROVIDER TO DETERMINE THE LONG-TERM SUFFICIENCY OF THE PROVIDER'S WATER SUPPLIES.**

31. **Oil, Gas, Water, and Mineral Disclosure.**

a. **THE SURFACE ESTATE OF THE PROPERTY MAY BE OWNED SEPARATELY FROM THE UNDERLYING MINERAL ESTATE AND TRANSFER OF THE SURFACE ESTATE MAY NOT NECESSARILY INCLUDE TRANSFER OF THE MINERAL ESTATE OR WATER RIGHTS. THIRD PARTIES MAY OWN OR LEASE INTERESTS IN OIL, GAS, OTHER MINERALS, GEOTHERMAL ENERGY OR WATER ON OR UNDER THE SURFACE OF THE PROPERTY, WHICH INTERESTS MAY GIVE**

THEM RIGHTS TO ENTER AND USE THE SURFACE OF THE PROPERTY TO ACCESS THE MINERAL ESTATE, OIL, GAS OR WATER.

b. SURFACE USE AGREEMENT. THE USE OF THE SURFACE ESTATE OF THE PROPERTY TO ACCESS THE OIL, GAS OR MINERALS MAY BE GOVERNED BY A SURFACE USE AGREEMENT, A MEMORANDUM OR OTHER NOTICE OF WHICH MAY BE RECORDED WITH THE COUNTY CLERK AND RECORDER.

c. OIL AND GAS ACTIVITY. OIL AND GAS ACTIVITY THAT MAY OCCUR ON OR ADJACENT TO THE PROPERTY MAY INCLUDE, BUT IS NOT LIMITED TO, SURVEYING, DRILLING, WELL COMPLETION OPERATIONS, STORAGE, OIL AND GAS, OR PRODUCTION FACILITIES, PRODUCING WELLS, REWORKING OF CURRENT WELLS AND GAS GATHERING AND PROCESSING FACILITIES.

d. ADDITIONAL INFORMATION. BUYER IS ENCOURAGED TO SEEK ADDITIONAL INFORMATION REGARDING OIL AND GAS ACTIVITY ON OR ADJACENT TO THE PROPERTY, INCLUDING DRILLING PERMIT APPLICATIONS. THIS INFORMATION MAY BE AVAILABLE FROM THE COLORADO OIL AND GAS CONSERVATION COMMISSION.

32. Radon Disclosure. THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT STRONGLY RECOMMENDS THAT ALL HOME BUYERS HAVE AN INDOOR RADON TEST PERFORMED BEFORE PURCHASING RESIDENTIAL REAL PROPERTY AND RECOMMENDS HAVING THE RADON LEVELS MITIGATED IF ELEVATED RADON CONCENTRATIONS ARE FOUND. ELEVATED RADON CONCENTRATIONS CAN BE REDUCED BY A RADON MITIGATION PROFESSIONAL. RESIDENTIAL REAL PROPERTY MAY PRESENT EXPOSURE TO DANGEROUS LEVELS OF INDOOR RADON GAS THAT MAY PLACE THE OCCUPANTS AT RISK OF DEVELOPING RADON-INDUCED LUNG CANCER. RADON, A CLASS A HUMAN CARCINOGEN, IS THE LEADING CAUSE OF LUNG CANCER IN NONSMOKERS AND THE SECOND LEADING CAUSE OF LUNG CANCER OVERALL. THE SELLER OF RESIDENTIAL REAL PROPERTY IS REQUIRED TO PROVIDE THE BUYER WITH ANY KNOWN INFORMATION ON RADON TEST RESULTS OF THE RESIDENTIAL REAL PROPERTY. AN ELECTRONIC COPY OF THE MOST RECENT BROCHURE PUBLISHED BY THE DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT IN ACCORDANCE WITH C.R.S. §25-11-114(2)(A) THAT PROVIDES ADVICE ABOUT "RADON AND REAL ESTATE TRANSACTIONS IN COLORADO" IS AVAILABLE AT: HTTPS://CDPHE.COLORADO.GOV/RADON-AND-REAL-ESTATE.

33. Further Acts. Each of the parties hereto covenants and agrees with the other, upon reasonable request from the other, from time to time, to execute and deliver such additional documents and instruments and to take such other actions as may be reasonably necessary to give effect to the provisions of this Contract.

34. Amendment. This Contract shall not be amended, altered, changed, modified, supplemented or rescinded in any manner except by a written agreement executed by Purchaser and Seller.

IN WITNESS WHEREOF, Seller and the City have executed this Contract on the dates stated in their respective acknowledgements intending that this Contract be effective as of the day and year first above set forth.

CITY:
CITY OF LOUISVILLE, a Colorado home rule municipal corporation

Christopher M. Leh, Mayor

ATTEST:

G. Kline
Genny Kline, Interim City Clerk

PURCHASER:

Marike Fitzgerald
Marike Fitzgerald

Gregory Fitzgerald
Gregory Fitzgerald

ACKNOWLEDGMENT

STATE OF COLORADO)
)ss
COUNTY OF Boulder)

The foregoing instrument was acknowledged before me this 1st day of October, 2025 by Marike Fitzgerald.

Witness my hand and official seal.

My commission expires on: December 19, 2028

CATHERINE S FELTMAN
NOTARY PUBLIC - STATE OF COLORADO
NOTARY ID 20164047704
MY COMMISSION EXPIRES DEC 19, 2028

(SEAL) Catherine S Feltman
Notary Public

ACKNOWLEDGMENT

STATE OF COLORADO)
)ss
COUNTY OF Boulder)

The foregoing instrument was acknowledged before me this 1st day of October, 2025 by Gregory Fitzgerald.

Witness my hand and official seal.

My commission expires on: December 19, 2028

(SEAL) Catherine S Feltman
Notary Public

CATHERINE S FELTMAN
NOTARY PUBLIC - STATE OF COLORADO
NOTARY ID 20164047704
MY COMMISSION EXPIRES DEC 19, 2028

City Council First Reading

October 21, 2025

Presented by: Rob Zuccaro, Community Development Director

ORDINANCE 1909, SERIES 2025, AUTHORIZING THE SALE AND CONVEYANCE OF THE CITY-OWNED PROPERTY AT 1016 MAIN STREET – FIRST READING AND SET PUBLIC HEARING

- *Approval of ordinance to complete sale of 1016 Main Street, as required by State law.*
- *City Council approved contract to sell the property on Oct. 7 by Resolution No. 75, Series 2025.*

City of Louisville

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION AGENDA ITEM 8D

SUBJECT: **DISCUSSION / DIRECTION – CITY MANAGER'S PROPOSED 2026 OPERATING AND CAPITAL BUDGET, 2025-2030 CAPITAL IMPROVEMENT PLAN AND 2025-2030 LONG-TERM FINANCIAL PLAN – PUBLIC HEARING (advertised *Boulder Daily Camera* 10/12/25)**

DATE: **OCTOBER 21, 2025**

PREPARED BY: **RYDER BAILEY, CPA, FINANCE DIRECTOR**
MAHYAR MANSURABADI, FINANCIAL ANALYST

PRESENTED BY: **DIANA LANGLEY, CITY MANAGER**
SAMMA FOX, DEPUTY CITY MANAGER
RYDER BAILEY, CPA, FINANCE DIRECTOR
MAHYAR MANSURABADI, FINANCIAL ANALYST

SUMMARY:

The item presents the Budget Public Hearing and City Manager's Proposed 2026 Budget.

There have been no changes or modifications to the previously presented City Manager Recommended Budget, which was presented to City Council on September 2, 2025.

The 2026 Budget is supplemental to the 2025-2026 Biennial Budget. Please refer to the 2025-2026 Biennial Budget Document, adopted by City Council on November 4, 2024 here / link.

BACKGROUND:

The formulation of the City's Budget is one of the most important financial activities that the City of Louisville undertakes annually. The budget process provides a comprehensive plan to deliver efficient services to the City's residents and stakeholders, aligning resources with the City's policies, goals, mission, and vision.

Significant work by Staff, the Finance Committee, and City Council has led to a Structurally Balanced 2026 Budget for all City funds under consideration.

This budget, as presented, reflects our commitment to responsible fiscal management while balancing the needs of our community. Like many Cities across Colorado, we face a constrained financial environment where the growing costs of services are outpacing revenue growth. From flattening revenues from sales and use taxes, our largest revenue source, to a reduction of the local tax share of Colorado's Marijuana Tax. Rising costs of our personnel, materials, and services, especially in critical areas like public safety and parks maintenance.

This budget proactively addresses those risks, embracing restraint in ongoing expenditure while advancing strategic, one-time investments to secure our future. This budget adopts a conservative approach with its revenue projections and limited new spending to ensure long-term stability. We've focused on allocating existing resources in alignment with core services and our priorities. These include maintaining critical infrastructure, supporting economic vitality, advancing equity and inclusion, promoting sustainability, and expanding housing opportunities.

While difficult choices were required, this budget positions the City to meet both immediate needs and future challenges without compromising our financial resiliency.
This budget, as presented, contains:

Market Adjustments for our Police
Competitive salary increases for police officers to align with regional market standards, ensuring the City can attract and retain qualified personnel while maintaining high-quality public safety services. Due to current hiring and retention concerns, Council approved the market adjustments on September 16, 2025, with implementation beginning September 20, 2025.

Joining the Boulder Office of Disaster Management (ODM)
Collaboration and coordination between the City and Boulder County Office of Disaster Management (ODM) to improve preparedness for future potential disasters.

Significant Investments in Information Technology and Process Improvement
Enhancing public services by automating workflows, supporting ongoing efficiencies and process improvements in the organization, and providing improved cybersecurity.

Marshall Fire Building Permit Set Aside Established
City Council established $1.7M in assistance to support the hundreds of underinsured Louisville residents and families negatively impacted by the Marshall Fire.

Significant Investment in Infrastructure
South Street Underpass and the "Front and Center" project, which is Phase 1 of the Downtown Vision Project, will enhance the community's experience and economic activity in the city.

These commitments address our city's most critical areas of focus for our community, while maintaining sufficient reserves for unforeseen emergencies.

BUDGET DEVELOPMENT TIMELINE, DATES, AND PREVIOUS DISCUSSIONS:

Previously held Budget public meetings were held on the following dates:

- Monday, November 4th, 2024 – City Council Adoption of the Biennial 2025 / 2026 Budget – Link to Materials
- Tuesday, July 1st, 2025 – Finance Committee Special Meeting – 2026 Supplemental Budget Retreat Preview – Link to Materials
- Tuesday, July 23rd, 2025 – City Council Annual Budget Retreat– Link to Materials
- Thursday, August 21st, 2025 – Finance Committee - Update on the status of the 2026 Budget Development and Recap of the Budget Retreat– Link to Materials
- Tuesday, September 2nd – (Council Meeting) – City Manager's Recommended Budget Presentation – Link to Materials

The Final 2026 Budget public meeting will be held on the following date:

- Monday, November 3rd – (Council Meeting) – 2026 Supplemental Budget & Mill Levy Adoption

ANALYSIS:

City Staff have conducted extensive work and analysis in preparing the structurally balanced City Manager's Proposed 2026 Supplemental Budget for your consideration.

2025 COUNCIL WORK PLAN:

Core Services - Formulating the City's budget is one of the most important financial activities that the City of Louisville undertakes annually. The budget process provides a comprehensive plan to deliver efficient services to the City's residents and stakeholders, aligning resources with the City's policies, goals, mission, and vision.

FISCAL IMPACT:

Budgeted?: **Not Applicable**

ALTERNATIVE(S):

N/A.

RECOMMENDATION

Based on public comments and City Council direction during the budget hearing, the City Manager and staff will finalize the budget for adoption by City Council at the November 3, 2025, City Council meeting.

ATTACHMENTS:

1. PowerPoint Presentation
2. Draft Budget Book

Photo Courtesy: Jen Burlew

City Manager's Proposed 2026 Operating and Capital Budget – Public Hearing

Presented to: City Council

October 21st, 2025

Diana Langley, City Manager

Samma Fox, Deputy City Manager

Ryder Bailey, CPA, Finance Director

Mahyar Mansurabadi, Financial Analyst

City of Louisville

City Manager's Proposed 2026 Budget

- Today's brief presentation is the result of the significant work to date in developing the 2026 Supplemental Operating and Capital Budget.
- The 2026 Proposed Budget is **Structurally Balanced**.
- There have been **no changes** since the September 2nd City Manager's Recommended Budget presentation.

2026 Budget Highlights

- Market Pay Adjustments for the Police Department
- Joining the Boulder County Office of Disaster Management (ODM)
- Significant Investments in Technology, Security, and Process Improvement
- Marshall Fire Building Permit Rebate Set Aside
- Community Events *(150th/250th Celebration, Marshall Fire 5 Year, Council Sponsor Event Fund, and expanded Holiday Lighting)*
- **Structurally Balanced 2026 Budget**

Budget Calendar, Timeline, & Prior Discussions

- Monday, November 4th, 2024 – City's 2025/2026 Biennial Budget Adopted
- Tuesday, July 1st – Finance Committee Special Meeting – 2026 Budget
- Wednesday, July 23rd – City Council Annual Budget Retreat
- August 21st – Finance Committee Budget Update and Retreat Recap
- Tuesday, Sept 2nd – City Manager's Recommended Budget Presentation
- **Tuesday, Oct 21st – City Manager's Proposed Budget Presentation / Budget Public Hearing**
- Monday, November 3rd – 2026 Budget and Mill Levy Adoption

Changes made since the City Manager's Recommended Budget

None

Budget Next Steps

- 2026 Budget Adoption and Mill Levy Certification will be held on Monday, November 3rd.

2025–26 Biennial Operating & Capital Budget

2026 SUPPLEMENTAL BUDGET REPORT

City of Louisville
COLORADO • SINCE 1878

November 3, 2025

Mayor Leh and City Council,

I am pleased to present the 2026 Supplemental Operating & Capital Budget, the updated 2025-2030 Capital Improvements Plan (CIP), and the updated 2025-2030 Long-Term Financial Plan. These documents reflect our commitment to responsible fiscal management while addressing the needs of our community. Like many Cities across Colorado, we face a constrained financial environment where the growing costs of services are outpacing revenue growth. The ability to maintain our services comes with challenges.

Flattening revenues from sales and use taxes, our largest revenue source, to a reduction of the local tax share of Colorado's Marijuana Tax.

Rising costs of personnel, materials, and services, especially in critical areas like public safety and parks maintenance.

This budget proactively addresses those risks, embracing restraint in ongoing expenditures while advancing strategic, one-time investments to secure our future. This budget adopts a conservative approach with its revenue projections and limited new spending to ensure long-term stability. We've focused on allocating existing resources in alignment with core services and our priorities. These include maintaining critical infrastructure, supporting economic vitality, advancing equity and inclusion, promoting sustainability, and expanding housing opportunities.

While difficult choices were required, this budget positions the City to meet both immediate needs and future challenges without compromising our financial resiliency.

This budget, as presented, contains:

Market Adjustments for our Police – Core Service & Safety Preparedness
Competitive salary increases for police officers to align with regional market standards, ensuring the city can attract and retain qualified personnel while maintaining high-quality public safety services

Joining Boulder ODM – Safety Preparedness
Collaboration and coordination between the City and Boulder County Office of Disaster Management (ODM) to improve preparedness for future potential disasters.

Significant Investment in Information Technology and Process Improvement – Core Service
Enhancing public services by automating workflows, supporting ongoing efficiencies and process improvements in the organization, and providing improved cybersecurity.

DRAFT

Significant Investment in Infrastructure – Economic Vitality
South Street Underpass and the "Front and Center" project, which is Phase 1 of the Downtown Vision Project, will enhance the community's experience and economic activity in the city.

These commitments are in response to our city's most critical areas of focus for our community, while maintaining sufficient reserves for unforeseen emergencies.

Awards

The City has received the Government Finance Officers Association of the United States and Canada (GFOA) award for Distinguished Budget Presentation for the 2025-2026 biennial budget. In order to receive this award a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communication medium. The award received is valid for one biennium; therefore, the Supplemental Budget document will not be submitted for the award.

Acknowledgements

I want to thank the residents who contributed ideas, commented on and helped the City refine the 2026 budget. Mayor Leh and City Council Members for their clear direction and firm support, and the terrific staff throughout the City. A special thank you to the Finance Committee and the Finance Committee Chair Hoefner, for their support and guidance in this process. I want to thank the Finance Department and specifically Ryder Bailey, Finance Director, and Mahyar Mansurabadi, Finance Analyst, for their significant efforts in developing the budget. I would also express my appreciation for the Communications Team, Derek Cosson, and Grace Johnson for their assistance in compiling and drafting the budget document. Without everyone's hard work, collaboration, and advice, the development and passage of the 2026 Supplemental Operating and Capital Budget would not have been possible.

Following this budget message, the reader will find in-depth analysis on revenues and expenditures, projections, and the Long Term Financial Summary.

The attached documents offer further transparency.

- 2026 Operating & Capital Budget presented by *Program and* Sub-*Program;*
- 2026 Operating & Capital Budget presented by *Fund; and*
- The Updated 2025-2030 Capital Improvements Plan

Respectfully submitted,

Diana Langley
City Manager

DRAFT

REVENUE & OPERATING EXPENDITURE PROJECTIONS

The following table summarizes the updated revenue and operational expenditure estimates and assumptions for 2025 through 2030 that have been incorporated into the 2026 Operating & Capital Budget and 2025-2030 Long-Term Financial Plan.

All projections for construction-related revenue are based on forecasts by the Planning & Building Department. Construction-related revenue includes Use Tax on Building Materials, Construction Permits, Impact Fees, and Utility Tap Fees.

All projections for revenue generated at the Recreation Center and Golf Course are based on forecasts by the Parks & Recreation Department. Golf Course User Fees include a consolidation of green fees, annual season passes, golf cart rentals, driving range fees, pro shop merchandise sales, daily rentals, golf lesson fees, club repair fees, and handicap fees.

Projections for Solid Waste & Recycling Fees and Utility User Fees are based on forecasts by the Public Works Department.

All remaining projections are based on the Finance Department's forecasts using trend analysis.

City of Louisville, Colorado
Summary of Assumptions
Year-Over-Year Percent of Change
2020 - 2030

Category	Percent of Change										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenues:											
Taxes											
Sales Tax	-8.4%	16.3%	9.1%	7.4%	11.5%	-2.2%	2.9%	5.0%	3.5%	3.5%	3.5%
Property Tax	9.5%	2.9%	7.5%	-5.2%	14.4%	-0.3%	3.8%	3.0%	0.0%	3.0%	0.0%
Use Tax - Consumer	-16.4%	28.0%	25.0%	29.1%	-40.4%	63.5%	-25.1%	3.0%	3.0%	3.0%	3.0%
Use Tax - Auto	-12.5%	19.0%	5.3%	-3.4%	2.1%	-6.3%	3.5%	3.0%	3.0%	3.0%	3.0%
Use Tax - Building Materials	-18.4%	43.3%	-1.2%	-15.8%	98.8%	-48.7%	-2.3%	6.9%	-21.8%	9.0%	-17.7%
Franchise Taxes	-3.6%	13.1%	6.7%	4.2%	-4.0%	10.1%	-0.1%	3.0%	3.0%	3.0%	3.0%
Lodging Tax	-59.9%	48.3%	8.8%	41.2%	39.1%	-23.4%	7.5%	3.0%	3.0%	3.0%	3.0%
Specific Ownership Tax	-2.0%	4.0%	-1.4%	-3.4%	1.3%	-3.0%	3.5%	3.0%	3.0%	3.0%	3.0%
Licenses & Permits											
Construction Permits	-15.3%	47.0%	119.9%	17.8%	-19.6%	-61.4%	65.2%	-3.5%	-39.5%	36.9%	-33.4%
Minor Building-Related Permits	-52.2%	-14.2%	95.2%	-27.9%	9.0%	-41.6%	3.0%	1.9%	1.9%	1.9%	1.9%
Utilities											
Water User Fees Commercial	20.5%	-7.0%	9.7%	-23.0%	42.0%	-5.2%	6.4%	6.4%	7.2%	6.1%	4.5%
Water User Fees Residential	23.7%	-9.7%	-12.2%	-11.4%	42.0%	-2.3%	5.7%	6.6%	6.9%	6.0%	4.9%
Water Tap Fees	-24.7%	37.7%	-35.7%	-9.9%	73.2%	-52.0%	273.0%	-23.8%	-44.3%	23.8%	-45.1%
Wastewater User Fees Commercial	9.2%	-0.8%	1.3%	0.2%	26.4%	3.6%	23.8%	11.3%	4.1%	0.0%	0.0%
Wastewater User Fees Residential	9.8%	3.2%	-16.0%	17.0%	12.2%	13.1%	21.9%	11.8%	3.8%	0.1%	0.1%
Wastewater Tap Fees	-1.0%	-31.9%	-14.4%	29.6%	-24.5%	24.9%	174.5%	4.1%	-33.3%	20.1%	-44.0%
Storm Water User Fees Commercial	7.8%	5.3%	-2.7%	20.6%	13.2%	4.5%	19.8%	13.6%	14.1%	13.0%	-0.8%
Storm Water User Fees Residential	7.0%	2.3%	-9.8%	19.1%	16.0%	9.2%	19.1%	13.4%	14.2%	13.0%	-0.8%
Solid Waste User Fees	-4.1%	-5.9%	5.6%	6.1%	9.8%	26.3%	13.1%	4.0%	4.0%	4.0%	4.0%
Impact Fee											
Impact Fee - Transportation	41.9%	-42.3%	65.3%	-90.0%	760.0%	-28.4%	388.4%	2.1%	-49.6%	32.2%	-38.6%
Impact Fee - Library		-71.3%	21.5%	-42.3%	-22.5%	246.3%	156.3%	0.1%	-35.3%	-11.2%	-9.8%
Impact Fee- Parks and Trails	78.0%	-71.7%	128.3%	-65.5%	-32.2%	252.9%	201.8%	-0.4%	-35.1%	-11.3%	-9.8%
Fees	-32.7%	44.5%	14.0%	23.2%	7.1%	-0.1%	2.8%	3.0%	3.0%	3.0%	3.0%
Expenses:											
Salaries & Wages											
Regular Wages	2.2%	4.6%	9.6%	7.1%	10.1%	11.3%	4.6%	4.0%	4.0%	4.0%	4.0%
Variable & Seasonal Wages	-33.6%	33.9%	38.6%	7.8%	17.9%	9.7%	-0.4%	3.0%	3.0%	3.0%	3.0%
Employee Benefits	3.4%	0.0%	6.3%	3.6%	13.8%	16.7%	3.3%	8.5%	8.5%	8.5%	8.5%
Supplies	-4.2%	-2.3%	90.0%	-24.0%	4.4%	24.6%	53.7%	3.0%	3.0%	3.0%	3.0%
CPI	2.0%	3.5%	8.0%	5.2%	2.3%	1.6%	2.0%	1.9%	1.9%	1.9%	1.9%

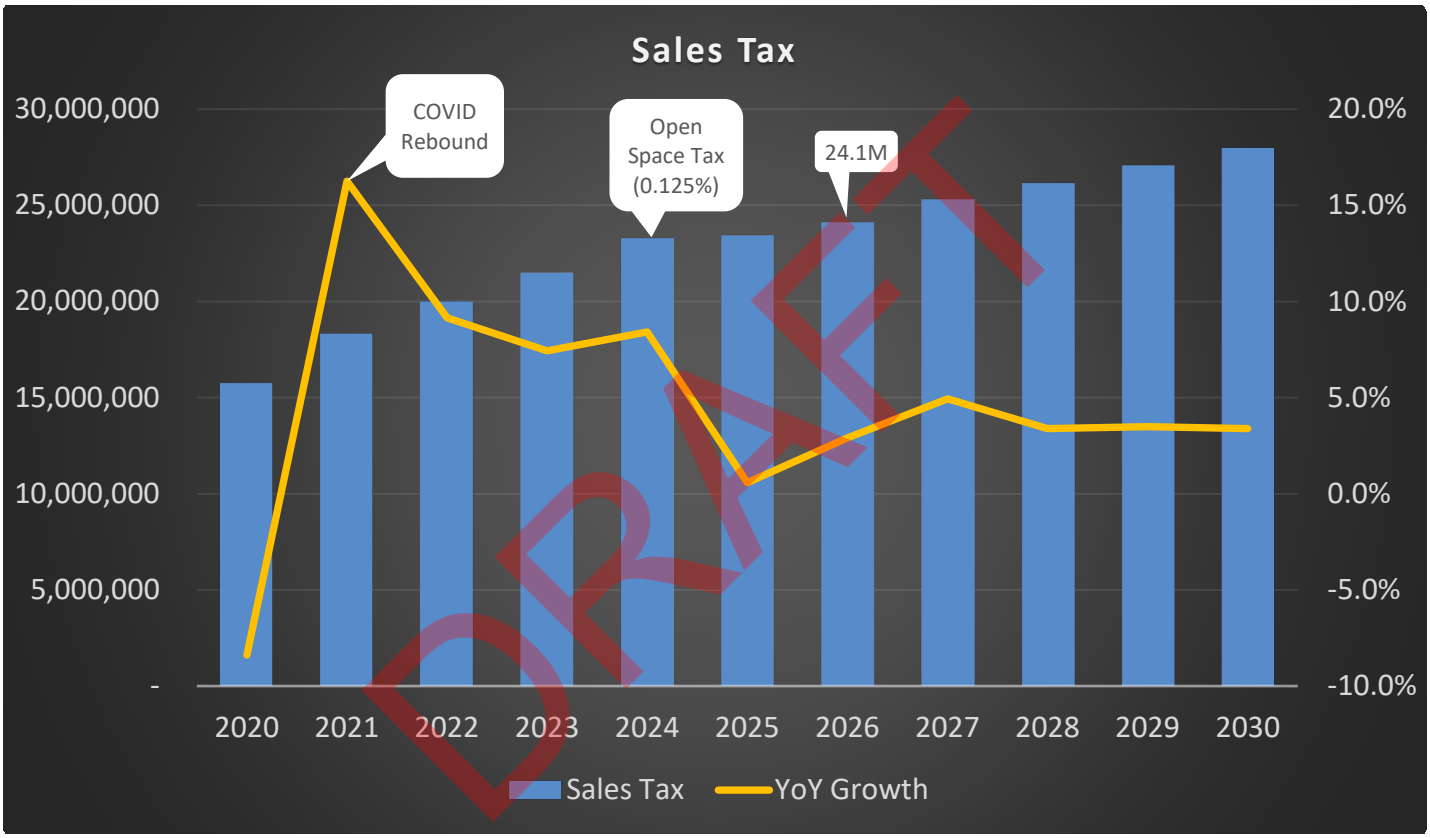
DRAFT

Sales Tax Revenue

Sales tax is a significant revenue source for the City and the projections/assumptions affect the City's following operating and capital funds:

- General Fund
- Open Space
- Parks Fund
- Historic Preservation Fund
- Recreation Fund
- Capital Project Fund

The following chart summarizes sales tax revenue history and projections from 2020 through 2030.



Assessed Valuation, Projected Mil Levy, & Property Tax Revenue

As of August 25th, the City had not received its *Preliminary* 2025 assessed valuation amounts from the Boulder County Assessor. Note that Final assessed valuations, multiplied by the mill levies, determine the amount of property tax revenue that will be received by the City in 2026.

The City currently levies a total of 6.559 mills with two separate levies:

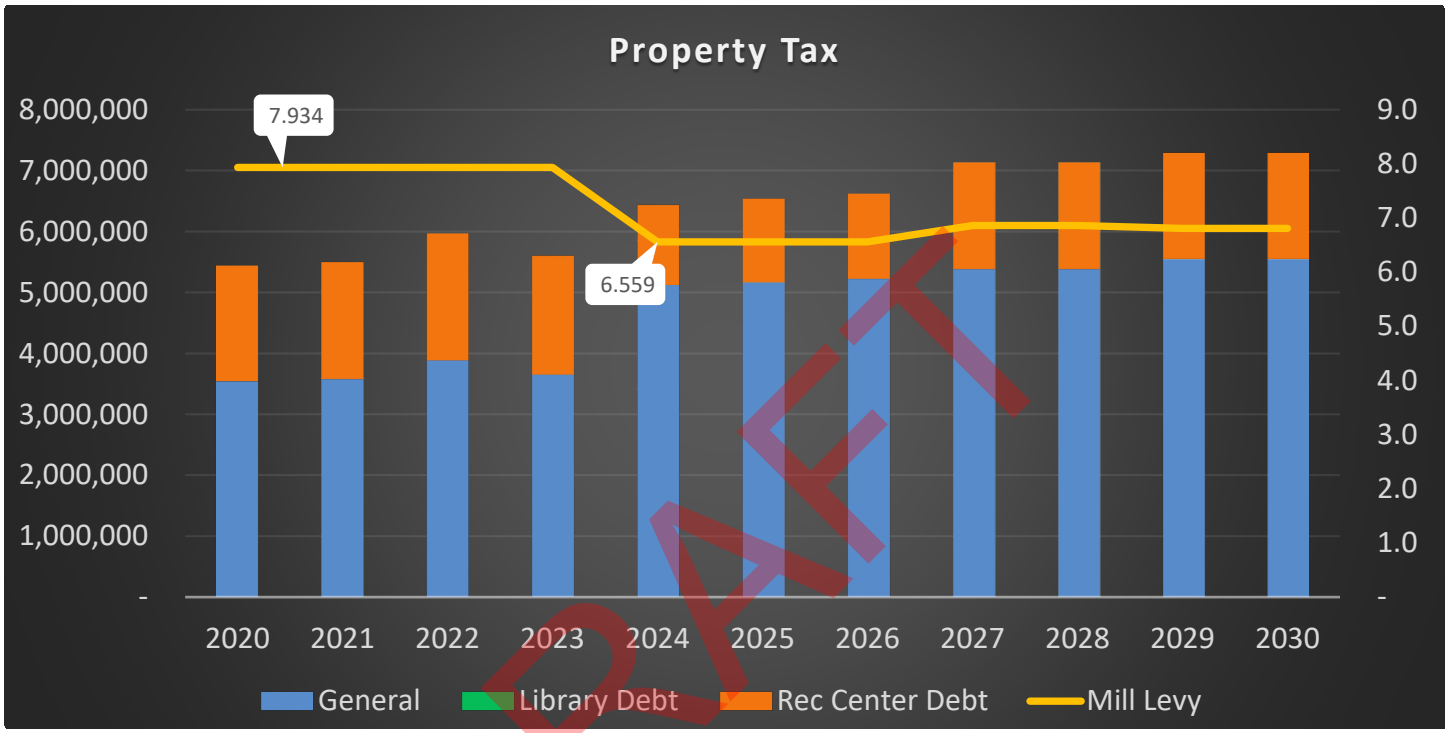
1. A 5.184 mill General Levy; and
2. A 1.375 mill Recreation Center Debt Service Levy.

For the third consecutive year, continuing into 2026, the budget extends the temporary mill levy credit to help offset the impact of increases to assessed values of property within the City jurisdiction.

For Calendar Year 2026, The City will levy a total of 6.559 mill levies, net of temporary mill levy credits, the two separate levies are as follows:

1. A 5.184 mill General Levy; and
2. A 1.375 mill Recreation Center Debt Service Levy.

Extending the temporary Recreation Center Debt Service Levy credit at 1.375 mills requires the use of fund balance. In 2027 and beyond, Staff will recommend a mill levy appropriate for future debt service payments.



DRAFT

Wage & Benefit Projections

The 2026 wage and benefit projections were developed by staff using the Tyler-Munis Salary projection tool. These projections are reflected in the 2026 Operating & Capital Budget and are the basis for projecting wages and benefits in the Long-Term Financial Plan for 2025 through 2030.

The 2026 wage and benefit projections include merit increases not to exceed 4% (5% for Police Department) and a market adjustment of 2% for all employees except for Police. (3-8% for Sworn Officers in the Police Department). Together, these inclusions account for an approximate $1.0 million increase in the City's employee compensation budget for 2026. These investments help support the City by maintaining an experienced and stable workforce, including the retention and attraction of employees, which is necessary to fulfill the level of service desired by Council and the community. In addition, these investments help reduce the costs and operational impacts of employee turnover.

The 2026 Recommended Budget includes a reduction of 6.57 full-time equivalents (FTEs) across Full-Time and Variable positions.

Recommended Adjustments to Full-Time Benefitted Positions (Regular Wages)

- Addition of Wastewater Plant Operator Trainee – A (+1.0 FTE)
- Reduction of Mitigation Coordinator (-1.0 FTE)
- Reduction of Risk Mitigation Specialist (-1.0 FTE)
- Conversion of two Part-Time (Variable) positions to Full-Time HR Analyst I (-0.45 FTE)

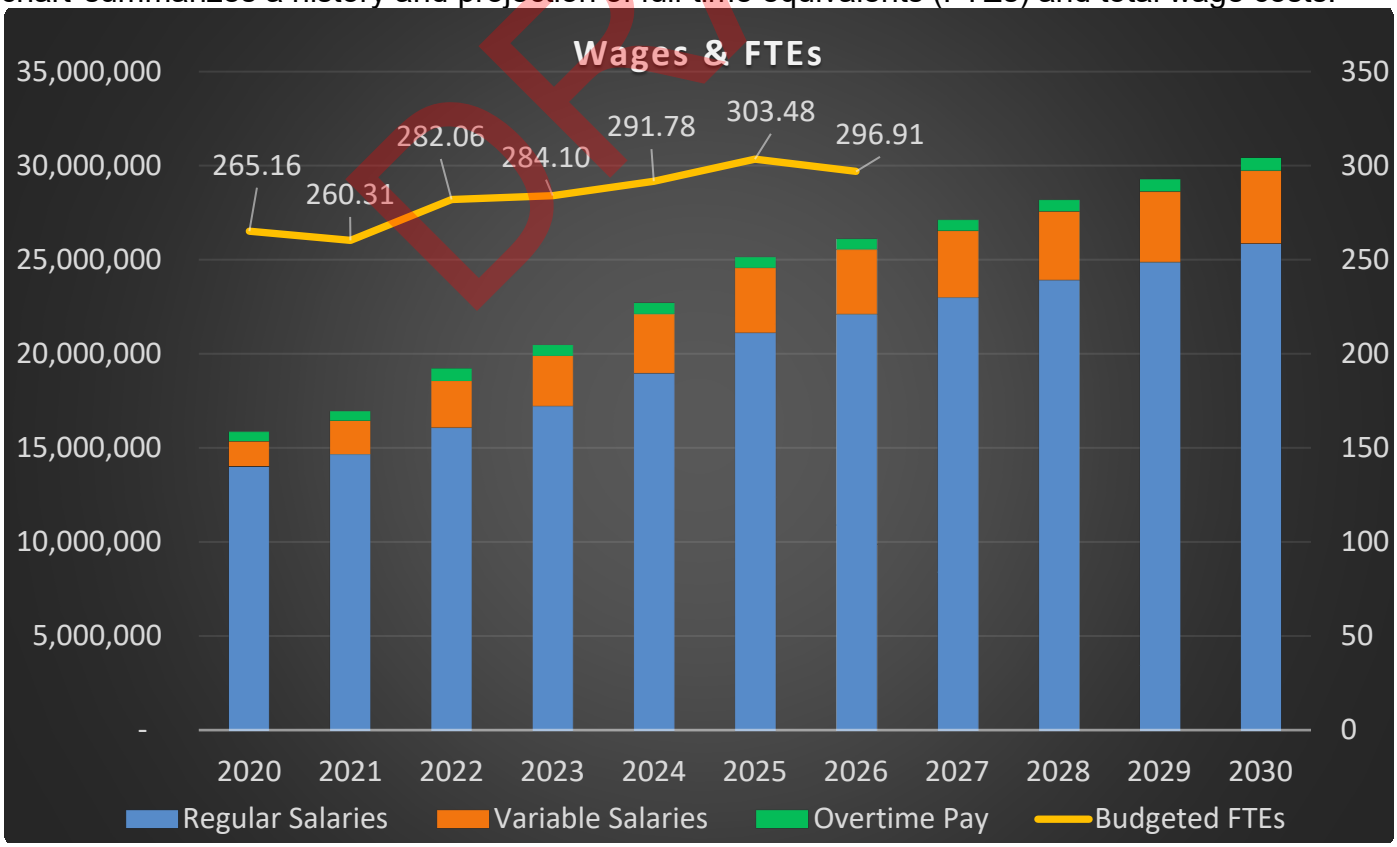
Below is a summary of the recommended adjustments to full-time wages and benefits.

	2026 Percent Increase
Market Adjustments	2%
Merit Adjustments - General	4%
Merit Adjustments – Police Sworn	5%
Health Insurance	5%
Dental Insurance	2%
Vision Insurance	2%

Recommended Adjustments to Part-Time Non-Benefitted Hours (Variable Wages)

The City manages its part-time, non-benefitted wages by managing hours, rather than individual positions. The hours are categorized by job class. This type of budgetary control allows departments the most flexibility for managing part-time, seasonal and temporary positions. A 2% market adjustment for 2026 has been included in the salary projection model for all variable positions.

Employee wages and benefits are the City's largest operational cost category. The following chart summarizes a history and projection of full-time equivalents (FTEs) and total wage costs.



DRAFT

CAPITAL IMPROVEMENTS PLAN UPDATE

Section 5.5 of the City's Financial Policies states:

> *A Six-Year Capital Improvement Plan will be presented to the City Council for consideration during the biennial budget development process. The annual capital budget will be based on the first year of the approved CIP.*

This document includes a CIP Summary Table that includes adjustments and represents the 2025-2030 CIP.

INTERFUND TRANSFERS

The following table summarizes the transfers between funds that are included in the 2026 Operating & Capital Budget.

2026 Recommended Inter-Fund Transfers

DRAFT

City of Louisville, Colorado
Inter-Fund Transfers Matrix
2026 Recommended Budget

	Transfers In				
Transfers Out	General Fund	Parks Fund	Cemetery Fund	Recreation Fund	Total
General Fund	$ -	$ 1,079,900 *a*	$ 129,700 *a*	$ 1,345,900 *a*	$ 2,555,500
Cemetery Perpetual Care Fund	-	-	38,465 *b*	-	38,465
Historic Preservation	215,200 *c*	-	-	-	215,200
Capital Projects Fund	-	-	-	162,900 *d*	162,900
Conservation Trust-Lottery Fund	-	100,000 *e*	-	-	100,000
Total	$ 215,200	$ 1,179,900	$ 168,165	$ 1,508,800	$ 3,072,065

a Annual subsidy transfer per City Financial Policies
b Annual transfer of interest earned in the Cemetery Perpetual Care Fund for cemetery operations and maintenance.
c Annual transfer to fund Museum Services.
d Annual subsidy transfer for capital projects.
e Transfer to Parks for eligible maintenance expenditures

Note: Beginning in 2026, and anticipated to occur through 2028, the City Council directed that the Conservation Trust Fund will fund certain eligible Park maintenance expenditures.

CITY-WIDE 2026 BUDGET SUMMARY

The following table summarizes the projected fiscal impact of the 2026 Operating & Capital Budget on each fund's revenue, expenditures, and fund balances.

City of Louisville, Colorado
Summary of Revenue, Expenditures, and Changes to Fund Balances
All Funds
2026 Projection

Fund Number	Fund Description	Beginning Fund Balance	Revenue & Other Sources	Expenditures & Other Uses		Ending Fund Balance	Amount of Change	Percent of Change
101	**General**	**$ 16,972,032**	**$ 28,782,474**	**$ 29,904,080**	*[1]*	**$ 15,850,426**	**$ (1,121,607)**	**-7%**
	Special Revenue Funds:							
202	Conservation Trust - Lottery	**401,762**	288,800	305,600		**384,962**	(16,800)	-4%
203	Cemetery Perpetual Care	**915,060**	80,000	38,765		**956,295**	41,235	5%
204	Cemetery	**193,903**	268,665	249,879		**212,689**	18,786	10%
205	PEG Fees	**12,954**	14,310	20,050		**7,214**	(5,740)	-44%
206	Parking Improvement	**105,352**	4,000	50		**109,302**	3,950	4%
207	Historic Preservation	**4,003,071**	1,163,626	1,763,315		**3,403,382**	(599,689)	-15%
208	Recreation	**4,710,248**	6,656,893	7,007,778	*[2]*	**4,359,362**	(350,885)	-7%
210	Open Space	**1,585,468**	2,669,346	2,892,121	*[3]*	**1,362,693**	(222,775)	-14%
211	Parks	**859,329**	2,802,269	2,769,608	*[4]*	**891,989**	32,660	4%
	Total Special Revenue Funds	**12,787,146**	**13,947,908**	**15,047,167**		**11,687,888**	**(1,099,258)**	**-9%**
	Capital Project Funds:							
301	Capital Projects	**13,330,470**	16,068,067	22,456,257		**6,942,280**	(6,388,190)	-48%
302	Impact Fee	**430,658**	1,415,380	300		**1,845,738**	1,415,080	329%
	Total Capital Project Funds	**13,761,128**	**17,483,447**	**22,456,557**		**8,788,018**	**(4,973,110)**	**-36%**
	Debt Service Funds:							
402	Recreation Center Debt Service	**510,123**	1,415,000	1,743,200		**181,923**	(328,200)	-64%
	Total Debt Service Funds	**510,123**	**1,415,000**	**1,743,200**		**181,923**	**(328,200)**	**-64%**
	Enterprise Funds (WC Basis):							
501	Water Utility	**10,189,640**	13,507,040	10,802,852		**12,893,828**	2,704,188	27%
502	Wastewater Utility	**929,994**	7,143,610	6,539,928		**1,533,676**	603,682	65%
503	Stormwater Utility	**1,407,591**	1,731,900	2,220,772		**918,719**	(488,872)	-35%
510	Solid Waste & Recycling Utility	**318,199**	2,572,550	2,653,716		**237,033**	(81,166)	-26%
520	Golf Course	**1,132,395**	3,265,010	3,447,536	*[5]*	**949,869**	(182,526)	-16%
	Total Enterprise Funds	**13,977,818**	**28,220,110**	**25,664,804**		**16,533,124**	**2,555,306**	**18%**
	Internal Service Funds (WC Basis):							
602	Technology Management	**38,562**	142,550	146,300		**34,812**	(3,750)	-10%
603	Fleet Management	**655,284**	-	-		**655,284**	-	0%
	Total Internal Service Funds	**693,846**	**142,550**	**146,300**		**690,096**	**(3,750)**	**-1%**
	Total All Funds	**$ 58,702,094**	**$ 89,991,489**	**$ 94,962,108**		**$ 53,731,475**	**$ (4,970,620)**	**-8%**

[1] Projected Expenditures Include a Projected Operational "Turnback" of 5.5% , which = 1,468,039
[2] Projected Expenditures Include a Projected Operational "Turnback" of 5.0% , which = 328,055
[3] Projected Expenditures Include a Projected Operational "Turnback" of 6.0% , which = 98,310
[4] Projected Expenditures Include a Projected Operational "Turnback" of 6.0% , which = 176,784
[5] Projected Expenditures Include a Projected Operational "Turnback" of 2.0% , which = 58,774

DRAFT

Note that five funds include a "turnback" and, therefore, those funds' Expenditures & Other Uses are less than the fund's total appropriations. As a reminder, "turnback" refers to a positive actual-to-budget variance at year end. Applying a turnback percentage accounts for the recognition that, due to budgetary limitations and controls, the main operating funds typically spend less than their total budget.

A history and projection of turnback for the City's main operating funds is summarized in the following table.

OPERATIONAL TURNBACK

City of Louisville, Colorado
Summary of Actual and Targeted Operational Turnback
Selected Operating Funds

Fund	2018 Actual	2019 Actual	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2025 Target	2026 Target	2027 Target	2028 Target	2029 Target	2030 Target
General Fund	9.7%	10.4%	4.3%	11.3%	20.8%	9.6%	7.9%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Recreation	N/A	-2.1%	3.6%	8.1%	-0.8%	-3.0%	3.8%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Open Space	*11.7%*	*6.9%*	*6.6%*	*9.9%*	*2.8%*	*16.2%*	22.9%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Parks	*11.7%*	*6.9%*	*6.6%*	*9.9%*	*2.8%*	*16.2%*	19.1%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Utilities	13.9%	14.2%	3.4%	1.2%	-8.9%	5.4%	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Golf	-16.3%	11.9%	0.0%	-7.8%	-0.3%	3.1%	-0.9%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

** - OS and Parks Turnback prior to 2024 is derived from the formerly shared Fund (201)*

For a more detailed review of the proposed operating and capital budgets, attached to this transmittal is a presentation of the following:

1. 2026 Biennial Operating and Capital Budget by Program and Sub-Program; and
2. 2026 Biennial Operating and Capital Budget by Fund

LONG-TERM FINANCIAL PLAN SUMMARY

Section 5.6 of the City's Financial Policies states:

> *Six-year financial forecasts for each of the City's major operating funds will be presented to the City Council for consideration during budget development.*

Staff have updated forecasts of revenue, expenditures, and reserves for all funds. However, staff has performed a more detailed review and has made more detailed forecasts for the major operating and capital funds, defined as the:

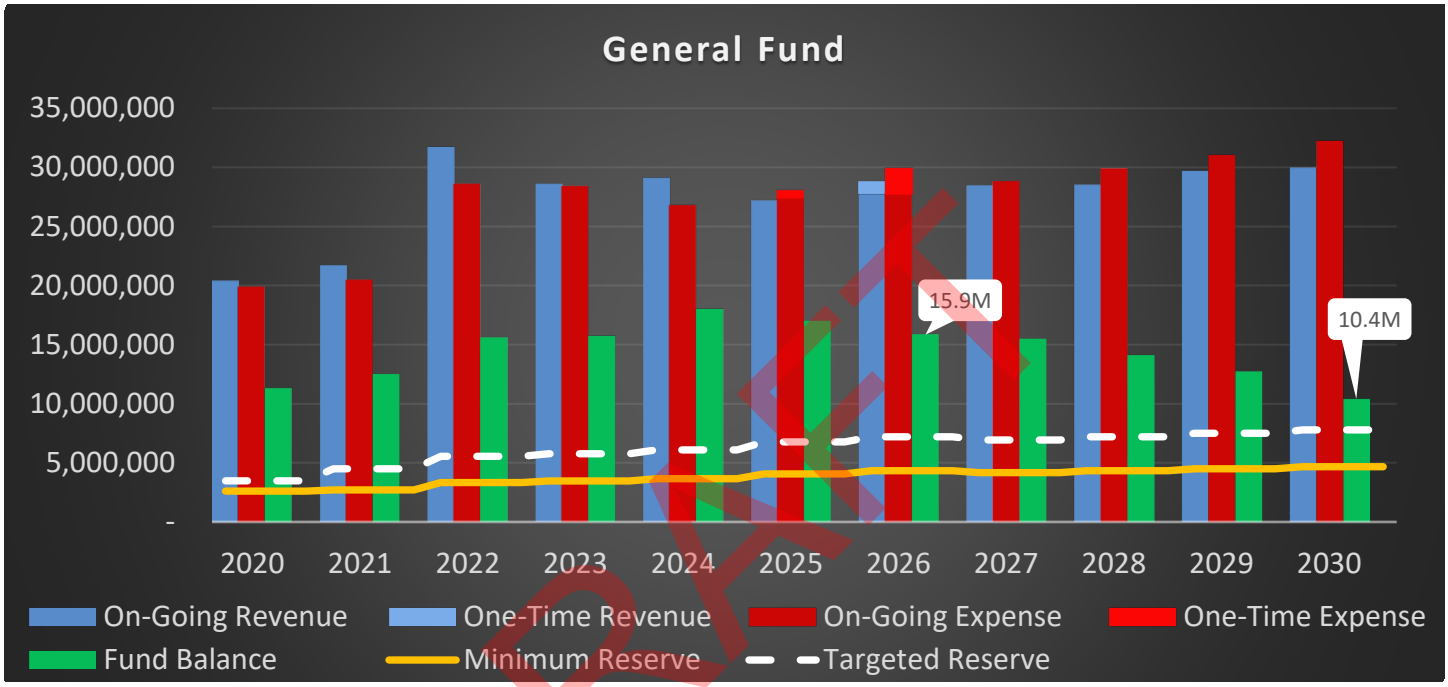
- General Fund;
- Open Space Fund;
- Parks Fund;
- Recreation Fund;
- Capital Projects Fund;
- Consolidated Utility Funds; and
- Golf Course Fund.

DRAFT

The forecasting model uses the 2025 revised budget or projection, as the base year and then applies the revenue assumptions, operating expenditure targets, proposed interfund transfers, and the updated Capital Improvements Plan to project revenue, expenditures, and fund balances (or working capital for proprietary funds) for years 2025 through 2030.

General Fund Long-Term Forecast

Incorporating the revenue assumptions, the operating expenditure targets, and the proposed interfund transfers outlined in the preceding discussion, the following chart summarizes a history and projection of revenue, expenditures, and fund balances for the General Fund.



DRAFT

The City's current Reserve Policy for the General Fund states,

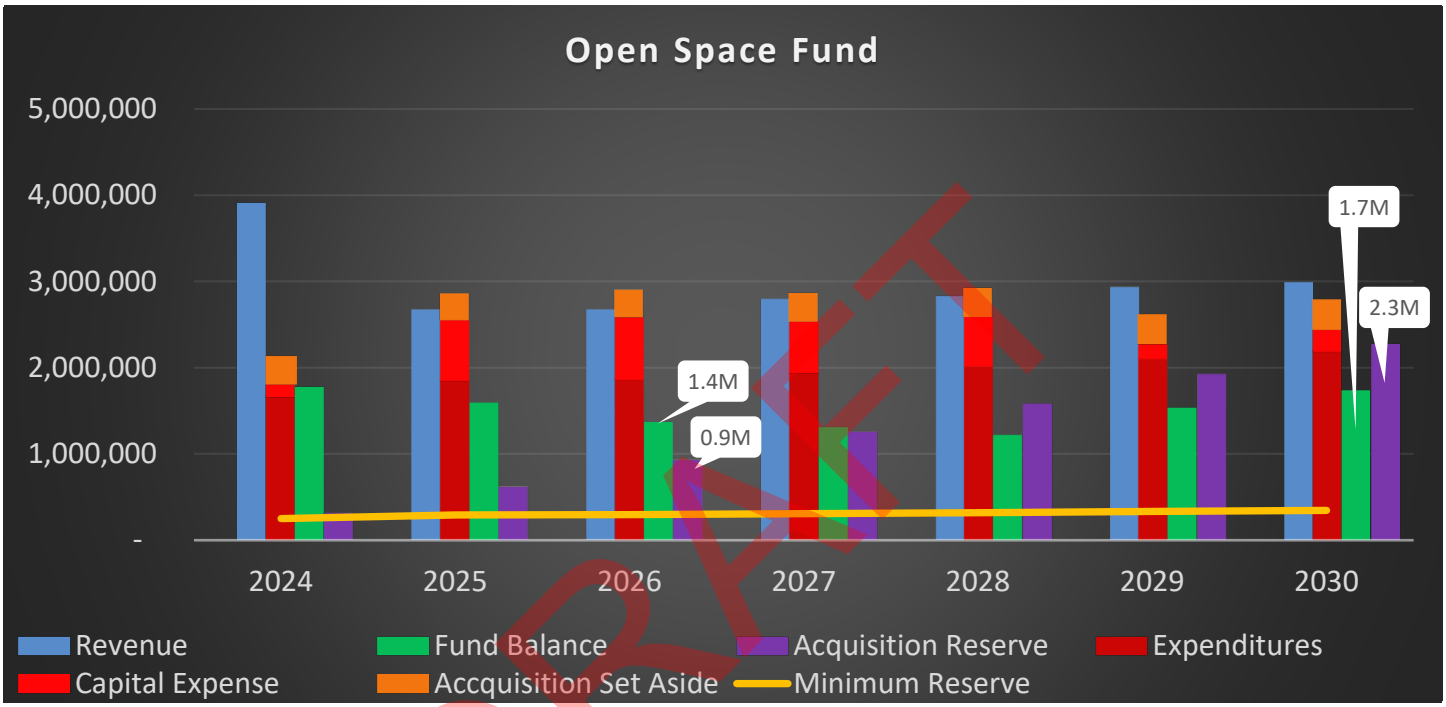
> *The minimum unrestricted fund balance of the General Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures less any one-time, non-recurring transfers to other funds. Annual, recurring support transfers to other funds will be included in the definition of current operating expenditures.*
>
> *While the minimum unrestricted fund balance is set at 15% of current operating expenditures, the targeted unrestricted fund balance will be at or above 25% of current operating expenditures.*

The General Fund fund balance is projected to end 2030 with approximately $10.4 million, while remaining in compliance with both reserve policies, minimum and target.

Open Space Fund Long-Term Forecast

Incorporating the revenue assumptions, the operating expenditure targets, and the updated CIP projections outlined in the preceding discussion, the following chart summarizes a history and projection of revenue, expenditures, and fund balances for the Open Space Fund.

Note: Prior to 2024, Open Space and Parks operated within a single shared Fund. Approval of Ballot Measure 2C in November 2023, defined how future Sales and Use Tax revenues were to be split, as well as requiring each division to operate within its own separate and distinct fund.



DRAFT

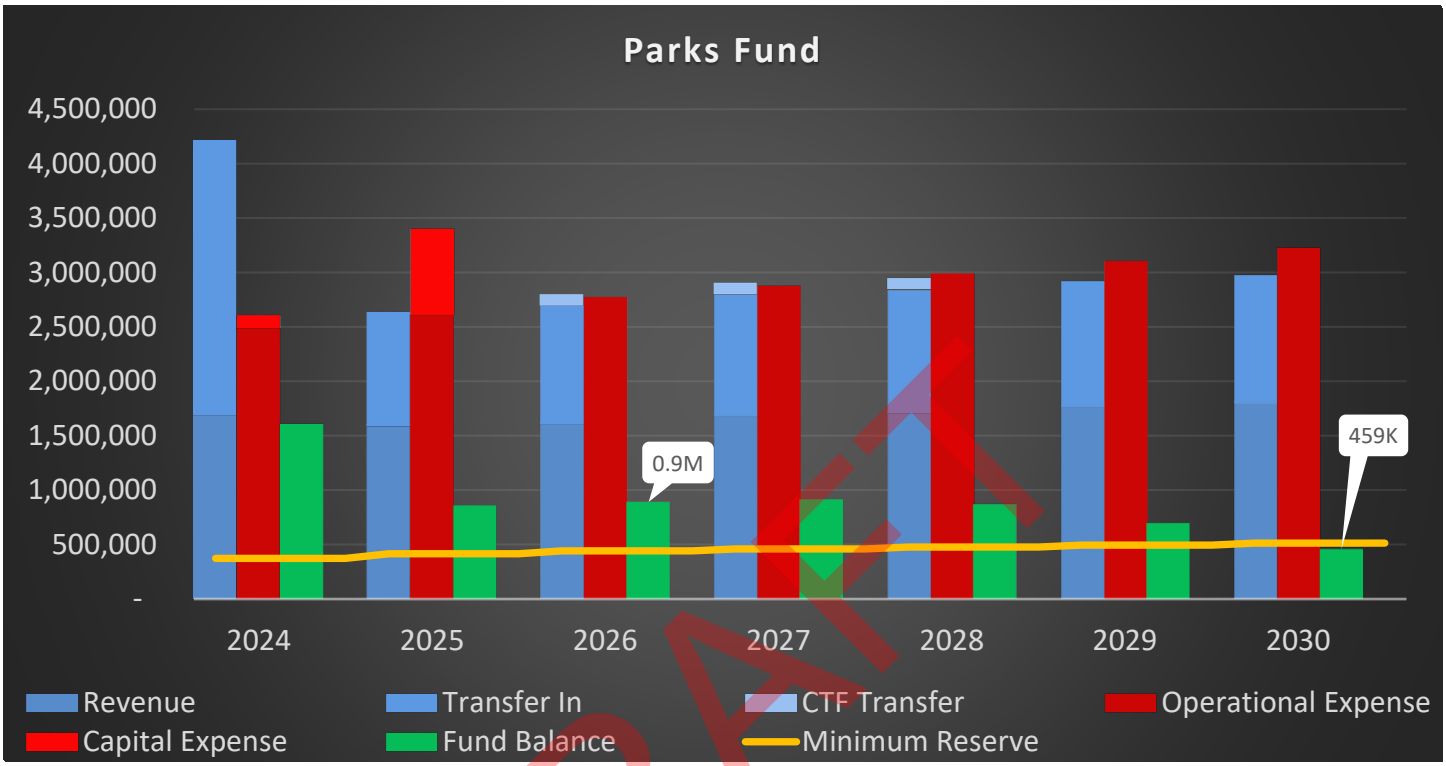
The City's Reserve Policy for the Open Space Fund states,

> *The minimum fund balance of the Open Space Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures include only open space operations and exclude all interfund transfers and capital outlay.*
>
> *Within the Open Space Fund, separate and apart from the minimum fund balance, an acquisition reserve is established to fund future open space acquisitions. A minimum of 30% of the annual budgeted sales and use tax revenue proceeds from the tax established in Section 3.20.200(A)(3) of the Louisville Municipal Code shall be encumbered for acquisition of open space land in and around the city, until a target reserve is achieved.*

The Open Space fund balance is projected to end 2030 with approximately $1.7 million, while remaining in compliance with both reserve policies, minimum and acquisition.

Parks Fund Long-Term Forecast

Incorporating the revenue assumptions, the operating expenditure targets, the proposed interfund transfers, and the updated CIP projections outlined in the preceding discussion, the following chart summarizes a history and projection of revenue, expenditures, and fund balances for the Parks Fund.



The City's Reserve Policy for the Parks Fund states,

> *The minimum fund balance of the Parks Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures include only parks operations and exclude all interfund transfers and capital outlay.*
>
> *The Parks Fund requires a recurring annual transfer from the General Fund to fund its operating deficit. This annual transfer will be calculated by taking the amount of funding provided by the General Fund for Parks in 2007 ($626,900) and inflating that amount on an annual basis by the regional Consumer Price Index for All Urban Consumers. The 2007 funding level for Parks is the starting point for the calculation, since that was the last year that Parks was funded within the General Fund. In 2024, the budgeted annual transfer from the General Fund amount was $1,017,900.*

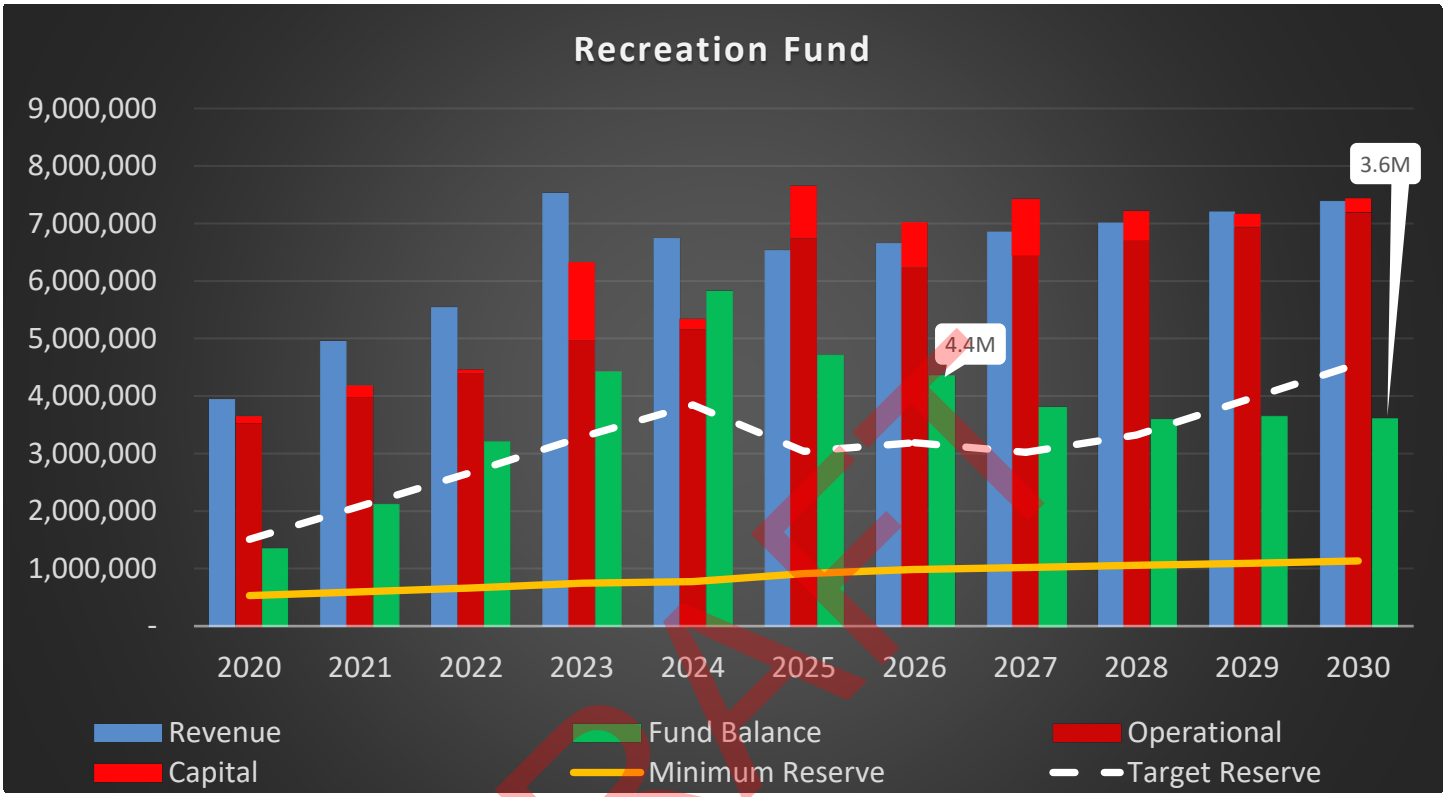
Beginning in 2025, all Parks capital projects have been shifted to the Capital Fund. Starting in 2026, and anticipated to occur through 2028, the City Council directed that the Conservation Trust Fund will fund certain eligible Park maintenance expenditures.

The Park Fund fund balance is projected to end 2030 with approximately $459,000, which is below the minimum reserve policy. Staff will continue working towards a long-term solution for Parks.

DRAFT

Recreation Fund Long-Term Forecast

Incorporating the revenue assumptions, the operating expenditure targets, the proposed interfund transfers, and the updated CIP projections outlined in the preceding discussion, the following chart summarizes a history and projection of revenue, expenditures, and fund balances for the Recreation Fund.



DRAFT

The City's Reserve Policy for the Recreation Fund states,

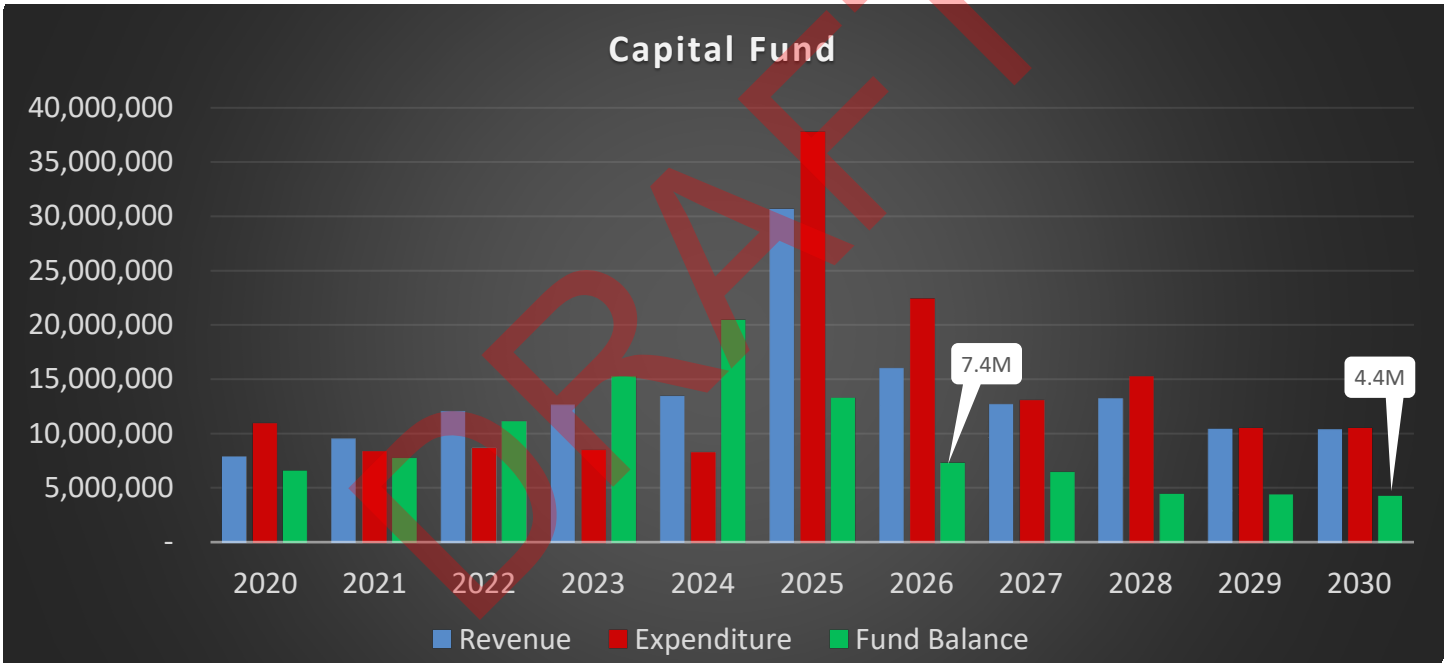
> *The minimum fund balance of the Recreation Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures, excluding interfund transfers and capital outlay.*
>
> *In addition to maintaining an operating reserve, the Recreation Fund will also maintain a capital asset renewal and replacement reserve. The purpose of this reserve is to accumulate funds for the timely renewal and replacement of Recreation Center and Memory Square Pool assets. The methodology for calculating this reserve will be approved by the Finance Committee.*
>
> *The City Council recognizes that the dedicated sales tax and user fee revenues may not be sufficient and the Recreation Fund may also need to rely on annual General Fund transfers. The annual General Fund transfer will be calculated by taking the General Fund subsidy for the Recreation Center/Memory Square Pool in 2017 ($986,300) and inflating that amount on an annual basis by the regional Consumer Price Index for All Urban Consumers. The 2017 General Fund subsidy level is the starting point for the calculation, since that is the last year that the Recreation Center and Memory Square Pool were funded within the General Fund.*

In addition to the annual General Fund transfer towards the annual operating costs, minimum fund balance requirements, and capital asset renewal and replacement reserves, this policy also authorizes an annual transfer from the Capital Projects Fund to the Recreation Fund in the amount of $125,000 for 2019 and each year thereafter inflated on an annual basis by the regional Consumer Price Index for All Urban Consumers. This transfer is restricted for capital outlay.

The projected Recreation Fund balance at the end of 2026 is $4.4 million. The projected Recreation Fund balance at the end of 2030 is $3.6 million. This is well above the minimum fund balance but below the capital asset renewal and replacement target.

Capital Projects Fund Long-Term Forecast

Incorporating the revenue assumptions, the operating expenditure targets, the proposed interfund transfers, and the updated CIP projections outlined in the preceding discussion, the following chart summarizes a history and projection of revenue, expenditures, and fund balances for the Capital Projects Fund.



DRAFT

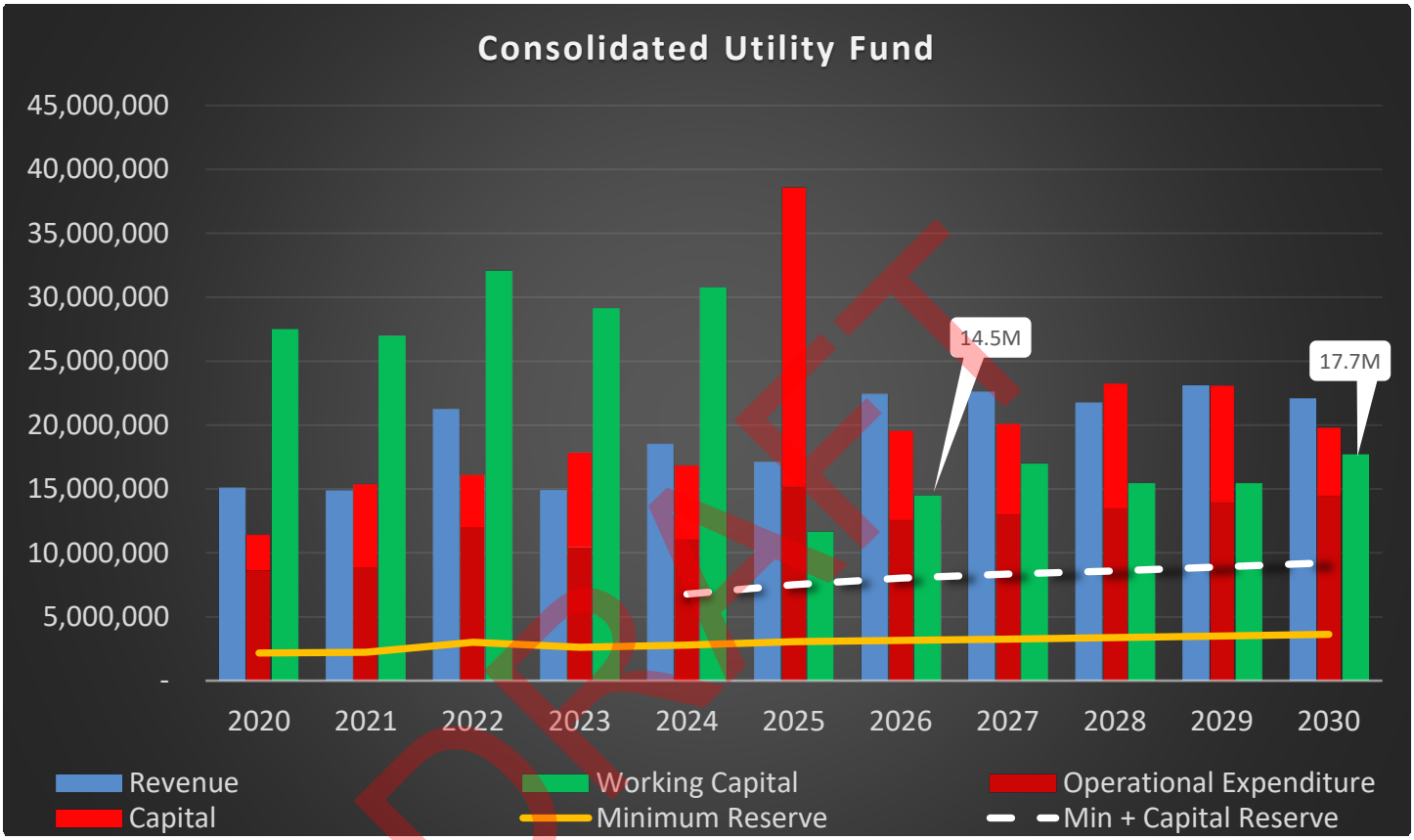
Large fluctuations in revenue, expenditures and fund balances within capital project funds are typical. The City does not have a formal reserve policy for its Capital Projects Fund. However, the City has historically attempted to maintain enough reserves to mitigate current and future risks (revenue shortfalls, unanticipated expenditures, etc.).

The projected fund balance at the end of 2030 is approximately $4.4 million.

Consolidated Utility Fund Long-Term Forecast

The Consolidated Utility Fund consists of the Water Utility Fund, the Wastewater Utility Fund, and the Storm Water Utility Fund.

Incorporating the revenue assumptions, the operating expenditure targets, and the updated CIP projections outlined in the preceding discussion, the following chart summarizes a history and projection of revenue, expenditures, and reserves (defined as working capital) for the Consolidated Utility Fund.



DRAFT

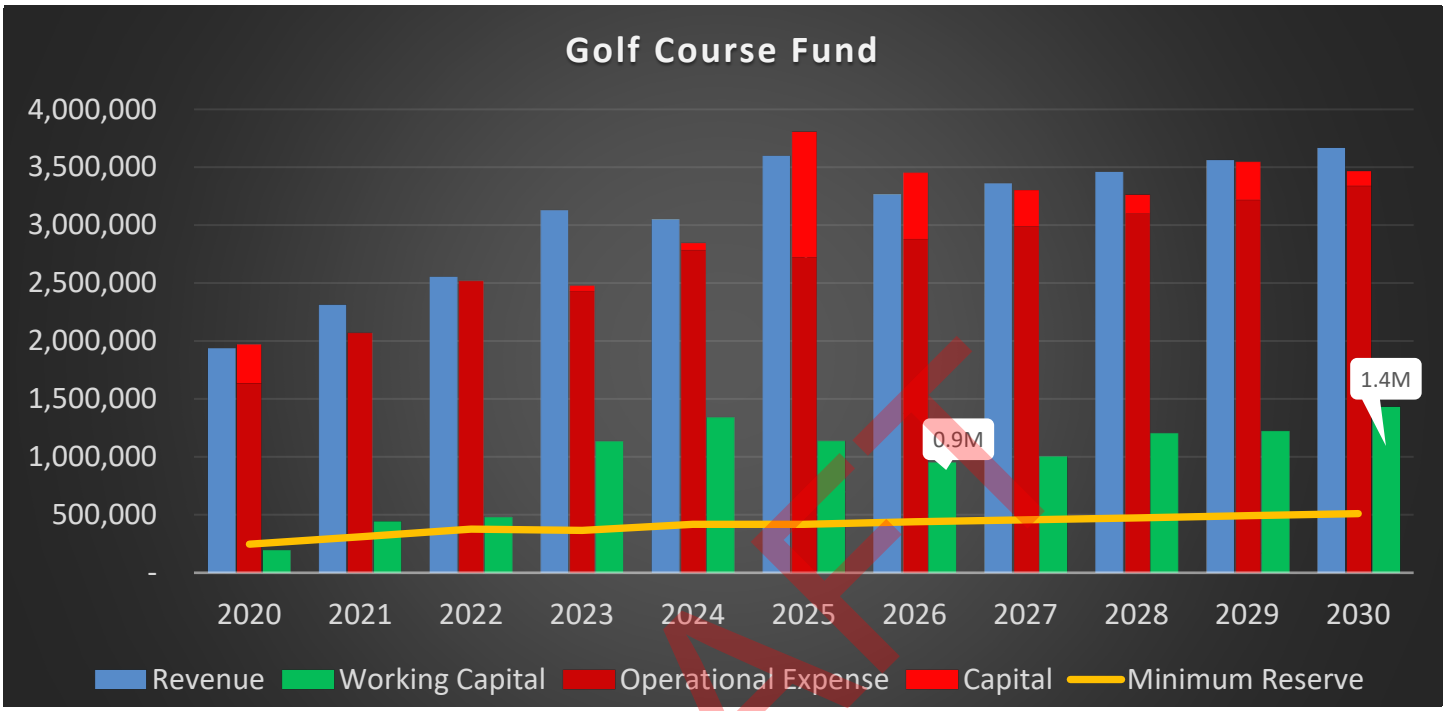
The City's Reserve Policy for the Utility Funds states,

> *The minimum working capital for the Water, Wastewater, and Storm Water Utility Funds shall be maintained at or above 25% of current operating expenses, as measured on the City's budgetary basis. For purpose of this policy, operating expenses are defined as all budgetary-basis expenses, excluding interfund transfers and capital outlay.*

The Consolidated Utility Fund reserves are expected to remain above the 25% minimum level as defined in the Reserve Policy. All the individual utility funds are also expected to remain in full compliance with the reserve policy.

Golf Course Fund Long-Term Forecast

Incorporating the revenue assumptions, the operating expenditure targets, and the updated CIP projections outlined in the preceding discussion, the following chart summarizes a history and projection of revenue, expenditures, and reserves (defined as working capital) for the Golf Course Fund.



DRAFT

The City's Reserve Policy for the Golf Course Fund states,

> *The minimum working capital balance of the Golf Course Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures, excluding interfund transfers and capital outlay.*

The projected Golf Course Fund balance at the end of 2030 is $1.4 million.

Program and Sub-Program Descriptions	Initial Budget 2024	Adopted Budget 2025	Revised Budget 2026	Diff 24-25	Diff 25-26	
Transportation						
Planning & Engineering	3.53	2.75	2.75	(0.78)	(0.00)	
Transport Infrastructure Maint	5.18	5.46	4.90	0.28	(0.56)	
Streetscapes	3.83	3.52	3.65	(0.31)	0.13	
Snow & Ice Removal	2.97	3.07	2.87	0.10	(0.20)	
Total Transportation	15.51	14.80	14.17	(0.71)	(0.64)	
Utilities						
Water	21.21	24.25	22.20	3.04	(2.05)	(a)
Wastewater	15.09	16.92	17.66	1.83	0.74	(b)
Stormwater	3.17	3.58	3.64	0.41	0.05	
Solid Waste, Recycle & Compost	0.73	0.73	0.48	0.00	(0.25)	
Total Utilties	40.20	45.48	43.97	5.28	(1.51)	
Public Safety & Justice						
Patrol & Investigations	43.38	43.65	43.66	0.27	0.01	
Code Enforcement	1.59	1.59	1.59	-	-	
Municipal Court	1.52	1.52	1.52	-	-	
Police Dept Bldg Maint	0.44	0.44	0.44	-	-	
Total Public Safety & Justice	46.93	47.20	47.21	0.27	0.01	
Parks						
Parks & Recreation Admin	0.06	2.36	2.36	2.30	0.00	
Parks	22.72	18.85	19.31	(3.87)	0.46	
Cemetery	0.73	1.25	0.68	0.52	(0.57)	
Total Parks	23.51	22.46	22.35	(1.06)	(0.11)	
Open Space & Trails						
Acquisition	0.04	0.05	0.05	0.01	-	
Maintenance & Management	5.65	8.21	8.14	2.56	(0.07)	
Education & Outreach	3.15	3.40	3.40	0.25	-	
New Trails & Maint	1.36	2.01	2.01	0.65	0.00	
Total Open Space & Trails	10.20	13.67	13.60	3.47	(0.06)	
Recreation						
Recreation Center Mgmt	10.24	12.56	13.28	2.32	0.72	
Youth Activities	7.53	7.82	8.46	0.29	0.64	
Adult Activities	5.61	6.67	6.85	1.06	0.18	
Senior Activites & Services	3.26	3.56	3.57	0.30	0.01	
Aquatics	17.72	18.98	18.91	1.26	(0.07)	
Golf Course	21.96	23.71	23.78	1.75	0.07	
Athletic Field Maint	0.97	0.82	0.90	(0.15)	0.07	
RecCenter Bldg Maint	1.38	1.38	1.38	-	-	
Total Recreation	68.67	75.50	77.13	6.84	1.62	

DRAFT

Program and Sub-Program Descriptions	Initial Budget 2024	Adopted Budget 2025	Revised Budget 2026	Diff 24-25	Diff 25-26
Cultural Services					
Library Services	22.04	22.74	22.99	0.70	0.25
Museum Services	2.89	2.89	2.93	-	0.04
Cultural Arts & Special Events	1.28	1.28	1.29	-	0.01
Total Cultural Services	26.21	26.91	27.21	0.70	0.30
Community Design					
Community Design	4.79	4.93	4.91	0.14	(0.02)
Development Review	12.22	10.49	11.03	(1.73)	0.54
Historic Preservation	1.30	1.31	1.19	0.01	(0.12)
Total Community Design	18.31	16.72	17.12	(1.59)	0.40
Economic Prosperity					
Business Retention & Develop	2.00	2.00	2.00	-	-
Total Economic Prosperity	2.00	2.00	2.00	-	-
Administration & Support Services					
Governance & Administration	9.46	9.23	6.28	(0.23)	(2.95) (c)
Public Info & Involvement	4.14	4.13	4.04	(0.01)	(0.09)
Sustainability	2.16	2.16	2.16	-	-
City Clerk/Public Records	3.25	3.25	3.30	-	0.05
Legal Support	-	-	-	-	-
Human Resources & Org Devel	6.12	6.11	3.52	(0.01)	(2.59) (d)
Finance Accounting & Tax Admin	7.25	6.77	5.76	(0.48)	(1.01) (d)
InformationTechnology	6.16	5.39	5.39	(0.77)	-
Fleet Maintenance	0.02	0.02	0.02	-	-
Facilities Maintenance	1.69	1.69	1.69	-	-
Total Administration & Support Services	40.25	38.75	32.16	(1.50)	(6.59)
Total for All Programs	291.78	303.48	296.91	11.70	(6.57)

DRAFT

(a) Overfill position included in the 2025 model, removed from 2026
(b) Increased Waste Water Treatment Plant Trainee
(c) Reduction of Risk Management Specialist & Mitigation Coordinator (Grant Funded)
(d) Payroll Allocation Adjustments

Summary of Revenue & Expenditures by Program

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Transportation	700,760	1,030,815	860,884	1,691,350
Utilities	16,631,080	20,372,096	18,777,553	24,955,100
Public Safety & Justice	86,661	233,832	279,336	208,600
Parks	2,076,160	2,265,376	2,173,653	2,460,429
Open Space & Trails	2,608,373	2,789,185	2,599,748	2,669,346
Recreation	9,283,646	8,369,934	8,664,601	8,413,103
Cultural Services	408,069	530,241	555,850	551,700
Community Design	4,726,642	4,336,605	2,584,957	3,222,726
Economic Prosperity	50,000	50,000	60,000	60,000
Administration & Support Services	1,041,053	707,464	361,087	328,790
Total Revenue	37,612,444	40,685,548	36,917,669	44,561,144
Transportation	9,560,210	8,706,983	22,720,555	20,596,073
Utilities	17,040,672	16,144,388	35,346,419	19,691,468
Public Safety & Justice	7,722,584	7,889,026	9,567,851	9,280,504
Parks	2,628,676	3,890,089	7,277,799	5,612,291
Open Space & Trails	2,376,254	1,528,259	2,357,420	2,352,764
Recreation	9,595,727	8,441,830	10,989,995	10,842,143
Cultural Services	2,848,918	3,181,564	3,939,127	3,634,364
Community Design	3,585,883	3,292,321	4,086,976	6,156,481
Economic Prosperity	321,633	396,110	544,427	431,811
Administration & Support Services	7,726,315	8,907,768	21,945,092	10,285,569
Total Expenditures	63,406,872	62,378,338	118,775,661	88,883,468
Transportation	(8,859,450)	(7,676,168)	(21,859,671)	(18,904,723)
Utilities	(409,592)	4,227,708	(16,568,866)	5,263,632
Public Safety & Justice	(7,635,923)	(7,655,194)	(9,288,515)	(9,071,904)
Parks	(552,516)	(1,624,713)	(5,104,146)	(3,151,862)
Open Space & Trails	232,119	1,260,926	242,328	316,582
Recreation	(312,081)	(71,896)	(2,325,394)	(2,429,040)
Cultural Services	(2,440,849)	(2,651,323)	(3,383,277)	(3,082,664)
Community Design	1,140,759	1,044,284	(1,502,019)	(2,933,755)
Economic Prosperity	(271,633)	(346,110)	(484,427)	(371,811)
Administration & Support Services	(6,685,262)	(8,200,304)	(21,584,005)	(9,956,779)
Total Surplus (Deficiency)	(25,794,428)	(21,692,790)	(81,857,992)	(44,322,324)

DRAFT

Community Indicators

Purpose

The purpose of the Community Indicators is to evaluate the City's progress towards achieving the goals in the Strategic Plan and our Critical Success Factors. Critical Success Factors are items that the City must achieve for the organization's vision of being 'dedicated to providing a vibrant, healthy community with the best small town atmosphere'.

These measures focus on community outcomes and align with each Critical Success Factor. Some of these measures may not be in the City's direct control but will show progress and changes experienced by those who live, work and visit Louisville.

INDICATOR	UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Financial Stewardship & Asset Management					
Debt Service Ratio (Debt Service Expenditures/Total Operating Expenditures)	%	4%	5%	5%	5%
Capital Spending as a Percentage of Total Expenditures	%	15%	20%	15%	15%
Bond Rating	Rating	AA+	AA+	AA+	AA+
Reliable Core Services					
Crime Rate for Part 1 and Part 2 Crimes	#	5,651.2	5,769*	6,500	6,500
Response Time for Emergency Response Services from Initial Call	Minutes	2.23	3*	3	3
Average Commute Time to Work for Residents	Minutes	24.5	25.0*	25.5	26.0
Community Survey Question: Rating of Overall Appearance of Louisville[1]	% Excellent or Good	N/A	83%	N/A	N/A
Community Survey Question: Rating of Ease of Walking in Louisville[1]	% Excellent or Good	N/A	84%	N/A	N/A
Miles of Bicycle Paths and Lanes	#	72.6	72.6*	72.6	74
Percentage of Residential Waste Diverted[2]	%	41	43	40	40
Percentage of Commercial Waste Diverted[3]	%	9	17	10	10
Community Greenhouse Gas (GHG) Emissions	MTCO2e	215,500	210,000*	200,000	190,000
Community Water Use per Capita	Gallons	119	154*	147	147
Vibrant Economic Climate					
City's Unemployment Rate	Rate	2.5	3.5*	3.5	3.5
Percentage of City Population Living Below the National Poverty Line	%	5.4 (actual)	5*	5	5
Regional Area Median Income (AMI) Compared to National AMI	#	$124,459 (154% of national)	$141,000*	$147,000	$152,895
Jobs/Housing Ratio[5]	#/#	2.3/1	N/A*	N/A	N/A
In-City Sales Tax per Capita	$	539	600*	618	637

DRAFT

INDICATOR	UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Vacancy Rate by Sector	Retail Rate	16.3	5.6*	6	5.9
	Industrial Rate	6.79	6.96*	6.00	5.10
Quality Programs & Amenities					
Number of Cultural Institutions and Sporting Facilities	#	53	53*	53	53
Square Feet of Public Indoor Recreation Space per Capita	Sq. ft./Capita	104,000	104,000*	104,000	104,000
Engaged Community					
Voter Participation in Last Municipal Election as a Percentage of Registered Voters	%	54.7	60*	50	50
Percentage of Households with Internet Connections	%	93.6	94*	94	95
Healthy Workforce					
Percentage of Employees with a Performance Review of Exceeds or Higher	%	91.6	93*	94	94
Full-Time Employee Attrition Rate	%	27.4	12*	10	9
Percentage of Diverse Candidates in Total Applicant Pool for City Jobs[6]	%	26	30*	32	35
Marshall Fire Recovery					
Percentage of Homes Rebuilt	%	23	80	90	100

Notes:

[1]The Community Survey occurs every four years. The most recent was 2024.

[2]Residential waste diversion rate includes all residential waste (single-family city contract, single-family non-city contract, multi-family) reported through Boulder County's ReTRAC database, including solid waste, recycling, compost and reuse.

[3]Commercial waste diversion rate includes all solid waste, recycling, compost and reuse materials reported through Boulder County's ReTRAC database.

[4]Based on 2022 Xcel Community Energy Report, which is pending. Measure in MTCO2e includes both residential and commercial/industrial electricity and natural gas usage. Significant decrease is likely due to homes lost in the Marshall Fire.

[5]Metric impacted by Marshall Fire and recent legislation, such as HB24-1313

[6]New metric related to Equity, Diversity & Inclusion. Staff will start compiling data in 2023 for reporting starting in 2024.

DRAFT

Transportation Key Indicators

Goals

A safe, well-maintained, effective and efficient multi-modal transportation system at a reasonable cost.

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Efficiency						
Average Cost per Snow Event		$	11,245.05	12,000*	12,000	12,000
Cost per Square Foot Maintained of Streetscape		$	$3.42	$3.47*	$3.50	$3.55
Effectiveness						
Overall Pavement Condition Index (PCI)	Target = 75	#	72.6	73*	69.1	72.6
Percentage of Street Miles with PCI Score Lower than 35	Target = Less than 1	%	1	1*	1	1
Percentage of Arterials & Collectors with Marked Bicycle Lanes	Target = N/A	%	60	60*	60	61
Percentage of Streets with Sidewalks	Target = 100	%	95	95*	95	96
Community Survey Question: Rating of Street Maintenance in Louisville[1]	Target = 100	% Excellent or Good	N/A	67*	N/A	N/A
Average Response Time per Snow Event	Target = 1 HR	Hours	1HR	1HR*	1HR	1HR
Community Survey Question: Rating of Snow Removal/Street Sanding[1]	Target = 100	% Excellent or Good	N/A	56	N/A	N/A
Community Survey Question: Rating of Maintenance of Medians & Street Landscaping[1]	Target = 100	% Excellent or Good	N/A	78	N/A	N/A

Notes:

[1]The community survey occurs every four years. The most recent was 2024.

DRAFT

Program 31: Transportation

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	664,780	754,686	663,350	737,350	(91,336)	-12%	74,000	11%
Fees	31,569	271,484	194,500	950,000	(76,984)	-28%	755,500	388%
Miscellaneous Revenue	4,411	4,645	3,034	4,000	(1,611)	-35%	966	32%
Total Program Revenue	700,760	1,030,815	860,884	1,691,350	(169,931)	-16%	830,466	96%
Personnel	1,350,134	1,468,863	1,624,424	1,670,804	155,561	11%	46,380	3%
Supplies	303,498	302,193	351,975	357,475	49,782	16%	5,500	2%
Services	1,591,342	1,308,351	1,220,620	1,245,120	(87,731)	-7%	24,500	2%
Capital Outlay	6,315,236	5,627,576	19,523,536	17,322,674	13,895,960	247%	(2,200,862)	-11%
Total Program Expenditures	9,560,210	8,706,983	22,720,555	20,596,073	14,013,572	161%	(2,124,482)	-9%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(8,859,450)	(7,676,168)	(21,859,671)	(18,904,723)	(14,183,503)		2,954,948	
Expenditures per resident	475.63	433.18	1,130.38	1,024.68	697.19	161%	(105.70)	-9%
Full-time equivalents (FTE's)	15.14	15.51	14.80	14.17	(0.71)	-5%	(0.64)	-4%

DRAFT

Sub-Program 311: Planning & Engineering

Description	2023 Actual	2024 Budget	2025 Budget	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	396,832	389,413	423,105	453,936	33,692	9%	30,831	7%
Supplies	10,837	7,390	8,550	8,550	1,160	16%	-	0%
Services	27,229	30,517	30,870	30,540	353	1%	(330)	-1%
Capital Outlay	2,950	2,845	2,025,000	-	2,022,155	71078%	(2,025,000)	-100%
Total Sub-Program Expenditures	437,848	430,165	2,487,525	493,026	2,057,360	478%	(1,994,499)	-80%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(437,848)	(430,165)	(2,487,525)	(493,026)	(2,057,360)		1,994,499	
Expenditures per resident	21.78	21.40	123.76	24.53	102.36	478%	(99.23)	-80%
Full-time equivalents (FTE's)	3.48	3.53	2.75	2.75	(0.78)	-22%	(0.00)	0%

DRAFT

Sub-Program 312: Infrastructure Maintenance

Description	2023 Actual	2024 Budget	2025 Budget	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	664,780	754,686	663,350	737,350	(91,336)	-12%	74,000	11%
Fees	31,569	271,484	194,500	950,000	(76,984)	-28%	755,500	388%
Miscellaneous Revenue	4,411	4,645	3,034	4,000	(1,611)	-35%	966	32%
Total Sub-Program Revenue	700,760	1,030,815	860,884	1,691,350	(169,931)	-16%	830,466	96%
Personnel	400,540	482,557	538,366	515,063	55,809	12%	(23,303)	-4%
Supplies	153,920	196,241	188,475	188,475	(7,766)	-4%	-	0%
Services	1,306,391	1,003,826	903,080	921,080	(100,746)	-10%	18,000	2%
Capital Outlay	5,302,630	5,443,513	15,091,943	14,922,674	9,648,430	177%	(169,269)	-1%
Total Sub-Program Expenditures	7,163,481	7,126,137	16,721,864	16,547,292	9,595,727	135%	(174,572)	-1%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(6,462,721)	(6,095,322)	(15,860,980)	(14,855,942)	(9,765,658)		1,005,038	
Expenditures per resident	356.39	354.53	831.93	823.25	477.40	135%	(8.69)	-1%
Full-time equivalents (FTE's)	5.08	5.18	5.46	4.90	0.28	5%	(0.56)	-10%

DRAFT

Sub-Program 313: Streetscapes

Description	2023 Actual	2024 Budget	2025 Budget	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	312,190	320,434	352,518	391,341	32,084	10%	38,823	11%
Supplies	20,437	13,356	31,350	36,850	17,994	135%	5,500	18%
Services	168,488	222,399	224,950	230,450	2,551	1%	5,500	2%
Capital Outlay	986,402	147,333	2,063,359	2,400,000	1,916,026	1300%	336,641	16%
Total Sub-Program Expenditures	1,487,517	703,522	2,672,177	3,058,641	1,968,655	280%	386,464	14%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(1,487,517)	(703,522)	(2,672,177)	(3,058,641)	(1,968,655)		(386,464)	
Expenditures per resident	74.01	35.00	132.94	152.17	97.94	280%	19.23	14%
Full-time equivalents (FTE's)	3.56	3.83	3.52	3.65	(0.31)	-8%	0.13	4%

DRAFT

Sub-Program 314: Snow & Ice Removal

Description	2023 Actual	2024 Budget	2025 Budget	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	240,573	276,459	310,435	310,464	33,976	12%	29	0%
Supplies	115,169	84,584	123,250	123,250	38,666	46%	-	0%
Services	56,945	40,153	38,760	39,760	(1,393)	-3%	1,000	3%
Capital Outlay	23,254	33,885	343,235	-	309,350	913%	(343,235)	-100%
Total Sub-Program Expenditures	435,941	435,081	815,680	473,474	380,599	87%	(342,206)	-42%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(435,941)	(435,081)	(815,680)	(473,474)	(380,599)		342,206	
Expenditures per resident	21.69	21.65	40.58	23.56	18.94	87%	(17.03)	-42%
Full-time equivalents (FTE's)	3.02	2.97	3.07	2.87	0.10	3%	(0.20)	-7%

DRAFT

Sub-Program 320: Public Works Administration

Description	2023 Actual	2024 Budget	2025 Budget	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	3,136	622	350	350	(272)	-44%	-	0%
Supplies	25,669	4,817	7,300	7,300	2,483	52%	-	0%
Services	6,620	6,640	15,660	15,990	9,020	136%	330	2%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	35,425	12,079	23,310	23,640	11,231	93%	330	1%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(35,425)	(12,079)	(23,310)	(23,640)	(11,231)		(330)	
Expenditures per resident	1.76	0.60	1.16	1.18	0.56	93%	0.02	1%
Full-time equivalents (FTE's)	-	-	-	-	-		-	

DRAFT

Utilities Key Indicators

Goals

Ensure safe, reliable, great tasting water; properly treated wastewater; effective stormwater control; successfully managed solid waste; and competitive prices for all services.

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Workload						
Annual Potable Water Produced		Gallons	1,054,830,000	1,200,000,000*	1,200,000,000	1,200,000,000
Efficiency						
Cost per Ton Sent to Landfill		$	426	443.04*	460.7616	479.192064
Treatment Cost per 1,000 Gallons of Wastewater		$	1.54	1.76*	1.77	1.82
Energy Cost per Million Gallons per Day Billed		$	138.18	124.03*	133.33	138
Effectiveness						
Community Survey Question: Rating of Solid Waste/Trash Services[1]	Target = 100	% Excellent or Good	N/A	80	N/A	N/A
Community Survey Question: Rating of Fees for Water/Sewer/Trash[1]	Target = 100	% Excellent or Good	N/A	63	N/A	N/A
Community Survey Question: Rating of Storm Drainage (Flooding Management)[1]	Target = 100	% Excellent or Good	N/A	87	N/A	N/A
Community Survey Question: Rating of Wastewater (Sewage System)[1]	Target = 100	% Excellent or Good	N/A	93	N/A	N/A
Community Survey Question: Rating of Quality of Louisville Water[1]	Target = 100	% Excellent or Good	N/A	88	N/A	N/A

Notes:
[1]The community survey occurs every four years. The most recent was 2024.

DRAFT

Program 32: Utilities [1]

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
License and Permits	600	375	2,000	2,000	1,625	433%	-	0%
Grant Revenue	1,462,318	363,198	250,000	-	(113,198)	-31%	(250,000)	-100%
Fees	13,925,231	18,220,156	17,509,270	23,819,680	(710,886)	-4%	6,310,410	36%
Miscellaneous Revenue	1,228,779	1,660,268	1,016,283	1,133,420	(643,985)	-39%	117,137	12%
Other Revenue	14,152	128,099	-	-	(128,099)	-100%	-	
Total Program Revenue	16,631,080	20,372,096	18,777,553	24,955,100	(1,594,543)	-8%	6,177,547	33%
Personnel	3,756,535	4,257,784	5,082,412	5,097,551	824,628	19%	15,139	0%
Supplies	678,745	768,490	909,091	948,991	140,601	18%	39,900	4%
Services	5,213,127	5,363,001	6,063,370	6,598,976	700,369	13%	535,606	9%
Capital Outlay	7,392,265	5,755,113	23,291,546	7,045,950	17,536,433	305%	(16,245,596)	-70%
Total Program Expenditures	17,040,672	16,144,388	35,346,419	19,691,468	19,202,031	119%	(15,654,951)	-44%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(409,592)	4,227,708	(16,568,866)	5,263,632	(20,796,574)		21,832,498	
Expenditures per resident	847.79	803.20	1,758.53	979.68	955.32	119%	(778.85)	-44%
Full-time equivalents (FTE's)	34.56	40.20	45.48	43.97	5.28	13%	(1.51)	-3%

Notes:
[1] Program revenue and expenses exclude transfers between utility funds.

DRAFT

Sub-Program 321: Water [1]

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	1,212,318	137,539	-	-	(137,539)		-	
Fees	6,728,086	10,106,865	8,328,630	12,625,830	(1,778,235)	-18%	4,297,200	52%
Miscellaneous Revenue	528,230	1,239,873	721,875	881,210	(517,998)	-42%	159,335	22%
Total Sub-Program Revenue	8,468,634	11,484,277	9,050,505	13,507,040	(2,433,772)	-21%	4,456,535	49%
Personnel	1,976,992	2,246,808	2,646,975	2,552,179	400,167	18%	(94,796)	-4%
Supplies	502,108	554,979	625,131	665,131	70,152	13%	40,000	6%
Services	2,362,198	2,161,849	2,455,050	2,499,592	293,201	14%	44,542	2%
Capital Outlay	5,290,753	2,333,627	16,708,321	5,058,950	14,374,694	616%	(11,649,371)	-70%
Total Sub-Program Expenditures	10,132,051	7,297,263	22,435,477	10,775,852	15,138,214	207%	(11,659,625)	-52%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(1,663,417)	4,187,014	(13,384,972)	2,731,188	(17,571,986)		16,116,160	
Expenditures per resident	504.08	363.05	1,116.19	536.11	753.14	207%	(580.08)	-52%
Full-time equivalents (FTE's)	18.53	21.21	24.25	22.20	3.04	14%	(2.05)	-8%

Note:
[1] Revenue and expenditures are presented on the City's budgetary basis and exclude transfers between utility funds.

DRAFT

Sub-Program 322: Wastewater [1]

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Fees	4,313,498	4,954,559	5,488,000	6,959,400	533,441	11%	1,471,400	27%
Miscellaneous Revenue	435,073	411,312	226,795	184,210	(184,517)	-45%	(42,585)	-19%
Total Sub-Program Revenue	4,748,571	5,365,871	5,714,795	7,143,610	348,924	7%	1,428,815	25%
Personnel	1,367,568	1,548,544	1,905,433	1,986,499	356,889	23%	81,066	4%
Supplies	169,380	203,102	247,055	246,955	43,953	22%	(100)	0%
Services	1,143,195	1,171,011	1,262,310	1,482,774	91,299	8%	220,464	17%
Capital Outlay	1,739,632	1,639,268	5,290,526	812,000	3,651,258	223%	(4,478,526)	-85%
Total Sub-Program Expenditures	4,419,775	4,561,925	8,705,324	4,528,228	4,143,399	91%	(4,177,096)	-48%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	328,796	803,946	(2,990,529)	2,615,382	(3,794,475)		5,605,911	
Expenditures per resident	219.89	226.96	433.10	225.28	206.14	91%	(207.82)	-48%
Full-time equivalents (FTE's)	12.63	15.09	16.92	17.66	1.83	12%	0.74	4%

Note:
[1] Revenue and expenditures are presented on the City's budgetary basis and exclude transfers between utility funds.

DRAFT

Sub-Program 323: Storm Water [1]

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
License and Permits	600	375	2,000	2,000	1,625	433%	-	0%
Grant Revenue	250,000	225,659	250,000	-	24,341	11%	(250,000)	-100%
Fees	1,143,014	1,308,895	1,397,900	1,669,900	89,005	7%	272,000	19%
Miscellaneous Revenue	300,756	113,222	58,722	60,000	(54,500)	-48%	1,278	2%
Total Sub-Program Revenue	1,694,370	1,648,151	1,708,622	1,731,900	60,471	4%	23,278	1%
Personnel	329,932	370,793	431,581	480,157	60,788	16%	48,576	11%
Supplies	7,248	10,399	30,905	30,905	20,506	197%	-	0%
Services	91,201	247,442	122,610	122,610	(124,832)	-50%	-	0%
Capital Outlay	361,880	1,782,217	1,292,698	1,175,000	(489,519)	-27%	(117,698)	-9%
Total Sub-Program Expenditures	790,261	2,410,851	1,877,794	1,808,672	(533,057)	-22%	(69,122)	-4%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	904,109	(762,700)	(169,172)	(76,772)	593,528		92,400	
Expenditures per resident	39.32	119.94	93.42	89.98	(26.52)	-22%	(3.44)	-4%
Full-time equivalents (FTE's)	2.77	3.17	3.58	3.64	0.41	13%	0.06	2%

Note:
[1] Revenue and expenditures are presented on the City's budgetary basis.

DRAFT

Sub-Program 324: Solid Waste, Recycling & Composting

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Fees	1,708,405	1,859,429	2,294,740	2,564,550	435,311	23%	269,810	12%
Miscellaneous Revenue	11,103	14,368	8,891	8,000	(5,477)	-38%	(891)	-10%
Total Sub-Program Revenue	1,719,508	1,873,797	2,303,631	2,572,550	429,834	23%	268,919	12%
Personnel	82,043	91,639	98,423	78,716	6,784	7%	(19,707)	-20%
Supplies	9	9	6,000	6,000	5,991	66567%	-	0%
Services	1,616,533	1,782,699	2,223,400	2,494,000	440,701	25%	270,600	12%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	1,698,585	1,874,347	2,327,823	2,578,716	453,476	24%	250,893	11%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	20,923	(550)	(24,192)	(6,166)	(23,642)		18,026	
Expenditures per resident	84.51	93.25	115.81	128.29	22.56	24%	12.48	11%
Full-time equivalents (FTE's)	0.63	0.73	0.73	0.48	-	0%	(0.25)	-35%

DRAFT

Public Safety Key Indicators

Goals

Police and other City staff working with the community to help ensure safety, satisfy residents' expectations that individuals observe the City's Municipal Code and State Law, and a justice system that is fair, effective, and efficient.

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Workload						
Number of Calls for Service and Officer-Initiated Activity		#	14,523	15,000*	16,000	17,000
Efficiency						
Percentage of Code Enforcement Cases Brought into Voluntary		%	99.2	90*	90	90
Average Time for Resolution of Cases at Municipal Court		Days	40	35*	35	35
Effectiveness						
Community Survey Question: Rating of Municipal Code Enforcement Issues[1]	Target = 100	% Excellent or Good	N/A	65*	N/A	N/A
Customer Rating Survey Question: Satisfaction with Municipal Court[1]	Target = 5	Rating 1 to 5	4	4*	4	4
Community Survey Question: Rating of Communication Regularly with Community Members[1]	Target = 100	% Excellent or Good	N/A	60*	N/A	N/A
Community Survey Question: Rating of Overall Performance of Louisville Police Department[1]	Target = 100	% Excellent or Good	N/A	87	N/A	N/A
Community Survey Question: Rating of Visibility of Patrol Cars[1]	Target = 100	% Excellent or Good	N/A	77	N/A	N/A

Notes:
[1]The community survey occurs every four years. The most recent was 2024.

DRAFT

Program 21: Public Safety & Justice

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	-	94,712	179,336	108,600	84,624	89%	(70,736)	-39%
Fines	12	-	-	-	-		-	
Fees	86,649	139,120	100,000	100,000	(39,120)	-28%	-	0%
Total Program Revenue	86,661	233,832	279,336	208,600	45,504	19%	(70,736)	-25%
Personnel	5,353,421	5,974,563	6,641,007	7,054,207	666,444	11%	413,200	6%
Supplies	301,238	363,726	393,300	404,405	29,574	8%	11,105	3%
Services	1,484,296	1,211,694	1,347,804	1,307,672	136,110	11%	(40,132)	-3%
Capital Outlay	583,629	339,043	1,185,740	514,220	846,697	250%	(671,520)	-57%
Total Program Expenditures	7,722,584	7,889,026	9,567,851	9,280,504	1,678,825	21%	(287,347)	-3%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(7,635,923)	(7,655,194)	(9,288,515)	(9,071,904)	(1,633,321)		216,611	
Expenditures per resident	384.21	392.49	476.01	461.72	83.52	21%	(14.30)	-3%
Full-time equivalents (FTE's)	50.03	46.93	47.20	47.21	0.27	1%	0.01	0%

DRAFT

Sub-Program 211: Patrol & Investigations

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	-	94,712	179,336	108,600	84,624	89%	(70,736)	-39%
Fees	12	-	-	-	-		-	
Total Sub-Program Revenue	12	94,712	179,336	108,600	84,624	89%	(70,736)	-39%
Personnel	4,998,831	5,598,490	6,236,558	6,636,707	638,068	11%	400,149	6%
Supplies	278,155	336,435	359,620	371,035	23,185	7%	11,415	3%
Services	1,242,323	983,779	1,064,364	1,041,952	80,585	8%	(22,412)	-2%
Capital Outlay	560,967	339,043	891,657	514,220	552,614	163%	(377,437)	-42%
Total Sub-Program Expenditures	7,080,276	7,257,747	8,552,199	8,563,914	1,294,452	18%	11,715	0%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(7,080,264)	(7,163,035)	(8,372,863)	(8,455,314)	(1,209,828)		(82,451)	
Expenditures per resident	352.25	361.08	425.48	426.07	64.40	18%	0.58	0%
Full-time equivalents (FTE's)	45.73	43.38	43.65	43.66	0.27	1%	0.01	0%

DRAFT

Sub-Program 212: Code Enforcement

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	134,308	157,339	162,277	181,603	4,938	3%	19,326	12%
Supplies	7,087	7,621	12,440	12,130	4,819	63%	(310)	-2%
Services	24,439	20,734	19,880	17,420	(854)	-4%	(2,460)	-12%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	165,834	185,694	194,597	211,153	8,903	5%	16,556	9%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(165,834)	(185,694)	(194,597)	(211,153)	(8,903)		(16,556)	
Expenditures per resident	8.25	9.24	9.68	10.51	0.44	5%	0.82	9%
Full-time equivalents (FTE's)	2.42	1.59	1.59	1.59	-	0%	-	0%

DRAFT

Sub-Program 216: Municipal Court

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Fines	86,649	139,120	100,000	100,000	(39,120)	-28%	-	0%
Total Sub-Program Revenue	86,649	139,120	100,000	100,000	(39,120)	-28%	-	0%
Personnel	173,836	170,704	192,039	183,098	21,335	12%	(8,941)	-5%
Supplies	11,092	16,714	16,370	16,370	(344)	-2%	-	0%
Services	96,011	63,519	83,610	73,750	20,091	32%	(9,860)	-12%
Capital Outlay	22,662	-	-	-	-		-	
Total Sub-Program Expenditures	303,601	250,937	292,019	273,218	41,082	16%	(18,801)	-6%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(216,952)	(111,817)	(192,019)	(173,218)	(80,202)		18,801	
Expenditures per resident	15.10	12.48	14.53	13.59	2.04	16%	(0.94)	-6%
Full-time equivalents (FTE's)	1.52	1.52	1.52	1.52	-	0%	-	0%

DRAFT

Sub-Program 219: Police Department Building Maintenance

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	46,446	48,031	50,133	52,799	2,102	4%	2,666	5%
Supplies	4,904	2,957	4,870	4,870	1,913	65%	-	0%
Services	121,523	143,662	179,950	174,550	36,288	25%	(5,400)	-3%
Capital Outlay	-	-	294,083	-	294,083		(294,083)	
Total Sub-Program Expenditures	172,873	194,650	529,036	232,219	334,386	172%	(296,817)	-56%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(172,873)	(194,650)	(529,036)	(232,219)	(334,386)		296,817	
Expenditures per resident	8.60	9.68	26.32	11.55	16.64	172%	(14.77)	-56%
Full-time equivalents (FTE's)	0.36	0.44	0.44	0.44	-	0%	-	0%

DRAFT

Parks Key Indicators

Goals

Provide well-maintained parks and landscaped areas that are easy to walk to and enjoyable to visits or see; sports facilities that are fully used and properly maintained.

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Workload						
Acres of Park per Capita		#	17	17*	17	17
Efficiency						
Average Cost to Inter at Cemetery		$	1,330	1,330*	1,330	1,330
Parks Expenditures per Acre		$	4,314	4,446*	4,682	4,939
Effectiveness						
Community Survey Question: Rating of Maintenance of Louisville Cemetery[1]	Target = 100	% Excellent or Good	N/A	91	N/A	N/A
Community Survey Question: Rating of Overall Performance of Parks Division[1]	Target = 100	% Excellent or Good	N/A	89	N/A	N/A

Notes:
[1]The community survey occurs every four years. The most recent was 2024.

DRAFT

Program 51: Parks

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	1,479,181	1,590,492	1,520,719	1,545,974	(69,773)	-4%	25,255	2%
License and Permits	104,194	111,265	76,720	103,720	(34,545)	-31%	27,000	35%
Grant Revenue	293,243	238,274	256,120	267,090	17,846	7%	10,970	4%
Fees	98,554	126,534	185,520	491,530	58,986	47%	306,010	165%
Miscellaneous Revenue	100,988	198,811	134,574	52,115	(64,237)	-32%	(82,459)	-61%
Total Program Revenue [1]	2,076,160	2,265,376	2,173,653	2,460,429	(91,723)	-4%	286,776	13%
Personnel	1,164,783	1,383,168	1,642,160	1,739,901	258,992	19%	97,741	6%
Supplies	121,376	116,291	161,480	162,730	45,189	39%	1,250	1%
Services	813,646	986,197	990,500	999,860	4,303	0%	9,360	1%
Capital Outlay	528,871	1,404,433	4,483,659	2,709,800	3,079,226	219%	(1,773,859)	-40%
Total Program Expenditures	2,628,676	3,890,089	7,277,799	5,612,291	3,387,710	87%	(1,665,508)	-23%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(552,516)	(1,624,713)	(5,104,146)	(3,151,862)	(3,479,433)		1,952,284	
Expenditures per resident	130.78	193.54	362.08	279.22	168.54	87%	(82.86)	-23%
Full-time equivalents (FTE's)	23.85	23.51	22.46	22.35	(1.06)	-5%	(0.11)	0%

Notes:

[1] Program Revenue excludes recurring interfund transfers from the General Fund.

DRAFT

Sub-Program 510: Parks & Recreation Admin

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	13,449	45,587	58,776	65,426	13,189	29%	6,650	11%
Total Sub-Program Revenue [1]	1,850	3,364	3,180	3,180	(184)	-5%	-	0%
Services	24,956	23,727	28,260	25,000	4,533	19%	(3,260)	-12%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	40,255	72,678	90,216	93,606	17,538	24%	3,390	4%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(40,255)	(72,678)	(90,216)	(93,606)	(17,538)		(3,390)	
Expenditures per resident	2.00	3.62	4.49	4.66	0.87	24%	0.17	4%
Full-time equivalents (FTE's)	0.06	0.06	2.36	2.36	2.30	3833%	-	0%

DRAFT

Sub-Program 511: Parks

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	1,479,181	1,590,492	1,520,719	1,545,974	(69,773)	-4%	25,255	2%
License and Permits	4,222	3,980	3,720	3,000	(260)	-7%	(720)	-19%
Grant Revenue	293,243	238,274	256,120	267,090	17,846	7%	10,970	4%
Fees	60,681	41,140	145,200	450,000	104,060	253%	304,800	210%
Miscellaneous Revenue	57,692	148,439	101,620	39,465	89,393	60%	(62,155)	-61%
Total Sub-Program Revenue	1,895,019	2,022,325	2,027,379	2,305,529	141,266	7%	278,150	14%
Personnel	1,075,504	1,244,744	1,469,362	1,598,156	224,618	18%	128,794	9%
Supplies	114,157	107,406	147,900	148,400	40,494	38%	500	0%
Services	685,960	842,192	821,990	830,650	(20,202)	-2%	8,660	1%
Capital Outlay	518,871	1,394,433	4,467,659	2,691,300	3,073,226	220%	(1,776,359)	-40%
Total Sub-Program Expenditures	2,394,492	3,588,775	6,906,911	5,268,506	3,318,136	92%	(1,638,405)	-24%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(499,473)	(1,566,450)	(4,879,532)	(2,962,977)	(3,176,870)		1,916,555	
Expenditures per resident	119.13	178.55	343.63	262.11	165.08	92%	(81.51)	-24%
Full-time equivalents (FTE's)	22.54	22.72	18.85	19.31	(3.87)	-17%	0.46	2%

DRAFT

Sub-Program 515: Cemetery

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
License and Permits	99,972	107,286	73,000	100,720	(34,286)	-32%	27,720	38%
Fees	37,873	85,394	40,320	41,530	(45,074)	-53%	1,210	3%
Miscellaneous Revenue	43,296	50,372	32,954	12,650	(17,418)	-35%	(20,304)	-62%
Total Sub-Program Revenue [1]	181,141	243,052	146,274	154,900	(96,778)	-40%	8,626	6%
Personnel	75,830	92,837	114,022	76,319	21,185	23%	(37,703)	-33%
Supplies	5,370	5,522	10,400	11,150	4,878	88%	750	7%
Services	102,729	120,278	140,250	144,210	19,972	17%	3,960	3%
Capital Outlay	10,000	10,000	16,000	18,500	6,000	60%	2,500	16%
Total Sub-Program Expenditures	193,929	228,637	280,672	250,179	52,035	23%	(30,493)	-11%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(12,788)	14,415	(134,398)	(95,279)	(148,813)		39,119	
Expenditures per resident	9.65	11.37	13.96	12.45	2.59	23%	(1.52)	-11%
Full-time equivalents (FTE's)	1.25	0.73	1.25	0.68	0.52	71%	(0.57)	-46%

Note:
[1] This Sub-Program table excludes recurring interfund transfers from the General Fund.

DRAFT

Open Space & Trails Key Indicators

Goals: *Acquire candidate properties as they become available and preserve, enhance and maintain native plants, wildlife, wildlife and plant habitat, cultural resources, agriculture and scenic vistas and appropriate passive recreation.*

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Effectiveness						
Number of Acres/Parcels Acquired[1]	Target = N/A	#	1,919.81	1,919.81*	1,919.81	1,919.81
Average Number of Participants per Education Program	Target = 20	#	32	25*	25	25
Volunteer Hours Donated	Target = 950	#	1,081.75	1,000*	1,000	1,000
Percentage of Acres with Active Weed Management[2]	Target = 25	%	23.5	25*	25	25
Community Survey Question: Rating of Maintenance of Open Space[3]	Target = 70	% Excellent or Good	N/A	89	N/A	N/A
Community Survey Question: Rating of Maintenance of Trail System[3]	Target = 95	% Excellent or Good	N/A	92	N/A	N/A

Notes:

[1]Target is less geared towards specific acreage and more around evaluation and prospective property prioritization, available parcels, funding, etc.

[2]Acres of active weed management includes chemical and mechanical (including grazing) control efforts. Additional management efforts including monitoring, cultural, and biological control have not been captured in this acreage.

[3]The community survey occurs every four years. The most recent was 2024.

DRAFT

Program 52: Open Space & Trails

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	1,479,182	2,628,199	2,534,518	2,576,950	(93,681)	-4%	42,432	2%
Grant Revenue	1,129,191	59,926	3,290	3,290	(56,636)	-95%	-	0%
Miscellaneous Revenue	-	101,060	61,940	89,106	(39,120)	-39%	27,166	44%
Total Program Revenue	2,608,373	2,789,185	2,599,748	2,669,346	(189,437)	-7%	69,598	3%
Personnel	775,296	979,873	1,176,840	1,208,107	196,967	20%	31,267	3%
Supplies	22,672	53,238	30,706	29,746	(22,532)	-42%	(960)	-3%
Services	212,163	346,909	426,181	399,911	79,272	23%	(26,270)	-6%
Capital Outlay	1,366,123	148,239	723,693	715,000	575,454	388%	(8,693)	-1%
Total Program Expenditures	2,376,254	1,528,259	2,357,420	2,352,764	829,161	54%	(4,656)	0%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	232,119	1,260,926	242,328	316,582	(1,018,598)		74,254	
Expenditures per resident	118.22	76.03	117.28	117.05	41.25	54%	(0.23)	0%
Full-time equivalents (FTE's)	10.13	10.20	13.67	13.60	3.47	34%	(0.06)	0%

DRAFT

Sub-Program 521: Acquisition

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	5,479	6,447	47,636	47,887	41,189	639%	251	1%
Total Sub-Program Revenue	5,479	6,447	47,636	47,887	41,189	639%	251	1%
Personnel	5,449	6,414	7,626	7,877	1,212	19%	251	3%
Supplies	-	3	-	-	(3)		-	
Services	30	30	40,010	40,010	39,980	133267%	-	0%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	5,479	6,447	47,636	47,887	41,189	639%	251	1%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	-	-	-	-	-		-	
Expenditures per resident	0.27	0.32	2.37	2.38	2.05	639%	0.01	1%
Full-time equivalents (FTE's)	0.03	0.04	0.05	0.05	0.01	25%	-	0%

DRAFT

Sub-Program 522: Maintenance & Management

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	635,201	893,019	1,449,524	1,282,217	556,505	62%	(167,307)	-12%
Total Sub-Program Revenue	635,201	893,019	1,449,524	1,282,217	556,505	62%	(167,307)	-12%
Personnel	378,537	509,627	627,431	645,292	117,804	23%	17,861	3%
Supplies	18,164	48,171	24,350	23,390	(23,821)	-49%	(960)	-4%
Services	200,424	321,221	347,743	318,535	26,522	8%	(29,208)	-8%
Capital Outlay	38,076	14,000	450,000	295,000	436,000	3114%	(155,000)	-34%
Total Sub-Program Expenditures	635,201	893,019	1,449,524	1,282,217	556,505	62%	(167,307)	-12%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	-	-	-	-	-		-	
Expenditures per resident	31.60	44.43	72.12	63.79	27.69	62%	(8.32)	-12%
Full-time equivalents (FTE's)	5.49	5.65	8.21	8.14	2.56	45%	(0.07)	-1%

DRAFT

Sub-Program 523: Education & Outreach

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	262,746	302,861	330,727	341,469	27,866	9%	10,742	3%
Total Sub-Program Revenue	262,746	302,861	330,727	341,469	27,866	9%	10,742	3%
Personnel	255,499	287,689	318,667	329,409	30,978	11%	10,742	3%
Supplies	3,422	3,708	5,020	5,020	1,312	35%	-	0%
Services	3,825	11,464	7,040	7,040	(4,424)	-39%	-	0%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	262,746	302,861	330,727	341,469	27,866	9%	10,742	3%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	-	-	-	-	-		-	
Expenditures per resident	13.07	15.07	16.45	16.99	1.39	9%	0.53	3%
Full-time equivalents (FTE's)	3.00	3.15	3.40	3.40	0.25	8%	-	0%

DRAFT

Sub-Program 524 & 528 (consolidated): New Trails & Trail Maintenance

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	-	325,932	529,533	681,191	203,601	62%	151,658	29%
Grant Revenue	1,129,191	-	-	-	-		-	
Total Sub-Program Revenue	1,129,191	325,932	529,533	681,191	203,601	62%	151,658	29%
Personnel	135,811	176,143	223,116	225,529	46,973	27%	2,413	1%
Supplies	1,087	1,356	1,336	1,336	(20)	-1%	-	0%
Services	7,884	14,194	31,388	34,326	17,194	121%	2,938	9%
Capital Outlay	1,328,046	134,239	273,693	420,000	139,454	104%	146,307	53%
Total Sub-Program Expenditures	1,472,828	325,932	529,533	681,191	203,601	62%	151,658	29%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(343,637)	-	-	-	-		-	
Expenditures per resident	73.28	16.22	26.34	33.89	10.13	62%	7.55	29%
Full-time equivalents (FTE's)	1.61	1.36	2.01	2.01	0.65	48%	-	0%

DRAFT

Recreation Key Indicators

Goals

Promote the physical, mental and social well-being of residents and visitors through a broad range of high-quality, reasonably priced recreation and leisure activities for people of all ages, interests and ability levels.

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Efficiency						
Average Cost Recovery Rate for Youth Classes & Programs		$/Class or Program	107%-Sports 70%-Youth Activities	98%-Sports 69%-Youth Activities	98%-Youth Sports 69% Youth Activities	90% Youth Sports 70% Youth Activities
Cost Recovery Rate per Round of Golf		$/Round	63.54	74*	75	76
Effectiveness						
Community Survey Question: Rating of Current Recreation Programs for Youth[1]	Target = 95	% Excellent or Good	N/A	91	N/A	N/A
Rounds of Golf per Playable Day	Target = 150	#	154	134	140	144
Community Survey Question: Overall Satisfaction of the Course[2]	Target = 5	Rating 1 to 5	N/A	82	N/A	N/A

Notes:

[1]The community survey occurs every four years. The most recent was 2024.

[2]Formerly a different survey measure, now tied to the community survey.

DRAFT

Program 53: Recreation

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	1,183,375	1,268,354	1,217,291	1,236,743	(51,063)	-4%	19,452	2%
Grant Revenue	218,092	108,111	593,000	85,000	484,889	449%	(508,000)	-86%
Fees	6,201,431	6,582,874	6,597,213	6,794,050	14,339	0%	196,837	3%
Miscellaneous Revenue	1,595,748	408,095	257,097	297,310	(150,998)	-37%	40,213	16%
Other Revenue	85,000	2,500	-	-	(2,500)		-	
Total Program Revenue [1], [2]	9,283,646	8,369,934	8,664,601	8,413,103	294,667	4%	(251,498)	-3%
Personnel	4,606,441	5,075,383	5,376,171	5,940,418	300,788	6%	564,247	10%
Supplies	520,740	561,706	608,652	614,037	46,946	8%	5,385	1%
Services	2,289,357	2,251,329	2,894,912	2,945,336	643,583	29%	50,424	2%
Capital Outlay	2,179,189	553,412	2,110,260	1,342,352	1,556,848	281%	(767,908)	-36%
Total Program Expenditures [1]	9,595,727	8,441,830	10,989,995	10,842,143	2,548,165	30%	(147,852)	-1%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(312,081)	(71,896)	(2,325,394)	(2,429,040)	(2,253,498)		(103,646)	
Expenditures per resident	477.40	419.99	546.77	539.41	126.77	30%	(7.36)	-1%
Full-time equivalents (FTE's)	69.53	68.67	75.50	77.13	6.84	10%	1.62	2%

Notes:

[1] Program table excludes revenue and expenditures from the Recreation Center Construction and Recreation Center Debt Service Funds.

[2] Program revenue excludes recurring interfund transfers from the General Fund.

DRAFT

Sub-Program 530: Recreation Center Management

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	455,363	497,951	667,034	922,340	169,083	34%	255,306	38%
Supplies	15,693	21,631	26,900	32,650	5,269	24%	5,750	21%
Services	229,665	276,524	329,950	354,440	53,426	19%	24,490	7%
Capital Outlay	1,540	1,540	3,440	3,440	1,900	123%	-	0%
Total Sub-Program Expenditures	702,261	797,646	1,027,324	1,312,870	229,678	29%	285,546	28%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(702,261)	(797,646)	(1,027,324)	(1,312,870)	(229,678)		(285,546)	
Expenditures per resident	34.94	39.68	51.11	65.32	11.43	29%	14.21	28%
Full-time equivalents (FTE's)	9.80	10.24	12.56	13.28	2.32	23%	0.72	6%

DRAFT

Sub-Program 531: Youth Activities

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Fees	655,101	655,341	665,800	632,300	89,393	14%	(33,500)	-5%
Total Sub-Program Revenue	655,101	655,341	665,800	632,300	89,393	14%	(33,500)	-5%
Personnel	490,871	512,844	582,995	633,914	70,151	14%	50,919	9%
Supplies	55,884	51,207	37,560	43,295	(13,647)	-27%	5,735	15%
Services	120,236	114,117	110,218	139,323	(3,899)	-3%	29,105	26%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	666,991	678,168	730,773	816,532	52,605	8%	85,759	12%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(11,890)	(22,827)	(64,973)	(184,232)	36,788		(119,259)	
Expenditures per resident	33.18	33.74	36.36	40.62	2.62	8%	4.27	12%
Full-time equivalents (FTE's)	7.53	7.53	7.82	8.46	0.29	4%	0.64	8%

DRAFT

Sub-Program 532: Adult Activities

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Fees	329,204	389,029	271,550	258,350	(117,479)	-30%	(13,200)	-5%
Total Sub-Program Revenue	329,204	389,029	271,550	258,350	(117,479)	-30%	(13,200)	-5%
Personnel	435,634	494,817	520,779	549,237	25,962	5%	28,458	5%
Supplies	11,712	9,425	10,200	10,200	775	8%	-	0%
Services	93,233	92,595	282,980	292,980	190,385	206%	10,000	4%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	540,579	596,837	813,959	852,417	217,122	36%	38,458	5%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(211,375)	(207,808)	(542,409)	(594,067)	(334,601)		(51,658)	
Expenditures per resident	26.89	29.69	40.50	42.41	10.80	36%	1.91	5%
Full-time equivalents (FTE's)	5.61	5.61	6.67	6.85	1.06	19%	0.18	3%

DRAFT

Sub-Program 533: Senior Activities & Services

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	6,176	5,434	5,000	5,000	(434)	-8%	-	0%
Fees	239,227	200,257	166,540	171,500	(33,717)	-17%	4,960	3%
Total Sub-Program Revenue	245,403	205,691	171,540	176,500	(34,151)	-17%	4,960	3%
Personnel	336,534	351,414	374,466	392,774	23,052	7%	18,308	5%
Supplies	33,085	25,418	45,305	45,305	19,887	78%	-	0%
Services	292,067	261,737	348,290	357,690	86,553	33%	9,400	3%
Capital Outlay	-	-	-	75,000	-		75,000	
Total Sub-Program Expenditures	661,686	638,569	768,061	870,769	129,492	20%	102,708	13%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(416,283)	(432,878)	(596,521)	(694,269)	(163,643)		(97,748)	
Expenditures per resident	32.92	31.77	38.21	43.32	6.44	20%	5.11	13%
Full-time equivalents (FTE's)	3.29	3.26	3.56	3.57	0.30	9%	0.01	0%

DRAFT

Sub-Program 535: Aquatics

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Fees	292,001	277,553	240,500	257,200	(37,053)	-13%	16,700	7%
Total Sub-Program Revenue	292,001	277,553	240,500	257,200	(37,053)	-13%	16,700	7%
Personnel	1,047,800	1,111,887	1,152,777	1,179,923	40,890	4%	27,146	2%
Supplies	83,591	88,343	117,660	117,660	29,317	33%	-	0%
Services	92,247	97,793	115,550	117,250	17,757	18%	1,700	1%
Capital Outlay	76,790	5,236	313,500	333,500	308,264	5887%	20,000	6%
Total Sub-Program Expenditures	1,300,428	1,303,259	1,699,487	1,748,333	396,228	30%	48,846	3%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(1,008,427)	(1,025,706)	(1,458,987)	(1,491,133)	(433,281)		(32,146)	
Expenditures per resident	64.70	64.84	84.55	86.98	19.71	30%	2.43	3%
Full-time equivalents (FTE's)	16.97	17.72	18.98	18.91	1.26	7%	(0.07)	0%

DRAFT

Sub-Program 537: Golf Course [1]

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	5,359	-	-	-	-		-	
Fees	2,896,256	2,961,074	3,034,570	3,207,700	73,496	2%	173,130	6%
Miscellaneous Revenue	226,307	89,954	54,751	43,310	(35,203)	-39%	(11,441)	-21%
Total Sub-Program Revenue	3,127,922	3,051,028	3,089,321	3,251,010	38,293	1%	161,689	5%
Personnel	1,616,380	1,875,866	1,838,347	1,999,644	(37,519)	-2%	161,297	9%
Supplies	268,022	315,781	306,747	299,397	(9,034)	-3%	(7,350)	-2%
Services	549,975	538,210	635,024	639,653	96,814	18%	4,629	1%
Capital Outlay	841,233	367,788	1,210,360	567,616	842,572	229%	(642,744)	-53%
Total Sub-Program Expenditures	3,275,610	3,097,645	3,990,478	3,506,310	892,833	29%	(484,168)	-12%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(147,688)	(46,617)	(901,157)	(255,300)	(854,540)		645,857	
Expenditures per resident	162.97	154.11	198.53	174.44	44.42	29%	(24.09)	-12%
Full-time equivalents (FTE's)	23.36	21.96	23.71	23.78	1.75	8%	0.07	0%

Note:
[1] Revenue and expenditures are presented on the City's budgetary basis.

DRAFT

Sub-Program 538: Athletic Field Maintenance

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	78,326	81,179	84,089	97,957	2,910	4%	13,868	16%
Supplies	13,403	9,760	20,100	21,350	10,340	106%	1,250	6%
Services	79,598	99,941	113,000	119,000	13,059	13%	6,000	5%
Capital Outlay	10,000	9,883	136,000	57,500	126,117	1276%	(78,500)	-58%
Total Sub-Program Expenditures	181,327	200,763	353,189	295,807	152,426	76%	(57,382)	-16%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(181,327)	(200,763)	(353,189)	(295,807)	(152,426)		57,382	
Expenditures per resident	9.02	9.99	17.57	14.72	7.58	76%	(2.85)	-16%
Full-time equivalents (FTE's)	0.86	0.97	0.82	0.90	(0.15)	-15%	0.07	9%

DRAFT

Sub-Program 539: Recreation Center Building Maintenance

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	145,533	149,425	155,684	164,629	6,259	4%	8,945	6%
Supplies	39,350	40,142	44,180	44,180	4,038	10%	-	0%
Services	830,795	768,871	956,460	921,560	187,589	24%	(34,900)	-4%
Capital Outlay	1,251,166	170,504	450,400	308,736	279,896	164%	(141,664)	-31%
Total Sub-Program Expenditures	2,266,844	1,128,942	1,606,724	1,439,105	477,782	42%	(167,619)	-10%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(2,266,844)	(1,128,942)	(1,606,724)	(1,439,105)	(477,782)		167,619	
Expenditures per resident	112.78	56.17	79.94	71.60	23.77	42%	(8.34)	-10%
Full-time equivalents (FTE's)	2.11	1.38	1.38	1.38	-	0%	-	0%

DRAFT

Cultural Services Key Indicators

Goals: Provide services, facilities and activities that inform, involve, engage and inspire the community and preserve the community heritage. Continue City sponsored events.

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Workload						
Total Library Circulation (Number of Checkouts & Renewals)[1]		#	576,234	586,459	590,000	595,000
Library Visits per Capita[2]		#	5.9	6.8	6.5	6.5
Effectiveness						
Average Number of Attendees per Outdoor Event	Target = 6,000	#	2,000	1,500	5,000	5,000
Average Number of Attendees per Indoor Event[3]	Target = 70	#	60	50	60	60
Community Survey Question: Rating of Opportunities to Attend Cultural Activities[4]	Target = 80	% Excellent or Good	N/A	66	N/A	N/A
Average Number of Attendees per Library Program	Target = 35	#	33	35	35	35
Community Survey Question: Rating of Overall Performance of Louisville Public Library[4]	Target = 98	% Excellent or Good	N/A	97	N/A	N/A
Average Number of Attendees per Museum Program	Target = 70	#	83	83	85	85
Percentage Change in Number of Museum Visitors	Target = 10	%	30	15	10	10
Community Survey Question: Rating of Overall Performance of Louisville Historical Museum[4]	Target = 95	% Excellent or Good	N/A	97	N/A	N/A

DRAFT

Program 55: Cultural Services

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
License and Permits	4,868	7,350	7,500	7,500	150	2%	-	0%
Grant Revenue	368,004	490,747	431,500	501,500	(59,247)	-12%	70,000	16%
Fees	31,308	28,298	42,150	38,700	13,852	49%	(3,450)	-8%
Fines	3,908	3,804	4,000	4,000	196	5%	-	0%
Miscellaneous Revenue	(19)	42	70,700	-	70,658	168233%	(70,700)	-100%
Total Program Revenue	408,069	530,241	555,850	551,700	25,609	5%	(4,150)	-1%
Personnel	1,896,440	1,996,055	2,142,275	2,315,169	146,220	7%	172,894	8%
Supplies	188,729	166,455	165,020	156,920	(1,435)	-1%	(8,100)	-5%
Services	704,024	957,627	1,022,900	965,750	65,273	7%	(57,150)	-6%
Capital Outlay	59,725	61,427	608,932	196,525	547,505	891%	(412,407)	-68%
Total Program Expenditures	2,848,918	3,181,564	3,939,127	3,634,364	757,563	24%	(304,763)	-8%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(2,440,849)	(2,651,323)	(3,383,277)	(3,082,664)	(731,954)		300,613	
Expenditures per resident	141.74	158.29	195.98	180.81	37.69	24%	(15.16)	-8%
Full-time equivalents (FTE's)	21.27	26.21	26.91	27.21	0.70	3%	0.29	1%

DRAFT

Sub-Program 551: Library Services

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	362,004	448,162	391,500	461,500	(56,662)	-13%	70,000	18%
Fees	5,421	6,366	10,950	5,500	4,584	72%	(5,450)	-50%
Fines	3,908	3,804	4,000	4,000	196	5%	-	0%
Miscellaneous Revenue	(19)	42	-	-	(42)	-100%	-	
Total Sub-Program Revenue	371,314	458,374	406,450	471,000	(51,882)	-11%	64,550	16%
Personnel	1,638,619	1,715,611	1,839,891	1,994,592	124,280	7%	154,701	8%
Supplies	180,828	158,227	149,620	141,520	(8,607)	-5%	(8,100)	-5%
Services	380,726	415,560	535,240	471,970	119,680	29%	(63,270)	-12%
Capital Outlay	59,725	36,955	558,894	196,525	521,939	1412%	(362,369)	-65%
Total Sub-Program Expenditures	2,259,898	2,326,353	3,083,645	2,804,607	757,292	33%	(279,038)	-9%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(1,888,584)	(1,867,979)	(2,677,195)	(2,333,607)	(809,174)		343,588	
Expenditures per resident	112.43	115.74	153.42	139.53	37.68	33%	(13.88)	-9%
Full-time equivalents (FTE's)	17.89	22.04	22.74	22.99	0.70	3%	0.25	1%

DRAFT

Sub-Program 552: Museum Services

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Grant Revenue	6,000	42,586	40,000	40,000	(2,586)	-6%	-	0%
Fees	14,392	7,722	14,500	14,500	6,778	88%	-	0%
Total Sub-Program Revenue	20,392	50,308	54,500	54,500	4,192	8%	-	0%
Personnel	188,926	202,735	203,644	216,708	909	0%	13,064	6%
Supplies	5,464	6,691	9,320	9,320	2,629	39%	-	0%
Services	43,526	75,251	95,200	98,970	19,949	27%	3,770	4%
Capital Outlay	-	6,050	38,460	-	32,410	536%	(38,460)	-100%
Total Sub-Program Expenditures	237,916	290,727	346,624	324,998	55,897	19%	(21,626)	-6%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(217,524)	(240,419)	(292,124)	(270,498)	(51,705)		21,626	
Expenditures per resident	11.84	14.46	17.24	16.17	2.78	19%	(1.08)	-6%
Full-time equivalents (FTE's)	2.76	2.89	2.89	2.93	-	0%	0.04	2%

DRAFT

Sub-Program 553: Cultural Arts & Special Events

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
License & Permits	4,868	7,350	7,500	7,500	150	2%	-	0%
Fees	11,495	14,210	16,700	18,700	2,490	18%	2,000	12%
Miscellaneous Revenue	-	-	70,700	-	70,700	-	(70,700)	-100%
Total Sub-Program Revenue	16,363	21,560	94,900	26,200	73,340	340%	(68,700)	-72%
Personnel	68,895	77,709	98,740	103,869	21,031	27%	5,129	5%
Supplies	2,437	1,538	6,080	6,080	4,542	295%	-	0%
Services	279,771	466,816	392,460	394,810	(74,356)	-16%	2,350	1%
Capital Outlay	-	18,422	11,579	-	(6,843)	-37%	(11,579)	
Total Sub-Program Expenditures	351,103	564,485	508,859	504,759	(55,626)	-10%	(4,100)	-1%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(334,740)	(542,925)	(413,959)	(478,559)	128,966		(64,600)	
Expenditures per resident	17.47	28.08	25.32	25.11	(2.77)	-10%	(0.20)	-1%
Full-time equivalents (FTE's)	0.62	1.28	1.28	1.29	-	0%	0.01	1%

DRAFT

Community Design Key Indicators

Goals: Sustain an inclusive, family-friendly community with a small-town atmosphere, effective and efficient building services and effective preservation of the City's historic structures through a voluntary system.

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Efficiency						
Average Time from Submittal to City Council Public Hearing		Days	230	200*	200	200
Percentage of Staff Comments Provided within 10 Business Days for Building Permits		%	87	90*	90	90
Effectiveness						
Community Survey Question: Rating of Planning & Building Department[1]	Target = 90	% Excellent or Good	N/A	63	N/A	N/A
Community Survey Question: Rating of Preservation of Historic Character of Old Town[1]	Target = 90	% Excellent or Good	N/A	76	N/A	N/A
Percentage of Historic Assessments that Result in Landmarking	Target = 50	%	10	15*	20	20

Notes:
[1]The community survey occurs every four years. The most recent was 2024.

DRAFT

Program 16: Community Design

Description	2023 Actual	2024 Actual,	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	986,119	1,053,169	1,013,119	1,030,626	(40,050)	-4%	17,507	2%
License and Permits	3,544,367	2,993,260	1,328,588	1,917,100	(1,664,672)	-56%	588,512	44%
Fees	40,716	116,804	139,568	142,000	22,764	19%	2,432	2%
Miscellaneous Revenue	155,440	173,372	103,682	133,000	(69,690)	-40%	29,318	28%
Total Program Revenue	4,726,642	4,336,605	2,584,957	3,222,726	(1,751,648)	-40%	637,769	25%
Personnel	2,201,466	2,191,725	2,389,746	2,544,121	198,021	9%	154,375	6%
Supplies	25,413	18,492	46,050	1,746,050	27,558	149%	1,700,000	3692%
Services	1,317,053	1,049,173	1,575,330	1,554,860	526,157	50%	(20,470)	-1%
Capital Outlay	41,951	32,931	75,850	311,450	42,919	130%	235,600	311%
Total Program Expenditures	3,585,883	3,292,321	4,086,976	6,156,481	794,655	24%	2,069,505	51%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	1,140,759	1,044,284	(1,502,019)	(2,933,755)	(2,546,303)		(1,431,736)	
Expenditures per resident	178.40	163.80	203.33	306.29	39.54	24%	102.96	51%
Full-time equivalents (FTE's)	18.36	18.31	16.72	17.12	(1.59)	-9%	0.40	2%

DRAFT

Sub-Program 161: Community Design

Description	2023 Actual	2024 Actual,	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	600,101	623,850	738,184	784,569	114,334	18%	46,385	6%
Supplies	9,237	5,621	10,500	1,710,500	4,879	87%	1,700,000	16190%
Services	268,576	212,260	638,440	122,220	426,180	201%	(516,220)	-81%
Capital Outlay	41,951	32,931	-	55,000	(32,931)	-100%	55,000	
Total Sub-Program Expenditures	919,865	874,662	1,387,124	2,672,289	512,462	59%	1,285,165	93%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(919,865)	(874,662)	(1,387,124)	(2,672,289)	(512,462)		(1,285,165)	
Expenditures per resident	45.76	43.52	69.01	132.95	25.50	59%	63.94	93%
Full-time equivalents (FTE's)	4.79	4.79	4.93	4.91	0.14	3%	(0.02)	0%

DRAFT

Sub-Program 162/163: Development Review

Description	2023 Actual	2024 Actual,	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Licenses and Permits	3,544,367	2,993,260	1,328,588	1,917,100	(1,664,672)	-56%	588,512	44%
Fees	40,716	116,804	139,568	142,000	22,764	19%	2,432	2%
Total Sub-Program Revenue	3,585,083	3,110,064	1,468,156	2,059,100	(1,641,908)	-53%	590,944	40%
Personnel	1,452,879	1,410,955	1,474,419	1,583,187	63,464	4%	108,768	7%
Supplies	15,553	11,533	33,400	33,400	21,867	190%	-	0%
Services	260,008	531,067	373,740	319,490	(157,327)	-30%	(54,250)	-15%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	1,728,440	1,953,555	1,881,559	1,936,077	(71,996)	-4%	54,518	3%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	1,856,643	1,156,509	(413,403)	123,023	(1,569,912)		536,426	
Expenditures per resident	85.99	97.19	93.61	96.32	(3.58)	-4%	2.71	3%
Full-time equivalents (FTE's)	12.29	12.22	10.49	11.03	(1.73)	-14%	0.54	5%

DRAFT

Sub-Program 165: Historic Preservation

Description	2023 Actual	2024 Actual,	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Tax Revenue	986,119	1,053,169	1,013,119	1,030,626	(40,050)	-4%	17,507	2%
Miscellaneous Revenue	155,440	173,372	103,682	133,000	(69,690)	-40%	29,318	28%
Total Sub-Program Revenue	1,141,559	1,226,541	1,116,801	1,163,626	(109,740)	-9%	46,825	4%
Personnel	148,486	156,920	177,143	176,365	20,223	13%	(778)	0%
Supplies	624	1,337	2,150	2,150	813	61%	-	0%
Services	788,469	305,846	563,150	1,113,150	257,304	84%	550,000	98%
Capital Outlay	-	-	75,850	256,450	75,850	-	180,600	
Total Sub-Program Expenditures	937,579	464,103	818,293	1,548,115	354,190	76%	729,822	89%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	203,980	762,438	298,508	(384,489)	(463,930)		(682,997)	
Expenditures per resident	46.65	23.09	40.71	77.02	17.62	76%	36.31	89%
Full-time equivalents (FTE's)	1.28	1.30	1.31	1.19	0.01	1%	(0.12)	-9%

DRAFT

Economic Prosperity Key Indicators

Goals: *Promote a thriving business climate that provides job opportunities, facilitates investment, and produces reliable revenue to support City services.*

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Effectiveness						
Community Survey Question: Rating of Overall Economic Health of Louisville[1]	Target = 90	% Excellent or Good	N/A	65	N/A	N/A
Business Satisfaction Survey Rating[2]	Target = 60	% Business Friendly Community	N/A	N/A*	60	60

Notes:
[1]The community survey occurs every four years. The most recent was 2024.
[2]The business survey is being retooled and anticipated to be re-deployed in 2025.

DRAFT

Program 65: Economic Prosperity [1]

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Fees	50,000	50,000	60,000	60,000	10,000		-	
Total Program Revenue	50,000	50,000	60,000	60,000	10,000	20%	-	0%
Personnel	187,536	244,266	257,297	272,211	13,031	5%	14,914	6%
Supplies	1,543	1,594	1,500	2,500	(94)	-6%	1,000	67%
Services	132,554	150,250	285,630	157,100	135,380	90%	(128,530)	-45%
Capital Outlay	-	-	-	-	-		-	
Total Program Expenditures	321,633	396,110	544,427	431,811	148,317	37%	(112,616)	-21%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(271,633)	(346,110)	(484,427)	(371,811)	(138,317)		112,616	
Expenditures per resident	16.00	19.71	27.09	21.48	7.38	37%	(5.60)	-21%
Full-time equivalents (FTE's)	2.00	2.00	2.00	2.00	-	0%	-	0%

Note:
[1] Excludes all revenue and expenditures from the Urban Revitalization District Fund.

DRAFT

Sub-Program 651: Business Retention & Development [1]

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Fees	50,000	50,000	60,000	60,000	10,000	20%	-	
Total Sub-Program Revenue	50,000	50,000	60,000	60,000	10,000		-	
Personnel	187,536	244,266	257,297	272,211	13,031	5%	14,914	6%
Supplies	1,543	1,594	1,500	2,500	(94)	-6%	1,000	67%
Services	132,554	150,250	285,630	157,100	135,380	90%	(128,530)	-45%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	321,633	396,110	544,427	431,811	148,317	37%	(112,616)	-21%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(271,633)	(346,110)	(484,427)	(371,811)	(138,317)		112,616	
Expenditures per resident	16.00	19.71	27.09	21.48	7.38	37%	(5.60)	-21%
Full-time equivalents (FTE's)	2.00	2.00	2.00	2.00	-	0%	-	0%

Note:
[1] Excludes all revenue and expenditures from the Urban Revitalization District Fund.

DRAFT

Administration & Support Services Key Indicators

Goals: Ensure inclusive, responsive, transparent, friendly, fiscally responsible, effective and efficient governance, administration, and support.

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Workload						
Percentage Change in Number of Licenses and Permits Processed by City Clerk's Office		%	-12	-20*	-10	-10
Percentage Change in Number of IT Tickets Addressed		%	16.2	6.2*	6	6
Number of IT Devices Supported		#	N/A	3,000*	3,100	3,150
Efficiency						
Percentage of Public Record Requests Responded to within 24 Hours of Filing Request		%	40	40*	40	40
Overall Energy Used for City Facilities		kBTU	55,467,692	57,000,000*	59,000,000	61,000,000
Percentage Change in Water Usage for all City Facilities		%	-37	-5*	-5	-5
Percentage Change in Fuel Consumption by City Fleet Vehicles		%	-13	-5*	-5	-5
Percentage Change in Greenhouse Gas (GHG) Emissions for All City Facilities		%	-7	-5*	-5	-5
City-Wide Revenue Forecast Accuracy Percentage		%	100	98	100	100
City-Wide Expenditure Forecast Accuracy Percentage (excl. capital expenditures)		%	89	93	90	90
Effectiveness						
Employee Satisfaction Survey Question: Rating of City Leadership[1]	Target = 5	Rating 1 to 5	3.42	N/A*	3.5	N/A
Community Survey Question: Rating of Overall Performance of City Government[2]	Target = 100	% Excellent or Good	N/A	67%	N/A	N/A
Annual Training Hours per Full-Time Employee	Target = 20	#	n/a	10*	20	20
Worker's Compensation Rating	Target = >1	#	1	0.81*	>1	>1
Employee Satisfaction Survey Question: Rating of Overall Workplace Climate[1]	Target = 3.5	Rating 1 to 5	3.89	N/A*	3.9	N/A
Internal Survey Question: Overall Performance Rating of IT Services/Support[3]	Target = 10	Rating 1 to 10	N/A	9.5*	9.6	9.6
Internal Survey Question: Customer Service Satisfaction with Legal Services	Target = 5	Rating 1 to 5	4	4*	4	4

DRAFT

INDICATOR		UNIT	2023 ACTUAL	2024 ACTUAL/EST*	2025 PROJECTED	2026 PROJECTED
Number of Monthly Website Visitors	Target = 50,000	#	31,141	52,531*	62,000	70,000
Number of Social Media Followers	Target = 30,000	#	N/A	43,424*	50,000	55,000
Community Survey Question: Rating of City Response to Citizen Complaints or Concerns[2]	Target = 100	% Excellent or Good	N/A	56	N/A	N/A
Digital Content Accessibility Rating[4]	Target = TBD	TBD	TBD	TBD*	TBD	TBD
Percentage of Councilmembers and Executive Leadership Team Completed City Implicit Bias Course[5]	Target = 100	%	N/A	N/A	100%	100%
Percentage of Employees Who Have Completed City Implicit Bias Course[5]	Target = 100	%	N/A	N/A	70	80

Notes:

[1]The employee survey occurs every other year.

[2]The community survey occurs every four years. The most recent was 2024.

[3]Previously measured using different rating scales.

[4]New metric related to Digital Content Accessibility rating. Staff will start compiling data in 2023 and 2024, due to new legislation, for reporting in 2025.

[5]New metric related to Equity, Diversity & Inclusion. Staff will start compiling data in 2023 for reporting starting in 2024.

DRAFT

Program 10: Administration & Support Services

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Bag Tax	206,890	114,713	100,000	100,000	(14,713)	-13%	-	0%
License and Permits	118,170	60,775	45,772	46,930	(15,003)	-25%	1,158	3%
Grant Revenue	41,285	39,649	25,000	25,000	(14,649)	-37%	-	0%
Fees	594,465	408,926	157,140	155,860	(251,786)	-62%	(1,280)	-1%
Miscellaneous Revenue	59,363	43,600	33,175	1,000	(10,425)	-24%	(32,175)	-97%
Other Revenue	20,880	39,801	-	-	(39,801)	-100%	-	
Total Program Revenue	1,041,053	707,464	361,087	328,790	(346,377)	-49%	(32,297)	-9%
Personnel	4,129,993	4,596,380	4,976,487	4,590,971	380,107	8%	(385,516)	-8%
Supplies	387,050	312,500	651,362	677,517	338,862	108%	26,155	4%
Services	2,689,788	2,778,281	3,287,506	3,718,031	509,225	18%	430,525	13%
Capital Outlay	519,484	1,220,607	13,029,737	1,299,050	11,809,130	967%	(11,730,687)	-90%
Total Program Expenditures	7,726,315	8,907,768	21,945,092	10,285,569	13,037,324	146%	(11,659,523)	-53%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(6,685,262)	(8,200,304)	(21,584,005)	(9,956,779)	(13,383,701)		11,627,226	
Expenditures per resident	384.39	443.17	1,091.80	511.72	648.62	146%	(580.08)	-53%
Full-time equivalents (FTE's)	35.62	40.25	38.75	32.16	(1.50)	-4%	(6.59)	-17%

DRAFT

Sub-Program 101: Governance & Administration

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	1,102,461	1,218,962	1,300,030	1,181,900	81,068	7%	(118,130)	-9%
Supplies	21,485	6,096	44,800	22,905	38,704	635%	(21,895)	-49%
Services	1,036,002	1,125,967	1,495,224	1,813,568	369,257	33%	318,344	21%
Capital Outlay	-	-	20,000	20,000	20,000	-	-	0%
Total Sub-Program Expenditures	2,159,948	2,351,025	2,860,054	3,038,373	509,029	22%	178,319	6%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(2,159,948)	(2,351,025)	(2,860,054)	(3,038,373)	(509,029)		(178,319)	
Expenditures per resident	107.46	116.97	142.29	151.16	25.32	22%	8.87	6%
Full-time equivalents (FTE's)	7.07	9.46	9.23	6.28	(0.23)	-2%	(2.95)	-32%

DRAFT

Sub-Program 102: Public Information & Involvement

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	443,368	424,782	477,940	493,856	53,158	13%	15,916	3%
Supplies	4,641	3,916	20,350	17,425	16,434	420%	(2,925)	-14%
Services	142,540	180,904	284,552	175,163	103,648	57%	(109,389)	-38%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	590,549	609,602	782,842	686,444	173,240	28%	(96,398)	-12%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(590,549)	(609,602)	(782,842)	(686,444)	(173,240)		96,398	
Expenditures per resident	29.38	30.33	38.95	34.15	8.62	28%	(4.80)	-12%
Full-time equivalents (FTE's)	4.24	4.14	4.13	4.04	(0.01)	0%	(0.09)	-2%

DRAFT

Sub-Program 103: Sustainability

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Bag Tax	206,890	114,713	100,000	100,000	(14,713)	-13%	-	0%
Grant Revenue	41,285	36,649	25,000	25,000	(11,649)	-32%	-	0%
Total Sub-Program Revenue	248,175	151,362	125,000	125,000	(26,362)	-17%	-	0%
Personnel	185,275	225,220	278,414	263,436	53,194	24%	(14,978)	-5%
Supplies	1,375	7,488	13,400	13,400	5,912	79%	-	0%
Services	316,126	143,522	137,350	237,350	(6,172)	-4%	100,000	73%
Capital Outlay	90,168	418,040	1,001,963	-	583,923	140%	(1,001,963)	-100%
Total Sub-Program Expenditures	592,944	794,270	1,431,127	514,186	636,857	80%	(916,941)	-64%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(344,769)	(642,908)	(1,306,127)	(389,186)	(663,219)		916,941	
Expenditures per resident	29.50	39.52	71.20	25.58	31.68	80%	(45.62)	-64%
Full-time equivalents (FTE's)	1.16	2.16	2.16	2.16	-	0%	-	0%

DRAFT

Sub-Program 111: City Clerk & Public Records

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
License and Permits	32,895	32,750	35,772	36,930	3,022	9%	1,158	3%
Total Sub-Program Revenue	32,895	32,750	35,772	36,930	3,022	9%	1,158	3%
Personnel	297,208	268,107	328,742	288,574	60,635	23%	(40,168)	-12%
Supplies	10,263	17,806	5,600	5,600	(12,206)	-69%	-	0%
Services	120,697	73,236	120,540	200,750	47,304	65%	80,210	67%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	428,168	359,149	454,882	494,924	95,733	27%	40,042	9%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(395,273)	(326,399)	(419,110)	(457,994)	(92,711)		(38,884)	
Expenditures per resident	21.30	17.87	22.63	24.62	4.76	27%	1.99	9%
Full-time equivalents (FTE's)	3.25	3.25	3.25	3.30	-	0%	0.05	2%

DRAFT

Sub-Program 121: Legal Support

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	-	-	-	-	-		-	
Supplies	-	-	-	-	-		-	
Services	235,336	457,142	330,000	415,750	(127,142)	-28%	85,750	26%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	235,336	457,142	330,000	415,750	(127,142)	-28%	85,750	26%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(235,336)	(457,142)	(330,000)	(415,750)	127,142		(85,750)	
Expenditures per resident	11.71	22.74	16.42	20.68	(6.33)	-28%	4.27	26%
Full-time equivalents (FTE's)	-	-	-	-	-		-	

DRAFT

Sub-Program 131: Human Resources & Organizational Development

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	677,662	698,055	772,329	509,469	74,274	11%	(262,860)	-34%
Supplies	33,518	41,050	67,100	77,575	26,050	63%	10,475	16%
Services	250,926	181,896	212,450	229,050	30,554	17%	16,600	8%
Capital Outlay	-	-	-	-	-		-	
Total Sub-Program Expenditures	962,106	921,001	1,051,879	816,094	130,878	14%	(235,785)	-22%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(962,106)	(921,001)	(1,051,879)	(816,094)	(130,878)		235,785	
Expenditures per resident	47.87	45.82	52.33	40.60	6.51	14%	(11.73)	-22%
Full-time equivalents (FTE's)	6.12	6.12	6.11	3.52	(0.01)	0%	(2.59)	-42%

DRAFT

Sub-Program 151: Finance, Accounting, & Tax Administration

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
License and Permits	85,275	28,025	10,000	10,000	(18,025)	-64%	-	0%
Total Sub-Program Revenue	85,275	28,025	10,000	10,000	(18,025)	-64%	-	0%
Personnel	619,644	800,629	789,424	767,562	(11,205)	-1%	(21,862)	-3%
Supplies	7,729	12,169	5,000	6,500	(7,169)	-59%	1,500	30%
Services	219,766	159,519	133,950	126,030	(25,569)	-16%	(7,920)	-6%
Capital Outlay	-	-	-	500,000	-		500,000	
Total Sub-Program Expenditures	847,139	972,317	928,374	1,400,092	(43,943)	-5%	471,718	51%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(761,864)	(944,292)	(918,374)	(1,390,092)	25,918		(471,718)	
Expenditures per resident	42.15	48.37	46.19	69.66	(2.19)	-5%	23.47	51%
Full-time equivalents (FTE's)	6.21	7.25	6.77	5.76	(0.48)	-7%	(1.01)	-15%

DRAFT

Sub-Program 171: Information Technology

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	618,381	764,057	829,305	874,338	65,248	9%	45,033	5%
Supplies	272,065	183,817	447,427	486,427	263,610	143%	39,000	9%
Services	65,874	137,700	178,830	162,450	41,130	30%	(16,380)	-9%
Capital Outlay	310,822	435,851	843,541	744,050	407,690	94%	(99,491)	-12%
Total Sub-Program Expenditures	1,267,142	1,521,425	2,299,103	2,267,265	777,678	51%	(31,838)	-1%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(1,267,142)	(1,521,425)	(2,299,103)	(2,267,265)	(777,678)		31,838	
Expenditures per resident	63.04	75.69	114.38	112.80	38.69	51%	(1.58)	-1%
Full-time equivalents (FTE's)	6.16	6.16	5.39	5.39	(0.77)	-13%	-	0%

DRAFT

Sub-Program 181: Fleet Maintenance

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	1,866	1,922	2,117	2,197	195	10%	80	4%
Supplies	4,515	10,052	6,165	6,165	(3,887)	-39%	-	0%
Services	14,457	46,878	7,930	7,430	(38,948)	-83%	(500)	-6%
Capital Outlay	115	-	-	-	-		-	
Total Sub-Program Expenditures	20,953	58,852	16,212	15,792	(42,640)	-72%	(420)	-3%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(20,953)	(58,852)	(16,212)	(15,792)	42,640		420	
Expenditures per resident	1.04	2.93	0.81	0.79	(2.12)	-72%	(0.02)	-3%
Full-time equivalents (FTE's)	0.02	0.02	0.02	0.02	-	0%	-	0%

DRAFT

Sub-Program 191: Facility Maintenance

Description	2023 Actual	2024 Actual	2025 Revised	2026 Budget	2024/2025 Change	% Change	2025/2026 Change	% Change
Total Sub-Program Revenue	-	-	-	-	-		-	
Personnel	184,128	194,646	198,186	209,639	3,540	2%	11,453	6%
Supplies	31,459	30,106	41,520	41,520	11,414	38%	-	0%
Services	288,064	271,518	386,680	350,490	115,162	42%	(36,190)	-9%
Capital Outlay	118,379	366,715	11,164,233	35,000	10,797,518	2944%	(11,129,233)	-100%
Total Sub-Program Expenditures	622,030	862,985	11,790,619	636,649	10,927,634	1266%	(11,153,970)	-95%
Surplus (Deficiency) of Revenue Over (Under) Expenditures	(622,030)	(862,985)	(11,790,619)	(636,649)	(10,927,634)		11,153,970	
Expenditures per resident	30.95	42.93	586.60	31.67	543.66	1266%	(554.92)	-95%
Full-time equivalents (FTE's)	1.39	1.69	1.69	1.69	-	0%	-	0%

DRAFT

General Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Tax Revenue	19,924,264	20,747,649	22,496,976	22,818,802	22,868,854
License and Permits	3,266,311	3,671,627	3,065,365	1,385,580	1,975,250
Grant Revenue	1,653,758	2,218,521	1,808,773	1,815,066	2,645,460
Fees	183,357	207,557	282,828	261,698	259,350
Fines	57,456	90,557	142,924	104,000	104,000
Miscellaneous Revenue	785,735	894,201	959,036	569,895	714,360
Other Revenue	383,668	540,328	677	-	-
Total Revenue	26,254,549	28,370,440	28,756,579	26,955,041	28,567,274
Personnel	13,756,755	14,557,310	15,864,589	17,323,126	17,748,990
Supplies	1,064,018	1,205,754	1,163,651	1,598,237	3,333,897
Services	7,346,926	7,125,238	7,106,482	8,178,040	7,725,133
Debt Service	21,635	149,938	274,253	8,600	8,600
Capital Outlay	383,668	539,192	-	63,900	-
Total Expenditures	22,573,002	23,577,432	24,408,975	27,171,903	28,816,620
Transfer In	5,416,658	190,190	319,923	208,900	215,200
Transfer Out	(6,016,186)	(5,379,080)	(2,408,770)	(2,481,000)	(2,555,500)
Net Transfers	(599,528)	(5,188,890)	(2,088,847)	(2,272,100)	(2,340,300)
Net Change in Fund Balance	3,082,019	(395,882)	2,258,757	(2,488,962)	(2,589,646)

DRAFT

Conservation Trust-Lottery Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Grant Revenue	270,769	293,243	238,274	256,120	263,800
Miscellaneous Revenue	(2,655)	36,122	38,915	27,224	25,000
Total Revenue	268,114	329,365	277,189	283,344	288,800
Services	190	314	374	100	100
Capital Outlay	-	-	453,965	561,035	205,500
Total Expenditures	190	314	454,339	561,135	205,600
Transfer Out	-	-	-	-	(100,000)
Net Transfers	-	-	-	-	(100,000)
Net Change in Fund Balance	267,924	329,051	(177,150)	(277,791)	(16,800)

DRAFT

Cemetery Perpetual Care Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
License and Permits	67,394	49,986	53,643	36,500	50,000
Miscellaneous Revenue	(1,950)	35,412	38,465	24,831	30,000
Total Revenue	65,444	85,398	92,108	61,331	80,000
Services	347	300	300	300	300
Total Expenditures	347	300	300	300	300
Transfer Out	(8,640)	(12,480)	(16,780)	(17,300)	(38,465)
Net Transfers	(8,640)	(12,480)	(16,780)	(17,300)	(38,465)
Net Change in Fund Balance	56,457	72,618	75,028	43,731	41,235

DRAFT

Cemetery Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
License and Permits	67,394	49,986	53,643	36,500	50,000
Fees	39,200	37,873	85,394	40,320	41,500
Miscellaneous Revenue	(630)	7,883	11,907	8,123	9,000
Total Revenue	105,964	95,742	150,944	84,943	100,500
Personnel	97,777	75,832	92,837	114,022	76,319
Supplies	2,138	5,370	5,522	10,400	11,150
Services	104,817	102,429	119,978	139,950	143,910
Capital Outlay	4,210	10,000	10,000	16,000	18,500
Total Expenditures	208,942	193,631	228,337	280,372	249,879
Transfer In	174,677	182,330	139,000	143,200	168,165
Net Transfers	174,677	182,330	139,000	143,200	168,165
Net Change in Fund Balance	71,699	84,441	61,607	(52,229)	18,786

DRAFT

PEG Fee Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Fees	19,320	15,265	13,696	14,590	13,310
Miscellaneous Revenue	(183)	2,059	1,868	1,635	1,000
Total Revenue	19,137	17,324	15,564	16,225	14,310
Services	10	18	22	50	50
Total Expenditures	10	18	22	20,050	20,050
Transfer Out	-	-	(50,000)	-	-
Net Transfers	-	-	(50,000)	-	-
Net Change in Fund Balance	19,127	17,306	(34,458)	(3,825)	(5,740)

DRAFT

Parking Improvement Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Miscellaneous Revenue	(223)	4,411	4,645	3,034	4,000
Total Revenue	(223)	4,411	4,645	3,034	4,000
Services	47	44	45	50	150
Total Expenditures	47	44	45	50	150
Net Change in Fund Balance	(270)	4,367	4,600	2,984	3,850

DRAFT

Historic Preservation Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Tax Revenue	922,808	986,119	1,053,169	1,013,119	1,030,626
Miscellaneous Revenue	(4,993)	155,440	173,372	103,682	133,000
Total Revenue	917,815	1,141,559	1,226,541	1,116,801	1,163,626
Personnel	139,556	148,486	156,920	177,143	176,365
Supplies	1,296	624	1,337	2,150	2,150
Services	85,597	788,469	305,845	563,150	1,113,150
Capital Outlay	145,531	-	-	75,850	256,450
Total Expenditures	371,980	937,579	464,102	818,293	1,548,115
Transfer Out	(184,562)	(190,190)	(202,790)	(208,900)	(215,200)
Net Transfers	(184,562)	(190,190)	(202,790)	(208,900)	(215,200)
Net Change in Fund Balance	361,273	13,790	559,649	89,608	(599,689)

DRAFT

Recreation Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Tax Revenue	1,108,412	1,183,377	1,268,354	1,217,291	1,236,743
Grant Revenue	471,860	212,733	108,111	85,000	85,000
Fees	2,635,000	3,305,175	3,621,800	3,562,643	3,586,350
Miscellaneous Revenue	73,086	1,450,760	320,422	202,346	240,000
Total Revenue	4,288,358	6,152,045	5,318,687	5,067,280	5,148,093
Personnel	2,619,187	2,990,075	3,199,517	3,537,824	3,940,774
Supplies	182,890	252,718	245,925	301,905	314,640
Services	1,610,320	1,739,300	1,713,118	2,259,888	2,305,683
Capital Outlay	56,163	1,337,956	185,623	899,900	774,736
Total Expenditures	4,468,560	6,320,049	5,344,183	6,999,517	7,335,833
Transfer In	1,258,280	1,374,110	1,422,200	1,464,900	1,508,800
Transfer Out	-	-	-	(945,000)	-
Net Transfers	1,258,280	1,374,110	1,422,200	519,900	1,508,800
Net Change in Fund Balance	1,078,078	1,206,106	1,396,704	(1,412,337)	(678,940)

DRAFT

Open Space Fund Budget Summary*

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Tax Revenue	1,385,945	1,479,182	2,628,199	2,534,518	2,576,950
Grant Revenue	-	1,486,597	59,926	3,290	3,290
Miscellaneous Revenue	78,364	-	101,060	61,940	89,106
Total Revenue	1,464,309	2,965,779	2,789,185	2,599,748	2,669,346
Personnel	906,561	997,593	1,226,256	1,444,951	1,478,964
Supplies	73,031	23,835	54,434	31,111	30,151
Services	182,136	403,934	390,448	479,894	457,082
Capital Outlay	1,358,376	1,207,303	148,239	691,319	715,000
Total Expenditures	2,520,104	2,632,665	1,819,377	2,647,275	2,681,197
Transfer In	88,048	30,341	1,112,316	72,600	-
Net Transfers	88,048	30,341	1,112,316	72,600	-
Net Change in Fund Balance	(967,747)	363,455	2,082,124	25,073	(11,851)

** Open Space and Parks were reported as a consolidated fund in 2022 and 2023. Per a voter approved tax change effective January 1, 2024, they are reported as separate funds in 2024 and future years. Revenue shown for 2022 and 2023 is split among the two new funds, except for grants. Central Fund-Wide Charges and Snow and Ice Removal expenditures are also split among the two funds for the years 2022 and 2023.*

DRAFT

Parks Fund Budget Summary*

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Tax Revenue	1,385,944	1,479,181	1,590,492	1,520,719	1,545,974
Grant Revenue	-	293,243	-	3,290	3,290
Miscellaneous Revenue	78,364	244,198	109,475	74,396	73,105
Total Revenue	1,464,308	2,016,622	1,699,967	1,598,405	1,622,369
Personnel	1,170,269	1,297,808	1,491,131	1,737,476	1,891,346
Supplies	163,365	118,263	110,313	160,305	160,805
Services	1,066,059	888,224	888,745	885,203	894,241
Capital Outlay	1,235,152	156,061	120,670	778,617	-
Total Expenditures	3,634,845	2,460,356	2,610,859	3,561,601	2,946,392
Transfer In	988,618	1,013,821	2,518,039	1,048,400	1,179,900
Net Transfers	988,618	1,013,821	2,518,039	1,048,400	1,179,900
Net Change in Fund Balance	(1,181,919)	570,087	1,607,147	(914,796)	(144,123)

** Open Space and Parks were reported as a consolidated fund in 2022 and 2023. Per a voter approved tax change effective January 1, 2024, they are reported as separate funds in 2024 and future years. Revenue shown for 2022 and 2023 is split among the two new funds, except for grants. Central Fund-Wide Charges and Snow and Ice Removal expenditures are also split among the two funds for the years 2022 and 2023.*

DRAFT

Capital Projects Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Tax Revenue	8,173,827	8,341,607	9,898,319	8,684,890	9,125,857
Grant Revenue	502,329	182,002	1,577,418	19,959,558	6,200,000
Fees	32,000	32,000	-	25,000	25,000
Miscellaneous Revenue	79,936	1,114,507	2,002,070	621,023	717,210
Total Revenue	8,788,092	9,670,116	13,483,908	29,290,471	16,068,067
Personnel	370,088	321,600	384,910	466,377	454,938
Services	7,662	7,542	9,714	12,610	127,700
Capital Outlay	8,228,249	8,115,607	7,817,987	37,113,775	21,710,719
Total Expenditures	8,605,999	8,444,749	8,212,611	37,592,762	22,293,357
Transfer In	3,316,881	3,031,569	50,000	1,336,316	-
Transfer Out	(135,860)	(148,360)	(153,550)	(158,200)	(162,900)
Net Transfers	3,181,021	2,883,209	(103,550)	1,178,116	(162,900)
Net Change in Fund Balance	3,363,114	4,108,576	5,167,747	(7,124,175)	(6,388,190)

DRAFT

Impact Fee Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Fees	495,043	93,442	313,547	342,900	1,396,380
Miscellaneous Revenue	(2,566)	13,455	17,595	9,529	19,000
Total Revenue	492,477	106,897	331,142	352,429	1,415,380
Services	290	159	168	300	300
Total Expenditures	290	159	168	300	300
Transfer Out	(492,977)	(92,250)	-	(463,916)	-
Net Transfers	(492,977)	(92,250)	-	(463,916)	-
Net Change in Fund Balance	(790)	14,488	330,974	(111,787)	1,415,080

DRAFT

Recreation Center Debt Service Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Tax Revenue	2,077,373	1,954,006	1,312,765	1,368,000	1,386,000
Miscellaneous Revenue	26,209	69,890	63,733	45,484	29,000
Total Revenue	2,103,582	2,023,896	1,376,498	1,413,484	1,415,000
Services	985	1,088	1,013	800	800
Debt Service	1,742,200	1,741,600	1,739,800	1,741,800	1,742,400
Total Expenditures	1,743,185	1,742,688	1,740,813	1,742,600	1,743,200
Transfer In	-	180,000	3,853	-	-
Net Transfers	-	180,000	3,853	-	-
Net Change in Fund Balance	360,397	461,208	(360,462)	(329,116)	(328,200)

DRAFT

Water Utility Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Grant Revenue	285	1,212,318	137,539	-	-
Fees	8,036,368	6,753,882	10,097,273	8,328,630	12,625,830
Miscellaneous Revenue	1,601,529	488,281	1,121,366	721,875	881,210
Other Revenue	5,868,314	14,152	128,099	-	-
Total Revenue	15,506,496	8,468,633	11,484,277	9,050,505	13,507,040
Personnel	1,996,401	1,975,906	2,246,808	2,646,975	2,552,179
Supplies	1,393,491	502,108	554,979	625,131	665,131
Services	3,732,432	2,362,561	2,162,212	2,455,550	2,500,092
Debt Service	981,955	981,660	982,797	101,500	101,500
Capital Outlay	2,725,016	5,290,752	2,397,751	16,708,321	4,983,950
Total Expenditures	10,829,295	11,112,987	8,344,547	22,537,477	10,802,852
Transfer Out	-	-	-	(600,000)	-
Net Transfers	-	-	-	(600,000)	-
Net Change in Fund Balance	4,677,201	(2,644,354)	3,139,730	(14,086,972)	2,704,188

DRAFT

Waste Water Utility Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Fees	3,934,259	4,319,933	4,954,559	5,488,000	6,959,400
Miscellaneous Revenue	99,112	428,638	411,312	226,795	184,210
Total Revenue	4,033,371	4,748,571	5,365,871	5,714,795	7,143,610
Personnel	1,231,813	1,367,568	1,548,544	1,905,433	1,986,499
Supplies	169,244	169,380	203,102	247,055	246,955
Services	1,197,256	1,143,195	1,171,011	1,262,310	1,482,774
Debt Service	1,272,151	1,270,583	1,276,702	2,014,300	2,011,700
Capital Outlay	328,451	1,739,632	1,639,268	5,290,526	812,000
Total Expenditures	4,198,915	5,690,358	5,838,627	10,719,624	6,539,928
Transfer In	-	-	-	600,000	-
Net Transfers	-	-	-	600,000	-
Net Change in Fund Balance	(165,544)	(941,787)	(472,756)	(4,404,829)	603,682

DRAFT

Stormwater Utility Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
License and Permits	600	600	375	2,000	2,000
Grant Revenue	-	250,000	225,659	250,000	-
Fees	953,799	1,143,013	1,308,896	1,397,900	1,669,900
Miscellaneous Revenue	11,471	300,757	113,222	58,722	60,000
Total Revenue	965,870	1,694,370	1,648,152	1,708,622	1,731,900
Personnel	327,235	329,932	370,793	431,581	480,157
Supplies	10,349	7,248	10,399	30,905	30,905
Services	119,792	91,201	247,442	122,610	122,610
Debt Service	260,561	260,240	261,493	412,700	412,100
Capital Outlay	235,357	361,880	1,782,217	1,292,698	1,175,000
Total Expenditures	953,294	1,050,501	2,672,344	2,290,494	2,220,772
Net Change in Fund Balance	12,576	643,869	(1,024,192)	(581,872)	(488,872)

DRAFT

Solid Waste & Recycling Utility Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Fees	1,627,555	1,708,405	1,859,429	2,294,740	2,564,550
Miscellaneous Revenue	(1,367)	11,103	14,368	8,891	8,000
Total Revenue	1,626,188	1,719,508	1,873,797	2,303,631	2,572,550
Personnel	71,335	82,043	91,639	98,423	78,716
Supplies	9	9	9	6,000	6,000
Services	1,491,112	1,616,533	1,782,699	2,223,400	2,494,000
Capital Outlay	-	-	-	-	75,000
Total Expenditures	1,562,456	1,698,585	1,874,347	2,327,823	2,653,716
Transfer In	141,933	-	-	-	-
Net Transfers	141,933	-	-	-	-
Net Change in Fund Balance	205,665	20,923	(550)	(24,192)	(81,166)

DRAFT

Golf Course Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Grant Revenue	-	5,359	-	508,000	-
Fees	2,384,016	2,896,254	2,961,074	3,034,570	3,207,700
Miscellaneous Revenue	171,252	141,391	87,423	54,751	57,310
Other Revenue	50	85,000	2,500	-	-
Total Revenue	2,555,318	3,128,004	3,050,997	3,597,321	3,265,010
Personnel	1,444,814	1,615,905	1,875,866	1,838,347	1,999,644
Supplies	298,588	268,022	315,781	306,747	299,397
Services	775,298	549,975	538,210	635,024	639,653
Capital Outlay	-	46,072	62,340	1,074,915	567,616
Total Expenditures	2,518,700	2,479,974	2,792,197	3,855,033	3,506,310
Net Change in Fund Balance	36,618	648,030	258,800	(257,712)	(241,300)

DRAFT

Technology Management Fund Budget Summary

Description	2022 Actual	2023 Actual	2024 Actual	2025 Revised	2026 Budget
Fees	53,030	53,010	53,030	142,550	142,550
Miscellaneous Revenue	(508)	4,139	4,367	3,705	-
Total Revenue	52,522	57,149	57,397	146,255	142,550
Services	428	3,498	5,918	3,750	3,750
Capital Outlay	73,661	91,786	82,640	151,759	142,550
Total Expenditures	74,089	95,284	88,558	155,509	146,300
Net Change in Fund Balance	(21,567)	(38,135)	(31,161)	(9,254)	(3,750)

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Conservation Trust - Lottery Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
202511-630048	Playgrounds (40%)	197,279						197,279
202511-660015	Wayfinding & Signs	63,756						63,756
202511-630048	Park and Playground Improvements (%)		187,500	200,000	200,000	212,500	212,500	1,012,500
202511-660015	Park Signs		18,000	18,000		18,000		54,000
202511-660306	Trail Wayfinding Signage Implementation	300,000					150,000	450,000
	Total Conservation Trust - Lottery Fund	**561,035**	**205,500**	**218,000**	**200,000**	**230,500**	**362,500**	**1,777,535**

Cemetery Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
204799-640001	Park Division Equipment Replacements (%)	16,000	18,500	22,500	24,500	25,000	25,500	132,000
Future Year Req	Cemetery Long Range Plan			100,000				100,000
	Total Cemetery Fund	**16,000**	**18,500**	**122,500**	**24,500**	**25,000**	**25,500**	**232,000**

PEG Fee Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
205120-600008	PEG Capital	20,000	20,000	10,000	10,000	10,000	10,000	80,000
	Total PEG Fee Fund	**20,000**	**20,000**	**10,000**	**10,000**	**10,000**	**10,000**	**80,000**

Historic Preservation Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
207542-620113	Historical Museum Structural	60,850						60,850
207542-620098	Austin Niehoff Improvements	15,000	256,450					271,450
	Total Historic Preservation Fund	**75,850**	**256,450**	**-**	**-**	**-**	**-**	**332,300**

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Recreation Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
208533-640000	Mini Van Replacement		75,000					75,000
208535-620128	Aquatics Amenity Update	75,000						75,000
208535-620139	Miracote Deck	210,000						210,000
208535-620154	Sauna & Steam area expansion		278,000					278,000
208535-620156	Drinking Fountain & Shower		12,000					12,000
208535-640144	Pool Pump Replacements	15,000					15,000	30,000
208535-650124	LRC Pool Furniture	13,500	13,500					27,000
208535-650125	Memory Square Pool Furniture		30,000	15,000				45,000
Future Year Req	Indoor pool replaster				220,000			220,000
Future Year Req	Memory Return Line Replacement			600,000				600,000
208538-620153	Upgrade Restroom Faciities (%)		25,000	26,000	26,000	27,500	29,000	133,500
208538-630179	Infield Renovations- Miners, Heritage, Cleo (%)		14,000	15,000	15,000	17,500	17,500	79,000
208538-640001	Park Division Equipment Replacements (%)	16,000	18,500	22,500	24,500	25,000	25,500	132,000
208538-660307	Convert Inline Rink to Pickelball (%)	120,000						120,000
208539-600027	CPTED Assesment Recommendations (%)	13,800						13,800
208539-620155	LRC - Family Locker Room Floor Tile Replacement	176,000						176,000
208539-620178	Studio Upgrades for Hybrid Fitness Classes	80,000						80,000
208539-630181	Turf Gym Shade Structure		47,736					47,736
208539-640123	Fitness Equipment Replacement	125,000	152,000	152,000	152,000	160,000	160,000	901,000
208539-640168	Weight Plate Replacement		45,000					45,000
208539-640169	TechnoGym Selectorized Replacement		39,000					39,000
208539-640170	Stereo Replacement in 3 studios	27,000						27,000
208539-650122	Furniture Replacement		25,000					25,000
208539-650123	Mirrors & Barre in Mt. Elbert	28,600						28,600
Future Year Req	Weight Benches Replacement			20,000				20,000
Future Year Req	Hoist Selectorized Replacement			39,000				39,000
Future Year Req	Samson Rigs Replacement			60,000				60,000
Future Year Req	Cybex Selectorized Replacement				21,000			21,000
Future Year Req	Shade replacement in Weight & Cardio rooms				39,600			39,600
Future Year Req	Washer & Dryer Replacement				20,000			20,000
Future Year Req	TV Replacement in Facility			10,000				10,000
	Total Recreation Fund	**899,900**	**774,736**	**959,500**	**518,100**	**230,000**	**247,000**	**3,629,236**

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Open Space

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
210524-660081	Trail Improvements	126,475						126,475
210524-660300	Emergency & Maintenance Access	64,844						64,844
210522-630188	PROS Long Range Plan	150,000						150,000
210528-660316	Trail Master Plan	50,000						50,000
210522-600026	Open Space Planning Documents		150,000	255,000				405,000
210522-630178	Open Space Parking Lot Maintenance	70,000	65,000		40,000		40,000	215,000
210522-640000	Open Space New Vehicles	120,000						120,000
210522-660303	Open Space Signs	10,000		40,000				50,000
210522-660304	Open Space Amenity Maintenance	100,000	80,000	100,000		25,000	60,000	365,000
210524-640001	Open Space Equipment		120,000		50,000			170,000
210524-660305	Soft Surface Trail Maintenance & Design		300,000	150,000	150,000	150,000	150,000	900,000
Future Year Req	Warembourg Property and Fishing Pond Plan			44,000	325,000			369,000
	Total Open Space Fund	**691,319**	**715,000**	**589,000**	**565,000**	**175,000**	**250,000**	**2,985,319**

Parks

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
211511-630071	Parks and Open Space Signs	29,888						29,888
211511-630101	Irrig Replacements & Improvs	463,702						463,702
211511-630157	Park Site Furnishing Replacement	1,500						1,500
211511-640000	Additions to Fleet - Parks (60%)	13,228						13,228
211511-660292	Public Landscape Improvements	70,298						70,298
211511-630188	PROS Long Range Plan	150,000						150,000
211511-660316	Trail Master Plan	50,000						50,000
	Total Parks Fund	**778,617**	**-**	**-**	**-**	**-**	**-**	**778,617**

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Capital Projects Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
301103-620133	Building Energy Efficiency	369,463						369,463
301173-650058	City-Wide Telephone Syst Upgr	19,461						19,461
301191-640162	Generators for Critical Facili	4,900,556						4,900,556
301191-640165	City Svcs Security Cam Replace	44,727						44,727
301211-620116	Police Dept Basement Restroom	137,257						137,257
301211-650106	Bi-Directional 700-800 Amplifier	187,000						187,000
301211-650107	Communication Equip for EOC	29,500						29,500
301219-620120	Police Dept Electrical Work	20,083						20,083
301219-620148	Police/Court Roof Replacement	274,000						274,000
301312-660222	SH42 Corridor Improvements	6,860,617						6,860,617
301313-630143	Median Landscape Reno	795,207						795,207
301313-640000	Additions to Fleet - Parks (40%)	32,000						32,000
301313-660103	Median Improvements (& Playground Design)	13,378						13,378
301314-640001	Machinery & Equipment	70,735						70,735
301511-630048	Playgrounds (60%)	1,322,220						1,322,220
301511-630118	Tennis Court Renovation	59,218						59,218
301511-630171	Irrigation Pump Replacement	30,000						30,000
301511-630172	Park Sign Replacement	2,792						2,792
301511-630175	Sports Field Lighting	247,944						247,944
301511-630176	Tennis Court Rebuild	127,953						127,953
301524-660290	Open Space/Trail Improvements	32,374						32,374
301537-620132	Golf Maint. Facility Improvements	119,734						119,734
301537-630115	Cart Paths	15,711						15,711
301551-620036	Library Building Improvements	358,894						358,894
301552-620113	Historical Museum Structural	9,710						9,710
301553-620145	Fire Detection System	11,579						11,579
301313-640183	Block Party Trailer	30,000						30,000
301211-640000	Police Fleet Supplemental*		232,000					232,000
301161-640000	Shared Vehicle for Comm Dev*		55,000					55,000
301221-650128	Sales Tax Software*		500,000	200,000	206,000	212,180	218,545	1,336,725
301511-630157	Owl Park Fence*		18,700					18,700
301551-650065	Library Public Copier Replacement*		20,000					20,000
301103-640030	City Wide Decarbonization - EV Charging	632,500						632,500
301173-600030	Access Control	374,000	374,000	374,000				1,122,000
301173-640000	IT Vehicle	45,000						45,000
301173-640171	NetAlly Tester	17,000						17,000
301173-640172	Printer Replacement & Manage Print	50,000	50,000					100,000
301173-640173	IT UPS Modernization Project	38,600	45,000	45,000				128,600
301173-650103	Camera & DVR Replacement	27,500	32,500	55,500				115,500
301173-660258	Middle Mile Fiber Enhancements	120,221	100,000					220,221
Future Year Req	Firewall Replacement			10,000				10,000
Future Year Req	Extreme Switch Replacement				60,000	60,000		120,000
Future Year Req	Server Replacement			175,000			175,000	350,000
Future Year Req	Wifi Access Point Replacement					175,000		175,000

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Capital Projects Fund cont.

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
301191-600027	CPTED Assesment Recommendations (%)	66,700						66,700
301191-620161	Police/Court Roof Replacement	315,100						315,100
301191-620162	Police/Court Decarbonization	1,446,000				900,000		2,346,000
301191-620163	Recreation Center Decarbonization	2,484,000			86,250			2,570,250
301191-620164	City Services Decarbonization (incl Solar)	1,000					1,105,150	1,106,150
301191-620165	Library Decarbonization	1,841,150				475,000		2,316,150
301191-650126	City Services Office Workstations	65,000	35,000					100,000
Future Year Req	Austin Niehoff Decarbonization				46,000			46,000
Future Year Req	City Hall Interior Finishes and Decarbonization			25,000	2,070,000			2,095,000
Future Year Req	CS - Boom Lift Overhaul				17,250			17,250
Future Year Req	City Services - 13 Yr Check/ Equipment Upgrade				17,250			17,250
Future Year Req	City Services Interior Finishes Refresh				74,750			74,750
Future Year Req	Police/Court Elevator 20 yr Maintenance					28,750		28,750
Future Year Req	Police/Court - 13 Yr Fire Alarm Check/Upgrade						23,000	23,000
Future Year Req	Police Court Interior Refresh			172,500				172,500
Future Year Req	Arts Center Decarbonization			60,200				60,200
301211-600031	MDT Refresh & Equipment Initiative	125,000						125,000
301211-640000	Police Fleet Plan	274,000	282,220	290,687	299,407	308,389	317,641	1,772,344
301311-600034	Citywide Traffic Counts	25,000			25,000			50,000
301311-610011	Affordable Housing Development/Purchase	2,000,000						2,000,000
301312-600032	Annual Traffic Calming Program	50,000	50,000	50,000	50,000	50,000	50,000	300,000
301312-600033	ADA Transition Plan	240,000						240,000
301312-640000	Sign Truck Replacement (Unit 3212)	70,000						70,000
301312-660012	Annual Resurfacing Program (MF Impacts)	5,000,000	5,150,000	5,304,500	5,463,635	5,627,544	5,796,370	32,342,049
301312-660022	Concrete Replacement	115,000	120,750	132,300	144,703	150,491	158,016	821,260
301312-660074	Traffic Signal Maintenace	1,094,500		110,000	110,000	110,000		1,424,500
301312-660308	Via Appia Pedestrian Improvements	187,800	462,200					650,000
301312-660309	South Street Underpass	1,163,876	9,119,378					10,283,254
301312-660311	Pavement Marking Program	218,750		230,000		241,250		690,000
Future Year Req	School Zone Flashing Beacon Replacement				87,120			87,120
Future Year Req	3202 Snowplow / Dump Truck Replacement (%)						378,000	378,000
Future Year Req	3204 Snowplow / Dump Truck Replacement (%)						378,000	378,000
Future Year Req	3424 Snowplow / Dump Truck Replacement (%)				340,000			340,000
Future Year Req	Operations Tablet Replacement (%)					3,750		3,750
Future Year Req	Traffic Signal Timing			15,000		15,000		30,000
Future Year Req	3216 F550 Plow Truck Replacement				95,000			95,000
Future Year Req	3260 Sweeper Replacement (%)					345,675		345,675
Future Year Req	3403 Meter Truck Replacement (%)					15,000		15,000
Future Year Req	3409 Replacement (%)						33,000	33,000
301313-660310	Downtown Vision CIP	1,000,000	2,400,000	2,400,000	3,200,000			9,000,000
301314-640135	Loader Box Plow	60,000						60,000
301433-640175	Replacement Snowplow / Dump truck (Unit 3208) (%)	212,500						212,500
301450-640176	Fleet Tire Changer and Balancer		20,346					20,346
Future Year Req	Fleet Floor Cleaner Replacement				14,599			14,599

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Capital Projects Fund cont.

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
301511-600028	Technology Improvements	20,000	22,000	22,000	25,000	28,000	30,000	147,000
301511-600029	Park Division Equipment Tracking		28,000	30,000	32,500	35,000	38,000	163,500
301511-620153	Upgrade Restroom Faciities (%)		25,000	26,000	26,000	27,500	29,000	133,500
301511-620157	Sports Complex Restrooms		200,000					200,000
301511-620158	Indoor Batting Cage	16,000						16,000
301511-630036	Concrete Replacement at Sports Complex	150,000						150,000
301511-630048	Park and Playground Improvements (%)		187,500	200,000	200,000	212,500	212,500	1,012,500
301511-630049	Playground Replacement Parts / Features	15,000	18,000	20,000	22,000	25,000	27,000	127,000
301511-630101	Irrigation Upgrades	552,168	108,000	111,000	115,000	118,000	121,000	1,125,168
301511-630143	Median Renovations		700,000	700,000	700,000			2,100,000
301511-630157	Park Furnishing Replacements	15,000	18,000	20,000	22,000	25,000	25,000	125,000
301511-630176	Court Resurfacing		95,000	100,000	110,000	120,000	130,000	555,000
301511-630179	Infield Renovations- Miners, Heritage, Cleo (%)		14,000	15,000	15,000	17,500	17,500	79,000
301511-630180	Centennial Tennis Court Projects		350,000					350,000
301511-630182	Drainage improvements and Infield Replacement		150,000					150,000
301511-630183	Miners Fence backstop extension		150,000					150,000
301511-640000	Vehicle (Parks)	70,000	72,100	74,263	76,491	78,786	81,149	452,789
301511-640001	Park Division Equipment Replacements (%)	128,000	148,000	180,000	196,000	200,000	204,000	1,056,000
301511-640001	Park Division Equipment New Requests	80,000	85,000	116,000	92,500	95,000	95,000	563,500
301511-660099	Renovation of Arboretum		50,000	52,500	55,000			157,500
301511-660292	Landscaping Improvements	49,200	18,000	20,000	23,000	25,000	28,000	163,200
301511-660301	Surfacing Materials- Playground, Dog Park, Crusher	37,375	28,500	30,000	31,500	33,000	35,000	195,375
301511-660307	Convert Inline Rink to Pickelball (%)	80,000						80,000
Future Year Req	Feasbility Study Cleo Mudrock Park- MU Fields			150,000				150,000
Future Year Req	Sports Complex Parking lot Surfacing				350,000			350,000
Future Year Req	Splash Pad and Playground Replacement at Commu			650,000				650,000
301551-620159	Library Lighting Controls		176,525					176,525
301551-640174	AMH Replacement	200,000						200,000
Future Year Req	Library Millwork Refresh			57,500				57,500
Future Year Req	Library Snow Melt System 20yr Maintenance				23,000			23,000
301552-620160	Museum Fire Panel	28,750						28,750
Future Year Req	Museum Improvements			28,750				28,750
Future Year Req	Museum Building Improvements			113,850				113,850
	Total Capital Projects Fund	**36,923,802**	**21,710,719**	**12,366,550**	**14,521,955**	**9,758,315**	**9,705,872**	**104,987,213**

*New Capital Improvement Projects, Individual Forms Included

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Water Utility Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
501498-620146	NWTP HVAC Replacement	35,000						35,000
501498-640148	Chemical Mixing Equip Replace	13,604						13,604
501498-660141	Filter Media Replacement-No WTP	224,529						224,529
501499-620149	SCWTP Administration Bldg	2,289,805						2,289,805
501499-660289	Raw Water Infrastructure	495,770						495,770
501499-660295	SCWTP Residual Management	5,724,393						5,724,393
501499-650129	Utility Billing Software*		250,000	50,000	51,500	53,045	54,636	459,181
501498-600035	Water Efficiency Plan Update	50,000						50,000
501498-620166	North Water Plant Decarbonization	21,850	14,950		1,463,550			1,500,350
501498-620167	NWTP-Pre Treatment Building Roof Replacement	44,850						44,850
501498-620168	South Water Treatment Plant Decarbonization	10,500			862,500			873,000
501498-620169	NWTP - Roof Replacements	307,599						307,599
501498-640000	Replacement Snowplow / Dump truck (Unit 3208) (%)	127,500						127,500
501498-640000	Excavator and Flatbed Truck (%)	260,000						260,000
501498-640000	Operations - Locate Vehicle (%)	42,500						42,500
501498-640000	Engineering Vehicles Replacement (%)	39,600						39,600
501498-640045	Meter Replacement	3,799,871	1,900,000					5,699,871
501498-640167	Water Plant Chlorine Dioxide Replacement	150,000						150,000
501498-640178	Telemetry Site Refresh (%)		45,000					45,000
501498-640180	WTP Control System Replacement		420,000					420,000
501498-640181	South Water Plant HVAC for Pre-Treatment Bldg.	43,750						43,750
501498-660181	Water Pipeline Replacement	1,698,000	492,000	812,650	1,208,500	1,250,500	1,550,500	7,012,150
501498-660312	Northern Pump Station Improvements		550,000					550,000
Future Year Req	3202 Snowplow / Dump Truck Replacement (%)						42,000	42,000
Future Year Req	3204 Snowplow / Dump Truck Replacement (%)						42,000	42,000
Future Year Req	3424 Snowplow / Dump Truck Replacement (%)				85,000			85,000
Future Year Req	Louisville Reservoir Outlet Repairs			500,000				500,000
Future Year Req	Security Replacement and Upgrades (%)					136,500		136,500
Future Year Req	Water Valve Replacements				635,000			635,000
Future Year Req	3403 Meter Truck Replacement (%)					60,000		60,000
Future Year Req	Operations Tablet Replacement (%)					18,750		18,750
Future Year Req	NWTP Backwash Building Roof Replacement					28,750		28,750
Future Year Req	3409 Replacement (%)						77,000	77,000
501499-600027	CPTED Assesment Recommendations (%)	20,700						20,700
501499-640179	Utility Redundant Autodialer (%)	40,000						40,000
501499-660190	Windy Gap Firming Project	818,000	1,312,000	1,312,000	1,312,000	1,313,000	1,313,000	7,380,000
501499-660210	High Zone Tank Security	60,000						60,000
501499-670000	Water Rights Acquisition			1,100,000	1,100,000			2,200,000
Future Year Req	Water loop for NE Louisville			780,000				780,000
Future Year Req	Big Dry Creek Augmentation Station			500,000				500,000
Future Year Req	Filter Media Replacement HBWTP				398,000			398,000
Future Year Req	HBWTP Recycle System			560,000				560,000
Future Year Req	Raw Water Integration Project (RIP)				440,000	4,840,000		5,280,000
Future Year Req	Utility Fiber (%)			325,000				325,000
Future Year Req	Water Quality Algae Mitigation System						590,000	590,000
Future Year Req	WTP Instrumentation Upgrades					280,000		280,000
	Total Water Utility Fund	**16,317,822**	**4,983,950**	**5,939,650**	**7,556,050**	**7,980,545**	**3,669,136**	**46,447,153**

*New Capital Improvement Projects, Individual Forms Included

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Wastewater Utility Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
502498-660297	Sewer Pipeline Rehab/Replace	125,019						125,019
502499-640159	Sewer Service Lateral Backflow	130,000						130,000
502499-660285	WWTP Solids Handling Upgrade	3,707,390						3,707,390
502499-660298	Fiber Optic Loop City Rd/Redtail	54,210						54,210
502499-650129	Utility Billing Software*		150,000	30,000	30,900	31,827	32,782	275,509
Future Year Req	Security Replacement and Upgrades (%)					73,500		73,500
Future Year Req	Utility Fiber (%)			325,000				325,000
502499-640182	Lift Station Communication Upgrade	55,000						55,000
502499-640179	Utility Redundant Autodialer (%)	40,000						40,000
502499-620171	Waste Water Plant Decarbonization	15,843			1,026,000			1,041,843
Future Year Req	Operations Tablet Replacement (%)					11,250		11,250
Future Year Req	WWTP -Centrifuge Building Roof Replacement					74,750		74,750
502498-660313	Sanitary Sewer Rehab - Replacement	467,000	617,000	740,500	428,500	838,000	875,500	3,966,500
502498-640178	Telemetry Site Refresh (%)		45,000					45,000
502498-640000	Operations - Locate Vehicle (%)	558,714						558,714
502498-640000	Engineering Vehicles Replacement (%)	39,600						39,600
502498-620172	WWTP Operation Building Roof Replacement	74,750						74,750
502498-620170	WWTP - Admin Building Roof Replacement	23,000						23,000
	Total Wastewater Utility Fund	**5,290,526**	**812,000**	**1,095,500**	**1,485,400**	**1,029,327**	**908,282**	**10,621,035**

*New Capital Improvement Projects, Individual Forms Included

Storm Water Utility Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
503499-660273	Storm Water Quality Master Plan	152,154						152,154
503499-660287	Storm Water Quality Master Plan	622,883						622,883
503499-650129	Utility Billing Software*		25,000	5,000	5,150	5,305	5,464	45,918
503499-640000	Replacement Snowplow / Dump truck (Unit 3208) (%)	85,000						85,000
503499-640000	Excavator and Flatbed Truck (%)	65,000						65,000
503499-640000	Engineering Vehicle Replacement (%)	142,661						142,661
503499-640183	Storm Sewer CCTV Software/Implementation		650,000					650,000
503499-660314	SBR Lining - Slipline	225,000						225,000
503499-660315	Storm System Maintenance		500,000		672,500		706,500	1,879,000
Future Year Req	Operations Tablet Replacement (%)					3,750		3,750
Future Year Req	3260 Sweeper Replacement (%)					61,001		61,001
	Total Storm Water Utility Fund	**1,292,698**	**1,175,000**	**5,000**	**677,650**	**70,056**	**711,964**	**3,932,368**

*New Capital Improvement Projects, Individual Forms Included

Solid Waste & Recycling Utility Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
510499-650129	Utility Billing Software*	-	75,000	15,000	15,450	15,914	16,391	137,754
	Solid Waste & Recycling Utility Fund	**-**	**75,000**	**15,000**	**15,450**	**15,914**	**16,391**	**137,754**

*New Capital Improvement Projects, Individual Forms Included

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

Golf Course Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
520799-600027	CPTED Assesment Recommendations (%)	13,800						13,800
520799-620173	Clubhouse Exterior - Decking & Pergola		29,000					29,000
520799-620174	Maintenance Facility Storage Building	400,000						400,000
520799-620175	Golf Clubhouse - Basement Improvements	47,150						47,150
520799-620176	Golf Clubhouse - Interior Improvements	173,650						173,650
520799-620177	Golf Clubhouse Exterior Improvements	59,800						59,800
520799-630115	Cart Path Repairs	25,000	25,000					50,000
520799-630184	Pond Liner Replacement - Hole 11		309,241					309,241
520799-630184	Golf Clubhouse Parking Lot Lighting	37,375						37,375
520799-630185	Sunshade for Starter Station		22,000					22,000
520799-630186	Bunker Renovation		167,375	167,375				334,750
520799-640001	Electric for Robotic Mower	32,000						32,000
520799-640141	Golf Cart Fleet Replacement	270,140						270,140
520799-650127	Golf Operations Office Furniture	16,000						16,000
520799-660100	Tree Planting		15,000		15,000		15,000	45,000
Future Year Req	Golf Operations Office Furniture						50,000	50,000
Future Year Req	Maintenance Facility Paving Improvements					227,000	25,000	252,000
Future Year Req	Foley 673 Bedknife Grinder			46,465				46,465
Future Year Req	Foley 653 Accu-Master Reel Grinder				83,664			83,664
Future Year Req	175 Gallon Sprayer Replacement			49,515				49,515
Future Year Req	Echo Robotic Ball Picker				28,700			28,700
Future Year Req	Driving Range Porous Pave					65,000		65,000
Future Year Req	Cart Path Repairs			50,000	35,000	35,000	35,000	155,000
	Total Golf Course Fund	**1,074,915**	**567,616**	**313,355**	**162,364**	**327,000**	**125,000**	**2,570,250**

Technology Management Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
602120-650115	PW Electronic Review Conversio	5,790						5,790
602120-650015	Computer-Hardware	145,969	142,550	142,550	142,550	142,550	142,550	858,719
	Total Technology Management Fund	**151,759**	**142,550**	**142,550**	**142,550**	**142,550**	**142,550**	**858,719**

Fleet Management Fund

Project Account	Project Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
603511-640000	Motor Vehicle/Road Equipment	125,137						125,137
603312-640000	3213 F550 Plow Truck Replacement	90,000						90,000
603312-640000	Engineering Vehicles Replacement (%)	79,200						79,200
	Total Fleet Management Fund	**294,337**	**-**	**-**	**-**	**-**	**-**	**294,337**

DRAFT

City of Louisville, Colorado
Six-Year Capital Improvement Plan
2025 - 2030

All Funds

Fund Description	2025 Planned	2026 Planned	2027 Planned	2028 Planned	2029 Planned	2030 Planned	6-Year Totals
Conservation Trust - Lottery Fund	561,035	205,500	218,000	200,000	230,500	362,500	1,777,535
Cemetery Fund	16,000	18,500	122,500	24,500	25,000	25,500	232,000
PEG Fee Fund	20,000	20,000	10,000	10,000	10,000	10,000	80,000
Historic Preservation Fund	75,850	256,450	-	-	-	-	332,300
Recreation Fund	899,900	774,736	959,500	518,100	230,000	247,000	3,629,236
Open Space Fund	691,319	715,000	589,000	565,000	175,000	250,000	2,985,319
Parks Fund	778,617	-	-	-	-	-	778,617
Capital Projects Fund	36,923,802	21,710,719	12,366,550	14,521,955	9,758,315	9,705,872	104,987,213
Water Utility Fund	16,317,822	4,983,950	5,939,650	7,556,050	7,980,545	3,669,136	46,447,153
Wastewater Utility Fund	5,290,526	812,000	1,095,500	1,485,400	1,029,327	908,282	10,621,035
Storm Water Utility Fund	1,292,698	1,175,000	5,000	677,650	70,056	711,964	3,932,368
Solid Waste & Recycling Utility Fund	-	75,000	15,000	15,450	15,914	16,391	137,754
Golf Course Fund	1,074,915	567,616	313,355	162,364	327,000	125,000	2,570,250
Technology Management Fund	151,759	142,550	142,550	142,550	142,550	142,550	864,509
Fleet Management Fund	294,337	-	-	-	-	-	294,337
Total for All Funds	**64,388,580**	**31,457,021**	**21,776,605**	**25,879,019**	**19,994,206**	**16,174,195**	**179,669,626**

DRAFT

City of Louisville
COLORADO • SINCE 1878

Capital Improvement Projects

Police

Police Vehicle Supplemental Request

Description

The police department is currently budgeted to purchase and outfit 3 police patrol vehicles in 2026 to try and update a significantly aging fleet. The department would like to purchase 5 patrol (ICE) vehicles and 1 EV to continue supporting the elecrification of the fleet, while balancing response capabilities through this supplemental request.

Project Justification

This project seeks to address the agency's critical need to provide basic community patrol and police response capabilities. The police vehicle fleet currently consists of about 38 vehicles, 20 of which have already exceeded their service life. Patrol vehicles have much higher usage than other vehicles and the City's fleet replacement guidelines recommend replacement of patrol vehicles every 4 years while other vehicles are recommended for replacement every 12 years before they exceed their usable lifespan and the cost of ownership surpasses value. Over the next several years all vehicles in the fleet are subject to rotation and replacement. This plan seeks to create a better strategy to address the need for reliable police patrol vehicles. The plan also allows the department to continue to support the City's sustainability efforts to electrify its fleet.

Strategic Plan Alignment

Strategic Priority: Core Services

Core Services are broad ranging with a focus on maintaining existing infrastructure and assets, including utilities, parks, open space, and sustainable asset management, as well as city communications.

How it aligns:

This project closely aligns with the police department providing core services and response to public safety events, routine patrols, and calls for services. It also support the sustainability initiative through the furthering of electrification of our fleet. The department currently has 2 electric vehicles, and if approved, would increase that number to 3.

DRAFT

Project Funding

This will be a requested increase to the CIP presented for the 2025-2026 budget and will cover the purchase and outfitting of 5 police patrol vehicle's and 1 administrative services vehicle for the department's fleet in 2026.

	2026	2027	2028	2029	2030	5-Year Total
Special Revenue Funds	-	-	-	-	-	-
Capital Fund	$232,000	-	-	-	-	$232,000
Enterprise Funds	-	-	-	-	-	-
Internal Service Funds	-	-	-	-	-	-
Total Sources	**$232,000**	**-**	**-**	**-**	**-**	**$232,000**

Project Cost Estimate and Timeline

Acquisition of the vehicles will occur in Q1 or Q2 of 2026 and the outfitting of the patrol vehicles will occur by Q4 2026.

Uses	2026	2027	2028	2029	2030	5-Year Total
Design	-	-	-	-	-	-
Prof. Services	-	-	-	-	-	-
Acquisition	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Equipment	$232,000	-	-	-	-	$232,000
Contingency	-	-	-	-	-	-
Total Uses	**$232,000**	**-**	**-**	**-**	**-**	**$232,000**

Operating Cost Impact

The operating costs will include the need for potential vehicle maintenance or repairs, as well as the cost for electrical charging and fuel.

City of Louisville
COLORADO • SINCE 1878

Capital Improvement Projects

Community Development

Shared Vehicle for Comm Dev

Description

Pool Vehicle for Inspections. Potentail New Positions of Sustainability Planner/Specialist, WUI/Fire Hardening Program Manager. Also to support Building Official and Planning Staff, who do not have access to vehicle for inspections. Chevey Blazer EV or similar.

Project Justification

The City is anticipating hiring a Sustainability Specialist/Planner II or similar term limitted position with DRCOG Energy Code Jurisdictional Support grant money ($600,000). Community Development has also put in a request for a staff member to help oversee the fire heardening code and WUI code implimenation that is anticiapted to be adopted later this year. These are two new positions that would need to conduct field inspections. In addition, the Building Official does not have a City vehicle and submits for mileage for his personal vehicle. Planning staff also conduct field inspectoins periodically and do not have a vehicle. This reqeust provides a shared vehicle for these positions.

Strategic Plan Alignment

Strategic Priority: Core Services

Core Services are broad ranging with a focus on maintaining existing infrastructure and assets, including utilities, parks, open space, and sustainable asset management, as well as city communications.

How it aligns:

Provides needed vehicle for builidng and zoning inspections.

Project Funding

Capital Fund

	2026	2027	2028	2029	2030	5-Year Total
Special Revenue Funds	-	-	-	-	-	-
Capital Fund	$55,000	-	-	-	-	$55,000
Enterprise Funds	-	-	-	-	-	-
Internal Service Funds	-	-	-	-	-	-
Total Sources	**$55,000**	**-**	**-**	**-**	**-**	**$55,000**

Project Cost Estimate and Timeline

Purchase in 2026

Uses	2026	2027	2028	2029	2030	5-Year Total
Design	-	-	-	-	-	-
Prof. Services	-	-	-	-	-	-
Acquisition	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Equipment	$55,000	-	-	-	-	$55,000
Contingency	-	-	-	-	-	-
Total Uses	**$55,000**	**-**	**-**	**-**	**-**	**$55,000**

Operating Cost Impact

Increase in Vehicle Maintenance. Request to add $1,500 to Building Safety for anticiapted additional costs per operations recommendation.

DRAFT

Utility Billing & Tax Collection and Administration Software Upgrade

Description

Staff is seeking funding to replace the existing Utility Billing & Tax collection and administration software.

Project Justification

Utility Billing & effective Tax Collection and Administration is a Core Service. It is a commonly accepted best practice to regularly review existing processes and softwares for security requirements and operational efficiencies.

Strategic Plan Alignment

Strategic Priority: Core Services

Core Services are broad ranging with a focus on maintaining existing infrastructure and assets, including utilities, parks, open space, and sustainable asset management, as well as city communications.

How it aligns:

Utility Billing & effective Tax Collection and Administration is a Core Service.

DRAFT

Project Funding

Utility Billing = Utility Funds / Sales tax = Capital fund

	2026	2027	2028	2029	2030	5-Year Total
Special Revenue Funds	-	-	-	-	-	-
Capital Fund	$500,000	$200,000	$200,000	$200,000	$200,000	$1,300,000
Enterprise Funds	$500,000	$100,000	$100,000	$100,000	$100,000	$900,000
Internal Service Funds	-	-	-	-	-	-
Total Sources	**$1,000,000**	**$300,000**	**$300,000**	**$300,000**	**$300,000**	**$2,200,000**

Project Cost Estimate and Timeline

Q2 2026 through Q3 2026, as the Spring/Summer timeline is congruent with staff implementation availability.

Uses	2026	2027	2028	2029	2030	5-Year Total
Design	-	-	-	-	-	-
Prof. Services	$1,000,000	$300,000	$300,000	$300,000	$300,000	$2,200,000
Acquisition	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Equipment	-	-	-	-	-	-
Contingency	-	-	-	-	-	-
Total Uses	**$1,000,000**	**$300,000**	**$300,000**	**$300,000**	**$300,000**	**$2,200,000**

Operating Cost Impact

The anticipated cost of the upgrade will exceed current software costs.

Owl Park Fence Replacement

Description

The project will first survey the western property line to ensure the boundary of City property is clearly marked. The existing wooden split rail fence along the western property line will be removed and a new wood fence will be installed in it's place that is stronger and more aesthetic.

Project Justification

The property line is unable to be field located by Staff, so a professional survey is required to ensure the new fence is built on City property. The existing fence is in poor condition due to old age and portions were burned by the Marshall Fire. It's overdue for replacement.

Strategic Plan Alignment

Strategic Priority: Core Services

Core Services are broad ranging with a focus on maintaining existing infrastructure and assets, including utilities, parks, open space, and sustainable asset management, as well as city communications.

How it aligns:

Fence replacement aligns with the maintenance of existing park assests as part of the Core Services priority.

DRAFT

Project Funding

Funding is requested as either a one-time supplement to the Park's fund or via addition to the 2026 Capital Projects Fund.

	2026	2027	2028	2029	2030	5-Year Total
Special Revenue Funds	-	-	-	-	-	-
Capital Fund	$18,700	-	-	-	-	$18,700
Enterprise Funds	-	-	-	-	-	-
Internal Service Funds	-	-	-	-	-	-
Total Sources	**$18,700**	**-**	**-**	**-**	**-**	**$18,700**

Project Cost Estimate and Timeline

In 2026 the western property line of Owl Park will be staked by a professional surveyor and the existing fence on the west side of Owl Park will be removed and replaced by a licensed contractor.

Uses	2026	2027	2028	2029	2030	5-Year Total
Design	-	-	-	-	-	-
Prof. Services	$3,500	-	-	-	-	$3,500
Acquisition	-	-	-	-	-	-
Construction	$15,200	-	-	-	-	$15,200
Equipment	-	-	-	-	-	-
Contingency	-	-	-	-	-	-
Total Uses	**$18,700**	**-**	**-**	**-**	**-**	**$18,700**

Operating Cost Impact

There will be no impacts to operating costs.

Public Copier Replacement

Description

The project would be to replace the existing copier/printer in the library for the public with a new one. The current copier is old and vendors who have worked on it have commented on its age and how difficult it is to fix. It is time to get updated technology to make sure this important resource for the community continues to work.

Project Justification

Copying and printing services are used every day at the library. It's an incredibly important part of our daily services for many patrons. From printing resumes to copying important documents needed for legal purposes, access to inexpensive printing is essential for the community. If the copier were to break and we were without it for several weeks while creating a budget amendment and then waiting for shipping/installation, this would be a hardship for many community members. In 2024, patrons printed 56,699 pages, which was a 45% increase from the 38,905 pages printed in 2023. Being proactive and replacing it now, while it is old and having problems but is still working, will allow the public to have uninterrupted access to an important community good. Staff will also evaluate the option to move to a lease model for this equipment.

Strategic Plan Alignment

Strategic Priority: Core Services

Core Services are broad ranging with a focus on maintaining existing infrastructure and assets, including utilities, parks, open space, and sustainable asset management, as well as city communications.

How it aligns:

Access to printing is an EDI issue, as many people can't afford printing equipment at home. The library offers afforable copying and printing for everyone. Getting a new copier should also be more energy efficient, which will make it a more environmentally sustainable option.

Project Funding

This project will be funded through the capital fund with no expected grants.

	2026	2027	2028	2029	2030	5-Year Total
Special Revenue Funds	-	-	-	-	-	-
Capital Fund	$20,000	-	-	-	-	$20,000
Enterprise Funds	-	-	-	-	-	-
Internal Service Funds	-	-	-	-	-	-
Total Sources	**$20,000**	**-**	**-**	**-**	**-**	**$20,000**

Project Cost Estimate and Timeline

This is to replace the existing public copier and printer in the library. The project would be expected to be completed completely in 2026, as early as possible as the existing copier is outdated and having maintenance issues.

Uses	2026	2027	2028	2029	2030	5-Year Total
Design	-	-	-	-	-	-
Prof. Services	-	-	-	-	-	-
Acquisition	-	-	-	-	-	-
Construction	-	-	-	-	-	-
Equipment	$20,000	-	-	-	-	$20,000
Contingency	-	-	-	-	-	-
Total Uses	**$20,000**	**-**	**-**	**-**	**-**	**$20,000**

Operating Cost Impact

There will be no impact on operating costs, as this is replacement of an existing machine.

DRAFT

SUBJECT: **RESOLUTION NO. 84, SERIES 2025 – A RESOLUTION AMENDING THE 2025 BUDGET BY AMENDING APPROPRIATIONS IN THE GENERAL FUND, PARKING IMPROVEMENT FUND, HISTORIC PRESERVATION FUND, CAPITAL PROJECTS FUND, WATER UTILITY FUND, WASTEWATER UTILITY FUND, STORM WATER UTILITY FUND, AND GOLF COURSE FUND AND ADJUSTING BUDGETED REVENUE IN THE GENERAL FUND, PARING IMPROVEMENT FUND AND GOLF COURSE FUND**

DATE: **OCTOBER 21, 2025**

PREPARED BY: **RYDER BAILEY, CPA, FINANCE DIRECTOR**
MAHYAR MANSURABADI, FINANCIAL ANALYST

PRESENTED BY: **RYDER BAILEY, CPA, FINANCE DIRECTOR**
MAHYAR MANSURABADI, FINANCIAL ANALYST

SUMMARY:

Staff is seeking Council's approval of the Second Amendment to the 2025 City Budget necessary to complete Capital projects and Department Operational functions and goals.

BACKGROUND:

This information was presented and recommended for approval by the City Finance Committee on October 16. Budget amendments are done at least once a year to accommodate carry forwards and other adjustments.

Prior Discussions

November 4, 2024 – City Council adopted the 2025 Budget and Mill Levy (materials start on page 338 of the packet).

May 20, 2025 – Budget Amendment No. 1 – City Council approved a Budget Amendment that addressed Capital carry forward of Prior Year appropriations, previously approved Council Capital and Operational Adjustments since the 2025 Budget Adoption, City Staff recommended appropriation adjustments, adjustments to City Sources/Revenue, adjustments to interfund transfers and adjustments to LRC appropriations and revenues.

ANALYSIS:

Attached to this communication are Appendices (A-C) to the proposed Resolution. The amendment contains three general sections/purposes, which can be summarized as previously approved Council Capital and Operational Adjustments since the 2025 Budget

Adoption and Last Budget Amendment, staff recommended appropriation adjustments, and Adjustments to City Sources/Revenue, all of which correspond to the following appendices:

A. Adopt previous Council-approved operational and capital appropriation adjustments to the 2025 expenditure budget for items that were approved since the last budget amendment on May 20th. The total amount of this portion of the expenditure amendment, broken out by fund is as follows;
    a. Fund 101 – General Fund - $2,225,000
    b. Fund 207 – Historical Preservation - $1,400,000
    c. Fund 301 – Capital - $957,407
    d. Fund 501 – Utilities/Water - $432,477
    e. Fund 502 – Utilities/Wastewater - $119,803
    f. Fund 503 – Utilities/Storm - $12,594
    Total - $5,147,281

    *- Line item detail, including dates of Council's approval of the amendment, can be found in Appendix A – Items Previously approved by Council

B. Adopt other Staff Recommended operating appropriation adjustments to 2025 expenditures for golf pro shop sales and administrative entries. The total amount of this portion of the expenditure amendment, broken out by fund is as follows;
    a. Fund 206 – Parking Improvement Fund - $100
    b. Fund 520 – Golf - $50,000
    Total - $50,100

    *- Line item detail of this Section can be found in Appendix B

C. Adopt Sources/ Revenue adjustments to the 2025 Budget for Grant Awards, unanticipated Parking In Lieu Fee, and Golf pro shop merchandise sales revenue. The total amount of this portion of the amendment, broken out by fund is as follows;
    a. Fund 101 – General - $108,000
    b. Fund 206 – Parking Improvement Fund - $94,100
    c. Fund 520 – Golf - $50,000
    Total - $252,100

    *- Line item detail of this Section can be found in Appendix C

SUMMARY OF ADJUSTMENTS SINCE THE OCTOBER 16th, FINANCE COMMITTEE MEETING:

This item was presented and unanimously supported by the Finance Committee at their October meeting.

No adjustments have been made to this item from the October Finance Committee presentation.

2025 COUNCIL WORK PLAN:

Core Services – The budget amendment supports City work, including items on the 2025 Council City Work Plan.

FISCAL IMPACT:

Budgeted?: **Yes,** once the amendment is approved.

The proposed budget amendment increases the City expenditure budget by $5,197,381, offset by additional revenues in the amount of $252,100, for a net impact to all City funds of $4,945,281.

Upon approval of this adjustment, all funds with reserve requirements are to remain in full compliance with City Financial Reserve Policies.

ALTERNATIVES:

Council may choose to approve this amendment as recommended, and as unanimously supported by the City Council Finance Committee. Council may propose to modify or not approve the amendment. It should be noted that many of the items presented have already been approved by Council, and this represents the formal amendment to the budget subsequent to those individual approvals. Changing course at this point would likely incur greater costs to the City and will have service level impacts across many programs and services.

RECOMMENDATION:

Approve the proposed budget amendments to the Budget Year 2025 necessary to complete budgeted and existing Capital projects and Department Operational functions and goals.

ATTACHMENTS

1. Resolution No. 84, Series 2025 – Citywide
2. Appendices A – C
3. PowerPoint Presentation

RESOLUTION NO. 84
SERIES 2025

A RESOLUTION AMENDING THE 2025 BUDGET BY AMENDING APPROPRIATIONS IN THE GENERAL FUND, PARKING IMPROVEMENT FUND, HISTORIC PRESERVATION FUND, CAPITAL PROJECTS FUND, WATER UTILITY FUND, WASTEWATER UTILITY FUND, STORM WATER UTILITY FUND, AND GOLF COURSE FUND AND ADJUSTING BUDGETED REVENUE IN THE GENERAL FUND, PARKING IMPROVEMENT FUND, AND GOLF COURSE FUND

WHEREAS, the need exists to amend the 2025 budget by amending appropriations in the General Fund, Parking Improvement Fund, Historic Preservation Fund, Capital Projects Fund, Water Utility Fund, Wastewater Utility Fund, Storm Water Utility Fund, and Golf Course Fund for additional appropriations within such funds and adjusting budgeted revenue in the General Fund, Parking Improvement Fund, and Golf Course Fund; and

WHEREAS, the need to amend the 2025 budget arises:

1. To adopt other operating and capital adjustments to the 2025 expenditure budget for previously Council-approved items since Council adopted the original 2025 budget; and

2. To adopt other operating adjustments to the 2025 expenditure budget recommended by the Staff; and

WHEREAS, funding for any increase in appropriations will come from new/increased revenue or from fund reserves.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO TO ADJUST APPROPRIATIONS AS FOLLOWS:

City of Louisville, Colorado
Schedule of Appropriations by Fund
2025 Budget

Fund Description	Adopted Budget	Sum of Budget Amendments	2025 Appropriations
General Fund	29,652,903	2,225,000	31,877,903
Conservation Trust-LotteryFund	561,135	-	561,135
Cemetery Perpetual Care Fund	17,600	-	17,600
Cemetery Fund	280,372	-	280,372
PEG Fee Fund	20,050	-	20,050
Parking Improvement Fund	50	100	150
Historic Preservation Fund	1,027,193	1,400,000	2,427,193
Recreation Center Fund	7,944,517	-	7,944,517
Open Space Fund	2,647,275	-	2,647,275
Parks Fund	3,561,601	-	3,561,601
Capital Projects Fund	37,750,962	957,407	38,708,369
Impact Fee Fund	464,216	-	464,216
Debt Service-Rec Ctr Bond Fund	1,742,600	-	1,742,600
Water Utility Fund	23,137,477	432,477	23,569,954
Wastewater Utility Fund	10,719,624	119,803	10,839,427
Storm Water Utility Fund	2,290,494	12,594	2,303,088
Solid Waste&Recyc Utility Fund	2,327,823	-	2,327,823
Golf Course Fund	3,855,033	50,000	3,905,033
Technology Management Fund	155,509	-	155,509
Fleet Management Fund	294,837	-	294,837
Total Appropriations	$ 128,451,271	$ 5,197,381	$ 133,648,652

Summary of Revenue Adjustments

Fund Description	Adopted Budget	Sum of Budget Amendments	2025 Revenues
General Fund	27,163,941	108,000	27,271,941
Parking Improvement	3,034	94,100	97,134
Golf Course Fund	3,597,321	50,000	3,647,321
Total Revenues	$ 30,764,296	$ 252,100	$ 31,016,396

PASSED AND ADOPTED this 21st day of October 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

Appendix A

City of Louisville, Colorado

2025 Budget Amendment Detail

Changes to 2025 Expenditure Budget - Items Previously Approved by Council

Account Number	Account Description	Current Budget	Proposed Amendment	Proposed Budget	Comments/Notes/Council Approval Date
101121-620179	101 W. Cherry St Property	-	2,225,000	2,225,000	Purchase of real estate at 101 W. Cherry St. Approved 10/7/25
101 Total			**2,225,000**		
207541-538420	Contributions and Grants	500,000	1,400,000	1,900,000	Purchase of 1016 Main St property to prevent demo, designate, and re-sell. Approved 8/5/25
207 Total			**1,400,000**		
301173-640000	IT Truck	45,000	5,900	50,900	IT EV Truck - Approved 6/3/2025
301312-660309	South Street Underpass	1,163,876	683,507	1,847,383	Shift 2026 funding into 2025 for final design, and will reduce the 2026 budget in the same amount. Approved 9/16/25
301312-660309	South Street Underpass	1,163,876	180,000	1,343,876	Contingency for the South Street Underpass. Approved 9/16/25
301312-660308	Via Appia Pedestrian Improvmnt	110,000	77,800	187,800	Shifting some 2026 budget into 2025, another adjustment will need to be made in 2026 shifting $857,800 from 660012 to 660308. 9/16/25
301511-620158	Indoor Batting Cage	16,000	10,200	26,200	Additonal Funding for Indoor Batting Cage - Approved 6/3/25
301 Total			**957,407**		
501461-550020	Parts/Repairs/Maint-Equip	400,000	137,000	537,000	Emergency repair for critical parts - Approved 7/22/25
501498-640000	Vehicles	469,600	50,377	519,977	Flatbed Truck Approved 6/3/25
501498-640167	WTP Chlorine Dioxide Replacement	150,000	245,100	395,100	Move budget from 2026 forward to 2025 - Approved 7/8/25
501 Total			**432,477**		
502474-550070	Parts/Repairs/Maint-HVAC	5,310	119,803	125,113	HVAC - New explosion-proof heater for the Headworks building at the wastewater treatment plan. Approved 10/7/25
502 Total			**119,803**		
503499-640000	Vehicles	292,661	12,594	305,255	Flatbed Truck Approved 6/3/25
503 Total			**12,594**		
Totals			**5,147,281**		

Appendix B
City of Louisville, Colorado
2025 Budget Amendment Detail
Changes to 2025 Expenditure Budget - Staff Recommendations

Account Number	Account Description	Current Budget	Proposed Amendment	Proposed Budget	Comments/Notes
206120-540410	Prof Serv-Investment Fee	50	100	150	Required to prevent from exceeding appropriations at the fund level
206 Total			**100**		
520712-529100	Resale Merchandise	140,000	50,000	190,000	ProShop sales are better than anticipated, driving the need to adjust both exp and rev accounts
520 Total			**50,000**		
Totals			**50,100**		

Appendix C
City of Louisville, Colorado
2025 Budget Amendment Detail
Changes to 2025 Revenue Budget

Account Number	Account Description	Current Budget	Proposed Amendment	Proposed Budget	Comments/Notes
101021-431000	Federal Grant	63,900	108,000	171,900	Co Responder Grant Award, extended 7.1.25-6.30.26
101 Total			**108,000**		
206031-446800	Parking Improvement Fee	-	94,100	94,100	Parking In Leui Fee out per code
206 Total			**94,100**		
520053-447150	ProShop Merchandise Sales	192,730	50,000	242,730	ProShop sales are better than anticipated, driving the need to adjust both exp and rev accounts
520 Total			**50,000**		
Totals			**252,100**		

City of Louisville

Second Budget Amendment to the City's 2025 Budget

Ryder Bailey, CPA
Finance Director

October 21st, 2025

Budget Amendment – Res. No. XX Amending the 2025 City Budget

- Staff is seeking City Council's approval of the Second Budget Amendment to the 2025 City's Budget.
- The Budget Amendment is administrative in nature, as most items were previously heard and approved by City Council.

Budget Amendment – Res. No. XX Amending the 2025 City Budget

- Today's amendment can be broken out into the following categories;
  - Previously Approved Council Adjustments to Operational Budgets and Capital Projects since the last Budget Amendment on May 20th *(Appendix A); and*
  - Staff Recommended Adjustments *(Appendix B)*; and
  - Adjustments to Sources/Revenues *(Appendix C)*.

Budget Amendment – Res. No. XX Amending the 2025 City Budget

- Resolution No. XX is the official amending document. It presents the amendments by **fund**, the City's legal level of budgetary control.
- Appendices A - C to the Resolutions present the amendment by line item account, the most granular level of amendment detail.

Budget Amendment – Res. No. XX Amending the 2025 City Budget

- The proposed budget amendment increases the City's expenditure budget by $5,197,281, offset by additional revenues in the amount of $252,100, for a net impact to all City funds of $4,945,281.

Budget Amendment – Res. No. XX Amending the 2025 City Budget

Fiscal Impacts:

A. The total amount of previously Council-approved operational and capital appropriation adjustments to the 2025 budget for items that were approved since the last budget amendment on May 20th, broken out by Fund as follows;

- Fund 101 – General Fund - $2,225,000
- Fund 207 – Historical Preservation Fund - $1,400,000
- Fund 301 – Capital - $957,407
- Fund 501 – Utilities/Water - $432,477
- Fund 502 – Utilities/Wastewater - $119,803
- Fund 503 – Utilities/Storm - $12,594

Total - $5,147,281

*Details can be found in Attachment – Appendix A.

Budget Amendment – Res. No. XX Amending the 2025 City Budget

Fiscal Impacts:

B. The total amount of Staff Recommended operating appropriation adjustments to 2025 expenditures for Golf Pro Shop merchandise sales and an administrative entry is broken out by Fund as follows;

- Fund 206 – Parking Improvement Fund - $100
- Fund 520 – Golf - $50,000

Total - $50,100

*Details can be found in Attachment – Appendix B.

Budget Amendment – Res. No. XX Amending the 2025 City Budget

Fiscal Impacts:

C. The total amount Sources/Revenue adjustments to the 2025 Budget for a Grant Award, unanticipated parking in lieu revenue, and Golf Pro Shop Merchandise Sales, broken out by fund, is $252,100.

- Fund 101 – General - $108,000
- Fund 206 – Parking Improvement Fund - $94,100
- Fund 520 – Golf - $50,000

Total - $252,100

*Details can be found in Attachment – Appendix C.

Budget Amendment – Res. No. XX Amending the 2025 City Budget

Impacts to Financial Reserves:

- Upon budget amendment adoption, all impacted Funds with reserve requirements are projected to remain in full compliance with the City's Reserve Policies.

Fund	Minimum Reserve Met (15%)	Target Reserve Met (25%)
General Fund	√	√
Combined Utility Funds	n/a	√*
Golf Course Fund	√	n/a

** The 25% Reserve is the **Minimum** for Combined Utility Funds*

Budget Amendment – Res. No. XX Amending the 2025 City Budget

Fiscal Impact by Aggregated Fund Group Type:

Fund Group	Revenue Amendment	Expenditure Amendment
General Fund	$108,000	$2,225,000
Special Revenue Funds *(Historical Preservation, Parking Improvement Fund)*	94,100	1,400,100
Capital Project Fund	-	957,407
Enterprise Fund - Golf	50,000	50,000
Enterprise Funds - Consolidated Utility Funds	-	564,874
Total	$252,100	$5,197,381

Budget Amendment – Res. No. XX Amending the 2025 City Budget

The City Council Finance Committee reviewed and supported approval of the proposed amendment at their October 16th meeting.

Staff's Recommendation is for the City Council to approve the Proposed Second Amendment to the 2025 City Budget as presented.

Thank you!

SUBJECT: **AVISTA ADVENTIST HOSPITAL**

i. ORDINANCE NO. 1904, SERIES 2025 – AN ORDINANCE APPROVING THE CONOCOPHILLIPS CAMPUS GDP, AMENDMENT NO. 1 – 2ND READING AND PUBLIC HEARING (advertised City of Louisville website 10/08/2025)

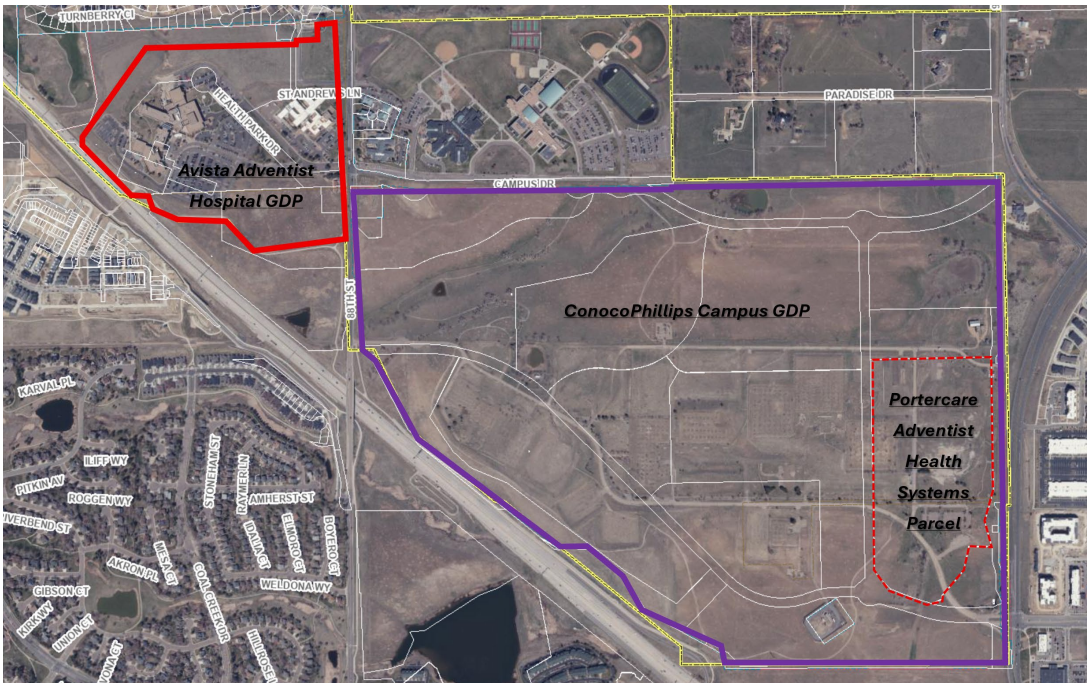
ii. ORDINANCE NO. 1905, SERIES 2025- AN ORDINANCE APPROVING THE AVISTA ADVENTIST HOSPITAL GENERAL DEVELOPMENT PLAN, AMENDMENT NO. 2 – 2ND READING AND PUBLIC HEARING (advertised City of Louisville website 10/08/2025)

DATE: **OCTOBER 21, 2025**

PREPARED BY: **ROB ZUCCARO, COMMUNITY DEVELOPMENT DIRECTOR**

PRESENTED BY: **ROB ZUCCARO, COMMUNITY DEVELOPMENT DIRECTOR**

VICINITY MAP:



SUMMARY:
The applicant, Portercare Adventist Health Systems, requests two simultaneous amendments to the Avista Adventist Hospital General Development Plan (GDP) and the ConocoPhillips Campus GDP (Redtail Ridge) (see Attachment Nos. 4 and 5 for proposed

GDPs). The amendments are in support of the applicant's desire to build a new hospital campus within the Redtail Ridge development on Lot 1, Block 2 of Redtail Ridge, Filing No. 1.

The following summarizes the proposed amendments:

Avista Adventist Hospital GDP, Amendment No. 2

- Reduce the maximum building area allowed from 750,000 sq. ft. to 398,694 sq. ft., which represents existing development within the GDP boundary.
- Dedicate to the City an approximately 7.5-acre parcel for use as Open Space, noted as Lot B on proposed GDP amendment.
- Modify the building setbacks adjacent to Lot B to be 5' for parking and drive aisles and 20' for buildings. This replaces a 50' setback for two-story buildings and 100' setbacks for three-story buildings on north side of the development, and a 75' setback for all buildings on the northwest side development, but will increase overall setbacks from adjoining residential development when taking into consideration the Lot B dedication.

ConcoPhillips Campus GDP, Amendment No. 1

- Add 364,400 sq. ft. of allowed building area to Lot 1, Block 2 of Redtail Ridge Filing No. 1, which was purchased by Portercare Adventist Health Systems. The building area allowance would be in addition to the maximum 2,542,380 sq. ft. of allowed building area within the Redtail Ridge development, bringing the total development cap to 2,906,780 sq. ft. With the Avista Adventist Campus GDP removing 351,306 sq. ft. of future development potential from that GDP area, this would result in a net increase of 13,094 sq. ft. of additional development allowed between the two GDP areas.
- Establish three height zones for:
  - 2-3 story buildings (maximum of 45' tall, 50' to parapet, 65' to mechanical screen),
  - 4 story buildings (maximum of 60' tall, 65' to parapet, 80' to mechanical screen), and
  - 5 story buildings (maximum of 85' tall, 90' to parapet, 105' to mechanical penthouse).
- Establish building massing standards to ensure architectural interest and moderate visual impacts of taller building elements. This includes design standards for building projections and building step-back standards for building elements above 45' in height.

BACKGROUND / PRIOR DISCUSSIONS:

Avista Adventist Hospital GDP

The original Avista Adventist Hospital campus was annexed into the City in 1986 and zoned Agriculture. The property was then platted and developed as the Centennial Health Park, starting in 1987. There have been six subdivision plat amendments, with the last

amendment taking place in 2002. The subdivision plats have resulted in the establishment of multiple parcels for the development of medical facilities and offices, public utility and access easements, and right of way dedication for Health Park Drive.

- 1987 – Health Park Subdivision Filing No. 1
- 1988 – Health Park Subdivision Filing No. 2
- 1990 – Health Park Subdivision Filing No. 3
- 1990 – Health Park Subdivision Filing No. 4
- 1996 – Health Park Subdivision Filing No. 5
- 2002 – Health Park Subdivision Filing No. 6

In 1998, a portion of the subject property was rezoned to Planned Community Zone District – Commercial (PCZD-C) along with approval of the initial GDP for the property. In 2002, an additional 13 acre parcel on the north side of the property was annexed, zoned to PCZD-C, and incorporated in the Avista Hospital GDP area.

- 1998 Avista Adventist Hospital GDP
- 2002 Avista Adventist Hospital GDP (Amendment No. 1)

As part of the 2002 annexation, a 10-acre parcel on the north and northwest sides of the GDP area was dedicated for open space (see Attachment No. 10 for Annexation Agreement, Section 15). This dedication was required by the US 36 Corridor Comprehensive Development Plan Intergovernmental Agreement (IGA) and First Amendment to the Agreement, which specifically addressed the open space dedication requirement.

- 2000 - US 36 Corridor Comprehensive Development Plan IGA
- 2002 - First Amendment to the36 Corridor Comprehensive Development Plan IGA

The proposed public use dedication area (Lot B on proposed GDP amendment) is contiguous to the original 10-acre open space parcel, extending the overall open space parcel to approximately 17.5 acres.

Current development within the Avista Adventist Hospital GDP includes the AdventHealth Avista Hospital and associated medical office buildings, and Centennial Peaks Hospital. The 2002 Avista Adventist Hospital GDP includes a maximum development cap of 750,000 sq. ft. of building area. The existing development within the Avista Adventist Hospital GDP boundaries totals 398,694 sq. ft. of building area, with 351,306 sq. ft. remaining for future development.

ConcoPhillips Campus GDP

The ConcoPhillips Campus GDP is the former location of StorageTek Corporation. StorageTek established its original campus on 310 acres within unincorporated Boulder County. The City subsequently annexed the 310-acre campus in 1978. The StorageTek campus included approximately 1.6 million sq. ft. of building area at full build-out.

ConocoPhillps acquired the property in 2008 and completed demolition of the StorageTek campus in 2009 to facilitate a new research campus. In 2009, ConocoPhillips petitioned the City to annex 80 acres of land adjacent to the 310-acre campus and requested rezoning of the entire property to Planned Community Zone District – Commercial (PCZD-C).

In 2010, the City rezoned the property to PCZD-C and approved the ConocoPhillips Campus GDP, a Zoning Agreement, Preliminary Subdivision Plat, and Preliminary Planned Unit Development (PUD) for the ConocoPhillips development. The GDP included an approximately 2.5 million sq. ft. development cap, set allowed land uses, setbacks, parking standards, and required a minimum public land dedication of 12%, matching the minimum code requirement. ConocoPhillips later abandoned its development plans and sold the property. The Preliminary Subdivision Plat and Preliminary PUD were never finalized and have since expired. A metro district was also established to help fund infrastructure for the development.

- 2010 – ConocoPhillips Campus GDP

In 2024, the City approved a final plat for the Redtail Ridge development, with the intent to develop the property consistent with the standards set by the ConocoPhillips Campus GDP. The plat approval included dedication of 139 acres of public use lands, created multiple development parcels, established utility and access easements, dedicated public road rights of way, including an extension of Campus Drive, and included an agreement for expansion of the City's wastewater treatment plant. The developer is currently installing the horizontal infrastructure and public roads and completing initial over-lot grading for the development.

- 2024 – Redtail Ridge, Filing No. 1

<u>Ordinance No. 1996, Series 2025</u>
On July 8, 2025, the City Council adopted Ordinance 1896, Series 2025, which amended Section 17.72.190 of the Louisville Municipal Code regarding Yard and Bulk requirements for GDPs. Specifically, this ordinance amendment allows Yard and Bulk requirements (e.g. setbacks, lot coverage, and building heights) to be set through the approval of a GDP or GDP amendment.

Prior to this code amendment, GDPs were prohibited from establishing Yard and Bulk standards that were inconsistent with certain underlying zoning requirements. Deviations to the Yard and Bulk standards could only be approved through the waiver process at the time of PUD approval. This was found to be inconsistent with the intent of GDPs to create custom zoning standards for the district that will define the type and character of the development. The limitation also led to GDPs that did not provide the landowner clear guidance on the desired development standards and uncertainty in the development review process.

PROPOSAL:

Avista Adventist Hospital GDP

The proposed amendment would reduce maximum allowed building area on the Avista Adventist Hospital GDP and is intended to serve as a "density swap" where the unused development area is transferred to the ConocoPhillips Campus GDP. This is accomplished by updating the "Building Area Summary" note to set the maximum allowed building area to reflect existing campus development at 398,694 sq. ft. and remove the remaining 351,306 sq. ft of development allotment for future phases. This would not prohibit future development within the new development cap if existing buildings were to be demolished.

Figure 1: Existing and Proposed Maximum Development Areas

Existing GDP Note

BUILDING AREA SUMMARY

EXISTING FACILITIES:	
Avista Hospital	170,000 SF
MOB I	40,000 SF
MOB II/ASC	86,200 SF
Centennial Peaks facility	53,777 SF
subtotal	**349,977 SF**
FUTURE PHASES:	
Planning Areas	400,023 SF
Total Maximum Buildout	**750,000 SF**

Proposed GDP Note

BUILDING AREA SUMMARY

EXISTING FACILITIES:		
Avista Hospital		198,847 SF
MOB I		40,000 SF
MOB II/ASC		86,200 SF
Centennial Peaks facility		64,907 SF
Spicer Residences	east -	4,625 SF
	west-	4,115 SF
subtotal		**398,694 SF**
FUTURE PHASES:		
Planning Areas (Buildable SF)		0 SF
Total Maximum Buildout		**398,694 SF**

Part of the intent of the "density swap" is to limit the gross new development area between the two GDPs, and thus, limit any potential traffic impacts and impacts on City water and sewer utilities. As part of this request, the applicant provided a traffic study and analysis of wastewater infrastructure capacity to demonstrate that adequate infrastructure would be in place as part of the Redtail Ridge development. The City's Public Works Department determined that there is adequate water infrastructure in place and did not request an analysis.

The applicant is also proposing dedication of an approximately 7.5-acre parcel for open space (Lot B). The dedication area covers approximately half of a 15-acre parcel listed on the Open Space Advisory Board's 2023 Candidate Open Space Ranking map as a *High Priority* (see Attachment No. 11, Parcel DD). The applicant requests that the City manage the new open space parcel as Open Space-Preserve Land as defined under Section 15-4 of the City Charter, and that the City does not develop public trails, trailheads or other amenities on the parcel, unless such agreement is amended in the future. A separate agreement is proposed related to dedication of the parcel, which would be transferred to the City by separate action following approval of the GDP amendments (Attachment No. 8). This draft is still under negotiation with the applicant and will be on a future agenda for Council consideration; therefore, Ordinance No. 1904 contains a condition of approval that this agreement be executed by the City and the applicant.

This public land dedication is not being made to meet a municipal code requirement for public use dedications, as the property is already subdivided and no new development is proposed within the Avista Adventist Hospital GDP area. Public use dedications are required when a property is initially subdivided, totaling 12% of commercial areas and 15% of residential areas, or cash in lieu of land dedication (LMC Sec. 16.16.060). Additional public use dedications may be required as part of the Planned Unit Development (PUD) approval process when certain criteria are met (LMC Sec. 17.28.080). This proposal does not include a PUD development proposal.

Figure 2: Proposed Open Space Dedication Area

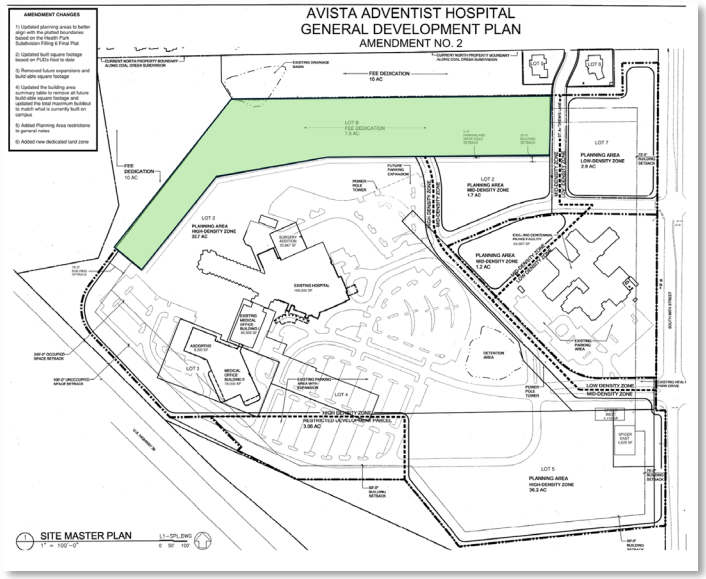
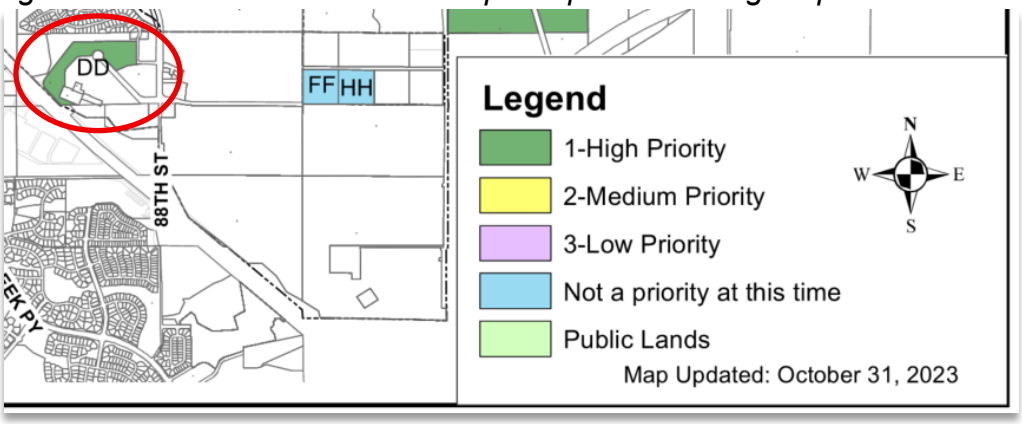


Figure 3: Aerial of Proposed Open Space Dedication Area

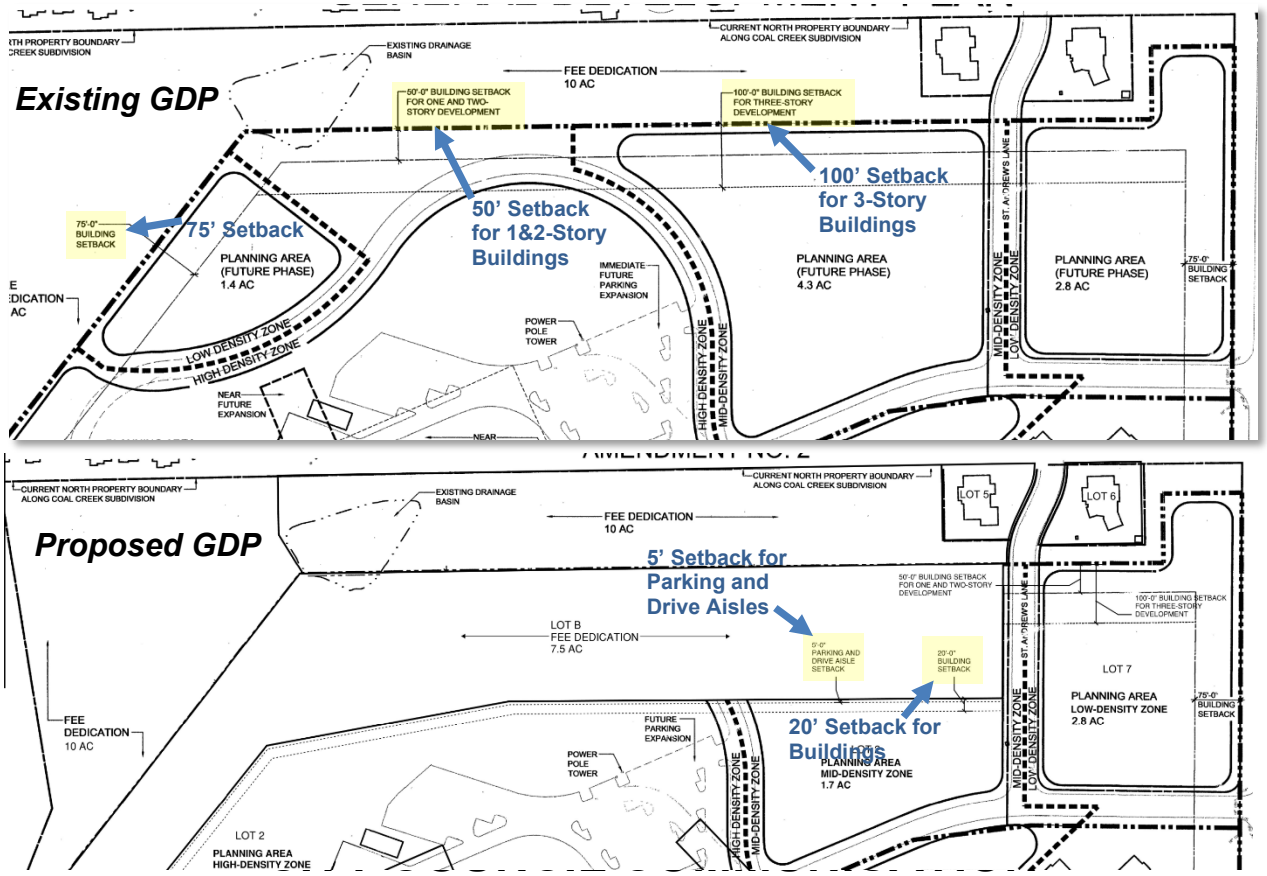
Previous Open Space Dedication
Proposed Open Space Dedication
ST ANDREWS LN
HEARTHPARK DR
CAMPUS DR
88TH ST
Redtail Ridge Park and Open Space
Scriffiny Open Space

Figure 4: OSAB 2023 Candidate Open Space Ranking Map



The current GDP includes building setback notes requiring a minimum 50' setback for one and two-story buildings and 100' setback for three-story buildings along the north boundary of the development, and a 75' setback along the northwest boundary of the development. As part of the public dedication of Lot B, the applicant requests that these setbacks be modified to be 5' for parking and drive aisles and 20' for buildings. When taken together with the public land dedication area, the minimum setbacks would be increased from the adjoining residential development to the north.

Figure 5: Existing and Proposed Setback Notes



ConocoPhillips Campus GDP

As part of the "density swap," the applicant proposes adding 364,400 sq. ft. of additional allowed building area to Lot 1, Block 2 of Redtail Ridge Filing No. 1, which is owned by Portercare Adventist Health Systems and the anticipated site of a new hospital campus development. The proposed GDP labels this lot as the "Hospital Parcel." When added to the existing development cap within Redtail Ridge of 2,542,380 sq. ft., the total allowed development equals 2,906,780 sq. ft. As previously noted, the "density swap" would limit the overall development allowance between the two GDPs and result in a net increase of 13,094 sq. ft. of allowed building area.

Figure 6: Proposed GDP Note Addressing Additional Development Allowance

SITE INFORMATION

GROSS DEVELOPABLE AREA (PUD BOUNDARY):	391.719 ACRES (MINIMUM 0.15 F.A.R.) * FOR LEGAL DESCRIPTION SEE EXHIBIT A OF ORDINANCE NO. 1569 SERIES 2010
ZONING:	PLANNED COMMUNITY ZONED DISTRICT (PCZD) - COMMERCIAL WITH PUD-C OVERLAY
PLANNED ACCESS:	NORTHWEST PARKWAY, CAMPUS DRIVE, SOUTH 88TH STREET

* THE F.A.R APPLIES TO THE GROSS AREA OF THE ENTIRE DEVELOPMENT AND IS NOT PARCEL-SPECIFIC. THIS GDP ACKNOWLEDGES AN ADDITIONAL 364,400 SF ALLOCATED TO THE HOSPITAL PARCEL, ON TOP OF THE ALLOCATED DEVELOPMENT SQUARE FOOTAGE.THE 364,400 SF IS IN CONSIDERATION WITH A DENSITY SWAP FROM HEALTH PARK 1.

The applicant also proposes adding a notation to the Permitted Use table to clarify that Hospital and Medical Office Buildings are allowed commercial uses within Redtail Ridge. Staff finds that the commercial zoning designation allows Hospital and Medical Office Buildings, but the note provides additional clarity to this allowance.

Figure 7: Proposed Use Note Amendment

PERMITTED USES

PERMITTED USE	COMMENTS / REMARKS	PARKING REQUIREMENTS
PROFESSIONAL, BUSINESS, AND ADMINISTRATIVE OFFICES	-	4 / 1,000 S.F.
EDUCATIONAL AND TRAINING FACILITIES	MEETING ROOMS AND SOCIAL SPACE FOR EMPLOYEES AND VISITORS	0.5/ 1,000 S.F.
PRIVATE SHORT TERM LODGING FOR CONOCOPHILLIPS EMPLOYEES AND GUESTS	OVERNIGHT ACCOMMODATIONS FOR EMPLOYEES/VISITORS	0.5 / ROOM
PEDESTRIAN PLAZAS AND PEDESTRIAN WAYS	-	-
PRIVATE, NONCOMMERCIAL, RECREATIONAL AND SOCIAL FACILITIES	-	1 / 1,000 S.F.
PARKING LOTS AND PARKING BUILDINGS	SURFACE AND STRUCTURED PARKING	-
CAMPUS ORIENTED CHILDCARE CENTER	PRIVATE CHILDCARE FOR EMPLOYEES	1.5 SPACES PER TEACHER PLUS ONE SPACE PER ADMINISTRATIVE EMPLOYEE
RESEARCH/OFFICE AND CORPORATE USES AND FACILITIES FOR THE RESEARCH, DEVELOPMENT, MANUFACTURING, FABRICATION, PROCESSING, OR ASSEMBLY OF SCIENTIFIC OR TECHNICAL PRODUCTS, OR OTHER PRODUCTS	-	1.25 / 1,000 S.F.
BUILDING MOUNTED CMRS FACILITIES	-	-
CAMPUS ORIENTED FOOD SERVICE	RESTAURANTS, CAFETERIAS, OR CAFES FOR USE BY EMPLOYEES/VISITORS INTEGRATED THROUGHOUT THE CAMPUS	-
COMMERCIAL USES, INCLUDING BUT NOT LIMITED TO BUILDING CONTRACTOR'S EQUIPMENT YARDS, TRANSPORTATION CENTERS AND SERVICED, WAREHOUSES AND STORAGE FACILITIES	STORAGE OF MATERIALS IN SUPPORT OF THE CAMPUS RESEARCH AND DEVELOPMENT FACILITY, HELIPAD (SPECIAL REVIEW USE), HOSPITAL, MEDICAL OFFICE BUILDINGS	1 / 1,000 S.F.
PRIVATE UTILITY USES	TO ALLOW THE EXISTING SANITARY LIFT STATION, POTENTIAL SUBSURFACE GEO EXCHANGE FIELD, SOLAR PANELS, BUILDING MOUNTED WIND POWERED ELECTRICAL GENERATION FACILITIES, AND CENTRAL MECHANICAL, ELECTRICAL, AND PLUMBING FACILITY	-
OTHER USES AS ESTABLISHED BY THE CITY COUNCIL AS FOUND TO BE SPECIFICALLY COMPATIBLE FOR COMMERCIAL AND OFFICE PLANNING AREAS	-	-

Within the Hospital Parcel, the applicant proposes the establishment of three building height zones and building massing design standards. The three height zones are for three-story, four-story, and five-story buildings. The standards include different maximum heights for the buildings, the parapets, and mechanical screen structures. Due to some of the unique requirements for hospital and medical office developments, the proposed maximum heights are taller than what would be expected in non-medical office buildings.

The proposed building massing design standards would require building step-backs of 15 feet for building elements above 45' and limit the footprint of building elements above 45' to 50% of the lower building footprint. This is intended to moderate the visual impacts of the building massing for taller buildings. The proposed standards also include allowances for

Figure 8: Hospital Parcel Height Zones

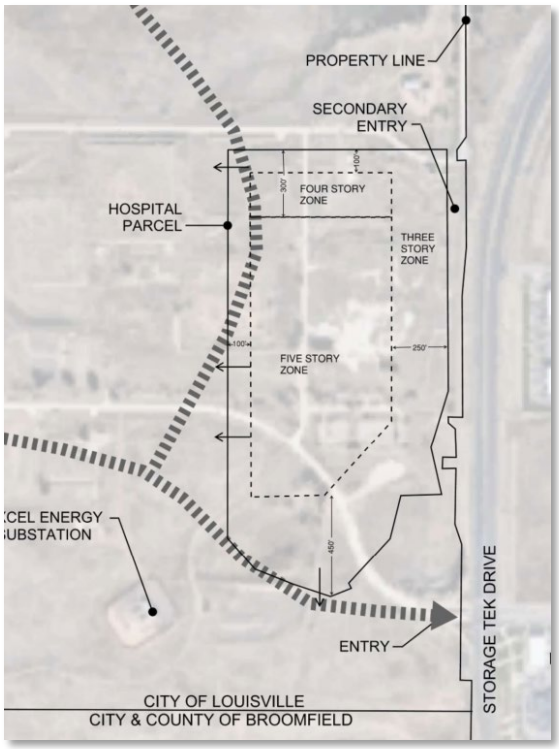


Figure 9: Proposed Height and Massing Standards

HOSPITAL PARCEL
FOR THE HOSPITAL PARCEL (LOT 1, BLOCK 1) BUILDING HEIGHTS ARE EXPECTED TO RANGE FROM THREE TO FIVE OCCUPIABLE STORIES, RANGING IN HEIGHT FROM 50' TO 90'. UNOCCUPIED MECHANICAL SCREENING OF UP TO 20' WOULD BE ABOVE THE 5 STORIES. THE HOSPITAL PARCEL WILL BE ZONED TO SUPPORT LOWER THREE-STORY BUILDING HEIGHTS TOWARDS THE NORTH, EAST, AND WEST PROPERTY BOUNDARIES CONCENTRATING THE 5-STORY STRUCTURES CENTRALLY WITHIN THE SITE. REFER TO THE GRAPHIC FOR PARCEL HEIGHT ZONES.

BUILDING HEIGHT ZONING:
THREE STORY ZONE:
45'-0" MAXIMUM BUILDING HEIGHT
50'-0" PARAPET HEIGHT
65'-0" MECHANICAL PENTHOUSE HEIGHT*

FOUR STORY ZONE:
60'-0" MAXIMUM BUILDING HEIGHT
65'-0" PARAPET HEIGHT
80'-0" MECHANICAL PENTHOUSE HEIGHT*

FIVE STORY ZONE:
85'-0" MAXIMUM BUILDING HEIGHT
90'-0" PARAPET HEIGHT
105'-0" MECHANICAL PENTHOUSE HEIGHT*

*ROOF ACCESS AND ELEVATOR OVERUN IS EXCLUDED FROM THE BUILDING HEIGHT

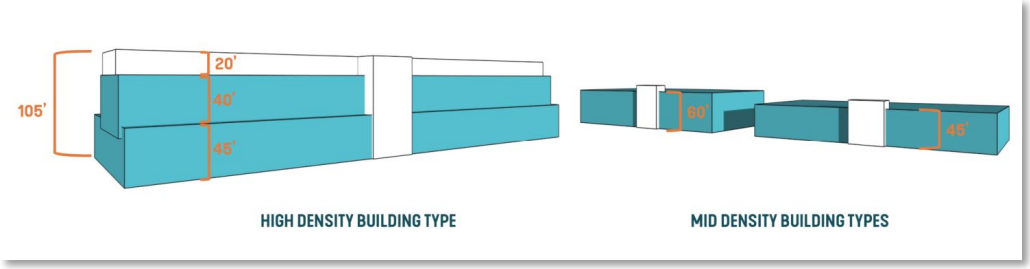
BUILDING MASSING DESIGN PARAMETERS:
FOR BUILDING FACADES EXCEEDING 100 FEET IN LENGTH AND MORE THAN 45 FT IN HEIGHT, A RELIEF IN THE BUILDING MASSING IS REQUIRED TO REDUCE VISUAL MONOTONY AND ENHANCE ARCHITECTURAL INTEREST:
- A MAXIMUM HEIGHT OF 45 FEET IS PERMITTED BEFORE A MINIMUM HORIZONTAL SETBACK OF 15 FEET IS REQUIRED FROM THE PRIMARY BUILDING FACE.
- A PROJECTED RELIEF ELEMENT MAY EXTEND OUTWARD FROM THE MAIN BUILDING MASS BY A MINIMUM OF 2 FEET, PROVIDED IT CONTRIBUTES TO THE OVERALL ARTICULATION AND DESIGN OF THE FACADE.
- THE FOOTPRINT OF EACH FLOOR ABOVE 45 FEET SHALL NOT EXCEED 50% OF THE FOOTPRINT OF THE BUILDING AT OR BELOW 45 FEET.
- ANY ROOFTOP ENCLOSURE (E.G., MECHANICAL PENTHOUSES) MUST BE SET BACK A MINIMUM OF 10 FEET FROM THE EDGE OF THE BUILDING MASS, UNLESS IT IS ARCHITECTURALLY INTEGRATED INTO THE OVERALL DESIGN OF THE BUILDING.
- EXCEPTION: A DEFINING ARCHITECTURAL ELEMENT OR DISTINCT BUILDING FORM WITH A TOTAL WIDTH OF LESS THAN 100 FEET IS EXEMPT FROM THE ABOVE SETBACK AND RELIEF REQUIREMENTS. A MINIMUM 2-FOOT DEPTH VARIATION FROM THE ADJACENT PRIMARY FACADE PLANE MUST STILL BE PROVIDED TO ENSURE VISUAL ARTICULATION.

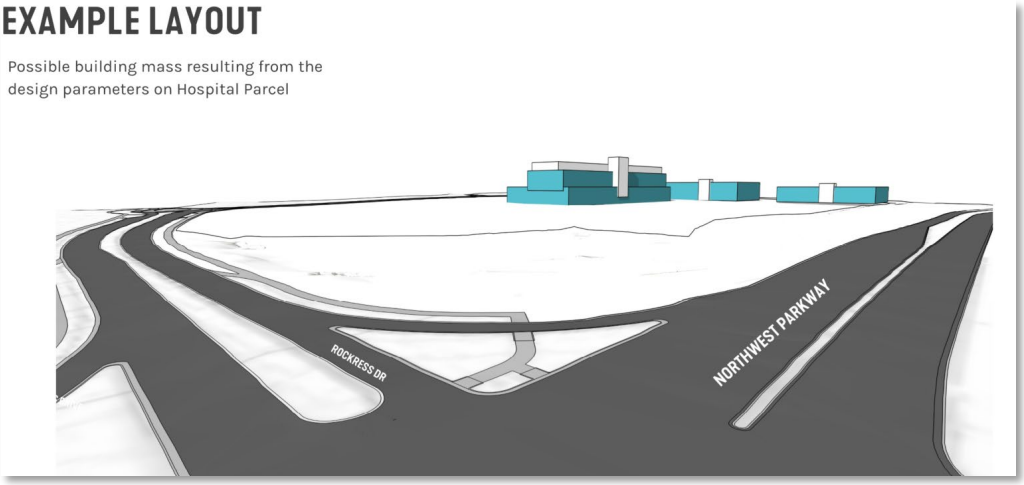
DEFINING ARCHITECTURAL ELEMENTS MAY INCLUDE, BUT ARE NOT LIMITED TO:
-VERTICAL CIRCULATION TOWERS (E.G., STAIR OR ELEVATOR CORES)
-ENTRY PAVILIONS OR LOBBIES
-ARCHITECTURAL EYEBROWS OR ROOF OVERHANGS
-BRANDED OR SCULPTURAL FACADE FEATURES
-CORNER ELEMENTS OR TURRETS
-ATRIUM VOLUMES OR LIGHT WELLS
-DISTINCTIVE ROOF FORMS

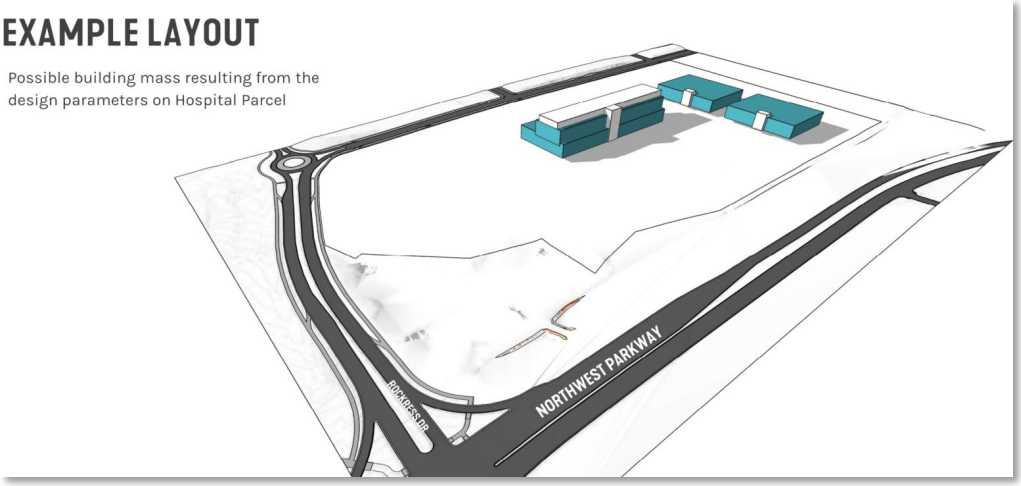
architectural projections and “defining architectural elements,” including requirements for depth variations for these elements. Rooftop enclosures would need to be set back an additional 10’ from the edge of the buildings.

The applicant has provided a massing study and examples of intended architecture in support of the request (see Attachment No. 7).

Figure 10: Massing Diagrams







ANALYSIS:
LMC Chapter 17.72 outlines the requirements for PCZD-zoned properties and the standards for GDPs. Sec.17.72.060 of this chapter notes that existing GDPs may be amended, subject to the same procedure as the original approval.

> *Any adopted planned community general development plan and supplementary development standards may be amended, revised or territory added thereto, pursuant to the same procedure and subject to the same limitations and requirements by which such plan was originally approved.*

LMC Sec. 17.72.010 outlines the purpose of the PCZD as follows:

> *The purpose of the planned community zone district is to encourage, preserve and improve the health, safety and general welfare of the people of the city by encouraging the use of contemporary land planning principles and coordinated community design. The planned community zone district is created in recognition of the economic and cultural advantages that will accrue to the residents of an integrated, planned community development of sufficient size to provide related areas for various housing types, retail and service activities, recreation, schools and public facilities, and other uses of land. This district is designed for use where the area comprising such development project is under single ownership or control at the time of its classification as this district.*

Staff finds that the proposed GDP amendments are consistent with the purpose of the PCZD. The proposed amendments to the ConocoPhillips Campus GDP for the Hospital Parcel establish minimum standards to address building massing, ensuring quality architectural design of the taller building elements. The Hospital Parcel is also located at the lowest elevation point of the Redtail Ridge development, which helps mitigate overall height in relation to surrounding development. The building heights will also be consistent with taller building heights allowed in Broomfield immediately to the east across NW Parkway. The Broomfield development includes existing buildings up to five stories, with the zoning providing height allowances in three districts of up to 70', 80', and 13 stories (specific height not defined).

For the Avista Adventist Hospital GDP, the public land dedications on the north side of the development and revised setbacks will continue to provide an appropriate buffer to the Coal Creek neighborhood to the north.

LMC Sec. 17.72.030 requires that a GDP address the following items:

A. *The proposed use of all lands within the subject property;*

B. *The type or character of development and the number of dwelling units per gross acre proposed;*

C. The proposed location of school sites, parks, open spaces, recreation facilities and other public and quasi-public facilities; and

D. The proposed location of all streets shall be coordinated with the adopted general street plan for the city

Staff finds that the proposed GDP amendments are consistent with these standards. There are no changes to the allowed land uses. The design standards, including the revised minimum setbacks and height and massing standards, will reflect an appropriate type of character of development within each GDP area that compliments surrounding development. The proposal also includes dedication of additional open space in a location designed as a high priority by the City. No changes are proposed to the street network for either development.

Comprehensive Plan

The 2013 Comprehensive Plan includes both the Avista Adventist Hospital GDP and ConocoPhillips Campus GDP as part of the Phillips 66 Special District, which is designated as a Rural special district.

- see pp. 35-36 for Special Districts

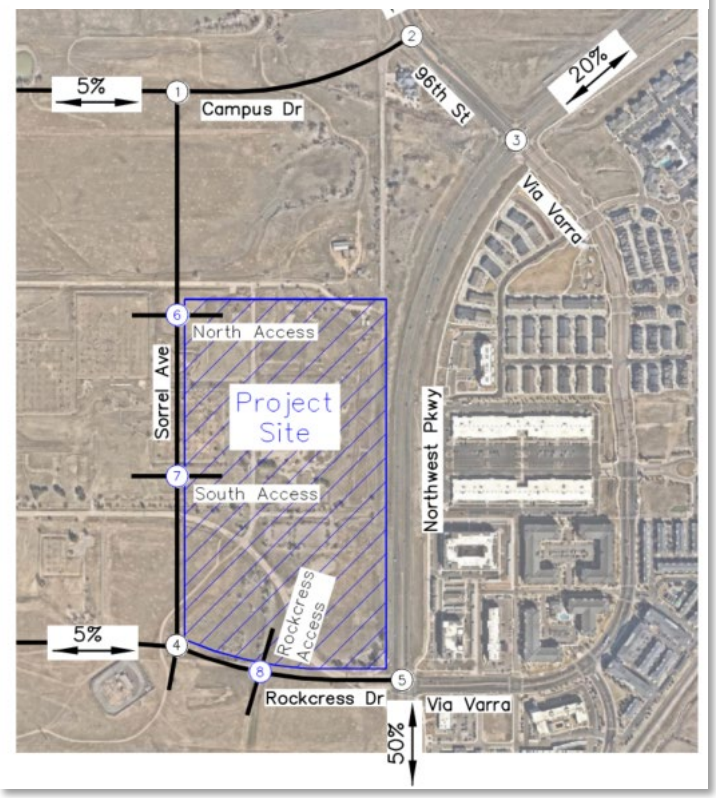
At the time of the drafting of the 2013 Comprehensive Plan, the City anticipated that ConocoPhillips would develop a research campus at what is now Redtail Ridge. The policies within the Comprehensive Plan reflect this anticipated development. The Comprehensive Plan notes that within Rural special districts building heights may exceed three stories if structures are clustered, located outside of the public view shed, and buffered by surrounding topography and open space. The Preliminary PUD approved for the ConocoPhillps Campus included building heights up to 95’ in one subarea, and 65’ in several other subareas of that plan.

Staff finds that the proposed building heights that exceed three stories for the Hospital Parcel would be consistent with these policies. The Redtail Ridge final plat created a significant open space buffer along the north and west sides of the development, resulting in a clustering of the development on the south and east sides of the development. There is a large open space parcel located in Broomfield between US 36 and the Hospital Parcel that will buffer the development from the south. The building massing standards established on the GDP amendment will also help to ensure the additional heights are appropriately designed to ensure the taller building masses are further buffered from public view.

Traffic Study

The applicant submitted a traffic study that addresses the change in development allocations between the two GDP areas and analyzes the overall impact of the increased development area within the Hospital Parcel at Redtail Ridge (see Attachment No. 6). The trip distribution for the Hospital Parcel is expected to include 50% of trips to/from US 36/NW Parkway south, 20% of trips to/from NW Parkway north, 20% of trips to/from 96th Street, 5% of trips to/from Campus Drive, and 5% of trips to/from Rockcress Drive. The study also shows three access points to the Hospital Parcel, one from Rockcress Drive and one from Sorrel Avenue.

Figure 11: Traffic Study Trip Distributions



With the relocation of the hospital campus from its 88th Street location, and with a larger planned hospital campus at Redtail Ridge, the traffic study estimates an additional 658 weekday trips, with 47 more trips during the morning peak hour and 61 more trips during the afternoon peak hour.

The traffic study includes recommended transportation improvements that would supplement the transportation infrastructure currently being constructed as part of the Redtail Ridge development (pp 3-5 of study). The study concludes that, with the recommended improvements, that traffic will operate acceptable through the long-term study horizon. Staff recommends a condition that the applicant provide an updated traffic study with future PUD applications and that the necessary transportation infrastructure and development agreements to complete the improvements be addressed at the time of PUD approvals.

Wastewater Facilities Analysis

Part of the Redtail Ridge development is the construction of a sewer lift station within the development and the necessary infrastructure to distribute the effluent to the City's wastewater treatment plant. As part of this application, staff requested an analysis to demonstrate that the current infrastructure plans will accommodate the additional development that the GDP amendments would allow within the Redtail Ridge development (see Attachment 9). The City's Public Works department has reviewed the analysis and

finds that current plans for the lift station and wastewater infrastructure are adequate to accommodate the planned development.

PUBLIC COMMENTS:
See Attachment No. 17 for public comments received prior to publication of this report.

2025 COUNCIL WORK PLAN:
This item is not on the 2025 City Council Workplan.

FISCAL IMPACT:
Budgeted?: **Not Applicable**

ALTERNATIVE(S):
The following are potential alternatives for consideration:

- Approve the Ordinances for each GDP on first reading and set the public hearing for second reading.
- Not approve the Ordinances.

RECOMMENDATIONS:
OSAB Recommendation:
The Open Space Advisory Board (OSAB) held a public hearing on September 24, 2025 to review the proposal for public land dedication and voted unanimously to recommend approval (see Attachment Nos. 12 and 13 for draft minutes and resolution). OSAB also added the following additional recommendation to the approval resolution.

> *The Board further recommends that prior to the City Council hearing that the applicant meets with City staff to explore if additional areas of Parcel DD, designated as a High Priority by OSAB as shown on the 2023 Priority Acquisition Map, may be considered for dedication, that the applicant consider allowing designation of the property as Open Space – Protected Land, and consider if a trail alignment could be allowed through the designated parcel at a future date.*

The additional recommendation does not include any conditions that would need to be met prior to the City Council hearing and is intended to encourage further discussions on allowing a potential future public trail through the dedicated open space and to provide additional dedication area within Parcel DD.

Planning Commission Recommendation:
The Planning Commission held a public hearing on September 25, 2025 to review the proposed GDP amendments and voted unanimously to recommend approval (see Attachment Nos. 14, 15 and 16 for draft minutes and resolutions). The meeting video can be viewed at the following link:

Link: Meeting Video (0:7:45 to 1:40:15)

The Planning Commission also unanimously approved a separate motion that matched OSAB's recommendation to City Council regarding allowing trail access through the open space dedication parcel.

> *The Planning Commission recommends that prior to the City Council hearing that the applicant meets with City staff to explore if additional areas of Parcel DD, designated as a High Priority by OSAB as shown on the 2023 Priority Acquisition Map, may be considered for dedication, that the applicant consider allowing designation of the property as Open Space – Protected Land, and consider if a trail alignment could be allowed through the designated parcel at a future date.*

Staff Recommendation:
Staff recommends approval of Ordinance No. 1904 with the following condition:

- Future Planned Unit Development applications for Lot 1, Block 2 of Redtail Ridge Filing No. 1 shall include a traffic study and a development agreement requiring the construction by the applicant of any transportation infrastructure needed to accommodate the development.

Staff recommends approval of Ordinance No. 1905.

ATTACHMENT(S):

1. Ordinance No. 1904, Series 2025
2. Ordinance No. 1905, Series 2025
3. Application Forms
4. Proposed Avista Adventist Hospital GDP, Amendment No. 2
5. Proposed ConocoPhillips Campus GDP, Amendment No. 1
6. July 2025 AdventHealth Louisville Traffic Study
7. ConocoPhillips Campus GDP Amendment Massing Study
8. Draft Land Dedication Agreement (to be approved by Council at a later date)
9. Wastewater Analysis
10. 2002 PorterCare Adventist Health System Annexation Agreement
11. 2023 Candidate Open Space Ranking map
12. Draft OSAB Meeting Minutes
13. OSAB Resolution 1, Series 2025, Recommending Approval of the Open Space Dedication as Part of the Adventists Hospital General Development Plan, Amendment No. 2
14. Draft Planning Commission Minutes
15. Planning Commission Resolution 12, Series 2025, Recommending Approval of the Avista Adventists Hospital General Development Plan, Amendment No. 2
16. Planning Commission Resolution 13, Series 2025, Recommending Approval of ConocoPhillips Campus GDP, Amendment No. 1

17. Public Comments
18. Staff Presentation

ORDINANCE NO. 1904
SERIES 2025

AN ORDINANCE APPROVING THE CONOCO PHILLIPS CAMPUS GDP, AMENDMENT NO. 1

WHEREAS, the City of Louisville (the "City"), is a Colorado home rule municipal corporation duly organized and existing under laws of the State of Colorado and the City of Louisville Home Rule Charter (the "City Charter"); and

WHEREAS, the ConocoPhillips Campus GDP is the former location of the StorageTek Corporation, which established its original campus on 310 acres in unincorporated Boulder County, and was annexed to the City in 1978; and

WHEREAS, in 2009, an additional 80 acres of adjacent land was annexed to the City and in 2010 the entire property was rezoned to Planned Community Zone District – Commercial (PCZD-C) and the ConocoPhillips Campus GDP was approved; and

WHEREAS, the City has received an application to amend the ConocoPhillips Campus GDP, as it pertains to Lot 1, Block 2, Redtail Ridge Filing No. 1 subdivision, labeled as the "Hospital Parcel" on the proposed GDP amendment ("Amendment No. 1"), which would increase the total allowed development area, clarify allowed commercial uses, and establish building height and massing standards; and

WHEREAS, in connection with Amendment No. 1, the applicant has proposed dedication of an approximately 7.5-acre parcel for open space (Lot B), which dedication area covers approximately half of a 15-acre parcel listed on the Open Space Advisory Board's 2023 Candidate Open Space Ranking map as a *High Priority*; and

WHEREAS, after a duly noticed public hearing held September 25, 2025, at which evidence and testimony were entered into the record, including the Louisville Planning Commission Staff Report dated September 11, 2025, the Louisville Planning Commission has forwarded a recommendation to the City Council to conditionally approve Amendment No. 1; and

WHEREAS, City Council has provided notice of a public hearing on said ordinance by publication as provided by law and held a public hearing as provided in said notice; and

WHEREAS, The City Council finds Amendment No.1 is consistent with the requirements of the Planned Community Zone District chapter of the Louisville Municipal Code; the criteria, requirements, and provisions of other applicable sections of the Louisville Municipal Code; and the principles and polices of the City of Louisville 2013 Comprehensive Plan, The South Boulder Road Small Area Plan, and the City of Louisville Housing Plan.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the ConocoPhillips Campus General Development Plan, Amendment No. 1 ("Amendment No.1"), subject to the following conditions:

A. Future Planned Unit Development applications for Lot 1, Block 2 of Redtail Ridge Filing No. 1 shall include a traffic study and a development agreement requiring the construction by the applicant of any transportation infrastructure needed to accommodate the development.

B. Execution by the City and the applicant of a Land Dedication Agreement for the 7.5-acre parcel for open space (Lot B).

Section 2. Amendment No. 1 shall be recorded in the Offices of the Boulder County Clerk and Recorder.

INTRODUCED, READ, PASSED ON FIRST READING AND ORDERED PUBLISHED this 7th day of October 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

PUBLIC HEARING AND SECOND READING WILL BE THE 21ST DAY OF OCTOBER, 2025, AT 6:00 P.M. AT LOUISVILLE CITY HALL, 749 MAIN STREET, LOUISVILLE, CO 80027.

PASSED AND ADOPTED ON SECOND AND FINAL READING, this __ day of _____, 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

APPROVED AS TO FORM:
Kelly PC, City Attorney

_____
Kathleen M. Kelly

ORDINANCE NO. 1905
SERIES 2025

AN ORDINANCE APPROVING THE AVISTA ADVENTIST HOSPITAL GDP, AMENDMENT NO. 2

WHEREAS, the City of Louisville (the "City"), is a Colorado home rule municipal corporation duly organized and existing under laws of the State of Colorado and the City of Louisville Home Rule Charter (the "City Charter"); and

WHEREAS, the original Avista Adventist Hospital campus was annexed to the City in 1986 and zoned Agriculture, then platted and developed as the Centennial Health Park, starting in 1987; and

WHEREAS, in 1998, a portion of the subject property was rezoned to Planned Community Zone District – Commercial (PCZD-C) under the name Avista Hospital General Development Plan, and in 2022 an additional 13-acre parcel on the north side of the property was annexed, zoned PCZD-C, and incorporated into the Avista Hospital GDP Area as Avista Adventist Hospital General Development Plan Amendment No. 1; and

WHEREAS, the City has received an application to further amend the GDP ("Amendment No. 2") to revise the maximum allowed development area, revise setback standards and other associated development notes, and provide for dedication of an approximately 7.5-acre parcel for open space; and

WHEREAS, after a duly noticed public hearing held September 24, 2025, at which evidence and testimony were entered into the record, the Open Space Advisory Board recommend the City Council approve the proposed public use dedication of approximately 7.5 acres to be designated Open Space as part of the Avista Adventist Hospital General Development Plan, Amendment No. 2; and

WHEREAS, after a duly noticed public hearing held September 25, 2025, at which evidence and testimony were entered into the record, including the Louisville Planning Commission Staff Report dated September 11, 2025, the Louisville Planning Commission has forwarded a recommendation to the City Council to approve Amendment No. 2; and

WHEREAS, City Council has provided notice of a public hearing on said ordinance by publication as provided by law and held a public hearing as provided in said notice; and

WHEREAS, The City Council finds Amendment No. 2 is consistent with the requirements of the Planned Community Zone District chapter of the Louisville Municipal Code; the criteria, requirements, and provisions of other applicable sections of the Louisville Municipal Code; and the principles and polices of the City of Louisville 2013 Comprehensive Plan, The South Boulder Road Small Area Plan, and the City of Louisville Housing Plan.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Avista Adventist Hospital General Development Plan, Amendment No. 2 ("Amendment No. 2").

Section 2. Amendment No. 2 shall be recorded in the Offices of the Boulder County Clerk and Recorder.

INTRODUCED, READ, PASSED ON FIRST READING AND ORDERED PUBLISHED this 7th day of October 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

PUBLIC HEARING AND SECOND READING WILL BE THE 21ST DAY OF OCTOBER, 2025, AT 6:00 P.M. AT LOUISVILLE CITY HALL, 749 MAIN STREET, LOUISVILLE, CO 80027.

PASSED AND ADOPTED ON SECOND AND FINAL READING, this __ day of _____, 2025.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

APPROVED AS TO FORM:
Kelly PC, City Attorney

_____
Kathleen M. Kelly

Docusign Envelope ID: 9BE5AC06-3394-4F53-9731-BB764E59341B

City of Louisville
COLORADO • SINCE 1878

Community Development Department

749 Main Street • Louisville CO 80027 • 303.335.4592 • www.louisvilleco.gov

Development Review Application Form

Please complete this form and include it with the submittal documents for your development review application. Applications will not be processed until all required information is provided to the satisfaction of the City of Louisville Planning Department.

Property Information

Common Address(es): 100 Health Park Dr, Louisville, CO 80027

Legal Description:

Lot Tract A, Lot 1 - 7 Block _____ Subdivision Health Park Subdivision Filing No. 6

Lot Area: _____ Sq. Ft. or ~66 Total Acres

LAND USE PROCESS (check all that apply)

- ☐ Annexation
- ☐ Concept Plan
- ☐ Easement Vacation
- ☐ Oil and Gas
- ■ General Development Plan (GDP)
  - ■ Amendment
  - ☐ New GDP
- ☐ Planned Unit Development (PUD)
  - ☐ Amendment
  - ☐ Preliminary
  - ☐ New PUD
- ☐ Rezoning
- ☐ Special Review Use (SRU)
  - ☐ Amendment
  - ☐ New SRU
- ☐ Subdivision
  - ☐ Final or Replat
  - ☐ Preliminary Plat
- ☐ Temporary Use Permit
- ☐ Variance
- ☐ Vested Property Right
- ☐ Wireless Facility
- ☐ Other: _____

PROJECT DESCRIPTION:

Amendment to the Avista Adventist Hospital 2002 GDP to reduce the allowable square footage and transfer said square footage to the ConocoPhillips Campus GDP. This density transfer is necessary to support the new AdventHealth Louisville Hospital Campus located on the east side of the Redtail Ridge Subdivision.

In addition to the reduction in build-able square footage, graphical updates to the plan to better align the planning areas to the platted and PUD boundaries is included with this amendment.

Property Owner Information

Name: David Nelson Entity (if applicable) Portercare Adventist Health System

Address: 6061 S. Willow Drive, Suite 210, Greenwood Village, CO 80112

Phone: _____ Email: david.nelson@adventhealth.com

Application Representative Information

Name: Valerie Wilkins Entity (if applicable) Adams Management Services

Address: 336 Broad Street, Suite 300, Rome, GA 30161

Phone: 720.799.3041 Email: vwilkins@adamspmc.com

Certification/Signature

I certify that the information I have submitted is true and correct to the best of my knowledge and in filing the application and submittal documents, I am acting as and/or with the knowledge and consent of those persons who are owners of the subject property or are parties to this application.

Signed by: David Nelson
F0FE21EEBCEC490...

Signature* | David Nelson Print Name | 5/2/2025 Date

***If acting as a representative/agent of the owner, include written authorization from the owner that certifies the agent's right to submit this application**

Docusign Envelope ID: 9BE5AC06-3394-4F53-9731-BB764E59341B

City of Louisville
COLORADO • SINCE 1878

Community Development Department

749 Main Street • Louisville CO 80027 • 303.335.4592 • www.louisvilleco.gov

Development Review Application Form

Please complete this form and include it with the submittal documents for your development review application. Applications will not be processed until all required information is provided to the satisfaction of the City of Louisville Planning Department.

Property Information

Common Address(es): TBD

Legal Description:

Lot 1 Block 2 Subdivision Redtail Ridge Filing No. 1

Lot Area: _____ Sq. Ft. or 40 Acres

LAND USE PROCESS (check all that apply)

- ☐ Annexation
- ☐ Concept Plan
- ☐ Easement Vacation
- ☐ Oil and Gas
- ☐ General Development Plan (GDP)
  - ☐ Amendment
  - ☐ New GDP
- ☐ Planned Unit Development (PUD)
  - ☐ Amendment
  - ☐ Preliminary
  - ☐ New PUD
- ☐ Rezoning
- ☐ Special Review Use (SRU)
  - ☐ Amendment
  - ☐ New SRU
- ☐ Subdivision
  - ☐ Final or Replat
  - ☐ Preliminary Plat
- ☐ Temporary Use Permit
- ☐ Variance
- ☐ Vested Property Right
- ☐ Wireless Facility
- ☐ Other: _____

PROJECT DESCRIPTION:

Amendment to the ConocoPhillips Campus GDP is being requested to support the new AdventHealth Louisville Hospital Campus located on the east side of the Retail Ridge Subdivision. Amendments to the GDP consist of the following:
-Identify and include the allowable square footage transfer from the Avista Adventist Hospital 2002 GDP.
-Adjust Floor Area Ratio for hospital parcel to reflect density transfer from Avista Adventist Hospital 2002 GDP.
-Addition of hospital and medical office building uses to the "Permitted Uses" for better clarity on specific uses.
-Increase in the allowable height for the hospital parcel only.

Property Owner Information

Name: David Nelson Entity (if applicable) Portercare Adventist Health System

Address: 6061 S. Willow Drive, Suite 210, Greenwood Village, CO 80112

Phone: _____ Email: david.nelson@adventhealth.com

Application Representative Information

Name: Valerie Wilkins Entity (if applicable) Adams Management Services

Address: 336 Broad Street, Suite 300, Rome, GA 30161

Phone: 720.799.3041 Email: vwilkins@adamspmc.com

Certification/Signature

I certify that the information I have submitted is true and correct to the best of my knowledge and in filing the application and submittal documents, I am acting as and/or with the knowledge and consent of those persons who are owners of the subject property or are parties to this application.

Signed by:
David Nelson
F0EE21EEBCEC490...

Signature* | David Nelson Print Name | 5/2/2025 Date

***If acting as a representative/agent of the owner, include written authorization from the owner that certifies the agent's right to submit this application**

AVISTA ADVENTIST HOSPITAL
GENERAL DEVELOPMENT PLAN
AMENDMENT NO. 2

AMENDMENT CHANGES

1) Updated planning areas to better align with the platted boundaries based on the Health Park Subdivision Filling 6 Final Plat

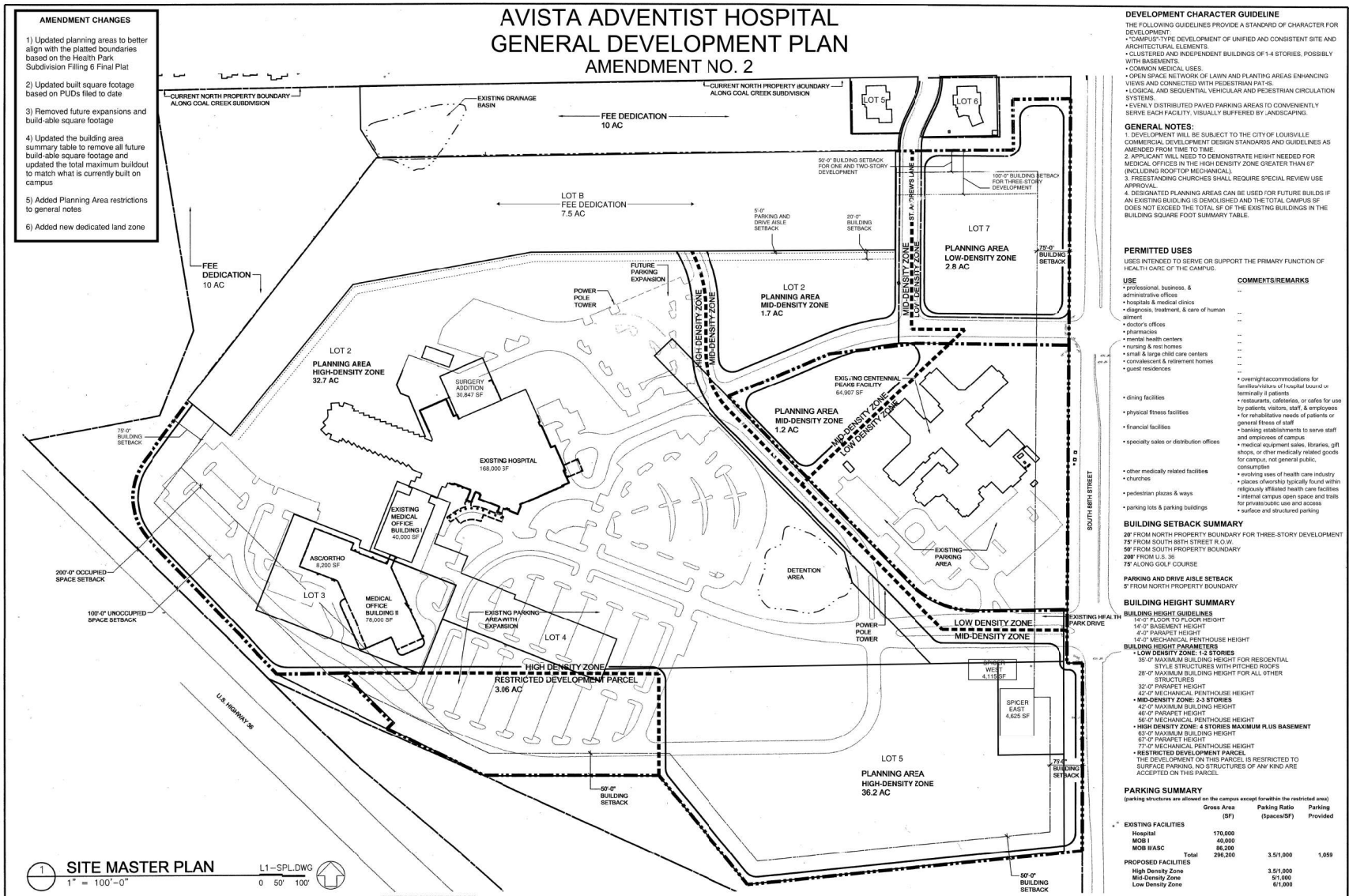
2) Updated built square footage based on PUDs filed to date

3) Removed future expansions and build-able square footage

4) Updated the building area summary table to remove all future build-able square footage and updated the total maximum buildout to match what is currently built on campus

5) Added Planning Area restrictions to general notes

6) Added new dedicated land zone



1 SITE MASTER PLAN L1-SPL.DWG
1" = 100'-0" 0 50' 100'

CITY COUNCIL CERTIFICATE
APPROVED THIS ___ DAY OF _____, 20___ BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO.
RESOLUTION NO. ____; SERIES ____

CITY CLERK

MAYOR

PLANNING COMMISSION CERTIFICATE
APPROVED THIS ___ DAY OF _____, 20___ BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, COLORADO.
RESOLUTION NO. ____; SERIES ____

OWNERSHIP SIGNATURE BLOCK
BY SIGNING THIS GDP, THE OWNER ACKNOWLEDGES AND ACCEPTS ALL THE REQUIREMENTS AND INTENT SET FORTH BY THIS GDP.

WITNESS OUR HANDS AND SEALS THIS ___ DAY OF _____, 20___.

OWNER
PORTERCARE ADVENTIST HEALTH SYSTEM, A COLORADO NONPROFIT CORPORATION

BY: _____
TREASURER

NOTARY

RECEPTION NUMBER

LOT B SHALL BE DEDICATED TO THE CITY OF LOUISVILLE AS OPEN SPACE IN ACCORDANCE WITH THE [INSERT AGREEMENT NAME AND DATE] RECORDED WITH THE BOULDER COUNTY CLERK AND RECORDER UNDER RECEPTION NUMBER [INSERT RECEPTION NUMBER]. THE OPEN SPACE SHALL BE MANAGED AS OPEN SPACE-PRESERVED LAND AS DEFINED UNDER CITY CHARTER, AND NO TRAILS, TRAIL HEADS, OR OTHER AMENITIES SHALL BE ALLOWED ON THE PARCEL.

DEVELOPMENT CHARACTER GUIDELINE

THE FOLLOWING GUIDELINES PROVIDE A STANDARD OF CHARACTER FOR DEVELOPMENT:
- "CAMPUS"-TYPE DEVELOPMENT OF UNIFIED AND CONSISTENT SITE AND ARCHITECTURAL ELEMENTS.
- CLUSTERED AND INDEPENDENT BUILDINGS OF 1-4 STORIES, POSSIBLY WITH BASEMENTS.
- COMMON MEDICAL USES.
- OPEN SPACE NETWORK OF LAWN AND PLANTING AREAS ENHANCING VIEWS AND CONNECTED WITH PEDESTRIAN PATHS.
- LOGICAL AND SEQUENTIAL VEHICULAR AND PEDESTRIAN CIRCULATION SYSTEMS.
- EVENLY DISTRIBUTED PAVED PARKING AREAS TO CONVENIENTLY SERVE EACH FACILITY, VISUALLY BUFFERED BY LANDSCAPING.

GENERAL NOTES:

1. DEVELOPMENT WILL BE SUBJECT TO THE CITY OF LOUISVILLE COMMERCIAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES AS AMENDED FROM TIME TO TIME.
2. APPLICANT WILL NEED TO DEMONSTRATE HEIGHT NEEDED FOR MEDICAL OFFICES IN THE HIGH DENSITY ZONE GREATER THAN 67' (INCLUDING ROOFTOP MECHANICAL).
3. FREESTANDING CHURCHES SHALL REQUIRE SPECIAL REVIEW USE APPROVAL.
4. DESIGNATED PLANNING AREAS CAN BE USED FOR FUTURE BUILDS IF AN EXISTING BUILDING IS DEMOLISHED AND THE TOTAL CAMPUS SF DOES NOT EXCEED THE TOTAL SF OF THE EXISTING BUILDINGS IN THE BUILDING SQUARE FOOT SUMMARY TABLE.

PERMITTED USES

USES INTENDED TO SERVE OR SUPPORT THE PRIMARY FUNCTION OF HEALTH CARE OF THE CAMPUS.

USE	COMMENTS/REMARKS
• professional, business, & administrative offices	--
• hospitals & medical clinics	--
• diagnosis, treatment, & care of human ailment	--
• doctor's offices	--
• pharmacies	--
• mental health centers	--
• nursing & resi homes	--
• small & large child care centers	--
• convalescent & retirement homes	--
• guest residences	--
• dining facilities	• overnight accommodations for families/visitors of hospital bound or terminally ill patients • restaurants, cafeteries, or cafes for use by patients, visitors, staff, & employees
• physical fitness facilities	• for rehabilitative needs of patients or general fitness of staff
• financial facilities	• banking establishments to serve staff and employees of campus
• specialty sales or distribution offices	• medical equipment sales, libraries, gift shops, or other medically related goods for campus, not general public, consumption
• other medically related facilities	• evolving ses of health care industry
• churches	• places of worship typically found within religiously affiliated health care facilities
• pedestrian plazas & ways	• internal campus open space and trails for private/public use and access
• parking lots & parking buildings	• surface and structured parking

BUILDING SETBACK SUMMARY

20' FROM NORTH PROPERTY BOUNDARY FOR THREE-STORY DEVELOPMENT
75' FROM SOUTH 88TH STREET R.O.W.
50' FROM SOUTH PROPERTY BOUNDARY
200' FROM U.S. 36
75' ALONG GOLF COURSE

PARKING AND DRIVE AISLE SETBACK
5' FROM NORTH PROPERTY BOUNDARY

BUILDING HEIGHT SUMMARY

BUILDING HEIGHT GUIDELINES
14'-0" FLOOR TO FLOOR HEIGHT
14'-0" BASEMENT HEIGHT
4'-0" PARAPET HEIGHT
14'-0" MECHANICAL PENTHOUSE HEIGHT

BUILDING HEIGHT PARAMETERS
- **LOW DENSITY ZONE: 1-2 STORIES**
  - 35'-0" MAXIMUM BUILDING HEIGHT FOR RESIDENTIAL STYLE STRUCTURES WITH PITCHED ROOFS
  - 28'-0" MAXIMUM BUILDING HEIGHT FOR ALL OTHER STRUCTURES
  - 32'-0" PARAPET HEIGHT
  - 42'-0" MECHANICAL PENTHOUSE HEIGHT
- **MID-DENSITY ZONE: 2-3 STORIES**
  - 42'-0" MAXIMUM BUILDING HEIGHT
  - 46'-0" PARAPET HEIGHT
  - 56'-0" MECHANICAL PENTHOUSE HEIGHT
- **HIGH DENSITY ZONE: 4 STORIES MAXIMUM PLUS BASEMENT**
  - 63'-0" MAXIMUM BUILDING HEIGHT
  - 67'-0" PARAPET HEIGHT
  - 77'-0" MECHANICAL PENTHOUSE HEIGHT
- **RESTRICTED DEVELOPMENT PARCEL**
  - THE DEVELOPMENT ON THIS PARCEL IS RESTRICTED TO SURFACE PARKING. NO STRUCTURES OF ANY KIND ARE ACCEPTED ON THIS PARCEL

PARKING SUMMARY

(parking structures are allowed on the campus except forwithin the restricted area)

	Gross Area (SF)	Parking Ratio (Spaces/SF)	Parking Provided
EXISTING FACILITIES			
Hospital	170,000		
MOB I	40,000		
MOB II/ASC	86,200		
Total	296,200	3.5/1,000	1,059
PROPOSED FACILITIES			
High Density Zone		3.5/1,000	
Mid-Density Zone		5/1,000	
Low Density Zone		6/1,000	

SITE INFORMATION

TOTAL ACREAGE
63.14 acres (2,750,378 SF)

ZONING:
EXISTING FACILITIES: PCZD-C
PROPOSED FACILITIES: PCZD-C

BUILDING AREA SUMMARY

EXISTING FACILITIES:		
Avista Hospital		198,847 SF
MOB I		40,000 SF
MOB II/ASC		86,200 SF
Centennial Peaks facility		64,907 SF
Spicer Residences	east -	4,625 SF
	west-	4,115 SF
subtotal		398,694 SF
FUTURE PHASES:		
Planning Areas (Buildable SF)		0 SF
Total Maximum Buildout		398,694 SF

SMITHGROUP
1675 LOGAN ST.
SUITE 500
DENVER, COLORADO 80202
303.832.3272
smithgroup.com

Kimley»Horn
1125 17TH ST
SUITE 1400
DENVER, CO 80202
303.228.2300
kimley-horn.com

ISSUE/REVISION	DATE	NO.
GDP CITY RESPONSE #1 R1	8/21/2025	
GDP CITY RESPONSE #1	7/18/2025	
GDP AMENDMENT	6/2/2025	

AVISTA ADVENTIST HOSPITAL

100 HEALTH PARK DR. LOUISVILLE, CO

CENTURA HEALTH

GENERAL DEVELOPMENT PLAN AMENDMENT NO. 2

DRAWN BY	TEAM
CHK'D BY	TEAM
SHEET FILE	

SHEET NUMBER:
1 OF 1

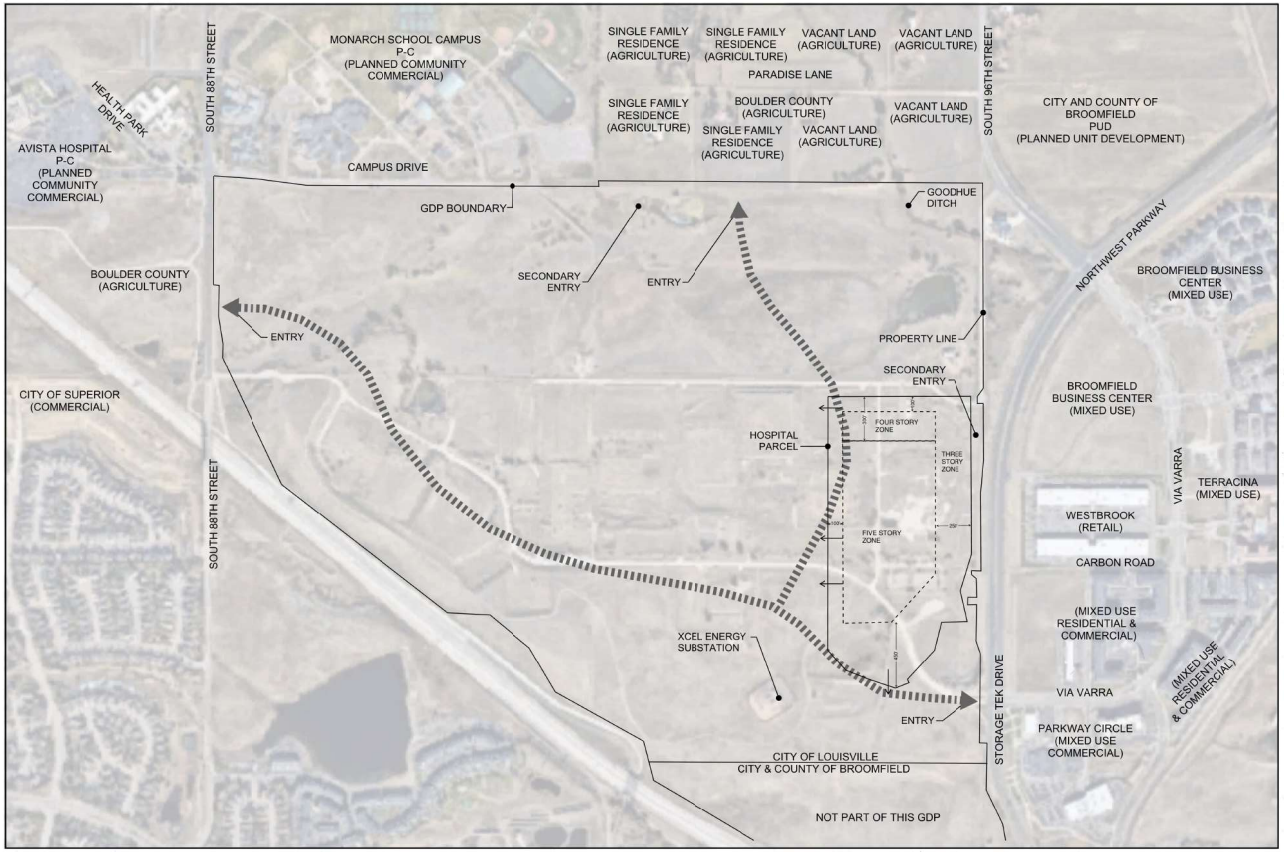
CONOCOPHILLIPS CAMPUS
GENERAL DEVELOPMENT PLAN AMENDMENT 1

A PART OF THE SOUTH HALF OF SECTION 20, THE NORTH HALF SECTION 29,
TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M.
SHEET 1 OF 1

AMENDMENT CHANGES

THE PURPOSE OF THIS AMENDMENT IS SPECIFICALLY FOR THE HOSPITAL PARCEL AND THE REST OF THE REDTAIL DEVELOPMENT REMAINS UNCHANGED.

1)Additional note for the allowable square footage transfer from the Avista Adventist Hospital 2002 GDP.
2)Addition of hospital and medical office building uses to the "Permitted Uses" for better clarity on specific uses.
3)Updated yard and bulk requirements to include the allowable height for the hospital parcel only.
4)Updated aerial graphic
5)Added Hospital Parcel and density zoning to graphic
6) Added Hospital Parcel building massing design parameters



GENERAL DEVELOPMENT PLAN

400 200 0 400 800

SCALE: 1" = 400'

RECEPTION NUMBER

CERTIFICATIONS/SIGNATURE BLCCKS

CITY COUNCIL CERTIFICATION:

APPROVED THIS _____ DAY OF _____, 20___ BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO.

RESOLUTION NO. _____, SERIES _____

_____
MAYOR SIGNATURE

PLANNING COMMISSION CERTIFICATION:

APPROVED THIS _____ DAY OF _____, 20___ BY THE PLANNING COMMISSION OF THE CITY OF LOUISVILLE, COLORADO.

RESOLUTION NO. _____, SERIES _____.

OWNERSHIP SIGNATURE BLOCK:

BY SIGNING THIS GDP, THE OWNER ACKNOWLEDGES AND ACCEPTS ALL THE REQUIREMENTS AND INTENT SET FORTH IN THIS GDP. WITNESS OU" HANDS AND SEALS

THIS ___ DAY OF _____, 20____.

OWNER
PORTERCARE ADVENTIST HEALTH SYSTEM,
A COLORADO NONPROFIT CORPORATION

_____ _____
BY: SIGNATURE TITLE

_____
NOTARY NAME AND SIGNATURE

MY COMMISSION EXPIRES _____

GENERAL NOTES:

1. DEVELOPMENT SHALL CONFORM AND BE CONSISTENT WITH THE LOUISVILLE MUNICIPAL CODE AND THE COMMERICAL DEVELOPMENT DESIGN STANDARDS AND GUIDELINES UNLESS OTHERWISE WAIVED OR MODIFIED BY THE CITY COUNCIL THROUGH THE PUD DEVELOPMENT PLAN PROCESS.
2. THE CAMPUS SECURITY BOUNDARY WILL NOT EXTEND OUTSIDE THE SITE BOUNDARY.
3. TRAFFIC CIRCULATION PATERNS DEPICTED WITHIN AND ACROSS LOT A REPRESENT INTERNAL PRIVATE DRIVES AND ARE CONCEPTUAL ONLY AND SUBJECT TO MODIFICATION.
4. EXISTING FREE STANDING SIGNS FACITIES WITHIN LOT A SHALL CONSITUTE A PERMISSIBLE NON-CONFORMING USE.
5. PUBLIC LAND DEDICATION OF AT LEAST 12% WILL COMPLY WITH SECTION 16.16.060.B OF THE LOUISVILLE MUNICIPAL CODE.

SITE INFORMATION

GROSS DEVELOPABLE AREA (PID BOUNDARY):	391.719 ACRES (MAXIMUM 0.15 F.A.R.) * FOR LEGAL DESCRIPTION SEE EXHIBIT A OF DRAWING NO. TWA-584823-2010
ZONING:	PLANNED COMMUNITY ZONED DISTRICT (PCZD) - COMMERCIAL WITH PUD-COVERLAY
PLANNED ACCESS:	NORTHWEST PARKWAY, CAMPUS DRIVE, SOUTH 88TH STREET

* THE F.A.R APPLIES TO THE GROSS AREA OF THE ENTIRE DEVELOPMENT AND IS NOT PARCEL-SPECIFIC. THIS GDP ACKNOWLEDGES AN ADDITIONAL 364,400 SF ALLOCATED TO THE HOSPITAL PARCEL ON TOP OF THE ALLOCATED DEVELOPMENT SQUARE FOOTAGE.THE 364,400 SF IS IN CONSIDERATION WITH A DENSITY SWAP FROM HEALTH PARK 1.

PERMITTED USES

PERMITTED USE	COMMENTS / REMARKS	PARKING REQUIREMENTS
PROFESSIONAL, BUSINESS, AND ADMINISTRATIVE OFFICES	-	4 / 1,000 S.F.
EDUCATIONAL AND TRAINING FACILITIES	MEETING ROOMS AND SOCIAL SPACE FOR EMPLOYEES AND VISITORS	0.5/ 1,000 S.F.
PRIVATE SHORT TERM LODGING FOR CONOCOPHILLIPS EMPLOYEES AND GUESTS	OVERNIGHT ACCOMMODATIONS FOR EMPLOYEES/VISITORS	0.5 / ROOM
PEDESTRIAN PLAZAS AND PEDESTRIAN WAYS	-	-
PRIVATE, NONCOMMERCIAL, RECREATIONAL AND SOCIAL FACILITIES	-	1 / 1,000 S.F.
PARKING LOTS AND PARKING BUILDINGS	SURFACE AND STRUCTURED PARKING	-
CAMPUS ORIENTED CHILDCARE CENTER	PRIVATE CHILDCARE FOR EMPLOYEES	1.5 SPACES PER TEACHER PLUS ONE SPACE PER ADMINISTRATIVE EMPLOYEE
RESEARCH/OFFICE AND CORPORATE USES AND FACILITIES FOR THE RESEARCH, DEVELOPMENT, MANUFACTURING, FABRICATION PROCESSING, OR ASSEMBLY OF SCIENTIFIC OR TECHNICAL PRODUCTS, OR OTHER PRODUCTS	-	1.25 / 1,000 S.F.
BUILDING MOUNTED CMRS FACILITIES	-	-
CAMPUS ORIENTED FOOD SERVICE	RESTAURANTS, CAFETERIAS, OR CAFES FOR USE BY EMPLOYEES/VISITORS INTEGRATED THROUGHOUT THE CAMPUS	-
COMMERCIAL USES, INCLUDING BUT NOT LIMITED TO BUILDING CONTRACTOR'S EQUIPMENT YARDS, TRANSPORTATION CENTERS AND SERVICES, WAREHOUSES AND STORAGE FACILITIES	STORAGE OF MATERIALS IN SUPPORT OF THE CAMPUS RESEARCH AND DEVELOPMENT FACILITY, HELIPAD (SPECIAL REVIEW USE), HOSPITAL, MEDICAL OFFICE BUILDINGS	1 / 1,000 S.F.
PRIVATE UTILITY USES	TO ALLOW THE EXISTING SANITARY LIFT STATION, POTENTIAL SUBSURFACE GEO EXCHANGE FIELD, SOLAR PANELS, BUILDING MOUNTED WIND POWERED ELECTRICAL GENERATION FACILITIES, AND CENTRAL MECHANICAL, ELECTRICAL, AND PLUMBING FACILITY	-
OTHER USES AS ESTABLISHED BY THE CITY COUNCIL AS FOUND TO BE SPECIFICALLY COMPATIBLE FOR COMMERCIAL AND OFFICE PLANNING AREAS	-	-

YARD AND BULK REQUIREMENTS

1. OTHER THAN FOR THE HOSFITAL PARCEL, MAXIMUM BUILDING HEIGHTS SHALL BE BASED ON THE CONOCOPHLIPS CAMPUS GDP (RECEPTION NO. 0308879). STNDARDS FOR THE HOSPITAL PARCEL ARE NOTED BELOW.

MINIMUM BUILDING SETBACKS
(FOR BUILDING FOOTPRINTSLESS THAN OR EQUAL TO 30,000 GROSS SQUARE FEET)

STREET R.O.W. LINE:
ARTERIAL STREET 30 FT.
COLLECTOR STREET 20 FT.
INTERNAL/PRIVATE DRIVE 10 FT.

(FOR BUILDING FOOTPRINTSGREATER THAN OR EQUAL TO 30,000 GROSS SQUARE FEET)

STREET R.O.W. LINE:
ARTERIAL STREET 50 FT.
COLLECTOR STREET 40 FT.
INTERNAL/PRIVATE DRIVE 10 FT.

MINIMUM PARKING SETBACKS
(FROM ALL PERIMETER PROPERTY LINE OR RIGHTS-OF-WAYS)

PROPERTY LINES ADJACENT TO U.S. 36 40 FT.
ARTERIAL STREET R.O.W. 25 FT.
COLLECTOR STREET R.O.W. 15 FT.
INTERNAL/COMMON PROPERTY BOUNDARY 10 FT.

HOSPITAL PARCEL
FOR THE HOSPITAL PARCEL (LOT 1, BLOCK 1) BUILDING HEIGHTS ARE EXPECTED TO RANGE FROM THREE TO FIVE OCCUPIABLE STORIES, RANGING IN HEIGHT FROM 50' TO 90'. UNOCCUPIED MECHANICAL SCREENING OF UP TO 20' WOULD BE ABOVE THE 5 STORIES. THE HOSPITAL PARCEL WILL BE ZONED TO SUPPORT LOWER THREE-STORY BUILDING HEIGHTS TOWARDS THE NORTH, EAST, AND WEST PROPERTY BOUNDARIES CONCENTRATING THE 5-STORY STRUCTURES CENTRALLY WITHIN THE SITE. REFER TO THE GRAPHIC FOR PARCEL HEIGHT ZONES.

BUILDING HEIGHT ZONING:
THREE STORY ZONE:
45'-0" MAXIMUM BUILDING HEIGHT
50'-0" PARAPET HEIGHT
65'-0" MECHANICAL PENTHOUSE HEIGHT*

FOUR STORY ZONE:
60'-0" MAXIMUM BUILDING HEIGHT
65'-0" PARAPET HEIGHT
80'-0" MECHANICAL PENTHOUSE HEIGHT*

FIVE STORY ZONE:
85'-0" MAXIMUM BUILDING HEIGHT
90'-0" PARAPET HEIGHT
105'-0" MECHANICAL PENTHOUSE HEIGHT*

*ROOF ACCESS AND ELEVATOR OVERUN IS EXCLUDED FROM THE BUILDING HEIGHT

BUILDING MASSING DESIGN PARAMETERS:
FOR BUILDING FACADES EXCEEDING 100 FEET IN LENGTH AND MORE THAN 45 FT IN HEIGHT, A RELIEF IN THE BUILDING MASSING IS REQUIRED TO REDUCE VISUAL MONOTONY AND ENHANCE ARCHITECTURAL INTEREST
•A MAXIMUM HEIGHT OF 45 FEET IS PERMITTED BEFORE A MINIMUM HORIZONTAL SETBACK OF 15 FEET IS REQUIRED FROM THE PRIMARY BUILDING FACE.
•A PROJECTED RELIEF ELEMENT MAY EXTEND OUTWARD FROM THE MAIN BUILDING MASS BY A MINIMUM OF 2 FEET, PROVIDED IT CONTRIBUTES TO THE OVERALL ARTICULATION AND DESIGN OF THE FACADE.
•THE FOOTPRINT OF EACH FLOOR ABOVE 45 FEET SHALL NOT EXCEED 50% OF THE FOOTPRINT OF THE BUILDING AT OR BELOW 45 FEET.
•ANY ROOFTOP ENCLOSURE (E.G., MECHANICAL PENTHOUSES) MUST BE SET BACK A MINIMUM OF 10 FEET FROM THE EDGE OF THE BUILDING MASS, UNLESS IT IS ARCHITECTURALLY INTEGRATED INTO THE OVERALL DESIGN OF THE BUILDING.
•EXCEPTION: A DEFINING ARCHITECTURAL ELEMENT OR DISTINCT BUILDING FORM WITH A TOTAL WIDTH OF LESS THAN 16 FEET IS EXEMPT FROM THE ABOVE SETBACK AND RELIEF REQUIREMENTS. A MINIMUM 2-FOOT DEPTH VARIATION FROM THE ADJACENT PRIMARY FACADE PLANE MUST STILL BE PROVIDED TO ENSURE VISUAL ARTICULATION.
DEFINING ARCHITECTURAL ELEMENTS MAY INCLUDE, BUT ARE NOT LIMITED TO:
-VERTICAL CIRCULATION TOWERS (E.G., STAIR OR ELEVATOR CORES)
-ENTRY PAVILIONS OR LOBBIES
-ARCHITECTURAL OVERHANGS OR ROOF OVERHANGS
-BRANDED OR SCULPTURAL FACADE FEATURES
-CORNER ELEMENTS OR TURRETS
-ATRIUM VOLUMES OR LIGHT WELLS
-DISTINCTIVE ROOF FORMS

SMITHGROUP
1675 LOGAN ST.
SUITE 500
DENVER, COLORADO 80202
303.832.3272
smithgroup.com

Kimley»Horn
1125 17TH ST
SUITE 1400
DENVER, CO 80202
303.228.2300
kimley-horn.com

ISSUE / REVISION	DATE
GDP CITY RESPONSE #1	7/16/2025
GDP AMENDMENT	5/2/2025

CONOCOPHILLIPS CAMPUS
2270 SO 88TH STREET
LOUISVILLE, CO

GENERAL DEVELOPMENT PLAN

DRAWN	TEAM
CHK	TEAM
PRJ #	

SHEET NUMBER:
1 OF 1

TRAFFIC IMPACT STUDY

AdventHealth Louisville

City of Louisville, Colorado

Prepared for:

SmithGroup

Kimley»Horn

T R A F F I C I M P A C T S T U D Y

AdventHealth Louisville

City of Louisville, Colorado

Prepared for
SmithGroup
1675 Larimer Street
Suite 500
Denver, Colorado 80202

Prepared by
Curtis D. Rowe, PE, PTOE
Kimley-Horn and Associates, Inc
6200 South Syracuse Way
Suite 300
Greenwood Village, Colorado 80111
(303) 228-2300

July 2025

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

TABLE OF CONTENTS

TABLE OF CONTENTS i
LIST OF TABLES ii
LIST OF FIGURES ii
1.0 EXECUTIVE SUMMARY 1
2.0 INTRODUCTION 7
3.0 EXISTING AND FUTURE CONDITIONS 10
3.1 Existing Study Area 10
3.2 Existing and Proposed Roadway Network 10
3.3 Future Traffic Volumes and Unspecified Development Traffic Growth 15
4.0 PROJECT TRAFFIC CHARACTERISTICS 19
4.1 Trip Generation 19
4.2 Trip Distribution 20
4.3 Traffic Assignment 21
4.4 Total (Background Plus Project) Traffic 21
5.0 TRAFFIC OPERATIONS ANALYSIS 28
5.1 Analysis Methodology 28
5.2 Key Intersection Operational Analysis 29
5.3 Vehicle Queuing Analysis 36
5.4 Improvement Summary 38
6.0 CONCLUSIONS AND RECOMMENDATIONS 41

Appendices

Appendix A: Conceptual Site Plan
Appendix B: Fox Tuttle Study Documents
Appendix C: Trip Generation Worksheets
Appendix D: Intersection Analysis Worksheets
Appendix E: Signal Warrant Analysis Worksheet
Appendix F: Queue Analysis Worksheets

LIST OF TABLES

Table 1 – AdventHealth Louisville Traffic Generation 20
Table 2 – Level of Service Definitions 28
Table 3 – Campus Drive & Sorrel Avenue (#1) LOS Results 29
Table 4 – Campus Drive & 96th Street (#2) LOS Results 30
Table 5 – 96th Street/Via Varra & Northwest Parkway (#3) LOS Results 31
Table 6 – Rockcress & Sorrel Avenue (#4) LOS Results 32
Table 7 – Rockcress Drive/Via Varra & Northwest Parkway (#5) LOS Results 33
Table 8 – Project Access Level of Service Results 35
Table 9 – Turn Lane Queuing Analysis Results 36

LIST OF FIGURES

Figure 1 – Vicinity Map 9
Figure 2 – Existing Geometry and Control 14
Figure 3 – 2030 Background Traffic Volumes 16
Figure 4 – 2040 Background Traffic Volumes 17
Figure 5 – 2045 Background Traffic Volumes 18
Figure 6 – Project Trip Distribution 22
Figure 7 – 2030 Project Traffic Assignment 23
Figure 8 – 2040 Project Traffic Assignment 24
Figure 9 – 2030 Total Traffic Volumes 25
Figure 10 – 2040 Total Traffic Volumes 26
Figure 11 – 2045 Total Traffic Volumes 27
Figure 12 – 2030 Recommended Geometry and Control 39
Figure 13 – 2040 Recommended Geometry and Control 40

1.0 EXECUTIVE SUMMARY

AdventHealth Louisville is proposed to be located on the northwest corner of the Via Varra & Northwest Parkway intersection in Louisville, Colorado. At full buildout, the project is proposed to include a hospital and additional medical office buildings totaling approximately 800,000 square feet. By approximately the 2030 horizon, Phase 1 of the hospital and medical office buildings is expected to be complete, with approximately 435,600 square feet of hospital use (with 200 beds) and 80,000 square feet of related medical office building uses. For purposes of this study, Phase 2 of development is anticipated to be complete by 2040, which would include an additional 204,000 square feet of hospital use (100 additional beds) and 80,000 additional square feet of medical office space. Based on coordination with the City of Louisville staff, the initial 2030 short-term Phase 1 horizon was analyzed, while the 2040 buildout horizon was also analyzed. At the request of City staff, the major intersections in the study area were also analyzed for the twenty-year 2045 long-term traffic conditions.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following existing and future intersections were incorporated into this traffic study based on the City of Louisville, Colorado requested scope:

- Campus Drive & Sorrel Avenue (#1) – Future Intersection
- Campus Drive & 96th Street (#2)
- 96th Street/Via Varra & Northwest Parkway (#3)
- Rockcress Drive & Sorrel Avenue (#4) – Future Intersection
- Rockcress Drive/Via Varra & Northwest Parkway (#5)

In addition, the proposed full movement access on the north side of Rockcress Drive and the proposed two full movement accesses on the east side of Sorrel Avenue were also evaluated. The access along Rockcress Drive is anticipated to be located approximately 775 feet to the west of the Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection, measured center to center; a future south leg at this location is also proposed when development to the south of Rockcress Drive occurs. The two proposed accesses along Sorrel Avenue are anticipated to align with two future accesses on the west side of Sorrel Avenue, creating two four-leg intersections.

Regional access to the site will be provided by US-36, US-287, and Northwest Parkway, while primary access to the site will be provided by US-36, 96th Street, and Northwest Parkway. Direct access to the site will be provided by one full movement access on the north side of Rockcress Parkway to the west of Northwest Parkway, and two full movement accesses along the east side of Sorrel Avenue. There is also an additional emergency only access proposed along Sorrel Avenue, south of these two full movement accesses.

In the 2030 Phase 1 buildout, AdventHealth Louisville is expected to generate approximately 6,268 weekday daily trips, with 474 of these trips occurring during the morning peak hour and 557 of these trips occurring during the afternoon peak hour. With full buildout of the site by 2040, the project is anticipated to generate 10,632 weekday daily trips, with 772 of these trips occurring during the morning peak hour and 970 of these trips occurring during the afternoon peak hour.

Based on the analysis presented in this report, Kimley-Horn believes AdventHealth Louisville will be successfully incorporated into the existing and future roadway network. There is an existing AdventHealth hospital located at the intersection of Campus Drive and 88th Street approximately 1.25 miles to the west of this proposed site. This existing site includes approximately 400,000 square feet of hospital/medical office building uses and is approved with an expansion of an addition 350,000 square feet to include up to 750,000 square feet at full buildout. The currently proposed AdventHealth site within the Redtail Ridge development area is expected to include up to 799,600 square feet of hospital/medical office building uses. As such, this increase of 49,600 square feet of additional uses with relocation of the existing hospital with approved expansion to the new site is expected to result in approximately 658 additional weekday daily trips, with 47 more trips during the morning peak hour and 61 more trips during the afternoon peak hour compared to the traffic the existing site could generate. This results in approximately one additional vehicle every 75 seconds during the morning peak hour and one additional vehicle every minute (60 seconds) during the afternoon peak hour on the surrounding street network compared to the existing project site. This study assessed the additional improvements that could be needed due to the additional square footage of this proposed site, and any vehicle rerouting that could occur with the site being located further to the east. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following recommendations:

2030 Recommendations

- The Campus Drive & Sorrel Avenue (#1) intersection is anticipated to be constructed prior to AdventHealth Louisville construction. Based on currently proposed construction plans, it will be a 'T'-roundabout controlled intersection, with eastbound Campus Drive operating with a shared through/right turn lane, westbound Campus Drive providing separate left and through lanes, and the northbound Sorrel Avenue approach providing one lane for shared left/right turning movements. R1-2 "YIELD" signs should be posted on all three approaches to the roundabout.
- The Campus Drive & 96th Street (#2) intersection is anticipated to become a signalized 'T'-intersection with full movements allowed by the 2030 horizon prior to AdventHealth construction. For purposes of this study, the eastbound Campus Drive approach was based on the proposed construction plans, which would have dual continuous eastbound left turn lanes and a separate right turn lane approximately 500 feet in length. The northbound 96th Street approach was conservatively assumed to provide a single 200-foot left turn lane and two through lanes in this horizon. However, at full buildout based on construction plans, it is anticipated to provide dual left turn lanes and three through lanes northbound. The southbound 96th Street approach should provide two through lanes and a 200-foot right turn lane.
- The 96th Street/Via Varra & Northwest Parkway (#3) intersection may require extension of the eastbound right turn lane from 375 feet to approximately 475 feet by this horizon to meet expected vehicle queues. However, if not improved, it is believed any additional vehicles can safely queue in the southernmost eastbound through lane if these queues are experienced.
- The future Rockcress Drive & Sorrel Avenue (#4) is proposed to be constructed as a four-leg single-lane roundabout prior to AdventHealth construction. The eastbound, northbound, and southbound approaches are all expected to provide one approach lane for shared left/through/right turning movements, while the westbound approach would provide a shared left/through lane and a separate right turn lane. Each approach should provide R1-2 "YIELD" signs on approach to the intersection.
- The Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection is expected to be improved on the eastbound approach to the intersection with dual left turn lanes, one of which would provide 400 feet in length while the other would be a continuous turn lane. These improvements are based on the currently proposed improvement plans. Although it is understood that three southbound through lanes are eventually proposed at this intersection,

it was conservatively analyzed with the existing two southbound through lanes during this horizon.

- Two full movement accesses are proposed along the east side of Sorrel Avenue, to align with two proposed accesses on the west side of Sorrel Avenue. R1-1 "STOP" signs are proposed on the eastbound and westbound approaches to Sorrel Avenue at both accesses. These accesses should operate well with one approach lane for shared left/through/right turning movements. The northbound and southbound approaches of Sorrel Avenue to both accesses are recommended to provide 150-foot left turn lanes and shared through/right turn lanes.
- The primary access into the proposed site is anticipated to be along Rockcress Drive, approximately 775 feet to the west of Northwest Parkway, measured center to center. This intersection is anticipated to operate well under minor street stop control through the 2030 horizon with Phase 1 construction of AdventHealth Louisville. The Rockcress Access (#8) is recommended to provide a 150-foot left turn lane, one through lane, and one shared through/right turn lane along both eastbound and westbound Rockcress Drive. The northbound approach to the intersection is anticipated to operate well with one lane for shared left/through/right turning movements while the southbound approach exiting the hospital should provide a 200-foot left turn lane and a separate through/right lane. Of note, dual southbound left turn lanes are recommended at this access at full buildout and as such, it is recommended that pavement width be provided for the future second left turn lane, but that it be striped out with chevron striping to allow only one southbound left turn lane until full buildout of the hospital site. During this horizon, R1-1 "STOP" signs should be posted on the northbound and southbound approaches.

2040 & 2045 Recommendations

- By the 2040 horizon, it was assumed that the Campus Drive & 96th Street (#2) intersection would provide dual northbound left turn lanes 200 feet in length while a third northbound through lane would also be provided. This third northbound through lane would provide the third required receiving lane for the proposed triple northbound left turn lanes at Northwest Parkway just to the southeast.
- The 96th Street/Via Varra & Northwest Parkway (#3) intersection is anticipated to provide triple northbound left turn lanes on Northwest Parkway and triple eastbound left turn lanes on 96th Street based on proposed improvement plans. For purposes of this study, the third northbound left turn lane was assumed to provide 600 feet in length while the third

eastbound left turn was assumed to provide 250 feet in length. It should be noted the third eastbound left turn lane will require three receiving lanes on Northwest Parkway to the north of this intersection.

- The Rockcress Parkway/Via Varra & Northwest Parkway (#5) intersection should provide three southbound through lanes by this horizon. To meet expected vehicle queues, the inner northbound left turn lane may need to be extended from 250 feet to 375 feet to meet expected vehicle queues. It is believed this northbound left turn lane extension can be accomplished with minor median reconstruction.
- With full buildout of the AdventHealth site, the Rockcress Access (#8) is recommended to be signalized and is expected to meet warrants for signalization. When signalized, the southbound approach exiting the hospital is recommended to be improved to provide dual left turn lanes 200 feet in length.
- Each of these improvements is anticipated to operate acceptably through the 2045 horizon.

General Recommendations

- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of the City of Louisville and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition, 2023.

2.0 INTRODUCTION

Kimley-Horn has prepared this report to document the results of a Traffic Impact Study for AdventHealth Louisville proposed to be located on the northwest corner of the Via Varra and Northwest Parkway intersection in the City of Louisville, Colorado. A vicinity map illustrating the project development location is shown in **Figure 1**. At full buildout, the project is proposed to include a hospital and additional medical office buildings totaling approximately 800,000 square feet. By approximately the 2030 horizon, Phase 1 of the hospital and medical office buildings is expected to be complete, with approximately 435,600 square feet of hospital use (with 200 beds) and 80,000 square feet of related medical office building uses. For purposes of this study, Phase 2 of development is anticipated to be complete by 2040, which would include an additional 204,000 square feet of hospital use (100 additional beds) and 80,000 additional square feet of medical office space. A conceptual plan for the site is attached in **Appendix A**. Based on coordination with the City of Louisville staff, the initial 2030 short-term Phase 1 horizon was analyzed, while the 2040 buildout horizon was also analyzed. At the request of City staff, the major intersections in the study area were also analyzed for the twenty-year 2045 long-term traffic conditions.

The purpose of this traffic study is to identify project traffic generation characteristics to determine potential project traffic related impacts on the local street system and to develop the necessary mitigation measures required for the identified traffic impacts. The following existing and future intersections were incorporated into this traffic study based on the City of Louisville, Colorado requested scope:

- Campus Drive & Sorrel Avenue (#1) – Future Intersection
- Campus Drive & 96th Street (#2)
- 96th Street/Via Varra & Northwest Parkway (#3)
- Rockcress Drive & Sorrel Avenue (#4) – Future Intersection
- Rockcress Drive/Via Varra & Northwest Parkway (#5)

In addition, the proposed full movement access on the north side of Rockcress Drive and the proposed two full movement accesses on the east side of Sorrel Avenue were also evaluated. The access along Rockcress Drive is anticipated to be located approximately 775 feet to the west of the Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection, measured center to

center; a future south leg at this location is also proposed when development to the south of Rockcress Drive occurs. The two proposed accesses along Sorrel Avenue are anticipated to align with two future accesses on the west side of Sorrel Avenue, creating two four-leg intersections.

Regional access to the site will be provided by US-36, US-287, and Northwest Parkway, while primary access to the site will be provided by US-36, 96th Street, and Northwest Parkway. Direct access to the site will be provided by one full movement access on the north side of Rockcress Parkway to the west of Northwest Parkway, and two full movement accesses along the east side of Sorrel Avenue. There is also an additional emergency only access proposed along Sorrel Avenue, south of these two full movement accesses.

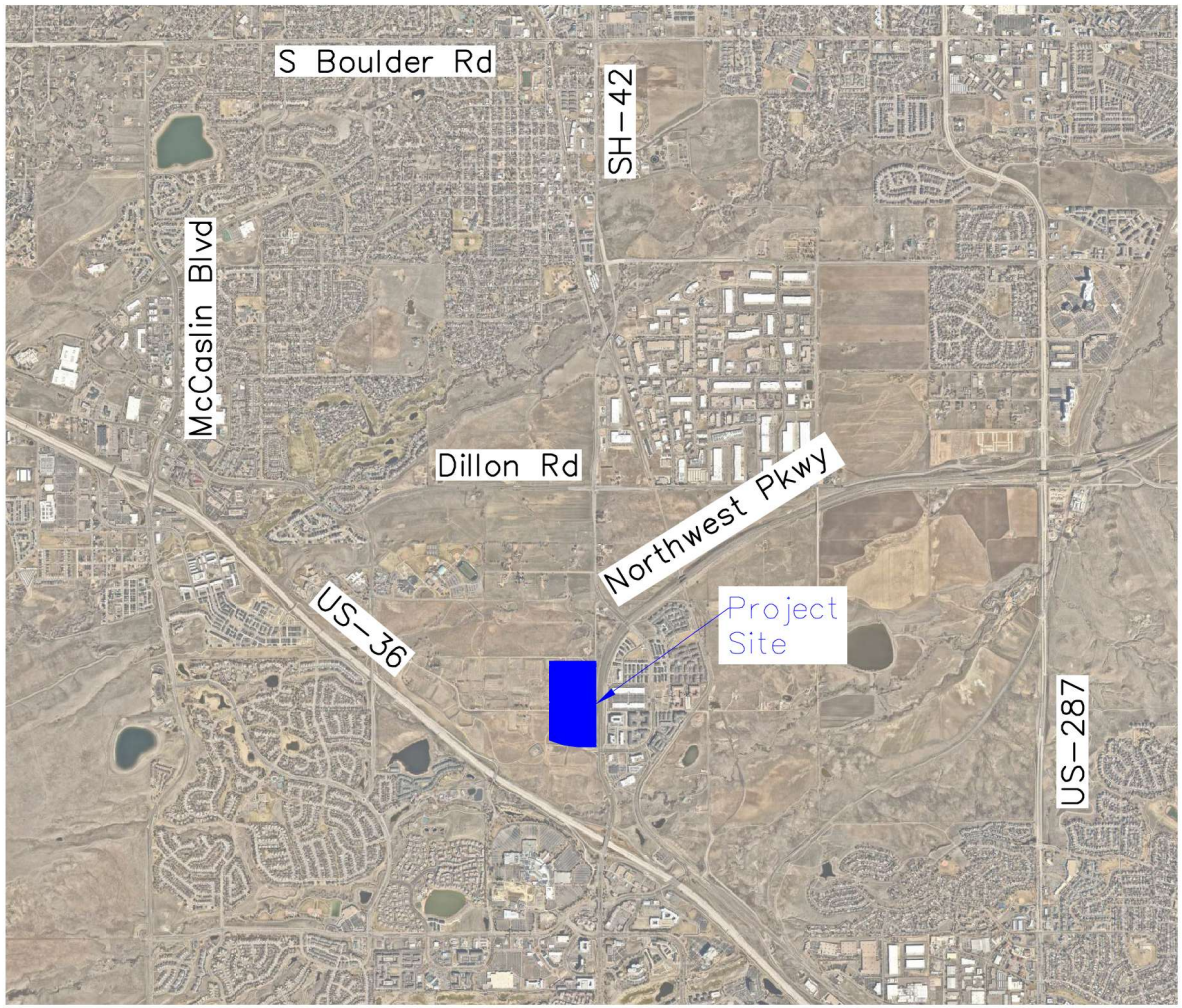


FIGURE 1
AdventHealth Louisville
Louisville, Colorado
Vicinity Map

3.1 Existing Study Area

The existing site is comprised of vacant land. The site is part of a larger future development known as Redtail Ridge, which is expected to include several other uses, including industrial/manufacturing, general office space, research/development buildings, and some local retail uses as well. The North Metro Fire Rescue Station 67 is located just to the north of the project site. The broader vicinity is generally comprised of additional vacant land, with Monarch High School to the northwest, and some additional retail/residential uses to the east and south of the site.

3.2 Existing and Proposed Roadway Network

Northwest Parkway is a divided highway that extends in the north/south direction adjacent to the study area and provides two continuous through lanes in each direction with acceleration and deceleration lanes provided at the intersections with 96th Street/Via Varra to the north and Via Varra to the south. The posted speed limit in this area is 45 miles per hour.

96th Street generally exists in the north/south direction, but it connects to Northwest Parkway with vehicles traveling eastbound/westbound. Two through lanes are provided in each direction nearest to the study area, which soon reduces to one through lane in each direction further to the north. The posted speed limit is 40 miles per hour within the study area. Via Varra loops from the intersection of Northwest Parkway and 96th Street/Via Varra and again connects to Northwest Parkway approximately 0.60 miles further to the south. Two through lanes are provided in each direction and the posted speed limit is 35 miles per hour.

Sorrel Avenue is proposed to be a north/south roadway with one through lane in each direction, approximately 1,150 feet to the west of Northwest Parkway. Rockcress Drive is proposed to be the west leg of the Northwest Parkway & south Via Varra (#5) intersection. Two through lanes in each direction along Rockcress Drive are anticipated to be provided between Sorrel Avenue and Northwest Parkway, and one through lane in each direction to the west of Sorrel Avenue.

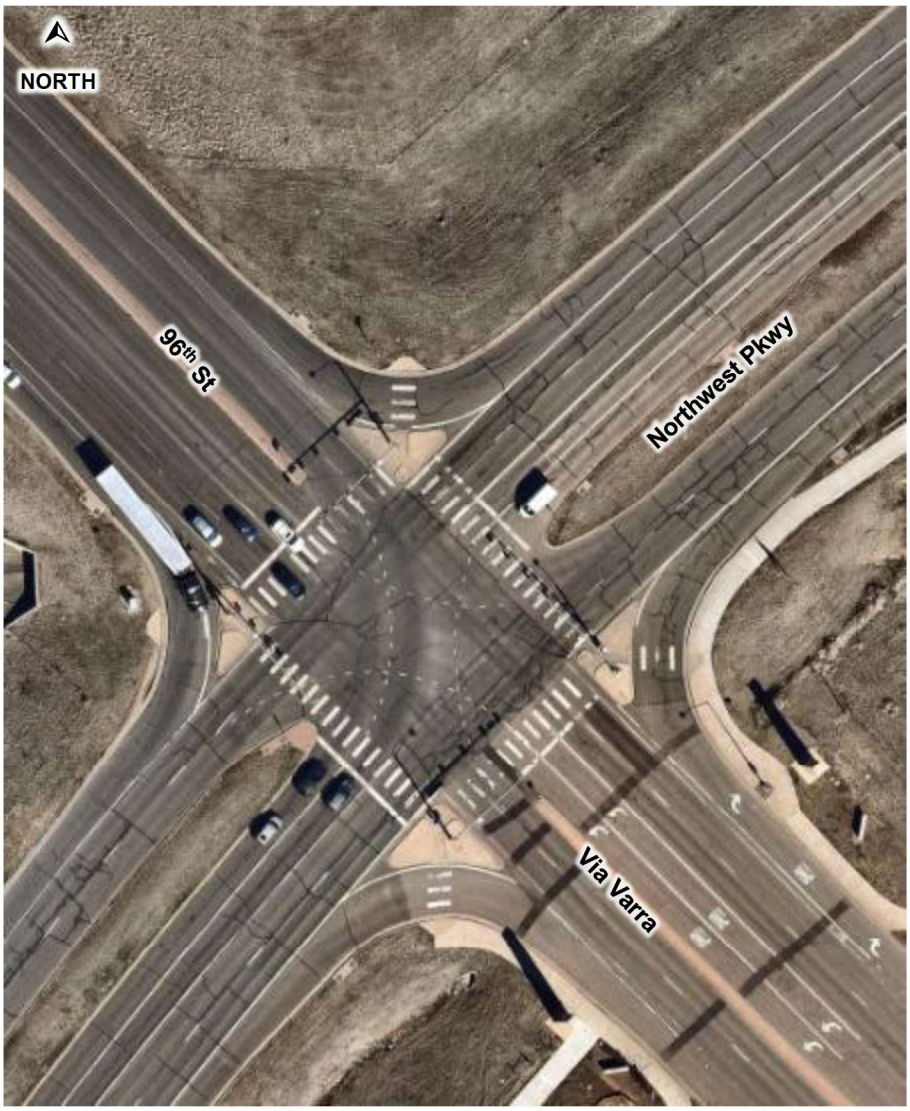
Campus Drive is proposed to exist along the northern side of the project, traveling in the east/west direction. It is anticipated that two through lanes will exist to the east of Sorrel Avenue within the

study area, while just to the west of Sorrel Avenue one lane in each direction will be provided. A roundabout is proposed to be constructed at the future intersections of Campus Drive & Sorrel Avenue (#1) as well as at Rockcress Drive & Sorrel Avenue (#4). Based on current project understanding, the initial phases of other Redtail Ridge development will be constructed prior to Phase 1 of AdventHealth Louisville development. As such, for purposes of this study it is assumed that Campus Drive, Rockcress Drive, and Sorrel Avenue will be constructed prior to the 2030 short-term horizon.

The existing 'T'-intersection just to the north of the North Metro Fire Rescue Station 67 is a ¾-movement intersection. This location is proposed to become the connection point for the Campus Drive extension, which is anticipated to be completed prior to Phase 1 of AdventHealth development. When this extension is complete, it is understood this 'T'-intersection will become a full movement signalized intersection. The existing northbound 96th Street approach provides a left turn lane and one through lane while the southbound 96th Street approach provides a shared through/right turn lane. The existing minor street approach is restricted to right-out only movements. An aerial photo of the existing intersection configuration is provided below.

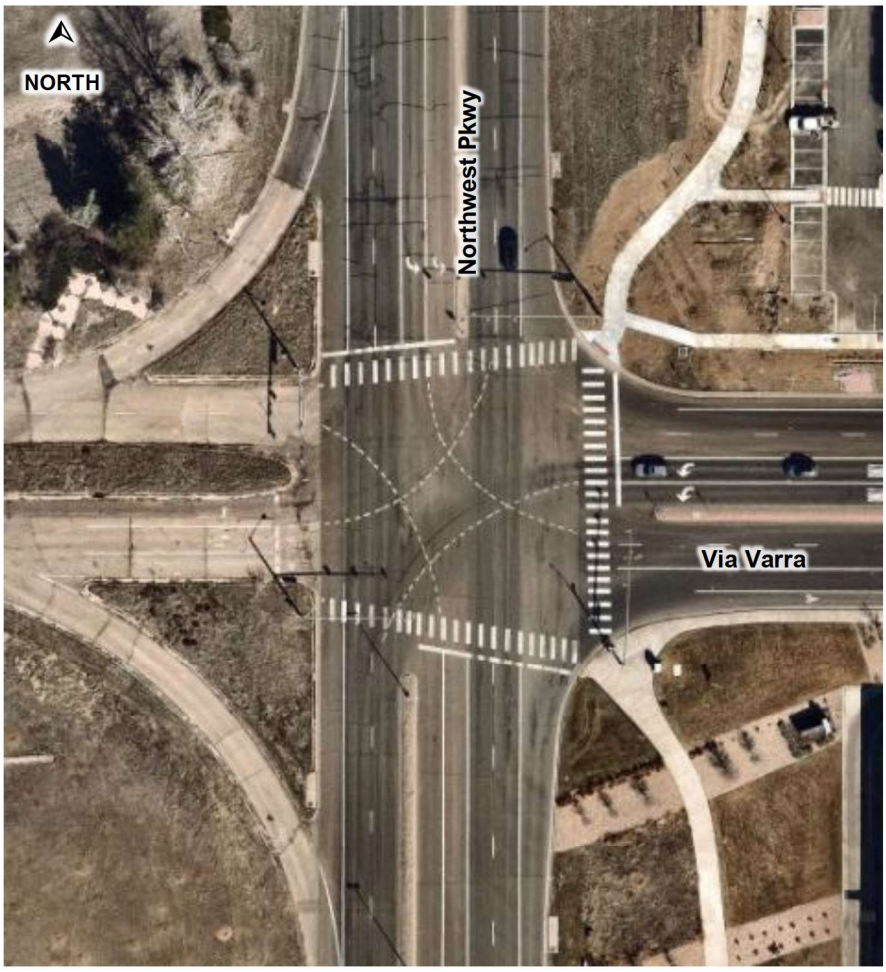
Future Campus Drive & 96th Street (#1)

The existing signalized intersection of 96th Street/Via Varra & Northwest Parkway (#2) operates with protected-only left turn phasing on all four approaches to the intersection. Each of the four approaches provide dual left turn lanes, two through lanes, and a right turn lane, with the right turning movements operating with free turning movement in channelized right turn lanes. For purposes of this study, Northwest Parkway was identified to be the northbound/southbound approach to the intersection while 96th Street is the eastbound approach and Via Varra is the westbound approach. An aerial photo of the existing intersection configuration is provided below.



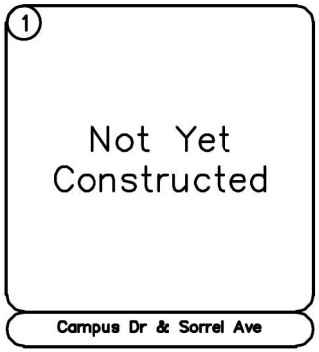
96th Street/Via Varra & Northwest Parkway (#2)

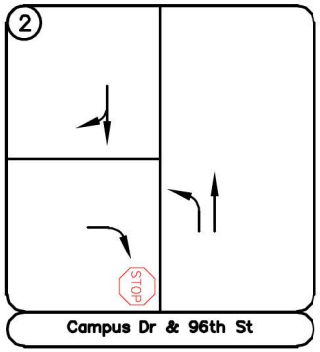
The Via Varra & Northwest Parkway (#5) intersection is signalized and operates with protected-only left turn phasing on all four approaches to the intersection. The northbound and southbound approaches to the intersection provide dual left turn lanes, two through lanes, and a right turn lane. The southbound right turning movement is channelized and operates with yield control. The eastbound approach operates with dual left turn lanes, one through lane, and a channelized right turn lane—that opens from the eastbound through lane just prior to the intersection—operates with free movement. The westbound approach provides dual left turn lanes, one through lane, and a shared through/right turn lane. An aerial photo of the existing intersection configuration is below.

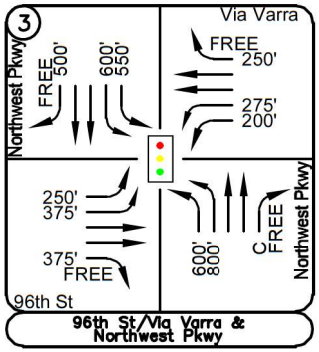


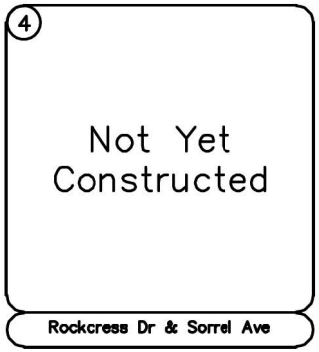
Via Varra & Northwest Parkway (#3)

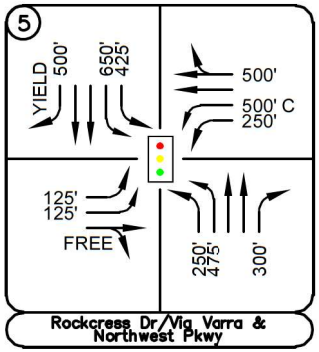
The intersection lane configuration and control for the existing study area intersections are shown in **Figure 2**.

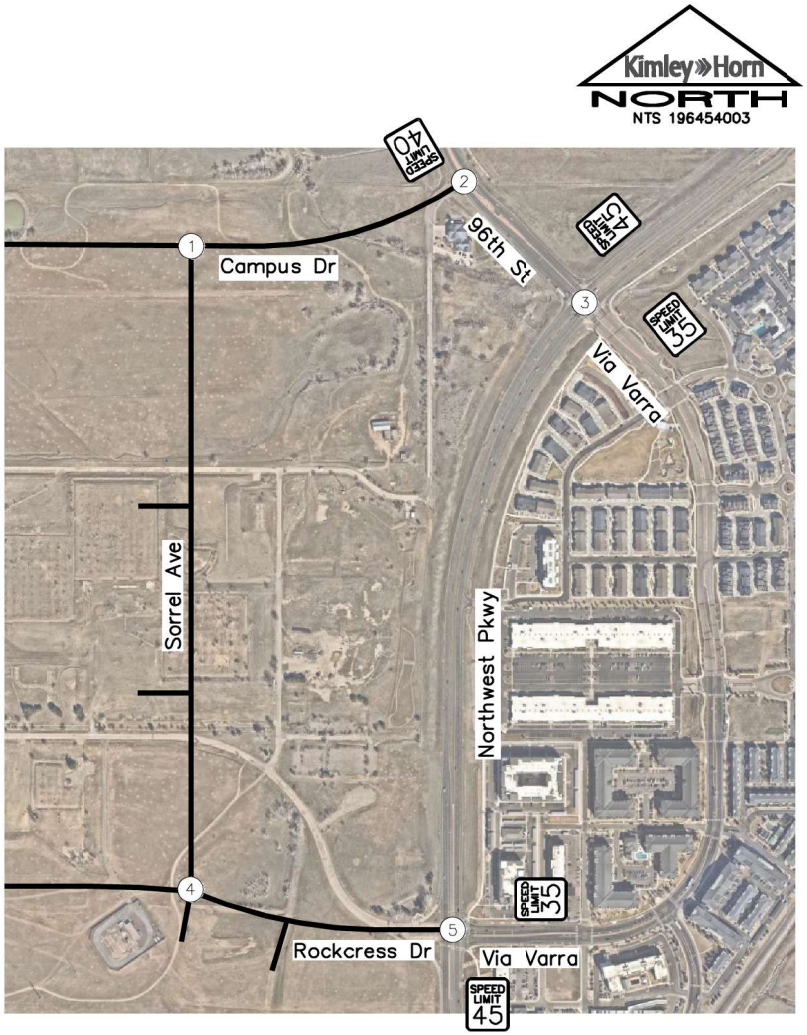












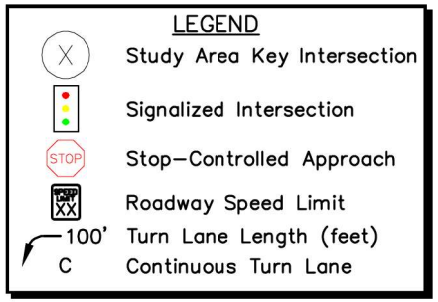


FIGURE 2
AdventHealth Louisville
Louisville, Colorado
Existing Geometry and Control

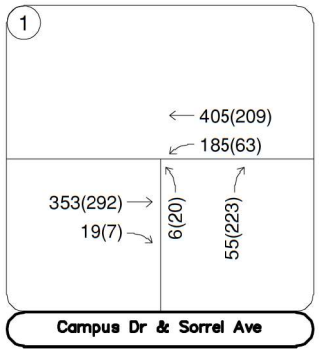
Kimley»Horn

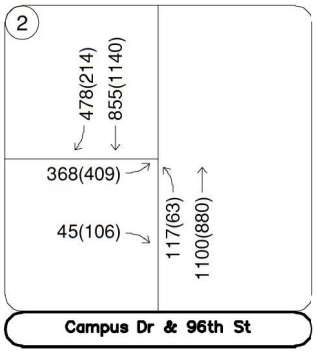
3.3 Future Traffic Volumes and Unspecified Development Traffic Growth

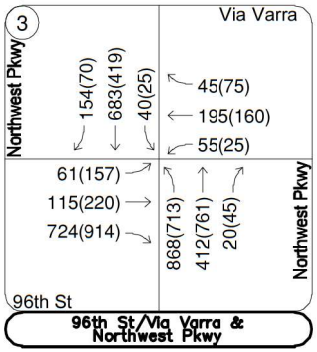
Future projected traffic volumes used in this study were based on the Redtail Ridge Traffic and Mobility Study completed by Fox Tuttle Transportation Group in July 2024. The Redtail Ridge study serves as a master study that analyzed full buildout of the entire Redtail Ridge development area, which includes additional development nearby the hospital, such as additional office uses, industrial/manufacturing buildings, research/development buildings, and some general retail uses. The master study included the entire AdventHealth parcel, which also assumed a hospital land use with adjoining medical office buildings; the hospital was assumed to house 160 beds while the medical office buildings were assumed to comprise approximately 150,000 square feet.

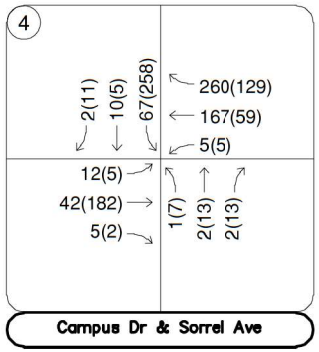
The Redtail Ridge master traffic study analyzed a 2025 short-term buildout year for some developments, with additional land uses constructed by a 2030 mid-year horizon—including full buildout of the hospital and medical office buildings—and a 2040 full buildout horizon. The 2030 and 2040 total traffic volumes from the Redtail Ridge study were used as a basis to generate traffic volumes in this study. However, because the currently proposed land use on the AdventHealth parcel is anticipated to generate more traffic than the originally studied intensities, this AdventHealth traffic study removed the traffic originally projected to be generated by this site to generate 2030 and 2040 background traffic volumes to represent the expected traffic volumes in the area if the hospital/medical office building construction did not occur. Applicable documents from the Fox Tuttle study are included in **Appendix B**.

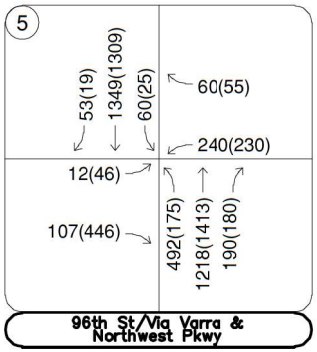
Based on communication with City staff, a twenty-year 2045 long-term horizon was also analyzed for the major external intersections, including Campus Drive & 96th Street (#1), 96th Street/Via Varra & Northwest Parkway (#2), and Rockcress Drive/Via Varra & Northwest Parkway (#3). To develop traffic projections for these intersections, the 2040 existing traffic volumes were grown by an annual growth rate of 0.50 percent per year to account for any additional future development traffic in the area. Of note, traffic volumes entering/exiting the east Via Varra legs of the Northwest Parkway intersections (#2 and #3) were not grown further, as this area is expected to be fully built out by the 2040 horizon. The calculated background traffic volumes for 2030, 2040, and 2045 are shown in **Figure 3**, **Figure 4,** and **Figure 5**, respectively.

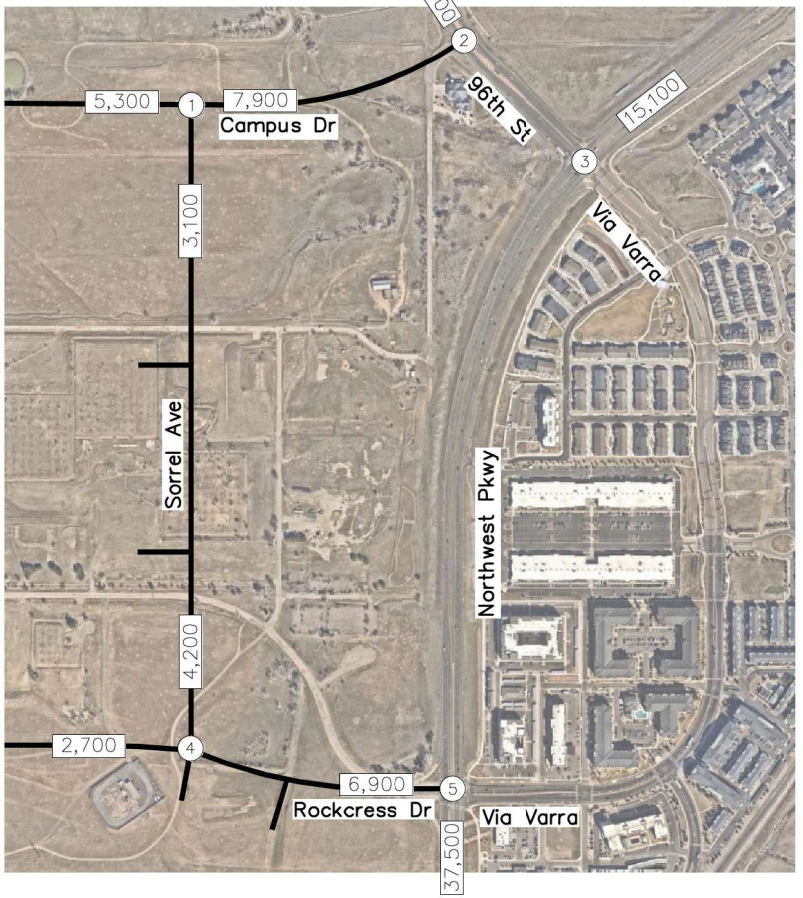










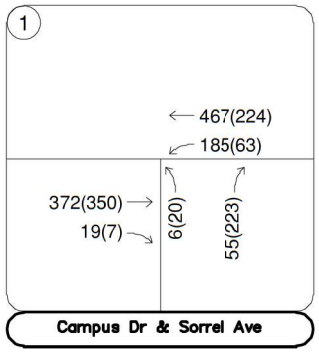


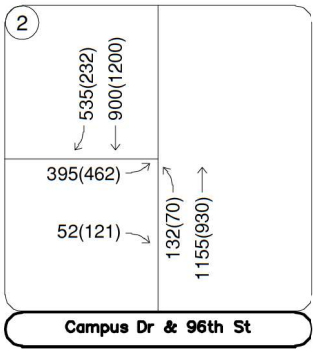
LEGEND

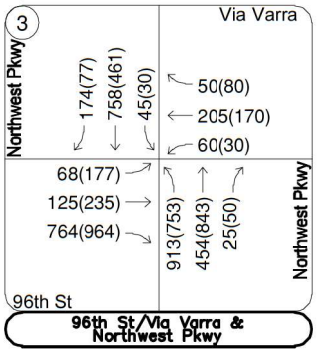
(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

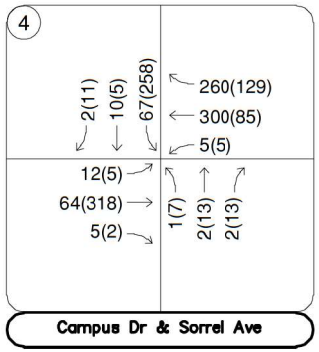
FIGURE 3
AdventHealth Louisville
Louisville, Colorado
2030 Background Traffic Volumes

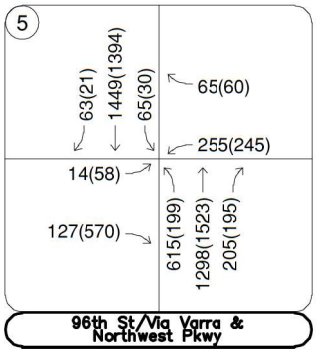
Kimley»Horn

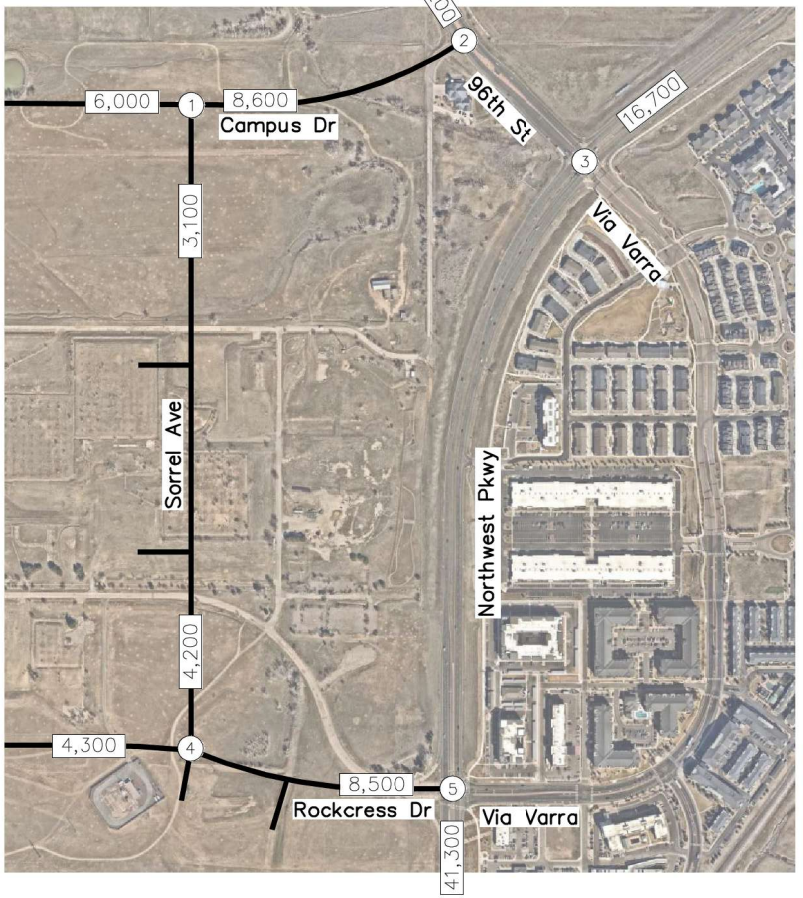








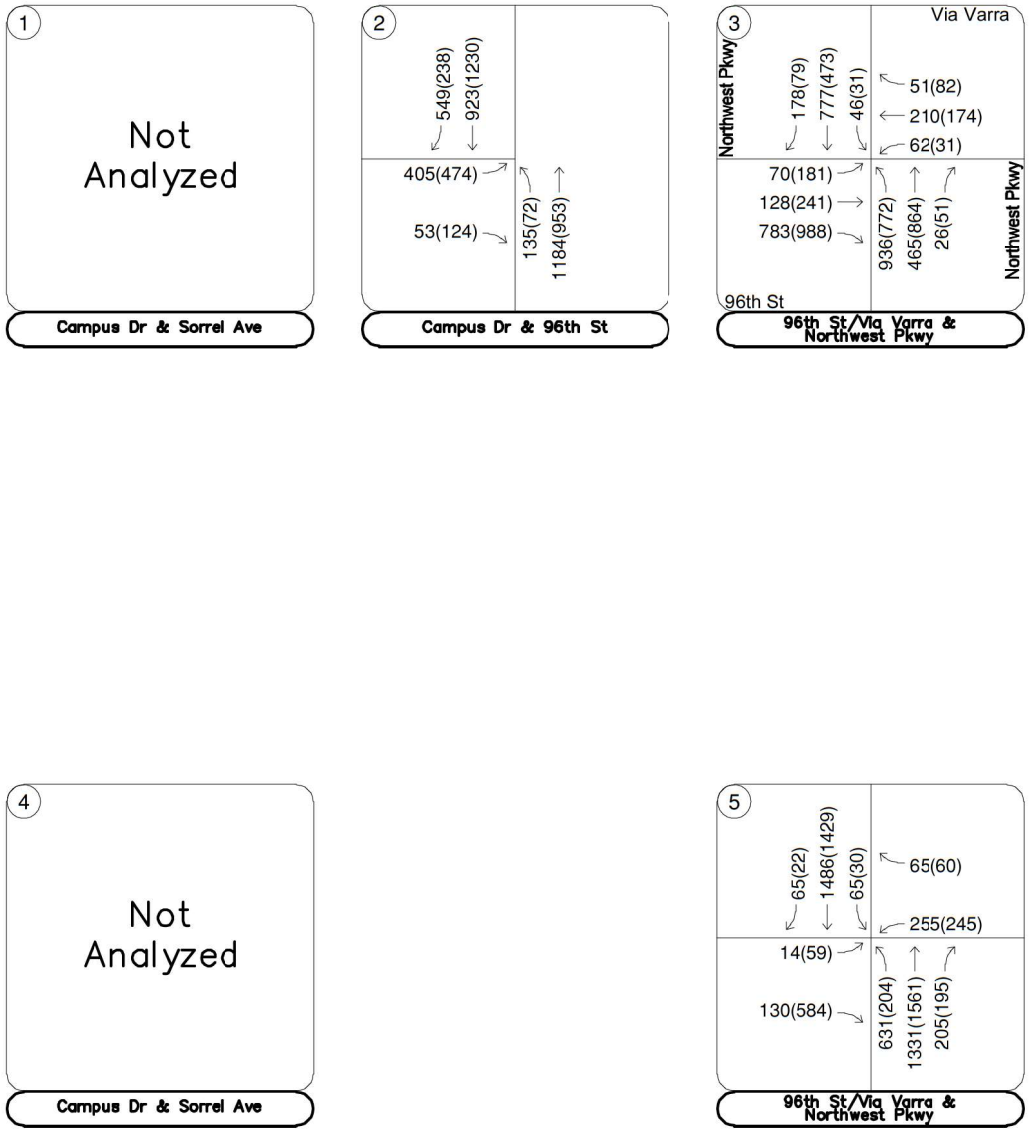


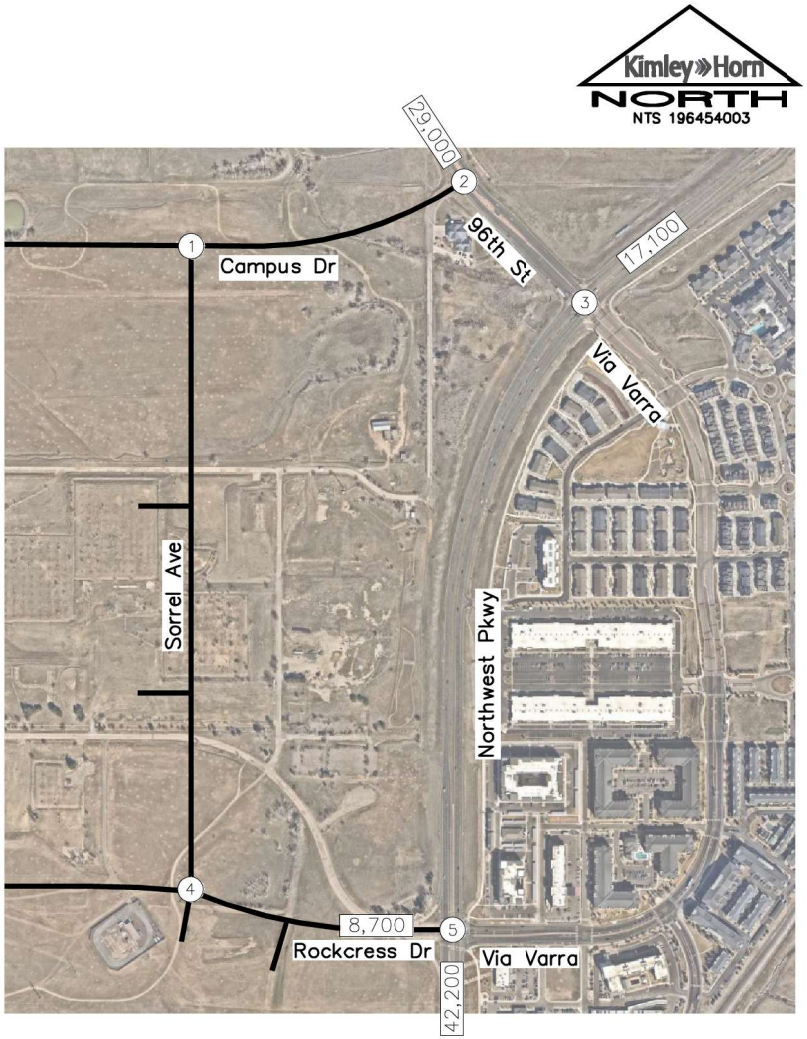


LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 4
AdventHealth Louisville
Louisville, Colorado
2040 Background Traffic Volumes





LEGEND

(X)	Study Area Key Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 5
AdventHealth Louisville
Louisville, Colorado
2045 Background Traffic Volumes

Kimley»Horn

4.1 Trip Generation

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*[1] published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. For this study, Kimley-Horn chose to use the ITE Trip Generation Manual average rates and fitted curve equations that apply to Hospital (ITE Land Use Code 610) and Medical-Dental Office Building (ITE Land Use Code 720) and that match what was previously used in the Fox Tuttle study as best as possible for traffic associated with this development.

In the 2030 Phase 1 buildout, AdventHealth Louisville is expected to generate approximately 6,268 weekday daily trips, with 474 of these trips occurring during the morning peak hour and 557 of these trips occurring during the afternoon peak hour. With full buildout of the site by 2040, the project is anticipated to generate 10,632 weekday daily trips, with 772 of these trips occurring during the morning peak hour and 970 of these trips occurring during the afternoon peak hour.

There is an existing AdventHealth hospital in Louisville at the Campus Drive and 88th Street intersection approximately 1.25 miles to the west of the proposed site. This existing site includes approximately 400,000 square feet of hospital/medical office building uses and is approved with an expansion of an additional 350,000 square feet to include up to 750,000 total square feet at full buildout. Thus, a traffic generation comparison is provided to assess the net difference in trips between the proposed site with approximately 799,600 total square feet at full buildout within the Redtail Ridge development area versus the 750,000 total square feet that could be constructed at the existing hospital site. To provide a uniform comparison between these two sites, the traffic generation of the proposed site with the 799,600 square feet of hospital/medical office building uses was prorated to the up to 750,000 total square feet of the existing site, assuming that approximately 93.8 percent (750,000 / 799,600 square feet = 93.8 percent) of the traffic generation of the proposed site within Redtail Ridge would have been generated if the existing

[1] Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

hospital site were to be developed to the full 750,000 square feet that is already approved to be constructed there. As such, the currently proposed hospital site located within the Redtail Ridge development area could generate approximately 658 additional weekday daily trips, with 47 additional trips during the morning peak hour and 61 additional trips during afternoon peak hour. This results in approximately one additional vehicle every 75 seconds during the morning peak hour and one additional vehicle every minute (60 seconds) during the afternoon peak hour on the surrounding street network compared to the existing project site.

Calculations were based on the procedure and information provided in the ITE *Trip Generation Manual, 11th Edition – Volume 1: User's Guide and Handbook*, 2021. **Table 1** summarizes the estimated trip generation and traffic comparison for the site. The trip generation worksheets are included in **Appendix D**.

Table 1 – AdventHealth Louisville Traffic Generation

Land Use and Size	Weekday Vehicle Trips						
	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
2030 – Phase 1 Development							
Hospital (ITE 610) – 200 Beds	3,810	220	86	306	95	193	289
Medical/Dental Office Building (ITE 720) – 80,000 Square Feet	2,458	133	35	168	81	188	268
Total Phase 1 Trips	**6,268**	**353**	**121**	**474**	**176**	**381**	**557**
2040 – Full Buildout Development							
Hospital (ITE 610) – 300 Beds	5,716	330	128	458	143	290	433
Medical/Dental Office Building (ITE 720) – 160,000 Square Feet	4,916	248	66	314	161	376	537
Full Buildout Total Project Trips	**10,632**	**578**	**194**	**772**	**304**	**666**	**970**
Existing AdventHealth Hospital Site – Estimated Traffic Generation at 750,000 SF Buildout							
Hospital (ITE 610) – 281 Beds	5,362	310	120	430	134	272	406
Medical/Dental Office Building (ITE 720) – 150,100 Square Feet	4,612	233	62	295	151	352	503
Total Trips	**9,974**	**543**	**182**	**725**	**285**	**624**	**909**
Net Difference in Trips	***+658***	***+35***	***+12***	***+47***	***+19***	***+42***	***+61***

4.2 Trip Distribution

Distribution of site traffic on the street system was based on the area street system characteristics, existing traffic patterns, existing and anticipated surrounding demographic information, and the

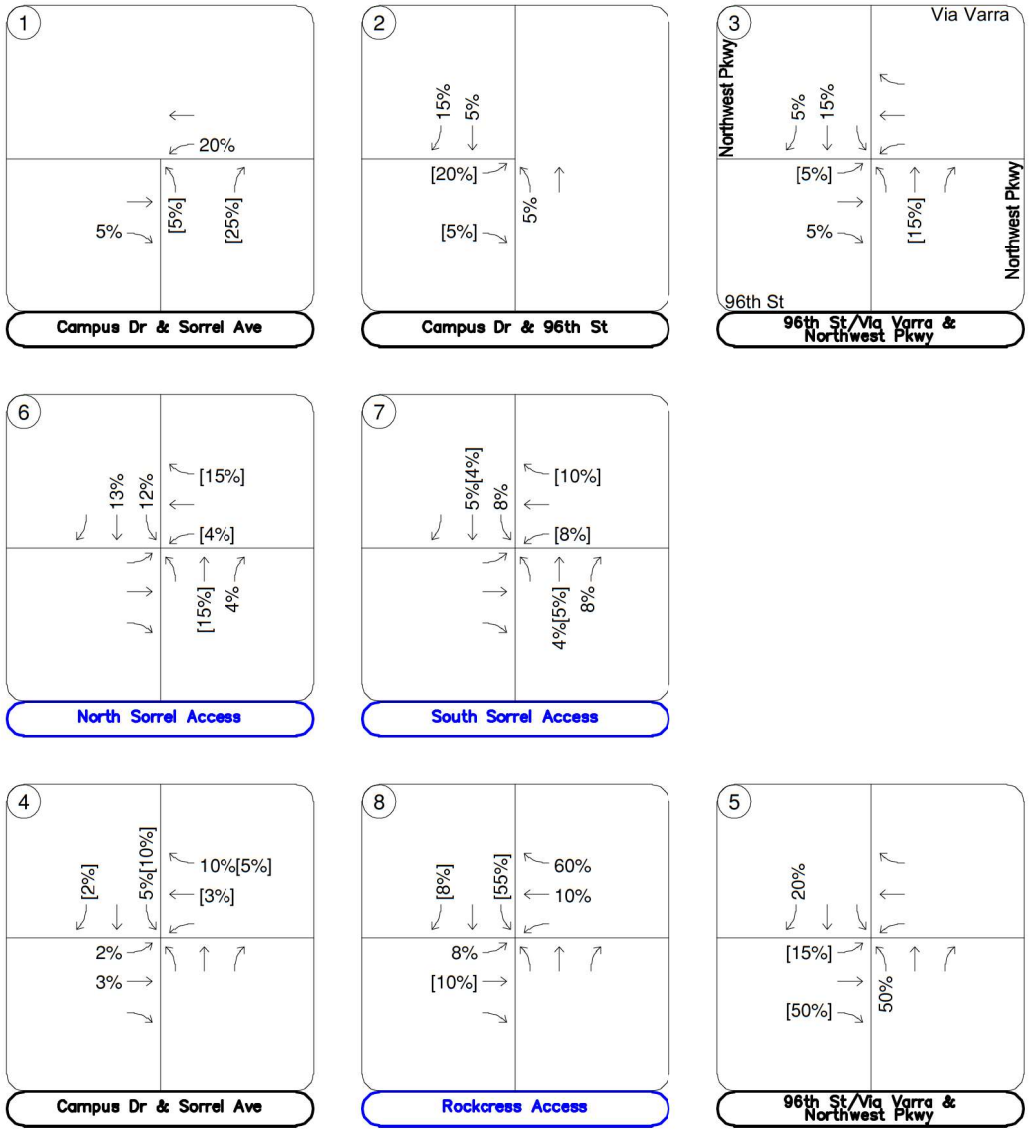
proposed access system for the project. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site back to the original source. The project trip distribution for the proposed development is illustrated in **Figure 6**.

4.3 Traffic Assignment

The project's traffic assignment was obtained by applying the project trip distribution to the estimated traffic generation of the development shown in **Table 1**. Traffic assignment for the 2030 short-term Phase 1 horizon is shown in **Figure 7**, while 2040 full buildout traffic assignment is provided in **Figure 8**.

4.4 Total (Background Plus Project) Traffic

Site traffic volumes were added to the background volumes to represent estimated traffic conditions for the short-term 2030 Phase 1, 2040 buildout, and long-term 2045 twenty-year planning horizon. These total traffic volumes for the study area are illustrated for the 2030, 2040, and 2045 horizon years in **Figure 9**, **Figure 10**, and **Figure 11** respectively.



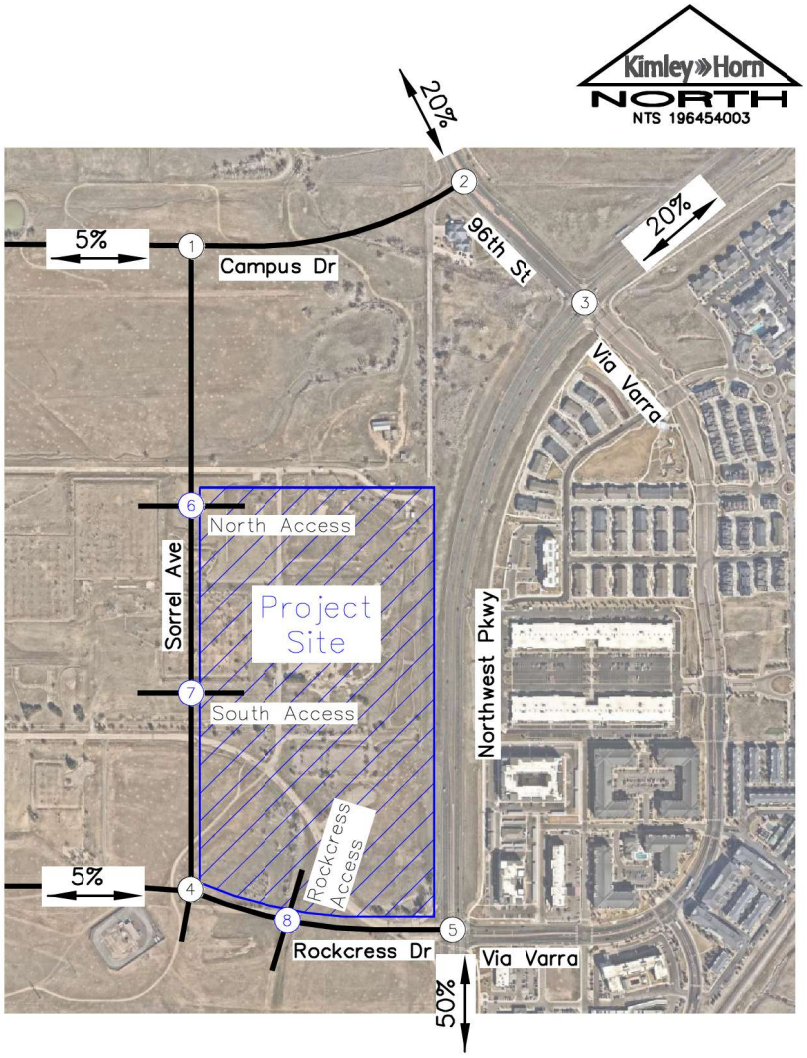
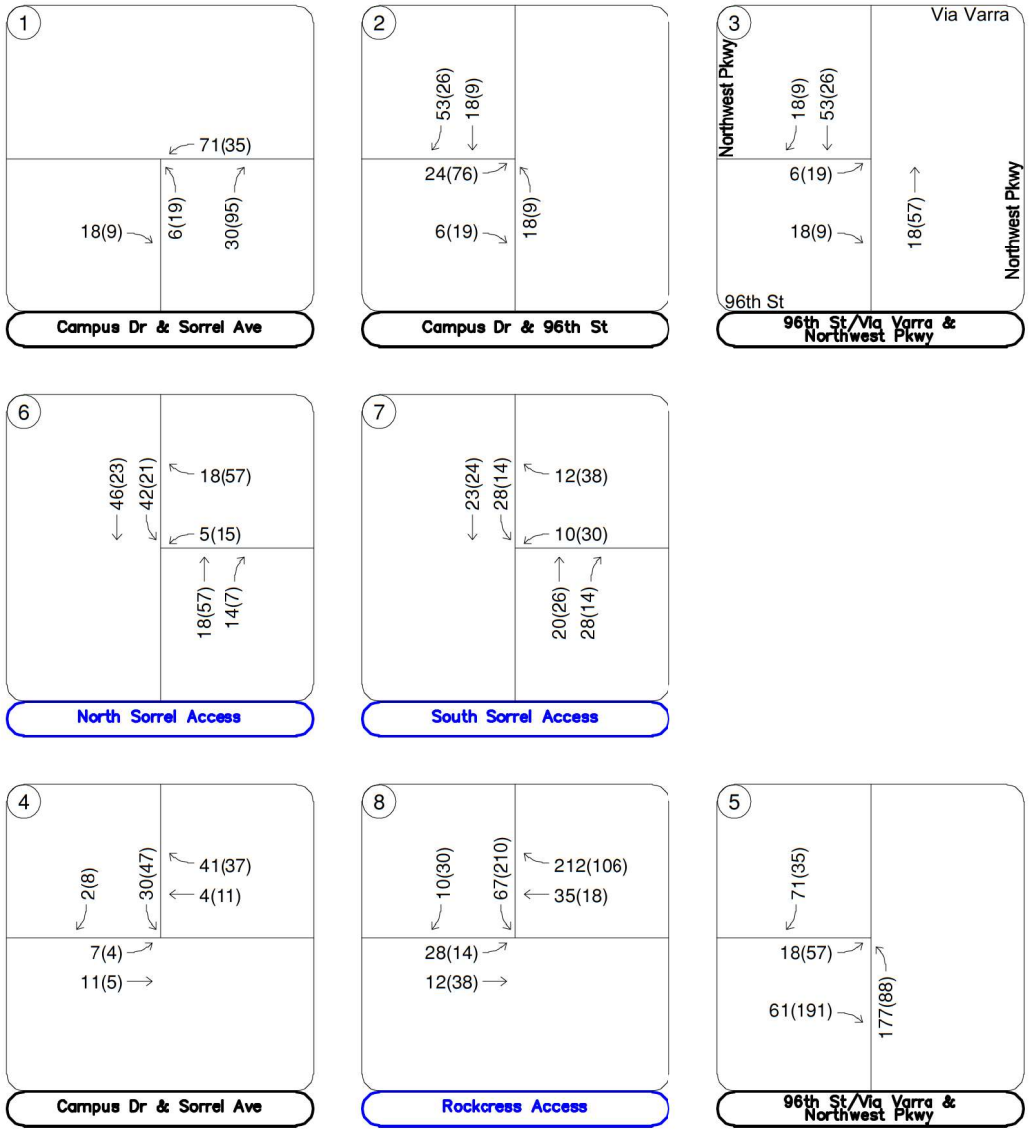
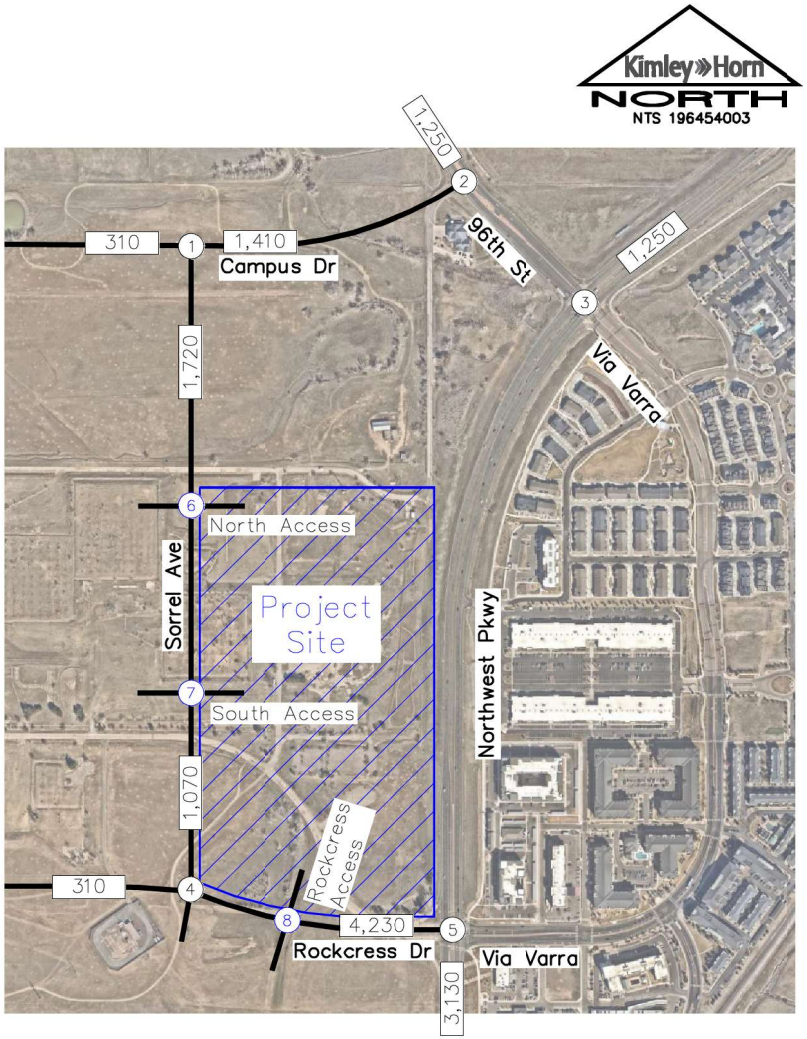


FIGURE 6
AdventHealth Louisville
Louisville, Colorado
Project Trip Distribution



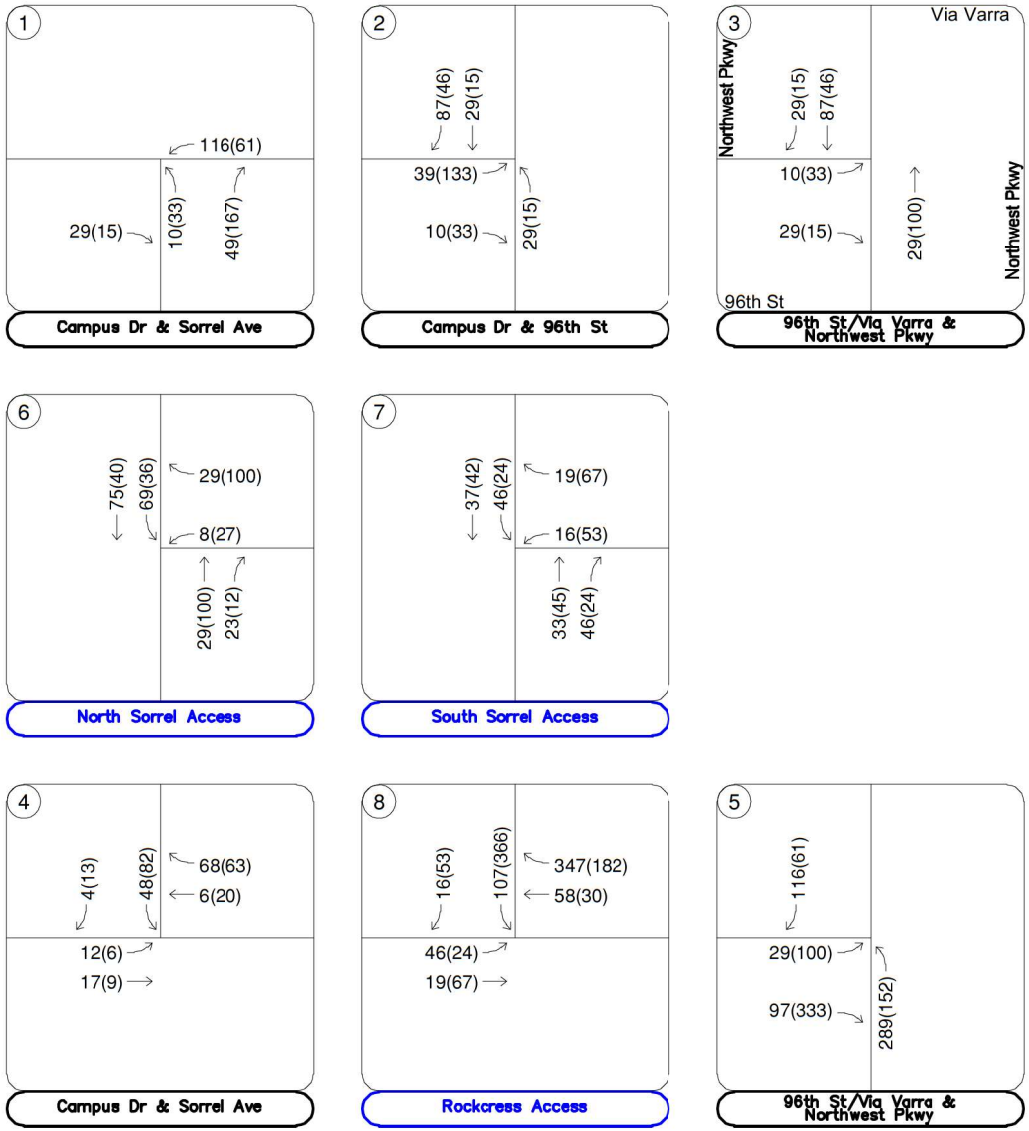


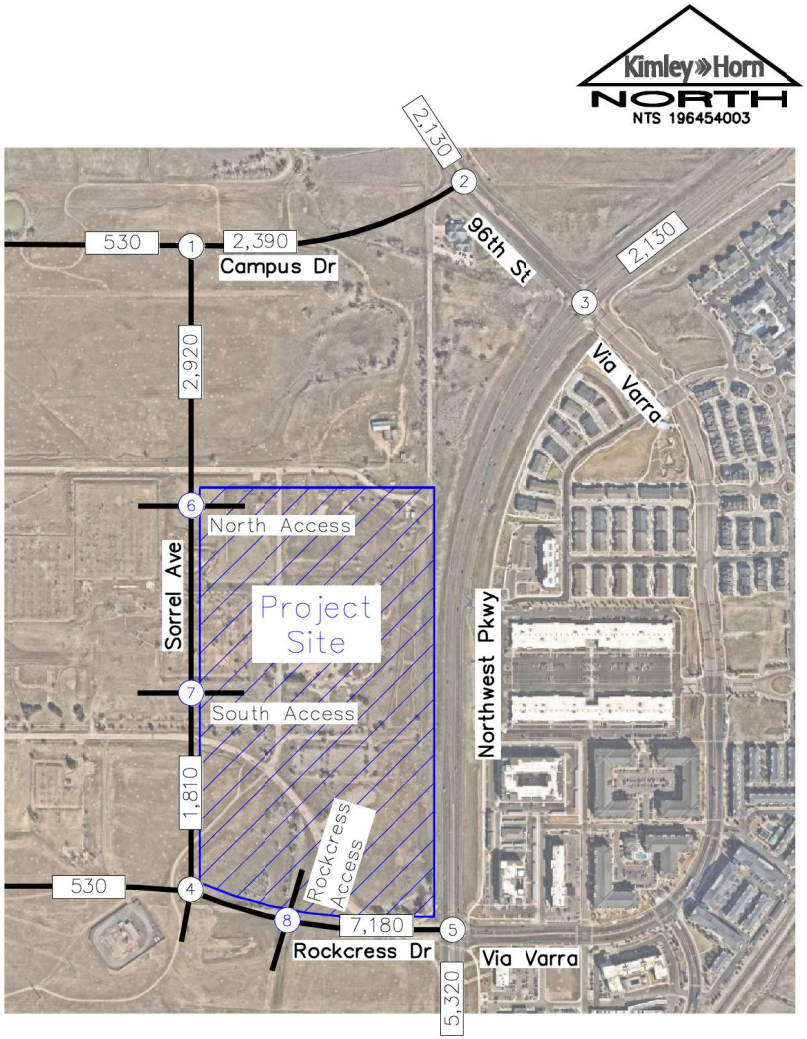
LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 7
AdventHealth Louisville
Louisville, Colorado
2030 Project Traffic Assignment

Kimley»Horn



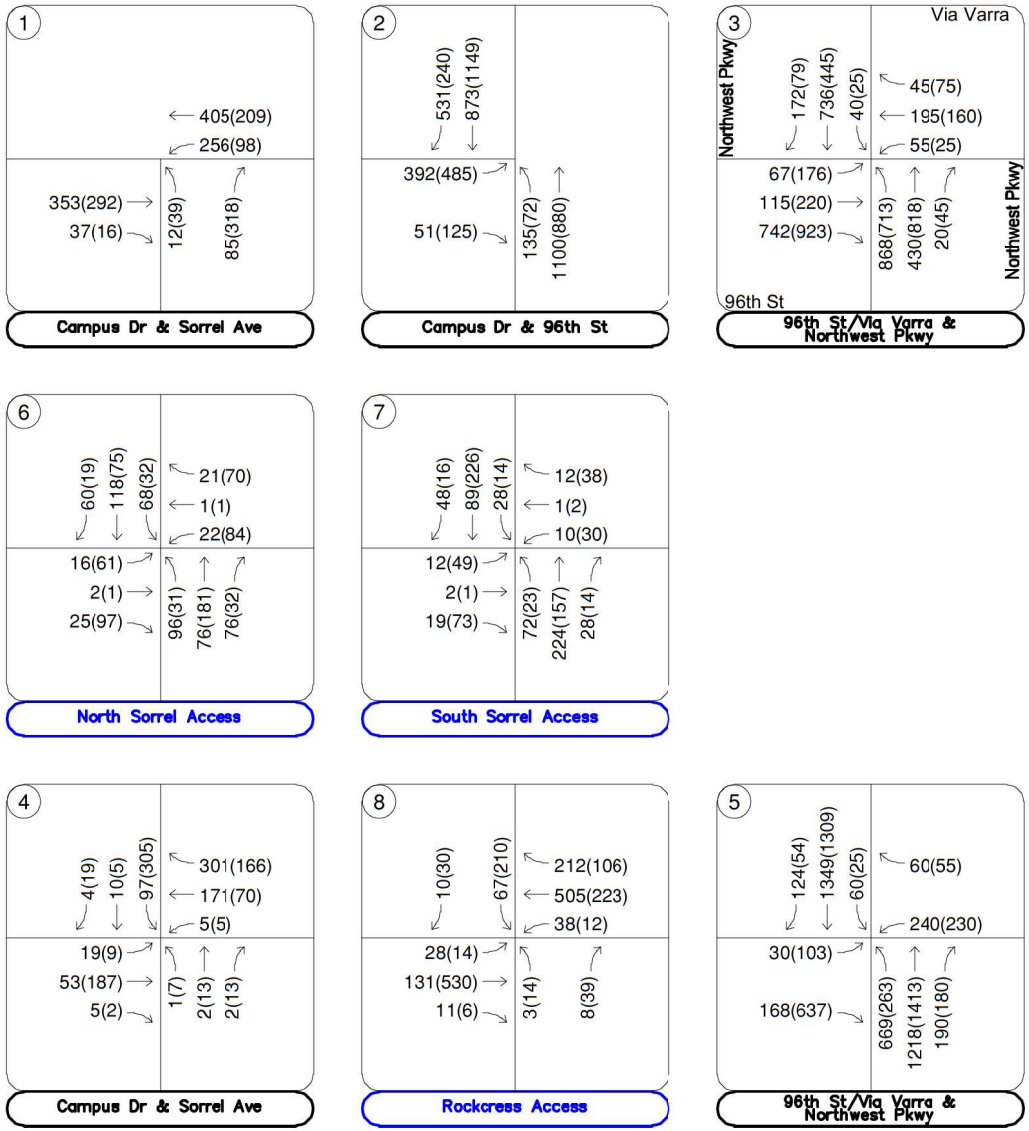


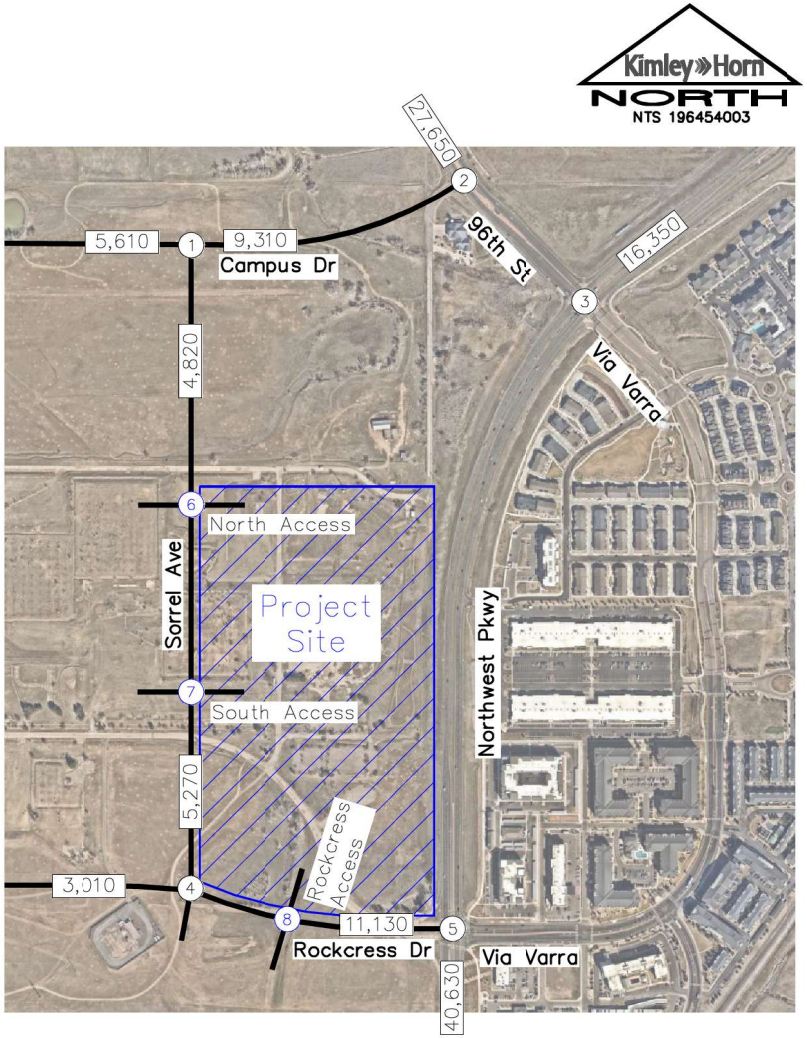
LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 8
AdventHealth Louisville
Louisville, Colorado
2040 Project Traffic Assignment

Kimley»Horn



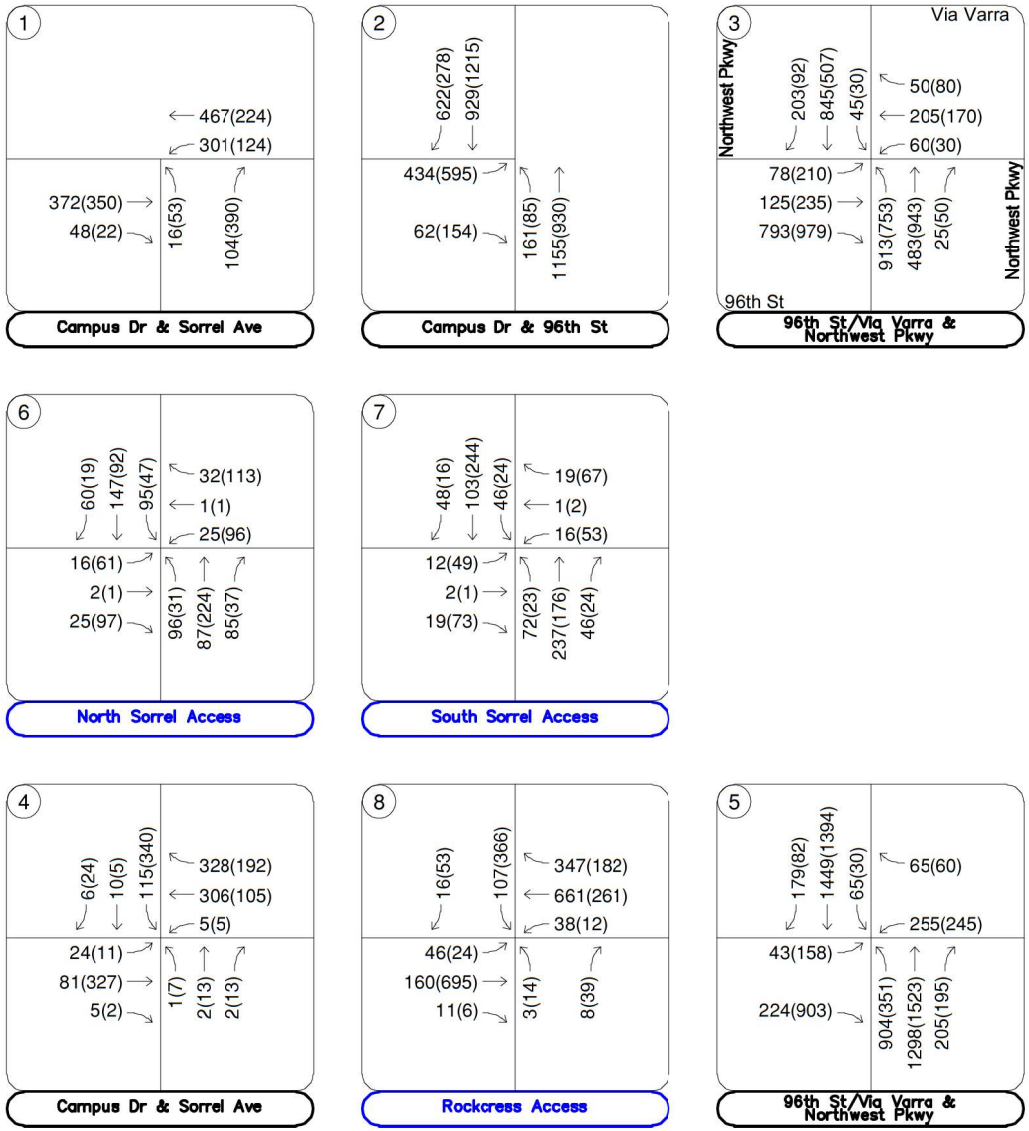


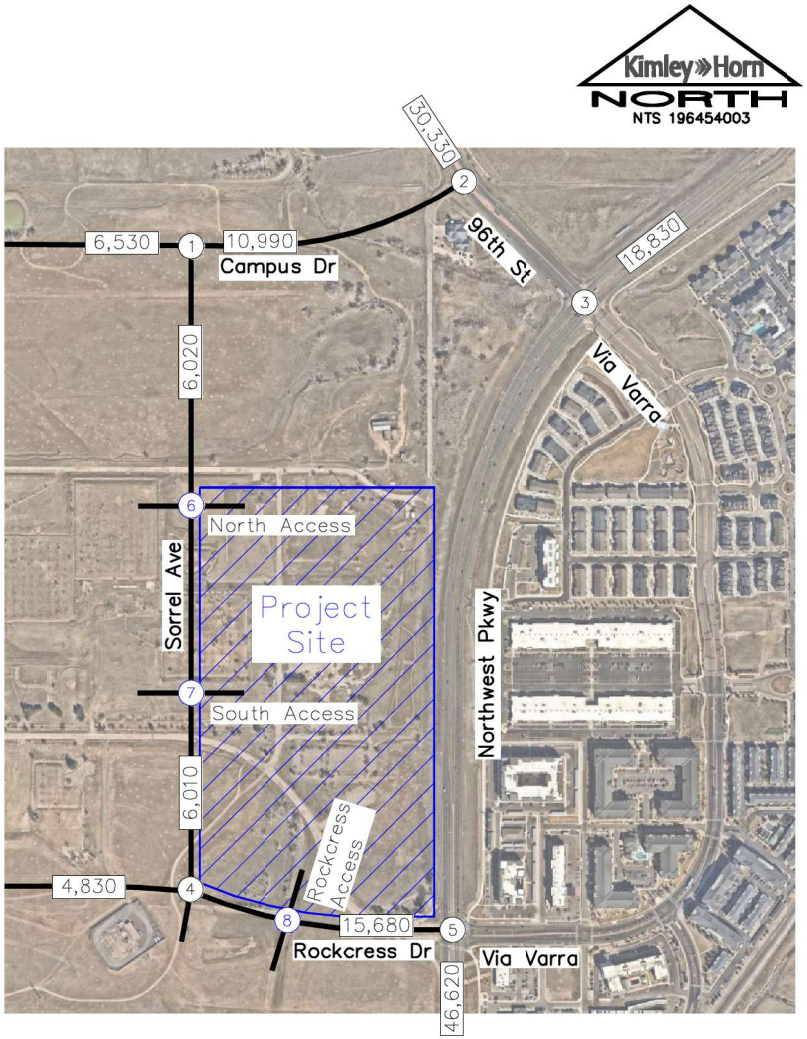
LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 9
AdventHealth Louisville
Louisville, Colorado
2030 Total Traffic Volumes

Kimley»Horn



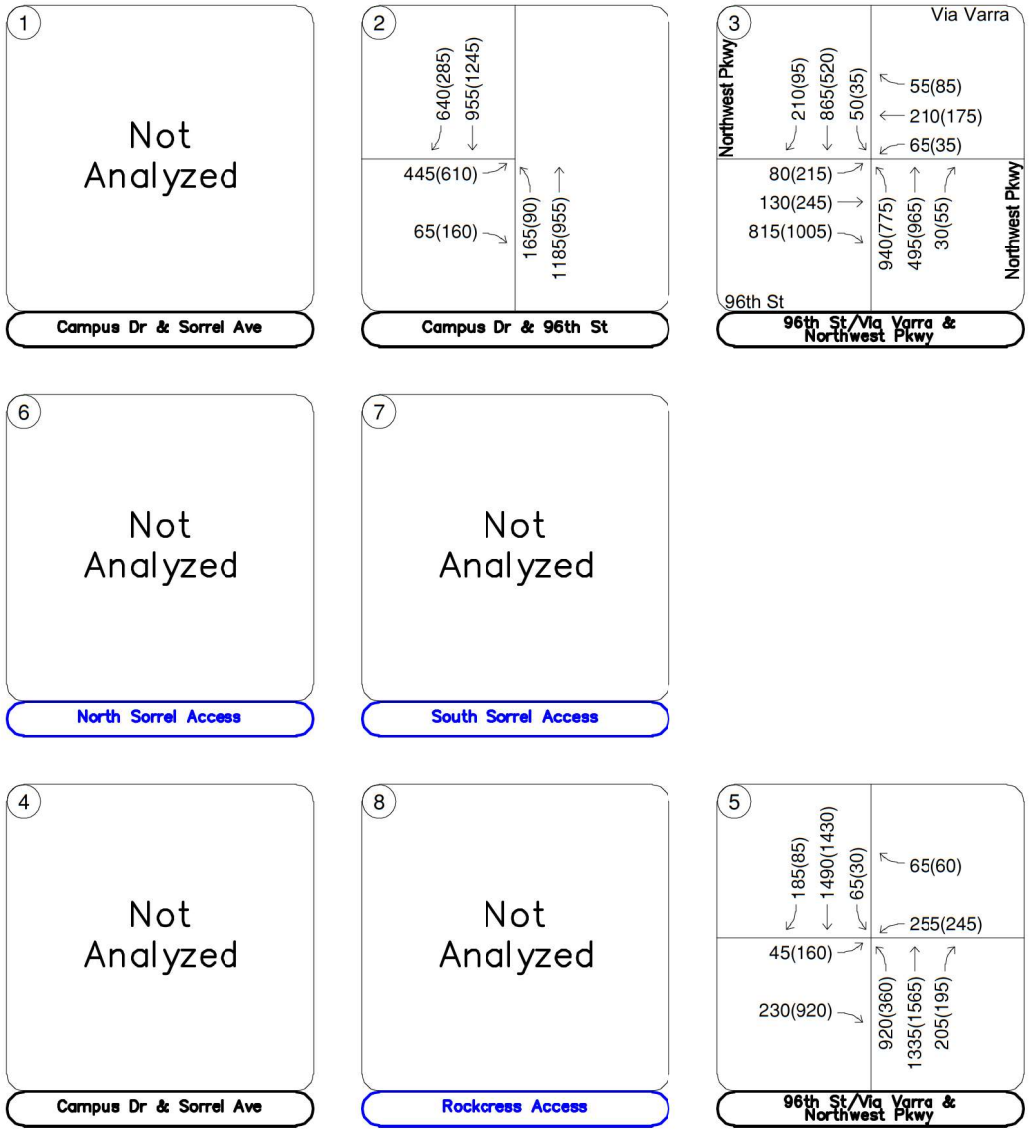


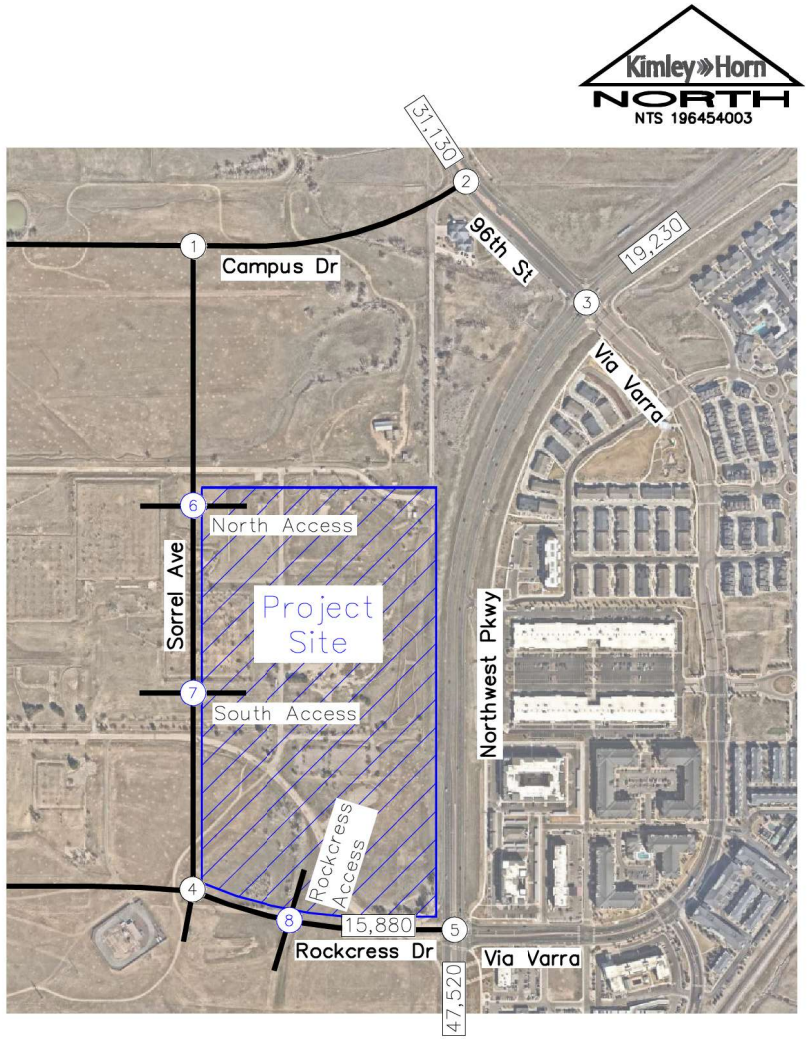
LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 10
AdventHealth Louisville
Louisville, Colorado
2040 Total Traffic Volumes

Kimley»Horn





LEGEND

X	Study Area Key Intersection
X	Project Access Intersection
XXX(XXX)	Weekday AM(PM) Peak Hour Traffic Volumes
XX,X00	Estimated Daily Traffic Volume

FIGURE 11
AdventHealth Louisville
Louisville, Colorado
2045 Total Traffic Volumes

Kimley»Horn

Kimley-Horn's analysis of traffic operations in the site vicinity was conducted to determine potential capacity deficiencies in the 2030, 2040, and 2045 development horizons at the identified key intersections. The acknowledged source for determining overall capacity is the *Highway Capacity Manual (HCM)*[2].

5.1 Analysis Methodology

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway during a specific time interval. It ranges from A (very little delay) to F (long delays and congestion). For intersections and roadways in this study area, standard traffic engineering practice recommends overall intersection LOS D and movement/approach LOS E as the minimum desirable thresholds for acceptable operations. **Table 2** shows the definition of level of service for signalized and unsignalized intersections.

Table 2 – Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Definitions provided from the Highway Capacity Manual, Seventh Edition, Transportation Research Board, 2022.

Study area intersections were analyzed based on average total delay analysis for signalized and unsignalized intersections. Under the unsignalized analysis, the LOS for a two-way stop-controlled intersection is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the whole intersection. LOS for signalized, roundabout, and all-way stop controlled intersections are defined for each approach and for the overall intersection.

[2] Transportation Research Board, *Highway Capacity Manual*, Seventh Edition, Washington DC, 2022.

5.2 Key Intersection Operational Analysis

Calculations for the operational level of service at the key intersections for the study area are provided in **Appendix E**. The existing year analysis is based on the lane geometry and intersection control shown in **Figure 2**. Synchro traffic analysis software was used to analyze the signalized and unsignalized key intersections for HCM level of service.

Campus Drive & Sorrel Avenue (#1)

The Campus Drive & Sorrel Avenue (#1) intersection is proposed to be a 'T'-intersection operating with roundabout control. Based on current improvement plans, it is understood that eastbound Campus Drive will provide one shared through/right turn lane, northbound Sorrel Avenue will provide a shared left/right turn lane, while westbound Sorrel Avenue will provide one left turn lane and a separate through lane. The intersection is anticipated to operate acceptably at LOS A in this configuration through the 2040 horizon with the addition of project traffic. **Table 3** provides the results of the LOS analysis conducted at this intersection.

Table 3 – Campus Drive & Sorrel Avenue (#1) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background – Overall	5.7	A	5.1	A
Eastbound Approach	7.0	A	5.1	A
Westbound Approach	4.9	A	3.8	A
Northbound Approach	4.6	A	6.4	A
2030 Total – Overall	6.1	A	5.9	A
Eastbound Approach	8.2	A	5.5	A
Westbound Approach	5.0	A	3.8	A
Northbound Approach	5.1	A	8.1	A
2040 Background – Overall	6.0	A	5.4	A
Eastbound Approach	7.3	A	5.7	A
Westbound Approach	5.3	A	3.9	A
Northbound Approach	4.7	A	7.0	A
2040 Total – Overall	6.7	A	7.4	A
Eastbound Approach	9.4	A	6.4	A
Westbound Approach	5.5	A	4.0	A
Northbound Approach	5.1	A	10.9	B

Campus Drive & 96th Street (#2)

The future Campus Drive & 96th Street 'T'-intersection is understood to be signalized by the 2030 horizon with development of other land uses in the overall Redtail Ridge area. Based on proposed construction from the improvement plans, it is understood that dual northbound left turn lanes and three through lanes will be provided at full buildout along 96th Street. However, to be conservative in this study, it was assumed that by 2030, the northbound approach would provide one left turn lane and two through lanes. The eastbound Campus Drive approach is proposed to provide dual left turn lanes and a right turn lane, while southbound 96th Street is proposed to provide two through lanes and a right turn lane. By the 2040 horizon, it was assumed that the improvement plans for dual northbound left turn lanes and three northbound through lanes would be provided. **Table 4** provides the results of the LOS analysis conducted at this intersection with these improvements. As shown, the intersection is anticipated to operate acceptably at LOS C or better during the studied peak hours throughout 2045 with the anticipated improvements.

Table 4 – Campus Drive & 96th Street (#2) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background	14.3	B	21.2	C
2030 Total	15.2	B	22.9	C
2040 Background[1]	21.5	C	22.1	C
2040 Total[1]	24.3	C	25.8	C
2045 Total[1]	29.0	C	29.3	C

[1]Dual NBL Turn Lanes and Three NBT Lanes

96th Street/Via Varra & Northwest Parkway (#3)

The 96th Street/Via Varra & Northwest Parkway (#3) intersection is signalized and operates with protected-only left turn phasing on all four approaches to the intersection. According to currently proposed improvement plans for this intersection, it is understood that the northbound dual left turn lanes on Northwest Parkway and dual eastbound left turn lanes on 96th Street will both be improved to provide triple left turn lanes. As such, this would require three receiving lanes on both westbound 96th Street to the west of Northwest Parkway as well as northbound Northwest Parkway to the north of 96th Street. However, to be conservative, it was assumed that this improvement would not be completed until the 2040 full buildout horizon to assess the intersection operation under 2030 Phase 1 conditions if no improvements are completed by 2030. As such, the intersection operates well at LOS C with the existing configuration in 2030 and continues to operate acceptably at LOS C in 2040 and 2045 with the proposed improvements. **Table 5** provides the results of the LOS analysis conducted at this intersection.

Table 5 – 96th Street/Via Varra & Northwest Parkway (#3) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background	29.0	C	29.3	C
2030 Total	29.9	C	29.6	C
2040 Background[1]	28.5	C	22.3	C
2040 Total[1]	29.3	C	22.4	C
2045 Total[1]	29.7	C	22.7	C

[1]Dual NBL Turn Lanes and Three NBT Lanes

Rockcress Drive & Sorrel Avenue (#4)

The Rockress Drive & Sorrel Avenue (#4) intersection is proposed to be constructed a four-leg single-lane roundabout. The northbound, southbound, and eastbound approaches would all provide one lane for shared turning movements while the westbound approach would provide one left/through lane and a right turn only lane. The south leg of the roundabout is anticipated to serve as an access into a future development to the south of Rockcress Drive. In this proposed configuration, the intersection is anticipated to operate at an acceptable level of service A through the 2040 horizon with the addition of project traffic. **Table 6** provides the results of the LOS analysis at this intersection.

Table 6 – Rockcress & Sorrel Avenue (#4) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background – Overall	4.0	A	4.7	A
Eastbound Approach	3.3	A	5.5	A
Westbound Approach	4.1	A	3.3	A
Northbound Approach	3.0	A	4.8	A
Southbound Approach	3.9	A	5.0	A
2030 Total – Overall	4.2	A	5.1	A
Eastbound Approach	3.6	A	6.0	A
Westbound Approach	4.3	A	3.6	A
Northbound Approach	3.2	A	5.1	A
Southbound Approach	4.2	A	5.6	A
2040 Background – Overall	4.4	A	5.5	A
Eastbound Approach	3.5	A	7.3	A
Westbound Approach	4.5	A	3.4	A
Northbound Approach	3.1	A	5.6	A
Southbound Approach	4.5	A	5.2	A
2040 Total – Overall	4.8	A	6.3	A
Eastbound Approach	4.0	A	8.6	A
Westbound Approach	4.9	A	3.7	A
Northbound Approach	3.4	A	6.3	A
Southbound Approach	5.2	A	6.3	A

Rockcress Drive/Via Varra & Northwest Parkway (#5)

The Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection is signalized and operates with protected-only left turn phasing on all four approaches to the intersection. Based on currently proposed improvement plans and the results of the Fox Tuttle study, it is understood that the southbound Northwest Parkway approach to this intersection will provide three through lanes in the future. The results of this analysis further confirm that this improvement is anticipated to be needed in the future. However, to be conservative, it was assumed that the intersection would remain in its current configuration through the 2030 horizon and that the third southbound through lane would not be implemented until the 2040 horizon. In 2030, the intersection is anticipated to operate acceptably at LOS B during the peak hours with the existing configuration and control. Based on these proposed improvements, the intersection is anticipated to operate at an acceptable level of service through the 2045 horizon with the addition of project traffic. **Table 7** provides the results of the LOS analysis conducted at this intersection.

Table 7 – Rockcress Drive/Via Varra & Northwest Parkway (#5) LOS Results

Scenario	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
2030 Background	19.9	B	16.2	B
2030 Total	28.8	C	18.2	B
2040 Background[1]	29.0	C	16.6	B
2040 Total[1]	31.8	C	29.8	C
2045 Total[1]	32.9	C	31.1	C

[1]Three SBT lanes

Project Accesses

With completion of the project, a full movement access is proposed along the north side of Rockcress Drive, approximately 775 feet west of the Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection, measured center to center. Two full movement accesses are also proposed along Sorrel Avenue, both of which are anticipated to align with future accesses to other developments to the west of Sorrel Avenue. A third access along Sorrel Avenue may be desired for access into the hospital—located between Rockcress Drive and the South Sorrel Access (#7). However, if constructed, this access would be designated for emergency vehicle access only.

Sorrel Avenue Accesses (#6 and #7)

Two additional full movement accesses are proposed along the east side of Sorrel Avenue. These accesses are anticipated to align with two accesses to the west of Sorrel Avenue that will serve other developments. At both access intersection locations, the northbound and southbound approaches are recommended to provide a left turn lane and a shared through/right turn lane, while the eastbound/westbound minor street access approaches would operate with stop control and one lane for shared left/through/right turning movements. R1-1 “STOP” signs should be posted on the minor street eastbound/westbound approaches to Sorrel Avenue at both access locations.

Rockcress Drive Access (#8)

The Rockcress Drive Access (#8) is anticipated to align with a future south leg for a development south of Rockcress Drive. This access is anticipated to serve as a primary entrance to the development. In the 2030 Phase 1 horizon, the intersection movements are anticipated to operate acceptably under stop control; only with full buildout traffic volumes by the 2040 horizon is a signal anticipated to be needed at this intersection. A signal warrant analysis was completed for this intersection, which is included in **Appendix E**. As such, this access is proposed to operate under stop control with R1-1 “STOP” signs on the exiting access approaches to the intersection. During this horizon, the eastbound and westbound Rockcress Drive approaches to this access intersection are recommended to provide a left turn lane, one through lane, and a shared through/right turn lane. The northbound approach is anticipated to require only one lane for shared left/through/right turning movements. The southbound approach exiting the hospital would be recommended to provide a left turn lane and a shared through/right turn lane during this horizon.

By the 2040 horizon and full buildout of the AdventHealth site, signalization is recommended at this access location. When full buildout is complete and signalization occurs, the southbound approach would be recommended to provide dual left turn lanes, while maintaining a shared through/right turn lane. Because this improvement is anticipated to be needed at full buildout, it would be recommended that the pavement width be allocated during Phase 1 development to allow for eventual dual southbound left turn lanes. To be conservative, this intersection was analyzed with split phase operations on the northbound/southbound approaches to the intersection because of the difference in approach lane configurations.

Table 8 provides the results of the level of service for these accesses. As shown in the table, the project access intersections are anticipated to operate at an acceptable level of service through the 2040 horizon.

Table 8 – Project Access Level of Service Results

Intersection	2030 Total				2040 Total			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS	Delay (sec/ veh)	LOS
Sorrel N. Access (#6)								
Northbound Left	7.8	A	7.5	A	7.9	A	7.5	A
Eastbound Approach	12.3	B	12.1	B	13.6	B	13.7	B
Westbound Approach	13.1	B	14.0	B	14.2	B	17.1	C
Southbound Left	7.7	A	7.8	A	7.8	A	7.9	A
Sorrel S. Access (#7)								
Northbound Left	7.7	A	7.8	A	7.7	A	7.9	A
Eastbound Approach	11.6	B	12.8	B	12.4	B	13.8	B
Westbound Approach	12.2	B	12.1	B	13.3	B	13.9	B
Southbound Left	7.9	A	7.6	A	8.0	A	7.7	A
Rockcress Access (#8) – Unsignalized								
Northbound Approach	9.5	A	12.5	B				
Eastbound Left	8.9	A	7.8	A				
Westbound Left	7.6	A	8.7	A	-	-	-	-
Southbound Left	19.5	C	26.8	D				
Southbound Through/Right	9.0	A	8.7	A				
Rockcress Access (#8) – Signalized	-	-	-	-	11.4	B	32.2	C

5.3 Vehicle Queuing Analysis

A vehicle queuing analysis was conducted for the study area intersections. The queuing analysis was performed using Synchro presenting the results of the 95th percentile queue lengths. Results are shown in the following **Table 9** with calculations provided within the level of service operational sheets of **Appendix E** for unsignalized intersections and Error! Reference source not found. for s ignalized intersections. Of note, vehicle queues were assumed to be a minimum of 25 feet (approximately one vehicle).

Table 9 – Turn Lane Queuing Analysis Results

Intersection Turn Lane	Existing Turn Lane Length	2030 Calculated Queue (AM/PM)	2030 Recommended Length	2040/2045* Calculated Queue (AM/PM)	2040/2045* Recommended Length
Campus & 96th (#2)					
Eastbound Left	DNE	209'/247' DL	C DL	230'/305'	C DL
Eastbound Right	C	35'/50'	500'	38'/77'	500'
Northbound Left	75'	25'/25'	200'	101'/65'	200' DL
Southbound Right	DNE	50'/38'	200'	59'/49'	200'
96th/Via Varra & Northwest Pkwy (#3)					
Eastbound Left	250'/375' DL	44'/94' DL	250'/375' DL	35'/78' TL	250'/250'/375' TL
Eastbound Right	375' Free	440'/459'	475' Free	467'/423'	475' Free
Westbound Left	200'/275' DL	47'/26' DL	200'/275' DL	53'/34' DL	200'/275' DL
Westbound Right	250' Free	25'/25'	250' Free	25'/25'	250' Free
Northbound Left	600'/800' DL	446'/349' DL	600'/800' DL	347'/240' TL	600'/600'/800' TL
Northbound Right	C Free	25'/25'	C Free	25'/25'	C Free
Southbound Left	550'/600' DL	25'/25' DL	550'/600' DL	28'/25' DL	550'/600' DL
Southbound Right	500' Free	25'/25'	500' Free	25'/25'	500' Free
Rockcress/Via Varra & Northwest Pkwy (#5)					
Eastbound Left	125' DL	29'/72'	400'/C DL	42'/82'	400'/C DL
Eastbound Right	Free	25'/25'	Free	25'/297'	Free
Westbound Left	250'/500'C DL	138'/127'	250'/500'C DL	147'/131'	250'/500'C DL
Northbound Left	250'/475' DL	327'/208'	250'/475' DL	414'/202'	375'/475' DL
Northbound Right	300'	26'/30'	300'	26'/38'	300'
Southbound Left	425'/650' DL	42'/25'	425'/650' DL	42'/25'	425'/650' DL
Southbound Right	500' Yield	25'/25'	500' Yield	25'/25'	500' Yield
Sorrel North Access (#6)					
Northbound Left	DNE	25'/25'	150'	25'/25'	150'
Southbound Left	DNE	25'/25'	150'	25'/25'	150'
Sorrel South Access (#7)					
Northbound Left	DNE	25'/25'	150'	25'/25'	150'
Southbound Left	DNE	25'/25'	150'	25'/25'	150'
Rockcress Access (#8)					
Eastbound Left	DNE	25'/25'	150'	36'/25'	150'
Westbound Left	DNE	25'/25'	150'	25'/25'	150'
Southbound Left	DNE	25'/100'	200'	70'/193'	200' DL

DNE = Does Not Exist; C = Continuous Turn Lane; DL = Dual Left Turn Lanes; TL = Triple Left Turn Lanes; **Blue** Text = Recommendation; * = 2040 horizon year used for internal intersections (#6, 7, 8) while 2045 horizon year is used for major external intersections (#2, 3, 5)

All queues are anticipated to remain within the existing or recommended turn lane lengths through 2045. The recommended turn lane lengths provided in this table are generally based on the currently proposed construction improvement plans at the major external intersections of Campus Drive & 96th Street (#2), 96th Street/Via Varra & Northwest Parkway (#3), and Rockcress Parkway/Via Varra & Northwest Parkway (#5), where available, while the internal intersection turn lane recommendations at the project accesses are based on a minimum assumed turn lane length of 150 feet, with additional storage provided to meet expected vehicle queues.

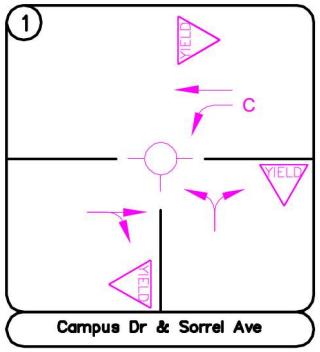
As noted previously, to be conservative it was assumed that the northbound left turning movement at Campus Drive & 96th Street (#2) would operate from a single lane in the 2030 horizon and would not be improved to dual left turn lanes until the 2040 horizon. It was also assumed that the triple northbound left turn lanes on Northwest Parkway and triple eastbound left turn lanes on 96th Street at the 96th Street/Via Varra & Northwest Parkway (#3) would not be implemented until the 2040 horizon. There is approximately 725 feet of spacing between the Campus Drive extension and Northwest Parkway along 96th Street available for left turn lane storage. Based on the proposed dual northbound left turn lanes at Campus Drive & 96th Street (#2) intersection providing 200 feet of storage and the triple southbound left turn lanes at 96th Street/Via Varra & Northwest Parkway (#3) providing 250 to 375 feet of storage, there is space for a shared taper length of approximately 150 feet for these back-to-back left turn lanes. Vehicle queues are easily accommodated the left turn lanes at both of these locations, with the northbound dual left turn lanes at Campus Drive & 96th Street (#2) expected to have 95th percentile queues approximately 100 feet or less through the 2045 horizon, while the southbound triple left turn lanes at 96th Street/Via Varra & Northwest Parkway (#3) are expected to experience 95th percentile queues under 80 feet through the 2045 horizon.

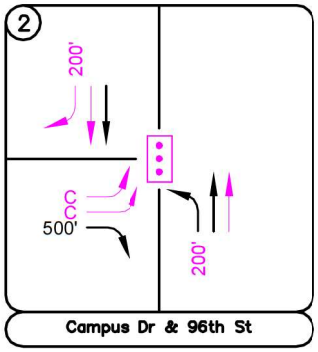
Additionally, because the Rockcress Access (#8) is proposed to operate with two-way stop control exiting the hospital in the 2030 horizon, the southbound approach is proposed to operate with only one southbound left turn lane in this horizon. By the 2040 horizon at full buildout and with signalization of this access, the dual left turn lanes, each proposed as 200 feet in length, should be provided. Because dual southbound left turn lanes are anticipated to be needed at full buildout at the Rockcress Access (#8), it would be recommended that pavement width be provided to allow for these dual left turn lanes, and that in the 2030 short-term horizon the second left turn lane be striped out with chevron striping to restrict its use until the intersection is signalized.

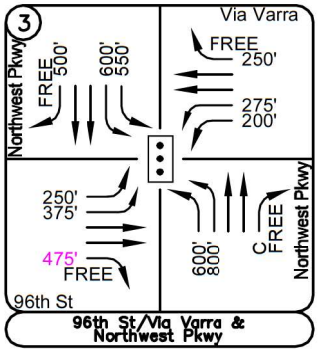
Rockcress Drive is proposed to provide two through lanes eastbound and westbound between Sorrel Avenue and Northwest Parkway. The second eastbound through lane is anticipated to become a forced left turn only lane at the Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection, while a second left turn lane 400 feet in length will also be provided. There is anticipated to be approximately 700 feet of spacing available for left turn lane storage. The westbound left turn lane at the Rockcress Access (#8) is proposed to provide 150 feet in length. This leaves 150 feet of additional length available between the Rockcress Access (#8) and Northwest Parkway available for a shared taper length for these back-to-back left turn lanes. The 95th percentile queue in the eastbound dual left turn lanes at Rockcress Drive/Via Varra & Northwest Parkway (#5) is expected to be approximately 82 feet or less through the 2045 horizon, while the westbound left turn queue at the Rockcress Access (#8) is anticipated to be 25 feet or less. As such, the provided left turn storage and taper length for these turn lanes are expected to easily accommodate projected traffic volumes through the 2045 horizon.

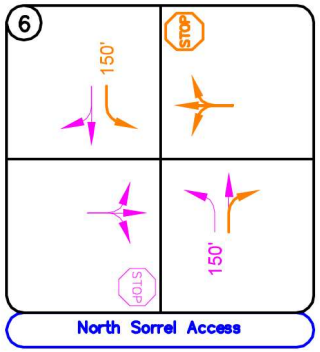
5.4 Improvement Summary

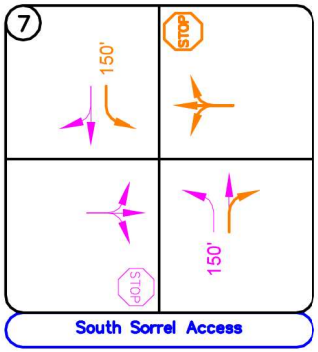
Based on the results of the intersection operational and vehicle queuing analysis, the key intersection recommended improvements and control are shown in **Figure 12** and **Figure 13** for the 2030 and 2040 horizons, respectively. Of note, the recommendations provided in **Figure 13** are anticipated to be needed by the 2040 horizon but are expected to provide acceptable operations through the 2045 horizon. These recommendations are distinguished by improvements expected to be needed due to the hospital site versus improvements that would be expected to be constructed by others as part of the master Redtail Ridge development.

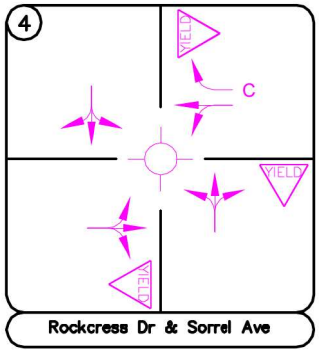


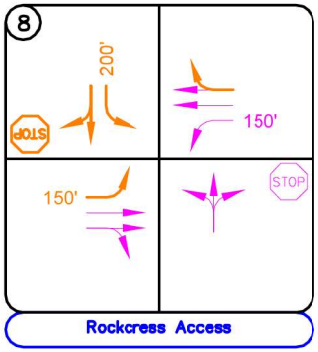


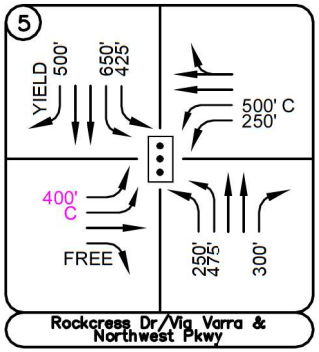




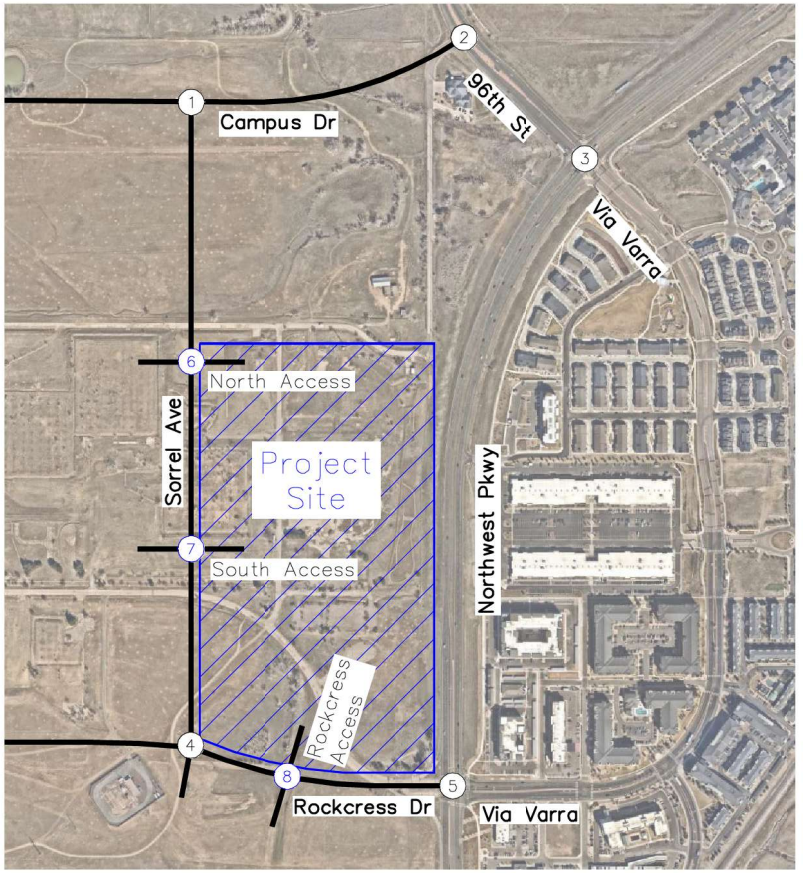








Kimley»Horn
NORTH
NTS 196454003

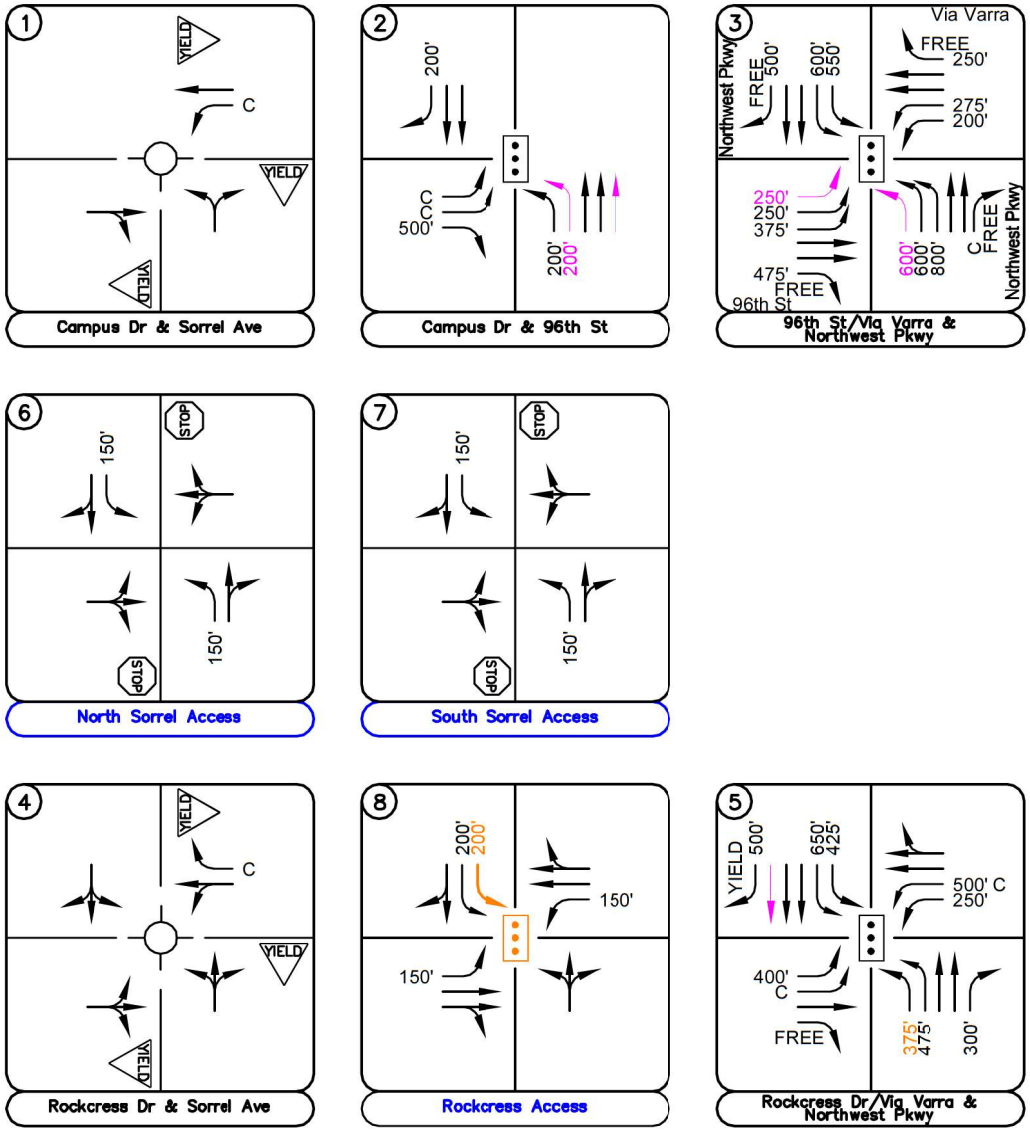


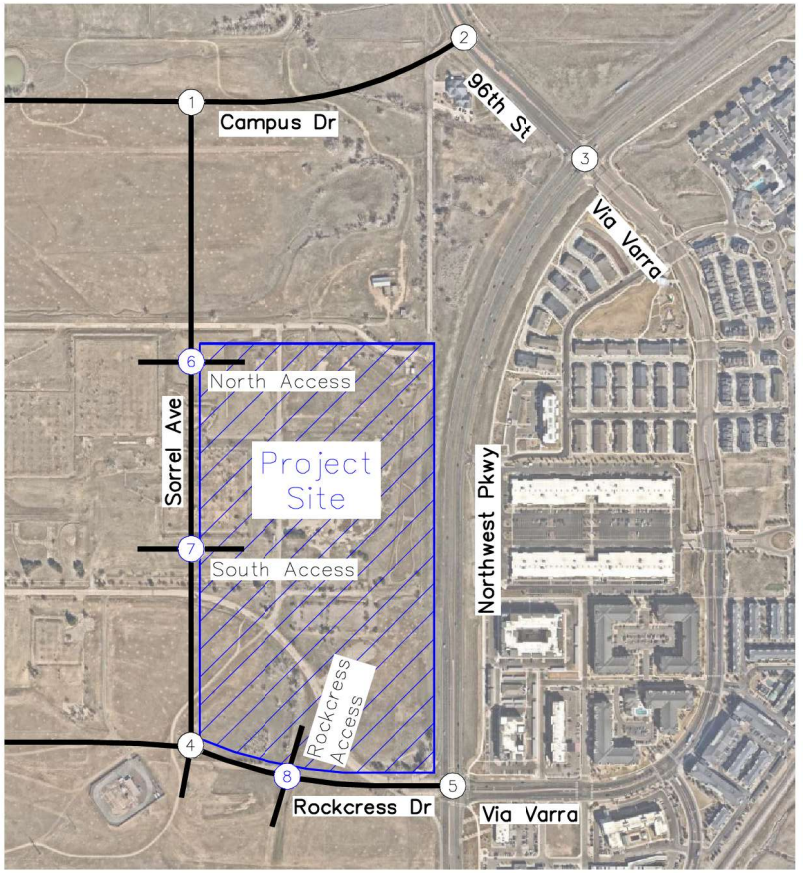
LEGEND

X — Study Area Key Intersection	STOP — Stop-Controlled Approach
Roundabout	Hospital-Specific Improvement
YIELD — Yield-Controlled Approach	Improvement by Others
Signalized Intersection	100' Turn Lane Length (feet)
	C — Continuous Turn Lane

FIGURE 12
AdventHealth Louisville
Louisville, Colorado
2030 Recommended Geometry and Control

Kimley»Horn





LEGEND

- Study Area Key Intersection
- Roundabout
- Yield-Controlled Approach
- Signalized Intersection
- Stop-Controlled Approach
- Hospital-Specific Improvement
- Improvement by Others
- 100' Turn Lane Length (feet)
- C Continuous Turn Lane

FIGURE 13
AdventHealth Louisville
Louisville, Colorado
2040 Recommended Geometry and Control

6.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis presented in this report, Kimley-Horn believes AdventHealth Louisville will be successfully incorporated into the existing and future roadway network. There is an existing AdventHealth hospital located at the intersection of Campus Drive and 88th Street approximately 1.25 miles to the west of this proposed site. This existing site includes approximately 400,000 square feet of hospital/medical office building uses and is approved with an expansion of an addition 350,000 square feet to include up to 750,000 square feet at full buildout. The currently proposed AdventHealth site within the Redtail Ridge development area is expected to include up to 799,600 square feet of hospital/medical office building uses. As such, this increase of 49,600 square feet of additional uses with relocation of the existing hospital with approved expansion to the new site is expected to result in approximately 658 additional weekday daily trips, with 47 more trips during the morning peak hour and 61 more trips during the afternoon peak hour compared to the traffic the existing site could generate. This results in approximately one additional vehicle every 75 seconds during the morning peak hour and one additional vehicle every minute (60 seconds) during the afternoon peak hour on the surrounding street network compared to the existing project site. This study assessed the additional improvements that could be needed due to the additional square footage of this proposed site, and any vehicle rerouting that could occur with the site being located further to the east. Analysis of the existing street network, the proposed project development, and expected traffic volumes resulted in the following recommendations:

2030 Recommendations

- The Campus Drive & Sorrel Avenue (#1) intersection is anticipated to be constructed prior to AdventHealth Louisville construction. Based on currently proposed construction plans, it will be a 'T'-roundabout controlled intersection, with eastbound Campus Drive operating with a shared through/right turn lane, westbound Campus Drive providing separate left and through lanes, and the northbound Sorrel Avenue approach providing one lane for shared left/right turning movements. R1-2 "YIELD" signs should be posted on all three approaches to the roundabout.
- The Campus Drive & 96th Street (#2) intersection is anticipated to become a signalized 'T'-intersection with full movements allowed by the 2030 horizon prior to AdventHealth construction. For purposes of this study, the eastbound Campus Drive approach was based

on the proposed construction plans, which would have dual continuous eastbound left turn lanes and a separate right turn lane approximately 500 feet in length. The northbound 96th Street approach was conservatively assumed to provide a single 200-foot left turn lane and two through lanes in this horizon. However, at full buildout based on construction plans, it is anticipated to provide dual left turn lanes and three through lanes northbound. The southbound 96th Street approach should provide two through lanes and a 200-foot right turn lane.

- The 96th Street/Via Varra & Northwest Parkway (#3) intersection may require extension of the eastbound right turn lane from 375 feet to approximately 475 feet by this horizon to meet expected vehicle queues. However, if not improved, it is believed any additional vehicles can safely queue in the southernmost eastbound through lane if these queues are experienced.
- The future Rockcress Drive & Sorrel Avenue (#4) is proposed to be constructed as a four-leg single-lane roundabout prior to AdventHealth construction. The eastbound, northbound, and southbound approaches are all expected to provide one approach lane for shared left/through/right turning movements, while the westbound approach would provide a shared left/through lane and a separate right turn lane. Each approach should provide R1-2 "YIELD" signs on approach to the intersection.
- The Rockcress Drive/Via Varra & Northwest Parkway (#5) intersection is expected to be improved on the eastbound approach to the intersection with dual left turn lanes, one of which would provide 400 feet in length while the other would be a continuous turn lane. These improvements are based on the currently proposed improvement plans. Although it is understood that three southbound through lanes are eventually proposed at this intersection, it was conservatively analyzed with the existing two southbound through lanes during this horizon.
- Two full movement accesses are proposed along the east side of Sorrel Avenue, to align with two proposed accesses on the west side of Sorrel Avenue. R1-1 "STOP" signs are proposed on the eastbound and westbound approaches to Sorrel Avenue at both accesses. These accesses should operate well with one approach lane for shared left/through/right turning movements. The northbound and southbound approaches of Sorrel Avenue to both accesses are recommended to provide 150-foot left turn lanes and shared through/right turn lanes.
- The primary access into the proposed site is anticipated to be along Rockcress Drive, approximately 775 feet to the west of Northwest Parkway, measured center to center. This intersection is anticipated to operate well under minor street stop control through the 2030

horizon with Phase 1 construction of AdventHealth Louisville. The Rockcress Access (#8) is recommended to provide a 150-foot left turn lane, one through lane, and one shared through/right turn lane along both eastbound and westbound Rockcress Drive. The northbound approach to the intersection is anticipated to operate well with one lane for shared left/through/right turning movements while the southbound approach exiting the hospital should provide a 200-foot left turn lane and a separate through/right lane. Of note, dual southbound left turn lanes are recommended at this access at full buildout and as such, it is recommended that pavement width be provided for the future second left turn lane, but that it be striped out with chevron striping to allow only one southbound left turn lane until full buildout of the hospital site. During this horizon, R1-1 "STOP" signs should be posted on the northbound and southbound approaches.

2040 & 2045 Recommendations

- By the 2040 horizon, it was assumed that the Campus Drive & 96th Street (#2) intersection would provide dual northbound left turn lanes 200 feet in length while a third northbound through lane would also be provided. This third northbound through lane would provide the third required receiving lane for the proposed triple northbound left turn lanes at Northwest Parkway just to the southeast.
- The 96th Street/Via Varra & Northwest Parkway (#3) intersection is anticipated to provide triple northbound left turn lanes on Northwest Parkway and triple eastbound left turn lanes on 96th Street based on proposed improvement plans. For purposes of this study, the third northbound left turn lane was assumed to provide 600 feet in length while the third eastbound left turn was assumed to provide 250 feet in length. It should be noted the third eastbound left turn lane will require three receiving lanes on Northwest Parkway to the north of this intersection.
- The Rockcress Parkway/Via Varra & Northwest Parkway (#5) intersection should provide three southbound through lanes by this horizon. To meet expected vehicle queues, the inner northbound left turn lane may need to be extended from 250 feet to 375 feet to meet expected vehicle queues. It is believed this northbound left turn lane extension can be accomplished with minor median reconstruction.
- With full buildout of the AdventHealth site, the Rockcress Access (#8) is recommended to be signalized and is expected to meet warrants for signalization. When signalized, the

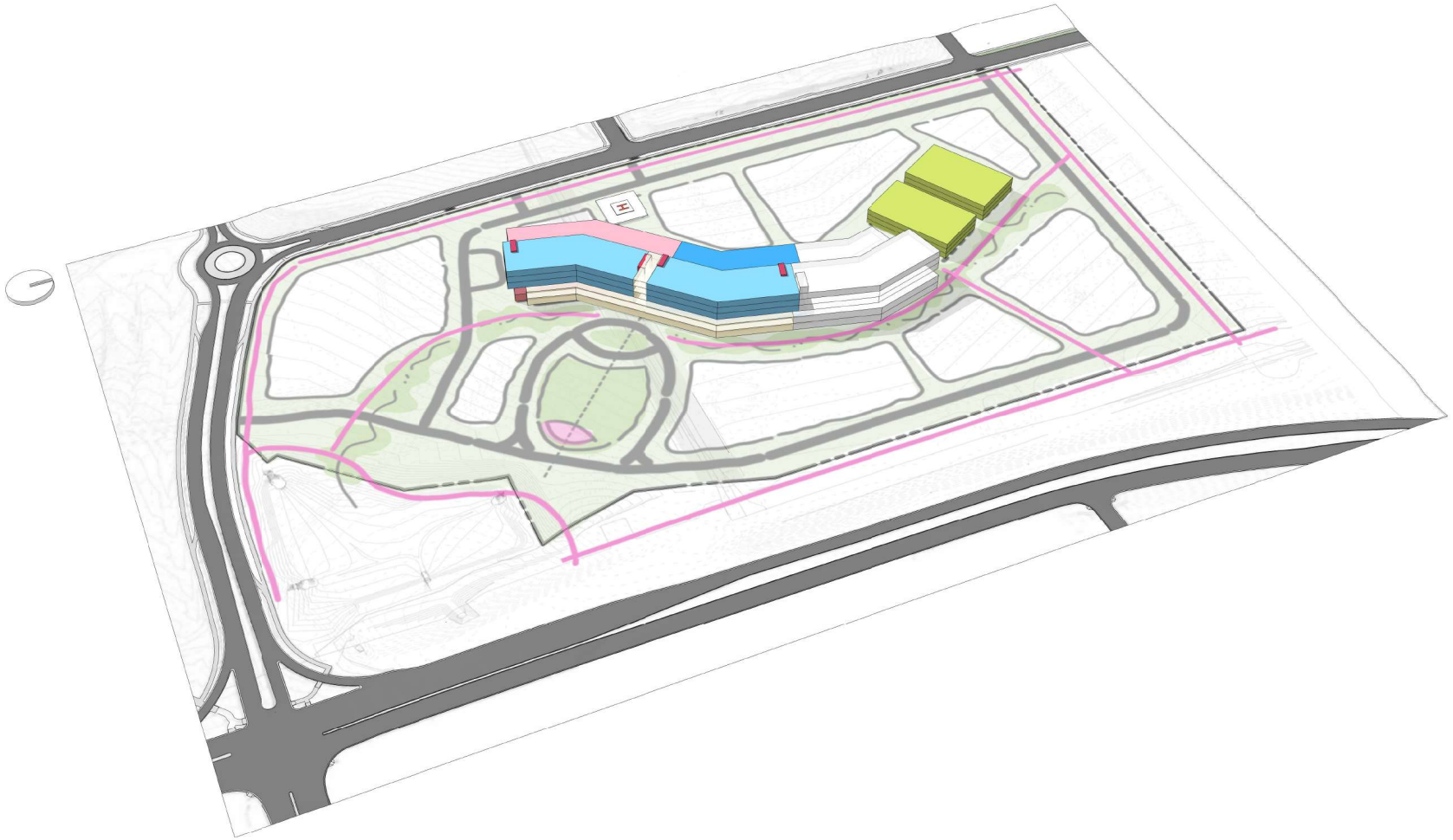
southbound approach exiting the hospital is recommended to be improved to provide dual left turn lanes 200 feet in length.

- Each of these improvements is anticipated to operate acceptably through the 2045 horizon.

General Recommendations

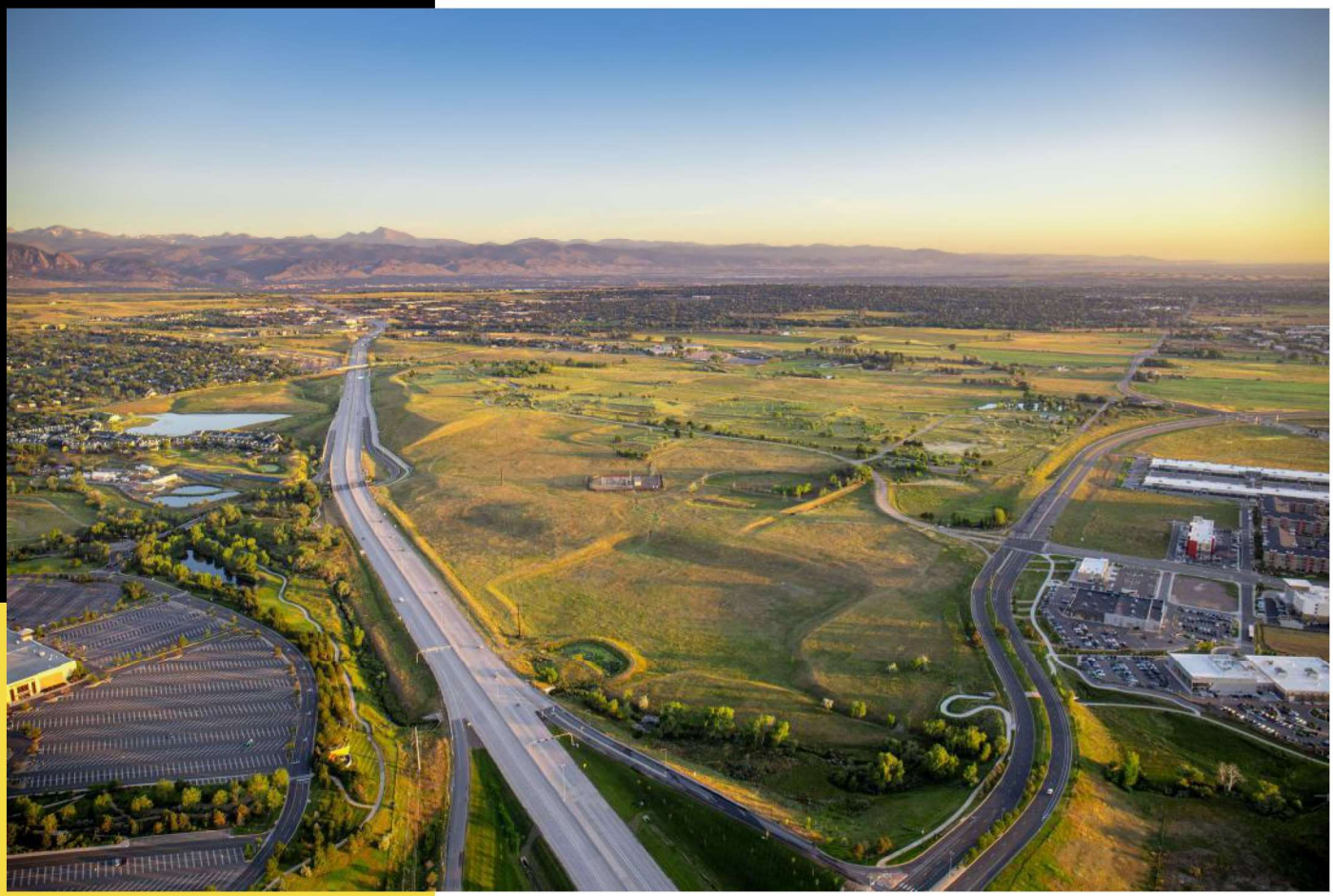
- Any onsite or offsite improvements should be incorporated into the Civil Drawings and conform to standards of the City of Louisville and the Manual on Uniform Traffic Control Devices (MUTCD) – 11th Edition, 2023.

Appendix A: Conceptual Site Plan



Appendix B: Fox Tuttle Study Documents

Redtail Ridge
Traffic and Mobility Study



Updated Date: July 30, 2024

COLORADO LICENSED
CASSANDRA R. SLADE
44414
PROFESSIONAL ENGINEER

Submitted To:
Sterling Bay
5910 Pacific Center Blvd, Suite 200
San Diego, CA 92121

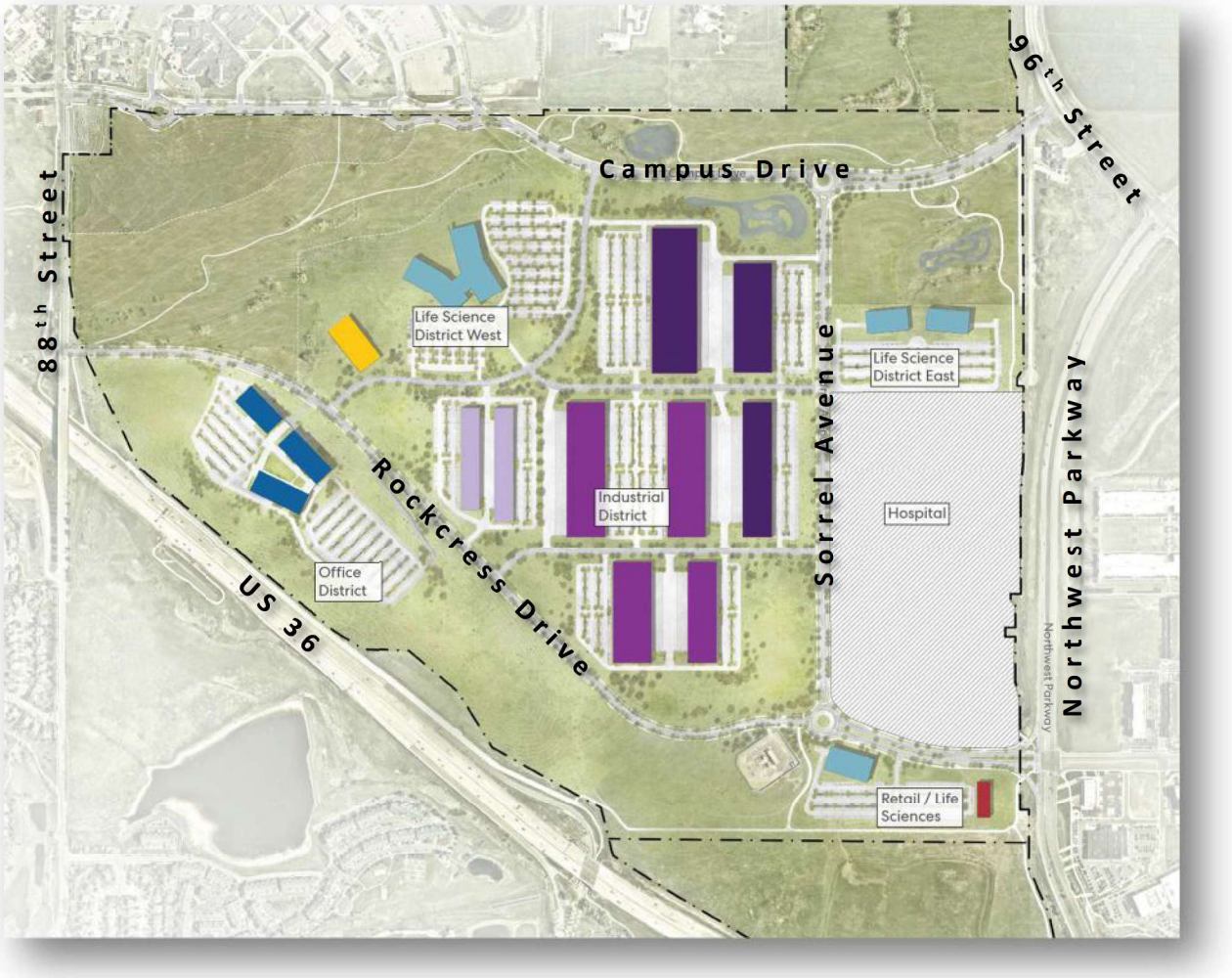
Submitted By:
Fox Tuttle Transportation Group, LLC
1580 Logan Street, 6th Floor
Denver, CO 80203

FOX TUTTLE

2.0 Project Description

A concept showing the preliminary proposed internal roadway network, proposed access to the external network, and the development areas is provided in **Figure 2.**

Figure 2. Proposed Land Use and Internal Roadways



While subject to change, the proposed land use type/size and estimated timeframe for when each phase will be completed and fully occupied is summarized below in **Table 1**:

Table 1. Summary of Land Uses and Sizes by Phase

Land Use Type	Phase 1 By Year 2025	Phase 2 By Year 2030	Phase 3 By Year 2035	Total
Industrial	509,260 sq. ft.	118,800 sq. ft.	-	*628,060 sq. ft.*
Life Science & Amenity Bldg.	300,000 sq. ft.	-	-	*300,000 sq. ft.*
Good Manufacturing Practice (GMP)	598,940 sq. ft.	-	-	*598,940 sq. ft.*
General Office	-	90,000 sq. ft.	270,000 sq. ft.	*360,000 sq. ft.*
Research and Development Center	-	264,000 sq. ft.	-	*264,000 sq. ft.*
Retail Services	-	14,000 sq. ft.	-	*14,000 sq. ft.*
Hospital	-	285,000 sq. ft.	-	*285,000 sq. ft.*
Medical/Dental Office	-	150,000 sq. ft.	-	*150,000 sq. ft.*
Total	**1,408,200 sq. ft.**	**921,800 sq. ft.**	**270,000 sq. ft.**	***2,600,000 sq. ft.***

The Redtail Ridge project will include two (2) new east-west roadway connections between 88th Street and 96th Street/Northwest Parkway. The first phase, prior to Year 2025, will include the extension of Campus Drive from the current dead end near Monarch High School (approximately 2,200 feet east of S. 88th Street) to 96th Street. This new connection will serve traffic generated by the proposed development, as well as existing traffic currently traveling along 88th Street and Dillon Road. The existing intersection of 88th Street/Campus Drive is full-movement and signalized. With the Campus Drive extension, a new full-movement signalized intersection is proposed on S. 96th Street at the northeast corner of the site, which will be near where Old 96th Street/Disc Drive currently intersects as a 3/4 movement access.

The first phase will also include construction of Rockcress Drive from Northwest Parkway to midway in the project site, which will be extended to S. 88th Street within the second phase (prior to Year 2030). This will be an additional east-west connection through the area. The existing intersection on Northwest

As shown in **Table 11**, with the assumptions listed above, the project site is expected to generate approximately 6,663 daily, 758 AM peak hour, and 803 PM peak hour external trips by Year 2025. At full build out the project site is expected to generate approximately 21,285 daily, 1,908 AM peak hour, and 2,149 PM peak hour external trips.

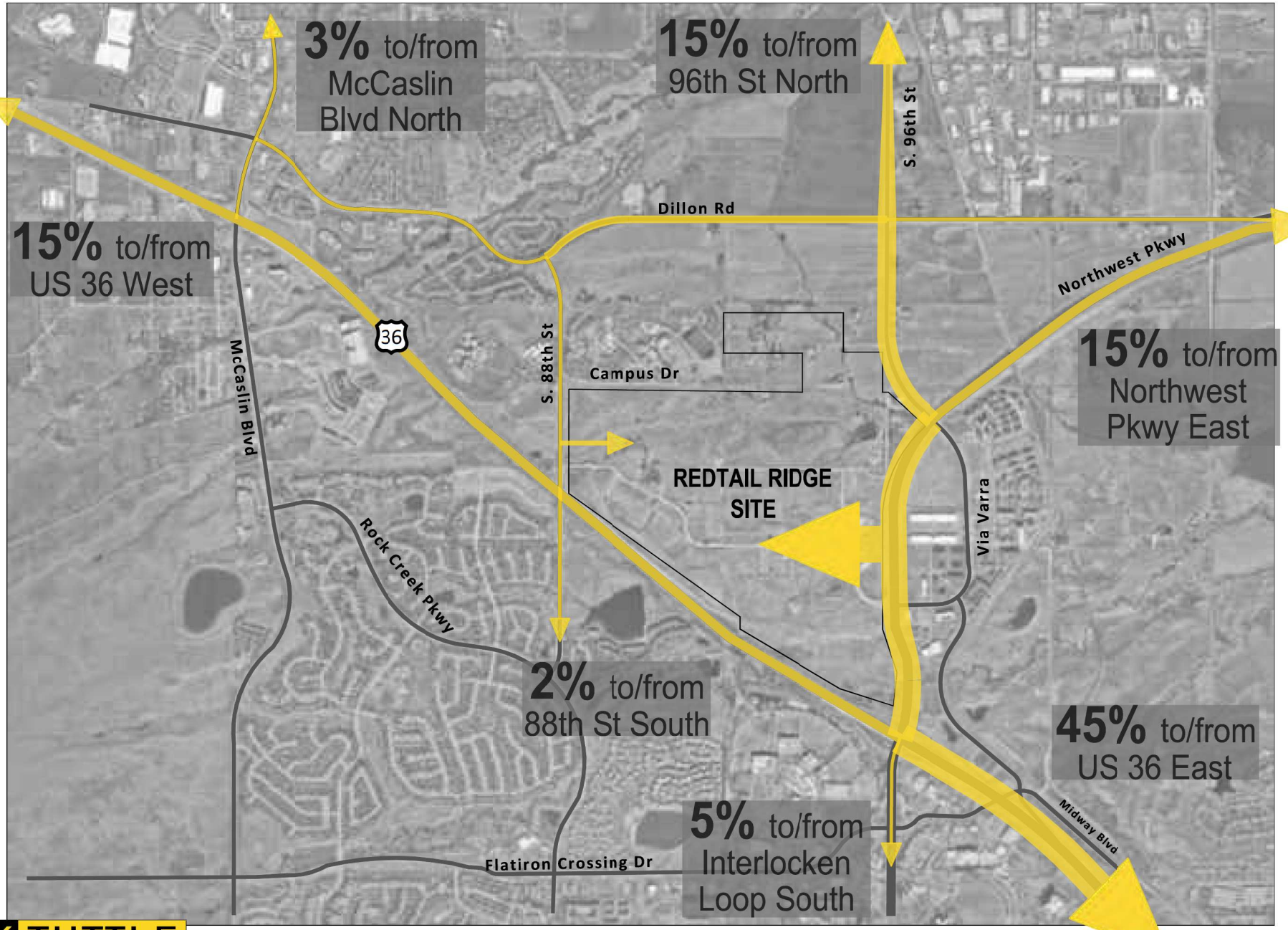
Table 11. Trip Generation Summary

	Land Use	Size	Unit	Non-SOV	Internal Capture	Net Reduction Factor	Average Weekday Trips Rate	Average Weekday Trips Total	Weekday AM Peak Hour Trips Rate	Weekday AM Peak Hour Trips Total	Weekday AM Peak Hour Trips In	Weekday AM Peak Hour Trips Out	Weekday PM Peak Hour Trips Rate	Weekday PM Peak Hour Trips Total	Weekday PM Peak Hour Trips In	Weekday PM Peak Hour Trips Out
Phase 1 (2025)	#130 Industrial Park	509.26	KSF	**12%**	**3%**	85%	*	1,868	0.4	174	141	33	0.4	174	37	137
	#760 Research and Development Center (Life Science + Amenity)	300.0	KSF	**12%**	**3%**	85%	**	2,695	1.03	264	216	48	0.98	251	40	211
	#140 Manufacturing (GMP)	598.94	KSF	**12%**	**3%**	85%	*****	2,100	******	320	243	77	0.74	378	117	261
		######	**KSF**			**Subtotal**		**6,663**		**758**	**600**	**158**		**803**	**194**	**609**
Phase 2 (2030)	#820 Shopping Center	14.0	KSF	**12%**	**75%**	22%	37.75	116	0.94	3	2	1	3.81	12	6	6
	#130 Industrial Park	118.8	KSF	**12%**	**3%**	85%	*	877	0.4	41	33	8	0.40	41	9	32
	#710 General Office Building	90	KSF	**12%**	**3%**	85%	**	818	***	95	82	13	****	88	14	74
	#760 Research and Development Center	264.00	KSF	**12%**	**3%**	85%	**	2,397	1.03	232	190	42	0.98	221	35	186
	#610 Hospital	160.0	BEDS	**12%**	**3%**	85%	22.32	3,048	1.79	244	176	68	1.69	231	76	155
	#720 Medical-Dental Office Bldg	150.0	KSF	**12%**	**3%**	85%	36.00	4,609	***	296	234	62	3.93	503	151	352
		921.80	**KSF**			**Subtotal**		**12,037**		**911**	**717**	**194**		**1,096**	**291**	**805**
Ph 3 (2040)	#710 General Office Building	270.0	KSF	**12%**	**3%**	85%	**	2,374	***	239	206	33	****	250	40	210
		270.00	**KSF**			**Subtotal**		**2,585**		**239**	**206**	**33**		**250**	**40**	**210**
						Full Buildout Total		**21,285**		**1,908**	**1,523**	**385**		**2,149**	**525**	**1,624**

* ITE Equation: EXP(0.52*LN(X) *** ITE Equation: (0.94*X+ 26.49) ***** ITE Equation 3.77*X+201.98
** ITE Equation: EXP(0.97*LN(X **** ITE Equation EXP(0.95*LN(X) ****** ITE Equation 0.61*X+9.54

7.6 Trip Distribution and Assignment

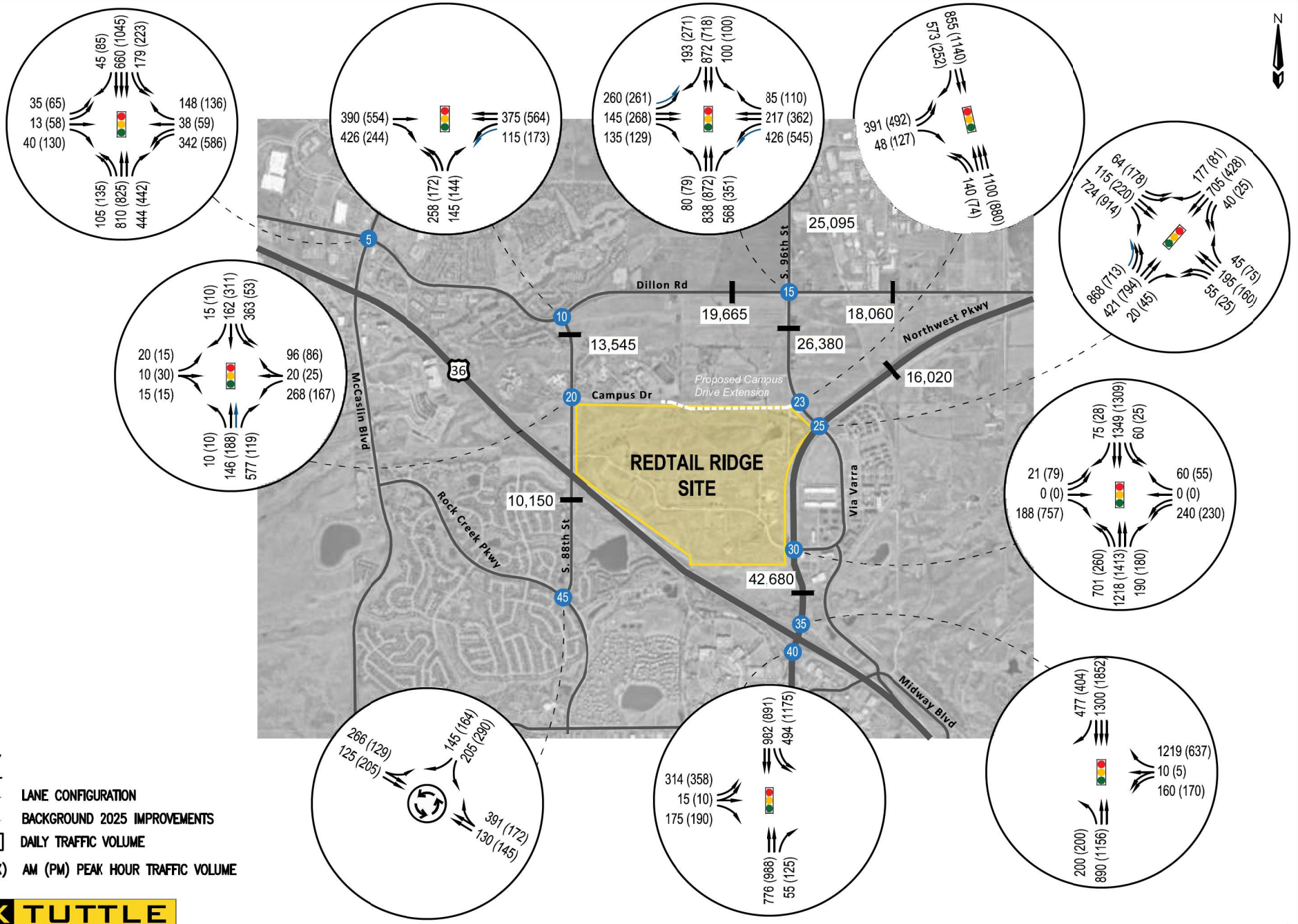
To develop the trip distribution for the proposed development, available traffic count and travel pattern data was reviewed. The proposed land uses for the project site were also taken into consideration which suggests that traffic generated to/from the project site is expected to utilize the regional transportation system, with a smaller percent of the trips generated by the local system. Therefore, most vehicles are expected to use the regional routes (such as US 36, Northwest Parkway, and S. 96th Street to the north) and few vehicles are expected to use local roads. Travel routes/patterns were reviewed to determine how vehicles are expected to access the site and what route is likely to be fastest for vehicles to use to



FOX TUTTLE
TRANSPORTATION GROUP

REDTAIL RIDGE TRAFFIC AND MOBILITY STUDY
TRIP DISTRIBUTION

FT Project #	19055	Original Scale	NTS	Date	02/15/2023	Drawn by	MAR	Figure #	18



KEY

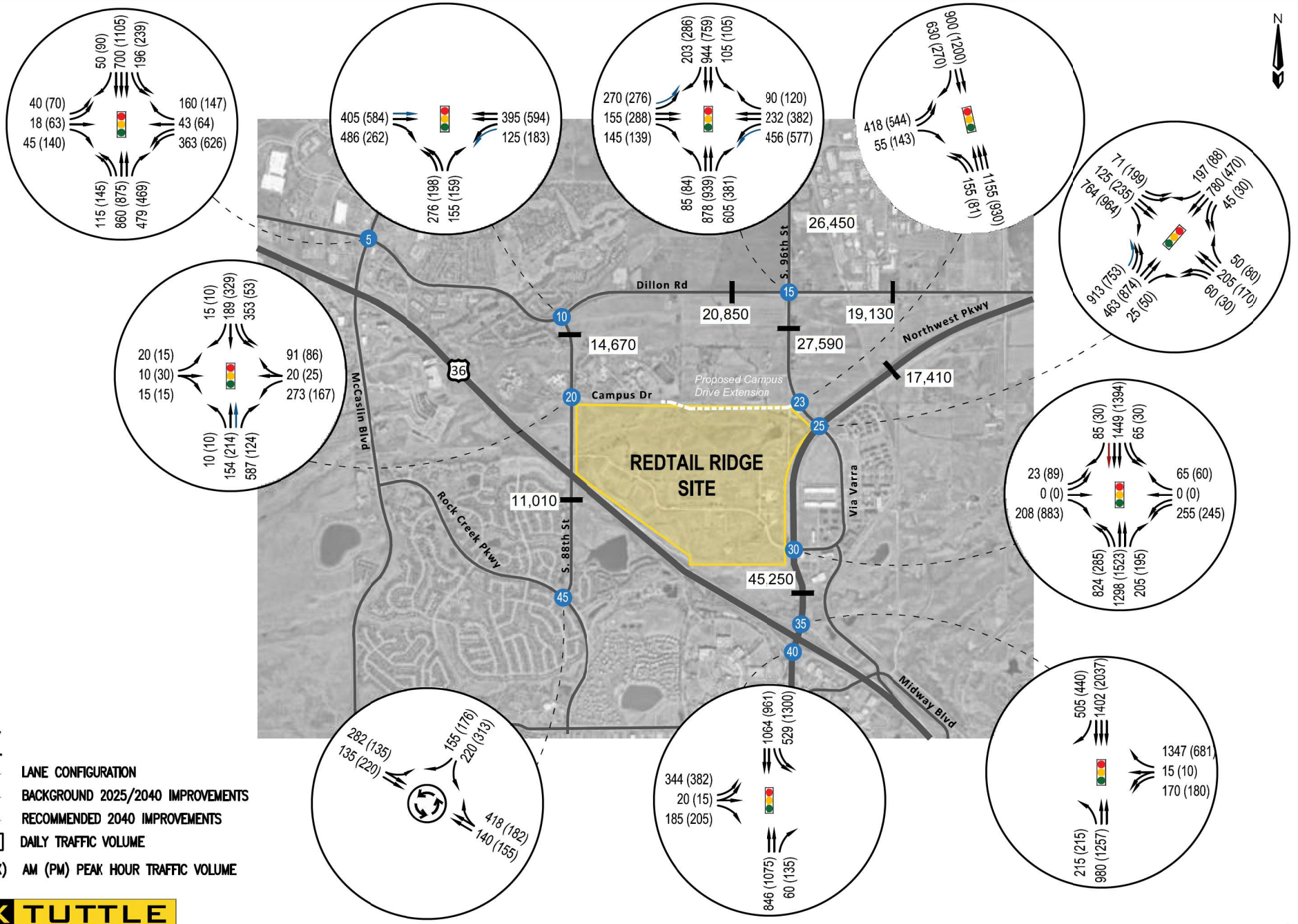
- LANE CONFIGURATION
- BACKGROUND 2025 IMPROVEMENTS
- X,XXX DAILY TRAFFIC VOLUME
- XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUME

FOX TUTTLE TRANSPORTATION GROUP

REDTAIL RIDGE TRAFFIC AND MOBILITY STUDY

YEAR 2030 BACKGROUND + REDTAIL RIDGE (PHASE 1 & 2) TRAFFIC VOLUMES

FT Project #	19055	Original Scale	NTS	Date	10/04/2023	Drawn by	SKK	Figure #	22

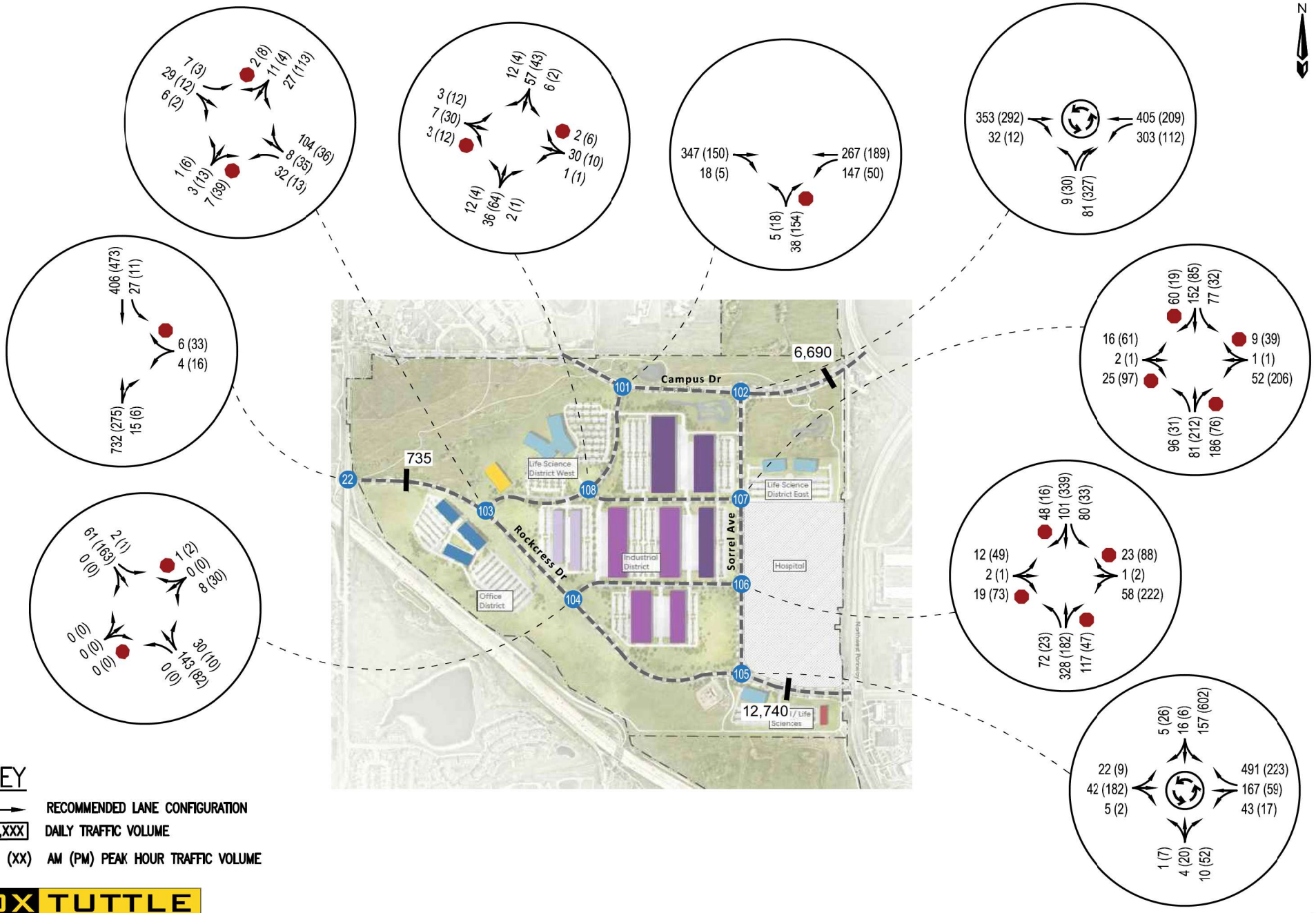


FOX TUTTLE
TRANSPORTATION GROUP

REDTAIL RIDGE TRAFFIC AND MOBILITY STUDY

YEAR 2040 BACKGROUND + REDTAIL RIDGE (FULL BUILDOUT) TRAFFIC VOLUMES

FT Project #	19055	Original Scale	NTS	Date	10/04/2023	Drawn by	SKK	Figure #	24



KEY

→ RECOMMENDED LANE CONFIGURATION

X,XXX DAILY TRAFFIC VOLUME

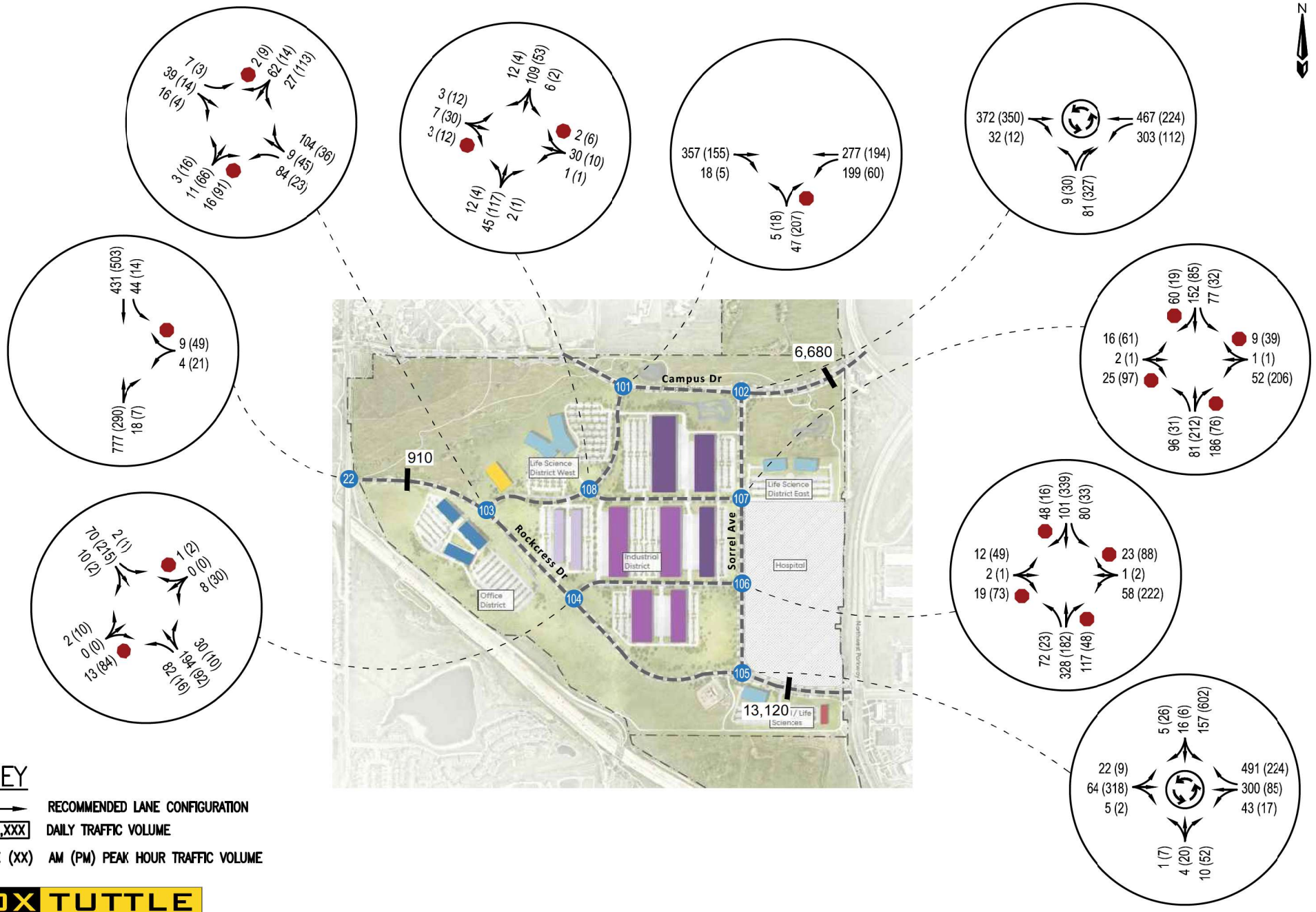
XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUME

FOX TUTTLE TRANSPORTATION GROUP

REDTAIL RIDGE TRAFFIC AND MOBILITY STUDY

YEAR 2030 BACKGROUND + REDTAIL RIDGE (PHASE 1 & 2) TRAFFIC VOLUMES [INTERNAL INTERSECTIONS]

FT Project #	19055	Original Scale	NTS	Date	07/17/2024	Drawn by	SKK	Figure #	26



KEY

- → RECOMMENDED LANE CONFIGURATION
- X,XXX DAILY TRAFFIC VOLUME
- XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUME

FOX TUTTLE TRANSPORTATION GROUP

REDTAIL RIDGE TRAFFIC AND MOBILITY STUDY

YEAR 2040 BACKGROUND + REDTAIL RIDGE (FULL BUILDOUT) TRAFFIC VOLUMES [INTERNAL INTERSECTIONS]

FT Project #	19055	Original Scale	NTS	Date	07/17/2024	Drawn by	SKK	Figure #	27

Appendix C: Trip Generation Worksheets

AdventHealth Louisville Trip Generation - 2030 Horizon

Land Use	Size	Unit	Non-SOV	Internal Capture	Net Reduction Factor	Average Weekday Trips		Weekday AM Peak Hour Trips				Weekday PM Peak Hour Trips			
						Rate	Total	Rate	Total	In	Out	Rate	Total	In	Out
Hospital (ITE 610)	200	Beds	12%	3%	85%	22.32	3,810	1.79	306	220	86	1.69	289	95	193
Medical-Dental Office Bldg (ITE 720)	80	KSF	12%	3%	85%	36.00	2,458	*	168	133	35	3.93	268	81	188
					TOTAL		**6,269**		**474**	**353**	**121**		**557**	**176**	**381**

* ITE Equation Ln(T) = (0.90 Ln(X) + 1.34)

AdventHealth Louisville Trip Generation - Full Buildout (2040 Horizon)

Land Use	Size	Unit	Non-SOV	Internal Capture	Net Reduction Factor	Average Weekday Trips		Weekday AM Peak Hour Trips				Weekday PM Peak Hour Trips			
						Rate	Total	Rate	Total	In	Out	Rate	Total	In	Out
Hospital (ITE 610)	300	Beds	12%	3%	85%	22.32	5,716	1.79	458	330	128	1.69	433	143	290
Medical-Dental Office Bldg (ITE 720)	160	KSF	12%	3%	85%	36.00	4,917	*	314	248	66	3.93	537	161	376
					TOTAL		**10,632**		**772**	**578**	**194**		**970**	**304**	**666**

* ITE Equation Ln(T) = (0.90 Ln(X) + 1.34)

These methods of trip generation calculations are consistent with the methods used in the Redtail Ridge Master Traffic Study. To be consistent with that study, as the hospital site is within the master study area, the rates/equations and trip generation adjustments used in the master study are used in this analysis.

Appendix D: Intersection Analysis Worksheets

Intersection	
Intersection Delay, s/veh	5.7
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	405	641	67
Demand Flow Rate, veh/h	413	654	68
Vehicles Circulating, veh/h	205	7	392
Vehicles Exiting, veh/h	456	453	226
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.0	4.9	4.6
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	TR	L	TR	LR
Assumed Moves	TR	L	TR	LR
RT Channelized				
Lane Util	1.000	0.313	0.687	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
A (Intercept)	1380	1420	1420	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	413	205	449	68
Cap Entry Lane, veh/h	1120	1411	1411	925
Entry HV Adj Factor	0.981	0.980	0.980	0.985
Flow Entry, veh/h	405	201	440	67
Cap Entry, veh/h	1099	1384	1383	912
V/C Ratio	0.369	0.145	0.318	0.074
Control Delay, s/veh	7.0	3.8	5.4	4.6
LOS	A	A	A	A
95th %tile Queue, veh	2	1	1	0

Intersection	
Intersection Delay, s/veh	5.1
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	325	295	264
Demand Flow Rate, veh/h	331	301	269
Vehicles Circulating, veh/h	69	22	323
Vehicles Exiting, veh/h	254	570	77
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.1	3.8	6.4
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	TR	L	TR	LR
Assumed Moves	TR	L	TR	LR
RT Channelized				
Lane Util	1.000	0.229	0.771	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
A (Intercept)	1380	1420	1420	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	331	69	232	269
Cap Entry Lane, veh/h	1286	1392	1392	993
Entry HV Adj Factor	0.981	0.986	0.980	0.981
Flow Entry, veh/h	325	68	227	264
Cap Entry, veh/h	1261	1372	1365	974
V/C Ratio	0.257	0.050	0.167	0.271
Control Delay, s/veh	5.1	3.0	4.0	6.4
LOS	A	A	A	A
95th %tile Queue, veh	1	0	1	1

Intersection	
Intersection Delay, s/veh	6.1
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	424	718	105
Demand Flow Rate, veh/h	433	733	107
Vehicles Circulating, veh/h	284	13	392
Vehicles Exiting, veh/h	462	486	325
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	8.2	5.0	5.1
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	TR	L	TR	LR
Assumed Moves	TR	L	TR	LR
RT Channelized				
Lane Util	1.000	0.387	0.613	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
A (Intercept)	1380	1420	1420	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	433	284	449	107
Cap Entry Lane, veh/h	1033	1403	1403	925
Entry HV Adj Factor	0.980	0.979	0.980	0.981
Flow Entry, veh/h	424	278	440	105
Cap Entry, veh/h	1012	1374	1376	908
V/C Ratio	0.419	0.202	0.320	0.116
Control Delay, s/veh	8.2	4.3	5.4	5.1
LOS	A	A	A	A
95th %tile Queue, veh	2	1	1	0

Intersection	
Intersection Delay, s/veh	5.9
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	334	334	388
Demand Flow Rate, veh/h	340	341	396
Vehicles Circulating, veh/h	109	43	323
Vehicles Exiting, veh/h	275	676	126
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.5	3.8	8.1
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	TR	L	TR	LR
Assumed Moves	TR	L	TR	LR
RT Channelized				
Lane Util	1.000	0.320	0.680	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
A (Intercept)	1380	1420	1420	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	340	109	232	396
Cap Entry Lane, veh/h	1235	1366	1366	993
Entry HV Adj Factor	0.981	0.982	0.980	0.980
Flow Entry, veh/h	334	107	227	388
Cap Entry, veh/h	1212	1341	1339	973
V/C Ratio	0.275	0.080	0.170	0.399
Control Delay, s/veh	5.5	3.3	4.1	8.1
LOS	A	A	A	A
95th %tile Queue, veh	1	0	1	2

Intersection	
Intersection Delay, s/veh	6.0
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	425	709	67
Demand Flow Rate, veh/h	433	723	68
Vehicles Circulating, veh/h	205	7	412
Vehicles Exiting, veh/h	525	473	226
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.3	5.3	4.7
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	TR	L	TR	LR
Assumed Moves	TR	L	TR	LR
RT Channelized				
Lane Util	1.000	0.284	0.716	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
A (Intercept)	1380	1420	1420	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	433	205	518	68
Cap Entry Lane, veh/h	1120	1411	1411	906
Entry HV Adj Factor	0.981	0.980	0.980	0.985
Flow Entry, veh/h	425	201	508	67
Cap Entry, veh/h	1099	1384	1383	893
V/C Ratio	0.387	0.145	0.367	0.075
Control Delay, s/veh	7.3	3.8	5.9	4.7
LOS	A	A	A	A
95th %tile Queue, veh	2	1	2	0

Intersection	
Intersection Delay, s/veh	5.4
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	388	311	264
Demand Flow Rate, veh/h	396	317	269
Vehicles Circulating, veh/h	69	22	388
Vehicles Exiting, veh/h	270	635	77
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.7	3.9	7.0
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	TR	L	TR	LR
Assumed Moves	TR	L	TR	LR
RT Channelized				
Lane Util	1.000	0.218	0.782	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
A (Intercept)	1380	1420	1420	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	396	69	248	269
Cap Entry Lane, veh/h	1286	1392	1392	929
Entry HV Adj Factor	0.981	0.986	0.980	0.981
Flow Entry, veh/h	388	68	243	264
Cap Entry, veh/h	1261	1372	1365	912
V/C Ratio	0.308	0.050	0.178	0.290
Control Delay, s/veh	5.7	3.0	4.1	7.0
LOS	A	A	A	A
95th %tile Queue, veh	1	0	1	1

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	456	835	130
Demand Flow Rate, veh/h	465	852	132
Vehicles Circulating, veh/h	334	17	412
Vehicles Exiting, veh/h	535	527	387
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	9.4	5.5	5.4
Approach LOS	A	A	A

Lane	Left	Left	Right	Left
Designated Moves	TR	L	TR	LR
Assumed Moves	TR	L	TR	LR
RT Channelized				
Lane Util	1.000	0.392	0.608	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
A (Intercept)	1380	1420	1420	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	465	334	518	132
Cap Entry Lane, veh/h	982	1398	1398	906
Entry HV Adj Factor	0.980	0.979	0.980	0.985
Flow Entry, veh/h	456	327	508	130
Cap Entry, veh/h	962	1369	1371	893
V/C Ratio	0.474	0.239	0.370	0.146
Control Delay, s/veh	9.4	4.6	6.0	5.4
LOS	A	A	A	A
95th %tile Queue, veh	3	1	2	1

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

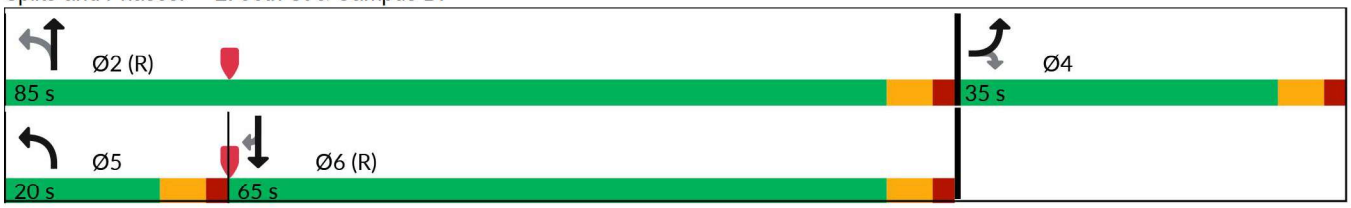
Approach	EB	WB	NB
Entry Lanes	1	2	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	404	378	482
Demand Flow Rate, veh/h	412	386	491
Vehicles Circulating, veh/h	138	59	388
Vehicles Exiting, veh/h	307	820	162
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.4	4.0	10.9
Approach LOS	A	A	B

Lane	Left	Left	Right	Left
Designated Moves	TR	L	TR	LR
Assumed Moves	TR	L	TR	LR
RT Channelized				
Lane Util	1.000	0.358	0.642	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609
Critical Headway, s	4.976	4.544	4.544	4.976
A (Intercept)	1380	1420	1420	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3
Entry Flow, veh/h	412	138	248	491
Cap Entry Lane, veh/h	1199	1346	1346	929
Entry HV Adj Factor	0.982	0.978	0.980	0.982
Flow Entry, veh/h	404	135	243	482
Cap Entry, veh/h	1177	1317	1319	912
V/C Ratio	0.344	0.103	0.184	0.529
Control Delay, s/veh	6.4	3.6	4.3	10.9
LOS	A	A	A	B
95th %tile Queue, veh	2	0	1	3

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	368	45	117	1100	855	478
Future Volume (vph)	368	45	117	1100	855	478
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	35.0	35.0	20.0	85.0	65.0	65.0
Total Split (%)	29.2%	29.2%	16.7%	70.8%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 69 (58%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	368	45	117	1100	855	478
Future Volume (veh/h)	368	45	117	1100	855	478
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	400	49	127	1196	929	520
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	486	223	336	2699	2375	1059
Arrive On Green	0.14	0.14	0.04	0.76	0.67	0.67
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	400	49	127	1196	929	520
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	13.5	3.3	2.5	14.6	14.1	19.4
Cycle Q Clear(g_c), s	13.5	3.3	2.5	14.6	14.1	19.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	486	223	336	2699	2375	1059
V/C Ratio(X)	0.82	0.22	0.38	0.44	0.39	0.49
Avail Cap(c_a), veh/h	835	383	470	2699	2375	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.62	0.62	1.00	1.00
Uniform Delay (d), s/veh	50.1	45.7	6.5	5.2	8.9	9.8
Incr Delay (d2), s/veh	3.6	0.5	0.4	0.3	0.5	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	3.1	0.9	4.7	5.3	6.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	53.7	46.2	6.9	5.6	9.4	11.4
LnGrp LOS	D	D	A	A	A	B
Approach Vol, veh/h	449			1323	1449	
Approach Delay, s/veh	52.9			5.7	10.1	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		97.1		22.9	10.9	86.2
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		79.0		29.0	14.0	59.0
Max Q Clear Time (g_c+I1), s		16.6		15.5	4.5	21.4
Green Ext Time (p_c), s		12.7		1.4	0.2	11.3

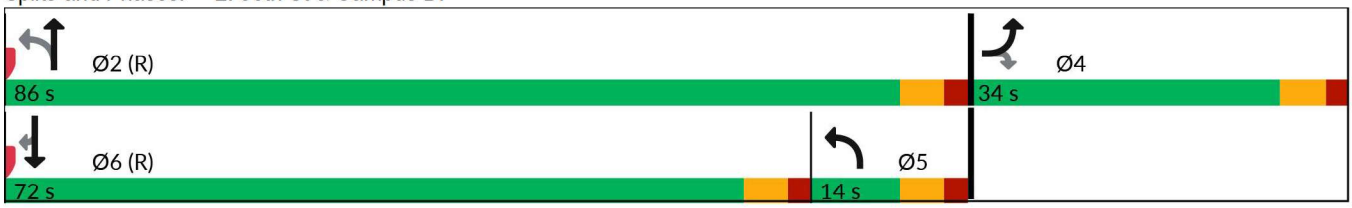
Intersection Summary		
HCM 7th Control Delay, s/veh		14.3
HCM 7th LOS		B

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	409	106	63	880	1140	214
Future Volume (vph)	409	106	63	880	1140	214
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	34.0	34.0	14.0	86.0	72.0	72.0
Total Split (%)	28.3%	28.3%	11.7%	71.7%	60.0%	60.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 53 (44%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	409	106	63	880	1140	214
Future Volume (veh/h)	409	106	63	880	1140	214
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	445	115	68	957	1239	233
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	536	246	423	2648	1955	872
Arrive On Green	0.15	0.15	0.15	0.75	0.55	0.55
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	445	115	68	957	1239	233
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	15.0	7.9	0.0	11.3	28.9	9.3
Cycle Q Clear(g_c), s	15.0	7.9	0.0	11.3	28.9	9.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	536	246	423	2648	1955	872
V/C Ratio(X)	0.83	0.47	0.16	0.36	0.63	0.27
Avail Cap(c_a), veh/h	806	370	423	2648	1955	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.68	0.68	1.00	1.00
Uniform Delay (d), s/veh	49.2	46.2	23.4	5.3	18.7	14.2
Incr Delay (d2), s/veh	4.6	1.4	0.1	0.3	1.6	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.2	1.3	3.8	11.9	3.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	53.8	47.6	23.5	5.6	20.2	15.0
LnGrp LOS	D	D	C	A	C	B
Approach Vol, veh/h	560			1025	1472	
Approach Delay, s/veh	52.5			6.8	19.4	
Approach LOS	D			A	B	

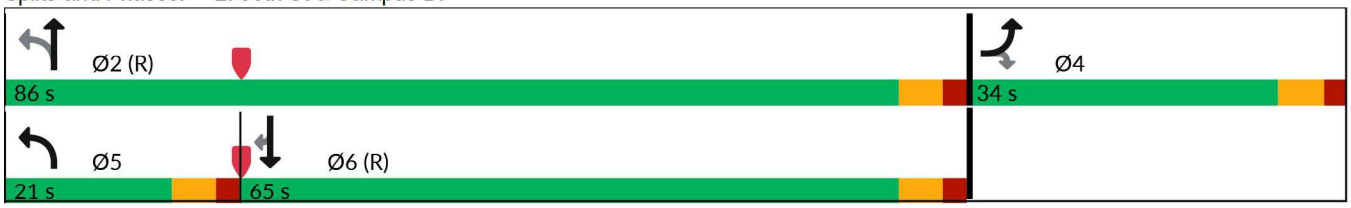
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		95.4		24.6	23.4	72.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		80.0		28.0	8.0	66.0
Max Q Clear Time (g_c+I1), s		13.3		17.0	2.0	30.9
Green Ext Time (p_c), s		9.0		1.6	0.1	13.3

Intersection Summary	
HCM 7th Control Delay, s/veh	21.2
HCM 7th LOS	C

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	392	51	135	1100	873	531
Future Volume (vph)	392	51	135	1100	873	531
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	34.0	34.0	21.0	86.0	65.0	65.0
Total Split (%)	28.3%	28.3%	17.5%	71.7%	54.2%	54.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lead		Lag	Lag
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 73 (61%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	392	51	135	1100	873	531
Future Volume (veh/h)	392	51	135	1100	873	531
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	426	55	147	1196	949	577
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	512	235	320	2672	2339	1043
Arrive On Green	0.15	0.15	0.04	0.75	0.66	0.66
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	426	55	147	1196	949	577
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	14.4	3.7	3.0	15.1	14.9	23.5
Cycle Q Clear(g_c), s	14.4	3.7	3.0	15.1	14.9	23.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	512	235	320	2672	2339	1043
V/C Ratio(X)	0.83	0.23	0.46	0.45	0.41	0.55
Avail Cap(c_a), veh/h	806	370	465	2672	2339	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.62	0.62	1.00	1.00
Uniform Delay (d), s/veh	49.7	45.1	7.3	5.6	9.6	11.0
Incr Delay (d2), s/veh	4.3	0.5	0.6	0.3	0.5	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	3.4	1.1	5.0	5.7	8.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	54.0	45.6	7.9	5.9	10.1	13.1
LnGrp LOS	D	D	A	A	B	B
Approach Vol, veh/h	481			1343	1526	
Approach Delay, s/veh	53.0			6.1	11.2	
Approach LOS	D			A	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		96.2		23.8	11.2	85.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		80.0		28.0	15.0	59.0
Max Q Clear Time (g_c+I1), s		17.1		16.4	5.0	25.5
Green Ext Time (p_c), s		12.7		1.4	0.2	11.7

Intersection Summary	
HCM 7th Control Delay, s/veh	15.2
HCM 7th LOS	B

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	485	125	72	880	1149	240
Future Volume (vph)	485	125	72	880	1149	240
Turn Type	Prot	Perm	pm+pt	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4	2			6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	36.0	36.0	13.0	84.0	71.0	71.0
Total Split (%)	30.0%	30.0%	10.8%	70.0%	59.2%	59.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 56 (47%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	485	125	72	880	1149	240
Future Volume (veh/h)	485	125	72	880	1149	240
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	527	136	78	957	1249	261
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	622	285	384	2559	1925	859
Arrive On Green	0.18	0.18	0.13	0.72	0.54	0.54
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	527	136	78	957	1249	261
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	17.7	9.2	0.0	12.4	29.8	10.8
Cycle Q Clear(g_c), s	17.7	9.2	0.0	12.4	29.8	10.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	622	285	384	2559	1925	859
V/C Ratio(X)	0.85	0.48	0.20	0.37	0.65	0.30
Avail Cap(c_a), veh/h	864	396	384	2559	1925	859
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.67	0.67	1.00	1.00
Uniform Delay (d), s/veh	47.6	44.1	27.4	6.4	19.4	15.1
Incr Delay (d2), s/veh	5.8	1.2	0.2	0.3	1.7	0.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	8.3	1.7	4.3	12.4	4.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	53.4	45.4	27.6	6.7	21.1	16.0
LnGrp LOS	D	D	C	A	C	B
Approach Vol, veh/h	663			1035	1510	
Approach Delay, s/veh	51.7			8.3	20.3	
Approach LOS	D			A	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		92.4		27.6	21.4	71.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		78.0		30.0	7.0	65.0
Max Q Clear Time (g_c+I1), s		14.4		19.7	2.0	31.8
Green Ext Time (p_c), s		9.0		1.9	0.1	13.4

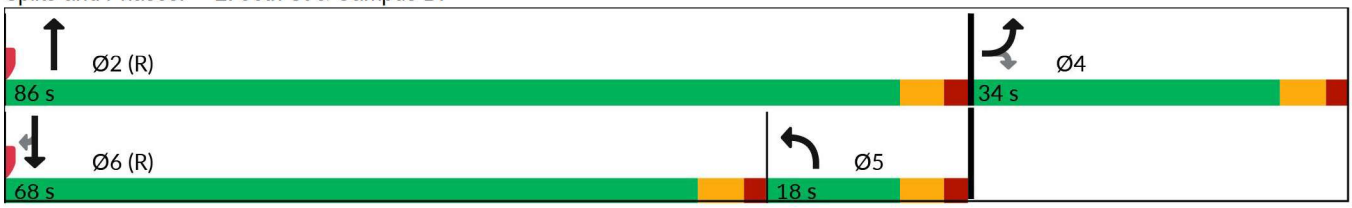
Intersection Summary		
HCM 7th Control Delay, s/veh	22.9	
HCM 7th LOS	C	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	395	52	132	1155	900	535
Future Volume (vph)	395	52	132	1155	900	535
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	34.0	34.0	18.0	86.0	68.0	68.0
Total Split (%)	28.3%	28.3%	15.0%	71.7%	56.7%	56.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 66 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	395	52	132	1155	900	535
Future Volume (veh/h)	395	52	132	1155	900	535
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	429	57	143	1255	978	582
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	515	236	637	3835	1836	819
Arrive On Green	0.15	0.15	0.18	0.75	0.52	0.52
Sat Flow, veh/h	3456	1585	3456	5274	3647	1585
Grp Volume(v), veh/h	429	57	143	1255	978	582
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1777	1585
Q Serve(g_s), s	14.5	3.8	4.2	9.7	22.0	33.7
Cycle Q Clear(g_c), s	14.5	3.8	4.2	9.7	22.0	33.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	515	236	637	3835	1836	819
V/C Ratio(X)	0.83	0.24	0.22	0.33	0.53	0.71
Avail Cap(c_a), veh/h	806	370	637	3835	1836	819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	1.00	1.00
Uniform Delay (d), s/veh	49.6	45.1	41.6	4.9	19.3	22.1
Incr Delay (d2), s/veh	4.4	0.5	0.1	0.2	1.1	5.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	3.5	1.8	3.1	9.2	13.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	54.0	45.6	41.8	5.1	20.5	27.3
LnGrp LOS	D	D	D	A	C	C
Approach Vol, veh/h	486			1398	1560	
Approach Delay, s/veh	53.0			8.8	23.0	
Approach LOS	D			A	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		96.1		23.9	28.1	68.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		80.0		28.0	12.0	62.0
Max Q Clear Time (g_c+I1), s		11.7		16.5	6.2	35.7
Green Ext Time (p_c), s		13.2		1.4	0.2	11.0

Intersection Summary	
HCM 7th Control Delay, s/veh	21.5
HCM 7th LOS	C

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	462	121	70	930	1200	232
Future Volume (vph)	462	121	70	930	1200	232
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	35.0	35.0	12.0	85.0	73.0	73.0
Total Split (%)	29.2%	29.2%	10.0%	70.8%	60.8%	60.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 36 (30%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	462	121	70	930	1200	232
Future Volume (veh/h)	462	121	70	930	1200	232
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	502	132	76	1011	1304	252
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	595	273	413	3716	1984	885
Arrive On Green	0.17	0.17	0.12	0.73	0.56	0.56
Sat Flow, veh/h	3456	1585	3456	5274	3647	1585
Grp Volume(v), veh/h	502	132	76	1011	1304	252
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1777	1585
Q Serve(g_s), s	16.9	9.0	2.4	8.1	30.7	10.0
Cycle Q Clear(g_c), s	16.9	9.0	2.4	8.1	30.7	10.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	595	273	413	3716	1984	885
V/C Ratio(X)	0.84	0.48	0.18	0.27	0.66	0.28
Avail Cap(c_a), veh/h	835	383	413	3716	1984	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.81	0.81	1.00	1.00
Uniform Delay (d), s/veh	48.1	44.8	47.6	5.5	18.5	13.9
Incr Delay (d2), s/veh	5.7	1.3	0.2	0.1	1.7	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	8.1	1.0	2.7	12.6	3.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	53.8	46.2	47.7	5.7	20.2	14.7
LnGrp LOS	D	D	D	A	C	B
Approach Vol, veh/h	634			1087	1556	
Approach Delay, s/veh	52.2			8.6	19.3	
Approach LOS	D			A	B	

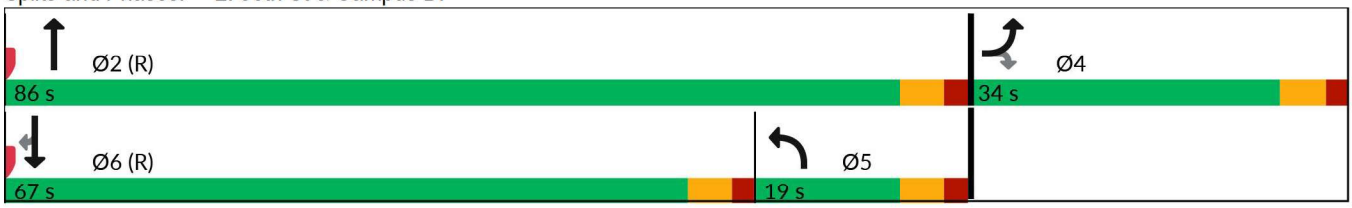
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		93.3		26.7	20.3	73.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		79.0		29.0	6.0	67.0
Max Q Clear Time (g_c+I1), s		10.1		18.9	4.4	32.7
Green Ext Time (p_c), s		9.5		1.8	0.0	14.3

Intersection Summary	
HCM 7th Control Delay, s/veh	22.1
HCM 7th LOS	C

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	434	62	161	1155	929	622
Future Volume (vph)	434	62	161	1155	929	622
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	34.0	34.0	19.0	86.0	67.0	67.0
Total Split (%)	28.3%	28.3%	15.8%	71.7%	55.8%	55.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 60 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	434	62	161	1155	929	622
Future Volume (veh/h)	434	62	161	1155	929	622
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	472	67	175	1255	1010	676
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	559	256	622	3770	1806	806
Arrive On Green	0.16	0.16	0.18	0.74	0.51	0.51
Sat Flow, veh/h	3456	1585	3456	5274	3647	1585
Grp Volume(v), veh/h	472	67	175	1255	1010	676
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1777	1585
Q Serve(g_s), s	15.9	4.4	5.2	10.2	23.4	43.9
Cycle Q Clear(g_c), s	15.9	4.4	5.2	10.2	23.4	43.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	559	256	622	3770	1806	806
V/C Ratio(X)	0.84	0.26	0.28	0.33	0.56	0.84
Avail Cap(c_a), veh/h	806	370	622	3770	1806	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.72	0.72	1.00	1.00
Uniform Delay (d), s/veh	48.8	44.0	42.5	5.4	20.3	25.3
Incr Delay (d2), s/veh	5.7	0.5	0.2	0.2	1.3	10.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	4.1	2.3	3.3	9.8	18.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	54.5	44.6	42.7	5.6	21.5	35.5
LnGrp LOS	D	D	D	A	C	D
Approach Vol, veh/h	539			1430	1686	
Approach Delay, s/veh	53.3			10.2	27.1	
Approach LOS	D			B	C	

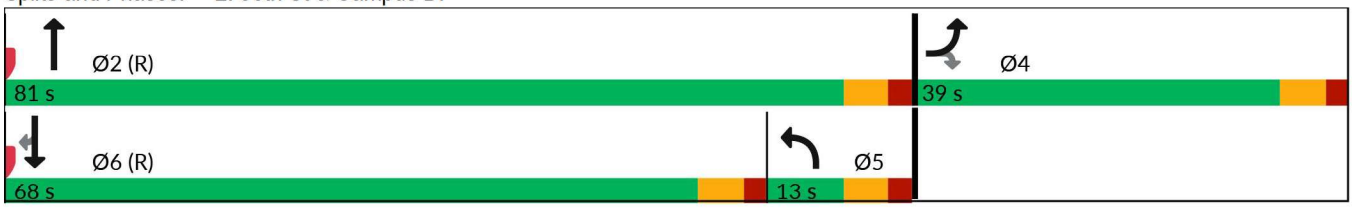
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		94.6		25.4	27.6	67.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		80.0		28.0	13.0	61.0
Max Q Clear Time (g_c+I1), s		12.2		17.9	7.2	45.9
Green Ext Time (p_c), s		13.2		1.5	0.3	8.8

Intersection Summary		
HCM 7th Control Delay, s/veh	24.3	
HCM 7th LOS	C	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	595	154	85	930	1215	278
Future Volume (vph)	595	154	85	930	1215	278
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	39.0	39.0	13.0	81.0	68.0	68.0
Total Split (%)	32.5%	32.5%	10.8%	67.5%	56.7%	56.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 47 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	595	154	85	930	1215	278
Future Volume (veh/h)	595	154	85	930	1215	278
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	647	167	92	1011	1321	302
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	747	343	405	3492	1836	819
Arrive On Green	0.22	0.22	0.12	0.68	0.52	0.52
Sat Flow, veh/h	3456	1585	3456	5274	3647	1585
Grp Volume(v), veh/h	647	167	92	1011	1321	302
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1777	1585
Q Serve(g_s), s	21.7	11.1	2.9	9.4	34.3	13.7
Cycle Q Clear(g_c), s	21.7	11.1	2.9	9.4	34.3	13.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	747	343	405	3492	1836	819
V/C Ratio(X)	0.87	0.49	0.23	0.29	0.72	0.37
Avail Cap(c_a), veh/h	950	436	405	3492	1836	819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.74	0.74	1.00	1.00
Uniform Delay (d), s/veh	45.4	41.2	48.0	7.5	22.3	17.3
Incr Delay (d2), s/veh	7.0	1.1	0.2	0.2	2.5	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	10.0	1.3	3.3	14.5	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	52.3	42.3	48.3	7.6	24.8	18.6
LnGrp LOS	D	D	D	A	C	B
Approach Vol, veh/h	814			1103	1623	
Approach Delay, s/veh	50.3			11.0	23.6	
Approach LOS	D			B	C	

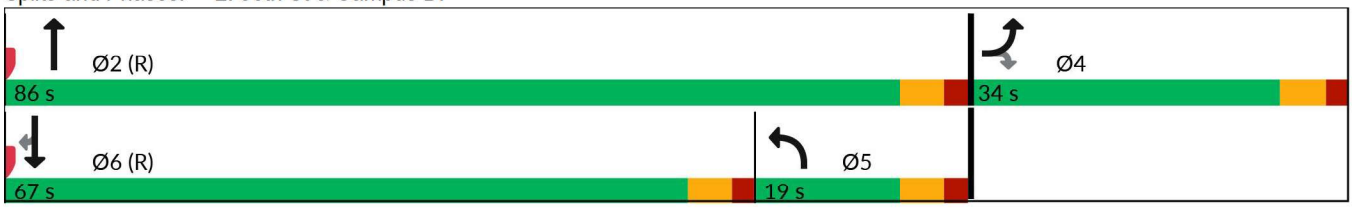
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		88.1		31.9	20.1	68.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		75.0		33.0	7.0	62.0
Max Q Clear Time (g_c+I1), s		11.4		23.7	4.9	36.3
Green Ext Time (p_c), s		9.5		2.3	0.0	13.0

Intersection Summary		
HCM 7th Control Delay, s/veh		25.8
HCM 7th LOS		C

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	445	65	165	1185	955	640
Future Volume (vph)	445	65	165	1185	955	640
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	34.0	34.0	19.0	86.0	67.0	67.0
Total Split (%)	28.3%	28.3%	15.8%	71.7%	55.8%	55.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 60 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	445	65	165	1185	955	640
Future Volume (veh/h)	445	65	165	1185	955	640
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	484	71	179	1288	1038	696
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	571	262	610	3752	1806	806
Arrive On Green	0.17	0.17	0.18	0.73	0.51	0.51
Sat Flow, veh/h	3456	1585	3456	5274	3647	1585
Grp Volume(v), veh/h	484	71	179	1288	1038	696
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1777	1585
Q Serve(g_s), s	16.3	4.7	5.4	10.7	24.3	46.2
Cycle Q Clear(g_c), s	16.3	4.7	5.4	10.7	24.3	46.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	571	262	610	3752	1806	806
V/C Ratio(X)	0.85	0.27	0.29	0.34	0.57	0.86
Avail Cap(c_a), veh/h	806	370	610	3752	1806	806
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.70	0.70	1.00	1.00
Uniform Delay (d), s/veh	48.6	43.8	42.9	5.6	20.5	25.9
Incr Delay (d2), s/veh	6.0	0.6	0.2	0.2	1.3	11.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	4.4	2.3	3.5	10.2	19.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	54.6	44.3	43.1	5.8	21.8	37.7
LnGrp LOS	D	D	D	A	C	D
Approach Vol, veh/h	555			1467	1734	
Approach Delay, s/veh	53.3			10.4	28.2	
Approach LOS	D			B	C	

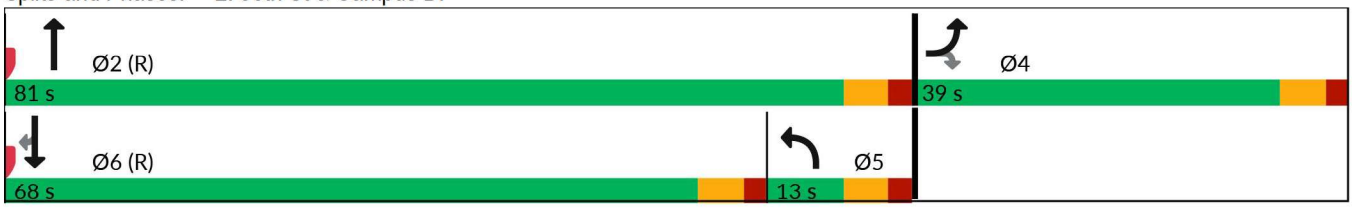
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		94.2		25.8	27.2	67.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		80.0		28.0	13.0	61.0
Max Q Clear Time (g_c+I1), s		12.7		18.3	7.4	48.2
Green Ext Time (p_c), s		13.8		1.5	0.3	8.1

Intersection Summary		
HCM 7th Control Delay, s/veh		25.0
HCM 7th LOS		C

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	610	160	90	955	1245	285
Future Volume (vph)	610	160	90	955	1245	285
Turn Type	Prot	Perm	Prot	NA	NA	Perm
Protected Phases	4		5	2	6	
Permitted Phases		4				6
Detector Phase	4	4	5	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	39.0	39.0	13.0	81.0	68.0	68.0
Total Split (%)	32.5%	32.5%	10.8%	67.5%	56.7%	56.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag		Lead	Lead
Lead-Lag Optimize?			Yes		Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	C-Max

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 47 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated

Splits and Phases: 2: 96th St & Campus Dr



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	610	160	90	955	1245	285
Future Volume (veh/h)	610	160	90	955	1245	285
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	663	174	98	1038	1353	310
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	763	350	389	3469	1836	819
Arrive On Green	0.22	0.22	0.11	0.68	0.52	0.52
Sat Flow, veh/h	3456	1585	3456	5274	3647	1585
Grp Volume(v), veh/h	663	174	98	1038	1353	310
Grp Sat Flow(s),veh/h/ln	1728	1585	1728	1702	1777	1585
Q Serve(g_s), s	22.2	11.5	3.1	9.8	35.7	14.1
Cycle Q Clear(g_c), s	22.2	11.5	3.1	9.8	35.7	14.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	763	350	389	3469	1836	819
V/C Ratio(X)	0.87	0.50	0.25	0.30	0.74	0.38
Avail Cap(c_a), veh/h	950	436	389	3469	1836	819
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.72	0.72	1.00	1.00
Uniform Delay (d), s/veh	45.1	40.9	48.6	7.7	22.6	17.4
Incr Delay (d2), s/veh	7.4	1.1	0.2	0.2	2.7	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	10.4	1.4	3.4	15.1	5.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	52.4	42.0	48.9	7.9	25.3	18.8
LnGrp LOS	D	D	D	A	C	B
Approach Vol, veh/h	837			1136	1663	
Approach Delay, s/veh	50.3			11.4	24.1	
Approach LOS	D			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		87.5		32.5	19.5	68.0
Change Period (Y+Rc), s		6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		75.0		33.0	7.0	62.0
Max Q Clear Time (g_c+I1), s		11.8		24.2	5.1	37.7
Green Ext Time (p_c), s		9.8		2.3	0.0	13.0

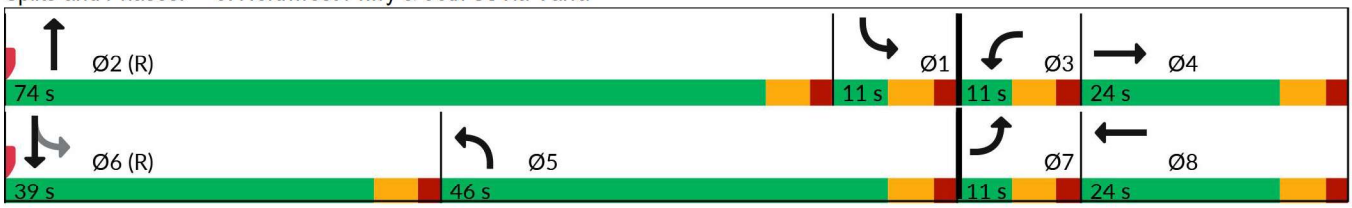
Intersection Summary	
HCM 7th Control Delay, s/veh	26.2
HCM 7th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	115	724	55	195	45	868	412	20	40	683	154
Future Volume (vph)	61	115	724	55	195	45	868	412	20	40	683	154
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	11.0	24.0		11.0	24.0		46.0	74.0		11.0	39.0	
Total Split (%)	9.2%	20.0%		9.2%	20.0%		38.3%	61.7%		9.2%	32.5%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	115	724	55	195	45	868	412	20	40	683	154
Future Volume (veh/h)	61	115	724	55	195	45	868	412	20	40	683	154
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	125	0	60	212	0	943	448	0	43	742	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	128	293		125	289		1405	2014		1004	977	
Arrive On Green	0.04	0.08	0.00	0.04	0.08	0.00	0.68	0.95	0.00	0.11	0.28	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	66	125	0	60	212	0	943	448	0	43	742	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.2	4.0	0.0	2.0	7.0	0.0	19.3	1.0	0.0	0.0	23.0	0.0
Cycle Q Clear(g_c), s	2.2	4.0	0.0	2.0	7.0	0.0	19.3	1.0	0.0	0.0	23.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	128	293		125	289		1405	2014		1004	977	
V/C Ratio(X)	0.52	0.43		0.48	0.73		0.67	0.22		0.04	0.76	
Avail Cap(c_a), veh/h	144	533		144	533		1405	2014		1004	977	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.00	1.00	1.00	0.00	0.83	0.83	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.7	52.4	0.0	56.7	53.8	0.0	14.5	1.4	0.0	23.5	39.9	0.0
Incr Delay (d2), s/veh	2.9	0.9	0.0	2.9	3.6	0.0	1.0	0.2	0.0	0.0	5.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.8	0.0	0.9	3.3	0.0	5.3	0.4	0.0	0.4	10.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.7	53.3	0.0	59.6	57.4	0.0	15.6	1.6	0.0	23.5	45.4	0.0
LnGrp LOS	E	D		E	E		B	A		C	D	
Approach Vol, veh/h		191			272			1391			785	
Approach Delay, s/veh		55.5			57.9			11.1			44.2	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.8	74.0	10.3	15.9	54.8	39.0	10.4	15.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	68.0	5.0	18.0	40.0	33.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	2.0	3.0	4.0	6.0	21.3	25.0	4.2	9.0
Green Ext Time (p_c), s	0.0	3.4	0.0	0.5	3.7	3.1	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.0
HCM 7th LOS	C

Notes

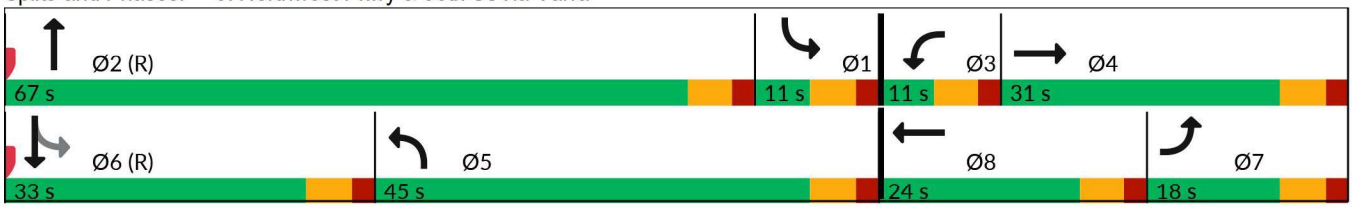
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	220	914	25	160	75	713	761	45	25	419	70
Future Volume (vph)	157	220	914	25	160	75	713	761	45	25	419	70
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	18.0	31.0		11.0	24.0		45.0	67.0		11.0	33.0	
Total Split (%)	15.0%	25.8%		9.2%	20.0%		37.5%	55.8%		9.2%	27.5%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	220	914	25	160	75	713	761	45	25	419	70
Future Volume (veh/h)	157	220	914	25	160	75	713	761	45	25	419	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	171	239	0	27	174	0	775	827	0	27	455	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	398		85	249		1515	1806		805	800	
Arrive On Green	0.07	0.11	0.00	0.02	0.07	0.00	0.58	0.68	0.00	0.16	0.22	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	171	239	0	27	174	0	775	827	0	27	455	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	5.8	7.7	0.0	0.9	5.7	0.0	16.0	13.1	0.0	0.0	13.7	0.0
Cycle Q Clear(g_c), s	5.8	7.7	0.0	0.9	5.7	0.0	16.0	13.1	0.0	0.0	13.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	398		85	249		1515	1806		805	800	
V/C Ratio(X)	0.74	0.60		0.32	0.70		0.51	0.46		0.03	0.57	
Avail Cap(c_a), veh/h	346	740		144	533		1515	1806		805	800	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.83	0.83	0.00	1.00	1.00	0.00	0.76	0.76	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.0	50.7	0.0	57.5	54.6	0.0	17.4	11.7	0.0	32.6	41.3	0.0
Incr Delay (d2), s/veh	3.9	1.2	0.0	2.1	3.5	0.0	0.2	0.6	0.0	0.0	2.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.5	0.0	0.4	2.7	0.0	5.6	4.5	0.0	0.3	6.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.9	51.9	0.0	59.6	58.1	0.0	17.6	12.3	0.0	32.6	44.3	0.0
LnGrp LOS	E	D		E	E		B	B		C	D	
Approach Vol, veh/h		410			201			1602			482	
Approach Delay, s/veh		54.9			58.3			14.9			43.6	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.6	67.0	9.0	19.4	58.6	33.0	14.0	14.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	61.0	5.0	25.0	39.0	27.0	12.0	18.0
Max Q Clear Time (g_c+I1), s	2.0	15.1	2.9	9.7	18.0	15.7	7.8	7.7
Green Ext Time (p_c), s	0.0	7.1	0.0	1.2	3.0	2.3	0.2	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	29.3
HCM 7th LOS	C

Notes

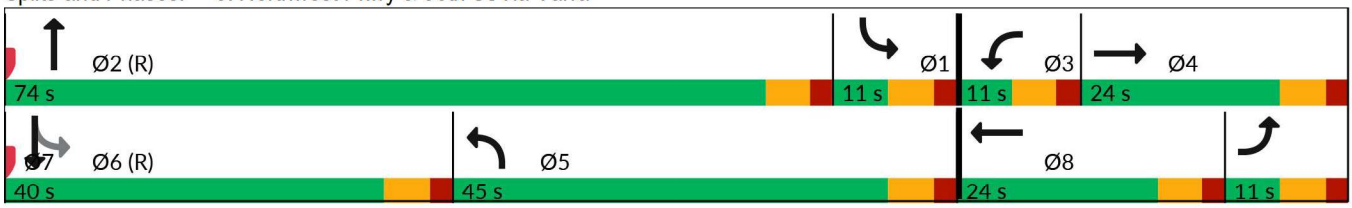
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	67	115	742	55	195	45	868	430	20	40	736	172
Future Volume (vph)	67	115	742	55	195	45	868	430	20	40	736	172
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	11.0	24.0		11.0	24.0		45.0	74.0		11.0	40.0	
Total Split (%)	9.2%	20.0%		9.2%	20.0%		37.5%	61.7%		9.2%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	115	742	55	195	45	868	430	20	40	736	172
Future Volume (veh/h)	67	115	742	55	195	45	868	430	20	40	736	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	125	0	60	212	0	943	467	0	43	800	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	296		125	289		1373	2014		1006	1007	
Arrive On Green	0.04	0.08	0.00	0.04	0.08	0.00	0.66	0.95	0.00	0.11	0.28	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	73	125	0	60	212	0	943	467	0	43	800	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.5	4.0	0.0	2.0	7.0	0.0	20.3	1.1	0.0	0.0	25.0	0.0
Cycle Q Clear(g_c), s	2.5	4.0	0.0	2.0	7.0	0.0	20.3	1.1	0.0	0.0	25.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	131	296		125	289		1373	2014		1006	1007	
V/C Ratio(X)	0.56	0.42		0.48	0.73		0.69	0.23		0.04	0.79	
Avail Cap(c_a), veh/h	144	533		144	533		1373	2014		1006	1007	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.00	1.00	1.00	0.00	0.83	0.83	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.7	52.2	0.0	56.7	53.8	0.0	15.6	1.4	0.0	23.0	39.8	0.0
Incr Delay (d2), s/veh	3.5	0.9	0.0	2.9	3.6	0.0	1.2	0.2	0.0	0.0	6.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.8	0.0	0.9	3.3	0.0	5.8	0.4	0.0	0.4	11.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.2	53.1	0.0	59.6	57.4	0.0	16.8	1.6	0.0	23.0	46.2	0.0
LnGrp LOS	E	D		E	E		B	A		C	D	
Approach Vol, veh/h		198			272			1410			843	
Approach Delay, s/veh		55.7			57.9			11.8			45.0	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	74.0	10.3	16.0	53.7	40.0	10.6	15.8
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	68.0	5.0	18.0	39.0	34.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	2.0	3.1	4.0	6.0	22.3	27.0	4.5	9.0
Green Ext Time (p_c), s	0.0	3.6	0.0	0.5	3.6	3.1	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.9
HCM 7th LOS	C

Notes

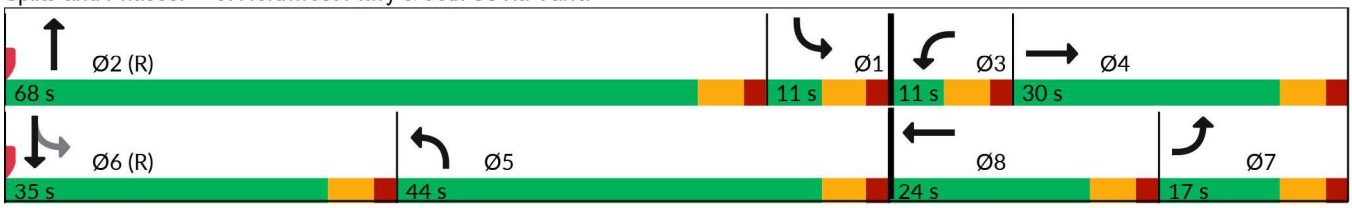
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	176	220	923	25	160	75	713	818	45	25	445	79
Future Volume (vph)	176	220	923	25	160	75	713	818	45	25	445	79
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	17.0	30.0		11.0	24.0		44.0	68.0		11.0	35.0	
Total Split (%)	14.2%	25.0%		9.2%	20.0%		36.7%	56.7%		9.2%	29.2%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 80
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	220	923	25	160	75	713	818	45	25	445	79
Future Volume (veh/h)	176	220	923	25	160	75	713	818	45	25	445	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	191	239	0	27	174	0	775	889	0	27	484	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	417		85	249		1439	1836		759	859	
Arrive On Green	0.07	0.12	0.00	0.02	0.07	0.00	0.55	0.69	0.00	0.14	0.24	0.00
Sat Flow, veh/h	3456	3554	1585	3456	3554	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	191	239	0	27	174	0	775	889	0	27	484	0
Grp Sat Flow(s),veh/h/ln	1728	1777	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	6.5	7.6	0.0	0.9	5.7	0.0	17.1	14.1	0.0	0.0	14.3	0.0
Cycle Q Clear(g_c), s	6.5	7.6	0.0	0.9	5.7	0.0	17.1	14.1	0.0	0.0	14.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	417		85	249		1439	1836		759	859	
V/C Ratio(X)	0.77	0.57		0.32	0.70		0.54	0.48		0.04	0.56	
Avail Cap(c_a), veh/h	317	711		144	533		1439	1836		759	859	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00
Upstream Filter(I)	0.82	0.82	0.00	1.00	1.00	0.00	0.74	0.74	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.7	50.1	0.0	57.5	54.6	0.0	19.5	11.3	0.0	33.1	39.9	0.0
Incr Delay (d2), s/veh	6.9	1.0	0.0	2.1	3.5	0.0	0.3	0.7	0.0	0.0	2.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.5	0.0	0.4	2.7	0.0	6.2	4.7	0.0	0.3	6.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.6	51.1	0.0	59.6	58.1	0.0	19.8	12.0	0.0	33.1	42.6	0.0
LnGrp LOS	E	D		E	E		B	B		C	D	
Approach Vol, veh/h		430			201			1664			511	
Approach Delay, s/veh		55.8			58.3			15.6			42.1	
Approach LOS		E			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	68.0	9.0	20.1	56.0	35.0	14.6	14.4
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	62.0	5.0	24.0	38.0	29.0	11.0	18.0
Max Q Clear Time (g_c+I1), s	2.0	16.1	2.9	9.6	19.1	16.3	8.5	7.7
Green Ext Time (p_c), s	0.0	7.9	0.0	1.2	2.9	2.6	0.1	0.7

Intersection Summary	
HCM 7th Control Delay, s/veh	29.6
HCM 7th LOS	C

Notes

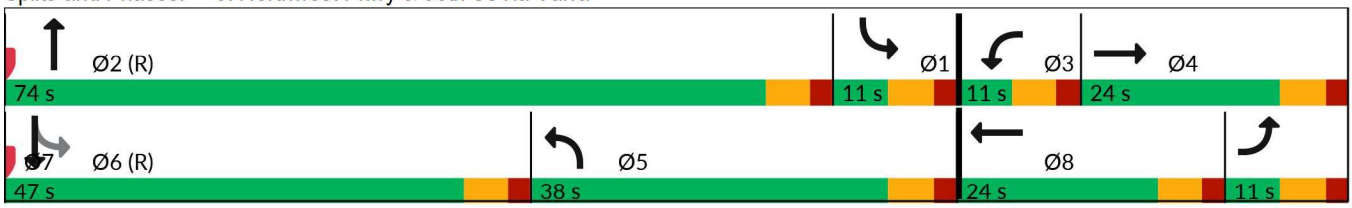
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	125	764	60	205	50	913	454	25	45	758	174
Future Volume (vph)	68	125	764	60	205	50	913	454	25	45	758	174
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	11.0	24.0		11.0	24.0		38.0	74.0		11.0	47.0	
Total Split (%)	9.2%	20.0%		9.2%	20.0%		31.7%	61.7%		9.2%	39.2%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	125	764	60	205	50	913	454	25	45	758	174
Future Volume (veh/h)	68	125	764	60	205	50	913	454	25	45	758	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	74	136	0	65	223	0	992	493	0	49	824	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	305		127	301		1685	2014		1084	1214	
Arrive On Green	0.04	0.09	0.00	0.04	0.08	0.00	0.56	0.95	0.00	0.11	0.34	0.00
Sat Flow, veh/h	5023	3554	1585	3456	3554	1585	5023	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	74	136	0	65	223	0	992	493	0	49	824	0
Grp Sat Flow(s),veh/h/ln	1674	1777	1585	1728	1777	1585	1674	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.7	4.4	0.0	2.2	7.4	0.0	15.5	1.2	0.0	0.0	23.8	0.0
Cycle Q Clear(g_c), s	1.7	4.4	0.0	2.2	7.4	0.0	15.5	1.2	0.0	0.0	23.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	305		127	301		1685	2014		1084	1214	
V/C Ratio(X)	0.39	0.45		0.51	0.74		0.59	0.24		0.05	0.68	
Avail Cap(c_a), veh/h	209	533		144	533		1685	2014		1084	1214	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.00	1.00	1.00	0.00	0.81	0.81	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.3	52.1	0.0	56.7	53.6	0.0	20.9	1.4	0.0	19.2	33.9	0.0
Incr Delay (d2), s/veh	1.1	0.9	0.0	3.1	3.6	0.0	0.4	0.2	0.0	0.0	3.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.0	0.0	1.0	3.4	0.0	4.9	0.4	0.0	0.4	10.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.5	53.0	0.0	59.8	57.2	0.0	21.4	1.7	0.0	19.2	36.9	0.0
LnGrp LOS	E	D		E	E		C	A		B	D	
Approach Vol, veh/h		210			288			1485			873	
Approach Delay, s/veh		54.6			57.8			14.8			35.9	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.3	74.0	10.4	16.3	46.3	47.0	10.6	16.2
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	68.0	5.0	18.0	32.0	41.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	2.0	3.2	4.2	6.4	17.5	25.8	3.7	9.4
Green Ext Time (p_c), s	0.0	3.8	0.0	0.5	3.6	5.1	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	28.5
HCM 7th LOS	C

Notes

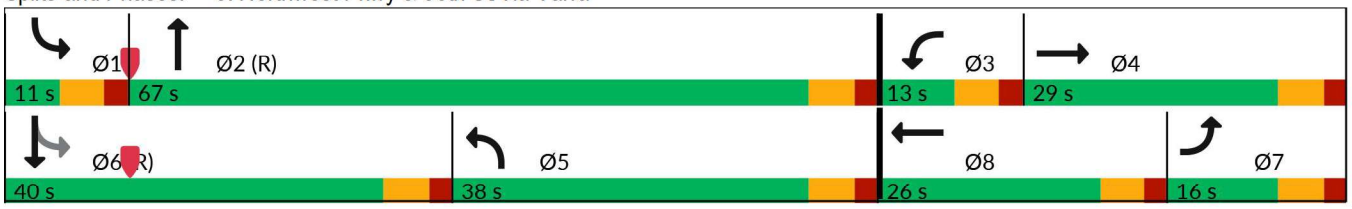
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	177	235	964	30	170	80	753	843	50	30	461	77
Future Volume (vph)	177	235	964	30	170	80	753	843	50	30	461	77
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	16.0	29.0		13.0	26.0		38.0	67.0		11.0	40.0	
Total Split (%)	13.3%	24.2%		10.8%	21.7%		31.7%	55.8%		9.2%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	235	964	30	170	80	753	843	50	30	461	77
Future Volume (veh/h)	177	235	964	30	170	80	753	843	50	30	461	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	192	255	0	33	185	0	818	916	0	33	501	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	363		96	263		1943	2283		459	1007	
Arrive On Green	0.06	0.10	0.00	0.03	0.07	0.00	0.77	1.00	0.00	0.03	0.28	0.00
Sat Flow, veh/h	5023	3554	1585	3456	3554	1585	5023	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	192	255	0	33	185	0	818	916	0	33	501	0
Grp Sat Flow(s),veh/h/ln	1674	1777	1585	1728	1777	1585	1674	1777	1585	1728	1777	1585
Q Serve(g_s), s	4.5	8.3	0.0	1.1	6.1	0.0	6.6	0.0	0.0	0.9	14.1	0.0
Cycle Q Clear(g_c), s	4.5	8.3	0.0	1.1	6.1	0.0	6.6	0.0	0.0	0.9	14.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	363		96	263		1943	2283		459	1007	
V/C Ratio(X)	0.69	0.70		0.34	0.70		0.42	0.40		0.07	0.50	
Avail Cap(c_a), veh/h	419	681		202	592		1943	2283		507	1007	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.81	0.81	0.00	1.00	1.00	0.00	0.71	0.71	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.6	52.1	0.0	57.3	54.3	0.0	9.1	0.0	0.0	34.1	35.9	0.0
Incr Delay (d2), s/veh	2.4	2.0	0.0	2.1	3.4	0.0	0.1	0.4	0.0	0.1	1.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.8	0.0	0.5	2.9	0.0	1.9	0.1	0.0	0.4	6.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	58.0	54.1	0.0	59.4	57.7	0.0	9.2	0.4	0.0	34.2	37.6	0.0
LnGrp LOS	E	D		E	E		A	A		C	D	
Approach Vol, veh/h		447			218			1734			534	
Approach Delay, s/veh		55.8			57.9			4.5			37.4	
Approach LOS		E			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	83.1	9.3	18.2	52.4	40.0	12.7	14.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	61.0	7.0	23.0	32.0	34.0	10.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	2.0	3.1	10.3	8.6	16.1	6.5	8.1
Green Ext Time (p_c), s	0.0	8.4	0.0	1.2	3.3	3.1	0.2	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	22.3
HCM 7th LOS	C

Notes

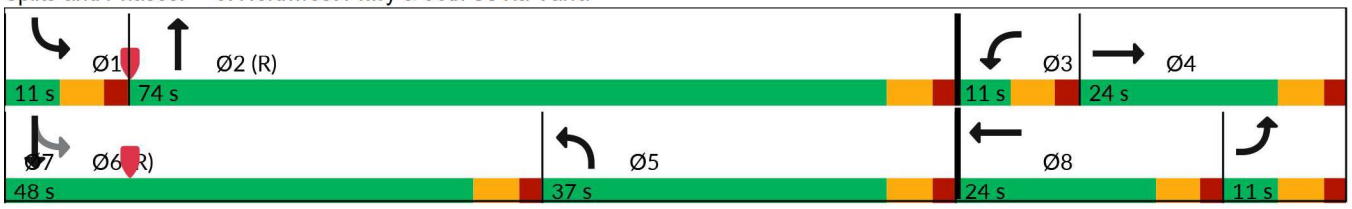
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	125	793	60	205	50	913	483	25	45	845	203
Future Volume (vph)	78	125	793	60	205	50	913	483	25	45	845	203
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	11.0	24.0		11.0	24.0		37.0	74.0		11.0	48.0	
Total Split (%)	9.2%	20.0%		9.2%	20.0%		30.8%	61.7%		9.2%	40.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	125	793	60	205	50	913	483	25	45	845	203
Future Volume (veh/h)	78	125	793	60	205	50	913	483	25	45	845	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	85	136	0	65	223	0	992	525	0	49	918	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	309		127	301		1638	2283		690	1244	
Arrive On Green	0.04	0.09	0.00	0.04	0.08	0.00	0.54	1.00	0.00	0.03	0.35	0.00
Sat Flow, veh/h	5023	3554	1585	3456	3554	1585	5023	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	85	136	0	65	223	0	992	525	0	49	918	0
Grp Sat Flow(s),veh/h/ln	1674	1777	1585	1728	1777	1585	1674	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.0	4.4	0.0	2.2	7.4	0.0	16.1	0.0	0.0	1.2	27.2	0.0
Cycle Q Clear(g_c), s	2.0	4.4	0.0	2.2	7.4	0.0	16.1	0.0	0.0	1.2	27.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	309		127	301		1638	2283		690	1244	
V/C Ratio(X)	0.43	0.44		0.51	0.74		0.61	0.23		0.07	0.74	
Avail Cap(c_a), veh/h	209	533		144	533		1638	2283		718	1244	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.87	0.00	1.00	1.00	0.00	0.80	0.80	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.3	52.0	0.0	56.7	53.6	0.0	22.1	0.0	0.0	28.4	34.2	0.0
Incr Delay (d2), s/veh	1.3	0.9	0.0	3.1	3.6	0.0	0.5	0.2	0.0	0.0	3.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.0	0.0	1.0	3.4	0.0	5.2	0.1	0.0	0.5	12.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.6	52.9	0.0	59.8	57.2	0.0	22.6	0.2	0.0	28.5	38.1	0.0
LnGrp LOS	E	D		E	E		C	A		C	D	
Approach Vol, veh/h		221			288			1517			967	
Approach Delay, s/veh		54.7			57.8			14.8			37.6	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	83.1	10.4	16.4	45.1	48.0	10.7	16.2
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	68.0	5.0	18.0	31.0	42.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	3.2	2.0	4.2	6.4	18.1	29.2	4.0	9.4
Green Ext Time (p_c), s	0.0	4.1	0.0	0.5	3.5	5.3	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.3
HCM 7th LOS	C

Notes

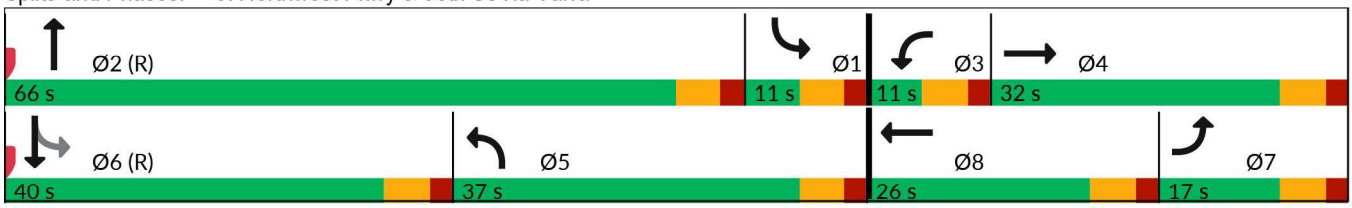
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	235	979	30	170	80	753	943	50	30	507	92
Future Volume (vph)	210	235	979	30	170	80	753	943	50	30	507	92
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	17.0	32.0		11.0	26.0		37.0	66.0		11.0	40.0	
Total Split (%)	14.2%	26.7%		9.2%	21.7%		30.8%	55.0%		9.2%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	235	979	30	170	80	753	943	50	30	507	92
Future Volume (veh/h)	210	235	979	30	170	80	753	943	50	30	507	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	228	255	0	33	185	0	818	1025	0	33	551	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	390		96	263		1905	1777		984	1007	
Arrive On Green	0.06	0.11	0.00	0.03	0.07	0.00	0.76	1.00	0.00	0.16	0.28	0.00
Sat Flow, veh/h	5023	3554	1585	3456	3554	1585	5023	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	228	255	0	33	185	0	818	1025	0	33	551	0
Grp Sat Flow(s),veh/h/ln	1674	1777	1585	1728	1777	1585	1674	1777	1585	1728	1777	1585
Q Serve(g_s), s	5.3	8.3	0.0	1.1	6.1	0.0	7.0	0.0	0.0	0.0	15.8	0.0
Cycle Q Clear(g_c), s	5.3	8.3	0.0	1.1	6.1	0.0	7.0	0.0	0.0	0.0	15.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	390		96	263		1905	1777		984	1007	
V/C Ratio(X)	0.72	0.65		0.34	0.70		0.43	0.58		0.03	0.55	
Avail Cap(c_a), veh/h	460	770		144	592		1905	1777		984	1007	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.73	0.73	0.00	1.00	1.00	0.00	0.68	0.68	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.1	51.2	0.0	57.3	54.3	0.0	9.8	0.0	0.0	19.0	36.5	0.0
Incr Delay (d2), s/veh	2.2	1.4	0.0	2.1	3.4	0.0	0.1	0.9	0.0	0.0	2.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.8	0.0	0.5	2.9	0.0	2.0	0.2	0.0	0.3	7.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.3	52.6	0.0	59.4	57.7	0.0	9.9	0.9	0.0	19.0	38.6	0.0
LnGrp LOS	E	D		E	E		A	A		B	D	
Approach Vol, veh/h		483			218			1843			584	
Approach Delay, s/veh		54.8			57.9			4.9			37.5	
Approach LOS		D			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.5	66.0	9.3	19.2	51.5	40.0	13.6	14.9
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	60.0	5.0	26.0	31.0	34.0	11.0	20.0
Max Q Clear Time (g_c+I1), s	2.0	2.0	3.1	10.3	9.0	17.8	7.3	8.1
Green Ext Time (p_c), s	0.0	9.9	0.0	1.4	3.3	3.4	0.3	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	22.4
HCM 7th LOS	C

Notes

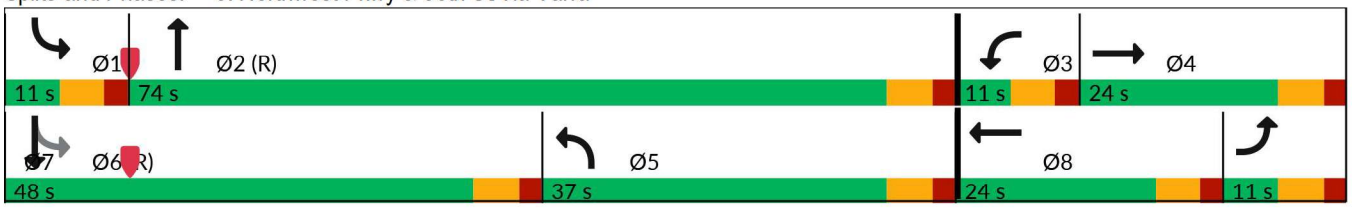
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	130	815	65	210	55	940	495	30	50	865	210
Future Volume (vph)	80	130	815	65	210	55	940	495	30	50	865	210
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	11.0	24.0		11.0	24.0		37.0	74.0		11.0	48.0	
Total Split (%)	9.2%	20.0%		9.2%	20.0%		30.8%	61.7%		9.2%	40.0%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	130	815	65	210	55	940	495	30	50	865	210
Future Volume (veh/h)	80	130	815	65	210	55	940	495	30	50	865	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	141	0	71	228	0	1022	538	0	54	940	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	312		130	306		1630	2273		686	1244	
Arrive On Green	0.04	0.09	0.00	0.04	0.09	0.00	0.54	1.00	0.00	0.03	0.35	0.00
Sat Flow, veh/h	5023	3554	1585	3456	3554	1585	5023	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	87	141	0	71	228	0	1022	538	0	54	940	0
Grp Sat Flow(s),veh/h/ln	1674	1777	1585	1728	1777	1585	1674	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.0	4.5	0.0	2.4	7.5	0.0	16.9	0.0	0.0	1.3	28.1	0.0
Cycle Q Clear(g_c), s	2.0	4.5	0.0	2.4	7.5	0.0	16.9	0.0	0.0	1.3	28.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	312		130	306		1630	2273		686	1244	
V/C Ratio(X)	0.44	0.45		0.54	0.74		0.63	0.24		0.08	0.76	
Avail Cap(c_a), veh/h	209	533		144	533		1630	2273		710	1244	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67	1.00	1.00	1.00
Upstream Filter(I)	0.85	0.85	0.00	1.00	1.00	0.00	0.78	0.78	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	56.3	52.0	0.0	56.7	53.5	0.0	22.5	0.0	0.0	28.5	34.5	0.0
Incr Delay (d2), s/veh	1.3	0.9	0.0	3.5	3.6	0.0	0.6	0.2	0.0	0.0	4.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.1	0.0	1.1	3.5	0.0	5.5	0.1	0.0	0.5	12.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.6	52.9	0.0	60.2	57.1	0.0	23.0	0.2	0.0	28.5	38.8	0.0
LnGrp LOS	E	D		E	E		C	A		C	D	
Approach Vol, veh/h		228			299			1560			994	
Approach Delay, s/veh		54.7			57.9			15.2			38.2	
Approach LOS		D			E			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	82.8	10.5	16.5	44.9	48.0	10.7	16.3
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	68.0	5.0	18.0	31.0	42.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	3.3	2.0	4.4	6.5	18.9	30.1	4.0	9.5
Green Ext Time (p_c), s	0.0	4.2	0.0	0.5	3.5	5.2	0.0	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	29.7
HCM 7th LOS	C

Notes

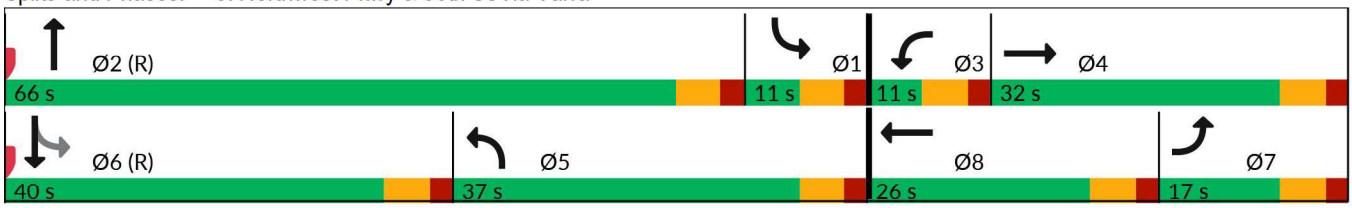
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	245	1005	35	175	85	775	965	55	35	520	95
Future Volume (vph)	215	245	1005	35	175	85	775	965	55	35	520	95
Turn Type	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free	pm+pt	NA	Free
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			Free			Free			Free	6		Free
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	11.0	24.0		11.0	24.0		11.0	24.0		11.0	24.0	
Total Split (s)	17.0	32.0		11.0	26.0		37.0	66.0		11.0	40.0	
Total Split (%)	14.2%	26.7%		9.2%	21.7%		30.8%	55.0%		9.2%	33.3%	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lead		Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Green, Master Intersection
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: Northwest Pkwy & 96th St/Via Varra



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	245	1005	35	175	85	775	965	55	35	520	95
Future Volume (veh/h)	215	245	1005	35	175	85	775	965	55	35	520	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	234	266	0	38	190	0	842	1049	0	38	565	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	324	392		103	269		1891	1777		968	1007	
Arrive On Green	0.06	0.11	0.00	0.03	0.08	0.00	0.75	1.00	0.00	0.16	0.28	0.00
Sat Flow, veh/h	5023	3554	1585	3456	3554	1585	5023	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	234	266	0	38	190	0	842	1049	0	38	565	0
Grp Sat Flow(s),veh/h/ln	1674	1777	1585	1728	1777	1585	1674	1777	1585	1728	1777	1585
Q Serve(g_s), s	5.5	8.6	0.0	1.3	6.3	0.0	7.5	0.0	0.0	0.0	16.3	0.0
Cycle Q Clear(g_c), s	5.5	8.6	0.0	1.3	6.3	0.0	7.5	0.0	0.0	0.0	16.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	324	392		103	269		1891	1777		968	1007	
V/C Ratio(X)	0.72	0.68		0.37	0.71		0.45	0.59		0.04	0.56	
Avail Cap(c_a), veh/h	460	770		144	592		1891	1777		968	1007	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	0.71	0.71	0.00	1.00	1.00	0.00	0.65	0.65	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	55.1	51.3	0.0	57.1	54.2	0.0	10.2	0.0	0.0	19.3	36.6	0.0
Incr Delay (d2), s/veh	2.3	1.5	0.0	2.2	3.4	0.0	0.1	0.9	0.0	0.0	2.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.9	0.0	0.6	2.9	0.0	2.1	0.2	0.0	0.3	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.4	52.8	0.0	59.3	57.6	0.0	10.3	0.9	0.0	19.3	38.9	0.0
LnGrp LOS	E	D		E	E		B	A		B	D	
Approach Vol, veh/h		500			228			1891			603	
Approach Delay, s/veh		54.9			57.9			5.1			37.7	
Approach LOS		D			E			A			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.2	66.0	9.6	19.2	51.2	40.0	13.8	15.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	60.0	5.0	26.0	31.0	34.0	11.0	20.0
Max Q Clear Time (g_c+I1), s	2.0	2.0	3.3	10.6	9.5	18.3	7.5	8.3
Green Ext Time (p_c), s	0.0	10.2	0.0	1.4	3.4	3.4	0.3	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	22.7
HCM 7th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	4.0
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	2	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	64	470	5	86
Demand Flow Rate, veh/h	65	480	5	87
Vehicles Circulating, veh/h	90	16	134	192
Vehicles Exiting, veh/h	189	123	21	304
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.3	4.1	3.0	3.9
Approach LOS	A	A	A	A

Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.398	0.602	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
A (Intercept)	1380	1420	1420	1380	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3	1.02e-3
Entry Flow, veh/h	65	191	289	5	87
Cap Entry Lane, veh/h	1259	1400	1400	1204	1134
Entry HV Adj Factor	0.986	0.981	0.979	0.992	0.986
Flow Entry, veh/h	64	187	283	5	86
Cap Entry, veh/h	1241	1373	1371	1194	1119
V/C Ratio	0.052	0.136	0.206	0.004	0.077
Control Delay, s/veh	3.3	3.7	4.3	3.0	3.9
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	1	0	0

Intersection	
Intersection Delay, s/veh	4.7
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	2	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	205	209	36	297
Demand Flow Rate, veh/h	209	213	36	303
Vehicles Circulating, veh/h	296	27	493	78
Vehicles Exiting, veh/h	85	502	12	162
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	5.5	3.3	4.8	5.0
Approach LOS	A	A	A	A

Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.329	0.671	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
A (Intercept)	1380	1420	1420	1380	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3	1.02e-3
Entry Flow, veh/h	209	70	143	36	303
Cap Entry Lane, veh/h	1020	1386	1386	835	1274
Entry HV Adj Factor	0.981	0.982	0.979	0.992	0.980
Flow Entry, veh/h	205	69	140	36	297
Cap Entry, veh/h	1001	1360	1357	828	1249
V/C Ratio	0.205	0.051	0.103	0.043	0.238
Control Delay, s/veh	5.5	3.0	3.5	4.8	5.0
LOS	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	1

Intersection	
Intersection Delay, s/veh	4.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	2	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	84	518	5	120
Demand Flow Rate, veh/h	85	529	5	122
Vehicles Circulating, veh/h	123	24	187	196
Vehicles Exiting, veh/h	195	168	21	357
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.6	4.3	3.2	4.2
Approach LOS	A	A	A	A

Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.369	0.631	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
A (Intercept)	1380	1420	1420	1380	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3	1.02e-3
Entry Flow, veh/h	85	195	334	5	122
Cap Entry Lane, veh/h	1217	1389	1389	1140	1130
Entry HV Adj Factor	0.986	0.981	0.979	0.992	0.982
Flow Entry, veh/h	84	191	327	5	120
Cap Entry, veh/h	1201	1363	1360	1131	1109
V/C Ratio	0.070	0.140	0.240	0.004	0.108
Control Delay, s/veh	3.6	3.8	4.7	3.2	4.2
LOS	A	A	A	A	A
95th %tile Queue, veh	0	0	1	0	0

Intersection	
Intersection Delay, s/veh	5.1
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	2	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	215	261	36	358
Demand Flow Rate, veh/h	219	267	36	365
Vehicles Circulating, veh/h	349	32	556	91
Vehicles Exiting, veh/h	107	560	12	208
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	6.0	3.6	5.1	5.6
Approach LOS	A	A	A	A

Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.311	0.689	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
A (Intercept)	1380	1420	1420	1380	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3	1.02e-3
Entry Flow, veh/h	219	83	184	36	365
Cap Entry Lane, veh/h	967	1379	1379	783	1258
Entry HV Adj Factor	0.981	0.982	0.978	0.992	0.981
Flow Entry, veh/h	215	81	180	36	358
Cap Entry, veh/h	949	1354	1349	777	1233
V/C Ratio	0.227	0.060	0.133	0.046	0.290
Control Delay, s/veh	6.0	3.1	3.7	5.1	5.6
LOS	A	A	A	A	A
95th %tile Queue, veh	1	0	0	0	1

Intersection	
Intersection Delay, s/veh	4.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	2	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	88	614	5	86
Demand Flow Rate, veh/h	89	627	5	87
Vehicles Circulating, veh/h	90	16	158	339
Vehicles Exiting, veh/h	336	147	21	304
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	3.5	4.5	3.1	4.5
Approach LOS	A	A	A	A

Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.539	0.461	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
A (Intercept)	1380	1420	1420	1380	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3	1.02e-3
Entry Flow, veh/h	89	338	289	5	87
Cap Entry Lane, veh/h	1259	1400	1400	1174	977
Entry HV Adj Factor	0.984	0.981	0.979	0.992	0.986
Flow Entry, veh/h	88	331	283	5	86
Cap Entry, veh/h	1239	1373	1371	1165	963
V/C Ratio	0.071	0.241	0.206	0.004	0.089
Control Delay, s/veh	3.5	4.7	4.3	3.1	4.5
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	1	0	0

Intersection	
Intersection Delay, s/veh	5.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	2	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	353	237	36	297
Demand Flow Rate, veh/h	360	242	36	303
Vehicles Circulating, veh/h	296	27	644	107
Vehicles Exiting, veh/h	114	653	12	162
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.3	3.4	5.6	5.2
Approach LOS	A	A	A	A

Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.409	0.591	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
A (Intercept)	1380	1420	1420	1380	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3	1.02e-3
Entry Flow, veh/h	360	99	143	36	303
Cap Entry Lane, veh/h	1020	1386	1386	715	1237
Entry HV Adj Factor	0.981	0.981	0.979	0.992	0.980
Flow Entry, veh/h	353	97	140	36	297
Cap Entry, veh/h	1001	1360	1357	710	1212
V/C Ratio	0.353	0.071	0.103	0.050	0.245
Control Delay, s/veh	7.3	3.2	3.5	5.6	5.2
LOS	A	A	A	A	A
95th %tile Queue, veh	2	0	0	0	1

Intersection	
Intersection Delay, s/veh	4.8
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	2	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	119	695	5	143
Demand Flow Rate, veh/h	122	709	5	146
Vehicles Circulating, veh/h	144	30	245	346
Vehicles Exiting, veh/h	348	220	21	393
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.0	4.9	3.4	5.2
Approach LOS	A	A	A	A

Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.487	0.513	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
A (Intercept)	1380	1420	1420	1380	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3	1.02e-3
Entry Flow, veh/h	122	345	364	5	146
Cap Entry Lane, veh/h	1191	1382	1382	1075	970
Entry HV Adj Factor	0.977	0.981	0.981	0.992	0.978
Flow Entry, veh/h	119	338	357	5	143
Cap Entry, veh/h	1164	1355	1355	1066	948
V/C Ratio	0.102	0.250	0.263	0.005	0.151
Control Delay, s/veh	4.0	4.8	4.9	3.4	5.2
LOS	A	A	A	A	A
95th %tile Queue, veh	0	1	1	0	1

Intersection	
Intersection Delay, s/veh	6.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	2	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	369	328	36	401
Demand Flow Rate, veh/h	376	334	36	409
Vehicles Circulating, veh/h	387	34	751	129
Vehicles Exiting, veh/h	151	753	12	239
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	8.6	3.7	6.3	6.3
Approach LOS	A	A	A	A

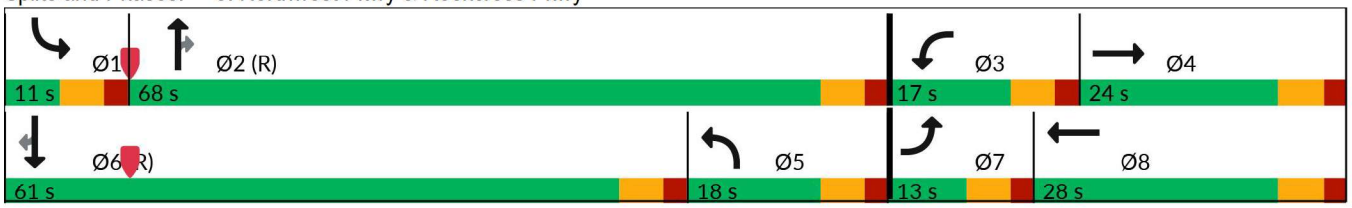
Lane	Left	Left	Right	Left	Left
Designated Moves	LTR	LT	R	LTR	LTR
Assumed Moves	LTR	LT	R	LTR	LTR
RT Channelized					
Lane Util	1.000	0.362	0.638	1.000	1.000
Follow-Up Headway, s	2.609	2.535	2.535	2.609	2.609
Critical Headway, s	4.976	4.544	4.544	4.976	4.976
A (Intercept)	1380	1420	1420	1380	1380
B (Slope)	1.02e-3	9.101e-4	9.101e-4	1.02e-3	1.02e-3
Entry Flow, veh/h	376	121	213	36	409
Cap Entry Lane, veh/h	930	1377	1377	641	1210
Entry HV Adj Factor	0.981	0.981	0.981	0.992	0.980
Flow Entry, veh/h	369	119	209	36	401
Cap Entry, veh/h	912	1351	1351	637	1186
V/C Ratio	0.404	0.088	0.155	0.056	0.338
Control Delay, s/veh	8.6	3.4	3.9	6.3	6.3
LOS	A	A	A	A	A
95th %tile Queue, veh	2	0	1	0	2

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	12	107	240	0	492	1218	190	60	1349	53	
Future Volume (vph)	12	107	240	0	492	1218	190	60	1349	53	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	13.0		17.0	28.0	18.0	68.0	68.0	11.0	61.0	61.0	24.0
Total Split (%)	10.8%		14.2%	23.3%	15.0%	56.7%	56.7%	9.2%	50.8%	50.8%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 70 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	0	107	240	0	60	492	1218	190	60	1349	53
Future Volume (veh/h)	12	0	107	240	0	60	492	1218	190	60	1349	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	0	0	261	0	65	535	1324	207	65	1466	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	2		314	104	93	927	2451	1093	127	1629	
Arrive On Green	0.01	0.00	0.00	0.09	0.00	0.06	0.27	0.69	0.69	0.07	0.92	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	13	0	0	261	0	65	535	1324	207	65	1466	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	0.4	0.0	0.0	8.9	0.0	4.8	16.1	22.1	5.6	2.2	23.6	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.0	8.9	0.0	4.8	16.1	22.1	5.6	2.2	23.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	51	2		314	104	93	927	2451	1093	127	1629	
V/C Ratio(X)	0.26	0.00		0.83	0.00	0.70	0.58	0.54	0.19	0.51	0.90	
Avail Cap(c_a), veh/h	202	281		317	326	291	927	2451	1093	144	1629	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.83	0.00
Uniform Delay (d), s/veh	58.5	0.0	0.0	53.6	0.0	55.4	38.0	9.2	6.6	54.5	3.7	0.0
Incr Delay (d2), s/veh	2.6	0.0	0.0	16.6	0.0	9.0	0.9	0.9	0.4	2.6	7.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	4.6	0.0	2.2	6.9	8.2	1.9	1.0	3.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.1	0.0	0.0	70.3	0.0	64.5	38.9	10.1	7.0	57.1	10.8	0.0
LnGrp LOS	E			E		E	D	B	A	E	B	
Approach Vol, veh/h		13			326			2066			1531	
Approach Delay, s/veh		61.1			69.1			17.2			12.8	
Approach LOS		E			E			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	88.8	16.9	3.9	38.2	61.0	7.8	13.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	62.0	11.0	18.0	12.0	55.0	7.0	22.0
Max Q Clear Time (g_c+I1), s	4.2	24.1	10.9	0.0	18.1	25.6	2.4	6.8
Green Ext Time (p_c), s	0.0	14.8	0.0	0.0	0.0	14.1	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	19.9
HCM 7th LOS	B

Notes

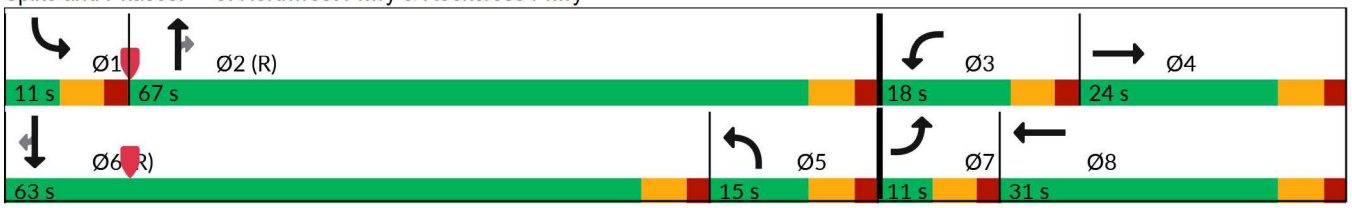
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	46	446	230	0	175	1413	180	25	1309	19	
Future Volume (vph)	46	446	230	0	175	1413	180	25	1309	19	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	11.0		18.0	31.0	15.0	67.0	67.0	11.0	63.0	63.0	24.0
Total Split (%)	9.2%		15.0%	25.8%	12.5%	55.8%	55.8%	9.2%	52.5%	52.5%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 61 (51%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	0	446	230	0	55	175	1413	180	25	1309	19
Future Volume (veh/h)	46	0	446	230	0	55	175	1413	180	25	1309	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	0	0	250	0	60	190	1536	196	27	1423	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	2		307	99	88	814	2437	1087	85	1688	
Arrive On Green	0.03	0.00	0.00	0.09	0.00	0.06	0.24	0.69	0.69	0.05	0.95	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	50	0	0	250	0	60	190	1536	196	27	1423	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.7	0.0	0.0	8.5	0.0	4.5	5.3	28.7	5.3	0.9	12.1	0.0
Cycle Q Clear(g_c), s	1.7	0.0	0.0	8.5	0.0	4.5	5.3	28.7	5.3	0.9	12.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	2		307	99	88	814	2437	1087	85	1688	
V/C Ratio(X)	0.43	0.00		0.81	0.00	0.68	0.23	0.63	0.18	0.32	0.84	
Avail Cap(c_a), veh/h	144	281		346	370	330	814	2437	1087	144	1688	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	56.8	0.0	0.0	53.7	0.0	55.6	37.1	10.4	6.8	56.1	1.9	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	12.7	0.0	8.8	0.1	1.2	0.4	1.7	4.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	4.2	0.0	2.0	2.3	10.7	1.8	0.4	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	0.0	0.0	66.4	0.0	64.4	37.3	11.7	7.1	57.8	6.3	0.0
LnGrp LOS	E			E		E	D	B	A	E	A	
Approach Vol, veh/h		50			310			1922			1450	
Approach Delay, s/veh		59.3			66.0			13.7			7.3	
Approach LOS		E			E			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	88.3	16.7	6.1	34.3	63.0	10.1	12.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	61.0	12.0	18.0	9.0	57.0	5.0	25.0
Max Q Clear Time (g_c+I1), s	2.9	30.7	10.5	0.0	7.3	14.1	3.7	6.5
Green Ext Time (p_c), s	0.0	16.3	0.1	0.0	0.1	15.8	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	16.2
HCM 7th LOS	B

Notes

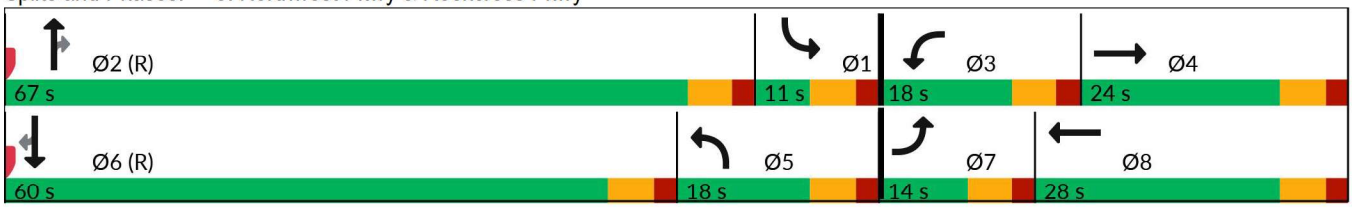
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	30	168	240	0	669	1218	190	60	1349	124	
Future Volume (vph)	30	168	240	0	669	1218	190	60	1349	124	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	14.0		18.0	28.0	18.0	67.0	67.0	11.0	60.0	60.0	24.0
Total Split (%)	11.7%		15.0%	23.3%	15.0%	55.8%	55.8%	9.2%	50.0%	50.0%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 66 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	168	240	0	60	669	1218	190	60	1349	124
Future Volume (veh/h)	30	0	168	240	0	60	669	1218	190	60	1349	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	0	0	261	0	65	727	1324	207	65	1466	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	2		317	104	93	910	1806	806	709	1599	
Arrive On Green	0.03	0.00	0.00	0.09	0.00	0.06	0.26	0.51	0.51	0.41	0.90	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	33	0	0	261	0	65	727	1324	207	65	1466	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	1.1	0.0	0.0	8.9	0.0	4.8	23.5	35.0	5.4	1.4	28.3	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	8.9	0.0	4.8	23.5	35.0	5.4	1.4	28.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	2		317	104	93	910	1806	806	709	1599	
V/C Ratio(X)	0.34	0.00		0.82	0.00	0.70	0.80	0.73	0.26	0.09	0.92	
Avail Cap(c_a), veh/h	230	281		346	326	291	910	1806	806	709	1599	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.79	0.79	0.00
Uniform Delay (d), s/veh	57.3	0.0	0.0	53.5	0.0	55.4	41.2	23.1	6.2	28.5	4.7	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	13.9	0.0	9.0	5.1	2.7	0.8	0.0	8.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	4.5	0.0	2.2	10.6	14.9	3.2	0.6	4.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.4	0.0	0.0	67.4	0.0	64.5	46.3	25.8	7.0	28.6	12.8	0.0
LnGrp LOS	E			E		E	D	C	A	C	B	
Approach Vol, veh/h		33			326			2258			1531	
Approach Delay, s/veh		59.4			66.8			30.7			13.4	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.6	67.0	17.0	5.4	37.6	60.0	9.3	13.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	61.0	12.0	18.0	12.0	54.0	8.0	22.0
Max Q Clear Time (g_c+I1), s	3.4	37.0	10.9	0.0	25.5	30.3	3.1	6.8
Green Ext Time (p_c), s	0.0	12.1	0.1	0.0	0.0	12.6	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	27.4
HCM 7th LOS	C

Notes

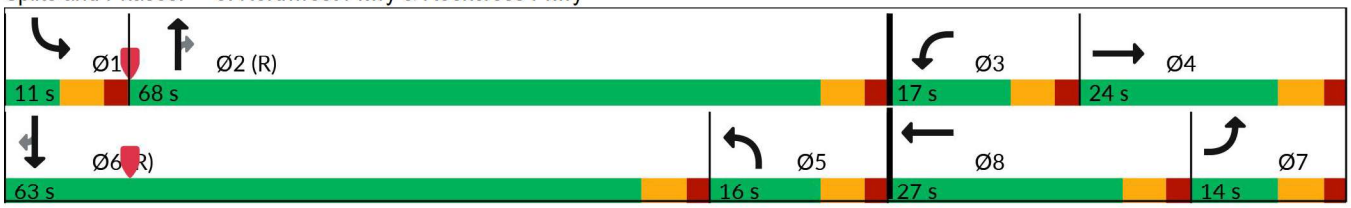
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	103	637	230	0	263	1413	180	25	1309	54	
Future Volume (vph)	103	637	230	0	263	1413	180	25	1309	54	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	14.0		17.0	27.0	16.0	68.0	68.0	11.0	63.0	63.0	24.0
Total Split (%)	11.7%		14.2%	22.5%	13.3%	56.7%	56.7%	9.2%	52.5%	52.5%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lag		Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 61 (51%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	0	637	230	0	55	263	1413	180	25	1309	54
Future Volume (veh/h)	103	0	637	230	0	55	263	1413	180	25	1309	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	112	0	0	250	0	60	286	1536	196	27	1423	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	28		305	98	88	766	2388	1065	85	1688	
Arrive On Green	0.05	0.00	0.00	0.09	0.00	0.06	0.22	0.67	0.67	0.05	0.95	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	112	0	0	250	0	60	286	1536	196	27	1423	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.8	0.0	0.0	8.5	0.0	4.5	8.4	30.0	5.6	0.9	12.1	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	8.5	0.0	4.5	8.4	30.0	5.6	0.9	12.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	28		305	98	88	766	2388	1065	85	1688	
V/C Ratio(X)	0.68	0.00		0.82	0.00	0.68	0.37	0.64	0.18	0.32	0.84	
Avail Cap(c_a), veh/h	230	281		317	311	277	766	2388	1065	144	1688	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.81	0.81	0.00
Uniform Delay (d), s/veh	56.2	0.0	0.0	53.8	0.0	55.6	39.6	11.4	7.4	56.1	1.9	0.0
Incr Delay (d2), s/veh	4.8	0.0	0.0	15.3	0.0	9.0	0.3	1.3	0.4	1.7	4.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.0	4.4	0.0	2.0	3.6	11.3	1.9	0.4	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.0	0.0	0.0	69.0	0.0	64.6	39.9	12.7	7.7	57.7	6.2	0.0
LnGrp LOS	E			E		E	D	B	A	E	A	
Approach Vol, veh/h		112			310			2018			1450	
Approach Delay, s/veh		61.0			68.2			16.1			7.2	
Approach LOS		E			E			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	86.6	16.6	7.8	32.6	63.0	11.7	12.7
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	62.0	11.0	18.0	10.0	57.0	8.0	21.0
Max Q Clear Time (g_c+I1), s	2.9	32.0	10.5	0.0	10.4	14.1	5.8	6.5
Green Ext Time (p_c), s	0.0	16.2	0.0	0.0	0.0	15.8	0.1	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	18.2
HCM 7th LOS	B

Notes

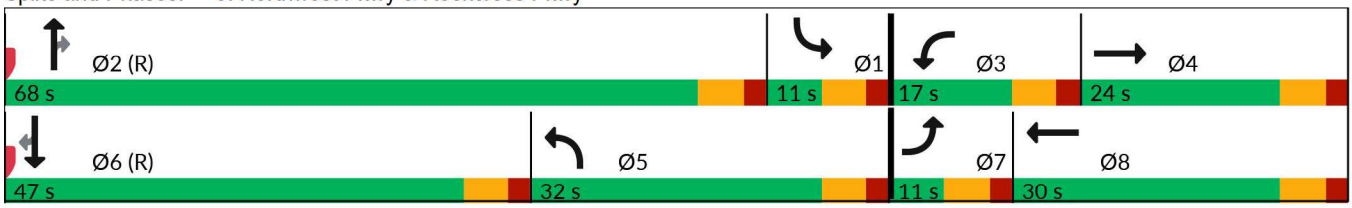
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	14	127	255	0	615	1298	205	65	1449	63	
Future Volume (vph)	14	127	255	0	615	1298	205	65	1449	63	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	11.0		17.0	30.0	32.0	68.0	68.0	11.0	47.0	47.0	24.0
Total Split (%)	9.2%		14.2%	25.0%	26.7%	56.7%	56.7%	9.2%	39.2%	39.2%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 69 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	0	127	255	0	65	615	1298	205	65	1449	63
Future Volume (veh/h)	14	0	127	255	0	65	615	1298	205	65	1449	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	15	0	0	277	0	71	668	1411	223	71	1575	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	2		317	112	100	1310	1836	819	705	1745	
Arrive On Green	0.02	0.00	0.00	0.09	0.00	0.06	0.38	0.52	0.52	0.41	0.68	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	15	0	0	277	0	71	668	1411	223	71	1575	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	0.5	0.0	0.0	9.5	0.0	5.3	17.9	38.2	5.7	1.5	30.6	0.0
Cycle Q Clear(g_c), s	0.5	0.0	0.0	9.5	0.0	5.3	17.9	38.2	5.7	1.5	30.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	57	2		317	112	100	1310	1836	819	705	1745	
V/C Ratio(X)	0.26	0.00		0.87	0.00	0.71	0.51	0.77	0.27	0.10	0.90	
Avail Cap(c_a), veh/h	144	281		317	355	317	1310	1836	819	705	1745	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	58.3	0.0	0.0	53.8	0.0	55.2	28.7	23.2	5.9	28.7	17.4	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	22.7	0.0	9.0	0.3	3.2	0.8	0.1	6.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	5.1	0.0	2.4	7.4	16.3	3.4	0.6	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.8	0.0	0.0	76.5	0.0	64.2	29.0	26.4	6.8	28.8	24.2	0.0
LnGrp LOS	E			E		E	C	C	A	C	C	
Approach Vol, veh/h		15			348			2302			1646	
Approach Delay, s/veh		60.8			74.0			25.3			24.4	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.5	68.0	17.0	4.5	51.5	47.0	8.0	13.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	62.0	11.0	18.0	26.0	41.0	5.0	24.0
Max Q Clear Time (g_c+I1), s	3.5	40.2	11.5	0.0	19.9	32.6	2.5	7.3
Green Ext Time (p_c), s	0.0	12.3	0.0	0.0	1.5	6.2	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	29.0
HCM 7th LOS	C

Notes

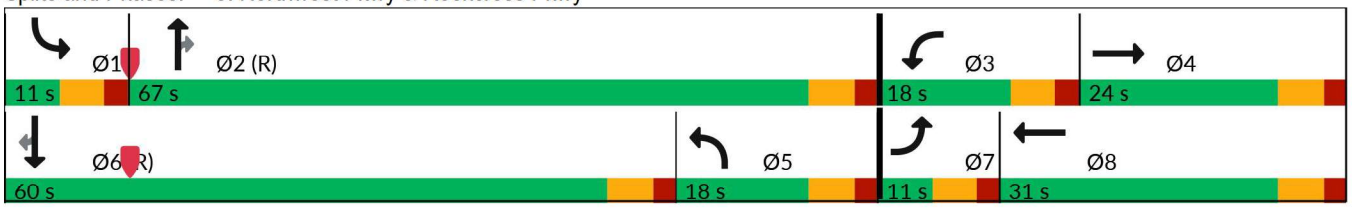
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	58	570	245	0	199	1523	195	30	1394	21	
Future Volume (vph)	58	570	245	0	199	1523	195	30	1394	21	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	11.0		18.0	31.0	18.0	67.0	67.0	11.0	60.0	60.0	24.0
Total Split (%)	9.2%		15.0%	25.8%	15.0%	55.8%	55.8%	9.2%	50.0%	50.0%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 51 (43%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	0	570	245	0	60	199	1523	195	30	1394	21
Future Volume (veh/h)	58	0	570	245	0	60	199	1523	195	30	1394	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	63	0	0	266	0	65	216	1655	212	33	1515	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	126	5		322	105	94	879	2405	1073	96	2298	
Arrive On Green	0.04	0.00	0.00	0.09	0.00	0.06	0.25	0.68	0.68	0.06	0.90	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	63	0	0	266	0	65	216	1655	212	33	1515	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	2.1	0.0	0.0	9.1	0.0	4.8	6.0	33.8	6.0	1.1	8.8	0.0
Cycle Q Clear(g_c), s	2.1	0.0	0.0	9.1	0.0	4.8	6.0	33.8	6.0	1.1	8.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	5		322	105	94	879	2405	1073	96	2298	
V/C Ratio(X)	0.50	0.00		0.83	0.00	0.70	0.25	0.69	0.20	0.34	0.66	
Avail Cap(c_a), veh/h	144	281		346	370	330	879	2405	1073	144	2298	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.80	0.80	0.00
Uniform Delay (d), s/veh	56.7	0.0	0.0	53.5	0.0	55.4	35.6	11.7	7.2	55.6	3.7	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.0	14.4	0.0	8.9	0.1	1.6	0.4	1.7	1.2	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	4.6	0.0	2.2	2.5	12.8	2.0	0.5	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.7	0.0	0.0	67.9	0.0	64.3	35.7	13.4	7.7	57.3	4.9	0.0
LnGrp LOS	E			E		E	D	B	A	E	A	
Approach Vol, veh/h		63			331			2083			1548	
Approach Delay, s/veh		59.7			67.2			15.1			6.1	
Approach LOS		E			E			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	87.2	17.2	6.3	36.5	60.0	10.4	13.1
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	61.0	12.0	18.0	12.0	54.0	5.0	25.0
Max Q Clear Time (g_c+I1), s	3.1	35.8	11.1	0.0	8.0	10.8	4.1	6.8
Green Ext Time (p_c), s	0.0	16.0	0.1	0.0	0.3	16.4	0.0	0.3

Intersection Summary	
HCM 7th Control Delay, s/veh	16.6
HCM 7th LOS	B

Notes

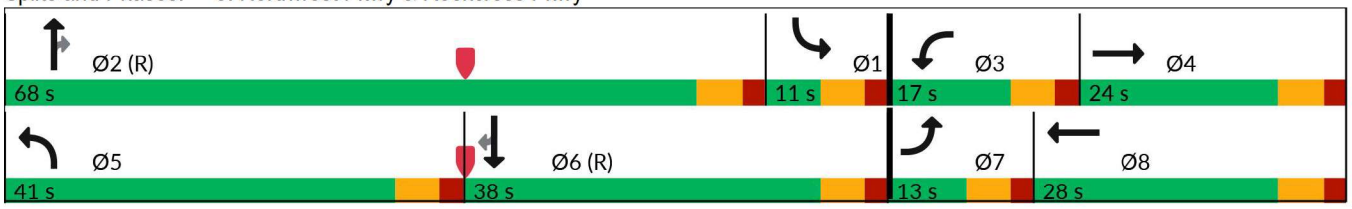
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	43	224	255	0	904	1298	205	65	1449	179	
Future Volume (vph)	43	224	255	0	904	1298	205	65	1449	179	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	13.0		17.0	28.0	41.0	68.0	68.0	11.0	38.0	38.0	24.0
Total Split (%)	10.8%		14.2%	23.3%	34.2%	56.7%	56.7%	9.2%	31.7%	31.7%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 58 (48%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	224	255	0	65	904	1298	205	65	1449	179
Future Volume (veh/h)	43	0	224	255	0	65	904	1298	205	65	1449	179
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	47	0	0	277	0	71	983	1411	223	71	1575	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	7		317	111	99	1008	1836	819	649	2107	
Arrive On Green	0.03	0.00	0.00	0.09	0.00	0.06	0.29	0.52	0.52	0.38	0.83	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	47	0	0	277	0	71	983	1411	223	71	1575	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	1.6	0.0	0.0	9.5	0.0	5.3	33.8	38.2	5.7	1.6	16.9	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	9.5	0.0	5.3	33.8	38.2	5.7	1.6	16.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	114	7		317	111	99	1008	1836	819	649	2107	
V/C Ratio(X)	0.41	0.00		0.87	0.00	0.71	0.98	0.77	0.27	0.11	0.75	
Avail Cap(c_a), veh/h	202	281		317	326	291	1008	1836	819	649	2107	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.77	0.77	0.00
Uniform Delay (d), s/veh	56.9	0.0	0.0	53.8	0.0	55.2	42.1	23.2	5.9	30.9	7.6	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	22.7	0.0	9.1	22.4	3.2	0.8	0.1	1.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	5.1	0.0	2.4	17.4	16.3	3.4	0.7	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.2	0.0	0.0	76.5	0.0	64.3	64.5	26.4	6.8	31.0	9.5	0.0
LnGrp LOS	E			E		E	E	C	A	C	A	
Approach Vol, veh/h		47			348			2617			1646	
Approach Delay, s/veh		59.2			74.0			39.0			10.5	
Approach LOS		E			E			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.5	68.0	17.0	6.5	41.0	55.5	10.0	13.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	62.0	11.0	18.0	35.0	32.0	7.0	22.0
Max Q Clear Time (g_c+I1), s	3.6	40.2	11.5	0.0	35.8	18.9	3.6	7.3
Green Ext Time (p_c), s	0.0	12.3	0.0	0.0	0.0	8.8	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

Notes

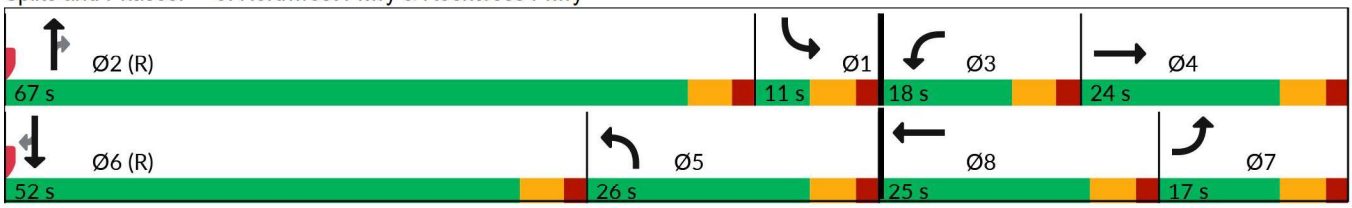
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	158	903	245	0	351	1523	195	30	1394	82	
Future Volume (vph)	158	903	245	0	351	1523	195	30	1394	82	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	17.0		18.0	25.0	26.0	67.0	67.0	11.0	52.0	52.0	24.0
Total Split (%)	14.2%		15.0%	20.8%	21.7%	55.8%	55.8%	9.2%	43.3%	43.3%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lag		Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 60 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	0	903	245	0	60	351	1523	195	30	1394	82
Future Volume (veh/h)	158	0	903	245	0	60	351	1523	195	30	1394	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	172	0	0	266	0	65	382	1655	212	33	1515	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	60		322	104	93	1008	1806	806	576	1957	
Arrive On Green	0.07	0.00	0.00	0.09	0.00	0.06	0.29	0.51	0.51	0.33	0.77	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	172	0	0	266	0	65	382	1655	212	33	1515	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	5.9	0.0	0.0	9.1	0.0	4.8	10.6	51.4	5.5	0.8	20.4	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0	9.1	0.0	4.8	10.6	51.4	5.5	0.8	20.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	60		322	104	93	1008	1806	806	576	1957	
V/C Ratio(X)	0.75	0.00		0.83	0.00	0.70	0.38	0.92	0.26	0.06	0.77	
Avail Cap(c_a), veh/h	317	281		346	281	251	1008	1806	806	576	1957	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.88	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.79	0.79	0.00
Uniform Delay (d), s/veh	55.0	0.0	0.0	53.5	0.0	55.5	33.9	27.1	6.2	33.6	11.0	0.0
Incr Delay (d2), s/veh	5.5	0.0	0.0	14.4	0.0	9.2	0.2	8.8	0.8	0.0	2.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.0	4.6	0.0	2.2	4.5	23.1	3.3	0.3	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.5	0.0	0.0	67.9	0.0	64.7	34.1	36.0	7.0	33.6	13.4	0.0
LnGrp LOS	E			E		E	C	D	A	C	B	
Approach Vol, veh/h		172			331			2249			1548	
Approach Delay, s/veh		60.5			67.3			32.9			13.9	
Approach LOS		E			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	67.0	17.2	9.8	41.0	52.0	14.0	13.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	61.0	12.0	18.0	20.0	46.0	11.0	19.0
Max Q Clear Time (g_c+I1), s	2.8	53.4	11.1	0.0	12.6	22.4	7.9	6.8
Green Ext Time (p_c), s	0.0	6.2	0.1	0.0	0.8	12.5	0.1	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	29.8
HCM 7th LOS	C

Notes

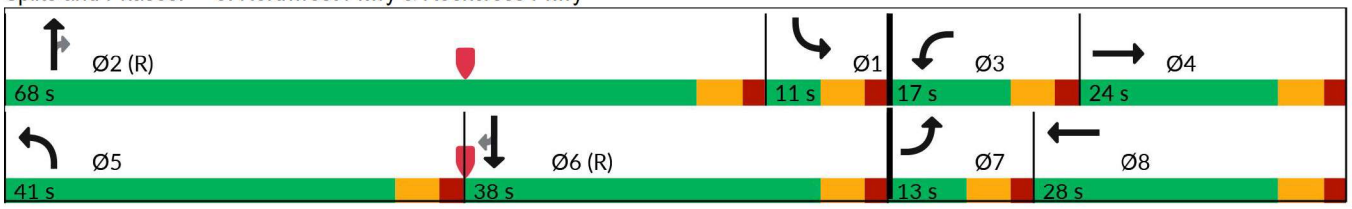
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	45	230	255	0	920	1335	205	65	1490	185	
Future Volume (vph)	45	230	255	0	920	1335	205	65	1490	185	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	13.0		17.0	28.0	41.0	68.0	68.0	11.0	38.0	38.0	24.0
Total Split (%)	10.8%		14.2%	23.3%	34.2%	56.7%	56.7%	9.2%	31.7%	31.7%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead		Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 58 (48%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	0	230	255	0	65	920	1335	205	65	1490	185
Future Volume (veh/h)	45	0	230	255	0	65	920	1335	205	65	1490	185
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	0	0	277	0	71	1000	1451	223	71	1620	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	9		317	111	99	1008	1836	819	647	2104	
Arrive On Green	0.03	0.00	0.00	0.09	0.00	0.06	0.29	0.52	0.52	0.37	0.82	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	49	0	0	277	0	71	1000	1451	223	71	1620	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	1.7	0.0	0.0	9.5	0.0	5.3	34.6	40.0	5.7	1.6	18.3	0.0
Cycle Q Clear(g_c), s	1.7	0.0	0.0	9.5	0.0	5.3	34.6	40.0	5.7	1.6	18.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	9		317	111	99	1008	1836	819	647	2104	
V/C Ratio(X)	0.42	0.00		0.87	0.00	0.71	0.99	0.79	0.27	0.11	0.77	
Avail Cap(c_a), veh/h	202	281		317	326	291	1008	1836	819	647	2104	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.99	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.74	0.74	0.00
Uniform Delay (d), s/veh	56.8	0.0	0.0	53.8	0.0	55.2	42.4	23.7	5.9	31.0	7.8	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	22.7	0.0	9.1	26.4	3.6	0.8	0.1	2.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	5.1	0.0	2.4	18.3	17.1	3.4	0.7	3.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	59.3	0.0	0.0	76.5	0.0	64.3	68.7	27.2	6.8	31.1	9.9	0.0
LnGrp LOS	E			E		E	E	C	A	C	A	
Approach Vol, veh/h		49			348			2674			1691	
Approach Delay, s/veh		59.3			74.0			41.0			10.8	
Approach LOS		E			E			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.5	68.0	17.0	6.5	41.0	55.5	10.0	13.5
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	62.0	11.0	18.0	35.0	32.0	7.0	22.0
Max Q Clear Time (g_c+I1), s	3.6	42.0	11.5	0.0	36.6	20.3	3.7	7.3
Green Ext Time (p_c), s	0.0	12.0	0.0	0.0	0.0	8.2	0.0	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	32.9
HCM 7th LOS	C

Notes

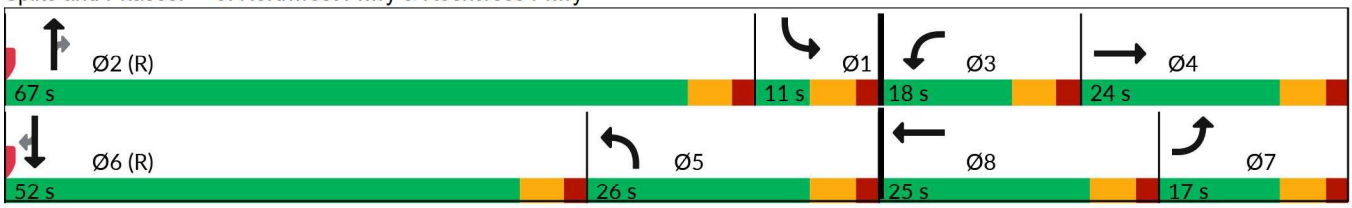
Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	Ø4
Lane Configurations											
Traffic Volume (vph)	160	920	245	0	360	1565	195	30	1430	85	
Future Volume (vph)	160	920	245	0	360	1565	195	30	1430	85	
Turn Type	Prot	Free	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	
Protected Phases	7		3	8	5	2		1	6		4
Permitted Phases		Free					2			6	
Detector Phase	7		3	8	5	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0		11.0	24.0	11.0	24.0	24.0	11.0	24.0	24.0	24.0
Total Split (s)	17.0		18.0	25.0	26.0	67.0	67.0	11.0	52.0	52.0	24.0
Total Split (%)	14.2%		15.0%	20.8%	21.7%	55.8%	55.8%	9.2%	43.3%	43.3%	20%
Yellow Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lag		Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None	None	None	C-Max	C-Max	None	C-Max	C-Max	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 60 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 100
Control Type: Actuated-Coordinated

Splits and Phases: 5: Northwest Pkwy & Rockcress Pkwy



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	0	920	245	0	60	360	1565	195	30	1430	85
Future Volume (veh/h)	160	0	920	245	0	60	360	1565	195	30	1430	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	174	0	0	266	0	65	391	1701	212	33	1554	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	61		322	104	93	1006	1806	806	574	1957	
Arrive On Green	0.07	0.00	0.00	0.09	0.00	0.06	0.29	0.51	0.51	0.33	0.77	0.00
Sat Flow, veh/h	3456	1870	1585	3456	1777	1585	3456	3554	1585	3456	5106	1585
Grp Volume(v), veh/h	174	0	0	266	0	65	391	1701	212	33	1554	0
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1728	1777	1585	1728	1777	1585	1728	1702	1585
Q Serve(g_s), s	5.9	0.0	0.0	9.1	0.0	4.8	10.9	54.2	5.5	0.8	21.8	0.0
Cycle Q Clear(g_c), s	5.9	0.0	0.0	9.1	0.0	4.8	10.9	54.2	5.5	0.8	21.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	61		322	104	93	1006	1806	806	574	1957	
V/C Ratio(X)	0.75	0.00		0.83	0.00	0.70	0.39	0.94	0.26	0.06	0.79	
Avail Cap(c_a), veh/h	317	281		346	281	251	1006	1806	806	574	1957	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	0.87	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.78	0.78	0.00
Uniform Delay (d), s/veh	55.0	0.0	0.0	53.5	0.0	55.5	34.0	27.8	6.2	33.7	11.2	0.0
Incr Delay (d2), s/veh	5.6	0.0	0.0	14.4	0.0	9.2	0.2	11.3	0.8	0.0	2.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	4.6	0.0	2.2	4.6	24.8	3.3	0.3	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.6	0.0	0.0	67.9	0.0	64.7	34.3	39.1	7.0	33.7	13.9	0.0
LnGrp LOS	E			E		E	C	D	A	C	B	
Approach Vol, veh/h		174			331			2304			1587	
Approach Delay, s/veh		60.6			67.3			35.3			14.3	
Approach LOS		E			E			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.9	67.0	17.2	9.9	40.9	52.0	14.1	13.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	5.0	61.0	12.0	18.0	20.0	46.0	11.0	19.0
Max Q Clear Time (g_c+I1), s	2.8	56.2	11.1	0.0	12.9	23.8	7.9	6.8
Green Ext Time (p_c), s	0.0	4.2	0.1	0.0	0.9	12.4	0.1	0.2

Intersection Summary	
HCM 7th Control Delay, s/veh	31.1
HCM 7th LOS	C

Notes

Unsignalized Delay for [EBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	2	25	22	1	21	96	76	76	68	118	60
Future Vol, veh/h	16	2	25	22	1	21	96	76	76	68	118	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	2	27	24	1	23	104	83	83	74	128	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	601	683	161	610	674	124	193	0	0	165	0	0
Stage 1	309	309	-	333	333	-	-	-	-	-	-	-
Stage 2	292	374	-	277	341	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	412	372	884	407	376	927	1380	-	-	1413	-	-
Stage 1	701	660	-	681	644	-	-	-	-	-	-	-
Stage 2	716	618	-	729	638	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	351	326	884	343	330	927	1380	-	-	1413	-	-
Mov Cap-2 Maneuver	351	326	-	343	330	-	-	-	-	-	-	-
Stage 1	665	625	-	629	595	-	-	-	-	-	-	-
Stage 2	644	571	-	668	605	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.33	13.14	3.03	2.13
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1380	-	-	538	490	1413	-	-
HCM Lane V/C Ratio	0.076	-	-	0.087	0.098	0.052	-	-
HCM Control Delay (s/veh)	7.8	-	-	12.3	13.1	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.3	0.3	0.2	-	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	1	97	84	1	70	31	181	32	32	75	19
Future Vol, veh/h	61	1	97	84	1	70	31	181	32	32	75	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	66	1	105	91	1	76	34	197	35	35	82	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	426	460	92	433	453	214	102	0	0	232	0	0
Stage 1	161	161	-	282	282	-	-	-	-	-	-	-
Stage 2	265	299	-	152	172	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	539	498	966	533	502	826	1490	-	-	1336	-	-
Stage 1	841	764	-	725	678	-	-	-	-	-	-	-
Stage 2	741	666	-	851	757	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	465	474	966	451	478	826	1490	-	-	1336	-	-
Mov Cap-2 Maneuver	465	474	-	451	478	-	-	-	-	-	-	-
Stage 1	819	745	-	709	663	-	-	-	-	-	-	-
Stage 2	656	651	-	737	737	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.09	14	0.95	1.97
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1490	-	-	680	567	1336	-	-
HCM Lane V/C Ratio	0.023	-	-	0.254	0.297	0.026	-	-
HCM Control Delay (s/veh)	7.5	-	-	12.1	14	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1	1.2	0.1	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	16	2	25	25	1	32	96	87	85	95	147	60
Future Vol, veh/h	16	2	25	25	1	32	96	87	85	95	147	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	2	27	27	1	35	104	95	92	103	160	65

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	703	795	192	717	781	141	225	0	0	187	0	0
Stage 1	399	399	-	349	349	-	-	-	-	-	-	-
Stage 2	304	396	-	367	432	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	352	320	849	345	326	907	1344	-	-	1387	-	-
Stage 1	627	602	-	667	633	-	-	-	-	-	-	-
Stage 2	706	604	-	652	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	288	274	849	283	279	907	1344	-	-	1387	-	-
Mov Cap-2 Maneuver	288	274	-	283	279	-	-	-	-	-	-	-
Stage 1	580	557	-	615	584	-	-	-	-	-	-	-
Stage 2	625	557	-	582	539	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.58	14.16	2.83	2.45
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1344	-	-	466	456	1387	-	-
HCM Lane V/C Ratio	0.078	-	-	0.1	0.138	0.074	-	-
HCM Control Delay (s/veh)	7.9	-	-	13.6	14.2	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.3	0.5	0.2	-	-

Intersection	
Int Delay, s/veh	7.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	1	97	96	1	113	31	224	37	47	92	19
Future Vol, veh/h	61	1	97	96	1	113	31	224	37	47	92	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	66	1	105	104	1	123	34	243	40	51	100	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	524	564	110	534	554	264	121	0	0	284	0	0
Stage 1	213	213	-	331	331	-	-	-	-	-	-	-
Stage 2	311	351	-	203	223	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	464	435	943	457	441	775	1467	-	-	1279	-	-
Stage 1	790	727	-	682	645	-	-	-	-	-	-	-
Stage 2	699	632	-	799	719	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	365	408	943	380	413	775	1467	-	-	1279	-	-
Mov Cap-2 Maneuver	365	408	-	380	413	-	-	-	-	-	-	-
Stage 1	758	698	-	667	630	-	-	-	-	-	-	-
Stage 2	574	618	-	680	690	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.74	17.08	0.8	2.36
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1467	-	-	584	524	1279	-	-
HCM Lane V/C Ratio	0.023	-	-	0.296	0.436	0.04	-	-
HCM Control Delay (s/veh)	7.5	-	-	13.7	17.1	7.9	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.2	2.2	0.1	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	2	19	10	1	12	72	224	28	28	89	48
Future Vol, veh/h	12	2	19	10	1	12	72	224	28	28	89	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	2	21	11	1	13	78	243	30	30	97	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	584	614	123	574	625	259	149	0	0	274	0	0
Stage 1	184	184	-	415	415	-	-	-	-	-	-	-
Stage 2	401	430	-	159	210	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	423	407	928	430	401	780	1433	-	-	1289	-	-
Stage 1	818	748	-	615	592	-	-	-	-	-	-	-
Stage 2	626	583	-	843	729	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	383	376	928	386	370	780	1433	-	-	1289	-	-
Mov Cap-2 Maneuver	383	376	-	386	370	-	-	-	-	-	-	-
Stage 1	799	730	-	581	560	-	-	-	-	-	-	-
Stage 2	581	551	-	803	711	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	11.65	12.23	1.7	1.33
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1433	-	-	578	523	1289	-	-
HCM Lane V/C Ratio	0.055	-	-	0.062	0.048	0.024	-	-
HCM Control Delay (s/veh)	7.7	-	-	11.6	12.2	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	1	73	30	2	38	23	157	14	14	226	16
Future Vol, veh/h	49	1	73	30	2	38	23	157	14	14	226	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	1	79	33	2	41	25	171	15	15	246	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	507	521	254	505	522	178	263	0	0	186	0	0
Stage 1	285	285	-	228	228	-	-	-	-	-	-	-
Stage 2	222	236	-	277	293	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	476	460	784	478	459	865	1301	-	-	1389	-	-
Stage 1	722	676	-	774	715	-	-	-	-	-	-	-
Stage 2	781	710	-	730	670	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	438	446	784	415	446	865	1301	-	-	1389	-	-
Mov Cap-2 Maneuver	438	446	-	415	446	-	-	-	-	-	-	-
Stage 1	714	668	-	760	701	-	-	-	-	-	-	-
Stage 2	727	696	-	648	663	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.82	12.14	0.93	0.42
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1301	-	-	594	580	1389	-	-
HCM Lane V/C Ratio	0.019	-	-	0.225	0.131	0.011	-	-
HCM Control Delay (s/veh)	7.8	-	-	12.8	12.1	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	0.4	0	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	2	19	16	1	19	72	237	46	46	103	48
Future Vol, veh/h	12	2	19	16	1	19	72	237	46	46	103	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	2	21	17	1	21	78	258	50	50	112	52

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	653	702	138	652	703	283	164	0	0	308	0	0
Stage 1	238	238	-	439	439	-	-	-	-	-	-	-
Stage 2	415	464	-	213	264	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	381	362	910	381	362	756	1414	-	-	1253	-	-
Stage 1	765	708	-	597	578	-	-	-	-	-	-	-
Stage 2	615	563	-	789	690	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	335	329	910	336	328	756	1414	-	-	1253	-	-
Mov Cap-2 Maneuver	335	329	-	336	328	-	-	-	-	-	-	-
Stage 1	735	680	-	564	546	-	-	-	-	-	-	-
Stage 2	564	532	-	738	662	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	12.35	13.26	1.56	1.87
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1414	-	-	525	475	1253	-	-
HCM Lane V/C Ratio	0.055	-	-	0.068	0.082	0.04	-	-
HCM Control Delay (s/veh)	7.7	-	-	12.4	13.3	8	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.2	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	1	73	53	2	67	23	176	24	24	244	16
Future Vol, veh/h	49	1	73	53	2	67	23	176	24	24	244	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	53	1	79	58	2	73	25	191	26	26	265	17

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	568	593	274	572	589	204	283	0	0	217	0	0
Stage 1	326	326	-	254	254	-	-	-	-	-	-	-
Stage 2	242	267	-	318	335	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	433	418	765	431	421	836	1280	-	-	1352	-	-
Stage 1	686	648	-	750	697	-	-	-	-	-	-	-
Stage 2	761	688	-	693	643	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	378	402	765	370	404	836	1280	-	-	1352	-	-
Mov Cap-2 Maneuver	378	402	-	370	404	-	-	-	-	-	-	-
Stage 1	673	636	-	735	683	-	-	-	-	-	-	-
Stage 2	679	674	-	608	630	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13.83	13.94	0.81	0.65
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1280	-	-	541	535	1352	-	-
HCM Lane V/C Ratio	0.02	-	-	0.247	0.248	0.019	-	-
HCM Control Delay (s/veh)	7.9	-	-	13.8	13.9	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1	1	0.1	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	131	11	38	505	212	3	0	8	67	0	10
Future Vol, veh/h	28	131	11	38	505	212	3	0	8	67	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	142	12	41	549	230	3	0	9	73	0	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	779	0	0	154	0	0	566	1071	77	879	962	390
Stage 1	-	-	-	-	-	-	209	209	-	747	747	-
Stage 2	-	-	-	-	-	-	357	862	-	132	215	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	952	-	-	1424	-	-	*615	275	968	344	325	907
Stage 1	-	-	-	-	-	-	*773	728	-	498	507	-
Stage 2	-	-	-	-	-	-	*900	443	-	858	723	-
Platoon blocked, %	0	-	-		-	-	0	0		0	0	0
Mov Cap-1 Maneuver	952	-	-	1424	-	-	*571	259	968	320	305	907
Mov Cap-2 Maneuver	-	-	-	-	-	-	*571	259	-	320	305	-
Stage 1	-	-	-	-	-	-	*749	704	-	483	492	-
Stage 2	-	-	-	-	-	-	*864	430	-	823	700	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	1.47	0.38	9.49	18.15
HCM LOS			A	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	814	952	-	-	1424	-	-	320	907
HCM Lane V/C Ratio	0.015	0.032	-	-	0.029	-	-	0.227	0.012
HCM Control Delay (s/veh)	9.5	8.9	-	-	7.6	-	-	19.5	9
HCM Lane LOS	A	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0	0.1	-	-	0.1	-	-	0.9	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	530	6	12	223	106	14	0	39	210	0	30
Future Vol, veh/h	14	530	6	12	223	106	14	0	39	210	0	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	576	7	13	242	115	15	0	42	228	0	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	358	0	0	583	0	0	757	993	291	645	939	179
Stage 1	-	-	-	-	-	-	610	610	-	326	326	-
Stage 2	-	-	-	-	-	-	147	384	-	318	613	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1288	-	-	988	-	-	*347	269	705	422	291	999
Stage 1	-	-	-	-	-	-	*448	483	-	767	713	-
Stage 2	-	-	-	-	-	-	*968	671	-	667	481	-
Platoon blocked, %	0	-	-		-	-	0	0		0	0	0
Mov Cap-1 Maneuver	1288	-	-	988	-	-	*327	263	705	387	284	999
Mov Cap-2 Maneuver	-	-	-	-	-	-	*327	263	-	387	284	-
Stage 1	-	-	-	-	-	-	*443	477	-	757	704	-
Stage 2	-	-	-	-	-	-	*924	662	-	620	476	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.2	0.31	12.46	24.58
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	540	1288	-	-	988	-	-	387	999
HCM Lane V/C Ratio	0.107	0.012	-	-	0.013	-	-	0.59	0.033
HCM Control Delay (s/veh)	12.5	7.8	-	-	8.7	-	-	26.8	8.7
HCM Lane LOS	B	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	3.6	0.1

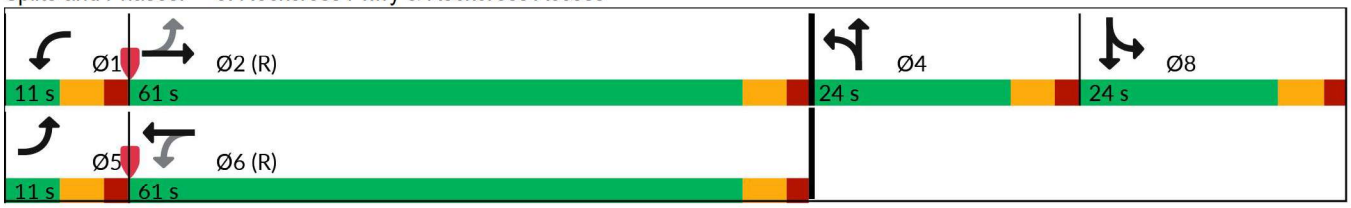
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	46	160	38	661	0	107	0
Future Volume (vph)	46	160	38	661	0	107	0
Turn Type	pm+pt	NA	pm+pt	NA	NA	Split	NA
Protected Phases	5	2	1	6	4	8	8
Permitted Phases	2		6				
Detector Phase	5	2	1	6	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	11.0	24.0	24.0	24.0	24.0
Total Split (s)	11.0	61.0	11.0	61.0	24.0	24.0	24.0
Total Split (%)	9.2%	50.8%	9.2%	50.8%	20.0%	20.0%	20.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	Max	Max	Max

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 104 (87%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 8: Rockcress Pkwy & Rockcress Access



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	160	11	38	661	347	3	0	8	107	0	16
Future Volume (veh/h)	46	160	11	38	661	347	3	0	8	107	0	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	174	12	41	718	377	3	0	9	116	0	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	1583	108	642	1050	551	61	0	183	518	0	238
Arrive On Green	0.03	0.47	0.47	0.06	0.93	0.93	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1781	3375	231	1781	2253	1181	407	0	1222	3456	0	1585
Grp Volume(v), veh/h	50	91	95	41	566	529	12	0	0	116	0	17
Grp Sat Flow(s),veh/h/ln	1781	1777	1829	1781	1777	1658	1630	0	0	1728	0	1585
Q Serve(g_s), s	1.7	3.4	3.5	1.4	7.1	7.2	0.8	0.0	0.0	3.5	0.0	1.1
Cycle Q Clear(g_c), s	1.7	3.4	3.5	1.4	7.1	7.2	0.8	0.0	0.0	3.5	0.0	1.1
Prop In Lane	1.00		0.13	1.00		0.71	0.25		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	330	833	858	642	828	773	244	0	0	518	0	238
V/C Ratio(X)	0.15	0.11	0.11	0.06	0.68	0.68	0.05	0.00	0.00	0.22	0.00	0.07
Avail Cap(c_a), veh/h	344	833	858	661	828	773	244	0	0	518	0	238
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.64	0.64	0.64	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.7	17.8	17.8	15.1	2.4	2.4	43.7	0.0	0.0	44.9	0.0	43.8
Incr Delay (d2), s/veh	0.2	0.3	0.3	0.0	2.9	3.2	0.4	0.0	0.0	1.0	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.5	1.5	0.6	1.8	1.7	0.3	0.0	0.0	1.6	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	15.9	18.1	18.1	15.1	5.3	5.6	44.1	0.0	0.0	45.9	0.0	44.4
LnGrp LOS	B	B	B	B	A	A	D			D		D
Approach Vol, veh/h		236			1136			12			133	
Approach Delay, s/veh		17.6			5.8			44.1			45.7	
Approach LOS		B			A			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	62.3		24.0	10.1	61.9		24.0				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	5.0	55.0		18.0	5.0	55.0		18.0				
Max Q Clear Time (g_c+I1), s	3.4	5.5		2.8	3.7	9.2		5.5				
Green Ext Time (p_c), s	0.0	1.1		0.0	0.0	9.9		0.3				

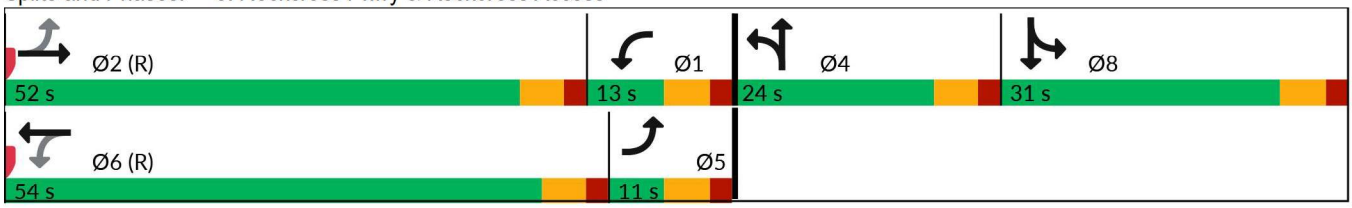
Intersection Summary												
HCM 7th Control Delay, s/veh			11.4									
HCM 7th LOS			B									

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	24	695	12	261	0	366	0
Future Volume (vph)	24	695	12	261	0	366	0
Turn Type	pm+pt	NA	pm+pt	NA	NA	Split	NA
Protected Phases	5	2	1	6	4	8	8
Permitted Phases	2		6				
Detector Phase	5	2	1	6	4	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	11.0	24.0	13.0	24.0	24.0	24.0	24.0
Total Split (s)	11.0	52.0	13.0	54.0	24.0	31.0	31.0
Total Split (%)	9.2%	43.3%	10.8%	45.0%	20.0%	25.8%	25.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lag	Lead	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			
Recall Mode	None	C-Max	None	C-Max	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 16 (13%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated

Splits and Phases: 8: Rockcress Pkwy & Rockcress Access

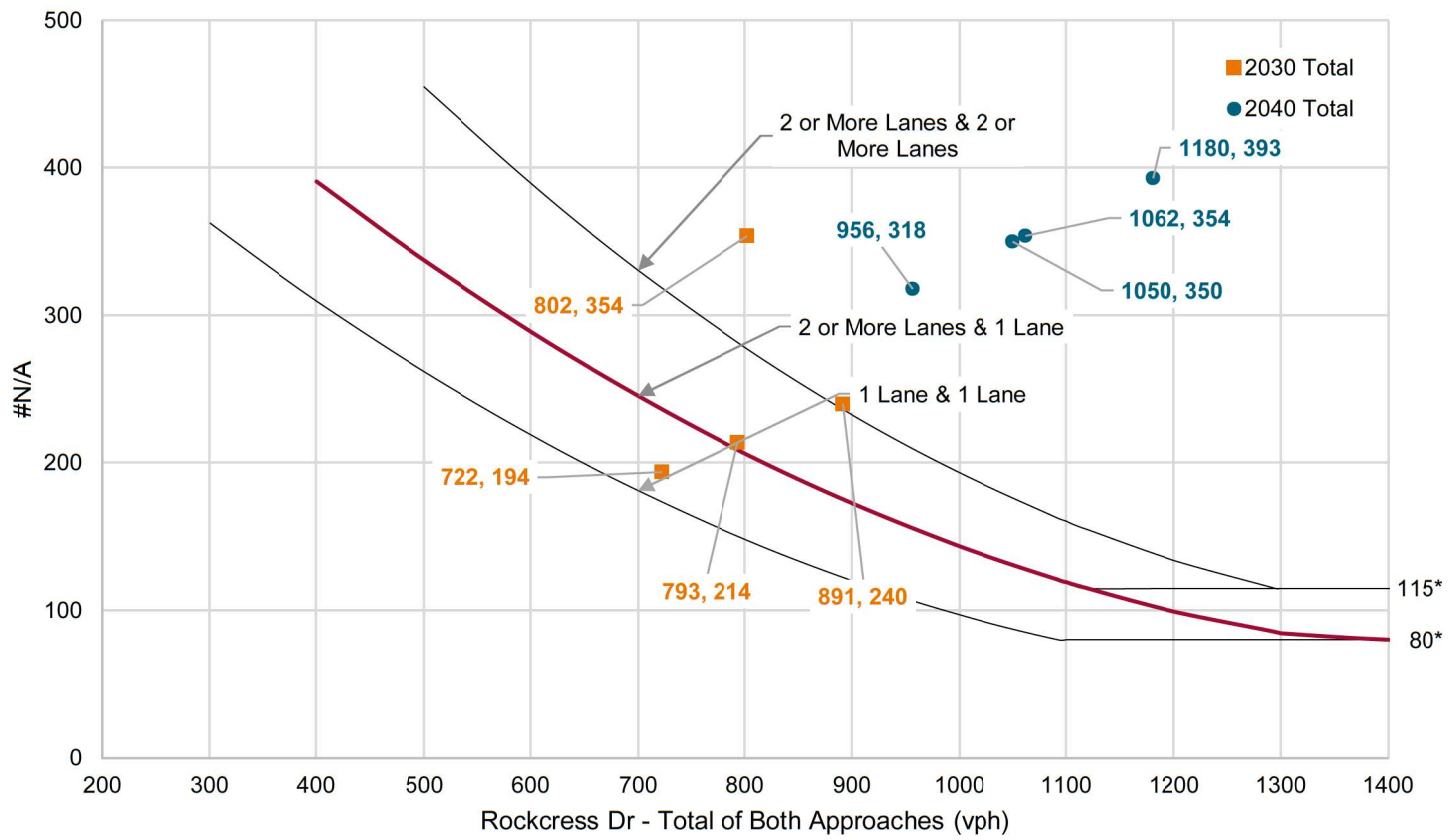


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	695	6	12	261	182	14	0	39	366	0	53
Future Volume (veh/h)	24	695	6	12	261	182	14	0	39	366	0	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	755	7	13	284	198	15	0	42	398	0	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	758	1383	13	629	811	549	19	0	54	482	0	221
Arrive On Green	0.22	0.38	0.38	0.47	0.80	0.80	0.04	0.00	0.04	0.14	0.00	0.14
Sat Flow, veh/h	1781	3608	33	1781	2028	1372	430	0	1203	3456	0	1585
Grp Volume(v), veh/h	26	372	390	13	248	234	57	0	0	398	0	58
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1777	1623	1632	0	0	1728	0	1585
Q Serve(g_s), s	0.0	19.6	19.6	0.0	4.6	4.9	4.1	0.0	0.0	13.4	0.0	3.9
Cycle Q Clear(g_c), s	0.0	19.6	19.6	0.0	4.6	4.9	4.1	0.0	0.0	13.4	0.0	3.9
Prop In Lane	1.00		0.02	1.00		0.85	0.26		0.74	1.00		1.00
Lane Grp Cap(c), veh/h	758	681	715	629	711	649	73	0	0	482	0	221
V/C Ratio(X)	0.03	0.55	0.55	0.02	0.35	0.36	0.78	0.00	0.00	0.83	0.00	0.26
Avail Cap(c_a), veh/h	758	681	715	629	711	649	245	0	0	720	0	330
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.80	0.80	0.80	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.0	28.9	28.9	12.7	7.7	7.7	56.7	0.0	0.0	50.2	0.0	46.1
Incr Delay (d2), s/veh	0.0	3.1	3.0	0.0	1.1	1.2	16.4	0.0	0.0	5.0	0.0	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	8.9	9.3	0.1	1.7	1.6	2.0	0.0	0.0	6.1	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.0	32.0	31.8	12.7	8.7	8.9	73.2	0.0	0.0	55.2	0.0	46.7
LnGrp LOS	B	C	C	B	A	A	E			E		D
Approach Vol, veh/h		788			495			57			456	
Approach Delay, s/veh		31.3			8.9			73.2			54.1	
Approach LOS		C			A			E			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	33.9	52.0		11.4	31.9	54.0		22.7				
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	7.0	46.0		18.0	5.0	48.0		25.0				
Max Q Clear Time (g_c+I1), s	2.0	21.6		6.1	2.0	6.9		15.4				
Green Ext Time (p_c), s	0.0	5.1		0.1	0.0	3.4		1.3				

Intersection Summary												
HCM 7th Control Delay, s/veh			32.2									
HCM 7th LOS			C									

Appendix E: Signal Warrant Analysis Worksheet



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

Rockcress Dr & Hospital Access
Signal Warrant Analysis
Four-Hour Volume Warrant

Source: Manual on Uniform Traffic Control Devices 2023

Intersection #8

Kimley»Horn

Appendix F: Queue Analysis Worksheets

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	426	55	147	1196	949	577
v/c Ratio	0.74	0.17	0.35	0.46	0.43	0.48
Control Delay (s/veh)	55.5	11.6	3.7	1.1	13.8	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.5	11.6	3.7	1.1	13.8	2.5
Queue Length 50th (ft)	163	0	4	16	192	0
Queue Length 95th (ft)	209	35	m6	22	281	50
Internal Link Dist (ft)	1226			875	483	
Turn Bay Length (ft)	150	150	250			250
Base Capacity (vph)	801	411	486	2592	2164	1192
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.13	0.30	0.46	0.44	0.48

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	527	136	78	957	1249	261
v/c Ratio	0.77	0.32	0.26	0.38	0.57	0.24
Control Delay (s/veh)	53.2	8.2	3.8	0.8	16.4	2.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	53.2	8.2	3.8	0.8	16.4	2.1
Queue Length 50th (ft)	201	0	1	8	301	0
Queue Length 95th (ft)	247	50	m4	12	417	38
Internal Link Dist (ft)	1226			875	483	
Turn Bay Length (ft)	150	150	250			250
Base Capacity (vph)	858	497	298	2480	2174	1073
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.27	0.26	0.39	0.57	0.24

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	472	67	175	1255	1010	676
v/c Ratio	0.75	0.19	0.47	0.34	0.51	0.57
Control Delay (s/veh)	54.4	10.3	56.8	1.1	17.9	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.4	10.3	56.8	1.1	17.9	3.2
Queue Length 50th (ft)	180	0	73	14	241	0
Queue Length 95th (ft)	225	37	m101	19	334	57
Internal Link Dist (ft)	1226			875	483	
Turn Bay Length (ft)	150	500	400			250
Base Capacity (vph)	801	420	371	3650	1980	1183
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.16	0.47	0.34	0.51	0.57

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	647	167	92	1011	1321	302
v/c Ratio	0.81	0.35	0.46	0.29	0.66	0.29
Control Delay (s/veh)	51.9	10.4	47.1	0.8	21.4	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.9	10.4	47.1	0.8	21.4	2.5
Queue Length 50th (ft)	243	15	39	8	366	2
Queue Length 95th (ft)	296	69	m63	10	485	45
Internal Link Dist (ft)	1226			875	483	
Turn Bay Length (ft)	150	500	400			250
Base Capacity (vph)	944	538	200	3394	1978	1015
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.31	0.46	0.30	0.67	0.30

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	484	71	179	1288	1038	696
v/c Ratio	0.76	0.20	0.48	0.35	0.52	0.58
Control Delay (s/veh)	54.3	10.0	56.7	1.2	18.5	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	54.3	10.0	56.7	1.2	18.5	3.3
Queue Length 50th (ft)	185	0	75	14	252	0
Queue Length 95th (ft)	230	38	m101	20	349	59
Internal Link Dist (ft)	1226			875	483	
Turn Bay Length (ft)	150	500	400			250
Base Capacity (vph)	801	423	371	3635	1969	1189
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.60	0.17	0.48	0.35	0.53	0.59

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	663	174	98	1038	1353	310
v/c Ratio	0.81	0.36	0.49	0.30	0.68	0.30
Control Delay (s/veh)	51.6	11.4	47.7	0.8	22.2	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.6	11.4	47.7	0.8	22.2	2.8
Queue Length 50th (ft)	250	21	41	8	385	4
Queue Length 95th (ft)	305	77	m65	10	504	49
Internal Link Dist (ft)	1226			875	483	
Turn Bay Length (ft)	150	500	400			250
Base Capacity (vph)	944	536	200	3369	1961	1010
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.32	0.49	0.31	0.69	0.31

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	73	125	807	60	212	49	943	467	22	43	800	187
v/c Ratio	0.34	0.28	0.50	0.40	0.57	0.03	0.87	0.20	0.01	0.05	0.66	0.11
Control Delay (s/veh)	44.8	35.9	7.6	64.6	57.2	0.0	41.4	4.3	0.0	13.8	38.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.8	35.9	7.6	64.6	57.2	0.0	41.4	4.3	0.0	13.8	38.8	0.1
Queue Length 50th (ft)	28	42	247	23	83	0	361	22	0	5	292	0
Queue Length 95th (ft)	44	44	440	47	121	0	446	28	m0	11	379	0
Internal Link Dist (ft)		875			991			2985			849	
Turn Bay Length (ft)	325		375	250		250	700			575		500
Base Capacity (vph)	210	530	1583	147	530	1583	1115	2233	1583	718	1206	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.24	0.51	0.41	0.40	0.03	0.85	0.21	0.01	0.06	0.66	0.12

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	191	239	1003	27	174	82	775	889	49	27	484	86
v/c Ratio	0.56	0.36	0.63	0.17	0.52	0.05	0.79	0.41	0.03	0.07	0.42	0.05
Control Delay (s/veh)	44.1	32.1	10.5	58.3	57.3	0.0	35.2	6.2	0.0	15.3	35.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	44.1	32.1	10.5	58.3	57.3	0.0	35.2	6.2	0.0	15.3	35.2	0.0
Queue Length 50th (ft)	71	78	402	10	68	0	278	63	0	3	162	0
Queue Length 95th (ft)	94	86	459	26	104	0	349	74	m0	10	231	0
Internal Link Dist (ft)		875			991			2985			849	
Turn Bay Length (ft)	325		375	250		250	700			575		500
Base Capacity (vph)	354	722	1583	151	530	1583	1087	2132	1583	380	1143	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.33	0.63	0.18	0.33	0.05	0.71	0.42	0.03	0.07	0.42	0.05

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	85	136	862	65	223	54	992	525	27	49	918	221
v/c Ratio	0.29	0.31	0.54	0.45	0.58	0.03	0.76	0.23	0.01	0.07	0.65	0.13
Control Delay (s/veh)	45.4	38.5	10.0	66.6	57.2	0.0	66.2	23.3	0.0	25.2	33.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	45.4	38.5	10.0	66.6	57.2	0.0	66.2	23.3	0.0	25.2	33.5	0.1
Queue Length 50th (ft)	18	33	337	25	87	0	291	177	0	12	313	0
Queue Length 95th (ft)	34	51	464	50	126	0	337	235	m0	26	404	0
Internal Link Dist (ft)		875			991			2985			849	
Turn Bay Length (ft)	325		375	250		250	700			575		500
Base Capacity (vph)	290	530	1583	143	530	1583	1289	2215	1583	619	1402	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.26	0.54	0.45	0.42	0.03	0.77	0.24	0.02	0.08	0.65	0.14

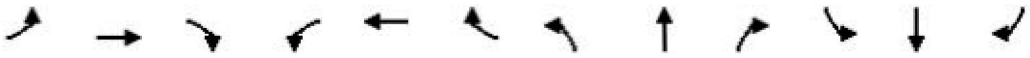
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	228	255	1064	33	185	87	818	1025	54	33	551	100
v/c Ratio	0.50	0.39	0.67	0.21	0.54	0.05	0.71	0.47	0.03	0.08	0.40	0.06
Control Delay (s/veh)	39.4	30.0	12.5	59.1	57.3	0.0	35.1	6.2	0.0	13.2	29.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.4	30.0	12.5	59.1	57.3	0.0	35.1	6.2	0.0	13.2	29.6	0.0
Queue Length 50th (ft)	58	86	473	12	73	0	205	83	0	4	170	0
Queue Length 95th (ft)	75	102	425	30	108	0	240	96	m0	11	240	0
Internal Link Dist (ft)		875			991			2985			849	
Turn Bay Length (ft)	325		375	250		250	700			575		500
Base Capacity (vph)	483	767	1583	151	589	1583	1289	2153	1583	379	1363	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.33	0.67	0.22	0.31	0.05	0.63	0.48	0.03	0.09	0.40	0.06

Intersection Summary

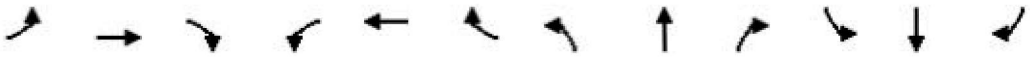
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	87	141	886	71	228	60	1022	538	33	54	940	228
v/c Ratio	0.30	0.27	0.55	0.49	0.59	0.03	0.79	0.25	0.02	0.09	0.70	0.14
Control Delay (s/veh)	46.6	38.1	10.7	68.4	57.2	0.0	66.8	24.0	0.0	25.4	36.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	46.6	38.1	10.7	68.4	57.2	0.0	66.8	24.0	0.0	25.4	36.0	0.1
Queue Length 50th (ft)	18	33	365	28	90	0	300	183	0	13	325	0
Queue Length 95th (ft)	35	55	467	53	128	0	347	242	m0	28	416	0
Internal Link Dist (ft)		875			991			2985			849	
Turn Bay Length (ft)	325		375	250		250	700			575		500
Base Capacity (vph)	290	551	1583	143	530	1583	1289	2138	1583	568	1327	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.26	0.56	0.50	0.43	0.04	0.79	0.25	0.02	0.10	0.71	0.14

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	234	266	1092	38	190	92	842	1049	60	38	565	103
v/c Ratio	0.51	0.40	0.68	0.25	0.54	0.05	0.73	0.48	0.03	0.10	0.41	0.06
Control Delay (s/veh)	39.3	30.0	13.2	59.8	57.3	0.0	34.9	6.6	0.0	13.6	30.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	39.3	30.0	13.2	59.8	57.3	0.0	34.9	6.6	0.0	13.6	30.2	0.0
Queue Length 50th (ft)	58	87	476	14	75	0	212	84	0	4	176	0
Queue Length 95th (ft)	78	106	423	34	111	0	240	107	m0	12	247	0
Internal Link Dist (ft)		875			991			2985			849	
Turn Bay Length (ft)	325		375	250		250	700			575		500
Base Capacity (vph)	485	768	1583	152	589	1583	1289	2144	1583	362	1349	1583
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.35	0.69	0.25	0.32	0.06	0.65	0.49	0.04	0.10	0.42	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	33	183	261	65	727	1324	207	65	1466	135
v/c Ratio	0.17	0.11	0.57	0.17	2.11	0.53	0.17	0.45	0.67	0.12
Control Delay (s/veh)	55.7	0.1	53.6	1.0	540.4	10.8	1.4	69.1	6.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.7	0.1	53.6	1.0	540.4	10.8	1.4	69.1	6.2	0.3
Queue Length 50th (ft)	12	0	96	0	~461	271	0	27	148	0
Queue Length 95th (ft)	29	0	138	0	#582	341	26	m47	88	m0
Internal Link Dist (ft)				548		606			2985	
Turn Bay Length (ft)	400	50	250		375		300	525		500
Base Capacity (vph)	228	1583	458	707	343	2459	1163	143	2188	1051
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.12	0.57	0.09	2.12	0.54	0.18	0.45	0.67	0.13

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	112	692	250	60	286	1536	196	27	1423	59
v/c Ratio	0.39	0.43	0.45	0.18	1.00	0.64	0.17	0.14	0.66	0.05
Control Delay (s/veh)	56.1	0.8	47.5	1.2	108.3	14.6	1.7	69.4	6.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	56.1	0.8	47.5	1.2	108.3	14.6	1.7	69.4	6.1	0.0
Queue Length 50th (ft)	43	0	89	0	115	388	0	10	128	0
Queue Length 95th (ft)	72	0	127	0	#208	513	30	m19	167	m0
Internal Link Dist (ft)				548		606			2985	
Turn Bay Length (ft)	400	50	250		375		300	525		500
Base Capacity (vph)	287	1583	552	683	286	2388	1131	184	2145	1034
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.44	0.45	0.09	1.00	0.64	0.17	0.15	0.66	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	47	243	277	71	983	1411	223	71	1575	195
v/c Ratio	0.25	0.15	0.57	0.20	0.82	0.58	0.19	0.49	0.85	0.27
Control Delay (s/veh)	55.9	1.1	52.8	1.3	42.4	11.9	1.3	44.2	19.6	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.9	1.1	52.8	1.3	42.4	11.9	1.3	44.2	19.6	1.7
Queue Length 50th (ft)	19	0	103	0	357	304	0	27	147	0
Queue Length 95th (ft)	40	1	147	0	416	368	26	m44	#536	23
Internal Link Dist (ft)				548		606			2985	
Turn Bay Length (ft)	400	50	250		375		300	525		500
Base Capacity (vph)	200	1583	483	707	1190	2427	1155	143	1844	698
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.15	0.57	0.10	0.83	0.58	0.19	0.50	0.85	0.28

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	172	982	266	65	382	1655	212	33	1515	89
v/c Ratio	0.50	0.62	0.44	0.20	0.73	0.69	0.18	0.23	0.56	0.09
Control Delay (s/veh)	42.5	6.7	45.6	1.4	57.7	16.2	2.3	65.6	8.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.5	6.7	45.6	1.4	57.7	16.2	2.3	65.6	8.7	0.1
Queue Length 50th (ft)	69	462	94	0	144	452	5	13	166	0
Queue Length 95th (ft)	81	283	131	0	197	587	37	m25	178	m0
Internal Link Dist (ft)				548		606			2985	
Turn Bay Length (ft)	400	50	250		375		300	525		500
Base Capacity (vph)	344	1583	608	637	572	2369	1123	143	2664	946
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.62	0.44	0.10	0.67	0.70	0.19	0.23	0.57	0.09

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	49	250	277	71	1000	1451	223	71	1620	201
v/c Ratio	0.26	0.15	0.57	0.20	0.81	0.59	0.19	0.49	0.91	0.29
Control Delay (s/veh)	55.8	1.1	52.8	1.3	40.5	12.2	1.3	44.4	23.9	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	55.8	1.1	52.8	1.3	40.5	12.2	1.3	44.4	23.9	1.8
Queue Length 50th (ft)	20	0	103	0	358	319	0	26	155	0
Queue Length 95th (ft)	42	3	147	0	414	385	26	m42	#587	m19
Internal Link Dist (ft)				548		606			2985	
Turn Bay Length (ft)	400	50	250		375		300	525		500
Base Capacity (vph)	200	1583	483	707	1234	2427	1155	143	1778	684
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.16	0.57	0.10	0.81	0.60	0.19	0.50	0.91	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	174	1000	266	65	391	1701	212	33	1554	92
v/c Ratio	0.51	0.63	0.44	0.20	0.75	0.71	0.18	0.23	0.58	0.09
Control Delay (s/veh)	42.8	6.9	45.5	1.4	58.2	16.9	2.4	65.2	8.7	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	42.8	6.9	45.5	1.4	58.2	16.9	2.4	65.2	8.7	0.1
Queue Length 50th (ft)	69	477	93	0	148	477	6	13	166	0
Queue Length 95th (ft)	82	297	131	0	202	620	38	m25	190	m0
Internal Link Dist (ft)				548		606			2985	
Turn Bay Length (ft)	400	50	250		375		300	525		500
Base Capacity (vph)	346	1583	610	637	572	2367	1122	143	2656	943
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.63	0.44	0.10	0.68	0.72	0.19	0.23	0.59	0.10

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	50	186	41	1095	12	116	17
v/c Ratio	0.24	0.11	0.06	0.66	0.03	0.22	0.02
Control Delay (s/veh)	15.7	17.5	19.0	23.7	0.1	46.1	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.7	17.5	19.0	23.7	0.1	46.1	0.0
Queue Length 50th (ft)	17	40	14	205	0	41	0
Queue Length 95th (ft)	36	63	m23	281	0	70	0
Internal Link Dist (ft)		389		682	344		365
Turn Bay Length (ft)	150		150			200	
Base Capacity (vph)	203	1674	627	1654	363	514	588
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.11	0.07	0.66	0.03	0.23	0.03

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Group Flow (vph)	26	762	13	482	57	398	58
v/c Ratio	0.04	0.34	0.02	0.23	0.27	0.71	0.07
Control Delay (s/veh)	9.5	14.0	3.6	0.9	3.3	54.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.5	14.0	3.6	0.9	3.3	54.4	0.1
Queue Length 50th (ft)	7	130	1	3	0	153	0
Queue Length 95th (ft)	20	250	m3	6	0	193	0
Internal Link Dist (ft)		389		682	344		365
Turn Bay Length (ft)	150		150			200	
Base Capacity (vph)	593	2181	460	2078	364	718	822
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.04	0.35	0.03	0.23	0.16	0.55	0.07

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

CONOCOPHILIPS CAMPUS GDP AMENDMENT – EXHIBIT A

MAY 16, 2025

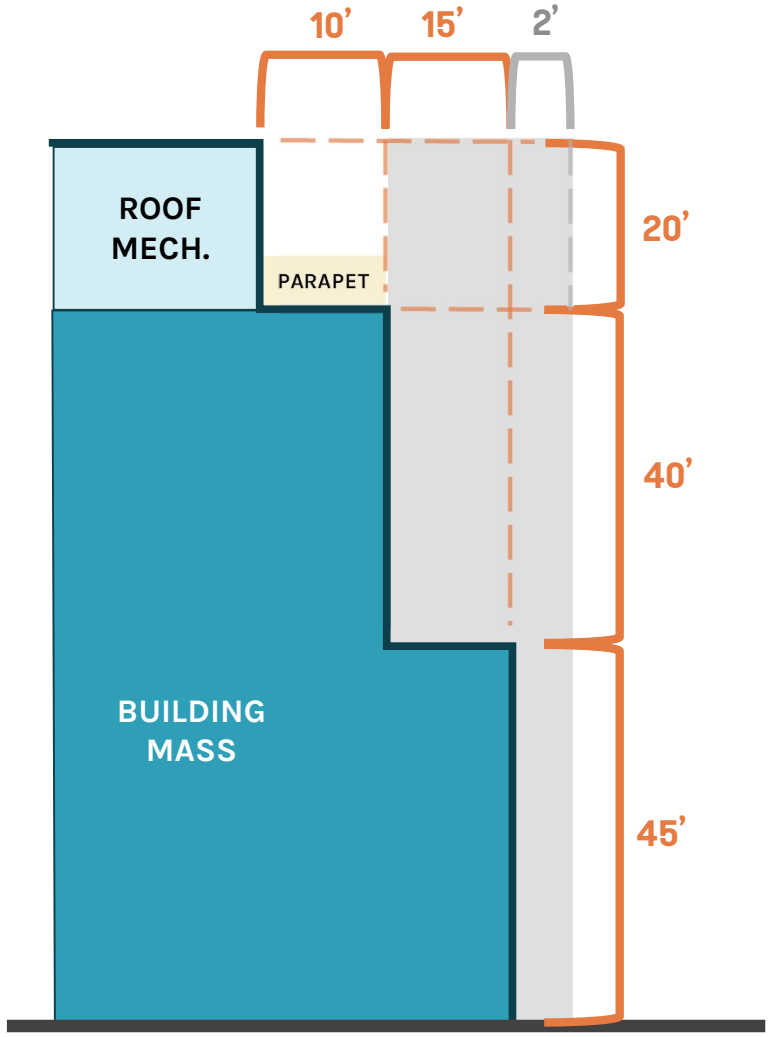
AdventHealth SMITHGROUP

DESIGN PARAMETERS

BUILDING MASSING AND HEIGHT REQUIREMENTS

For building facades exceeding 100 feet in length and more than 45 ft in height, a relief in the building massing is required to reduce visual monotony and enhance architectural interest:

- A maximum height of 45 feet is permitted before a minimum horizontal setback of 15 feet is required from the primary building face.
- The footprint of each floor above 45 feet shall not exceed 50% of the footprint of the building at or below 45 feet.
- Alternatively, a projected relief element may extend outward from the main building mass by a minimum of 2 feet, provided it contributes to the overall articulation and design of the facade.
- Any rooftop enclosure (e.g., mechanical penthouses) must be set back a minimum of 10 feet from the edge of the building mass, unless it is architecturally integrated into the overall design of the building.
- Exception: A defining architectural element or distinct building form with a total width of less than 100 feet is exempt from the above setback and relief requirements. A minimum 2-foot depth variation from the adjacent primary facade plane must still be provided to ensure visual articulation. Defining architectural elements may include, but are not limited to:
    - Vertical circulation towers (e.g., stair or elevator cores)
    - Entry pavilions or lobbies
    - Architectural eyebrows or roof overhangs
    - Branded or sculptural facade features
    - Corner elements or turrets
    - Atrium volumes or light wells
    - Distinctive roof forms

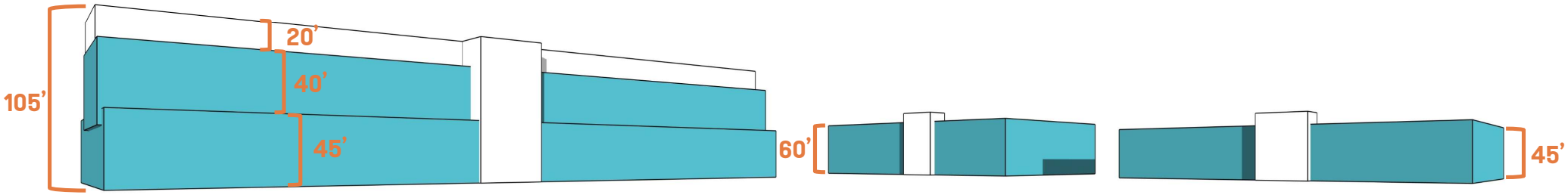


AdventHealth SMITHGROUP

666

EXAMPLE MASSING

Visual diagram illustrating a possible building mass resulting from the design parameters building massing and height requirements



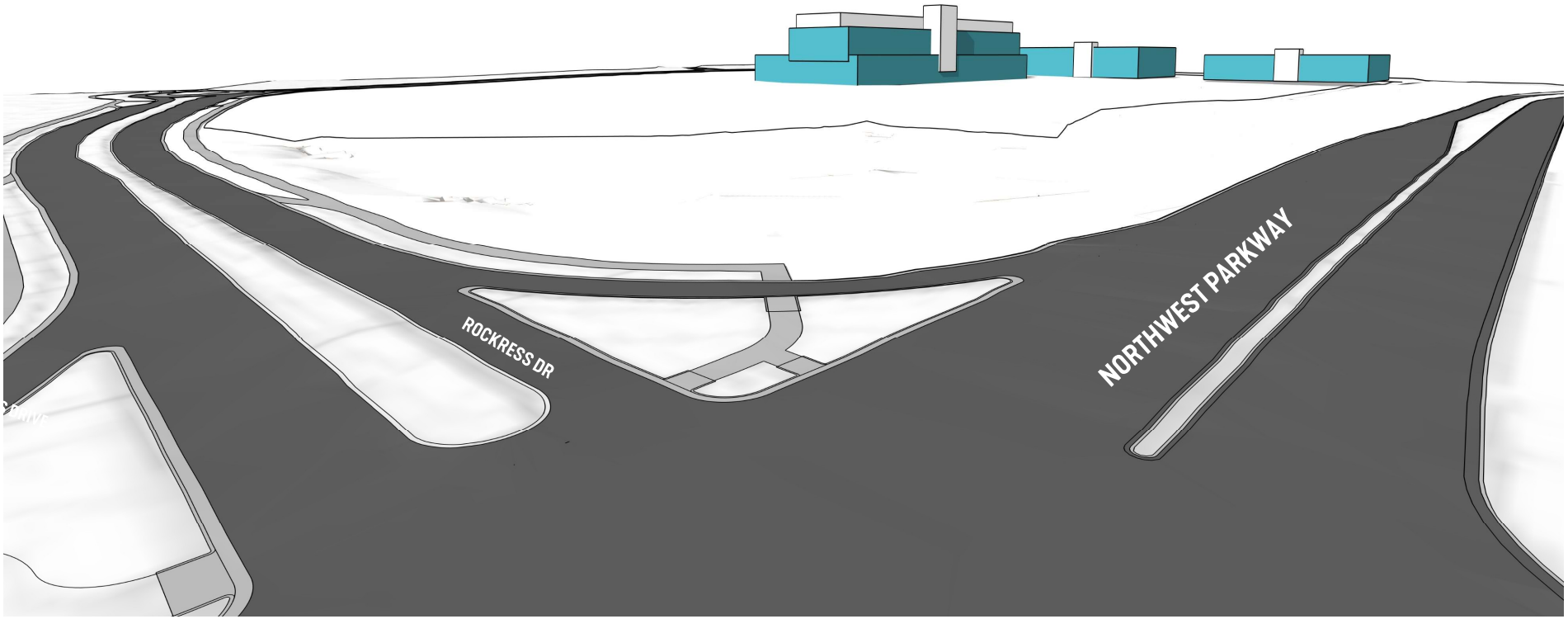
HIGH DENSITY BUILDING TYPE

MID DENSITY BUILDING TYPES

AdventHealth SMITHGROUP

EXAMPLE LAYOUT

Possible building mass resulting from the design parameters on Hospital Parcel



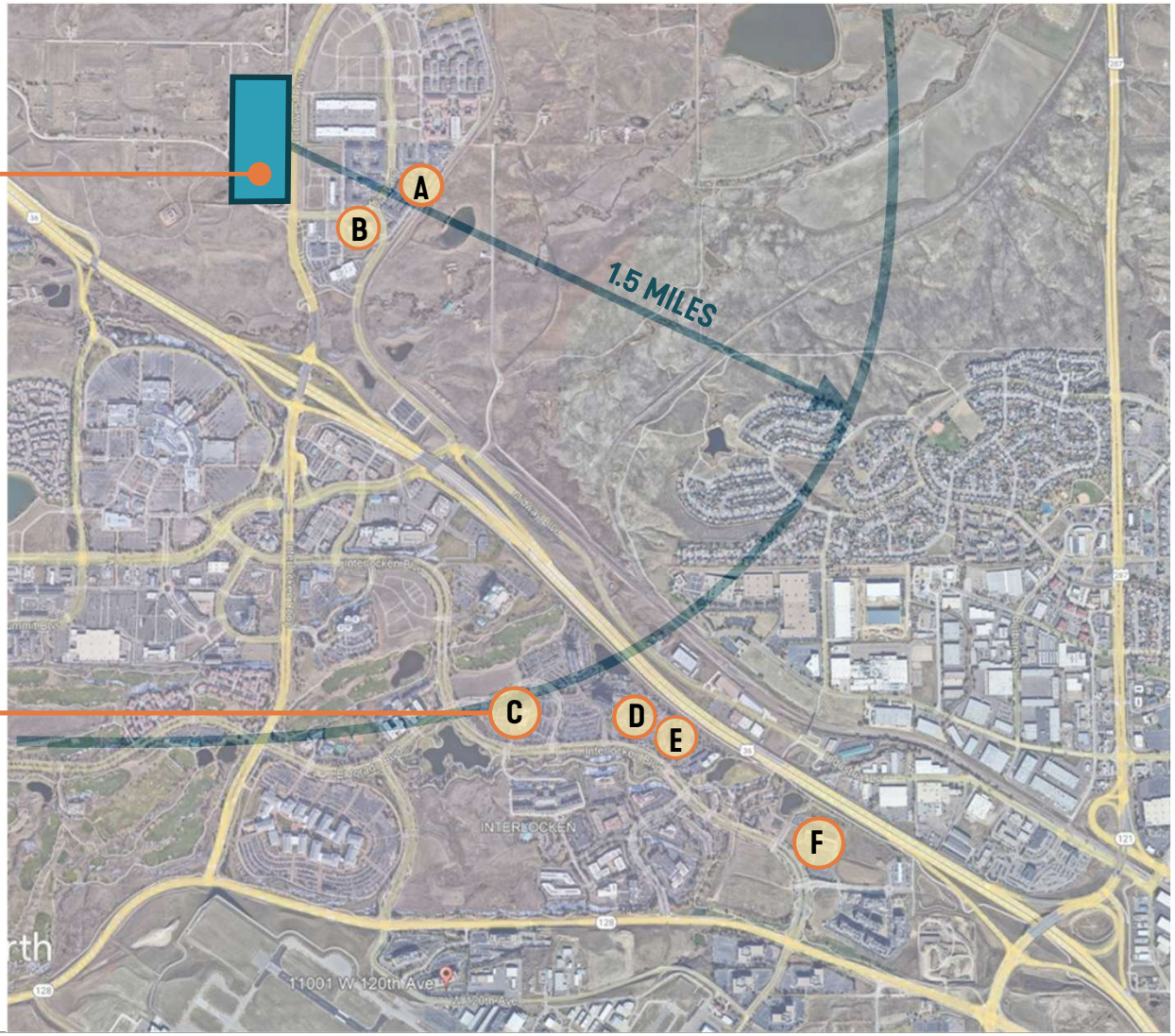
AdventHealth SMITHGROUP

SIMILAR SCALE BUILT PROJECTS

CONTEXTUAL HEIGHT NEAR THE SITE

PROJECT SITE

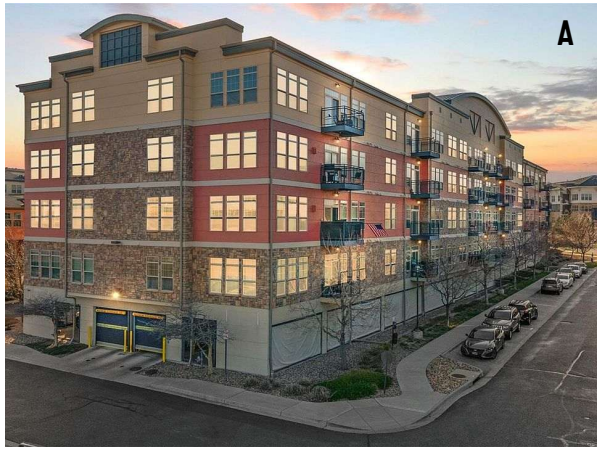
CONTEXT BUILDING LOCATIONS



AdventHealth SMITHGROUP

670

CONTEXTUAL HEIGHT NEAR THE SITE



AdventHealth SMITHGROUP

671

LAND DEDICATION AGREEMENT
[AdventHealth GDP Amendments]

THIS LAND DEDICATION AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 20____, by and between the **CITY OF LOUISVILLE**, a Colorado home rule municipal corporation ("City"), and **PORTERCARE ADVENTIST HEALTH SYSTEM**, a Colorado nonprofit corporation ("Developer").

WHEREAS, Developer has submitted applications for approval of a second amendment to the Avista Adventist Hospital General Development Plan and the ConocoPhillips Campus General Development Plan (the "GDP Amendments") affecting real property legally described as Lot 1, Health Park Filing No. 5 and Lots 1-7, Health Park Filing No. 6 (the "Avista Property") and Lot 1, Block 2, Redtail Ridge Filing No. 1 (the "Redtail Ridge Property") (collectively, the "Development"), which GDP Amendments have been reviewed and approved by the Planning Commission and the City Council by Resolution No. _____, Series 20___ ("Development Approval"); and

WHEREAS, Developer has identified certain land to be dedicated to the City in connection with the GDP Amendment, the legal description of which is set forth in Exhibit A attached hereto and incorporated herein by this reference; and

WHEREAS, the Developer and City desire to enter into this Agreement relative to such land dedication.

NOW, THEREFORE, in consideration of the foregoing, the parties hereto promise, covenant and agree as follows:

1. Within six (6) months following Development Approval, Developer shall file with the City a final plat application meeting all requirements set forth in Title 16 of the Louisville Municipal Code (the "Subdivision Plat") to replat the Avista Property to plat a separate tract for the proposed land dedication set forth in Exhibit A (the "Dedication Tract"). The Developer acknowledges that no assurance of approval of the Subdivision Plat by the City Council has been made by the City or relied upon by the Developer. Should the City Council not approve the Subdivision Plat, the legal description set forth in Exhibit A shall substitute for the Dedication Tract for all purposes set forth in this Agreement.

2. At the time the Subdivision Plat is presented to the City for recording, the Developer shall deliver an executed deed to the City conveying the Dedication Tract. Said conveyance shall be by Special Warranty Deed in form and substance reasonably

satisfactory to the City Attorney. Prior to such conveyance, the Developer shall, at Developer's expense, furnish the City a commitment for title insurance for the Dedication Tract. Such property shall be free and clear of liens, taxes and encumbrances, except for ad valorem real property taxes for the calendar year of conveyance and thereafter, but subject to all easements, right-of-way, reservations, restrictions, or other title burdens of record, or those easements and rights-of-way that would be readily apparent from a physical inspection or survey. The Developer shall, at its expense, cause a title policy in conformance herewith to be delivered to the City following conveyance. The Developer shall not be responsible for any City fees associated with the filing of the Subdivision Plat application required by this Agreement.

3. The Developer specifically represents that to the best of its knowledge, all portions of the Dedication Tract are in compliance with all environmental protection and anti-pollution laws, rules, regulations, orders, and requirements, including solid waste requirements, as defined by the US Environmental Protection Agency Regulations at 40 C.F.R., Part 261, and that the Dedication Tract in its entirety is in compliance with all such requirements pertaining to the disposal or existence in or on such dedicated property of any hazardous substances, pollutants, or contaminants, as defined by the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended, and regulations promulgated thereunder. The Developer does hereby indemnify and hold the City harmless from any liability whatsoever that may be imposed upon the City by any governmental authority, pertaining to the disposal of hazardous substances, pollutants or contaminants, and cleanup necessitated by leaking underground storage tanks, excavation and/or backfill of hazardous substances, pollutants or contaminants, or environmental cleanup responsibilities of any nature whatsoever on, of or related to any property dedicated to the City pursuant to this development. The Developer further agrees to indemnify and hold the City harmless from any claims or actions based directly, indirectly or in any manner on any of the aforementioned environmental risks brought against the City by third parties arising as a result of the dedication of the Dedication Tract to the City pursuant to this Agreement. Said indemnification shall not extend to claims, actions or other liability arising as a result of any hazardous substance, pollutants or contaminants generated or deposited by the City, its agents or representatives, upon portions of the property dedicated to the City pursuant to this Agreement.

4. Rezoning to Open Space. Following dedication of the Dedication Tract by Developer to the City, the City shall commence rezoning of the Dedication Tract to Open Space (OS) District pursuant to Chapter 17.44 of the Louisville Municipal Code and classify the land included in the Dedication Tract as Open Space-Preserve Land as set forth in Section 15-4(b)(1) of the City of Louisville Home Rule Charter. The land contained

within the Dedication Tract shall not contains trails, trailheads, or other amenities, and no active or passive recreational activities will be permitted.

5. Breach of Agreement. In the event that either party should fail to timely comply with any of the terms, conditions, covenants and undertakings of the Agreement, and if such noncompliance is not cured and brought into compliance within thirty (30) days of written notice of breach being delivered to the breaching party, unless the non-breaching party in writing and in its sole discretion designates a longer cure period, then the non-breaching party shall have any and all rights available at law or in equity, or otherwise appropriate under city, state or federal law. For the avoidance of doubt, in the event the City is the non-breaching party, the City shall have the right to withhold building permits, certificates of occupancy, or provision of new utilities fixtures or services for or to the Development. Any costs incurred by the non-breaching party, including, but not limited to, reasonable administrative costs and reasonable attorney's fees, in pursuit of any remedies due to the breach shall be the responsibility of the breaching party.

6. Recording of Agreement. The City shall record this Agreement at Developer's expense in the office of the Clerk and Recorder, County of Boulder, State of Colorado, and the City shall retain the recorded Agreement.

7. Binding Effect of Agreement. This Agreement shall run with the land included within the Development and shall inure to the benefit of and be binding upon the successors and assigns of the parties hereto.

8. Assignment, Delegation and Notice. This Agreement, or any part of this Agreement, may not be assigned by the Developer to any other party without the prior written approval of the City, which approval shall not be unreasonably withheld, conditioned or delayed. Developer shall provide to the City for approval written notice of any proposed assignment of any obligations under this Agreement to any successor, as well as arrangements, if any, for delegation of the obligations hereunder. Developer and any successor shall, until written City approval of the proposed assignment and delegation of obligations, be jointly and severally liable for the obligations of Developer under this Agreement; following such approval, Developer shall be released from such obligations from and after the date of such approval, but such approval shall not release any previously accrued liabilities unless expressly agreed by the City. The City may require as part of any such approval that the successor execute its consent to be bound by specified terms and conditions hereof and/or of applicable provisions of the GDP Amendment and other applicable documents relating to the Development.

9. Modification and Waiver. No modification of the terms of this Agreement shall be valid unless in writing and executed with the same formality as this Agreement, and no waiver of the breach of the provisions of any section of this Agreement shall be

construed as a waiver of any subsequent breach of the same section or any other sections which are contained herein.

10. Addresses for Notice. Any notice or communication required or permitted hereunder shall be given in writing and shall be personally delivered, or sent by United States mail, postage prepaid, registered or certified mail, return receipt requested, addressed as follows:

CITY:

City of Louisville
City Manager
749 Main Street
Louisville, CO 80207

With a copy to:

Kelly PC
City Attorney
749 Main Street
Louisville, 80027

DEVELOPER:

PorterCare Adventist Health System
6061 S. Willow Dr
Greenwood Village, Colorado 80112
Attn: Regional Chief Legal Officer

With a copy to:

Kutak Rock LLP
2001 16th Street, Suite 1800
Denver, Colorado 80202
Attn: Katie Crane

FSB Healthcare Realty LLC
Attn: Michelle Brokaw
8200 E Belleview Avenue, Suite 330C
Greenwood Village, Colorado 80111

or to such other address or the attention of such other person(s) as hereafter designated in writing by the applicable parties in conformance with this procedure. Notices shall be effective three days after mailing or upon personal delivery in compliance with this paragraph.

11. Previous Agreements. All previous written and recorded agreements between the parties or their predecessors, including, but not limited to, any Annexation Agreement or Subdivision Agreement, shall remain in full force and effect and shall control this Development. If any prior agreements conflict with this Agreement, then this Agreement controls.

12. Title and Authority. Developer warrants to the City that it is the record owner of the Development property or is acting in accordance with the currently valid and unrevoked power of attorney of the record owner hereto attached. The undersigned further warrant to have full power and authority to enter into this Agreement.

13. Governing Law; Venue; Severability. This Agreement and all matters arising hereunder or in connection herewith shall be governed by and construed and enforced in accordance with the laws of the State of Colorado. Any disputes regarding or arising out of this Agreement shall be brought in the courts of Boulder County, Colorado, and in no other court. In the event that any provision of the Agreement is held to be violative of the city, state, or federal laws and hereby rendered unenforceable, the City, in its sole discretion, may determine whether the remaining provisions will or will not remain in force.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first set forth above.

CITY OF LOUISVILLE

By:_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

DEVELOPER:

PORTERCARE ADVENTIST HEALTH SYSTEM

By:_____
Jeremy Pittman, Regional CFO

ACKNOWLEDGMENT

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing signature of Jeremy Pittman, as Regional CFO of PorterCare Adventist Health System, was subscribed and sworn to before me this ____day of _____, 20___.

Witness my hand and official seal.

_____
Notary Public

My commission expires:_____

EXHIBIT A

Growth over Avista Calculation

Existing Avista — Bed Count 108; MOB SF 41000 SF

Utility Bills

	Hospital	MOB	KGALS	GALS	
May-21	677	-	677	677,000	
Jun-21	1,807	-	1,807	1,807,000	
Jul-21	1,632	-	1,632	1,632,000	
Aug-21	2,092	-	2,092	2,092,000	
Sep-21	1,980	-	1,980	1,980,000	
Oct-21	1,645	-	1,645	1,645,000	
Nov-21	1,645	-	1,645	1,645,000	
Dec-21	704	-	704	704,000	
Jan-22	466	-	466	466,000	
Feb-22	480	-	480	480,000	
Mar-22	445	-	445	445,000	
Apr-22	598	-	598	598,000	
May-22	1,080	-	1,080	1,080,000	
Jun-22	1,698	-	1,698	1,698,000	
			14,465	14,465,000	*does not include May and June 2021
					**includes irrigation

Average Day	1,205,417	per month
	40,181	per day
	27.90	per minute
Peak Day	4,821,667	per month
4.00 FS	160,722	per day
	111.61	per minute
	1.03	gal/min/bed

	Hospital	MOB	KGALS	GALS	
May-21	-	106	106	106,000	
Jun-21	-	66	66	66,000	
Jul-21	-	45	45	45,000	
Aug-21	-	51	51	51,000	
Sep-21	-	49	49	49,000	
Oct-21	-	46	46	46,000	
Nov-21	-	46	46	46,000	
Dec-21	-	117	117	117,000	
Jan-22	-	150	150	150,000	
Feb-22	-	171	171	171,000	
Mar-22	-	144	144	144,000	
Apr-22	-	150	150	150,000	
May-22	-	125	125	125,000	
Jun-22	-	65	65	65,000	
			1,159	1,159,000	*does not include May and June 2021
					**includes irrigation

Average Day	96,583	per month
	3,219	per day
	2.24	per minute
Peak Day	386,333	per month
4.00 FS	12,878	per day
	8.94	per minute
	0.00022	

AH Louisville

Hospital

Bed Count	264	
Growth over Ex. Avista	2.44	
Average Day	2,946,574	per month
	98,219	per day
	68.21	per minute

MOB

MOB	145000	SF
Growth over Ex. Avista	3.54	
Average Day	341,575	per month
	11,386	per day
	7.91	per minute

Water Assumptions		
Average Day	3,288,149	per month
	109,605	per day
	76.11	per minute

Sewer Assumptions (~85% of Water Usage)		
Average Day	2,794,927	per month
	93,164	per day
	64.70	per minute

ADD (GPM)	64.70
Peak Based on 4.5*	291.14

*4.5 is from HKS Calculation

Table 1: Full Build-Out Sanitary Demand by PUD

PUD	Use	Area	Annual Average Daily Demand (GPD)	Average Daily Demand (GPM)	Average Daily Demand (CFS)	Peak Factor	Peak Flow (GPM)	Peak Flow (CFS)
PUD - 1	Industrial	654,500 sq. ft	90,521	62.9	0.140	3.56	223.8	0.499
PUD - 2	Industrial	453,700 sq. ft	62,749	43.6	0.097	3.78	164.5	0.367
PUD - 3	Medical	300,000 sq. ft	41,492	28.8	0.064	4.03	116.2	0.259
PUD - 4	Medical	118,800 sq. ft	16,431	11.4	0.025	4.68	53.4	0.119
PUD - 5	Office/Retail	113,000 sq. ft	19,012	13.2	0.029	4.57	60.3	0.134
PUD - 6	Hospital	435,000 sq. ft	94,800	65.8	0.147	4.50	296.3	0.660
PUD - 7	Medical	165,000 sq. ft	22,820	15.8	0.035	4.44	70.4	0.157
PUD - 8	Office	360,000 sq. ft	28,800	20.0	0.045	4.28	85.5	0.191
SUM		**2,600,000 sq. ft**	376,626	261.5	0.583		1070.5	2.385
TOTAL			376,626	261.5	0.583	2.83	741.4	1.652

Note: GPM = Gallons Per Minute, CFS = Cubic Feet per Second, GPD = gallons per day

ADD (GPM)	76
Peak Based on 2.68	203.99

*2.68 is from HKS Calculation

Table 4: Full Build-out Water Demands by PUD

	Use	Average Daily Demand (GPD)	Average Daily Demand (GPM)	Peak Day Demand (ADD*2.68) (GPD)	Peak Day Demand (ADD*2.68) (GPM)
PUD - 1	Industrial	108625	75.4	291116	202.2
PUD - 2	Industrial	75299	52.3	201802	140.1
PUD - 3	Medical	49790	34.6	133437	92.7
PUD - 4	Medical	19717	13.7	52841	36.7
PUD - 5	Office/Retail	22871	15.9	61294	42.6
PUD - 6	Hospital	111200	77.2	298016	207.0
PUD - 7	Medical	27385	19.0	73391	51.0
PUD - 8	Office	34560	24.0	92621	64.3
	Total:	449447	312.1	1204517	836.5

Note: Max day demand is 1.204 MGD

ADD (GPD)	93,164
ADD (MGD)	0.0932

	Wastewater Flow and Load	
	AAD Flow, MGD	AAD BOD_5, PPD
	Designed Flow Capacity	Designed Load Capacity
Hospital Allocated Capacity (435,600 SF)	0.09	*
Remaining Project Allocated Capacity (2,106,787 SF)	0.29	*
Total Redtail Ridge Capacity (2,542,387 SF)	0.38	*

Hospital Parcel

	Wastewater Flow and Load	
	MM Flow, MGD	MM BOD_5, PPD
	Designed Flow Capacity	Designed Load Capacity
Hospital Allocated Capacity (435,600 SF)	0.11	*
Remaining Project Allocated Capacity (2,106,787 SF)	0.34	*
Total Redtail Ridge Capacity (2,542,387 SF)	0.45	*

Hospital Parcel

Definitions:
AAD = Annual Average Daily
MM = Maximum Average Daily flow over a 30-day Period
BOD_5 = Biochemical Option Demand
MGD = Million Gallons per Day
PPD = Pounds Per Day

* The Load Capacity calculations are to be reasoanbly agreed upon between Seller and Buyer on or before 11/15/24

0.1 GPD / GSF Calculation

Hospital

GSF	655000	SF
Average Day	1,965,000	per month
	65,500	per day
	45.49	per minute

MOB

GSF	145000	SF
Average Day	435,000	per month
	14,500	per day
	10.07	per minute

Water Assumptions		
Average Day	2,400,000	per month
	80,000	per day
	55.56	per minute

Sewer Assumptions (~85% of Water Usage)		
Average Day	2,040,000	per month
	68,000	per day
	47.22	per minute

HKS Engineering Calculations

ADD (GPM)	47.22
Peak Based on 4.5*	212.50

*4.5 is from HKS Calculation

Table 1: Full Build-Out Sanitary Demand by PUD

PUD	Use	Area	Annual Average Daily Demand (GPD)	Average Daily Demand (GPM)	Average Daily Demand (CFS)	Peak Factor	Peak Flow (GPM)	Peak Flow (CFS)
PUD - 1	Industrial	654,500 sq. ft	90,521	62.9	0.140	3.56	223.8	0.499
PUD - 2	Industrial	453,700 sq. ft	62,749	43.6	0.097	3.78	164.5	0.367
PUD - 3	Medical	300,000 sq. ft	41,492	28.8	0.064	4.03	116.2	0.259
PUD - 4	Medical	118,800 sq. ft	16,431	11.4	0.025	4.68	53.4	0.119
PUD - 5	Office/Retail	113,000 sq. ft	19,012	13.2	0.029	4.57	60.3	0.134
PUD - 6	Hospital	435,000 sq. ft	94,800	65.8	0.147	4.50	296.3	0.660
PUD - 7	Medical	165,000 sq. ft	22,820	15.8	0.035	4.44	70.4	0.157
PUD - 8	Office	360,000 sq. ft	28,800	20.0	0.045	4.28	85.5	0.191
SUM		2,600,000 sq. ft	376,626	261.5	0.583		1070.5	2.385
TOTAL			376,626	261.5	0.583	2.83	741.4	1.652

Note: GPM = Gallons Per Minute, CFS = Cubic Feet per Second, GPD = gallons per day

ADD (GPM)	56
Peak Based on 2.68	148.89

*2.68 is from HKS Calculation

Table 4: Full Build-out Water Demands by PUD

	Use	Average Daily Demand (GPD)	Average Daily Demand (GPM)	Peak Day Demand (ADD*2.68) (GPD)	Peak Day Demand (ADD*2.68) (GPM)
PUD - 1	Industrial	108625	75.4	291116	202.2
PUD - 2	Industrial	75299	52.3	201802	140.1
PUD - 3	Medical	49790	34.6	133437	92.7
PUD - 4	Medical	19717	13.7	52841	36.7
PUD - 5	Office/Retail	22871	15.9	61294	42.6
PUD - 6	Hospital	111200	77.2	298016	207.0
PUD - 7	Medical	27385	19.0	73391	51.0
PUD - 8	Office	34560	24.0	92621	64.3
	Total:	449447	312.1	1204517	836.5

Note: Max day demand is 1.204 MGD

ADD (GPD)	68,000
ADD (MGD)	0.068

	Wastewater Flow and Load	
	AAD Flow, MGD	AAD BOD5, PPD
	Designed Flow Capacity	Designed Load Capacity
Hospital Allocated Capacity (435,600 SF)	0.09	*
Remaining Project Allocated Capacity (2,106,787 SF)	0.29	*
Total Redtail Ridge Capacity (2,542,387 SF)	0.38	*

Hospital Parcel

	Wastewater Flow and Load	
	MM Flow, MGD	MM BOD5, PPD
	Designed Flow Capacity	Designed Load Capacity
Hospital Allocated Capacity (435,600 SF)	0.11	*
Remaining Project Allocated Capacity (2,106,787 SF)	0.34	*
Total Redtail Ridge Capacity (2,542,387 SF)	0.45	*

Hospital Parcel

Definitions:
AAD = Annual Average Daily
MM = Maximum Average Daily flow over a 30-day Period
BOD5 = Biochemical Option Demand
MGD = Million Gallons per Day
PPD = Pounds Per Day

* The Load Capacity calculations are to be reasoanbly agreed upon between Seller and Buyer on or before 11/15/24

Bed Count Calculation (Wastewater Flows Assumed as 300 GPD / Bed + 0.085 GPD / GSF for MOB)

Bed Count

Bed Count		264 beds
	Average Day	2,732,400 per month
		91,080 per day
		63.25 per minute

MOB

GSF		145000 SF
	Average Day	435,000 per month
		14,500 per day
		10.07 per minute

*300 GPD/bed for wastewater flows (or 402.5 GPD/bed for water, 115%of wastewater) is based on ASPE Plumbing Engineering Design Handbook, Volume 2. Chapter 8 references 132-251 GPD/bed (172 GPD/bed average) plus 5.3-15.9 GPD/employee (10.6 GPD/employee) for typical wastewater flows. This chapter also references 250 GPD/bed for quantities of hospital sewage flows. 300 gal/bed was assumed based on the above.

Water Assumptions		
Average Day	3,167,400	per month
	105,580	per day
	73.32	per minute

Sewer Assumptions (~85% of Water Usage)		
Average Day	2,692,290	per month
	89,743	per day
	62.32	per minute

HKS Engineering Calculations

ADD (GPM)	62.32
Peak Based on 4.5*	280.45

*4.5 is from HKS Calculation

Table 1: Full Build-Out Sanitary Demand by PUD

PUD	Use	Area	Annual Average Daily Demand (GPD)	Average Daily Demand (GPM)	Average Daily Demand (CFS)	Peak Factor	Peak Flow (GPM)	Peak Flow (CFS)
PUD - 1	Industrial	654,500 sq. ft	90,521	62.9	0.140	3.56	223.8	0.499
PUD - 2	Industrial	453,700 sq. ft	62,749	43.6	0.097	3.78	164.5	0.367
PUD - 3	Medical	300,000 sq. ft	41,492	28.8	0.064	4.03	116.2	0.259
PUD - 4	Medical	118,800 sq. ft	16,431	11.4	0.025	4.68	53.4	0.119
PUD - 5	Office/Retail	113,000 sq. ft	19,012	13.2	0.029	4.57	60.3	0.134
PUD - 6	Hospital	435,000 sq. ft	94,800	65.8	0.147	4.50	296.3	0.660
PUD - 7	Medical	165,000 sq. ft	22,820	15.8	0.035	4.44	70.4	0.157
PUD - 8	Office	360,000 sq. ft	28,800	20.0	0.045	4.28	85.5	0.191
SUM		2,600,000 sq. ft	376,626	261.5	0.583		1070.5	2.385
TOTAL			376,626	261.5	0.583	2.83	741.4	1.652

Note: GPM = Gallons Per Minute, CFS = Cubic Feet per Second, GPD = gallons per day

ADD (GPM)	73
Peak Based on 2.68	196.50

*2.68 is from HKS Calculation

Table 4: Full Build-out Water Demands by PUD

	Use	Average Daily Demand (GPD)	Average Daily Demand (GPM)	Peak Day Demand (ADD*2.68) (GPD)	Peak Day Demand (ADD*2.68) (GPM)
PUD - 1	Industrial	108625	75.4	291116	202.2
PUD - 2	Industrial	75299	52.3	201802	140.1
PUD - 3	Medical	49790	34.6	133437	92.7
PUD - 4	Medical	19717	13.7	52841	36.7
PUD - 5	Office/Retail	22871	15.9	61294	42.6
PUD - 6	Hospital	111200	77.2	298016	207.0
PUD - 7	Medical	27385	19.0	73391	51.0
PUD - 8	Office	34560	24.0	92621	64.3
	Total:	449447	312.1	1204517	836.5

Note: Max day demand is 1.204 MGD

ASPE Plumbing Engineering Design Handbook, Volume 2, Chapter 8 Tables

Table 8-8 Typical Wastewater Flows from Institutional Sources

Source	Unit	Wastewater Flow, gal (L)/unit/day Range	Typical
Hospital, medical	Bed	132.0–251.0 (500–950)	172.0 (650)
	Employee	5.3–15.9 (20–60)	10.6 (40)
Hospital, mental	Bed	79.3–172.0 (300–650)	106.0 (400)
	Employee	5.3–15.9 (20–60)	10.6 (40)
Prison	Inmate	79.3–159.0 (300–600)	119.0 (450)
	Employee	5.3–15.9 (20–60)	10.6 (40)
Rest home	Resident	52.8–119.0 (200–450)	92.5 (350)
	Employee	5.3–15.9 (20–60)	10.6 (40)
School, day			
With cafeteria, gym, showers	Student	15.9–30.4 (60–115)	21.1 (80)
With cafeteria only	Student	10.6–21.1 (40–80)	15.9 (60)
Without cafeteria, gym, showers	Student	5.3–17.2 (20–65)	10.6 (40)
School, boarding	Student	52.8–106.0 (200–400)	74.0 (280)

Table 8-10 Quantities of Sewage Flows

Type of Establishment	gpd/Person (L/D/Person)[a]
Airports (per passenger)	5 (20)
Apartments—multifamily (per resident)	60 (225)
Bathhouses and swimming pools	10 (40)
Camps	
Campground with central comfort stations	35 (130)
With flush toilets, no showers	25 (95)
Construction camps (semipermanent)	50 (190)
Day camps (no meals served)	15 (60)
Resort camps (night and day) with limited plumbing	50 (190)
Luxury camps	100 (380)
Cottages and small dwellings with seasonal occupancy	50 (190)
Country clubs (per resident member)	100 (380)
Country clubs (per nonresident member present)	25 (95)
Dwellings	
Boarding houses	50 (190)
additional for nonresident boarders	10 (40)
Luxury residences and estates	150 (570)
Multifamily dwellings (apartments)	60 (225)
Rooming houses	40 (150)
Single-family dwellings	75 (285)
Factories (gal [L] per person, per shift, exclusive of industrial wastes)	35 (130)
Hospitals (per bed space)	250 (945)[b]
Hotels with private baths (2 persons per room)	60 (225)
Hotels without private baths	50 (190)
Institutions other than hospitals (per bed space)	125 (475)
Laundries, self-service (gal [L] per wash, i.e., per customer)	50 (190)
Mobile home parks (per space)	250 (945)
Motels with bath, toilet, and kitchen wastes (per bed space)	50 (190)
Motels (per bed space)	40 (150)
Picnic parks (toilet wastes only) (per picnicker)	5 (20)
Picnic parks with bathhouses, showers, and flush toilets	10 (40)
Restaurants (toilet and kitchen wastes per patron)	10 (40)
Restaurants (kitchen wastes per meal served)	3 (10)
Restaurants, additional for bars and cocktail lounges	2 (8)
Schools	
Boarding	100 (380)
Day, without gyms, cafeterias, or showers	15 (60)
Day, with gyms, cafeteria, and showers	25 (95)
Day, with cafeteria, but without gyms or showers	20 (80)
Service stations (per vehicle served)	10 (40)
Swimming pools and bathhouses	10 (40)
Theaters	
Movie (per auditorium seat)	5 (20)
Drive-in (per car space)	5 (20)
Travel trailer parks without individual water and sewer hookups (per space)	50 (190)
Travel trailer parks with individual water and sewer hookups (per space)	100 (380)
Workers	
Construction (at semipermanent camps)	50 (190)
Day, at schools and offices (per shift)	15 (60)

[a] Unless otherwise noted.
[b] Includes cafeteria.

ADD (GPD)	89,743
ADD (MGD)	0.090

	Wastewater Flow and Load	
	AAD Flow, MGD	AAD BOD5, PPD
	Designed Flow Capacity	Designed Load Capacity
Hospital Allocated Capacity (435,600 SF)	0.09	*
Remaining Project Allocated Capacity (2,106,787 SF)	0.29	*
Total Redtail Ridge Capacity (2,542,387 SF)	0.38	*

Hospital Parcel

	Wastewater Flow and Load	
	MM Flow, MGD	MM BOD5, PPD
	Designed Flow Capacity	Designed Load Capacity
Hospital Allocated Capacity (435,600 SF)	0.11	*
Remaining Project Allocated Capacity (2,106,787 SF)	0.34	*
Total Redtail Ridge Capacity (2,542,387 SF)	0.45	*

Hospital Parcel

Definitions:
AAD = Annual Average Daily
MM = Maximum Average Daily flow over a 30-day Period
BOD5 = Biochemical Option Demand
MGD = Million Gallons per Day
PPD = Pounds Per Day

* The Load Capacity calculations are to be reasoanbly agreed upon between Seller and Buyer on or before 11/15/24

COPY

2353051
Page 1 of 7
11/06/2002 08 12A
Boulder County Clerk, CO ANNEXATION R 36 00 D 0 00

ANNEXATION AGREEMENT

(1)

THIS AGREEMENT is made and entered into this 11th day of April, 2002, by and between PorterCare Adventist Health System, a Colorado non-profit corporation, hereinafter referred to as the "Owner," and the CITY OF LOUISVILLE, a municipal corporation of the State of Colorado, hereinafter referred to as "Louisville" or "City".

WITNESSETH:

WHEREAS, the Owner desires to annex to Louisville the property more particularly described on Exhibit "A," which is attached hereto, incorporated herein, and made a part hereof (such property is hereinafter referred to as "the property"); and

WHEREAS, Owner has executed a petition to annex the property, a copy of which petition is on file with the City Clerk; and

WHEREAS, it is to the mutual benefit of the parties hereto to enter into the following Agreement; and

WHEREAS, Owner acknowledges that upon annexation, the property will be subject to all ordinances, resolutions, and other regulations of the City of Louisville, as they may be amended from time to time.

WHEREAS, Owner acknowledges that the need for conveyances and dedication of certain property, including but not limited to property for ways and easements to Louisville as contemplated in this Agreement, are directly related to and generated by development intended to occur within the property and that no taking thereby will occur requiring any compensation.

NOW, THEREFORE, IN CONSIDERATION OF THE ABOVE PREMISES AND THE COVENANTS AS HEREINAFTER SET FORTH, IT IS AGREED BY AND BETWEEN THE PARTIES AS FOLLOWS:

1. Owner agrees to execute, promptly upon request of Louisville, any and all surveys and other documents necessary to effect the annexation of the property and the other provisions of this Agreement. Owner agrees to not sign any other petition for annexation of the property or any petition for an annexation election relating to the property, except upon request of Louisville.

2. Owner agrees to provide legal documents, surveys, engineering work, newspaper publication, maps, and reports determined by Louisville to be necessary to accomplish the annexation, and agrees to pay Louisville an annexation fee in the amount of Three Hundred Dollars ($300.00) plus Sixty Dollars ($60.00) per acre annexed.

3. Louisville shall act upon the petition for annexation within six months of the date of

Rob

686

filing thereof with the City Clerk, unless Owner consents to later action.

4. The parties recognize that it is the intent and desire of Owner to develop the property in a manner generally consistent with the zoning requested and that the granting of such zoning by the City of **Planned Community Zoned District-Commercial ("PCZD")** and the approval of the Adventist Hospital General Development Plan is a condition to annexation of the property. Owner shall take all action necessary to permit zoning by Louisville of the annexed property within the time prescribed by state statutes. Notwithstanding any other provision of this Agreement to the contrary, the Owner agrees that the uses permitted for the Property shall be as limited and set forth in the revised Adventist Hospital General Development Plan ("GDP") affecting the Property, as the same may be approved by the City.

5. Owner agrees to dedicate by General Warranty Deed or appropriate instrument of conveyance acceptable to the City easements and rights-of-way for streets and other public ways and for other public purposes, including but not limited to South 88th Street, as required by City ordinances and resolutions. Such dedications shall occur immediately upon request of the City except that internal rights-of-way shall be dedicated at the time of subdivision platting, unless the City specifies another time.

6. Owner agrees to design, improve, and provide signage, lighting, and signalization for, all public streets and other public ways within or adjacent to the property in accordance with City ordinances and resolutions and other applicable standards, subject to any reimbursement which may be provided for in such ordinances, resolutions, and standards, and to make such other improvements as required by City ordinances and resolutions, to guarantee construction of all required improvements, and, if requested by Louisville, to dedicate to Louisville any or all other required improvements. Owner agrees to enter into an agreement pertaining to such improvements and other matters prior to any development of the property.

7. If requested by Louisville, Owner agrees to include the property in one or more special improvement districts or other mechanisms established by Louisville for making improvements to streets and other public ways, or for making other public improvements authorized by law, and Owner hereby appoints the City Manager of Louisville as Owner's attorney-in-fact for the purpose of executing all documents determined by Louisville to be necessary for such inclusion. If requested by Owner, Louisville agrees to consider the establishment of one or more special improvement districts for making such improvements.

8. Owner agrees that the design, improvement, construction, development, and use of the property shall be in conformance with, and that Owner shall comply with, all City ordinances and resolutions including, without limitation, ordinances and resolutions pertaining to subdivision, zoning, storm drainage, utilities, and flood control.

9. Nothing contained in this Agreement shall constitute or be interpreted as a repeal of the City's ordinances or resolutions, or as a waiver of the City's legislative, governmental, or police

powers to promote and protect the health, safety, and welfare of the City and its inhabitants; nor shall this Agreement prohibit the enactment or increase by the City of any tax or fee.

10. No right or remedy of disconnection of the property from the City shall accrue from this Agreement, other than that provided by applicable state laws. In the event the property or any portion thereof is disconnected at Owner's request, Louisville shall have no obligation to serve the disconnected property or portion thereof and this Agreement shall be void and of no further force and effect as to such property or portion thereof.

11. The parties agree that if any part, term, portion, or provision of this Agreement is held by a court of competent jurisdiction to be illegal or in conflict with any law of the State of Colorado, the validity of the remaining parts, terms, portions, or provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Agreement did not contain the particular part, term, portion, or provision held to be invalid.

12. Louisville agrees to make available to the property all of the usual municipal services in accordance with the ordinances and policies of the City which services include, but are not limited to, police protection and water and sewer services. Owner acknowledges that City services do not include, as of the date of the execution of this Agreement, fire protection or emergency medical services, but the property is presently included within the boundaries of and is entitled to receive such services from the Louisville or Cherryvale Fire Protection District.

13. The City, by approving this Agreement, acknowledges that it has declined to purchase any of such appurtenant water rights at this time. Owner hereby grants to the City, for a period of twenty (20) years from the date of this Agreement, a right of first refusal to purchase all or any portion of the Exhibit "C" water rights. Such right of first refusal shall be exercised by the City, if at all, by written notice to Owner or their successors within sixty (60) days following receipt of written notice from Owner or their successors of the terms of an acceptable, bona fide offer to purchase all or any portion of the Exhibit "C" water rights. The City reserves the right to require dedication of water and/or cash in lieu of or to supplement such dedication. Such dedication shall be in accordance with the City's then current water rights dedication policy. The City further reserves the right to require, at the time of subdivision and/or P.U.D. approval, the payment of a Water Resource Fee or other consideration for raw water acquisition if, in the judgment of the City, the development planned for the property will generate a higher water demand than the average water demand. The City acknowledges that such actions by Owner satisfy the requirements of the City Code and policy regarding the dedication of water rights.

14. The subject Property shall be included into the Northern Colorado Water Conservancy District (NCWCD), and the Municipal Sub-district, prior to receiving water service from the City of Louisville. Further, the Owner shall petition to include the subject Property into the NCWCD at its expense

15. The Owner, in accordance with the revised Avista Adventist Hospital General

Development Plan ("GDP"), will convey to the City the 10-acre donation parcel shown on such Plan, a copy of which is attached hereto as Exhibit "B". Owner acknowledges that the conveyance of the 10-acre parcel is required by the provisions of the US 36 Corridor Comprehensive Development Plan Intergovernmental Agreement, as amended, and is a condition of annexation of the Property to Louisville. The Owner shall convey the 10-acre parcel to the City at or prior to the recording of the annexation ordinance for the Property, and in no event later than December 31, 2002. Such conveyance shall be free and clear of liens, taxes and encumbrances (except for reservations, restrictions and rights-of-way of record which are acceptable to the City) and shall be by Special Warranty Deed in form and substance acceptable to the City. The Owner shall also furnish at its expense an ALTA title policy for the property conveyed, in form and substance acceptable to the City.

16. The parties agree that they will cooperate with one another in accomplishing the terms, conditions, and provisions of the Agreement, and will execute such additional documents as necessary to effectuate the same.

17. This Agreement may be amended by the City and any Owner without the consent of any other Owner as long as such amendment affects only that Owner's portion of the property. Such amendments shall be in writing, shall be recorded with the County Clerk of Boulder County, Colorado, shall be covenants running with the land, and shall be binding upon all persons or entities having an interest in the property subject to the amendment unless otherwise specified in the amendment. Except as otherwise provided herein, this Agreement shall not be amended unless approved in writing by all parties hereto.

18. This Agreement embodies the entire agreement of the parties. There are no promises, terms, conditions, or obligations other than those contained herein; and this Agreement supersedes all previous communications, representations, or agreements, either verbal or written, between the parties.

19. Owner agrees to indemnify and hold harmless the City and the City's officers, employees, agents, and contractors, from and against all liability, claims, and demands, including attorney's fees and court costs, which arise out of or are in any manner connected with the annexation of the property, or with any other annexation or other action determined necessary or desirable by the City in order to effectuate the annexation of the property, or which are in any manner connected with Louisville's enforcement of this Agreement. Owner further agrees to investigate, handle, respond to, and to provide defense for and defend against or at the City's option to pay the attorney's fees for defense counsel of the City's choice for, any such liability, claims, or demands.

20. As used in this Agreement, the term "Owner" shall include any of the heirs, transferees, successors, or assigns of Owner, and all such parties shall have the right to enforce this Agreement, and shall be subject to the terms of this Agreement, as if they were the original parties thereto.

21. As used in this Agreement, unless otherwise specifically provided herein, any reference to any provision of any City ordinance, resolution, or policy is intended to refer to any subsequent amendments or revisions to such ordinance, resolution, or policy, and the parties agree that such amendments or revisions shall be binding upon Owner.

22. This Agreement shall be binding upon and inure to the benefit of the heirs, transferees, successors, and assigns hereof, and shall constitute covenants running with the land. This Agreement shall be recorded with the County Clerk of Boulder County, Colorado, at Owner's expense. Subject to the conditions precedent herein, this Agreement may be enforced in any court of competent jurisdiction.

23. This Agreement shall be null and void if the City fails to approve the annexation of the property.

24. The Owner acknowledges that the annexation and zoning of the property are subject to the legislative discretion of the City Council of the City of Louisville. No assurances of annexation or zoning have been made or relied upon by Owner. In the event that, in the exercise of its legislative discretion, any action with respect to the property herein contemplated is not taken, then the sole and exclusive remedy for the breach hereof accompanied by the exercise of such discretion shall be the withdrawal of the petition for annexation by the Owner, or disconnection from the City in accordance with state law, as may be appropriate.

25. Owner agrees that it is voluntarily entering into this Agreement. Owner represents and submits that, to the extent an election would be required pursuant to C.R.S. §31-12-112, as amended, to approve the annexation or to impose terms and conditions upon the Property to be annexed, Owners owns 100 percent of the Property, excluding public streets and alleys, and would vote to approve the annexation and all terms and conditions as set forth herein. Thus, any election would necessarily result in a majority of the electors' approval to the annexation and the terms and conditions.

26. This Agreement is made solely for the benefit of the parties hereto, and is not intended to nor shall it be deemed to confer rights to any persons or entities not named as parties hereto.

27. The laws of the State of Colorado shall govern the validity, performance, and enforcement of this Agreement. Should either party institute legal suit or action for enforcement of any obligation contained herein, it is agreed that the venue of such suit or action shall be in the district courts for Boulder County, Colorado.

28. The paragraph headings in this Agreement shall not be used in the construction or interpretation hereof as they have no substantive effect and are for convenience only.

29. Each person executing this document on behalf of Owner represents that he or she has been duly authorized by the person he or she represents to execute this Agreement, and has full authority to bind said party to the terms and conditions hereof. This Agreement may be executed in counterparts, each of which shall be deemed an original but all of which shall constitute one and the same document.

OWNER: PORTERCARE ADVENTIST HEALTH SYSTEM, a Colorado non-profit corporation

By: John Sackett
Title: Trustee

CITY OF LOUISVILLE

By: Tom Davidson
Tom Davidson, Mayor

ATTEST:

Nancy Varra
Nancy Varra, City Clerk

OWNER'S ACKNOWLEDGEMENT

STATE OF COLORADO)
)ss
COUNTY OF Boulder)

The above and foregoing signature of John Sackett was subscribed and sworn to before me this 11th day of April, 2002.

Witness my hand and official seal.

My commission expires on: March 19, 2005.

(SEAL)

Lisa Rec

EXHIBIT A
LEGAL DESCRIPTION-AVISTA ADVENTIST HOSPITAL ANNEXATION

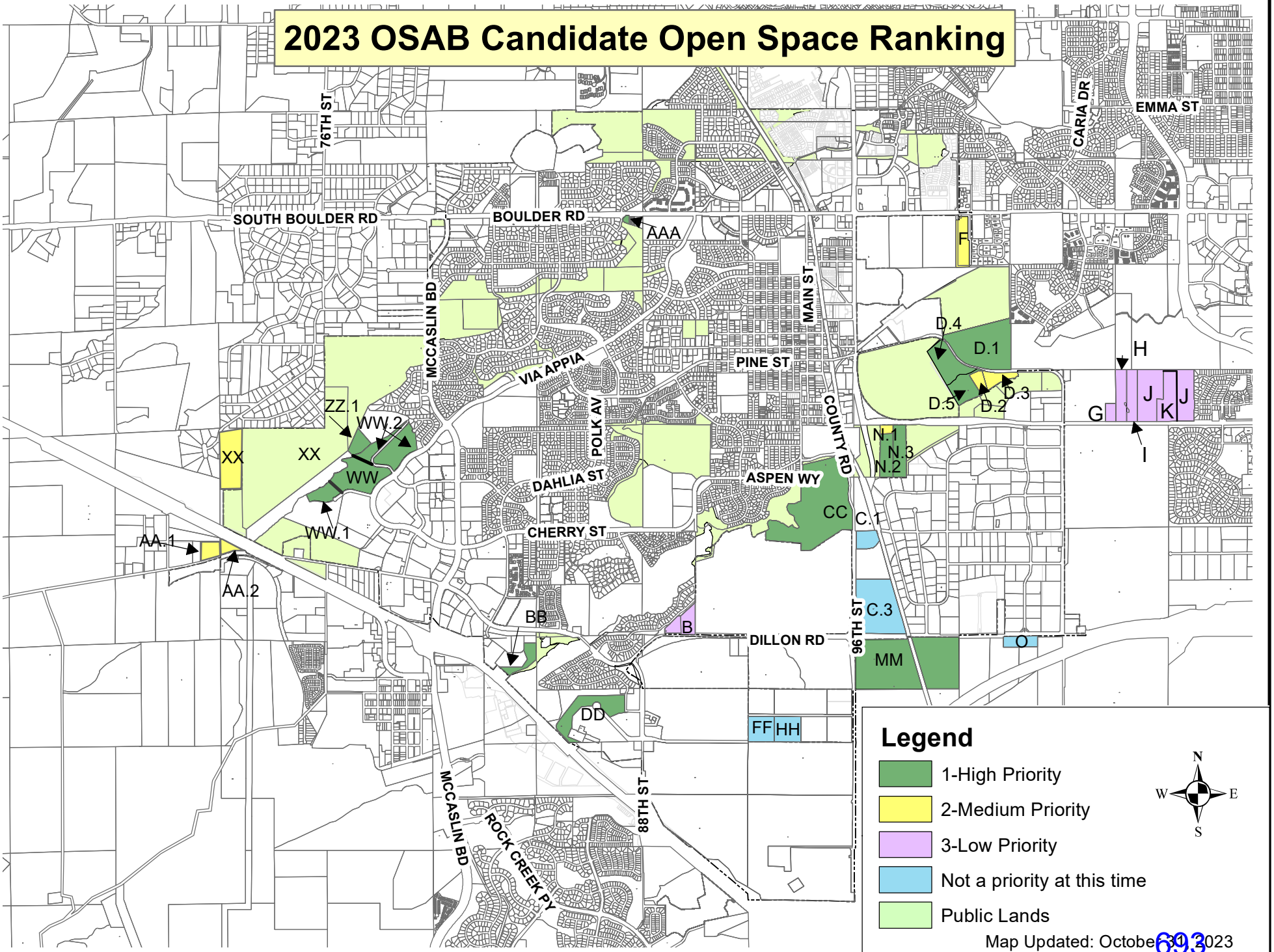
A PARCEL OF LAND SITUATED IN THE SE ¼ OF SECTION 19, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE 6TH P.M., COUNTY OF BOULDER, STATE OF COLORADO, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NE CORNER OF SAID SE ¼;
THENCE SOUTH 00 DEGREES 03 MINUTES 46 SECONDS WEST A DISTANCE OF 422.75 FEET;
THENCE SOUTH 83 DEGREES 59 MINUTES 11 SECONDS WEST A DISTANCE OF 778.02 FEET;
THENCE NORTH 38 DEGREES 59 MINUTES 03 SECONDS WEST A DISTANCE OF 316.16 FEET;
THENCE NORTH 90 DEGREES 00 MINUTES 00 SECONDS WEST A DISTANCE OF 392.03 FEET;
THENCE NORTH 63 DEGREES 24 MINUTES 47 SECONDS WEST A DISTANCE OF 515.11 FEET;
THENCE NORTH 89 DEGREES 07 MINUTES 21 SECONDS EAST A DISTANCE OF 1825.98 FEET TO THE POINT OF BEGINNING.

THE ABOVE DESCRIBED PARCEL CONTAINS 576,375 SQ. FT. OR 13.23 ACRES, MORE OR LESS.

3/20/02 8 50 AM[sj]F \Office\Lousville\Annexation\Avista Annexation Agrmt (final)

2023 OSAB Candidate Open Space Ranking



RESOLUTION NO. 01
SERIES 2025

A RESOLUTION RECOMMENDING TO THE CITY COUNCIL APPROVAL OF A PUBLIC USE DEDICATION OF APPROXIMATELY 7.5 ACRES TO BE DESIGNATED OPEN SPACE AS PART OF THE AVISTA ADVENTISTS HOSPITAL GENERAL DEVELOPMENT PLAN, AMENDMENT NO. 2

WHEREAS, Portercare Adventist Health Systems has applied for an amendment to the Avista Adventist Hospital General Development Plan, which includes the dedication of an approximate 7.5-acre parcel for open space, revising the maximum allowed development area, and revising setback standards and other associated development notes; and

WHEREAS, Section 4.02.050 of the Louisville Municipal Code outlines the process and standards for the Open Space Advisory Board to review development applications at a public hearing and make a recommendation to the City Council on the relevant aspects of those applications; and

WHEREAS, the Open Space Advisory Board has considered the application at a duly noticed public hearing on September 24, 2025, where evidence and testimony were entered into the record.

NOW THEREFORE, BE IT RESOLVED that the Open Space Advisory Board of the City of Louisville, Colorado does hereby recommend to the City Council approval of a public use dedication of approximately 7.5 acres to be designated Open Space as part of the Avista Adventists Hospital General Development Plan, Amendment No. 2.

The Board further recommends that prior to the City Council hearing that the applicant meets with City staff to explore if additional areas of Parcel DD, designated as a High Priority by OSAB as shown on the 2023 Priority Acquisition Map, may be considered for dedication, that the applicant consider allowing designation of the property as Open Space – Protected Land, and consider if a trail alignment could be allowed through the designated parcel at a future date.

PASSED AND ADOPTED this 24th day of September, 2025.

By: _____
Susan McEachern, Chair
Open Space Advisory Board

Attest: _____
Brad Pugh, Secretary
Open Space Advisory Board

City of Louisville
COLORADO • SINCE 1878

Open Space Advisory Board Meeting Minutes
Wednesday, September 24, 2025, 6:45pm
Library 1st Floor Meeting Room
951 Spruce St.

1. 6:45 pm Call to Order

2. Roll Call
- All present except Mark

3. Approval of Agenda
- Unanimously approved

4. Approval of Minutes
- Unanimously approved

5. 6:55 pm Public Hearing: Advent Health GDP Amendment and Land Dedication Review. Presented by Rob Zuccaro, Community Development Director (45 Minutes)
- Staff Report
  -
- Board Questions
  - Andy asked Rob for clarification on how the trail from 88th would connect. Ember noted that OSAB reviewed connection in 2018 and supported a plan that ultimately didn't happen due to funding and/or hospital approval.
  - Andy asks about OSABs purview. Are we weighing in on the dedication of land only or on the development swap more broadly. Rob said he believes based on statute that OSAB is limited to provide input on the land dedication only.
  - Susan asked if OSAB doesn't approve of the land dedication, will the development swap possibly go through anyway. Rob said "yes" if city council approves the GDP.
  - Michiko asks for clarification on the color-coded open space properties on the map in Rob's presentation.
  - Andy asked Rob about possible development on undeveloped land owned by applicant. Rob noted that existing buildings could be demolished and/or repurposed and suggested Andy could direct that question to applicants.
  - Daniel asked if the city or applicant has discussed how the lower portion of possible land dedication will connect to the bridge to the US 36 bike trail.
  - Brad and Andy asked questions related to city review of possible future development on the site. Rob said both possibilities would be entirely new and require separate zoning and GDP applications.
  - Andy asked another question about connecting to the bike path bridge and applicant said it's something that will have to be determined in the future.

  - Susan asked Ember how much open space is currently designated as "Open Space preserve". Ember said approximately 20% of open space land and that designation is usually based on vegetation quality.
  - Andy noted that the best location of a future trail connection would be include a small portion of the proposed dedication and urges City Council to consider future connections in that area when looking at this proposal.
  - Michiko asks if applicant would allow the city to have access to the land to do a vegetation survey before this application is approved. Rob asks for clarification about whether she wants a formal scientific survey or for staff to visit the land and do an informal survey. Ember noted that a survey would be difficult before the land was dedicated to the city.
  - Andy asked additional questions about the trail connections.
  - Susan commented that a "protected" dedication might be better than a "preserved" status to allow for future trail connections and collaboration with between the city and applicant.
  - Daniel asks about vacant lots. Rob and applicant noted that the total square footage on the existing site can't change so any future development would have to stay within those square footage limits in aggregate.
- Public Comment – 3 minutes each
  - Comment about concerns with additional traffic and natural disaster evacuation routes. Enjoy the cycling access but notes that the e-bike traffic is problematic and limits use of the path by residents.
  - Comment about typo in RTR section of the GDP that citizen and Rob are aware of. Concerns about a lack of code related to how to handle development swaps or similar actions. Urged OSAB to recommend the development of code, etc to better handle similar situations in the future. Also urged OSAB to push for all of DD to dedicated as open space.
  - Comment from Superior resident whose town home backs to the wall and as a result supports the land dedication to preserve their views.
  - Comment from resident whose grandfather owned much of the land in that area and noted his families desire was for that land to remain open space in the future and as a result he supports the dedication.
  - Comment about quality of the land to residents. Supports the dedication but wants land dedicated as "protected" so that trail connectivity can be pursued. Supports and binding limit on how dedicated square footage can be developed.
- Board Discussion and Action (Roll call vote of OSAB and record each member's vote)
  - Susan notes that she hopes we can achieve "protected" status and supports getting the rest of DD as a dedication.
  - Andy expresses concern that taking this dedication takes the dedication or acquisition of the remaining parcels, particularly the remaining part of DD, off the table.
  - Susan recommended limiting any rebuild on the Avista site to the existing footprint so that existing open land on the property would remain

untouched. Another alternative would be adding Lot 2 to the open space dedication, along with the remainder of DD.
    - Andy noted that he would prefer "protected" status too, but given our options, suggests supports accepting the dedication and amending the memo/resolution to city council to encourage staff to work with the applicant to allow future use of the dedicated land for a trail, to explore donating additional land, and to provide an easement for a trail connection to the US 36 bike path.
    - Rob comments that OSAB should limit its recommendation to City Council.
    - Based on the comments from OSAB, Rob developed a revised resolution and presented it to OSAB.
- Board vote on approving Resolution 1 2025 as Amended
    - Brad: Yes
    - Michiko: Yes
    - Susan: Yes
    - Andy: Yes
    - Daniel: Yes
    - Graeme: Yes
    - Motion approved

6. 8:10 pm Discussion Items for Next Meeting October 8th, 2025
- Public Hearing: 1155 Pine St, Preliminary PUD and Plat- Public Land Dedication.
- "Open Space Candidate Parcels: Opportunities for Preserving Open Space and Improving Trail Connectivity"- Ranking Properties
- "Open Space Candidate Parcels: Opportunities for Preserving Open Space and Improving Trail Connectivity"- Determine Format for City Council Meeting in November
- Discussion Items for Joint Meeting with Superior in November

7. Adjourn

RESOLUTION NO. 12
SERIES 2025

A RESOLUTION RECOMMENDING TO THE CITY COUNCIL APPROVAL OF THE AVISTA ADVENTISTS HOSPITAL GENERAL DEVELOPMENT PLAN, AMENDMENT NO. 2

WHEREAS, Portercare Adventist Health Systems has applied for an amendment to the Avista Adventist Hospital General Development Plan, which includes revising the maximum allowed development area, revising setback standards and other associated development notes, and the dedication of an approximately 7.5-acre parcel for open space; and

WHEREAS, the Planning Commission finds that the proposed amendment is consistent with the purpose of the Planned Community Zone District and meets all standards for General Development Plans outlined and Chapter 17.72 of the Louisville Municipal Code; and

WHEREAS, the Planning Commission has considered the application at a duly noticed public hearing on September 25, 2025, where evidence and testimony were entered into the record, including the findings in the Louisville Planning Commission Staff Report dated September 25, 2025.

NOW THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Louisville, Colorado does hereby recommend to the City Council approval of the Avista Adventists Hospital General Development Plan, Amendment No. 2.

PASSED AND ADOPTED this 25th day of September, 2025.

By: _____
Steve Brauneis, Chair
Planning Commission

Attest: _____
Cullen Choi, Secretary
Planning Commission

City of Louisville
COLORADO • SINCE 1878

Planning Commission

Meeting Minutes

September 25, 2025
City Hall, Council Chambers
749 Main Street
6:30 PM

Call to Order – Chair **Brauneis** called the meeting to order at 6:30 PM.

Roll Call was taken, and the following members were present:

Commission Members Present:	Steve Brauneis, Chair Cullen Choi, Secretary David Bangs Jonathan Mihaly Jeff Moline
Commission Members Absent:	Debra Baskett, Vice Chair Jennifer Hunt
Staff Members Present:	Jeff Hirt, Planning Manager Emily Cline-Gibson, Planner II Rob Zuccaro, Community Development Director

APPROVAL OF AGENDA

Motion to approve the agenda was moved by **Moline**, seconded by **Bangs**, and adopted by voice vote.

PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

None were heard.

PUBLIC HEARING ITEMS – NEW BUSINESS

a. Avista Adventist Hospital GDP, Amendment No. 2 – Resolution 12, Series 2025 presented together with **ConocoPhillips Campus GDP, Amendment No. 1** –

Resolution 12, Series 2025 recommending to the City Council approval of both the Avista Adventist Hospital General Development Plan, Amendment No. 2 and the ConocoPhillips Campus GDP, Amendment No. 1.

Staff Presentation:

Zuccaro introduced the presentation for the GDP Amendments. He presented two linked applications from Portercare Adventist Health Systems involving amendments to the Avista Adventist Hospital and Redtail Ridge general development plans. The proposal shifts unused development capacity from the existing Avista campus to Redtail Ridge, where a new hospital campus is planned. Specifically, the Avista development cap would be reduced from 750,000 square feet to 398,694 square feet, while the Redtail Ridge cap would be increased to accommodate future construction. The amendments also include establishing building height, massing, and architectural standards for the new hospital campus and dedicating a 7.5-acre parcel on the north side of the current hospital site.

Pause for Commissioner Questions:

Moline asked for clarification to confirm whether the stated number corresponds to the square footage already built.
Zuccaro explained that the number reflects the existing development, which includes the main hospital, Centennial Peaks Hospital, and medical office buildings. He noted that if approved, the applicant could demolish and rebuild under the new maximum cap, but the total development could not exceed that cap.
Bangs pointed out that a table on page four of the staff report shows the existing square footage as slightly different (349,977 sq ft) and noted that the proposed GDP change still results in a higher square footage than what currently exists, suggesting there may be a net change that needs clarification.
Zuccaro noted that there may be a typo in the presentation, but would need to refer to staff report, but that the GDP represents the new cap.

Staff Presentation continues:

Zuccaro explained that the applicant is requesting an additional 364,400 sq. ft. of development capacity within the ConocoPhillips/Red Tail Ridge GDP, limited to their parcel. This would raise the overall cap from 2.5 million to 2.9 million sq. ft., though after swapping capacity with the Avista campus, the net increase is only about 13,000 sq. ft. The intent is to ensure adequate utilities and limit traffic impacts, which were key concerns in earlier approvals.

He outlined zoning and design standards for the hospital parcel: height limits for 3–5 story zones (with the hospital at five stories), step-backs above 45 feet, footprint reductions for taller levels, and rooftop enclosure setbacks. These measures are intended to minimize visual impact and promote architectural variety.
He described a 7.5-acre open space dedication north of the Avista campus, which combined with an earlier dedication, would total 17.5 acres. While the applicant has already satisfied public land requirements, this addition would expand the City's open space. The Open Space Advisory Board recommended approval, though noted the applicant's request that the land remain natural space without trails, with future management discussions suggested.

Pause for Commissioner Questions:

Moline asked if there had been a staff open space recommendation as part of the prior night's discussion.
Zuccaro confirmed that City open space staff had reviewed the proposal, supported incorporating the parcel into open space, and noted the Open Space Advisory Board had already identified it as a high-priority area in 2023.
Brauneis asked what specifically made the property a priority citywide.
Zuccaro explained that the entire parcel was designated high priority because of its value as a buffer contiguous to existing open space and factors like vegetation. He added that this site was one of several (about six to eight) identified across the city in 2023 for potential acquisition.

Staff Presentation continues:

Zuccaro reviewed proposed setback changes for the Avista campus GDP, reducing requirements to 5 feet for parking/drive aisles and 20 feet for buildings, while maintaining large buffers to the Cole Creek neighborhood. Staff supports the change, emphasizing that the campus will still provide significant separation and protection.
He explained that the GDP functions as customized zoning and must meet municipal code standards for coordinated design. Staff found the proposal consistent with these principles, citing clear massing standards, compatibility with nearby Broomfield buildings (4–5 stories), adequate utilities, limited traffic impacts, and expanded buffers/setbacks.
The proposal also aligns with the Comprehensive Plan, which allows taller buildings when clustered and buffered, a condition achieved through major open space dedications in both Louisville and Broomfield. He noted Broomfield is finalizing a conservation easement on adjacent land, further strengthening buffers. Historical approvals for the site had permitted heights up to 95 feet, making the current request consistent with prior expectations.

On traffic, Zuccaro reported that impacts were analyzed with primary access planned off Rock Crest Drive. Red Tail Ridge is building supporting infrastructure, but additional refinements will occur at the PUD stage, with a development agreement to assign costs to the hospital. On utilities, staff confirmed that existing water and wastewater infrastructure, including the Red Tail Ridge lift station, can handle the additional demand without new facilities.

Staff Recommendation:

Staff recommended approval of both **Avista Adventist Hospital GDP, Amendment No. 2** – Resolution 12, Series 2025 and **ConocoPhillips Campus GDP, Amendment No. 1** –Resolution 12, Series 2025.

Commissioner Questions of Staff:

Bangs asked whether transportation improvements at the PUD stage would include public transit as well as cars.
Zuccaro clarified that the traffic study focuses on vehicles but Redtail Ridge includes multimodal planning such as trails, sidewalks, and a microtransit shuttle. He added that while there is no RTD service, the City plans to meet with RTD about future options.

Moline raised a concern about the "density swap," asking how to ensure it couldn't later be reversed or changed by subsequent amendments.
Zuccaro explained that while this approval would set zoning and caps, future city councils could change them through ordinance or GDP amendment, though that is not the current intent. He noted that utility capacity and planning would also be reassessed if future changes were proposed.

Choi asked whether the Avista open space dedication would be permanent.
Zuccaro confirmed the land would transfer to City ownership, be zoned as open space, and could not be rezoned without a citywide vote.

Brauneis asked about the unusual nature of the "swap," noting the City lacks a formal transfer of development rights program.
Zuccaro explained this was not a formal TDR program but rather a negotiated approach to address community concerns about traffic and infrastructure.

Bangs confirmed the GDP changes apply only to the 40-acre hospital parcel and asked whether the hospital intends to build to full density immediately.
Zuccaro said the applicant could best address phasing plans.

Bangs also asked if open space trail restrictions could change in the future.
Zuccaro responded that trail access could be reconsidered through future amendments if ownership or use changed.

Choi sought clarification on whether reducing Avista's development cap while dedicating seven acres of open space would increase the development ratio on the remaining parcel.
Zuccaro confirmed the ratio would increase, though Avista's GDP is governed by a square-footage cap rather than a floor area ratio. He said the specific ratio could be calculated.

Moline asked whether there are existing or planned trails in the open space area.
Zuccaro said there are social trails and past golf course access routes, and that trail connections to US 36 were studied in 2018 with several possible alignments, some of which may cross the dedicated acreage.

Brauneis questioned the value of restricting trails in open space and suggested the city might prefer to hold the property unencumbered.
Zuccaro explained that some city open space parcels are designated as "no activity," and while trails would not be planned, public access would not be prohibited. He added it is better to secure the land now and leave room for future discussions.

Mihaly asked whether the amendment would negatively affect traffic planning for Campus Drive, noting the packet suggests it may even improve outcomes.
Zuccaro deferred to the applicant's traffic engineer to address the analysis but acknowledged that the redistribution of density could be the reason for improved traffic projections.

Applicant Presentation:

Mark Smith (CEO, AdventHealth Avista Hospital)

- Introduced AdventHealth, noting it operates 55 hospitals in nine states with over 100,000 employees.
- Explained that AdventHealth recently purchased 40 acres in Redtail Ridge to construct a replacement hospital for Avista, which has served Louisville since 1990.
- Cited the Marshall Fire evacuation challenges and the need for better access, expansion capacity, and modern facilities as reasons for relocation.
- Emphasized that the GDP approval is an early step, with a detailed PUD submission to come in November, covering site access, plans, and compliance with city requirements.

- Thanked staff for collaboration and framed the project as necessary to meet the community's evolving health needs.

Valerie Wilkins (Adams Management, Program Manager & Owner's Rep)

- Introduced her role managing the Avista campus project on behalf of AdventHealth.

Afsaneh Makooi
(Smith Group, Design Team Project Manager)

- Explained rationale for five-story hospital height, noting operational efficiency, patient adjacencies, and wayfinding visibility.
- Outlined design standards: step-backs above 45 feet (15 ft), limitations on upper-story square footage (50% of base footprint), architectural roof screening, and additional step-backs above 95 feet.
- Provided examples of comparable five-story hospitals in Colorado (Good Samaritan, UC Highlands Ranch, St. Anthony North, UC Health Medical Center of the Rockies).
- Noted hospitals require greater floor-to-floor heights due to structural, medical gas, ventilation, and infection-prevention systems.
- Highlighted contextual fit: across Northwest Parkway are existing four- and five-story multifamily and office buildings.

Wilkins (on Phasing & Trails)

- Shared that Phase 1 will include the hospital and one medical office building.
- Future phases may add a second office building and a bed tower expansion.
- Addressed trail concerns: AdventHealth opposes trail development on the parcel while it functions as a secure medical campus (safety, liability, parking impacts).
- Stated willingness to revisit trail discussions if land use changes in the future.

Curtis Rowe (Kimley-Horn, Traffic Engineer)

- Addressed traffic concerns, specifically Campus Drive.
- Confirmed that the planned roadway network, including Campus Drive, will adequately accommodate hospital and Redtail Ridge traffic at full buildout.
- Concluded that no additional roadway improvements are required to support the hospital project.

Commissioner Questions of Applicant:

Bangs asked if the traffic study assumed use of the proposed micro-shuttle service or was based solely on personal vehicles.
Rowe explained that the study used national Institute of Transportation Engineers (ITE) standards, which are vehicle-centric and provide a conservative baseline. He noted that Colorado's strong multimodal options would likely reduce actual vehicle trips compared to the national averages.

Bangs followed up on whether bikeways and pathways were factored in.
Rowe confirmed they were not directly factored in, but they would reduce traffic if used, meaning the study was intentionally conservative.

Choi asked whether the traffic projections included the entire Redtail Ridge buildout as well as full development of the Avista parcel.
Rowe confirmed that the analysis accounted for both: full Redtail Ridge and the hospital parcel at maximum buildout, including office buildings and the bed tower expansion.

Choi asked about the actual heights of adjacent Broomfield residential buildings shown in the applicant's contextual slides.
Makooi explained that five-story residential buildings are about 60 feet tall plus 10–12 feet of rooftop mechanical screening, for a total of roughly 70 feet. In comparison, the hospital would be up to 105 feet with its mechanical penthouse.

Choi questioned whether the additional 350,000 square feet in the development cap was driven by programmatic needs or simply maximizing allowable space.
Wilkins said it was based on master planning to meet projected community healthcare needs, particularly bed capacity and medical office space, not just maximizing square footage.

Choi asked about the difference in bed count between the current Avista and the proposed hospital.
Wilkins explained the current Avista has 90 beds, while the proposed design in schematic planning is 373,000 square feet with 150 beds, close to the existing development cap.

Public Comment:

Cindy Bedell (Louisville resident) asked for clarification about Centennial Peaks Hospital, noting she thought she heard it was a separate entity from AdventHealth. She wanted to know whether Centennial Peaks would remain in its current location or be affected by the proposed changes.
Smith (AdventHealth CEO) responded to public comment, confirming that Centennial

Peaks Hospital operates under a long-term land lease exceeding 50 years and will not be affected by the new hospital plans.

Brauneis asked how the applicant would feel about a condition requiring reconsideration of trails on the donated open space.
Smith said AdventHealth is open to continuing conversations, though they remain cautious about trails in close proximity to medical facilities.

Moline asked about future plans for the current Avista campus once the hospital relocates.
Smith said the future use is still under evaluation, with no final decisions, though inpatient services would move to Redtail Ridge.

Bangs asked what assumptions were made in the traffic study regarding the existing Avista site once operations move.
Rowe (Traffic Engineer) explained the study assumed continued medical use at the site; if it became another use, such as high-density residential, traffic impacts would differ.

Zuccaro provided the floor area ratio (FAR) calculation after the open space dedication. With the cap of 398,894 square feet, the FAR is approximately 14%, and with the open space dedication, it increases slightly to 16%.

Commissioner Discussion:

Moline supported the proposal, praising staff and the applicant for balancing hospital retention, open space dedication, and traffic/utility concerns, and found the massing and height standards thoughtful.

Mihaly agreed, noting his height concerns were eased by design standards and the site's low location; he supported the redistribution of development capacity and highlighted the long-term benefit of added open space.

Bangs concurred, cautioning against confusion around the "land swap" terminology, urging diligence in monitoring the future of the Avista campus, and emphasizing multimodal access.

Choi voiced support, acknowledging initial concerns about the Avista parcel's development ratio but accepting staff's FAR calculations; he praised the applicant's efficient, vertical design approach.

Brauneis also supported the project, recognizing its visibility but valuing the placement of taller buildings at the low point, the step-backs, and the balance of traffic, utilities, and open space; he suggested further discussion on trail access.

The commission agreed not to impose a binding trail condition but to echo the Open Space Advisory Board's recommendation for continued talks with the applicant. **Choi** moved, with **Brauneis** seconding, to forward this recommendation to City Council, and the motion passed unanimously.

Motion to approve **Avista Adventist Hospital GDP, Amendment No. 2** – Resolution 12, Series 2025 was moved by **Moline** and seconded by **Brauneis**. The motion was adopted by a vote of 4 to 0.

Motion to approve **ConocoPhillips Campus GDP, Amendment No. 1** –Resolution 12, Series 2025 was moved by **Choi** and seconded by **Brauneis**. The motion was adopted by a vote of 4 to 0.

b. **811 Walnut Rezoning** – Resolution 14, Series 2025 recommending to the City Council approval of a rezoning from Residential Medium (R-M) to Community Commercial (C-C) for 811 Walnut.

Staff Presentation:

Emily Cline-Gibson presented Resolution 14, Series 2025, a request to rezone 811 Walnut Street from Residential Medium Density (RM) to Commercial Community (CC). The property, originally platted in 1880 and built out in 1954 for telephone operations, has housed various commercial uses but today only retains a valid professional office SRU, with other past approvals expired. Rezoning would align the site with its long-standing commercial function, extend the adjacent CC district, and allow 23 new uses (10 by right, 13 by SRU with public hearings). No exterior changes are proposed, and future redevelopment would require a PUD. Staff recommended a follow-up text amendment to bring the property into the Downtown Design Handbook area. Concluding that the request meets rezoning criterion #2 (area change in the public interest), staff found the property's small scale limits redevelopment, the rezoning would reasonably extend downtown, and the proposal supports the 2013 Comprehensive Plan goals of revitalization, job creation, and local revenue growth.

Staff Recommendation:

Staff recommended approval of **811 Walnut Rezoning** – Resolution 14, Series 2025.

Commissioner Questions of Staff:

Choi asked whether staff had verified if the property at 811 Walnut Street was outside the required distance buffer for natural medicine healing centers, which were recently added as a permitted use.
Cline-Gibson responded that staff had not specifically verified that distance for this site but confirmed that if an application for such a use were submitted, staff would conduct the verification at that time. (see verification below that property would not currently be eligible for such a use with the buffer requirements from certain land uses).

Applicant Presentation:

JD Green, property owner of 811 Walnut Street, requested rezoning from Residential Medium Density (RM) to Commercial Community (CC). He explained that the change would align zoning with the building's long-standing commercial use and support small, locally owned retail consistent with Old Town Louisville's walkable character.

George Colbert, co-owner of Colbert Hat Co., presented his family-owned custom hat business specializing in cowboy hats, fedoras, and trucker hats with personalized fittings and styling. He described the shop as a low-impact, appointment-driven model (about 80% by appointment) that generates limited traffic while attracting destination customers who spend time and money in downtown. Colbert emphasized the company's community engagement through successful pop-ups, local sponsorships, and event partnerships, noting the business would complement existing retailers, contribute to local jobs and tax revenue, and that 811 Walnut Street's size, layout, and parking make it an ideal first storefront, with the potential to open by the holiday season.

Commissioner Questions of Applicant:

Moline asked if the applicant anticipated any exterior changes to the building. **Colbert** replied that only minimal changes were considered, such as small signage or window frosting. Any formal signage proposal would be brought back for approval.

Bangs asked whether the business would use outdoor space. **Colbert** said no, apart from possibly placing chairs outside for waiting customers. He added that the business had just launched a website, so there might be limited product shipping, though mostly localized.
Green noted the building already accommodates UPS deliveries through the back door, similar to its current use.

Brauneis asked about ADA access, noise impacts, and overlay requirements. **Zuccaro** clarified there was ADA access at the back and occasional outdoor seating

would not trigger a Special Review Use (SRU) so long as it wasn't tied to sales or displays. Noise would be governed by the city's "unreasonable noise" standard.

Cline-Gibson explained that while the property is currently outside downtown Louisville's defined overlay, staff recommends initiating a text amendment to include it, ensuring consistency with downtown design standards.
Zuccaro added that the property would fall within the "transition area," requiring architectural standards to ensure compatibility with adjacent residential uses.
Green voiced support, noting he owns another Main Street property already subject to such standards.

Choi asked whether including the site in the downtown overlay would be a condition of approval.
Zuccaro said staff did not propose it as a condition but intends to pursue the amendment with the property owner's support.

Public Comment:

None were heard.

Commissioner Discussion:

Choi said the decision was straightforward, noting the property has been non-conforming for 75 years. He supported rezoning to bring it "into the fold" and appreciated staff's plan to adjust the downtown overlay language to ensure integration with design standards if exterior modifications occur.

Mihaly agreed with **Choi** and voiced support for the small business but raised concern about natural medicine healing centers being allowed adjacent to a residential neighborhood. After **Cline-Gibson** clarified that the property lies within a 1,000-foot buffer and therefore such a use would not be permitted, **Mihaly** said that addressed his concern and he was supportive.

Bangs expressed general support, seeing the rezoning as consistent with decades of prior commercial use and hoping it will be a success.

Moline also supported the rezoning.

Brauneis closed by stating he too supported the request for the reasons cited by his fellow commissioners.

Motion to approve **811 Walnut Rezoning** – Resolution 14, Series 2025 was moved by **Moline**, seconded by **Choi**, and adopted by a vote of 4 to 0.

PLANNING COMMISSION COMMENTS

Choi and **Mihaly** both noted they will be absent for the October 9th meeting.

Choi inquired about a second October meeting besides the October 9th meeting.
Hirt responded no.

Choi asked if there exists standard language around when there is a conflict.
Brauneis responded that he could work with staff on that.

STAFF COMMENTS

None were heard.

ADJOURNMENT

Motion to adjourn was moved by **Moline**, seconded by **Bangs**, and adopted by voice vote.
The Commission adjourned at 8:46 PM.

Commented [KD1]: Not sure where I might find this information, but I will be sure to note it in meetings I attend.

Commented [JH2R1]: For this one, I think we just do the math of assuming it started at 6:30 + the length of the recording at the time of adjournment, if that makes sense.

RESOLUTION NO. 13
SERIES 2025

A RESOLUTION RECOMMENDING TO THE CITY COUNCIL APPROVAL OF THE CONOCOPHILLIPS CAMPUS GENERAL DEVELOPMENT PLAN, AMENDMENT NO. 1

WHEREAS, Portercare Adventist Health Systems has applied for an amendment to the ConocoPhillips General Development Plan, which includes revising the allowed building area and establishing allowed building heights and massing standards within Lot 1, Block 2 of Redtail Ridge Filing No. 1; and

WHEREAS, the Planning Commission finds that the proposed amendment is consistent with the purpose of the Planned Community Zone District and meets all standards for General Development Plans outlined and Chapter 17.72 of the Louisville Municipal Code; and

WHEREAS, the Planning Commission has considered the application at a duly noticed public hearing on September 25, 2025, where evidence and testimony were entered into the record, including the findings in the Louisville Planning Commission Staff Report dated September 25, 2025.

NOW THEREFORE, BE IT RESOLVED that the Planning Commission of the City of Louisville, Colorado does hereby recommend to the City Council approval of the ConocoPhillips Campus General Development Plan, Amendment No. 1 with the following condition:

1. Future Planned Unit Development applications for Lot 1, Block 2 of Redtail Ridge Filing No. 1 shall include a traffic study and a development agreement requiring the construction by the applicant of any transportation infrastructure needed to accommodate the development.

PASSED AND ADOPTED this 25th day of September, 2025.

By: _____
Steve Brauneis, Chair
Planning Commission

Attest: _____
Cullen Choi, Secretary
Planning Commission

Rob Zuccaro

Subject: FW: Resolution 12, Series 2025 and Resolution 13, Series 2025

From: Clif Harald <clif.harald@firstflatironconsulting.com>
Sent: Tuesday, September 23, 2025 12:24 PM
To: Planning <planning@Louisvilleco.gov>
Subject: Resolution 12, Series 2025 and Resolution 13, Series 2025

[EXTERNAL EMAIL] From outside of City of Louisville DO NOT CLICK links or attachments unless you validate the sender and know the content is safe.

Planning Commission Members,

I'm writing to advocate for the staff recommendations to approve Resolution 12, Series 2025 and Resolution 13, Series 2025. The resolutions recommend that City Council approve the Avista Adventist Hospital General Development Plan Amendment No. 2, and the ConocoPhillips Campus GDP, Amendment No. 1.

I know you're well-informed about the details of the proposed amendments and how they comply with the city comp plan and municipal code, as summarized below. I hope their compliance with city regulations compels you to support the amendments. And, perhaps equally important, that Planning Commission's support demonstrates to City Council your resolve to see the advancement of the GDPs. foundation for its ongoing support of Redtail Ridge and AdventHealth Avista.

Summary compliance of the proposed amendments with city regulations:

1. The Louisville Comp Plan anticipated development of a research campus such as Redtail Ridge within the Phillips66 Rural Special District. The Comp Plan states that structures within the District that are clustered, located outside of the public view shed, and buffered by surrounding topography and open space may exceed three stories. The staff finds that the proposed building heights exceeding three stories for the Hospital Parcel would be consistent with these policies.

2. The proposed ConocoPhillips Campus GDP amendments are consistent with the purpose of the Planned Community Zone District. Staff has determined that the amendments proposed in the GDP for the Hospital Parcel establish minimum standards to address building massing, ensuring quality architectural design of the taller building elements. Staff also asserts that the Hospital Parcel is also located at the lowest elevation point of the Redtail Ridge development, helping mitigate overall height in relation to surrounding development.

3. For the Avista Adventist Hospital GDP, the proposed public land dedication is being offered by the applicant at the city's request. It is not required by the LMC.The land dedication represents about half of a 15-acre parcel ranked as a high priority on the OSAB's 2023 Candidate Open Space Ranking map. It is

contiguous to the original 10-acre open space parcel, expanding the overall open space parcel to more than 17 acres. Staff finds that the land dedications on the north side of the project and revised setbacks will provide required buffering for the development north of the project.

Thank you for taking my comments into consideration. I hope you'll support the findings of your staff.

Best,
Clif Harald
Ward 2 Resident

Rob Zuccaro

Subject: FW: public comment case #ZON-000555-2025

From: Nancy Jones <ningalls3@gmail.com>
Sent: Monday, September 8, 2025 9:02 AM
To: Planning <planning@Louisvilleco.gov>
Cc: kevinjones1308@gmail.com
Subject: public comment case #ZON-000555-2025

[EXTERNAL EMAIL] From outside of City of Louisville DO NOT CLICK links or attachments unless you validate the sender and know the content is safe.

RE: Avista Adventist Hospital GDP

Thank you for taking my public comment on this proposal. My home in Superior has a direct view of the Avista campus and surrounding open area. The space labeled "lot B" in the GDP amendment is our view, and a primary reason we purchased our home in Superior with a majority of our life savings.

If I am reading the information posted on the Louisville government website correctly, it looks like the proposal includes designating "lot B" as open space and therefore prohibiting any building to the west of the hospital complex (in between the hospital complex and the golf course). It is very important to us that nothing is built on that area that is currently open. Please keep that space undeveloped.

Thank you,

Nancy Jones
785 Josephine Way
Superior, CO 80027

Rob Zuccaro

Subject: FW: Sept 25 agenda - are there studies for non-car trips to Redtail Ridge?

Dear Planning Commission,

I was reviewing the agenda doc for the Sept 25th meeting of the Planning Commission, which contains a good 200+ pages of Redtail Ridge planning documents, and I'm struck by how car-centric it is. The "Traffic and Mobility Study" only seems to study the mobility of cars.

Are there other studies that have been done, or future studies planned, to lay out the trail network for bikes, and analyze the expected trips per day and needs of bike commuters? How about bus stops and bus trips? I'm really interested to see how we're planning for a city where people don't have to commute by car. I read through these packets fairly often but I don't think I've seen anything yet. I'm not sure if I've missed it.

Thank you,
David

Rob Zuccaro

Subject: FW: Advocate for a fair deal for Louisville

From: tamar krantz <tamarkrantz@gmail.com>
Sent: Thursday, September 25, 2025 2:39 PM
To: Planning <planning@Louisvilleco.gov>; Planning Commission <PlanningCommission@louisvilleco.gov>
Cc: Steve Brauneis <stevebrauneis@hotmail.com>
Subject: Advocate for a fair deal for Louisville

[EXTERNAL EMAIL] From outside of City of Louisville DO NOT CLICK links or attachments unless you validate the sender and know the content is safe.

Dear Planning Commissioners,

I sent the email below to OSAB for their meeting last night. I hope you will consider this in your meeting. I also hope that you will advocate for adding an ordinance to our development code to set standards for this type of transfer. This has never been done in Louisville before. If you allow it, please create a framework for the future.

Thanks,

Tamar

Dear OSAB members,

Thankyou for the work you do to advocate for our Open Space and ensure that our city uses our financial resources wisely.

Providing an additional 364,400 square feet of development rights to a private entity has monetary value. **The additional density offered at RTR could be worth many millions of dollars,** especially since the comp plan can lead to residential zoning. (The draft comp plan shows "Regional Center" allowing up 30 to 40 dwelling units per acre along with the hospital in the Avista parcel at RTR.) As stewards of our city's financial resources as well as Open Space resources, **please advocate for a fair deal**.

This is not really a "swap." The removal of the development allotment on the Avista GDP is not permanent. Your meeting packet for Wednesday mentions that the primary purpose of the Avista GDP amendment is to “swap development rights”. Staff confirmed to me that the "removal" of the 351,306 sq. ft development allotment can be reversed with a new GDP amendment. (It is likely to be reversed and even increased in the next few years to accommodate the densities proposed in our comprehensive plan.) It is more realistic to call this a "density gift."

This deal has costs for our city in the form of traffic and water impacts. It costs our public trust since voters elected to limit the RTR development to 2.56 million square feet in 2022. There are opportunity costs-- the city cannot provide "density gifts" to all property owners. It is not a sustainable practice.

Our city code does not regulate this type of "density gift"-- or as the proposal calls it a "density swap". This is a very unusual and unprecedented request from the applicant. The earlier versions of this application requested a "transfer of development rights." Please ask staff to explain the larger framework for "transfer of development rights" or "density swaps." Will this be a new mechanism to acquire open space? If so, there should be a **monetary analysis comparing the values of the 7.5 acre donation and the "density gift."** This type of analysis would be typical and expected for a transfer of development rights. Changing the words to "density swap" should not change your expectations for a fair deal.

Please advocate for a real "swap". Ask for a development agreement that permanently cancels development rights on the undeveloped parcels on the Avista GDP.

Thanks,

Tamar Krantz

Rob Zuccaro

Subject: FW: Please recommend a fair deal for Louisville

From: tamar krantz <tamarkrantz@gmail.com>
Sent: Monday, September 22, 2025 8:37 PM
To: Ember Brignull <Ebrignull@louisvilleco.gov>
Subject: Please recommend a fair deal for Louisville

[EXTERNAL EMAIL] From outside of City of Louisville DO NOT CLICK links or attachments unless you validate the sender and know the content is safe.

Hi Ember,

Can you please share this with OSAB and add it to the meeting packet?

Dear OSAB members,

Thankyou for the work you do to advocate for our Open Space and ensure that our city uses our financial resources wisely.

Providing an additional 364,400 square feet of development rights to a private entity has monetary value. **The additional density offered at RTR could be worth many millions of dollars,** especially since the comp plan can lead to residential zoning. (The draft comp plan shows "Regional Center" allowing up 30 to 40 dwelling units per acre along with the hospital in the Avista parcel at RTR.) As stewards of our city's financial resources as well as Open Space resources, **please advocate for a fair deal**.

This is not really a "swap." The removal of the development allotment on the Avista GDP is not permanent. Your meeting packet for Wednesday mentions that the primary purpose of the Avista GDP amendment is to “swap development rights”. Staff confirmed to me that the "removal" of the 351,306 sq. ft development allotment can be reversed with a new GDP amendment. (It is likely to be reversed and even increased in the next few years to accommodate the densities proposed in our comprehensive plan.) It is more realistic to call this a "density gift."

This deal has costs for our city in the form of traffic and water impacts. It costs our public trust since voters elected to limit the RTR development to 2.56 million square feet in 2022. There are opportunity costs-- the city cannot provide "density gifts" to all property owners. It is not a sustainable practice.

Our city code does not regulate this type of "density gift"-- or as the proposal calls it a "density swap". This is a very unusual and unprecedented request from the applicant. The earlier versions of this application requested a "transfer of development rights." Please ask staff to explain the larger framework for "transfer of development rights" or "density swaps." Will this be a new mechanism to acquire open space? If so, there should be a **monetary analysis comparing the values of the 7.5 acre donation and**

the "density gift." This type of analysis would be typical and expected for a transfer of development rights. Changing the words to "density swap" should not change your expectations for a fair deal.

Please advocate for a real "swap". Ask for a development agreement that permanently cancels development rights on the undeveloped parcels on the Avista GDP.

Thanks,

Tamar Krantz

LOSA LETTER TO OSAB 9/16/25

Dear Members of the Open Space Advisory Board,

I am writing to you on behalf of Louisville Open Space Advocates (LOSA), a group of residents who worked on the successful Open Space and Parks Sales Tax 2C ballot initiative and continue to advocate for our Open Spaces. We thank you for your steadfast commitment to protecting Louisville's natural spaces and advising on land use decisions that reflect our community's priorities.

The RTR, DD, and Avista parcels—and their development rights—must be considered together. Land ownership and development entitlements are interconnected decisions that shape one another. They are intrinsically linked. Any decision about one shapes the others. This context has direct consequences. The transfer may appear procedural, but it has long-term implications for land use, density, and the environment.

This land transfer/open space dedication— roughly half of the DD property—is part of a broader negotiation to transfer 364,400 sq. ft. of development rights from the current Avista site to the new hospital location at Redtail Ridge. Because Louisville lacks a formal development rights transfer process, it's unclear whether this move permanently extinguishes those rights at the current Avista site or simply pauses them until the GDP is amended again. To ensure the development rights transfer is permanent, full dedication of the DD property as open space would provide greater clarity and protection.

While you are being asked to consider whether to recommend acceptance of just half of DD—the proposed 7.5-acre land transfer adjacent to the existing 10-acre Open Space parcel—we urge you to advocate for three more impactful actions:

- **Support the full transfer of the entire 15.42-acre DD property**, rather than a disruptive partial dedication that fragments the landscape and weakens long-term planning.
- **Request that the negotiation include dedication of Lot 7 and the undeveloped portion of Lot 5**, (https://www.louisvilleco.gov/home/showpublisheddocument/46100/638926829259000000) creating a more diverse and ecologically valuable open space area and establishing a genuine development boundary that reflects community priorities and long-term stewardship.
- **Recommend an Open Space – Protected classification**, which allows passive recreation and trail connections—such as the link to the US 36 bikeway already identified in your OSAB acquisition recommendation. The owner-proposed Open Space – Preserved classification would prohibit trails and limit public access, undermining both connectivity and community benefit.

This is a one-time opportunity to secure a uniquely valuable piece of land—one that offers far greater ecological benefit and long-term protection than a partial acquisition. OSAB has already rated the DD parcel as a **high-priority acquisition**, (https://laserfiche.louisvilleco.gov/WebLink/DocView.aspx?dbid=1&id=636819&page=1&cr=1) citing its:

- Good connectivity to other Open Space
- Importance for conservation if Avista leaves the location
- Potential to prevent future development
- Valuable ground vegetation, grasses, and habitat
- Hilltop buffer
- Excellent potential for a trail connection to the US-36 bikeway

Acquiring the full parcel and classifying it as Open Space- Protected would:

- Preserve more habitat and strengthen the ecological integrity of the site
- Enhance viability and biodiversity by connecting directly to existing Open Space
- Restrict future development at the current Avista site by removing land from eligibility for “return” of development rights under future zoning or Comp Plan changes
- Allow for trail connections and community access benefits

In accord with Louisville’s City Charter the classification of open space is not determined by the property owner—it is a formal decision made by the City, by ordinance. OSAB’s role is to advise Council on the most appropriate classification based on ecological value, public benefit, and long-term stewardship. In this case, we urge OSAB to recommend the Open Space-Protected classification that establishes both the property's connectivity potential and the community’s vision for accessible, protected open space.

While OSAB is not reviewing the development rights transfer itself, your voice is essential in shaping the City’s priorities and response. Your tenacious advocacy on behalf of the environment and our community is not only your charge—it’s your strength. You have our full support to stand strong and urge the City to negotiate for the full DD parcel as a fair and forward-looking exchange and to classify the land as Open Space - Protected under the City Charter.

Thank you for your thoughtful stewardship and your commitment to protecting what makes Louisville special.

Warm regards,
Helen Moshak on behalf of LOSA

City Council Second Reading

October 21, 2025

ORDINANCE 1904, SERIES 2025:
APPROVING THE CONOCOPHILLIPS CAMPUS GDP, AMENDMENT NO. 1

ORDINANCE 1905, SERIES 2025:
APPROVING THE AVISTA ADVENTIST HOSPITAL GDP, AMENDMENT NO. 2

Presented by: Rob Zuccaro, Community Development Director

City of Louisville

Proposal

- Applicant – Portercare Adventist Health Systems
- Intent to Build New Hospital Campus in Redtail Ridge
- Amend GDPs to Adjust Maximum Allowed Building Area on Each GDP
  - ✓ Decrease Cap for Avista Adventist Hospital GDP
  - ✓ Increase Cap for ConocoPhillips Campus GDP (Limited to Hospital Campus Parcel)
- Establish Building Height and Massing Standards for Hospital Campus Parcel
- Dedicate ~7.5-Acre Parcel for Open Space on North Side of Avista Adventist Hospital GDP

City of Louisville

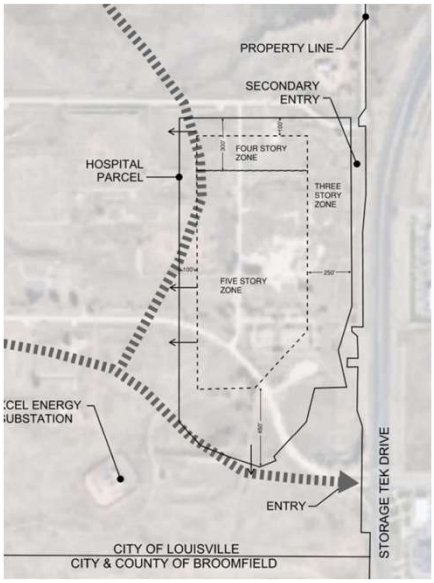
Proposal

- Adjustments to Maximum Building Areas
  - ✓ Avista Adventist Hospital GDP
    - Remove 351,306 sq. ft. of Allowed Future Development from 750,000 sq. ft. Maximum, Resulting in New Maximum of 398,694 sq. ft., matching existing development
  - ✓ ConocoPhillips Campus GDP
    - Add 364,400 sq. ft. of Allowed Future Development Specific to Hospital Parcel
    - Increases Total Allowed Development from 2,542,380 sq. ft. to 2,906,780 sq. ft.
  - ✓ Net Increase Between Two GDPs is Then Limited to 13,094 sq. ft.
  - ✓ Purpose of "Swap" is to Ensure Adequate City Water and Sewer Infrastructure and Limit Any Potential New Traffic Impacts

City of Louisville

Proposal

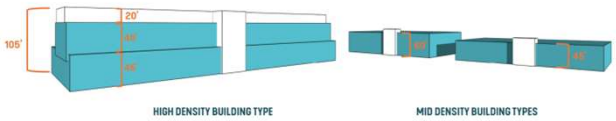
- Building Height and Massing Standards
  - ✓ Create Three Building Height Zones
    - 3 Stories – 45' Building; 50' Parapet; 65' Mechanical Screen
    - 4 Stories – 60' Building; 65' Parapet; 80' Mechanical Screen
    - 5 Stories – 85' Building; 90' Parapet; 105' Mechanical Penthouse
  - ✓ Massing Standards To Ensure Architectural Interest and Moderate Visual Impacts
    - 15' Building Step Backs for Building Elements Above 45'
    - Limit Building Footprint Above 45' to 50% of Building Footprint
    - Allowance for Architectural Projections Up to 2' and Defining Architectural Elements with 2' Depth Variations
    - 10' Step Backs for Rooftop Enclosures
  - ✓ Hospital Parcl Located at Lowest Elevation of Redtail Ridge



City of Louisville

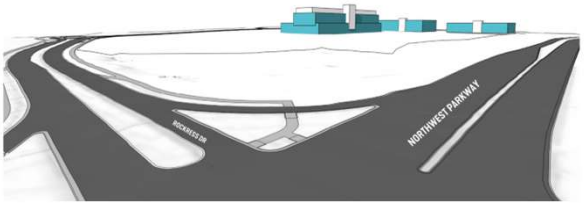
Proposal

- Building Height and Massing Standards
  - ✓ Create Three Building Height Zones
    - 3 Stories – 45’ Building; 50’ Parapet; 65’ Mechanical Screen
    - 4 Stories – 60’ Building; 65’ Parapet; 80’ Mechanical Screen
    - 5 Stories – 85’ Building; 90’ Parapet; 105’ Mechanical Penthouse
  - ✓ Massing Standards To Ensure Architectural Interest and Moderate Visual Impacts
    - 15’ Building Step Backs for Building Elements Above 45’
    - Limit Building Footprint Above 45’ to 50% of Building Footprint
    - Allowance for Architectural Projections Up to 2’ and Defining Architectural Elements with 2’ Depth Variations
    - 10’ Step Backs for Rooftop Enclosures
  - ✓ Hospital Parcl Located at Lowest Elevation of Redtail Ridge



EXAMPLE LAYOUT

Possible building mass resulting from the design parameters on Hospital Parcel



City of Louisville

Proposal

- Dedicate ~7.5 Acre Parcel for Open Space
  - ✓ Part of Parcel Designated by OSAB as High Priority for Acquisition
  - ✓ Adjacent to 10 Acre Parcel Previously Dedicated by Hospital
  - ✓ Applicant Requests Parcel Not Include Trails, Trail Heads and Other Amenities
  - ✓ Not Part of Meeting Code Requirement for Public Land Dedication
    - LMC Sec. 16.16.060, Public Use Dedication When Property Subdivided
    - LMC Sec. 17.28.080, Additional Open Space Dedications Through PUDs

City of Louisville

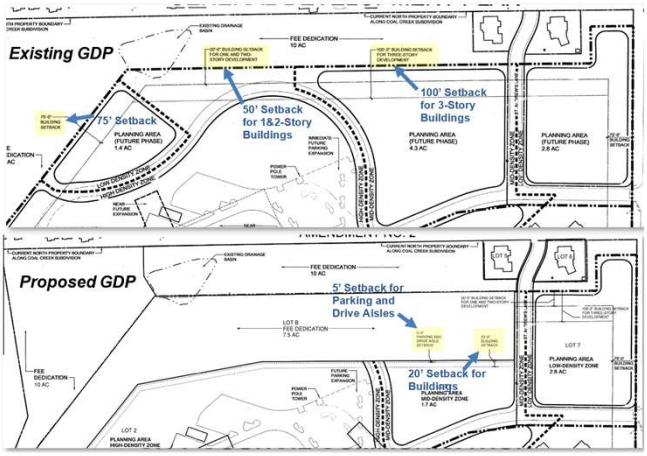
OSAB Recommendation

- Open Space Advisory Board Hearing on 9/24/2025
- Voted Unanimously to Recommend Approval
- Asked for Further Discussions before the City Council Hearing on Total Area of Open Space Dedication, Management Designation, and Potential For a Future Trail Alignment.

City of Louisville

Proposal

- Part of Open Space Dedication Includes Adjusting Building Setbacks
  - ✓ Current Setbacks of 50' for 1 and 2-Story Buildings and 100' for 3-Story Buildings on North; 75' on Northwest
  - ✓ Proposed Setback of 5' to Parking and Drive Aisles and 20' to Building
  - ✓ Overall Building Setbacks from Coal Creek Residential Neighborhood Would Increase



City of Louisville

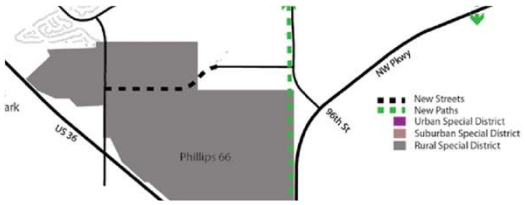
Analysis

- GDP and Planned Community Zone District (PCZD) Standards Outlined in LMC Chapter 17.72
- Proposed GDP Amendments Consistent with Purpose of PCZD to Encourage Use of Contemporary Land Planning Principles and Coordinated Community Design
  - ✓ Establishes Appropriate Design Standards to Address Building Massing and Architectural Design
  - ✓ Consistent With Building Heights to East Across NW Parkway in Broomfield
  - ✓ Consistent with Building Heights Previously Approved for ConocoPhillips
  - ✓ Ensures Adequate City Utility Services and Limits Traffic Impacts
  - ✓ Increased Building Buffers and Setbacks from Adjacent Residential Development

City of Louisville

Analysis

- 2013 Comprehensive Plan Designates Both GDP Areas As Part of Phillips 66 Rural Special District
  - ✓ Policies Allow Taller Building Heights When Development is Clustered and Out of View Sheds
    - Redtail Ridge Public Land Dedications on North and Northwest Sides of Development Result in Clustering of Development to South and East of Redtail Ridge
    - There is a Large Open Space Buffer to the South in Broomfield Between US 36 and Redtail Ridge
  - ✓ ConocoPhillips Approvals Allowed Taller Building Heights Up to 95' in One Subarea and 65' in Other Subareas



City of Louisville

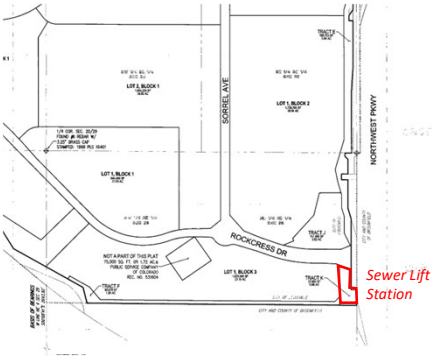
Analysis

- Traffic Study
  - ✓ Majority of Trips from US 36/NW Parkway South, NW Parkway North, and 96th Street
  - ✓ Estimates Additional 658 Weekday Trips, 47 Morning Peak Hour Trips, and 61 Afternoon Peak Hour Trips
  - ✓ Main Access from Rockcress Drive
  - ✓ For Full Buildout, Recommends Transportation Improvements Needed In Addition to Redtail Ridge Improvements Under Construction
  - ✓ Staff Recommends Condition for Updated Traffic Study and Development Agreement at time of PUD Approval

City of Louisville

Analysis

- Waste Water Infrastructure
  - ✓ Analysis Provided to Demonstrate Adequate Water and Wastewater Infrastcture Available, Include Sewer Lift Station in Redtail Ridge



City of Louisville

Planning Commission Recommendation

- Planning Commission Hearing on 9/25/2025
- Voted Unanimously to Recommend Approval
- Asked for Further Discussions before the City Council Hearing on Total Area of Open Space Dedication, Management Designation, and Potential For a Future Trail Alignment.

City of Louisville

Staff Recommendation

- Staff recommends approval of Ordinance 1904, Series 2025 Approving the ConocoPhillips Campus GDP, Amendment No. 1 with the following condition:
  - Future Planned Unit Development applications for Lot 1, Block 2 of Redtail Ridge Filing No. 1 shall include a traffic study and a development agreement requiring the construction by the applicant of any transportation infrastructure needed to accommodate the development.
  -
- Staff recommends approval of Ordinance 1905, Series 2025, Approving the Avista Adventist Hospital General Development Plan, Amendment No. 2.

City of Louisville

City of Louisville
COLORADO • SINCE 1878

CITY COUNCIL COMMUNICATION
AGENDA ITEM 8G

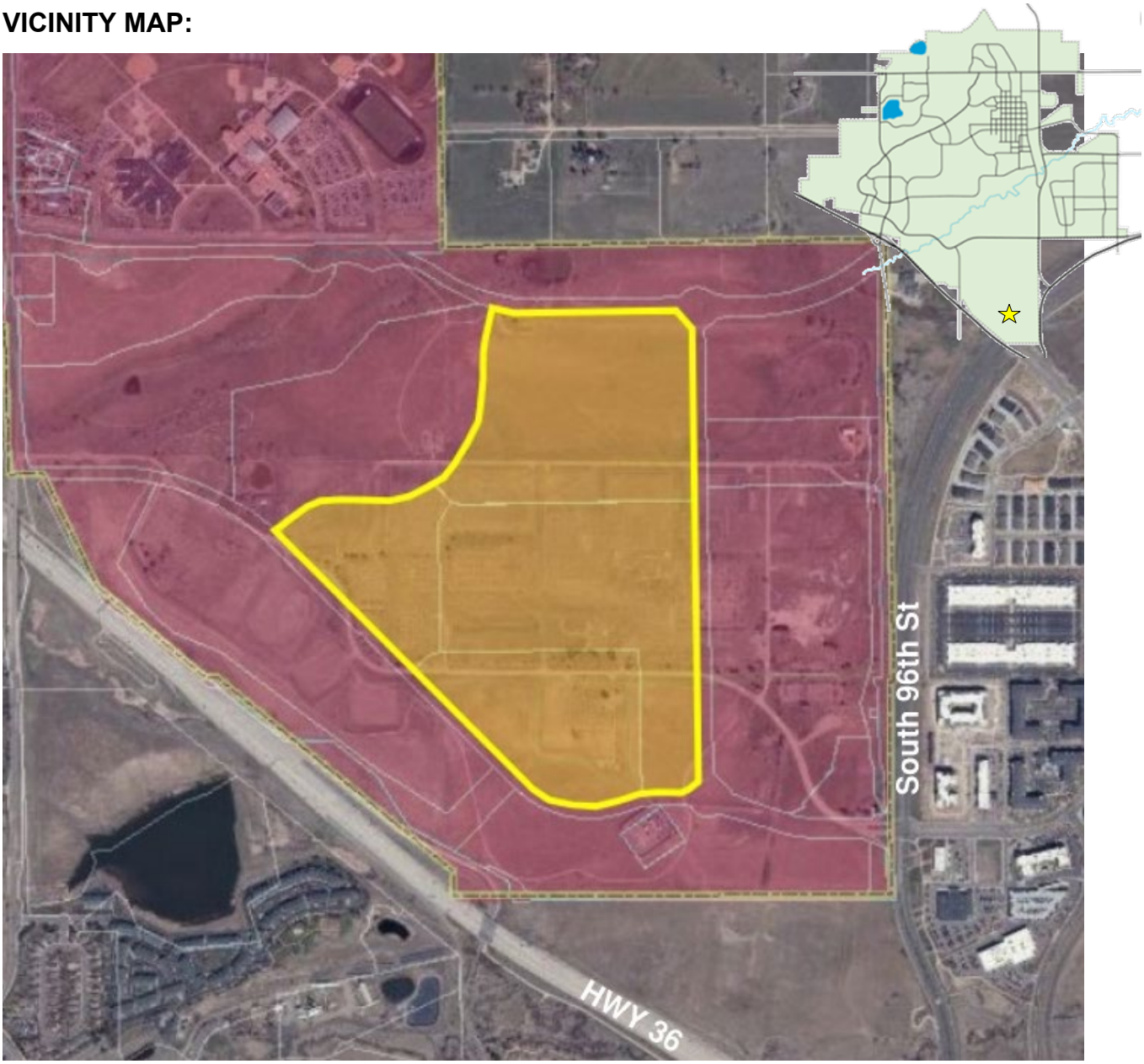
SUBJECT: CONCEPT PLAN REVIEW – AN AMENDMENT TO THE CONOCOPHILLIPS GENERAL DEVELOPMENT PLAN

DATE: OCTOBER 21, 2025

PREPARED BY: MATT POST, AICP, SENIOR PLANNER

PRESENTED BY: MATT POST, AICP, SENIOR PLANNER

VICINITY MAP:



SUMMARY:
Attached for review is a Concept Plan application to consider amending the ConocoPhillips Campus General Development Plan (GDP) to allow the application of Industrial Development Design Standards and Guidelines (IDDSG) in place of Commercial Development Design Standards and Guidelines (CDDSG) in selected areas of the ConocoPhillips Campus GDP, otherwise referred to as Redtail Ridge. This staff report provides property background, preliminary analysis, outlines relevant policies and code provisions, and identifies key considerations to inform future development applications.

BACKGROUND / PRIOR DISCUSSIONS:

Concept Plan

The Concept Plan Review process is optional and provides applicants with an opportunity to receive early, non-binding feedback from the City Council and the public prior to preparing a formal land use application. This application will not involve a vote or consensus, and the Council is not required to provide specific feedback. No other boards or commissions have reviewed this proposal, and staff have not completed an analysis or provided a recommendation. Instead, staff will identify applicable policies, code provisions, and key issues to inform future review. Should the applicant proceed, a formal application will be subject to additional public input, staff analysis, and public hearings before the Planning Commission and City Council.

Site Overview

The subject property was originally developed as the 310-acre StorageTek corporate campus, annexed into the City in 1978 and built out to approximately 1.6 million square feet. In 2008, ConocoPhillips acquired the property and subsequently demolished the existing campus to facilitate development of a new research facility. That same year, the company petitioned for annexation of an additional 80 acres and requested rezoning of the combined 390-acre site to Planned Community Zone District – Commercial (PCZD-C).

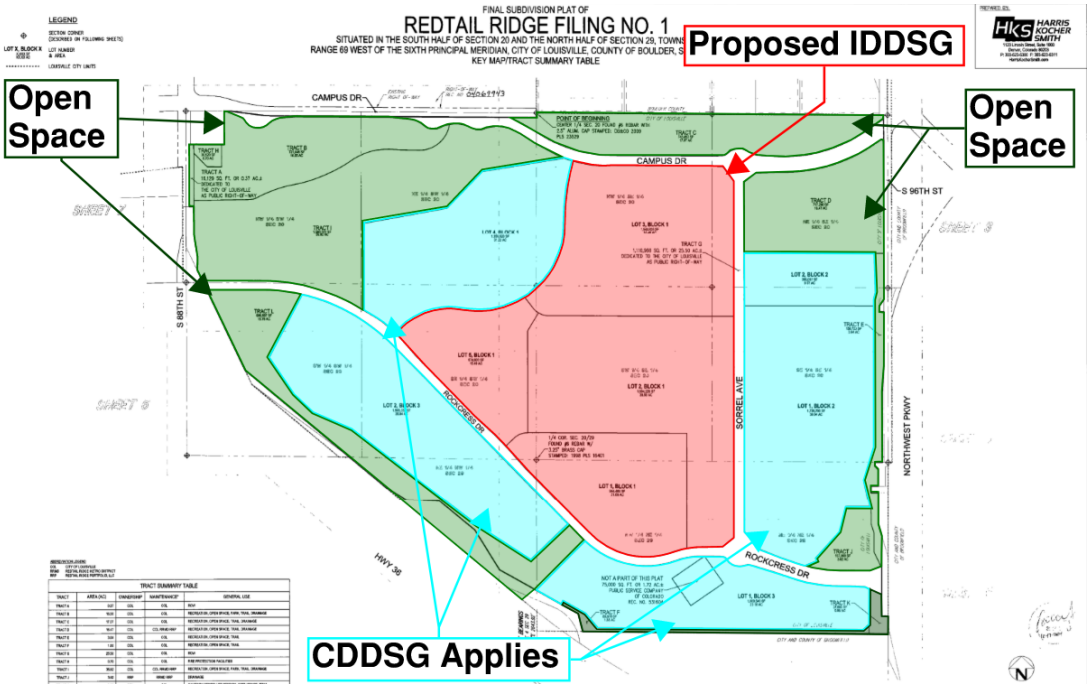
In 2010, the City approved the ConocoPhillips General Development Plan (GDP) and an associated Zoning Agreement. The GDP established a 2.5-million-square-foot development cap, permitted land uses, setbacks, and a 12% minimum public land dedication, and mandated that development on the property abide by the Commercial Development Design Standards and Guidelines (CDDSG).

In 2024, City Council approved a Final Plat of the 389-acre property to enable development consistent with the ConocoPhillips Campus GDP approved in 2010. The plat established lots, tracts, rights-of-way, and easements to support future hospital, medical office, light industrial, commercial, and office uses.

DEVELOPMENT PROPOSAL:

The applicant is requesting an amendment to the ConocoPhillips Campus GDP to allow application of the IDDSG in place of the CDDSG for four interior lots – Lots 1, 2, 3, and 5, of Block 1 – totaling approximately 111.5 acres. In addition to commercial uses, the

existing GDP permits uses such as manufacturing, warehousing, and storage, which the applicant asserts are more closely aligned with uses contemplated and permitted in industrial zone districts. The proposed amendment would clarify that the IDDSG may be applied to these interior parcels.



Area of Proposed IDDSG Application

PRELIMIMARY ANALYSIS:

The property is zoned Planned Community Zone District – Commercial (PCZD-C). As such, the site is subject to the Commercial Development Design Standards and Guidelines (CDDSG), consistent with the applicability statement of the CDDSG, which requires that all commercial development within the City comply with these standards. The CDDSG apply to development located within commercially zoned districts and are intended to promote cohesive and well-integrated commercial environments throughout Louisville.

The purpose of the CDDSG is to ensure that commercial development reflects high-quality, enduring, and context-sensitive design. The standards are intended to protect the community's established character and quality of life through clearly defined design goals, policies, and sets expectations for architectural, site, and landscape design. They also support Louisville's long-term economic vitality by encouraging projects that are visually attractive, durable, and built to last, while discouraging designs or materials that result in less appealing development patterns and designs.

The IDDSG apply to development located within industrially zoned districts within the City. The IDDSG include both mandatory design standards and general guidelines. Compliance

with the mandatory standards and consideration of the guidelines are required to meet the goals and policies of the IDDSG.

The IDDSG are generally more flexible and permissive than the CDDSG because they serve different purposes and reflect distinct land use characteristics in the districts in which they apply. Commercial areas are typically designed to enhance the public realm, emphasizing visibility, pedestrian activity, and architectural character. As such, the CDDSG standards are more stringent to ensure that development contributes to the community's aesthetic quality and maintains compatibility with nearby residential or mixed-use areas.

By contrast, the IDDSG are primarily intended to accommodate employment-generating uses that rely on functionality, efficiency, and operational flexibility. These developments often include larger buildings, loading areas, outdoor storage, and high-bay structures that serve practical needs of the user rather than public-facing design objectives. The more permissive IDDSG standards allow these uses to operate effectively while still maintaining a baseline of quality and durability. The intent is to ensure that industrial projects are appropriately designed within their context and mitigate off-site impacts, without imposing unnecessary constraints that would hinder the operational requirements typical of industrial users

The application of the IDDSG in place of the CDDSG would result in a noticeable shift in the design character and visual appearance of future development on the affected parcels. Under the IDDSG, building design would prioritize operational efficiency, durability, and functionality over architectural detailing and pedestrian-oriented form. Buildings developed under these standards may include larger, "boxy" footprints, taller structural bays, expanded mechanical and utility areas, and more utilitarian façades that reflect industrial and research-based uses rather than retail, office, or other commercial environments.

A key distinction between the two sets of standards is that the IDDSG would allow for the use of **concrete tilt-up construction**, a common industrial building type designed for efficiency, cost-effectiveness, and rapid delivery. While this method provides flexibility and durability, it typically results in simpler façades with less material variability, limited articulation, reduced fenestration, and minimal variation in roof design compared to buildings designed under the CDDSG. As a result, the architectural character of development may appear more uniform and less detailed, emphasizing function over aesthetics.

Example of Tilt-Up Concrete Construction facing Dillon Road at 769 CTC Blvd in the Colorado Technology Center within the Industrial Zone District

The IDDSG include requirements for screening, site design, landscaping, and material quality intended to maintain a cohesive and orderly appearance. The resulting development under these standards would reflect the functional and performance-based nature of light-industrial uses, with building forms and site layouts focused primarily on operational efficiency. Compared to commercial development, projects developed under the IDDSG are expected to exhibit less architectural detail, less variation in materials, and less overall visual complexity, consistent with the intended character and purpose of an industrial district.

Industrial Design Rendering at Redtail Ridge Provided by the Applicant

Commercial Design Rendering at Redtail Ridge Provided by the Applicant

Municipal Code and Adopted Policy Considerations

Louisville Municipal Code
Louisville Municipal Code (LMC) Chapter 17.72 outlines the requirements for PCZD zoned properties and the standards for GDPs. Sec.17.72.060 of this chapter notes that existing GDPs may be amended, subject to the same procedure as the original approval.

- *Any adopted planned community general development plan and supplementary development standards may be amended, revised or territory added thereto, pursuant to the same procedure and subject to the same limitations and requirements by which such plan was originally approved.*

LMC Sec. 17.72.010 outlines the purpose of the PCZD as follows:

- *The purpose of the planned community zone district is to encourage, preserve and improve the health, safety and general welfare of the people of the city by encouraging the use of contemporary land planning principles and coordinated community design. The planned community zone district is created in recognition of the economic and cultural advantages that will accrue to the residents of an integrated, planned community development of sufficient size to provide related areas for various housing types, retail and service activities, recreation, schools and public facilities, and other uses of land. This district is designed for use where the area comprising such development project is under single ownership or control at the time of its classification as this district.*

Staff will apply these provisions when evaluating a formal amendment request to the ConocoPhillips Campus GDP. Upon submittal, the application will be reviewed in accordance with the procedures and standards outlined in LMC Chapter 17.72 to determine whether the proposed changes are consistent with the intent and purpose of the Planned Community Zone District.

Comprehensive Plan
The 2013 Comprehensive Plan identifies the entire ConocoPhillips GDP property as being within the Phillips 66 Special District (pp. 35–36). At the time the Comprehensive Plan was prepared, the City anticipated that ConocoPhillips would develop as a large-scale research and innovation campus on the site now known as Redtail Ridge. The policies reflect this expectation and were intended to support the establishment of a corporate or institutional campus environment. Within the Special Districts, the Comprehensive Plan notes that industrial uses may occur either as a single use on a parcel or as part of a mixed commercial and industrial development pattern. Building form and design are expected to be responsive to site context, oriented to internal circulation systems, and reflective of the

functional requirements of the intended use, while maintaining consistency with surrounding development.

2025 COUNCIL WORK PLAN:
This item is not part of the 2025 Council Work Plan.

FISCAL IMPACT:
Budgeted?: **Not Applicable**

ALTERNATIVE(S):
No alternative is proposed with the Concept Plan application.

RECOMMENDATION:
Staff have not provided a recommendation on this Concept Plan.

PUBLIC COMMENTS:
No public comments have been received as of the date of this report.

ATTACHMENT(S):
1. Application materials

Redtail Ridge GDP Amendment Narrative

The current ConocoPhilips Campus GDP contemplates several permitted uses including Manufacturing, Warehouses and Storage Facilities. Redtail seeks Council's feedback to amend the current GDP to better align design standards with the allowable uses contemplated in the both the GDP and the intent of an innovation campus such as Redtail Ridge. The innovation market Redtail endeavors to attract comes with a plethora of uses, many of which lends itself to Industrial Development Design Standards & Guidelines – i.e. aerospace and life science manufacturing. Certain components of the IDDSG such as high bays, privacy and structural considerations do not lend itself to the current CDDSG zoning. The amendment to the current GDP would entail a minor clarification that the IDDSG may be applied to the development's interior parcels (Lots 1, 2, 3 & 5).

Redtail feels that IDDSG for the interior parcels is appropriate for several reasons including (1) no negative impact to site lines and perspectives of the campus as the interior parcels are surrounded by buildings that will meet the CDDSG, (2) allows for appropriate design standards to be applied to intended building use, (3) provides clarity in tenant and market pursuits as to what design parameters will ultimately be acceptable to the City of Louisville for buildings that fit the "industrial" use, (4) allows Redtail to build consistent architecture and apply design standards based on product type which will result in a more architecturally pleasing campus and streamlined tenant attraction (5) creates a more predictable PUD review process with City Staff as the current zoning requires the applicant and staff to make several subjective passes at reviewing CDDSG standards across all intended uses, resulting in a drawn out and inconsistent PUD review process.

In summary, we appreciate the Council's feedback on the proposed amendment to the current GDP and feel it will result in better permitting and construction processes and ultimately a better product for the campus.

FINAL SUBDIVISION PLAT OF

REDTAIL RIDGE FILING NO. 1

SITUATED IN THE SOUTH HALF OF SECTION 20 AND THE NORTH HALF OF SECTION 29, TOWNSHIP 1 SOUTH, RANGE 69 WEST OF THE SIXTH PRINCIPAL MERIDIAN, CITY OF LOUISVILLE, COUNTY OF BOULDER, STATE OF COLORADO

KEY MAP/TRACT SUMMARY TABLE

PREPARED BY:

HARRIS KOCHER SMITH

1120 Lincoln Street, Suite 1000
Denver, Colorado 80203
P: 303-623-6300 F: 303-623-6311
HarrisKocherSmith.com

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF HARRIS KOCHER SMITH

LEGEND

- SECTION CORNER (DESCRIBED ON FOLLOWING SHEETS)
- LOT X, BLOCK X (XXX SF, XX.XX AC) — LOT NUMBER & AREA
- LOUISVILLE CITY LIMITS

ABBREVIATION LEGEND

COL	CITY OF LOUISVILLE
RRMD	REDTAIL RIDGE METRO DISTRICT
RRP	REDTAIL RIDGE PORTFOLIO, LLC

TRACT SUMMARY TABLE

TRACT	AREA (AC)	OWNERSHIP	MAINTENANCE*	GENERAL USE
TRACT A	0.37	COL	COL	ROW
TRACT B	16.55	COL	COL	RECREATION, OPEN SPACE, PARK, TRAIL, DRAINAGE
TRACT C	17.07	COL	COL	RECREATION, OPEN SPACE, TRAIL, DRAINAGE
TRACT D	16.47	COL	COL, RRMD RRP	RECREATION, OPEN SPACE, TRAIL, DRAINAGE
TRACT E	3.64	COL	COL	RECREATION, OPEN SPACE, TRAIL
TRACT F	1.85	COL	COL	RECREATION, OPEN SPACE, TRAIL
TRACT G	25.50	COL	COL	ROW
TRACT H	0.70	COL	COL	FIRE PROTECTION FACILITIES
TRACT I	35.82	COL	COL, RRMD RRP	RECREATION, OPEN SPACE, PARK, TRAIL, DRAINAGE
TRACT J	3.62	RRP	RRMD RRP	DRAINAGE
TRACT K	0.86	COL	COL	SANITARY SEWER LIFT STATION, OPEN SPACE, TRAIL
TRACT L	15.76	RRP	RRMD RRP	RECREATION, OPEN SPACE, TRAIL
TOTAL	137.99			

* THE MAINTENANCE RESPONSIBILITIES ARTICULATED IN THE TRACT SUMMARY TABLE ARE FOR INFORMATIONAL PURPOSES ONLY. WHILE THESE GENERAL RESPONSIBILITIES ARE ACCURATE, MORE DETAILED INFORMATION PERTAINING TO MAINTENANCE RESPONSIBILITIES IS INCLUDED WITHIN THE REDTAIL RIDGE SUBDIVISION IMPROVEMENTS AND DEVELOPMENT AGREEMENT AND THE REDTAIL RIDGE OPERATIONS AND MAINTENANCE AGREEMENT. PLEASE REFER TO THESE DOCUMENTS FOR ADDITIONAL DETAIL PERTAINING TO MAINTENANCE RESPONSIBILITIES.

PROJECT NUMBER: 190108

KEY MAP/TRACT SUMMARY TABLE - SHEET 2 OF 8

PUD Diagram

- PUD 1 - Industrial / GMP District
- PUD 2 - Industrial District
- PUD 3 - Life Science District West
- PUD 4 - R&D District
- PUD 5 - Retail / Life Sciences
- PUD 6 - Hospital
- PUD 7 - Life Science Discrict East
- PUD 8 - Office District

STERLING BAY

This conceptual design is based upon a preliminary review of entitlement requirements and on unverified and possibly incomplete site and/or building information, and is intended merely to assist in exploring how the project might be developed.

PUD 1 South Rendering Exhibit

REDTAIL RIDGE - INDUSTRIAL B

LOUISVILLE, COLORADO, DEN22-0097-00

WARE MALCOMB

08/06/25