



NFRMPO TECHNICAL ADVISORY COMMITTEE (TAC)—AGENDA
March 20, 2019
1:00 – 3:30 p.m.

- 1. Call Meeting to Order, Welcome, and Introductions**
 - 2. Public Comment (2 minutes each)**
 - 3. Approval of February 20, 2019 Meeting Minutes (Page 2)**
-

CONSENT AGENDA

No items this month.

ACTION ITEMS

- | | |
|--|----------|
| 1) March 2019 TIP Amendment (Page 8) | Bornhoft |
| 2) FY2018 TIP Project Delay Review (Page 13) | Bornhoft |

PRESENTATIONS

No items this month.

DISCUSSION ITEMS

- | | |
|---|----------------|
| 3) Greeley STBG Project Adjustment Request (Page 17) | Karasko/Baxter |
| 4) FY2020-2023 Transportation Improvement Program (TIP) (Page 28) | Bornhoft |
| 5) 2019 Congestion Management Process (CMP) Elements (Page 29) | Martin |
| 6) 2045 Regional Transportation Plan (RTP) Draft Socio-Economic Profile and Performance Based Planning Sections (Page 38) | Karasko |

OUTSIDE PARTNER REPORTS

- 7) Regional Transit Agencies
- 8) Senior Transportation
- 9) Regional Air Quality Council

REPORTS

- | | |
|----------------|-----|
| 10) Roundtable | All |
|----------------|-----|
-

- 4. Final Public Comment (2 minutes each)**
- 5. Next Month’s Agenda Topic Suggestions**
- 6. Next TAC Meeting: April 17, 2019**

**MEETING MINUTES of the
TECHNICAL ADVISORY COMMITTEE (TAC)
North Front Range Transportation and Air Quality Planning Council**

**Windsor Recreation Center - Pine Room
250 North 11th Street
Windsor, CO**

**February 20, 2019
1:01 – 2:50 p.m.**

TAC MEMBERS PRESENT:

Dave Klockeman, Chair – Loveland
Mitch Nelson, Vice Chair – Severance
Everett Bacon – Weld County
Allison Baxter – Greeley
Amanda Brimmer – RAQC
Darren Davis – GET
Candice Folkers – COLT
Rusty McDaniel – Larimer County
Karen Schneiders – CDOT
Dennis Wagner – Windsor
Randy Ready – Evans

NFRMPO STAFF:

Suzette Mallette
Medora Bornhoft
Ryan Dusil
Alex Gordon
Becky Karasko
Sarah Martin

TAC MEMBERS ABSENT:

Stephanie Brothers – Berthoud
Aaron Bustow – FHWA
Gary Carsten – Eaton
Rick Coffin – CDPHE-APCD
Eric Fuhrman – Timnath
Tim Kemp – Fort Collins
Ranae Tunison – FTA
Johnstown
LaSalle
Milliken

IN ATTENDANCE:

Marissa Gaughan – CDOT
Katie Guthrie – City of Loveland
Tamara Keefe – FHU
Katrina Kloberdanz – CDOT
Annabelle Phillips – Transfort
Jan Rowe – CDOT
Jake Schuch – CDOT
Keith Wakefield – CDOT

CALL TO ORDER

Chair Klockeman called the meeting to order at 1:01 p.m.

PUBLIC COMMENT

There was no public comment.

APPROVAL OF THE FEBRUARY 21, 2019 TAC MINUTES

Nelson moved to approve the January 16, 2019 TAC meeting minutes. The motion was seconded by McDaniel and approved unanimously.

CONSENT AGENDA

2019 Public Involvement Plan (PIP) - Schneiders moved to approve the Consent Agenda. The motion was seconded by Nelson and approved unanimously.

ACTION ITEMS

FY2019 Program of Projects (POP) - Phillips stated the City of Fort Collins/Transfort is the designated recipient of FTA Sections 5307, 5310, and 5339 apportionments for the Fort Collins Transportation Management Area (TMA). Phillips reviewed how FTA Sections 5307, 5310, and 5339 funding will be used within

the TMA for FY2019. The total project cost listed in the TAC packet was based on 2018 apportionments. The figures will be updated when the 2019 apportionments are released. Transfort held a public hearing regarding the FY2019 POP on December 21, 2018 and posted a public notice in several location two weeks prior to the meeting. No public comment was received. Schneiders moved to approve the FY2019 POP. The motion was seconded by Nelson and approved unanimously.

FY2022-2023 Call for Projects Recommendations – Karasko stated 18 projects were submitted; 11 Congestion Mitigation and Air Quality Improvement (CMAQ), six Surface Transportation Block Grant (STBG), and one Transportation Alternatives (TA) application. An analysis requested by the NFRMPO Planning Council at their February 7, 2019 meeting found, in the last three Calls, CMAQ funding was split evenly between the counties, while Larimer County communities applied for and received more in STBG funding than Weld County communities.

Malette thanked those who presented their projects at the February 7, 2019 Planning Council meeting.

Brimmer asked if the CMAQ projects not receiving funding are waitlisted like STBG projects. Karasko stated only the STBG projects are waitlisted because the remaining \$428,382 will not sufficiently fund either remaining project. If more STBG funding becomes available, the funding will be awarded.

Brimmer asked if the population difference between Larimer and Weld counties factored into the scoring process. Karasko stated population was only used to define small and large communities in setting STBG funding targets to apply scoring criteria. Malette stated suballocation of funds based on population is not allowed under federal regulations.

Karasko stated she will include the Call for Projects Recommendations Summary Tables, pages 22 and 23 of the TAC packet, in the March 7, 2019 Planning Council packet.

McDaniel moved to approve the FY2022-2023 Call for Projects Recommendations. The motion was seconded by Nelson and approved unanimously.

PRESENTATION

Owl Canyon Road Feasibility Study – Wakefield stated CDOT is studying the feasibility of Owl Canyon Road as the upper alignment for a potential reroute of US287 to divert truck traffic away from downtown areas between Longmont and Fort Collins. The Study will analyze the feasibility of bringing Owl Canyon Road up to State Highway standards. If feasible, the existing US287 alignment could be converted to a business route and eventually devolved to a locally-controlled road. CDOT will model road improvements to assess benefits and begin holding public meetings with affected residents in March or April. A decision on next steps is scheduled for July at the latest.

Schneiders stated if Owl Canyon is deemed a feasible State Highway route, devolution of the existing US287 alignment would be a long, phased process. The current US287 alignment acts as a Main Street through several communities, who have expressed desire to have more access control. Schneiders added the Glade Reservoir Northern Integrated Supply Project (NISP) may factor into the decision. Bacon asked what the timeline is for the Glade Reservoir NISP project. Wakefield stated the affected portion of US287 has to be vacated by January 1, 2024 and a Record of Decision (ROD) will be released this year.

Bacon asked if the goal is to divert truck traffic away from the Mulberry Street and Riverside Avenue portions of SH14 within Fort Collins city limits. Schneiders stated the project would not divert all truck traffic but would provide another option for drivers.

McDaniel stated some necessary improvements to Owl Canyon Road were identified in a 2008 study by Larimer County and some improvements will be made to Owl Canyon Road regardless of CDOT's decision.

Schneiders asked what stakeholders CDOT has identified thus far. Wakefield stated the initial list includes the jurisdictions and residents along the affected corridors. Additional stakeholders will be identified at the kickoff meeting.

Region 4 Intersection Prioritization Study - Kloberdanz presented a map of 15 intersections identified in Phase 2 of the Study located within the NFRMPO region. CDOT Region 4 staff identified a total of 40 intersections: 15 in the NFRMPO region, 15 in the Denver Regional Council of Governments (DRCOG) region, five in the Eastern Transportation Planning Region (TPR), and five in the Upper Front Range TPR.

Intersections were ranked based on expected crash values, the Do Not Cull List, and whether problems would be exacerbated by future growth or higher truck percentages. Projects with recently completed or planned improvements were not considered.

Phase 3 will involve data collection and analysis at the 40 locations identified in Region 4. CDOT will categorize projects as safety improvements or operations improvements (signal retiming, reflective backplates, safety improvements achieved through operations, etc.). Phase 3 is scheduled to be completed by April, with a draft report released in mid-April.

Baxter asked if the list is part of the Highway Safety Improvement Program (HSIP). Kloberdanz stated it is not, but the list may be used to apply for HSIP or Funding Advancements for Surface Transportation and Economic Recovery Act of 2009 (FASTER) funding.

Bacon asked why the intersection of WCR 66 and US85 was identified. Kloberdanz responded it was primarily due to the rate of observed crashes compared with expected crashes, an identifiable crash pattern, and the expected performance improvement.

Malette asked what the list helps CDOT Region 4 do. Kloberdanz responded it is primarily used as a prioritization tool, stating 24 of the 25 projects identified through this process in 2016 have either been completed or are planned. Kloberdanz added ramps and interchanges were included this time, but not in 2016.

McDaniel asked what intersection project #7 is. Kloberdanz stated it is US34 and Glade Road/LCR 23 H.

Davis asked what years are included in the crash history. Kloberdanz stated it is 2013-2017 data.

Klockeman requested a one-page summary with more background information on the identified locations and the methodology used to identify locations. Kloberdanz stated she will provide more details on how locations were selected and ranked to Karasko for distribution to TAC members.

Larimer County Senior Transportation Project - Mallette stated the One Call/One Click Center project was generated from a *2013 Larimer County Strategic Plan* goal and is consistent with recommendations from the *Larimer County Senior Transportation Needs Assessment* completed in 2017.

Gordon stated the Larimer County Senior Transportation Work Group wants to improve communication and build relationships between providers and expand coordination efforts beyond Larimer County. NFRMPO is taking on project management of this effort. The project has received two grants: \$20,000 from the National Aging and Disability Transportation Center (NADTC) Getting Ready to Innovate grant to create an expert panel and \$40,000 in FTA Section 5304 funding for an Implementation Plan. Larimer County provided local funding for both grants. NFRMPO staff are waiting to hear back about a third grant for \$70,000 from the NADTC Innovations in Accessible Mobility Implementation grant to subsidize expansion of Via Mobility's Call Center and rides for south Larimer County (Estes Park and Berthoud).

Bacon asked if the Work Group has discussed the possibilities of Uber and Lyft or autonomous vehicles covering certain senior transportation needs. Gordon stated the density of demand in the region isn't feasible for Uber and Lyft and there have not yet been discussions autonomous vehicles. Gordon stated the more

immediate concern is collecting empirical data to support anecdotal accounts of needs in rural Larimer County.

Mallette stated service providers all operate independently. The goal of the project is to keep existing providers intact but improve communication and better meet needs. Mallette state Via partnered with another company to provide referrals of each other's services and saw their ridership increase by 33 percent.

DISCUSSION

2045 Regional Transportation Plan (RTP) Draft Environmental Profile and NFRMPO System Sections -

Karasko summarized the contents of the draft sections up for review by TAC. Karasko requested comments on these sections by March 8, 2019. The Regionally Significant Corridors (RSCs) within the Existing Conditions section will be updated once the functional classification request submitted by the NFRMPO and member communities is completed by CDOT. The freight section will be updated once *Freight Northern Colorado* is completed in Spring 2019. Karasko requested TAC members pay careful attention to the Transportation Demand Management (TDM) strategies and Intelligent Transportation System (ITS) lists. The Environmental section has been streamlined from the *2040 RTP*.

Baxter stated non-motorized facility data is missing for Greeley. Dusil stated the figures presented are placeholders until the non-motorized facility inventory is updated. Dusil will reach out to communities for updated data.

Klockeman requested Karasko send out calendar invitations for *2045 RTP* section review dates. Karasko stated she will send them out.

Mallette stated TAC members saw some of the content in 2018 during the discussion and approval of the *2045 RTP* Goals, Objectives, Performance Measures, and Targets (GOPMT).

NFRMPO staff plans to bring draft sections to TAC according to the schedule provided in the TAC packet. Content that is new or significantly different from the *2040 RTP* will be introduced with a staff presentation.

Mallette asked what sections Planning Council will see and when. Karasko stated Planning Council will see the Plan Scenarios as a presentation. They will see the Fiscally-Constrained Plan for discussion in June and approval in July once the NFRMPO has received its 2045 funding projections from CDOT. TAC will see the full *RTP* for discussion in July and for recommendation to Planning Council in August.

FY2018 TIP Project Delay Review - Bornhoft stated three projects from the City of Greeley, City of Loveland, and Weld County must receive a second project delay review because they have not met the advertisement date or notice to proceed dates. These projects were first discussed at the September 19, 2018 TAC meeting, but further discussion was delayed due to the suspension of the Buy America (BA) waiver process. NFRMPO policy is to send second delay requests to Planning Council for approval.

Bacon asked for clarification on the single BA waiver approval for Weld County. Bornhoft stated the Federal Highway Administration's (FHWA) records show a BA waiver for only one vehicle. Bacon stated he will provide Bornhoft with more information on the status of the remaining vehicles.

Klockeman stated the Loveland project is being moved up and he will provide Bornhoft with more information.

Schuch stated the Greeley project should be approved for advertisement next week.

Schneiders stated the North US287 project Phase I is done and Phase II will begin soon.

Ready asked what the next steps are. Bornhoft stated first and second delays will come back to TAC in March for Action. The second delay projects will go to Planning Council in March for Discussion.

Mallette requested more information on second delays be sent to Bornhoft by Friday, February 22, 2019 to be included in the Planning Council packet.

OUTSIDE PARTNERS REPORTS (verbal)

NoCo Bike & Ped Collaborative – Dusil stated a six-member team representing the NFRMPO region was accepted to the 2019 Walkability Action Institute (WAI) in Decatur, Georgia in late April. The WAI is a multi-day workshop where teams develop an Action Plan for increasing walking and improving walkability in their region. The NFRMPO team consists of staff from the City of Loveland, Colorado State University (CSU), Weld County, the NFRMPO and the Mayor of Berthoud. The team's travel and lodging are fully paid for through the Centers for Disease Control and Prevention (CDC) and the National Association of Chronic Disease Directors (NACDD). Upon their return, the team will work with the NoCo Bike & Ped Collaborative to finalize and implement their Action Plan.

The Collaborative has spent the past few months revising its Vision, Mission, Goals and Objectives and developing its 2019 Work Plan. Once finalized, the Collaborative will bring the frameworks to TAC.

The Collaborative is having a facilitated meeting on April 10, 2019 to discuss its organizational structure moving forward. The facilitators, from Larimer County, will help the group choose the structure that best serves its Vision and Mission. Potential structures the group has discussed have included pursuing 501(c)(3) non-profit organization status or trying to become an official committee or subcommittee of the NFRMPO. The Collaborative would like to have NFRMPO leadership, TAC leadership, and potentially a Planning Council member at the April 10 meeting.

Regional Transit Agencies – Davis stated GET has been having meetings regarding the Poudre Express regional bus route. GET plans to have the route operational by January 2020.

Phillips stated Transfort recently received six new Compressed Natural Gas (CNG) buses. Transfort is kicking off a project to implement zero emission tailpipe buses and is looking at a variety of funding sources. Mallette asked what routes the buses would operate on. Phillips stated the initial buses would go on the HORN route until their range is known.

Folkers stated COLT is working on signing a contract for its new public-facing website and automatic passenger counting (APC).

Schneiders stated the Bustang west route is back to normal schedule following Glenwood Canyon rockslide.

Senior Transit Items – no update was provided

Regional Air Quality Council – Brimmer stated Governor Polis' Executive Order (EO) B-2019-002 focuses on electric vehicles and corridors. The EO will rewrite the Volkswagen Settlement Plan with a focus on Zero Emission Vehicles (ZEVs). All funds for the next four years will likely go to electric vehicles with the exception of propane-fueled public school buses. In April, the Air Quality Control Commission (AQCC) will have a request for a hearing in July on the low-VOC Industrial Coatings and Consumer Products Rule to adopt California standards. In May, the AQCC will have a request for a ZEV hearing in August to discuss whether Colorado will add the ZEV component to the California Low Emission Vehicle (LEV) standard adopted by Colorado in 2018. RAQC Strategy Committees are meeting monthly with the RAQC board. An environmental group has submitted an intent to sue on the one-year extension of the attainment year for the 2008 Ozone standard. There is also a petition to the court on the 2015 Ozone standard Implementation Rule and a challenge of the non-attainment boundary for the 2015 Ozone standard, claiming all of Weld County should be included.

Baxter asked if the Clean Energy Plan is about switching to more solar and wind power and if charging ZEVs will be part of the discussion. Brimmer affirmed the Plan, which was completed by Xcel Energy, is about transitioning to wind and solar. The connection between ZEVs and wind and solar are part of the discussion,

but ZEVs likely won't be a big part of the discussion at the Stationary / Area Sources Committee Meeting on Friday, February 22, 2019.

Mallette stated Planning Council raised concerns that ZEVs do not currently pay into the Highway User Tax Fund (HUTF) while EO B-2019-002 calls for 940,000 additional ZEVs on the road by 2030. Brimmer stated funding is part of the discussion and CDOT will be on the working group charged with implementing the EO.

REPORTS

No reports were provided

ROUNDTABLE

Schneiders stated CDOT's new Executive Director, Shoshana Lew, is on board. Lew required senior executives reapply for their positions. So far, three positions have been retained. All CDOT Regional Directors were exempt from this process, but Region 4 Director Johnny Olson has accepted the CDOT Deputy Director position and will be acting in both capacities for at least two weeks. The Region 4 Director position will open soon and is expected to be filled by April. The Interim Regional Transportation District (RTD) Director is undetermined.

Klockeman asked when Shoshana Lew will come to the Upper Front Range TPR and NFRMPO Planning Council. Schneiders stated she is scheduled to be at both meetings in March.

Mallette stated Johnny Olson was instrumental in advocating for \$250M from Transportation Commission (TC) to build North I-25 Segments 7 and 8 to the full Environmental Impact Statement (EIS) alignment. Heather Paddock will discuss her plan for the \$250M at the I-25 Coalition meeting on Wednesday, March 6, 2019 at the Southwest Weld County Service Center in Longmont. TC loaned \$88M from Segments 7 and 8 to the South I-25 Gap Project. Paddock is confident the money will come back to Segments 7 and 8. Paddock is also applying for at least \$100M Infrastructure for Rebuilding America (INFRA) grant for Segments 7 and 8, due Monday, March 4, 2019. The grant would cover components such as the LCR 20 bridge replacement, replacing railroad bridges, moving the Port of Entry, and building North I-25 Segments 7 and 8 to the full EIS alignment.

Martin requested high-quality community photos from TAC members for the *2045 RTP*. Martin stated the NFRMPO quarterly newsletter format is changing to a primarily online format and will contain a construction project spotlight.

Ready asked if the Call for Projects recommendations will be voted on at the March 7, 2019 Planning Council meeting. Klockeman responded they will and no presentation is required of projects sponsors.

MEETING WRAP-UP

Final Public Comment – There was no final public comment.

Next Month's Agenda Topic Suggestions – Discussion: more *2045 RTP* chapters, FY 2019-2022 TIP amendments, FY 2020-2023 Draft TIP; Action: FY2018 TIP Delay Review

Meeting adjourned at 2:50 p.m.

Meeting minutes submitted by:

Ryan Dusil, NFRMPO Staff

The next meeting will be held at 1:00 p.m. on Wednesday, March 20, 2019 at the Windsor Recreation Center, Pine Room.

AGENDA ITEM SUMMARY (AIS)

North Front Range Transportation & Air Quality Technical Advisory Committee (TAC)



Meeting Date	Agenda Item	Submitted By																				
March 20, 2019	March 2019 TIP Amendment	Medora Bornhoft																				
Objective/Request Action																						
To recommend Planning Council approval of the March 2019 TIP Amendment to the FY2019-FY2022 TIP.		<input type="checkbox"/> Report <input type="checkbox"/> Work Session <input type="checkbox"/> Discussion <input checked="" type="checkbox"/> Action																				
Key Points																						
NFRMPO staff received three Amendment requests for the March 2019 TIP Amendment cycle.																						
CDOT R4 is requesting to revise one project:																						
<ul style="list-style-type: none"> Revising the <i>North I-25: WCR38 to SH402</i> project by adding \$20M federal BUILD grant funds in FY19, rolling \$2M STP-Metro funds from the <i>I-25/Crossroads</i> project, and reducing SB267 state funds by \$88.8M in FY19. The STP-Metro funds were awarded to the <i>I-25/Crossroads</i> project in the FY2016-2019 Call for Projects held in 2014. There are two remaining STP-Metro projects that are not yet completed and have not been fully funded from the 2014 Call, including Greeley's <i>10th St Access Control Implementation</i> project with \$1,089K unfunded and <i>Fort Collins' US287 Intersection Improvements</i> project with \$1,168K unfunded. 																						
<table border="1"> <thead> <tr> <th>Funding Source</th> <th>Currently Programmed</th> <th>Requested Additions</th> <th>Requested Reductions</th> <th>Request Total</th> </tr> </thead> <tbody> <tr> <td>Federal</td> <td>\$0</td> <td>\$22,000</td> <td>\$0</td> <td>\$22,000</td> </tr> <tr> <td>State</td> <td>\$204,000</td> <td>\$0</td> <td>\$88,800</td> <td>\$115,200</td> </tr> <tr> <td>Total</td> <td>\$204,000</td> <td>\$22,000</td> <td>\$88,800</td> <td>\$137,200</td> </tr> </tbody> </table>			Funding Source	Currently Programmed	Requested Additions	Requested Reductions	Request Total	Federal	\$0	\$22,000	\$0	\$22,000	State	\$204,000	\$0	\$88,800	\$115,200	Total	\$204,000	\$22,000	\$88,800	\$137,200
Funding Source	Currently Programmed	Requested Additions	Requested Reductions	Request Total																		
Federal	\$0	\$22,000	\$0	\$22,000																		
State	\$204,000	\$0	\$88,800	\$115,200																		
Total	\$204,000	\$22,000	\$88,800	\$137,200																		
The Town of Timnath is requesting to add one project:																						
<ul style="list-style-type: none"> Adding the <i>Harmony Widening: Three Bell Pkwy to Latham Pkwy</i> project with \$7,200K local funds in FY19. 																						
<table border="1"> <thead> <tr> <th>Funding Source</th> <th>Currently Programmed</th> <th>Requested Additions</th> <th>Request Total</th> </tr> </thead> <tbody> <tr> <td>Local</td> <td>\$0</td> <td>\$7,200</td> <td>\$7,200</td> </tr> <tr> <td>Total</td> <td>\$0</td> <td>\$7,200</td> <td>\$7,200</td> </tr> </tbody> </table>			Funding Source	Currently Programmed	Requested Additions	Request Total	Local	\$0	\$7,200	\$7,200	Total	\$0	\$7,200	\$7,200								
Funding Source	Currently Programmed	Requested Additions	Request Total																			
Local	\$0	\$7,200	\$7,200																			
Total	\$0	\$7,200	\$7,200																			
The Town of Windsor is requesting to add one project:																						
<ul style="list-style-type: none"> Adding the <i>Harmony Widening: Latham Pkwy to WCR 15</i> project with \$6,400K local funds in FY19. 																						
<table border="1"> <thead> <tr> <th>Funding Source</th> <th>Currently Programmed</th> <th>Requested Additions</th> <th>Request Total</th> </tr> </thead> <tbody> <tr> <td>Local</td> <td>\$0</td> <td>\$6,400</td> <td>\$6,400</td> </tr> <tr> <td>Total</td> <td>\$0</td> <td>\$6,400</td> <td>\$6,400</td> </tr> </tbody> </table>			Funding Source	Currently Programmed	Requested Additions	Request Total	Local	\$0	\$6,400	\$6,400	Total	\$0	\$6,400	\$6,400								
Funding Source	Currently Programmed	Requested Additions	Request Total																			
Local	\$0	\$6,400	\$6,400																			
Total	\$0	\$6,400	\$6,400																			
Committee Discussion																						
This is the first and only time TAC will see the March 2019 TIP Amendment.																						

Supporting Information

The 30-day Public Comment period for the March 2019 TIP Amendment begins on March 13, 2019 and concludes on April 11, 2019.

An environmental justice analysis is provided for the two projects being added to the TIP.

Funding Types and Uses

STP-Metro was a federal funding program available prior to the FAST Act. STP-Metro provided flexible funding for a variety of projects, including roadway preservation, roadway improvement, bridge and tunnel projects, pedestrian and bicycle infrastructure, transit capital projects, and transportation planning studies. These funds may be used for any roads functionally classified as collector or above including National Highway System (NHS) roads. The FAST Act replaced the STP Metro program with the Surface Transportation Block Grant program (STBG).

The Better Utilizing Investments to Leverage Development, or BUILD Transportation Discretionary Grant program, provides federal grant funds to build and repair critical pieces of the freight and passenger transportation networks. The BUILD program replaces the Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grants.

SB267, enacted during the 2017 legislative session, authorizes \$1.8B over four years to transportation projects. Funding must be used on Tier 1 projects on the CDOT 10-Year Development Program, 25 percent must be spent on projects in rural counties, and 10 percent of funding is dedicated to transit projects.

SB1, enacted during the 2018 legislative session, provides additional funding to the state highway fund, increases the Highway Users Tax Fund (HUTF) allocation to counties and municipalities, and creates a new multimodal fund for transit projects, operating expenses, or studies.

Advantages

TAC recommending approval by the NFRMPO Planning Council will ensure available funds are assigned to projects in a timely manner and the FY2019-2022 TIP remains fiscally constrained.

Disadvantages

None noted.

Analysis/Recommendation

Staff supports the March 2019 TIP Amendment to the FY2019-2022 TIP.

Attachments

- March 2019 Policy Amendment Form
- Environmental Justice Analysis and Map

Rev. 11/28/2018

FY 2019 - FY 2022 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

North Front Range Transportation & Air Quality Planning Council

Policy Amendment #2019-A3

Prepared by: Medora Kealy

DATE: 3/13/2019

Submitted to: TAC and Planning Council for Approval

Dollars Listed in Thousands

Funding Program / STIP ID	NFR TIP Number	Project Title/Location	Project Sponsor	Improvement Type	Source of Funds	Funding Type/ Program	Dollars Listed in Thousands					FY 19-22 TIP TOTAL	
							Previous Funding	Rolled Funding	FY 19	FY 20	FY 21		FY 22
Strategic													
PREVIOUS ENTRY SSP4428.014	2019-014	North I-25: WCR38 to SH402 MP 247 - 255.23	CDOT Region 4	Modify & Reconstruct	State	SB1	-	-	39,000	-	-	-	39,000
					State	SB267	-	-	165,000	-	-	-	165,000
					Total		-	-	204,000	-	-	-	204,000
REVISED ENTRY SSP4428.014	2019-014	North I-25: WCR38 to SH402 MP 247 - 255.23	CDOT Region 4	Modify & Reconstruct	Federal	BUILD	-	-	20,000	-	-	-	20,000
					Federal	STP-Metro	-	2,000	-	-	-	-	2,000
					State	SB1	-	-	39,000	-	-	-	39,000
					State	SB267	-	-	76,200	-	-	-	76,200
					Total		-	2,000	135,200	-	-	-	137,200
Project Description:		One new express lane in each direction from SH56 to SH402. Replacement/rehabilitation of key bridges, ITS, transit & safety components, replacement of portions of existing facility, and interchange improvements.											
Reason:		Funding adjustment: reducing \$88,800,000 in FY19 SB267 state funding, rolling \$2,000,000 federal STP-Metro from STIP ID: SSP4428.004 (I-25 / Crossroads) from FY18-21 TIP, and adding \$20,000,000 Federal BUILD grant in FY19.											
Local													
NEW ENTRY	2019-021	Harmony Widening: Three Bell Pkwy to Latham Pkwy	Timnath	Widening	Local	Local	-	-	7,200	-	-	-	7,200
					Total		-	-	7,200	-	-	-	7,200
Project Description:		Widening Harmony Road from two lanes to four lanes with bike lanes and intersection improvements at Club Drive & Latham Parkway.											
Reason:		New project											
NEW ENTRY	2019-022	Harmony Widening: Latham Pkwy to WCR 15	Windsor	Widening	Local	Local	-	-	6,400	-	-	-	6,400
					Total		-	-	6,400	-	-	-	6,400
Project Description:		Widening Harmony Road (WCR 74) from two lanes to four lanes with bike lanes and intersection improvements at Latham Pkwy, Duncroft Dr & WCR 15.											
Reason:		New project											

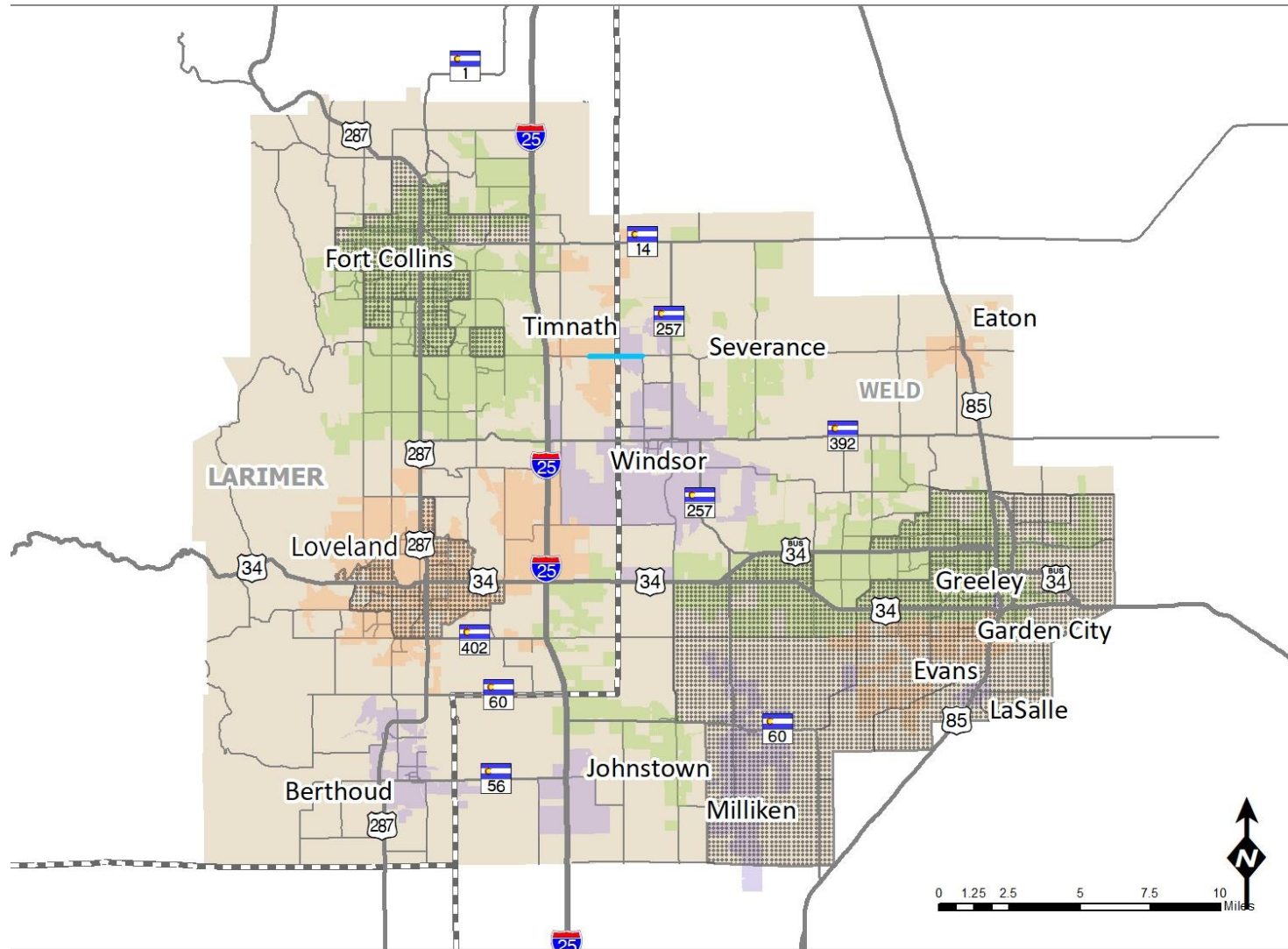
NFRMPO March 2019 TIP Amendment - Environmental Justice Analysis

Projects are identified by Name, Project Sponsor, Improvement Type, and Funding Program

	Harmony Widening: Three Bell Pkwy to Latham Pkwy, Widening, Timnath, Local	Harmony Widening: Latham Pkwy to WCR 15, Widening, Windsor, Local
Project already in the TIP - Yes or No	No	No
Project located 1/4 mile from areas that are above county average for Hispanic, minority, and/or low income	No	No
Bodily impairment, infirmity, illness, or death	No	No
Air, noise and water pollution and soil contamination	Yes	Yes
Destruction or disruption of man-made or natural resources	Yes	Yes
Destruction or diminution of aesthetic values	No	No
Destruction or disruption of community cohesion or a community's economic vitality	No	No
Destruction or disruption of the availability of public and private facilities and services	No	No
Vibration	Yes	Yes
Adverse employment effects	No	No
Displacement of persons, business, farms or non profit organizations	No	No
Increased traffic congestion, isolation, exclusion, or separation of minority or low-income individuals within a given community or from the broader community	No	No
Denial of, reduction in, or significant delay in the receipt of benefits of DOT programs policies, or activities.	No	No

Note: The remaining project in the March 2019 TIP Amendment is not impacting a new location.

March 2019 TIP Amendment, FY19-22 TIP



Legend

-  Environmental Justice Areas
-  Roadway Widening
-  County Boundary
-  NFRMPO Boundary



March 2019
Sources: CDOT, NFRMPO

MEMORANDUM

To: NFRMPO Technical Advisory Committee

From: Medora Bornhoft

Date: March 20, 2019

Re: FY2018 Transportation Improvement Program (TIP) Project Delay Review - Action

Background

The FY2018 TIP Project Review was a Discussion Item at the September 19, 2018 and February 20, 2019 TAC meetings. Planning Council discussed projects with a second delay at their March 7, 2019 meeting.

The TIP Project Delay Procedure promotes the effective and timely use of federal funds by ensuring projects receiving Congestion Mitigation and Air Quality (CMAQ), Surface Transportation Block Grant (STBG), and/or Transportation Alternative (TA) funds (or their equivalents in past or future federal surface transportation legislation) are making progress.

The TIP Delay Procedure is identified in the FY19-22 Transportation Improvement Program (TIP). “Delay” is defined as:

- when a construction-related project is not advertised during the fiscal year assigned in the TIP; or
- when a non-construction project or program is not issued a “Notice to Proceed” (NTP) during the fiscal year programmed in the TIP.

The TIP Delay Procedure allows TAC to recommend a one-year extension for projects if CDOT can guarantee the funds in the next fiscal year. If a project requires a second extension, TAC may either (1) recommend Planning Council issue a second extension, or (2) recommend Planning Council remove the funds from the project and either return the funds to the pool or fund another project.

In August and September 2018, sponsors provided project status information for projects initially programmed in FY18 or earlier, summarized in **Table 1**. Information for projects with a second delay was updated by project sponsors in March 2019. There are seven projects that are fully delayed and one project that has delayed components. The “Initial Program Year in TIP” identifies the first year the project was programmed, and the “Project Status Comments” identify other project milestones. The “2017 Review Outcome” identifies if the project received its first extension in 2017. Of the eight delayed projects, two were granted a one-year extension during the 2017 Project Review: Loveland’s *US287 & US34 VMS Signs* project and a portion of Weld County’s *CNG Vehicles & Expansion* project.



Action

Staff recommends TAC issue a one-year extension to the seven projects with first time delays. For the two delayed projects that have already received their first extension, staff requests TAC recommend Planning Council grant a second one-year extension.



Table 1. 2018 TIP Project Delay Review

PROJECT NAME	SPONSOR	FUNDING PROGRAM	INITIAL PROGRAM YEAR IN TIP	AD DATE (unless otherwise specified)	PROJECT STATUS COMMENTS	Federal Funds Programmed in FY16-19 (in thousands)	2017 Review Outcome	2018 Delay Status
US 85 Access Cntrl at 31st Street	Evans	STP Metro	FY12	-	ROW Plans Complete, acquiring ROW acquisition contractor	746	(a)	1 st Delay
35th Ave: Prairie View to 37th St	Evans	STP Metro	FY14	August 15, 2018	Bids due Sept. 6, 2018	1,115	1 st Extension	<i>Not Delayed</i>
US287 (N College) Ped Bridge & Path	Fort Collins	CMAQ	FY14	Anticipated Q4 2018	The project design and ROW phases are complete. Relocations are underway to move utilities out of the CDOT ROW. The project is dependent upon CDOT reconstructing the roadway prior to the City of Fort Collins project. The City and CDOT are meeting in early Sept. to finalize construction schedules.	174	(b)	1 st Delay
10th Street Phase II Construction	Greeley	STP Metro	FY15	2/15/2019	Bids are due March 13 th .	378	1 st Extension	<i>Not Delayed</i>
LCR 17 Expansion	Larimer County / Berthoud	STBG	FY18	Anticipated February 2019	Project delayed due to additional scope (storm sewer).	1,866	N/A	1 st Delay
Loveland Traffic Optimization	Loveland	CMAQ	FY16	NTP Received	Partial Equip Received.	380	1 st Extension	<i>Not Delayed</i>
Loveland CNG Vehicle Replacement	Loveland	CMAQ	FY17	-	On hold due to BA Waiver suspension.	256	(c)	1 st Delay
US 287 & US 34 VMS Signs	Loveland	CMAQ	FY15	Anticipated October 2019	IGA Complete. CDOT Region 4 Traffic policy review underway.	497	1 st Extension	2 nd Delay
Loveland I-25/US 34/Crossroads VMS	Loveland	CMAQ	FY11	Construction Complete	-	370	(d)	<i>Not Delayed</i>



PROJECT NAME	SPONSOR	FUNDING PROGRAM	INITIAL PROGRAM YEAR IN TIP	AD DATE (unless otherwise specified)	PROJECT STATUS COMMENTS	Federal Funds Programmed in FY16-19 (in thousands)	2017 Review Outcome	2018 Delay Status
COLT CNG Bus Replacement	Loveland	CMAQ	FY18	Anticipated NTP Late Fall 2018	Working with CDOT Local Agency Group on IGA.	726	N/A	1 st Delay
US34 Widening: Denver Ave to Boyd Lake Ave	Loveland	STBG	FY18	Anticipated 2/1/2019	Working with CDOT Local Agency Group on IGA.	2,320	N/A	1 st Delay
Weld County CNG Vehicles & Expansion	Weld County	CMAQ	FY16- FY17	8/2/2017	<u>CNG Station</u> - CNG station upgrades are near completion.	\$961	<i>Not Delayed</i>	
				8/11/2016	<u>2016 Vehicle Purchase</u> - Contract approved in 2016 and five vehicles purchased.	\$189	<i>Not Delayed</i>	
				2/6/2019	<u>2019 Vehicle Purchase</u> - BA Waiver for one vehicle approved in April 2018. Includes \$98K for three heavy-duty (Class 8) vehicle conversions which may not be procurable.	\$134	1 st Extension	<i>Not Delayed</i>
				-	<u>FY16-17 Remaining Vehicles</u> - On hold due to BA Waiver suspension.	\$2,230	1 st Extension	2 nd Delay
			FY18	-	<u>FY18 Vehicles</u> - On hold due to BA Waiver suspension.	\$888	-	1 st Delay
			FY19	-	<u>FY19 Vehicles</u> - On hold due to BA Waiver suspension.	\$901	<i>Not Delayed</i>	

- (a) Project was erroneously considered not delayed in 2017 review based on NTP milestone.
- (b) Project was rolled forward to FY18 in July 2017 and was not included in the 2017 review.
- (c) Project sponsor returned the FY17 funding so project did not require an extension in 2017.
- (d) Project was rolled forward to FY18 in July 2017 and was not included in the 2017 review

AGENDA ITEM SUMMARY (AIS)

North Front Range Transportation & Air Quality Technical Advisory Committee (TAC)



Meeting Date	Agenda Item	Submitted By
March 20, 2019	Greeley STBG Project Adjustment Request	Becky Karasko Allison Baxter
Objective/Request Action		
<p>Discuss the project scope change request submitted by the City of Greeley for the STBG project funds awarded for a capacity project on O Street between 11th Avenue and WCR 37 to a roundabout at 59th Avenue and O Street.</p>		<input type="checkbox"/> Report <input type="checkbox"/> Work Session <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Action
Key Points		
<ul style="list-style-type: none"> • Greeley submitted the O Street project in the 2016 Call for Projects and \$1,431,535 federal funds were awarded to the project. • In 2017, the US85 PEL study recommended the closure of O Street east of US85. Due to the loss of access east of US85, the original project scope is no longer necessary and would not be a good use of funds. • Of the six STBG applications submitted to the 2016 Call, two received full funding and four received partial funding. Excluding the O Street project, which received partial funding, the other three partially funded projects have \$931,140 in unfunded requests. • On February 20, 2019, Greeley submitted an application for the <i>59th Avenue and O Street Roundabout</i> project to NFRMPO staff. 		
Committee Discussion		
<p>This is the second time TAC will discuss this item.</p>		
Supporting Information		
<p>As outlined in the US 85 PEL Study, which was adopted in 2017 and provides a long-range vision for US 85, O St access to the east of 85 is to be eliminated and access moved to CR66 and US 85. In addition to this, since 2016 when the original project scope was submitted and awarded, Weld County and Colorado Department of Transportation (CDOT) have worked together with the Union Pacific Railroad to escalate this closure. Although an official closure date is yet to be finalized, in 2018 the City of Greeley began to look at alternatives to the vision of O Street and how it could better serve as an alternative for east/west movement. The City of Greeley is requesting approval to change the scope of the project as originally awarded from a capacity project to the construction of a roundabout at the intersection of O Street and 59th Avenue.</p>		
Advantages		
<p>The new project scope would be located on a more viable section of O Street 3.2 miles west of the original project location and will improve traffic flow on two regionally significant corridors rather than one.</p>		
Disadvantages		
<p>None noted.</p>		
Analysis/Recommendation		
<p>Staff requests TAC members review the attached application, evaluate the new project scope for reasonableness and eligibility, and discuss the scope change request.</p>		
Attachments		
<ul style="list-style-type: none"> • STBG Application for 59th Avenue and O Street Roundabout Project Scope Change • 2016 Call for Projects STBG Project Eligibility Requirements 		

Rev. 11/28/2018



OFFICE OF BOARD OF COMMISSIONERS
PHONE: 970-336-7204
FAX: 970-336-7233
1150 O STREET
P.O. BOX 758
GREELEY, COLORADO 80632

February 19, 2019

Suzette Mallette
MPO Executive Director
North Front Range Metropolitan Planning Organization
419 Canyon Ave. Suite 300
Fort Collins, CO 80521

RE: Support of STBG Project Adjustment Request

Dear Suzette Mallette:

The Weld County Commissioners are pleased to continue collaboration with the City of Greeley on the O Street/Crossroads Boulevard corridor vision. The county is supportive of the City's project adjustment request to transfer funds from the O Street road widening project to a roundabout at 59th Ave and O Street.

The O Street corridor is vital for transportation in Weld County as well as in the NFRMPO region. We believe the proposed project has an equivalent if not improved regional benefit. This project will assist Weld County residents by improving the quality and safety of a highly used intersection on O Street.

This partnership is consistent with our goal of promoting roadway quality, functionality and safety for the traveling public. The county has committed to financially support this project and in addition to the \$35,000 match provided for this project in 2016, the county will contribute their proportional share of 25% of the total project cost.

Thank you for your consideration, and if you have any questions, please feel free to contact us.

Sincerely,

BOARD OF COUNTY COMMISSIONERS


Barbara Kirkmeyer, Chair

c: Weld Public Works – Elizabeth Relford/Dawn Anderson
Weld Finance – Don Warden



City Manager's Office
City Hall
1000 10th Street
Greeley, Colorado 80631
Phone: 970-350-9770
Fax: 970-350-9828

January 31, 2019

Suzette Mallette
MPO Executive Director
North Front Range Metropolitan Planning Organization
419 Canyon Ave. Suite 300
Fort Collins, CO 80521

RE: Support of request to shift STBG project funding

Dear Ms. Mallette,

I am writing to express my support of the request to shift Surface Transportation Block Grant (STBG) funding from the O St Widening-11th Ave to WC 37 project to the 59th (CR 31) Avenue and O Street Roundabout project. Improvements to this intersection are of high importance to both the City of Greeley and Weld County. We believe it is important to consider CDOT's recommendation to close O St at US 85; because O St will be closed at the US 85 junction, widening an adjacent segment of roadway no longer presents itself as a wise investment. Therefore we request that grant funding be used in an area of equal need for improvements, which will serve more regional traffic, and provide greater delay and emission reduction.

Improvements to this intersection are identified in the City of Greeley's 2035 Comprehensive Transportation Plan based on forecasted traffic volumes and existing infrastructure needs. Furthermore, the proposed roundabout is consistent with a number of MPO regional transportation goals including increasing mobility, safety, and system reliability. 65th Avenue is Regionally Significant Corridor as defined in the 2040 Regional Transportation Plan that will continue to grow as a north south connection and O St is an RSC that is important for both local and regional travel.

Matching grant funds and overmatch funds will come from the City's 2019-2023 CIP project list.

I offer my full support for the City of Greeley's request to shift project funding.

Sincerely,

A handwritten signature in black ink, appearing to read "Roy Otto", is written over a horizontal line.

Roy Otto

STBGP Project Application Narrative



Applicant Information			
Project Sponsor Agency:	Agency Contact:	Telephone:	Email Address:
City of Greeley	Allison Baxter	970-350-9326	Allison.baxter@greeleygov.com
Project Name (160 character limit):	City:	State:	Zip Code:
59 th Ave and O St Roundabout	Greeley	CO	80524
Additional Financial Sponsors (if applicable):			
Weld County			
<p>Please provide a short narrative describing the project so the scoring committee can determine if the Performance Measure selected is appropriate.</p> <p>The 59th/65th Avenue and O St roundabout project will improve traffic flow at a key regional traffic junction. 59th Avenue and O Street provides significant regional north/south and east/west connectivity. 59th Ave extends for 16 miles from SH 14 south to 37th St, and O St extends east from US 85 to 83rd Ave, with the goal of eventually making a connection to Crossroads Boulevard and I-25. This connectivity explains why this is the highest volume intersection along O St.</p> <p>The existing facility is a four-way stop-sign controlled intersection serving approximately 12,000 vehicles per day that operates at a level of service D during PM peak hour. The roundabout will provide approximately 41 hours of delay reduction per day, 15,000 hours per year, and improve the quality of life for residents through improved travel times. This intersection is currently a choke point along O St, but with intersection improvements, travel times along the existing corridor will be noticeably improved.</p> <p>The conceptual design is a two lane roundabout with pedestrian/bike refuges. While O St remains two lanes, the roundabout would be striped down to a single lane until road widening occurred.</p>			

STBGP Project Application



Applicant Information

Project Sponsor Agency: City of Greeley	Agency Contact: Allison Baxter	Telephone: 970-350-9326	Email Address: allison.baxter@greeleygov.com
Mailing Address: 1300 A St, Building H		City: Greeley	State: CO
Zip Code: 80524			
Additional Financial Sponsors (if applicable): Weld County			

Project Description

Project Name (160 character limit): 59th Ave and O St Roundabout	Jurisdiction(s): Greeley and Weld County
Project Limits (to and from): 165 ft on each approach of the intersection	Project Length (miles): .03x.03 miles
Is this part of an ongoing project? If so, please describe. No	

Project Description:
 The 59th/65th Avenue and O St roundabout project will improve traffic flow at a key regional traffic junction. 65th Avenue and O Street is the only intersection along the Crossroads corridor that provides regional north/south and east/west connectivity. 59th Ave extends for 16 miles from SH 14 south to 37th St, and O St extends east from US 85 to 83rd Ave, with the goal of eventually making a connection to Crossroads Boulevard and I-25. This connectivity explains why this intersection has the highest volume of any intersection along O St.

The existing facility is a four-way stop-sign controlled intersection serving approximately 12,000 vehicles per day that operates at a level of service D during PM peak hour. The roundabout will provide approximately 42 hours of delay reduction per day and improve the quality of life for residents through improved travel times. 59th Ave is currently a choke point along O St, but with intersection improvements, travel times along the existing corridor will be noticeably improved.

The conceptual design is a two lane roundabout with pedestrian/bike refuges. While O St remains two lanes, the roundabout would be striped down to a single lane until road widening occurred.

Project Planning

What 2040 Regionally Significant Corridor is the project on?
#23-Crossroads Boulevard and #20-65th Avenue (59th Ave)

How does the project fit with the 2040 NFRMPO Regional Transportation Plan Corridor Vision?
The project will increase mobility through improved commuter access both east/west and north/south. The roundabout will also facilitate pedestrian movement with the addition of center refuge medians, and help reduce serious crashes and vehicle emissions.

2040 Goals, Objectives, Performance Measures, and Targets

MPO Goal(s)	Performance Measure(s)	Project Impact
1,2, and 4	4-Truck travel reliability 5- VOC, CO, NOx reduction	The project will improve safety and mobility along O St and 59th Avenue. Reduced delays will result in reduced vehicle emissions. Serious crashes are also shown to be addressed with roundabout installation.

How does the project support the MPO Goal? (Please attach all relevant data)
The project will improve the quality of life through improved access and reduced delays. It will also help reduce emissions, please see the attached emissions calculator tool that was filled out for the proposed project. The roundabout will improve travel time reliability both north/south on 59th Ave and east/west on O St. Through reduced congestion, freight movement will also be improved.

Scoring Criteria

Safety

Total Number of Accidents (separated by severity):

9 crashes have occurred from 2012-2017

Time Period of Accident Data (at least three years):

2012-2017

Source of Data:

DiExsys

ADT on facility (if intersection, please provide ADT on all legs):

NB:4,040 SB:3,945 EB:2,550 WB:1,865 (2018)

Please describe the type of accidents that are occurring (rear-end, broadside etc.) and to what extent the project will address these issues. Also please add any additional safety information that is relevant to the project and not reflected in the data:

1-overturning; 3-broadside; 2-rear-end; 2-approach turn; 1-fixed object. The crashes involved vehicles traveling north and east. Most were 'going-straight', while two crashes involved left-turning vehicles. One crash resulted in serious injury, the remaining were property damage only. No impairment was suspected in any of the crashes.

Mobility

Please describe how the project improves mobility.

The 59th Ave and O St intersection serves both regional and local traffic; 59th Ave is a north/south regional route that extends from SH14 south to 37th St, O St will eventually provide an east/west connection from Weld County Parkway to I-25.

System Preservation

Pavement Condition Index Type:

59th Ave- PQI 57 O St- PQI 62

Please describe the pavement condition and how this project will impact / address system preservation.

The pavement quality at the intersection is in reasonably good condition.

Partnerships

How many financial partners does the project have?

Weld County provided a 10% partnership match on the original project and has provided a letter of support for the shift in project funding. They have helped produce conceptual designs as well as the cost estimate for the project. If approved they have agreed to support 25% of the total project cost.

Funding			
	Source	Amount	Date Available
Federal Request	ST••••		2020
	ST••••	\$1,329,008	2021
Local Match		354,417	
		35,000	
Local Over Match		5,194,517	
Other Funding			
State Funding	CDOT	0	
Environmental Considerations			
What type of environmental clearance is anticipated? (Categorical Exclusion, Environmental Assessment, Environmental Assessment)			
Anticipated Project Milestone Dates			
			Month-Year. (or N/A)
Completion of CDOT/Sponsor IGA (Intergovernmental Agreement) (Minimum of 6-8 months)			n/a
FIR (Field Inspection Review) (Minimum of 3-12 months)			4/2020-4/2021
FOR (Final Office Review) (Minimum of 3 months)			4/2021-7/2021
Utility Clearance (Minimum of 1 month)			7/2021-8/2021
Right-of-Way Clearance (Minimum of 12-18 months if acquiring)			8/2021-6/2022
Environmental Clearance (Minimum of 6-8 months)			8/2021-4/2022
Advertisement Date (Minimum of 3 months)			6/2022-9/2022

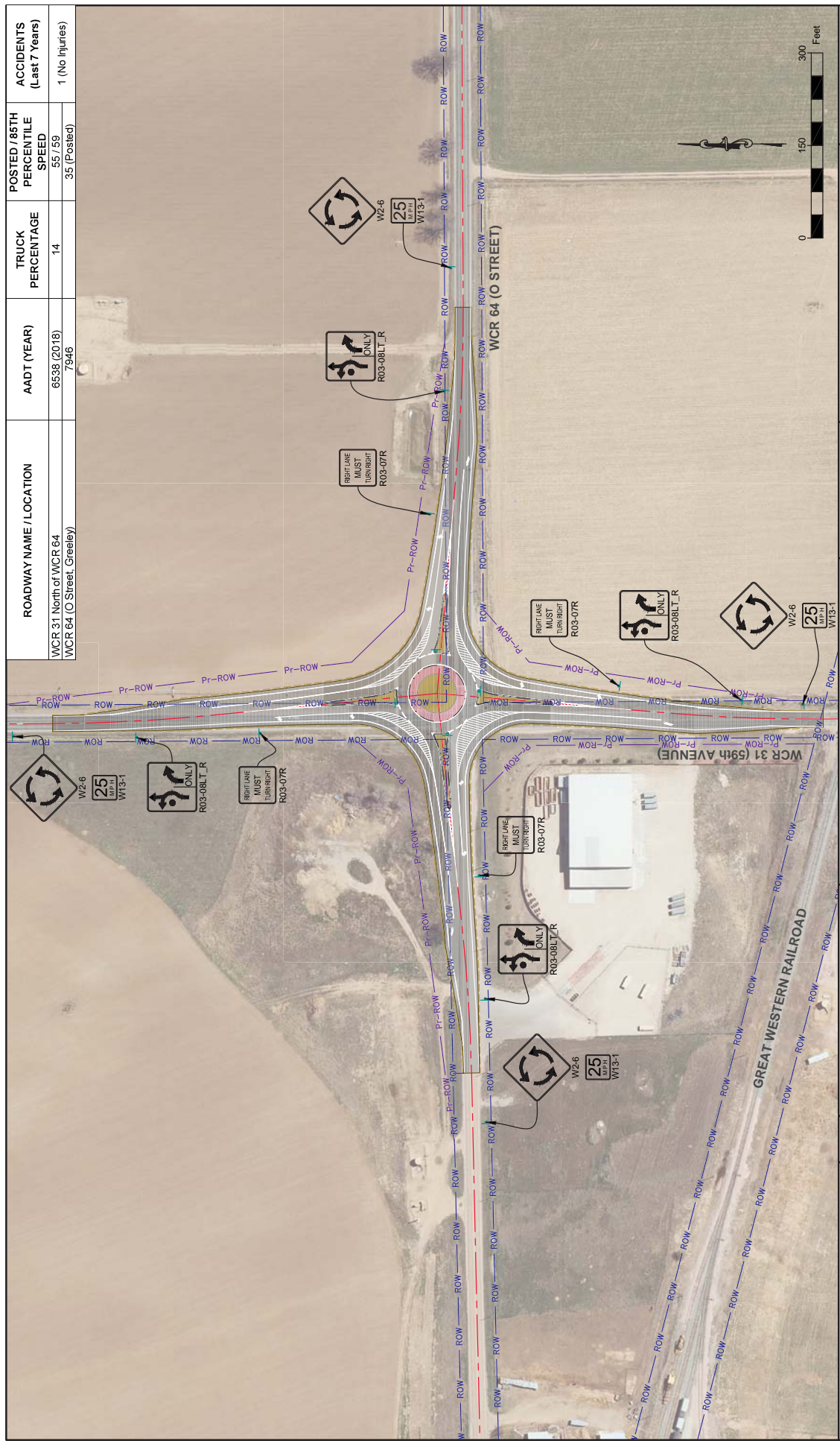
**WELD COUNTY PUBLIC WORKS DEPARTMENT
BUDGET STATUS UPDATE**



Project Name	CR 31 (59th Ave.)(Joint Project with Gree
Project Limits	WCR 64 AND WCR 31
DATE	29-Oct-18
TOTAL BUDGET AMOUNT	\$2,760,000
CONSTRUCTION SUBTOTAL	\$950,000
ENGINEERING SUBTOTAL	\$150,000
ESTIMATED BALANCE REMAINING	\$1,660,000
LENGTH (MILES)	0.82
Contracted Design/Build	
	DESIGN 2020
	R.O.W. 2021
	CONST. 2022

CONSTRUCTION COSTS	UNIT	UNIT COST	QUANTITY	TOTAL
Mobilization	LS	\$250,000.00	1	\$250,000
Clearing, Grubbing and Removals	ACRE	\$5,600.00	11.0	\$61,612
Unclassified Excavation	CY	\$10.57	18,047	\$190,756
Asphalt HMA PG64-22 (7")	TON	\$90.00	1,523	\$137,044
Asphalt HMA PG64-28 (2")	TON	\$105.00	435	\$45,681
ABC Class 6 Base Course (6" depth)	TON	\$27.03	9,281	\$250,874
Drainage and Erosion Control	LS	\$250,000.00	1	\$250,000
Traffic Control and Signage	LS	\$200,000.00	1	\$200,000
Concrete 11"	SY	\$77.00	11,602	\$893,325
Tensar - Triax 160	SY	\$13.50	15,469	\$208,829
Fencing	LF	\$25.50	8,872	\$226,236
Irrigation	LS	\$950,000.00	1	\$950,000
Other Minor Items and Contingencies	LS	\$2,714,357.75	18%	\$488,584
			<i>Subtotal</i>	<i>\$4,152,942</i>
ENGINEERING, ROW AND UTILITY COSTS	UNIT	UNIT COST	QUANTITY	TOTAL
Design/Survey	LS	\$200,000	1	\$200,000
Utilities	LS	\$660,000	1	\$1,060,000
ROW/Easements Acquisition (140')	ACRE	\$50,000 + Damages	8.0	\$1,200,000
Weld County Labor and Equipment	LS	\$150,000	1	\$150,000
Weld County Construction Inspection	LS	\$150,000	1	\$150,000
			<i>Subtotal</i>	<i>\$2,760,000</i>

TOTAL FOR ROUNDABOUT \$6,912,942



ROADWAY NAME / LOCATION	AADT (YEAR)	TRUCK PERCENTAGE	POSTED /85TH PERCENTILE SPEED	ACCIDENTS (Last 7 Years)
WCR 31 North of WCR 64	6538 (2018)	14	55 / 59	1 (No Injuries)
WCR 64 (O Street, Greeley)	7946		35 (Posted)	

Computer File Information		Index of Revisions		WELD COUNTY		As Constructed		WCR 64 - WCR 31 INTERSECTION INTERSECTION PLAN		Project No./Code	
Creation Date:	10/30/2018	Date:	-	PUBLIC WORKS DEPARTMENT		No Revisions:		Designer:		PW	
Last Modified Date:	10/30/2018	Comments:	-	111 W. STATE STREET		Revised:		Dataller:		PW	
Full Path:	W:\CIP\2018\DRAWINGS\PLAN SHEETS	Initials:	-	GREELY, CO. 80534-000		Void:		Sheet Subst:		Sheet Number 36 of 83	
Drawing File Name:	WCR 64 AND WCR 31 INTERSECTION.DWG		-	PHONE: (970) 365-2400				Sheet Subst:		CIP 2018	
AutoCAD Version:	2016		-	FAX: (970) 304-6487				Sheet Subst:		CIP 2018	
			-					Sheet Subst:		CIP 2018	
			-					Sheet Subst:		CIP 2018	
			-					Sheet Subst:		CIP 2018	

Roundabouts

This calculator will estimate the emission reductions resulting from building a roundabout at an intersection

INPUT

EXISTING CONDITIONS

Evaluation Year	2018
Area Type	Rural
Business District	No
Total peak hours per day(AM+PM)	4 hours

Existing intersection is Un-signalized
 Please input approaches in CLOCKWISE direction for existing intersection. If the intersection only has three approaches, put '0' for 'Average Annual Daily Traffic (AADT)' for Approach 4

	Approach 1	Approach 2	Approach 3	Approach 4	
Average Annual Daily Traffic volume (AADT)	4,040	3,945	2,550	1,865	
Peak-hour Volume	400	400	300	180	veh/hr
Truck Percentage	18%	18%	18%	18%	
Existing Delay per Vehicle	35	35	35	35	sec/veh
Number of Lanes	1	1	1	1	
Existing Intersection % Left Turns	10%	11%	28%	19%	
Existing Intersection % Right Turns	3%	6%	16%	10%	

Use the table below to estimate delay (HCM 2010, Exhibits 18-4, 19-1)

LOS	Delay (s/veh)	
	Unsignalized Intersection	Signalized Intersection
A	0 - 10	0 - 10
B	>10 - 15	>10 - 20
C	>15 - 25	>20 - 35
D	>25 - 35	>35 - 55
E	>35 - 50	>55 - 80
F*	>50	>80

*LOS F typically indicates that traffic demand has exceeded capacity

PROPOSED CONDITIONS

Number of Circulating Roundabout Lanes	2
--	---

Last Updated: 1/31/2019 1:48:52 PM

OUTPUT

Calculate Output

PERFORMANCE

Approach	PEAK-HOUR				OFF-PEAK			
	1	2	3	4	1	2	3	4
Proposed Capacity	782	676	679	750	904	861	866	750
Volume	400	400	300	180	122	117	68	57
Delay Reduction per vehicle	23.1	19.3	23.4	27.5	4.3	4.3	4.6	4.6
	Approach				Approach			
	1	2	3	4	1	2	3	4
Approach Delay Reduction per day	13.2	11.4	9.5	7.0	hours			
Total Roundabout Delay Reduction per day	41.1 hours							

EMISSION REDUCTIONS

Pollutant	Peak Hours Kilograms/day	Off-Peak Hours Kilograms/day	Total Kilograms/day
Carbon Monoxide (CO)	0.352	0.098	0.450
Particulate Matter <2.5 µm (PM _{2.5})	0.024	0.081	0.105
Particulate Matter <10 µm (PM ₁₀)	0.026	0.007	0.034
Nitrogen Oxide (NOx)	0.334	0.093	0.427
Volatile Organic Compounds (VOC)	0.065	0.018	0.083

Surface Transportation Block Grant Program (STBGP)

Project eligibility requirements:

- If project touches a state highway, sponsor must get a CDOT letter of support even if CDOT does not provide funding
- Regionally Significant Corridor from the 2040 NFRMPO Regional Transportation Plan (RTP)
- Consistent with the 2040 RTP Visions
- Addresses at least one 2040 RTP Performance Measure
- Local match of 17.21 percent (exceptions noted below)
- Complies with applicable local land use plans or current corridor studies, if available
- Project must be within the NFRMPO Boundary (include map in application to show project location)
- Project must complete a construction or an implementation phase
- Federal request cannot be less than \$100K
- Sponsors can only apply for projects equal to the funding shown on the Community Targets Table (see page 2)

All projects must be included on the project list template. Projects will be scored using the following criteria.

Evaluation Criterion	Possible Points	
	Small	Large
Safety	25	50
Mobility (multi-modal, congestion, reliability, continuity, etc.)	25	45
System Preservation (maintaining the current system based on current pavement condition)	25	0
Partnerships (Each partner must contribute at least 10% of the local match requirement)	25	5
TOTAL	100	

Note: Certain safety improvements as listed in 23 U.S.C. 120(c)(1) (traffic control signalization, maintaining minimum levels of retro-reflectivity of highway signs or pavement markings, traffic circles/roundabouts, safety rest areas, pavement marking, shoulder and centerline rumble strips and stripes, commuter carpooling and vanpooling, rail-highway crossing closure, and installation of traffic signs, traffic lights, guardrails, impact attenuators, concrete barrier end treatments, breakaway utility poles, or priority control systems for emergency vehicles or transit vehicles at signalized intersections) may have a Federal share of 100%, but this provision is limited to 10% of the total funds apportioned to a State under 23 U.S.C. 104.

AGENDA ITEM SUMMARY (AIS)

North Front Range Transportation & Air Quality Technical Advisory Committee (TAC)



Meeting Date	Agenda Item	Submitted By
March 20, 2019	Draft FY 2020-2023 Transportation Improvement Program (TIP)	Medora Bornhoft
Objective/Request Action		
To review and discuss the Draft FY 2020-2023 TIP.		<input type="checkbox"/> Report <input type="checkbox"/> Work Session <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Action
Key Points		
<ul style="list-style-type: none"> • The FY 2020-2023 TIP includes federally funded and/or regionally significant surface transportation projects programmed to receive funding in fiscal years (FY) 2020 through 2023. • All projects with funding in FY 2020-2022 in the current FY 2019-2022 TIP were carried forward to the Draft FY 2020-2023 TIP. • In addition, the Draft FY 2020-2023 TIP includes projects submitted during the January 22 – February 12 submission window and projects awarded funding in the FY 2022-2023 Call for Projects. • A call for roll-forwards will be held in the summer to roll unbudgeted FY 2019 funding into FY 2020. • The policies and procedures in the FY 2020-2023 TIP are carried forward from the FY 2019-2022 TIP. However, the following has been updated: <ul style="list-style-type: none"> ○ Clarified the TIP Delay Procedure by referencing the milestone dates in the project application instead of the year assigned/programmed in the TIP. ○ Clarified the length of a capacity project that requires an Amendment from “travel lane at least one mile in length” to “two lane miles”, which reflects how the length has been interpreted. ○ Added a description of the Annual Listing of Obligated Projects (ALOP). ○ Revised the Project Prioritization and Selection section to reflect the outcomes of the FY 2020-2021 Call for Projects and the FY 2022-2023 Call for Projects ○ Expanded the Transportation Performance Management (TPM) section to reflect the targets adopted by the NFRMPO. ○ Updated the Environmental Justice areas as defined in the adopted <u>2019 Public Involvement Plan (PIP)</u>. • The format of the TIP project tables has been revised to improve readability. 		
Committee Discussion		
<ul style="list-style-type: none"> • This is the first time the TAC is discussing the Draft FY 2020-2023 TIP. 		
Supporting Information		
<ul style="list-style-type: none"> • The Draft FY 2020-2023 is available for TAC review at https://nfrmpo.org/wp-content/uploads/draft-fy20-23tip.pdf. • Additional project selections made through the Colorado Department of Transportation (CDOT) process will be added into the Draft TIP as the information becomes available. • The public comment period for the Draft FY 2019-2022 TIP will open on April 1, 2019 and close on April 30, 2019. 		
Advantages		
<ul style="list-style-type: none"> • Approval of the TIP will ensure the timely merger of projects into the STIP so budget processes can occur at the beginning of the State FY 2020 on July 1, 2019. 		
Disadvantages		
<ul style="list-style-type: none"> • None. 		
Analysis/Recommendation		
Staff requests TAC review and discuss the Draft FY 2020-2023 TIP Narrative and Tables.		
Attachments		
<ul style="list-style-type: none"> • None. 		

AGENDA ITEM SUMMARY (AIS)

North Front Range Transportation & Air Quality Technical Advisory Committee (TAC)



Meeting Date	Agenda Item	Submitted By
March 20, 2019	<u>2019 Congestion Management Process (CMP)</u> Elements	Sarah Martin
Objective/Request Action		
To provide an overview of the <u>2019 CMP</u> structure and to discuss three elements of the <u>2019 CMP</u> : Performance Measures, the Current and Future CMP Strategies Table, and the Corridor Evaluation and Recommendation Template. The Draft <u>2019 CMP</u> will be a Discussion Item at the April 17, 2019 TAC meeting.		<input type="checkbox"/> Report <input type="checkbox"/> Work Session <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Action
Key Points		
<ul style="list-style-type: none"> • A Congestion Management Process (CMP) is a “systematic and regionally-accepted approach for managing congestion.”¹ • CMPs are required to be performance-based; however, federal law does not enumerate specific goals, objectives, or performance measures to include. • CMPs are required to identify and evaluate anticipated congestion mitigation strategies. • CMPs are required to identify an implementation schedule, responsible parties, and possible funding sources for proposed strategies. • The CMP currently in effect for the region is the <u>2015 CMP</u>. The <u>2019 CMP</u> will replace the <u>2015 CMP</u> and will be incorporated into the <u>2045 Regional Transportation Plan (RTP)</u>. 		
Committee Discussion		
<ul style="list-style-type: none"> • This is the first time the TAC is discussing the <u>2019 CMP</u>. 		
Supporting Information		
<ul style="list-style-type: none"> • Relevant Goals and Objectives from the 2045 Goals, Objectives, Performance Measures, and Targets (GOPMT) will be used as the guiding framework for the <u>2019 CMP</u>. • Performance measures were adapted from GOPMT to identify direct and indirect measures of congestion (Tables 1a and 1b). • Responses collected from TAC members were combined into a master Table to show current and future congestion mitigation strategies used in the North Front Range (Table 2). • The <u>2019 CMP</u> will define congestion using the target thresholds set in the GOPMT. Specifically, congested segments are those with a Travel Time Index (TTI) greater than or equal to 1.5 in 2018 or 2030 or a Travel Time Reliability greater than or equal to 1.5 in 2018. • A Congested Corridor Evaluation and Recommendation page will be completed for each Regionally Significant Corridor (RSC) with one or more congested segments to identify areas of opportunity. • An implementation timeframe will be developed from identified areas of opportunity; the implementation timeframe will also identify responsible parties and possible funding sources. 		
Advantages		
<ul style="list-style-type: none"> • Incorporation of TAC input prior to release of Draft <u>2019 CMP</u> on April 10, 2019. 		
Disadvantages		
<ul style="list-style-type: none"> • None. 		
Analysis/Recommendation		
Staff requests TAC review the definition of congestion, selected Performance Measures, and CMP Strategies Inventory, to identify missing information and provide general feedback.		
Attachments		
<ul style="list-style-type: none"> • <u>2019 CMP</u> Performance Measures (Table 1a and 1b) • Current and Future Congestion Management Strategies (Table 2) 		

¹ https://ops.fhwa.dot.gov/plan4ops/focus_areas/cmp.htm

Table 1a. Direct Measures of Congestion

CMP Performance Measure	Description	Type of Congestion
Travel Time Index (TTI)	Ratio of average peak travel time to an off-peak (free-flow) standard. A value of 1.5 indicates that the average peak travel time is 50% longer than off peak travel times.	Recurring
Vehicle Miles Traveled (VMT) per Capita	Miles traveled by vehicles in a specified region over a specified time period. Calculated per person for all trips or for specific destinations including home, work, commercial, etc.	Recurring
Travel Time Reliability	Measures unexpected delay. A corridor may be congested, but reliable if the congestion is predictable.	Non-Recurring

Table 1b. Indirect Measures of Congestion

CMP Performance Measure	Description	Type of Congestion
Number Crashes	Collisions involving one or more vehicles.	Non-recurring
Weekday transit ridership per Capita	The number of unlinked weekday trips per resident within each provider's service area. Measuring per capita helps account for continued population growth.	Recurring
Percent of non-single occupant vehicle (SOV) commute trips	Percent of all commute trips completed by any mode other than SOV, including by transit, bicycle, walking, or carpooling.	Recurring
Percent NHS miles covered by fiber	Percent of NHS miles with fiber-optic cables installed and used for transportation management purposes.	Recurring/Non-recurring

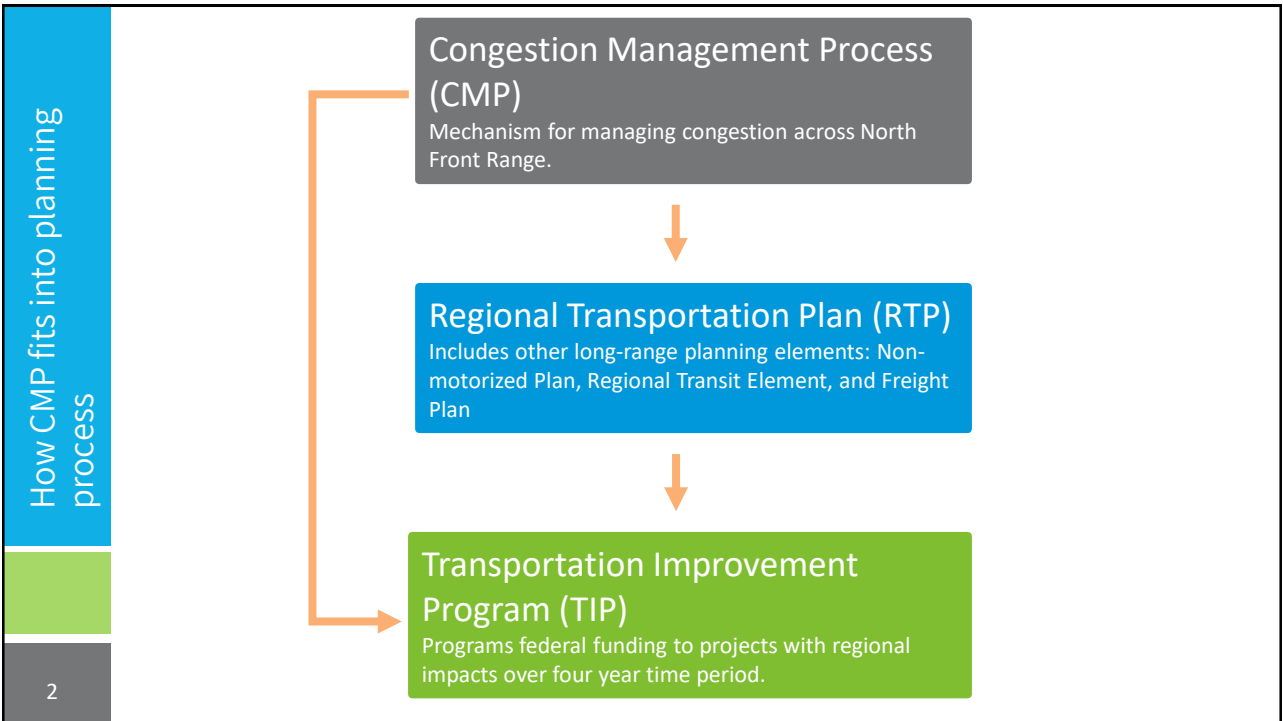
Table 2. CMP Strategies Inventory

	Fort Collins		Greeley		Severance		Windsor	
	Current	Future	Current	Future	Current	Future	Current	Future
Tier 1: Reducing Trip Generation and Shortening Trips								
Infill Development				Maybe	No		No	
Mixed-Use Developments					No		No	
Parking Management and Parking Pricing					No	Maybe		
Pay-as-You-Drive Insurance								
Telecommuting					No		No	
Transit-Oriented Development			No		No		No	
Tier 2: Encouraging Shift to Transit and Non-Motorized Modes								
Bike Lane Improvements								Maybe
Bike Share Service			No		No	No	No	
Bus Rapid Transit							No	
Car Sharing			No		No	Maybe	No	
Complete Streets Policies					No	Maybe		
Pedestrian Improvements					No			
Transit Incentives					No		No	
Transit Pricing Factors					No		No	
Transit Service Quality Factors					No	No	No	
Transit Service Quantity Factors					No		No	
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times								
Alternative/Flexible Work Schedules					No	No		
Carpooling/vanpooling aka Ridesharing					No			
Congestion Pricing	No		No		No		No	
Designated Parking for Ridesharing	No				No		No	
Guaranteed Ride Home	Maybe		No				No	
HOV Lanes	No		No		No		No	
Tier 4: Improving Roadway Operations without Expansion								
Access Management								
Adaptive Signal Control Technology (ASCT)					No		No	
Advanced Traveler Information System					No		No	
Automatic Road Enforcement			No		No		No	
Data Collection Technologies					No		No	
Electronic Toll Collection	No	No	No		No		No	
Fiber-Optic Communications					No		No	
Maintenance Decisions and Support System (MDSS)			No		No		No	
Ramp Metering			No		No		No	
Road Weather Information Systems			No		No		No	
Signage Improvements							No	
Traffic Operations Center			No		No		No	
Traffic Signal Timing Adjustments					No		No	
Transit Signal Priority	No		No		No		No	
Variable Speed Limits	No		No		No		No	
Tier 5: Traffic Incident Management								
Collision Detection			No		No		No	
Courtesy patrol			No		Maybe		No	
Emergency Vehicle Notification Systems			No		No		Maybe	
Incident Management Plans	No				Maybe		Maybe	
Tier 6: Road Capacity								
Additional Toll/Express Lanes	No		No		No		No	
Climbing Lanes	No		No		No		No	
Extended Acceleration Lanes	No				No		No	
Grade-separated railroad crossings/intersections			No		No		No	
New lanes/roads								
Roundabouts								
Turning Lanes								

Yes
 Maybe
 No
 N/A



1



2

Federal Requirements of CMP



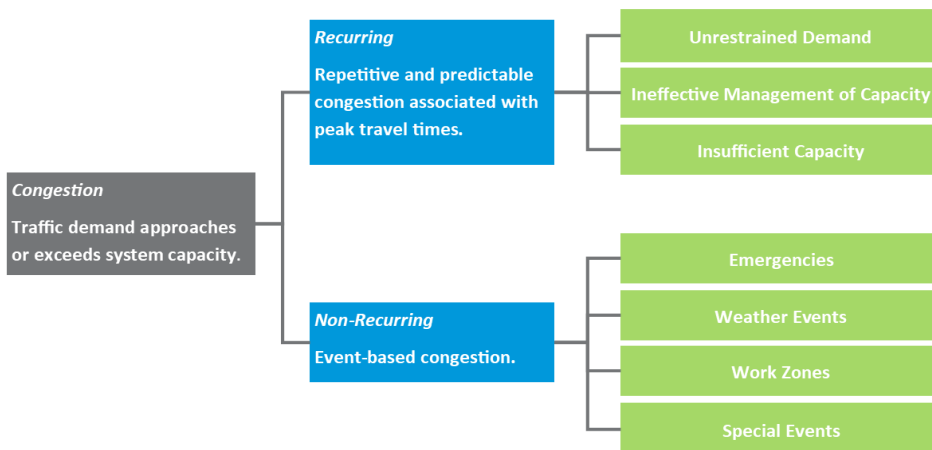
- Definition of congestion management **objectives** and appropriate performance measures
- Coordinated program for **data collection** and system performance monitoring
- Identification and evaluation of the anticipated performance and expected benefits of appropriate **congestion management strategies**
- Identification of an **implementation** schedule, responsibilities, and possible funding sources for each proposed strategies
- Periodic **assessment** of the effectiveness of implemented strategies

3

CMP

3

Defining Congestion and Causes



4

CMP

4

Direct Measures of Congestion



CMP Performance Measure	Description	Type of Congestion
Travel Time Index (TTI)	Ratio of average peak travel time to an off-peak (free-flow) standard. A value of 1.5 indicates that the average peak travel time is 50% longer than off peak travel times.	Recurring
Vehicle Miles Traveled (VMT) per Capita	Miles traveled by vehicles in a specified region over a specified time period. Calculated per person for all trips or for specific destinations including home, work, commercial, etc.	Recurring
Travel Time Reliability	Measures unexpected delay. A corridor may be congested, but reliable if the congestion is consistent.	Non-Recurring

5

CMP

5

Indirect Measures of Congestion



CMP Performance Measure	Description	Type of Congestion
Number Crashes	Collisions involving one or more vehicles.	Non-recurring
Weekday transit ridership per Capita	The number of unlinked weekday trips per resident within each provider's service area. Measuring per capita helps account for continued population growth.	Recurring
Percent of non-single occupant vehicle (SOV) commute trips	Percent of all commute trips completed by any mode other than SOV, including by transit, bicycle, walking, or carpooling.	Recurring
Percent NHS miles covered by fiber	Percent of NHS miles with fiber-optic cables installed and used for transportation management purposes.	Recurring/Non-recurring

6

CMP


6

Current and Future Strategies	Implemented		Programmed			Implemented		Programmed	
Tier 1: Reducing Trip Generation and Shortening Trips									
Infill Development									
Mixed-Use Developments									
Parking Management and Parking Pricing									
Pay-as-You-Drive Insurance									
Telecommuting									
Transit-Oriented Development									
Tier 2: Encouraging Shift to Transit and Non-Motorized Modes									
Bike Lane Improvements									
Bike Share Service									
Bus Rapid Transit									
Car Sharing									
Complete Streets Policies									
Pedestrian Improvements									
Transit Incentives									
Transit Pricing Factors									
Transit Service Quality Factors									
Transit Service Quantity Factors									
Tier 3: Increasing Vehicle Occupancy and Shifting Travel Times									
Alternative/Flexible Work Schedules									
Carpooling/vanpooling aka Ridesharing									
Congestion Pricing									
Designated Parking for Ridesharing									
Guaranteed Ride Home									
HOV Lanes									
Tier 4: Improving Roadway Operations without Expansion									
Access Management									
Adaptive Signal Control Technology (ASCT)									
Advanced Traveler Information System									
Automatic Road Enforcement									
Data Collection Technologies									
Electronic Toll Collection									
Fiber-Optic Communications									
Maintenance Decisions and Support System (MDSS)									
Ramp Metering									
Road Weather Information Systems									
Signage Improvements									
Traffic Operations Center									
Traffic Signal Timing Adjustments									
Transit Signal Priority									
Variable Speed Limits									
Tier 5: Traffic Incident Management									
Collision Detection									
Courtesy patrol									
Emergency Vehicle Notification Systems									
Incident Management Plans									
Tier 6: Road Capacity									
Additional Toll/Express Lanes									
Climbing Lanes									
Extended Acceleration Lanes									
Grade-separated railroad crossings/intersections									
New lanes/roads									
Roundabouts									
Turning Lanes									

7

7

Congested Corridor Selection Process



One or more conditions met for any segment on RSC:

- **Travel Time Index (TTI) > 1.5** in 2018 or 2030
 - Measured using INRIX data, local data (BlueTOAD, Acylica), or Regional Travel Demand Model data
- **Travel Time Reliability (TTR) > 1.5** in 2018
 - Measured using NPMRDS data (NHS system only)

8

CMP

8

Congested Corridor Profiles



Congested Corridor Profiles include:

- Corridor description
- Current and expected future corridor profile (TTI, jobs within a ½ mile, population within a ½ mile)
- Applied or programmed CMP strategies
- Corridor map with congested segments identified
- Opportunities for further CMP strategy implementation

9

CMP

9

Next Steps



- Gathering additional strategies and opportunities
- **April 17, 2019 TAC Meeting** – Draft CMP Discussion
- **May 2, 2019 Planning Council Meeting**– Draft CMP Discussion
- **May 15, 2019 TAC Meeting** – CMP Recommendation
- **June 6, 2019 Planning Council Meeting** – CMP Adoption

10

CMP

10

Requested Feedback



1. Did we include the appropriate performance measures?
2. Are any congestion management strategies missing?
3. Is the definition of “congested segments” appropriate?
4. Are the congested RSC profiles missing any information?

11

CMP

11

Questions?



Medora Bornhoft

Transportation Planner II

mbornhoft@nfrmpo.org

(970) 416-2293

Ryan Dusil

Transportation Planner

rdusil@nfrmpo.org

(970) 224-6191

Sarah Martin

Transportation Planner

smartin@nfrmpo.org

(970) 416-2309

12

CMP

12

AGENDA ITEM SUMMARY (AIS)

North Front Range Transportation & Air Quality Technical Advisory Committee (TAC)



Meeting Date	Agenda Item	Submitted By
March 20, 2019	2045 Regional Transportation Plan (RTP) Draft Socio-Economic Profile and Performance Based Planning Sections	Becky Karasko
Objective/Request Action		
Staff is providing the second of six groups of Chapters and Sections for the 2045 Regional Transportation Plan (RTP) for TAC review and discussion.		<input type="checkbox"/> Report <input type="checkbox"/> Work Session <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Action
Key Points		
<ul style="list-style-type: none"> • MPO staff is developing the 2045 RTP, scheduled for September 2019 Planning Council adoption. • The 2045 RTP includes a long-term transportation vision for the region. • The DRAFT 2045 RTP Socio-Economic Profile and Performance Based Planning Sections for TAC member's review are attached. 		
Committee Discussion		
This is the first time TAC will discuss these Sections of the 2045 RTP.		
Supporting Information		
The RTP is a federally-mandated plan for MPOs and includes a long-term transportation vision for the region. The 2045 RTP summarizes the existing transportation system: roadways, transit, bicycle and pedestrian infrastructure, the environment, and includes a fiscally-constrained corridor plan for the future.		
Advantages		
Providing the chapters as they are drafted allows TAC to maximize their time and input in reviewing the 2045 RTP chapters. Staff will provide presentations on the changes to the RTP to summarize changes to assist TAC in their review.		
Disadvantages		
None noted.		
Analysis/Recommendation		
Staff requests TAC members review the portions of the 2045 RTP Draft Sections applicable to their jurisdictions for accuracy and content.		
Attachments		
<ul style="list-style-type: none"> • 2045 RTP Draft Socio-Economic Profile and Performance Based Planning Sections • 2045 RTP Draft System Performance Report 		

Chapter 2-2: Socio-Economic Profile

A. Population

The population within the North Front Range has been growing rapidly since the 1980s. As shown in **Table 2-1**, each jurisdiction has outpaced the State’s annual growth rate between 1980 and 2017, with the exception of LaSalle. The fastest growing communities (Severance, Timnath, Johnstown, Windsor, and Milliken) are all located along major transportation corridors.

These communities are expected to see continued rapid growth given their access to the I-25 corridor and access to agricultural and manufacturing jobs. Between 1980 and 2017, Weld County grew at a slightly higher rate compared to Larimer County, owing largely to the smaller base-year population.

Table 2-1. Historical Population Trends by Annual Growth Rate 1980-2017

	1980	1990	2000	2010	2017	Growth Rate
Severance	102	106	672	3,204	4,239	10.6%
Timnath	185	190	286	629	3,312	8.1%
Johnstown	1,535	1,579	4,459	9,987	15,825	6.5%
Windsor	4,277	5,062	10,256	18,768	26,319	5.0%
Milliken	1,506	1,605	3,040	5,634	6,913	4.2%
Evans	5,063	5,876	10,448	18,651	20,975	3.9%
Berthoud	2,362	2,990	5005	5,127	6,828	2.9%
Eaton	1,932	1,959	2783	4,384	5,197	2.7%
Loveland	30,215	37,357	51,893	67,033	76,797	2.6%
Fort Collins	65,092	87,491	12,0236	144,888	164,810	2.5%
Garden City	123	199	346	235	246	1.9%
Greeley	53,006	60,454	78,559	93,262	104,947	1.9%
LaSalle	1,929	1,803	1,852	1,967	2,324	0.5%
Weld County	123,438	131,821	183,076	254,230	304,435	2.5%
Larimer County	149,184	186,136	253,088	300,532	343,853	2.3%
Colorado	2,889,964	3,294,394	4,301,261	5,029,316	5,607,154	1.8%

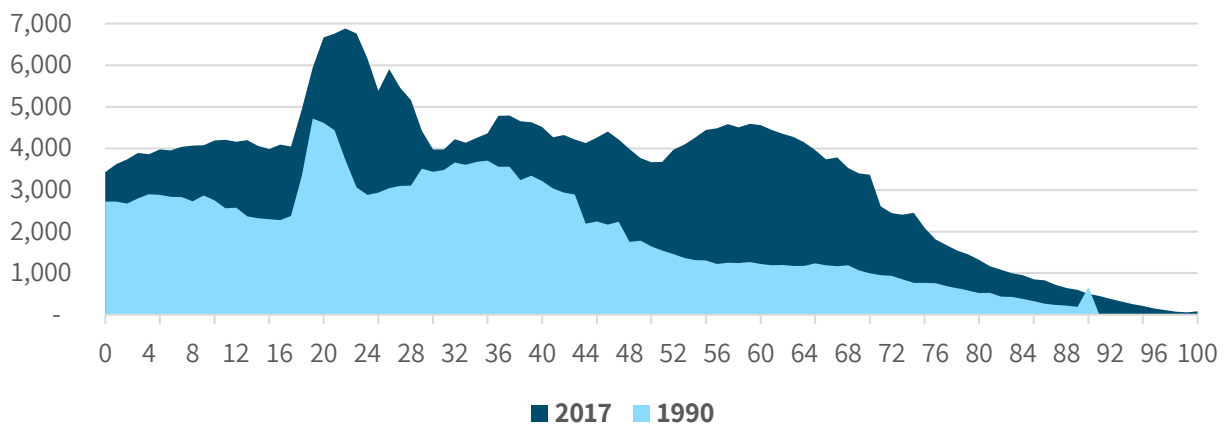
Source: DOLA County and Municipal Population Timeseries

An Aging Population

The population within the North Front Range has been aging. **Figure 2-1** and **Figure 2-1** show the age distributions for Larimer County and Weld County, respectively. Both show a large share of population in the 55 to 65 year old cohort in 2017 shifted from the 30 to 40 year old cohort in 1990. This fundamental change in the region’s population composition will require a close examination of the transportation services available for older adults. The older adult population is explored in greater detail in the **Environmental Justice** section of this Chapter.

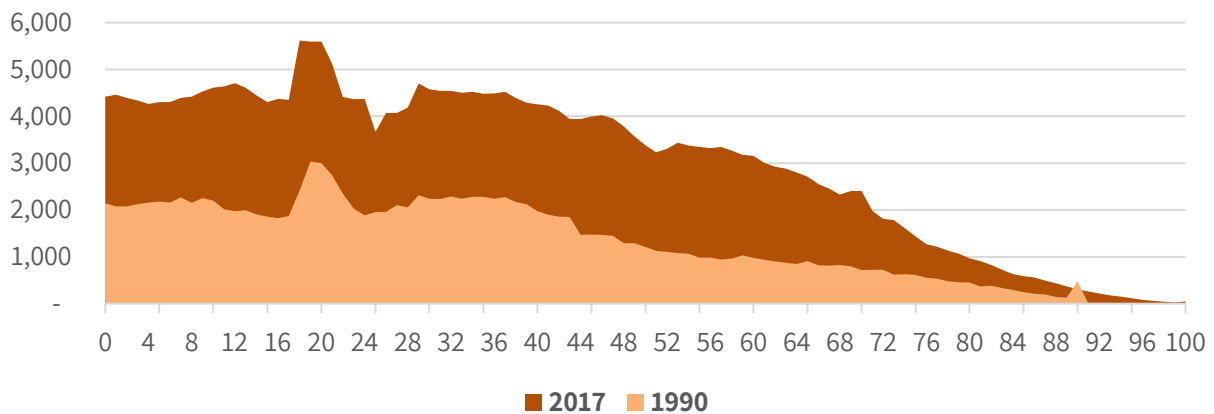
Compared to Weld County, Larimer County has a much larger percentage of its population in the 20 to 24 year old cohort, likely owing to Colorado State University (CSU) and several community and technical colleges in the County. Weld County retains a much larger portion of its population in the 30 to 45 year old cohort, likely due to lower home values in Weld County. Attainable housing for new and young families may also explain the larger 0 to 20 year old cohort in Weld County, compared to Larimer County.

Figure 2-1. Larimer County Age Distribution for 1990 and 2017



Source: DOLA Single Year of Age Data

Figure 2-2. Weld County Age Distribution for 1990 and 2017



Source: DOLA Single Year of Age Data

Racial and Ethnic Diversity

Table 2-2 shows the percentage of the population for Larimer and Weld Counties by race, regardless of ethnicity. In 2017, 91 percent of Larimer County residents and 88 percent of Weld County residents were White. Despite this overwhelming majority, the population has diversified over the past two decades, a trend expected to continue. In 2017, approximately 11.2 percent of Larimer County’s population was

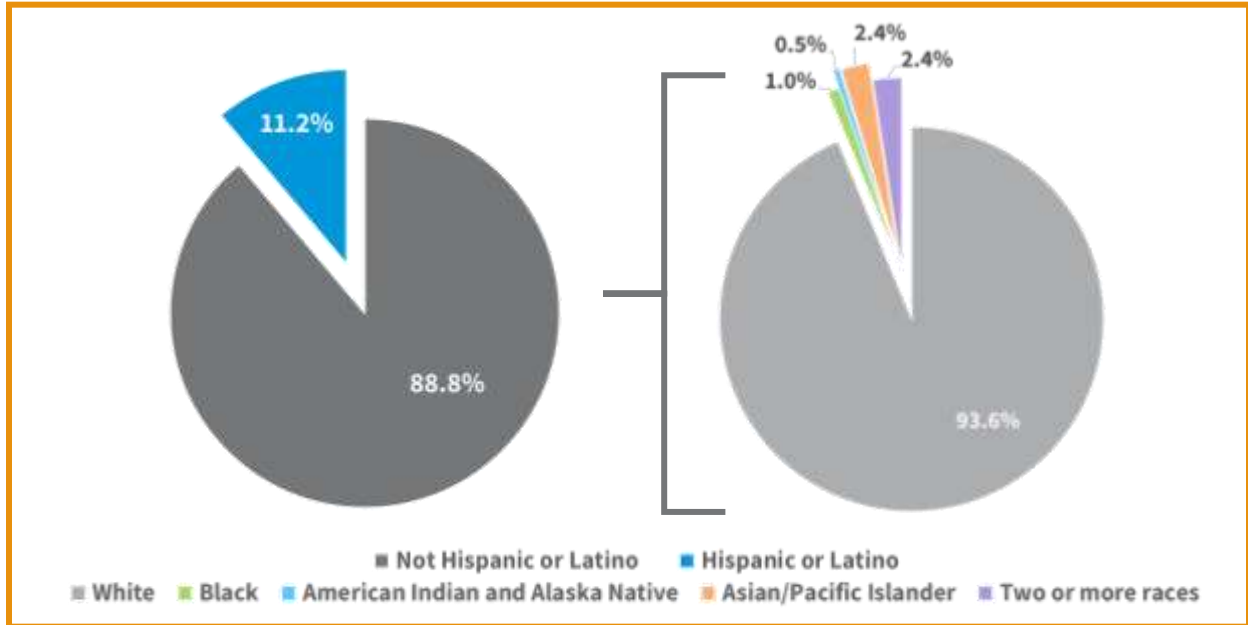
Hispanic or Latino, whereas 29 percent of the Weld County population was Hispanic or Latino, as shown in **Figure 2-3** and **Figure 2-4** respectively. Of the non-Hispanic portion of the population in both counties, only 6.4 percent were non-Hispanic, non-White. Minority populations are discussed in greater detail in the **Environmental Justice** section of this Chapter.

Table 2-2. Weld and Larimer County Population by Race 2017

	Larimer County		Weld County	
	Estimate	Percent	Estimate	Percent
Total	330,976	*****	285,729	*****
White	302,008	91.2%	253,742	88.8%
Black or African American	3,053	0.9%	3,199	1.1%
American Indian/Alaska Native	2,130	0.6%	2,070	0.7%
Asian	6,797	2.1%	3,880	1.4%
Native Hawaiian and Other Pacific Islander	299	0.1%	259	0.1%
Some other race	6,251	1.9%	14,835	5.2%
Two or more races	10,438	3.2%	7,744	2.7%

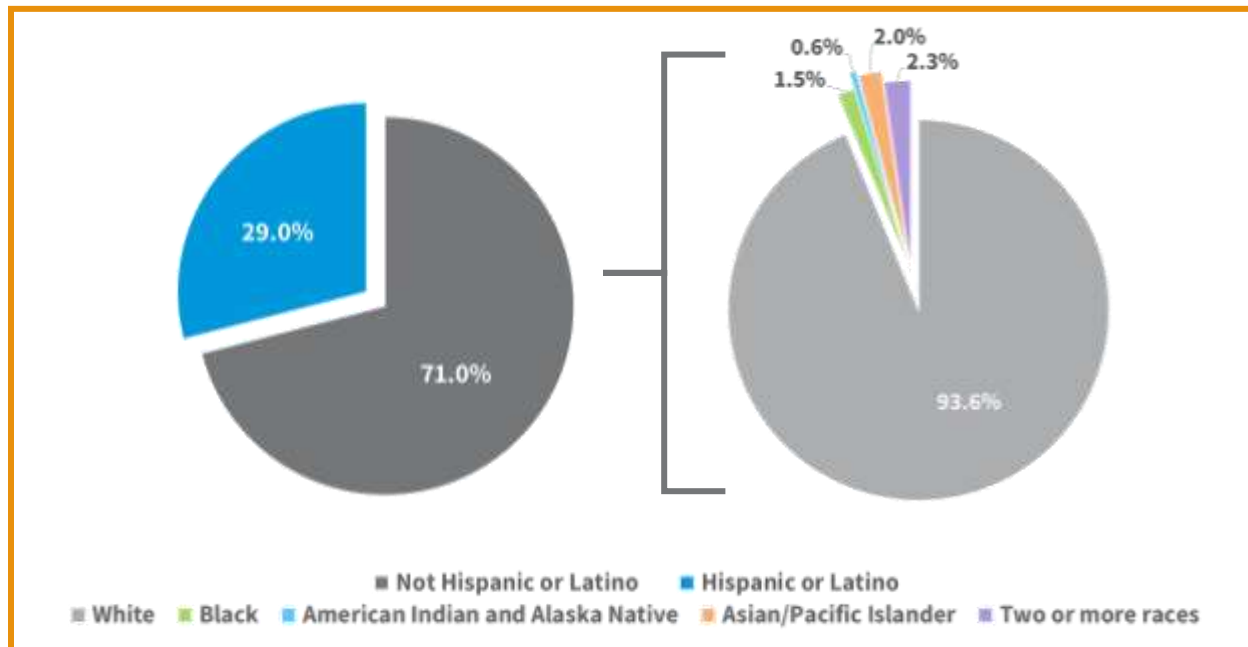
Source: 2013-2017 American Community Survey 5-Year Estimates

Figure 2-3. Larimer County Population by Hispanic/Latino and by Race



Source: 2013-2017 American Community Survey 5-Year Estimates

Figure 2-4. Weld County Population by Hispanic/Latino and by Race



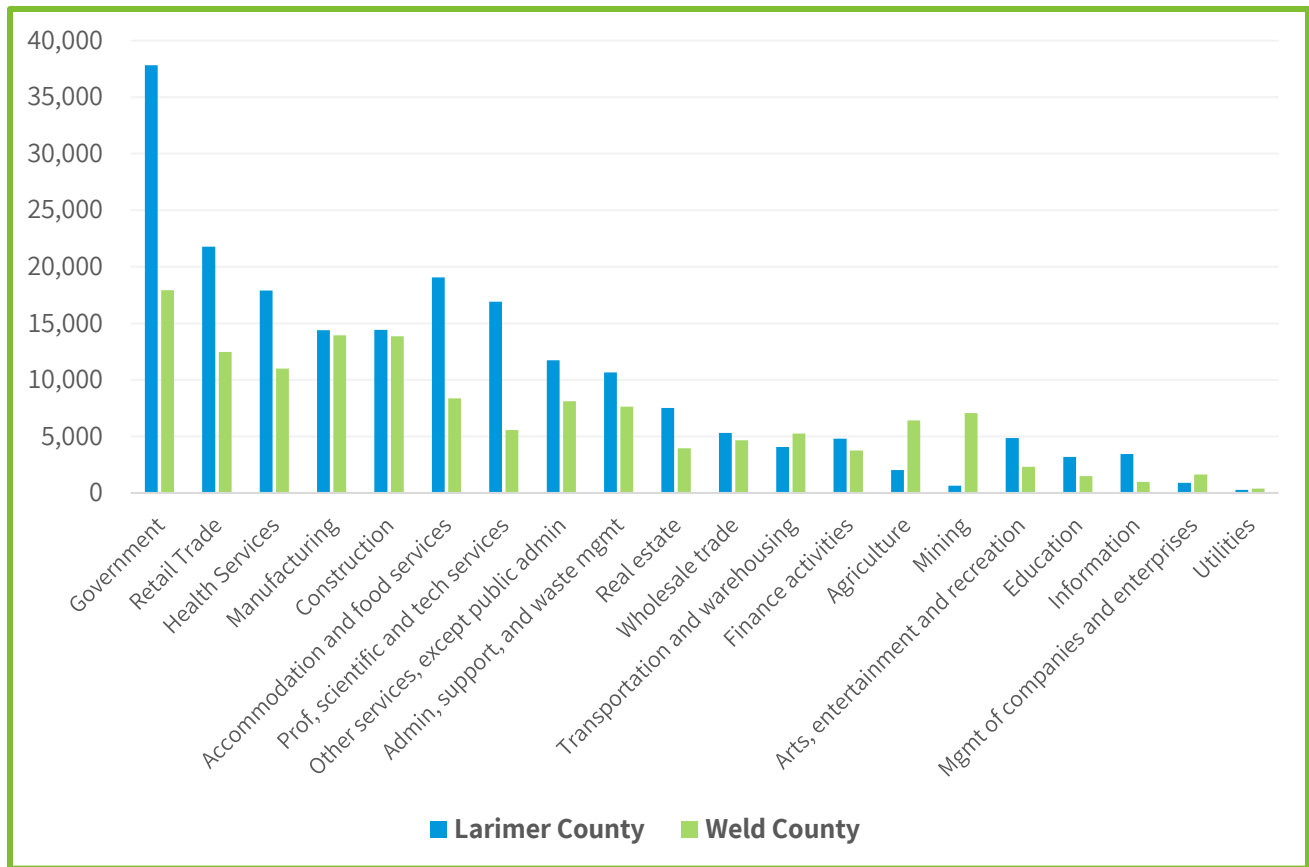
Source: 2013-2017 American Community Survey 5-Year Estimates

B. Economic Trends

Figure 2-5 shows the top 15 sectors of employment for Weld and Larimer Counties. Both counties are dominated by the government sector, though the retail, health services, manufacturing, construction, and accommodation and food services sectors make up a large portion of remaining jobs between the two counties. While the counties share several similarities, there are many economic differences. Larimer County has a large portion

of professional, scientific and technical services, while some of Weld County's top sectors include mining and agriculture. Even some of the counties' shared sectors, such as manufacturing break down into much different subsectors. While the majority of manufacturing jobs in Larimer County are computers and electrical equipment, the majority of manufacturing jobs in Weld County are related to food and beverage products.

Figure 2-5. Top 15 Employment Sectors by County in 2017

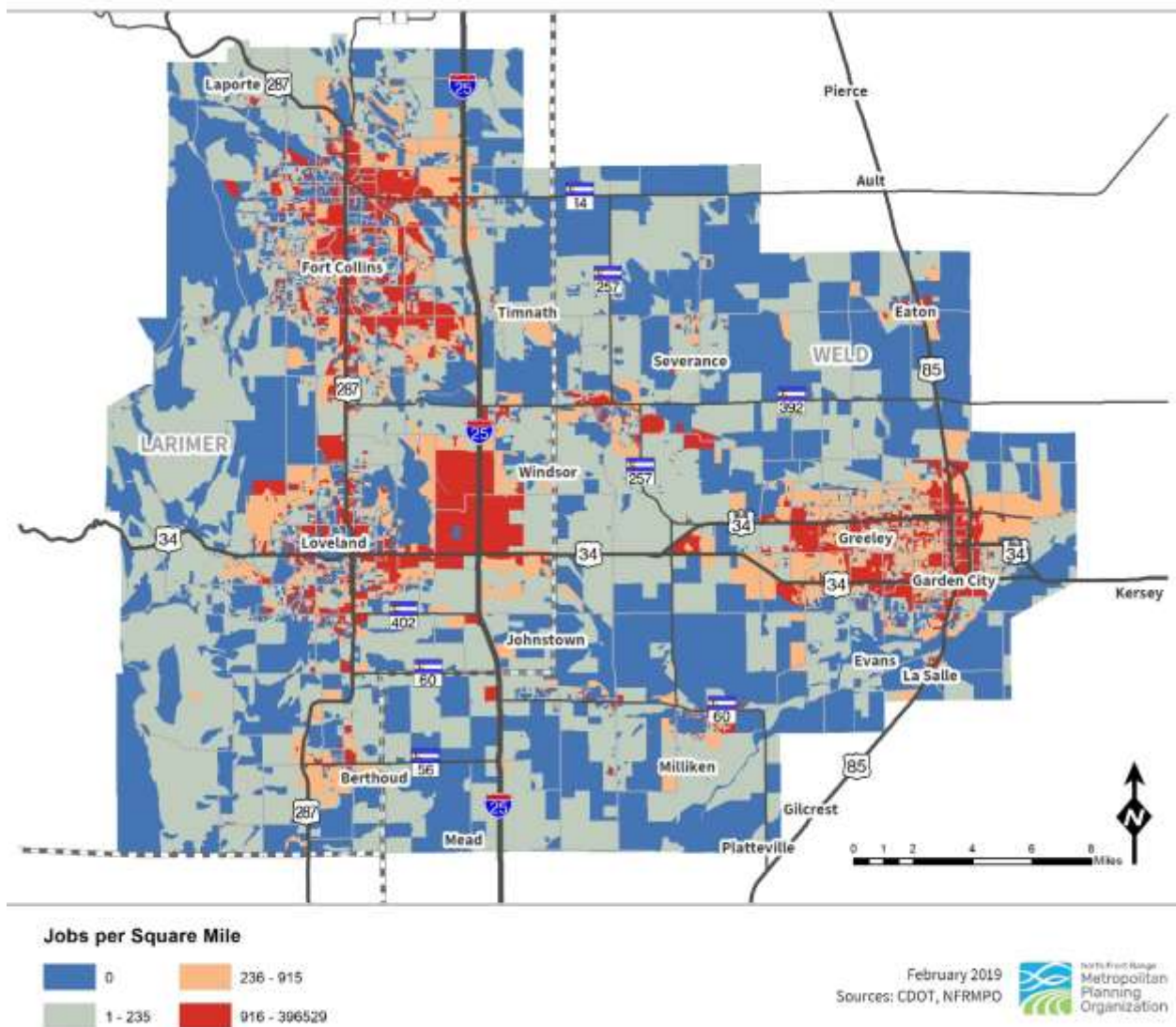


Source: DOLA State Demography Office Data Page, Jobs by Sector

As shown in **Figure 2-6**, the majority of employment remains centralized around major transportation corridors including I-25, US287, US34, US85, and SH14. Locations of major employment include downtown areas, the Harmony employment corridor, Windsor Industrial Park, and the US34/I-25 intersection. Major employers include Woodward Inc, UC Health Medical Center of the Rockies, McKee

Medical Center, Northern Colorado Medical Center, CSU, University of Northern Colorado (UNC), Aims Community College, and Front Range Community College (FRCC). The three largest employers in the region are the University of Colorado Health, Colorado State University (CSU), and JBS Swift and Company. Together, these three organizations provide nearly 20,000 jobs within the North Front Range.

Figure 2-6. Employment Density, 2015



Source: 2015 Forecast, 2010 Base Year UrbanCanvas Land Use Allocation Model

C. Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations (1994)*, was enacted to reinforce Title VI of the Civil Rights Act of 1964. The Civil Rights Act states that, “no person in the United States shall, on grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” **Executive Order 12898** also states, “each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.”

In May 2012, DOT issued an updated internal Order, *Actions to Address EJ in Minority Populations and Low-Income Populations (DOT Order)*. The DOT Order updates the Department’s original EJ Order, which was published April 15, 1997. The DOT Order continues to be a key component of the USDOT’s strategy to promote the principles of EJ in all DOT programs, policies, and activities.

Environmental Justice Analysis

Though **Executive Order 12898** defines environmental justice (EJ) populations as minority and low-income communities, the NFRMPO has expanded the definition to include additional populations, including persons with Limited English Proficiency (LEP), persons with disabilities, persons over the age of 60, and zero-

car households. An expanded analysis including these additional groups will be presented in the NFRMPO’s **Environmental Justice Plan**, which is currently under development. The following sections provide an overview of the traditional and expanded environmental justice populations within the NFRMPO Planning Region.

An EJ analysis is completed for all location-specific individual projects included in or amended into the TIP and RTP. If a project is located in, within ¼ mile of, or adjacent to an area with a substantial EJ population, it is considered to be an EJ project. If it does not, it is considered to be Non-EJ. The benefits and burdens of each project must be examined individually, regardless of its EJ status. An overall analysis on projects in the TIP determines if it meets EJ requirements. The analysis process follows three guiding principles outlined in *DOT Order 5610.2(a)*:

1. To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations in relation to transportation improvements.
2. To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
3. To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Under this DOT Order, an adverse effect means:

- Bodily impairment, infirmity, illness, or death;
- Air, noise, and water pollution and soil contamination;
- Destruction or disruption of man-made or natural resources;
- Destruction or diminution of aesthetic values;
- Destruction or disruption of community cohesion or a community’s economic vitality;
- Destruction or disruption of the availability of public and private facilities and services;
- Vibration;
- Adverse employment effects;
- Displacement of persons, businesses, farms, or non-profit organizations;
- Increased traffic congestion, isolation, exclusion, or separation of individuals within a given community or from the broader community;
- Denial of, reduction in, or significant delay in the receipt of benefits of USDOT programs, policies, or activities.

An EJ analysis also includes a determination of whether the activity will result in a “disproportionately high and adverse effect on human health or the environment,” defined in *DOT Order 5610.2(a)* as:

- Being predominately borne by a minority population and/or low-income population, or
- Suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income populations.

All EJ analysis procedures are completed by NFRMPO staff. **Table 2-3** lists the benefits and burdens reviewed for EJ or Non-EJ projects. **Chapter 3-5** includes an overall EJ analysis of regionally significant projects included in the FY2020-2023 TIP and 2045 RTP. This process may be re-evaluated as part of the NFRMPO’s upcoming Environmental Justice Plan.

Table 2-3. Environmental Justice Benefits and Burdens

Benefit	Burden
Decrease in travel time	Bodily impairment, infirmity, illness, or death
Improved air quality	Air, noise, and water pollution and soil contamination
Expanded employment opportunities	Destruction or disruption of man-made or natural resources, aesthetic values, or availability of public and private facilities and services
Better access to transit options and alternative modes of transportation (walking and bicycling)	Adverse impacts on community cohesion or economic vitality
	Noise and vibration
	Increased traffic congestion, isolation, exclusion, or separation

Minority and Low Income

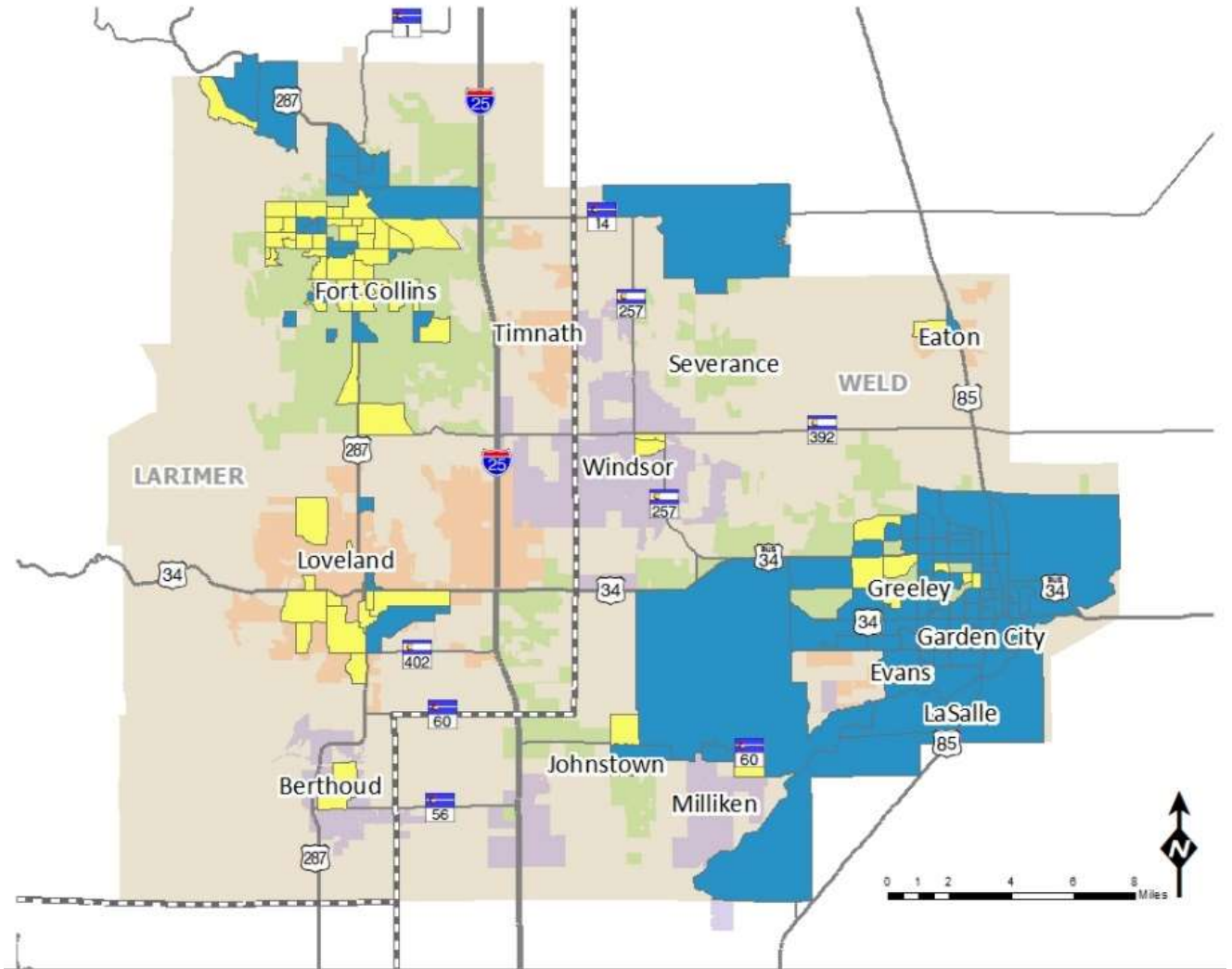
The Environmental Justice Analysis currently looks at low-income and minority populations. This is shown in **Figure 2-7**. EJ populations – block groups which have a higher percent population of low-income and/or minority populations than the county or regional average – are located across the region.

NFRMPO staff used the [CDOT National Environmental Policy Act \(NEPA\) methodology](#) and FY2018 US Department of Housing and Urban Development (HUD) county-specific Income thresholds by household size, to determine low-income thresholds for Larimer and Weld counties, respectively. Data for each block group is compared to the county average based on its average household size. If the block group has a higher percentage than the county threshold for that household size, it is considered to have an EJ population.

Minority status is based on 2013-2017 American Community Survey (ACS) data based on reported race and ethnicity. The minority population includes all persons who do not identify as white non-Hispanic. Data for each block group is compared to the regional average. If the block group has a higher percentage than the regional average, it is considered to have an EJ population.

Areas in Fort Collins with higher low income and/or minority populations are clustered near CSU, and north and central Fort Collins. CSU maintains a highly diverse student group. Northeast Fort Collins is the location of the historic Tres Colonias neighborhoods. Greeley, Evans, and LaSalle are home to JBS, agricultural, and oil and gas jobs, which often attract immigrants. The area north of Timnath and Severance is predominantly agricultural, attracting seasonal migrants.

Figure 2-7. Low Income and Minority Populations in the NFRMPO Region



Legend

- Low Income or Minority Population
- Low Income and Minority Population
- NFRMPO Boundary
- County Boundary

December 2018
Sources: CDOT, NFRMPO,
HUD, US Census Bureau



Limited English Proficiency

Limited English Proficiency (LEP) populations are defined by the US Census as individuals who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English. *Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency*, requires recipients of federal funds to examine the services they provide and identify any need for services to LEP populations. LEP languages spoken in the region include Spanish, Asian

Languages, African Languages, Arabic, and other languages. **Table 2-4** shows the LEP language categories defined by the ACS, the population of the NFRMPO region who speak the language, and the percent of the regional population. The region maintains a relatively low LEP average (4.53 percent) as a proportion of its overall population. **Table 2-5** shows the Larimer and Weld County breakdown of LEP populations within the North Front Range.

Table 2-4. LEP Languages and Population

	Speak Languages other than English	Percent of Population
Spanish	42,840	10.9%
Asian Languages	5,452	1.4%
Other Indo-European Languages	5,638	1.4%
Other Languages	2,210	0.6%
Total	56,140	14.30%

Source: 2013-2017 ACS 5-Year Estimates

Table 2-5. Percent of Population with LEP by Community

Geography	Total Pop. five years +	English Speakers Only	Pop. Speaking Language Other than English	LEP Population	% LEP Population
Larimer County	284,828	257,737	26,165	7,151	2.5%
Weld County	172,600	135,701	37,465	13,468	7.8%
NFRMPO Region	457,128	393,438	63,630	20,319	4.5%

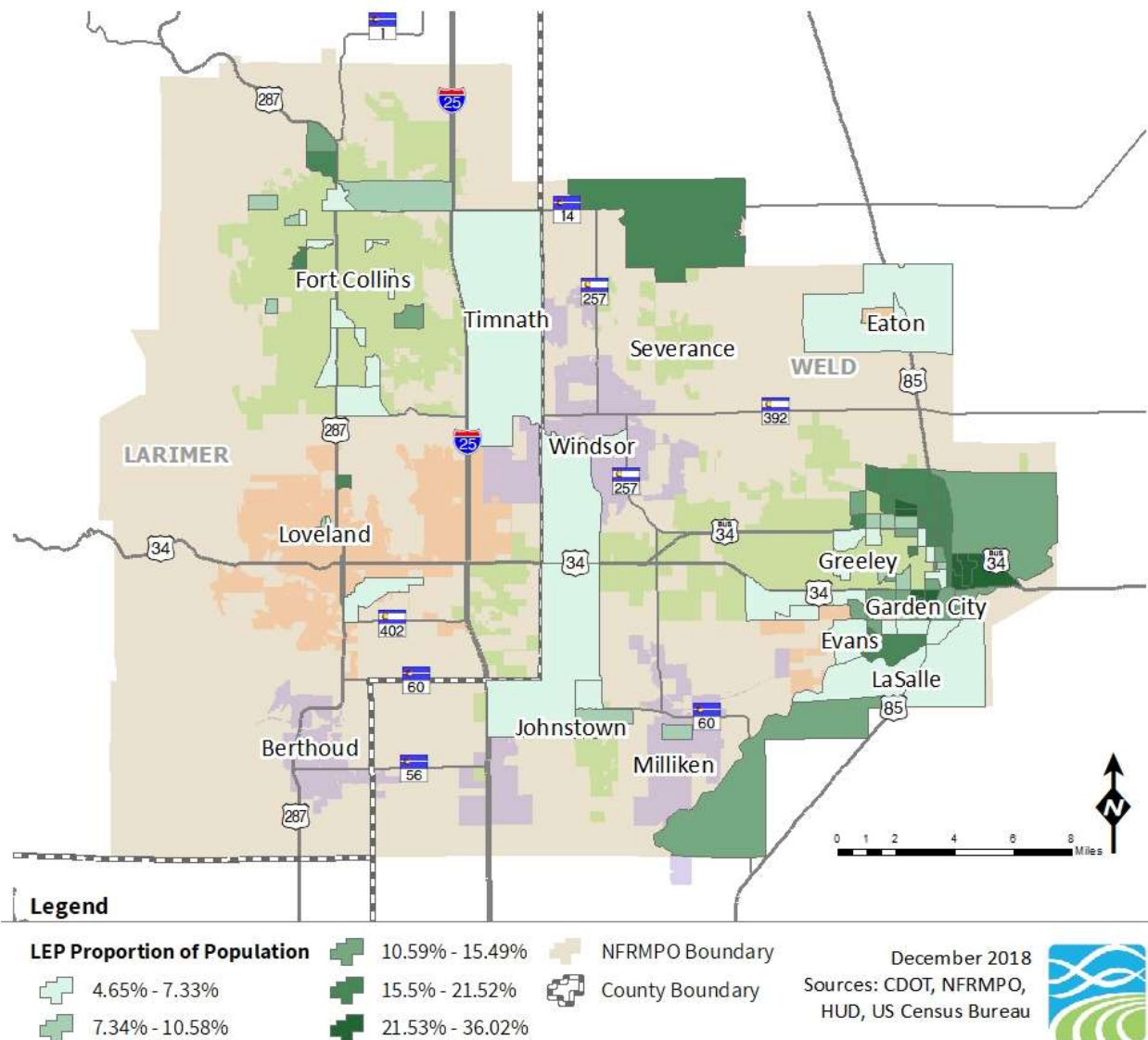
Source: 2013-2017 ACS 5-Year Estimates

*Note: "Data is based on the Block Groups that align with the NFRMPO boundary, not the full counties.

Census block groups with a moderate to high percentage of residents who are proficient in another language, but speak English “less than very well,” are considered supplemental EJ populations for the 2045 RTP. **Figure 2-8** shows the Census block groups with higher LEP

proportions as compared to the entire region. Some block groups are slightly over the regional average like in Timnath, while other block groups have nearly a third of their population identified as LEP.

Figure 2-8. Proportional LEP Map



Older Adult Population

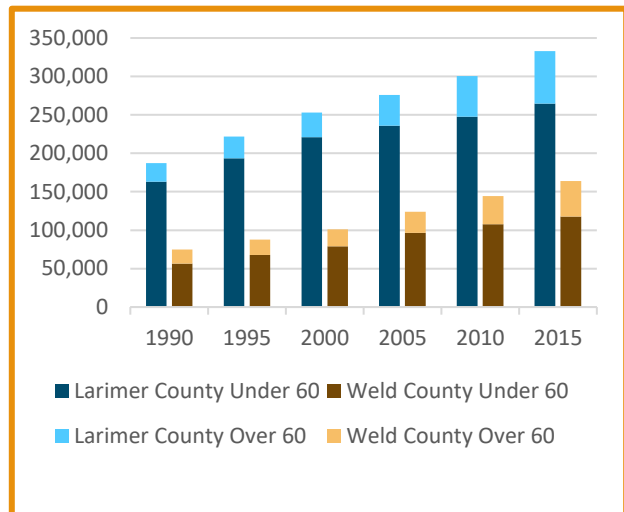
For a variety of reasons, older adults will comprise an increasing proportion of the region’s population. Trends include the “baby boomer” population (individuals born between 1946 and 1964) hitting retirement age, migration, medical breakthroughs allowing people to live longer, and the desire to “age in place.”

Estimates from the Department of Local Affairs (DOLA) between 1990 and 2015 show steep growth in the population over 60 living in Larimer and Weld counties. Between 1990 and 2015, the older adult population in Larimer and Weld counties grew by more than 173 percent. As shown in **Figure 2-9**, the proportion of adults over 60 has increased for both counties.

In 1990, 12.7 percent of Larimer County residents and 24.1 percent of Weld County residents were over the age of 60. By 2015, the percent of Larimer County residents over 60 had increased to 20.5 percent and Weld County residents to 28.3 percent. Overall, the proportion of adults over 60 to the total population for the region has increased from 16.0 percent to 23.1 percent between 1990 and 2015.

The municipal breakdown of percent of the total population over the age of 60 is shown in **Table 2-6**. Municipalities range between 9.4 percent and 28.7 percent for percent of population over the age of 60.

Figure 2-9. Larimer and Weld County Older Adult Population Trends (1990-2015)



Source: DOLA, 2019

Table 2-6. Percent Older Adult Population

Community	Over 60	
	Percent	Actual
Garden City	28.7%	66
Loveland	24.6%	18,226
Eaton	20.9%	1,029
Windsor	19.6%	4,576
LaSalle	19.2%	529
Johnstown	18.9%	2,719
Berthoud	18.8%	1,129
Timnath	16.8%	408
Greeley	16.7%	16,802
Fort Collins	14.4%	22,957
Severance	12.7%	485
Milliken	12.2%	774
Evans	9.4%	1,868
Total	17.1%	71,568

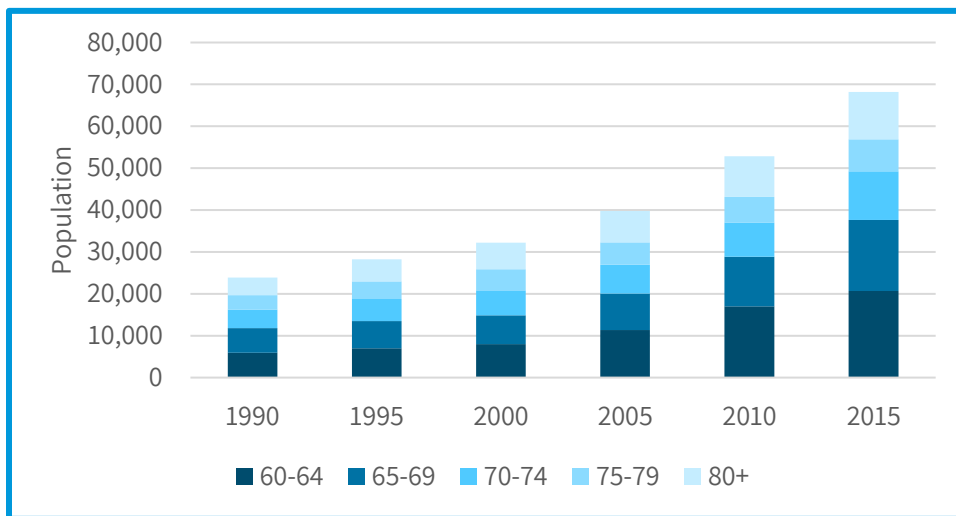
Source: 2013-2017 ACS 5-Year Estimates

*Note: “Total” reflects sum of municipalities listed and does not include unincorporated Larimer and Weld Counties.

As shown in **Figure 2-10**, Larimer County residents aged 60 and above grew by 185 percent between 1990 and 2015. The 80 and above age group grew by 169 percent and the 75-79 age group grew by 169 percent. The 60-64 and 65-69 age categories grew at 247 percent and 190 percent, respectively. As shown in **Figure 2-11**, Weld County residents over the age of 60 more

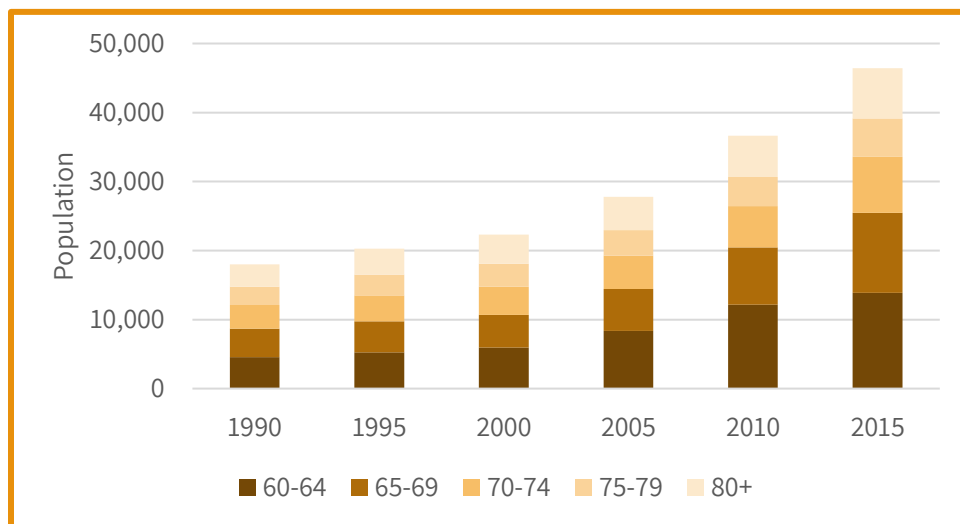
than doubled between 1990 and 2015, growing by 158 percent. Like Larimer County, Weld County residents aged 60-64 grew at the highest rate, increasing by 206 percent. Residents aged 65-69 grew by 179 percent and those aged 70-74 increased by 137 percent. Residents aged 75-79 and 80+ grew by 110.8 and 125 percent, respectively.

Figure 2-10. Larimer County Pop. Over 60 (1990-2015)



Source: DOLA, 2019

Figure 2-11. Weld County Pop. Over 60 (1990-2015)



Source: DOLA, 2019

Population with Disabilities

Census tracts with a moderate to high percentage of residents who are disabled are considered to be supplemental EJ populations within the region. Census tracts were selected as the unit of analysis due to limited data availability at smaller geographies.

The ACS defines the following disabilities:

- **Hearing difficulty:** defined as deafness or serious difficulty hearing;
- **Vision difficulty:** defined as blind or serious difficulty seeing;
- **Cognitive difficulty:** defined as having difficulty remembering, concentrating, or making decisions due to a physical, mental, or emotional problem;
- **Ambulatory difficulty:** defined as difficulty walking or climbing stairs;

- **Self-care difficulty:** defined as difficulty bathing or dressing; and
- **Independent living difficulty:** defined as difficulty doing errands alone due to a physical, mental, or emotional problem.

Table 2-7 shows the population with a disability under the age of 65 for each municipality and the percent of the municipality’s population. Disabled populations face different transportation and mobility challenges which may increase the need for safety improvements in the roadway and pedestrian system, increased transit, paratransit, and demand-response transportation systems, and a higher need for mobility coordination efforts throughout the region. Additional information about existing and potential future transportation services are discussed in the 2045 RTE.

Table 2-7. Percent of Population with a Disability Rolling Average (2013-2017)

Community	Percent with a Disability	Population with a Disability	Total Population
Berthoud	12.7%	764	6,018
Eaton	12.7%	625	4,931
Evans	8.7%	1,741	19,967
Fort Collins	8.0%	12,654	159,150
Garden City	20.4%	47	230
Greeley	11.3%	11,128	100,760
Johnstown	7.4%	1,066	14,386
LaSalle	10.9%	299	2,754
Loveland	12.0%	8,856	74,125
Milliken	7.0%	446	6,362
Severance	7.0%	266	3,816
Timnath	5.2%	126	2,422
Windsor	6.8%	1,574	23,386
Total	9.5%	39,592	418,307

Source: 2013-2017 American Community Survey 5-Year Estimates

*Note: “Total” reflects sum of municipalities listed and does not include unincorporated Larimer and Weld Counties.

Zero-Car Households

Zero-car households are self-reported households which do not currently have a vehicle. It does not acknowledge access to bicycles, work vehicles, or other autos. A plurality of residents in the NFRMPO region have access to two cars, while 3.5 percent of the population have no access to vehicles. This should be taken into consideration in planning

transportation options and when the NFRMPO plans outreach events in Fort Collins, Garden City, Greeley, LaSalle, and Loveland. These five communities have the highest number of residents with no access to a vehicle. A breakdown of the number of vehicles available per household in each community is shown in **Table 2-8**.

Table 2-8. Number of Vehicles Available

Community	Number of Vehicles Available			
	0	1	2	3 or more
Berthoud	0.9%	26.3%	42.2%	30.6%
Eaton	2.5%	25.1%	46.5%	25.9%
Evans	3.4%	26.7%	41.6%	28.4%
Fort Collins	4.8%	29.8%	42.4%	23.0%
Garden City	10.0%	50.8%	33.1%	6.2%
Greeley	6.3%	30.7%	37.9%	25.1%
Johnstown	1.2%	20.1%	45.2%	33.5%
Larimer County	4.1%	26.5%	42.2%	27.2%
LaSalle	5.8%	24.2%	32.4%	37.6%
Loveland	4.7%	28.5%	42.1%	24.8%
Milliken	0.0%	24.1%	33.9%	42.0%
Severance	1.9%	11.4%	52.1%	34.6%
Timnath	1.3%	11.2%	64.7%	22.7%
Weld County	3.8%	24.0%	40.3%	31.9%
Windsor	2.4%	21.1%	44.8%	31.7%

Source: 2013-2017 American Community Survey 5-Year Estimates

2-3 Performance-Based Planning

A. Federal Performance Measures

The Moving Ahead for Progress in the 21st Century (MAP-21) Act and the Fixing America's Surface Transportation (FAST) Act move performance measurement to the center of the transportation planning process. Performance measures were established through federal rulemakings as were associated schedules and deadlines to adopt associated targets. States are required to set targets based on observed data and trends. Metropolitan Planning Organizations (MPOs) are required to establish their own or support the State's targets also based on observed data and trends. Performance measures and targets are described in further detail in the **Goals, Objectives, Performance Measures, and Targets (GOPMT) section**.

The Colorado Department of Transportation (CDOT), transit agencies, and the NFRMPO are required to develop performance-based plans and processes which align with federal goals. The NFRMPO develops GOPMT to fulfill performance-based planning requirements and to drive project selection as MPOs are required to report in their Transportation Improvement Programs (TIP) and Regional Transportation Plans (RTP) the projects selected move the region towards achieving the goals, based on the targets adopted. The GOPMT are developed during the Planning stage of Performance-Based Planning.

Once CDOT and transit agencies adopt their targets, the NFRMPO generally has 180 days to set targets. NFRMPO staff analyzes its own data and data collected from CDOT and transit

agencies to make an informed decision about setting their own targets or adopting targets set by the other agencies. For the 2045 RTP, the NFRMPO Planning Council elected to adopt targets by supporting the targets set by the state and the transit agencies.

The federal performance measures are categorized into five areas, though only four have targets currently set:

- **Performance Measure (PM) 1: Highway Safety**
 - Number of fatalities
 - Rate of fatalities per 100M Vehicle Miles Traveled (VMT)
 - Number of serious injuries
 - Rate of serious injuries per 100M VMT
 - Number of non-motorized fatalities and serious injuries
- **PM2: Bridge and Pavement Condition**
 - Percent of Interstate pavement in Good condition
 - Percent of Interstate pavement in Poor condition
 - Percent of non-Interstate National Highway System (NHS) pavement in Good condition
 - Percent of non-Interstate NHS pavement in Poor condition
 - Percent of NHS bridges in Good condition
 - Percent of NHS bridges in Poor condition
- **PM3: System Reliability**
 - Percent of person-miles traveled on Interstate system that are reliable

- Percent of person-miles traveled on non-Interstate system that are reliable
- Truck travel time Reliability (TTTR) Index
- VOC reduction
- CO Reduction
- NOx Reduction

- **Transit Asset Management (TAM) Targets**

- Percent revenue vehicles meeting or exceeding useful life benchmark (ULB)
- Percent service vehicles meeting or exceeding ULB
- Percent passenger and maintenance facilities rated below condition 3

- **Transit Safety Targets**, which include the number of fatalities and rate per total vehicle revenue miles, number of reportable injuries and rate per total vehicle revenue miles, number of reportable safety events and rate per total vehicle revenue miles, and mean distance between major mechanical failures. These targets are due to be adopted after the adoption of the 2045 RTP.

CDOT collects data for the NHS throughout the State and provides the NFRMPO with data at the Statewide and MPO-level as agreed upon in the 2018 Memorandum of Understanding (MOU). The MOU provides an expectation for CDOT to provide data on a regular schedule to allow the

NFRMPO to make informed decisions in the transportation planning process. Based on the data provided, the NFRMPO can elect to set its own targets or adopt the Statewide targets.

The NFRMPO adopted the targets on the following schedules:

- PM1 targets are adopted annually and submitted to CDOT. The 2015-2019 Highway Safety Targets were adopted by the NFRMPO Planning Council on February 7, 2019.
- PM2 and PM3 targets are adopted prior to the adoption of the RTP and will be submitted to CDOT. PM2 and PM3 targets were adopted by the NFRMPO Planning Council on September 6, 2018.
- TAM targets are adopted annually by the transit agencies and submitted to the NFRMPO. The NFRMPO Planning Council adopted the TAM targets for the region on November 1, 2018.
- Transit Safety targets must be set by transit agencies by July 20, 2020. The NFRMPO will adopt transit safety targets by July 20, 2021.

For more information about performance measures, schedules, and expectations, visit the [FHWA TPM website](#).

Goals, Objectives, Performance Measures, and Targets (GOPMT)

Starting with the 2040 RTP, the NFRMPO has adopted GOPMT to guide investments in the regional transportation system. With the final rulemakings being promulgated between 2016 and 2018, the NFRMPO has updated the region's GOPMT. NFRMPO staff worked with TAC members to update objectives and to draft new regional performance measures. These performance measures and targets are organized into four NFRMPO-specific goals, seven national goals, and 12 objectives.

Much of the GOPMT framework did not change between the 2040 RTP and the 2045 RTP. The NFRMPO, its member communities, and transit agencies continue to believe in the need to invest in infrastructure, reduce delays, improve access to non-Single Occupancy Vehicle (SOV) transportation, and ensure projects are delivered in a timely manner. NFRMPO Goals and Objectives are shown alongside the seven National Goals in **Table 2-1**.

Goals

Goals are the first step to supporting the vision statement. Goals address the key desired outcomes for the region. In the 2040 RTP, the NFRMPO used CDOT's and the federally-established goals as the basis for the regional goals. For the 2045 RTP, the NFRMPO worked with TAC to ensure these goals reflect the region's current expectations.

Objectives

Objectives are needed to support and accomplish the established goals. For the 2040 RTP, objectives had not been released at the national level; rather, NFRMPO staff used CDOT objectives and local data to determine appropriate objectives for each goal. These were taken to TAC for input and updated as needed.

Table 2-1. NFRMPO GOPMT Framework

Value Statement

We seek to provide a multi-modal transportation system that is safe, as well as socially and environmentally sensitive for all users that protects and enhances the region’s quality of life and economic vitality.

	Goal Area 1 Economic Development & Quality of Life			Goal Area 2 Mobility			Goal Area 3 Multi-Modal			Goal Area 4 Operations		
MPO GOAL	Foster a transportation system that supports economic development and improves residents’ quality of life			Provide a transportation system that moves people and goods safely, efficiently, and reliably			Provide a multi-modal system that improves accessibility and transportation system continuity			Optimize operations of transportation facilities		
NATIONAL GOALS	Infrastructure Condition			Safety			Infrastructure Condition			Congestion Reduction		
	Freight movement and economic vitality			Congestion Reduction			System Reliability			Freight Movement and Economic Vitality		
	Environmental Sustainability			System Reliability						Reduced Project Delivery Delays		
OBJECTIVES	Conform to air quality requirement	Maintain transportation infrastructure and facilities	Increase investment in infrastructure	Reduce number of severe traffic crashes	Reduce congestion	Improve travel time reliability	Support transportation services for all including the most vulnerable and transit-dependent populations	Increase mode share of non-single occupancy vehicles (SOV) modes	Develop infrastructure that supports alternate modes and connectivity	Optimize the transportation system	Enhance Transit Service in the NFR region	Reduce project delivery time frame

Performance Measures and Targets

Performance measures are a key part of the NFRMPO Call for Projects, TIP, and RTP. The NFRMPO has five categories of performance measures: Highway Safety; Bridge and Pavement Condition; System Performance; Transit Asset Management; and Regional Performance Measures. The first four are set by the USDOT, while the NFRMPO established its own performance measures based on regional priorities. The individual performance measures and trends are explored in Appendix (letter).

Table 2-2 shows the federally required roadway

performance measures and targets. **Table 2-3** shows the transit-related performance measures and targets. **Table 2-4** shows the regional performance measures and targets.

Performance measures will be updated with each future RTP to ensure compliance with federal regulations and to ensure regional expectations are being met. Highway Safety targets are adopted each year by the NFRMPO, while transit agencies adopt TAM targets annually.

Table 2-2: Federal Roadway Performance Measures and Targets

Performance Measure	Statewide Target
Highway Safety	
Number of fatalities	644
Fatality rate per 100 million vehicle miles traveled	1.20
Number of serious injuries	2,909
Serious injury rate per 100 million vehicle miles traveled	5.575
Number of non-motorized fatalities and serious injuries	514
Bridge and Pavement Condition	
Percent of pavement on Interstate System in Good condition	47.0%
Percent of pavement on Interstate System in Poor condition	1.0%
Percent of pavement on non-Interstate System in good condition	51.0%
Percent of pavement on non-Interstate System in poor condition	2.0%
Percentage of NHS bridges in good condition	44.0%
Percentage of NHS bridges in poor condition	4.0%
System Reliability	
Percent of person-miles traveled on Interstate that are reliable	81.0%
Percent of person-miles traveled on non-Interstate NHS that are reliable	64.0%
Truck Travel Time Reliability Index	1.5
Total emissions reduction	105.000 kg/day VOC reduction 1,426.000 kg/day CO reduction 105.000 kg/day NOx reduction

Table 2-3: Transit Asset Management Performance Measures and Targets

Agency	Percent Revenue Vehicles Meeting or Exceeding Useful Life Benchmark	Benchmark (years)	Target
Transfort	Bus	15	25%
	Articulated Bus	17	
	Cutaway Bus	12	
	Automobile	10	
	Minivan	10	
	Truck/SUV	10	
GET	Bus	14	5%
	Cutaway (Fixed-Route)	7	10%
	Cutaway (Paratransit)	8	20%
Statewide Tier II	Bus	14	20%
	Cutaway Bus	10	7%-20%
	Automobile	8	50%
	Minivan	8	38%
Agency	Percent Service vehicles Meeting or Exceeding Useful Life Benchmark	Benchmark (years)	Target
Transfort	Automobile	10	25%
	Truck and other rubber-tire vehicles		
GET	Equipment	10	1%
Statewide Tier II	Automobile	8 to 14	28%
	Truck and other rubber-tire vehicles		
Agency	Percent Passenger and Maintenance Facilities Rated Below Condition 3	Target	
Transfort	Passenger Facility	25%	
	Passenger Parking		
	Maintenance		
	Administrative		
GET	Administrative	10%	
Statewide Tier II	Passenger Facility	19%	
	Passenger Parking		
	Maintenance		
	Administrative		

Table 2-4: Regional Performance Measures and Targets

Performance Measure	Regional Target
Population within publicly-operated paratransit and demand response service area within the NFRMPO boundary	$\geq 75\%$
Non-motorized facility miles	$\uparrow 50\%$
Percent of non-single-occupant vehicle (SOV) commuter trips	$\geq 25\%$
Fixed-route revenue hours per capita within service areas	$\uparrow 10\%$
Daily VMT per capita	≤ 24
Federally-funded projects within the NFRMPO boundary reported as financially inactive for more than three quarters	0
Travel Time index on RSCs	$90\% \leq 1.5$
Miles of fiber for connected roadways	250 miles

Progress of 2040 RTP GOPMT

The NFRMPO tracks data based on the 2040 RTP GOPMT. Table 2-25 reports on progress for the 10 targets established in the 2040 RTP. Statuses with a green background have been achieved, while those in red have made progress toward or

do not currently achieve the target. The data used is the most readily available but may not perfectly match data available from when the 2040 RTP was prepared. The best equivalent was used for comparison.

Table 2-5. 2040 RTP GOPMT Progress Report

Performance Measure	2040 Target	Status
Air quality conformity tests on plans and programs	Passes conformity	All NFRMPO conformity tests since the <u>2040 RTP</u> have passed conformity.
Number of facility samples with poor surface conditions	Reduce by 1%	The State Highway System saw a reduction from 110 miles to 29 miles of low-rated pavement.
Bridges with a sufficiency rating below 50.0	Less than 5 percent of bridges	6.0 percent of bridges in the NFRMPO region are rated as poor.
Five-year rolling average of serious injury and fatal crashes	No increases in crashes	The five-year rolling average increased from 169.3 to 216.8 in Larimer and Weld counties.
Regionally significant congested corridor with a travel time index of 2.5 times or less than free flow	Maintain at least 80%	99.9 percent of RSCs have a TTI of 2.5 or less.
Population and essential destinations within paratransit and demand response service area within the NFRMPO boundary	At least 85%	The current percentage is 65.1 percent.
Non-motorized facilities per capita	Increase by at least 2 percent	The NFRMPO population growth outpaced growth in non-motorized facilities.
Fixed-route revenue hours per capita within service areas	Increase by 30%	Revenue hours per capita increased by 25.1 percent between 2014 and 2017.
Transit service vehicles within useful life parameters established by FTA	Maintain 75%	20 percent of transit service vehicles were beyond ULB parameters set by FTA in 2017.
VMT growth per capita	Change in VMT should not exceed change in population	VMT grew by 12.9 percent while population grew at 7.7 percent.
Fixed-route ridership per capita within service areas	Increase by 10 percent	Ridership per capita has increased by 58.5 percent in the region since 2014.

Call for Projects

The programming stage of performance-based planning is carried out through the NFRMPO-administered Call for Projects in which federal funds are awarded for surface transportation projects. The NFRMPO awards funding from three federal programs: Congestion Mitigation and Air Quality Improvement (CMAQ), Surface Transportation Block Grant (STBG), and Transportation Alternatives (TA). These programs fund a wide variety of transportation projects, including bridges, major roadways, non-motorized transportation, transit, projects which reduce congestion and improve air quality, and environmental mitigation projects.

The FY 2020-2023 TIP identifies projects programmed in the North Front Range region for the first four years of the 2045 RTP. The NFRMPO held two Calls for Projects to award funds for the FY 2020-2023 TIP. Projects with funding in FY2020 and FY2021 were awarded during the 2016 Call for Projects and projects with funding in FY2022 and FY2023 were awarded during the 2018 Call for Projects.

Performance-based planning is an integral component of the Call for Projects. In 2016, submitted projects were scored and selected using the 2040 GOPMT adopted by the NFRMPO Planning Council on September 4, 2014. In 2018, submitted projects were scored and selected using the 2045 GOPMT adopted by the NFRMPO Planning Council on October 4, 2018. In addition, all CMAQ and STBG projects had to address at least one federally-required performance measure. By incorporating the GOPMT into the project selection process, the NFRMPO ensures

selected projects will contribute toward achievement of the region's targets.

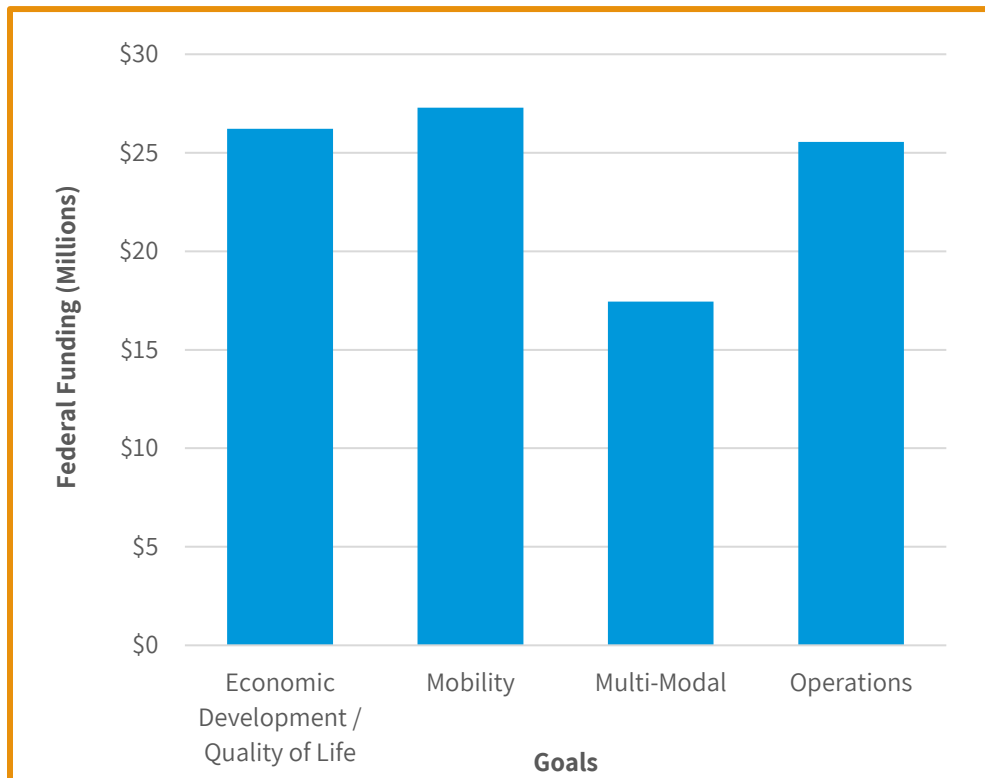
In total, \$34.4M federal funds were awarded through the two Calls for Projects, as shown in **Table 2-6**. Projects awarded through the Call for Projects are identified in the FY2020-2023 TIP and online at <https://nfrmpo.org/tip/call-for-projects/>. Each project awarded funding supports at least one of the four goals included in the 2040 and 2045 GOPMT. **Figure 2-1** identifies the amount of federal funding awarded in support of each of the four goals. Projects supporting the Mobility goal received the highest amount of funding, with \$27.3M, followed by Economic Development/Quality of Life at \$26.2M, Operations at \$25.6M, and Multi-Modal at \$17.4M.

Table 2-6. 2016 and 2018 Calls for Projects Award Summary

Funding Program	Federal Funding	Number of Projects
Congestion Mitigation & Air Quality Improvement (CMAQ)	\$19,012,654	13
Surface Transportation Block Group (STBG)	\$14,252,805	10
Transportation Alternatives (TA)	\$1,101,656	3
Total	\$34,367,115	25*

**The number of projects by funding program exceeds the total number of projects because one project received both STBG and TA funding.*

Figure 2-1. Project Funding by Goal, 2016 and 2018 Calls for Projects



Note: Most awarded projects contribute to multiple goals. The sum of federal funding contributing to each goal exceeds the total federal award amount of \$34.4M to comprehensively reflect the impacts of the awarded projects.