



COLORADO
Department of Transportation

SH 52 Coalition Meeting

July 22, 2021



Agenda

- Introductions
- Project Review and Updates
 - Schedule Status
 - Completed Meetings
- PEL Study
 - Additional Corridor Analysis
 - Alternatives Analysis
 - Visualizations
- Communications
 - August Virtual Open House
- Access Control Plan
 - Final IGA Comments
 - Access comments





COLORADO
Department of Transportation

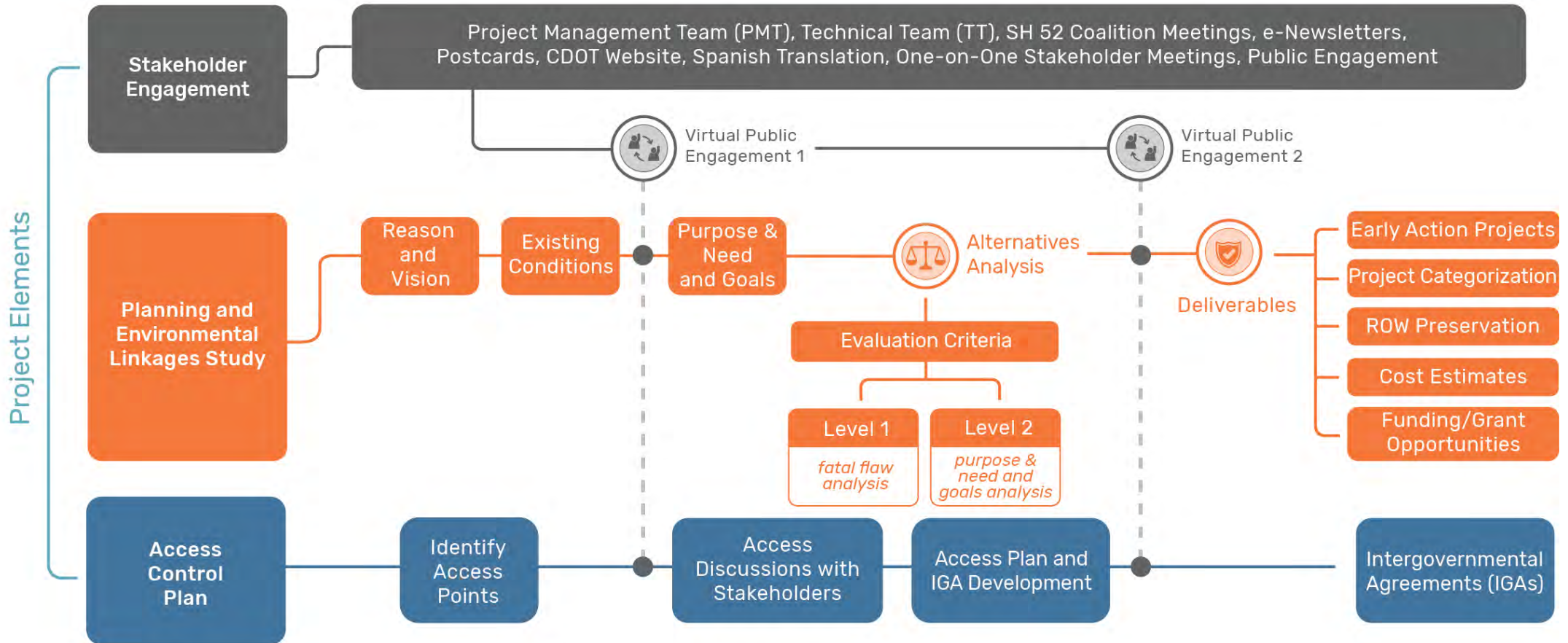
Project Review and Updates

July 22, 2021



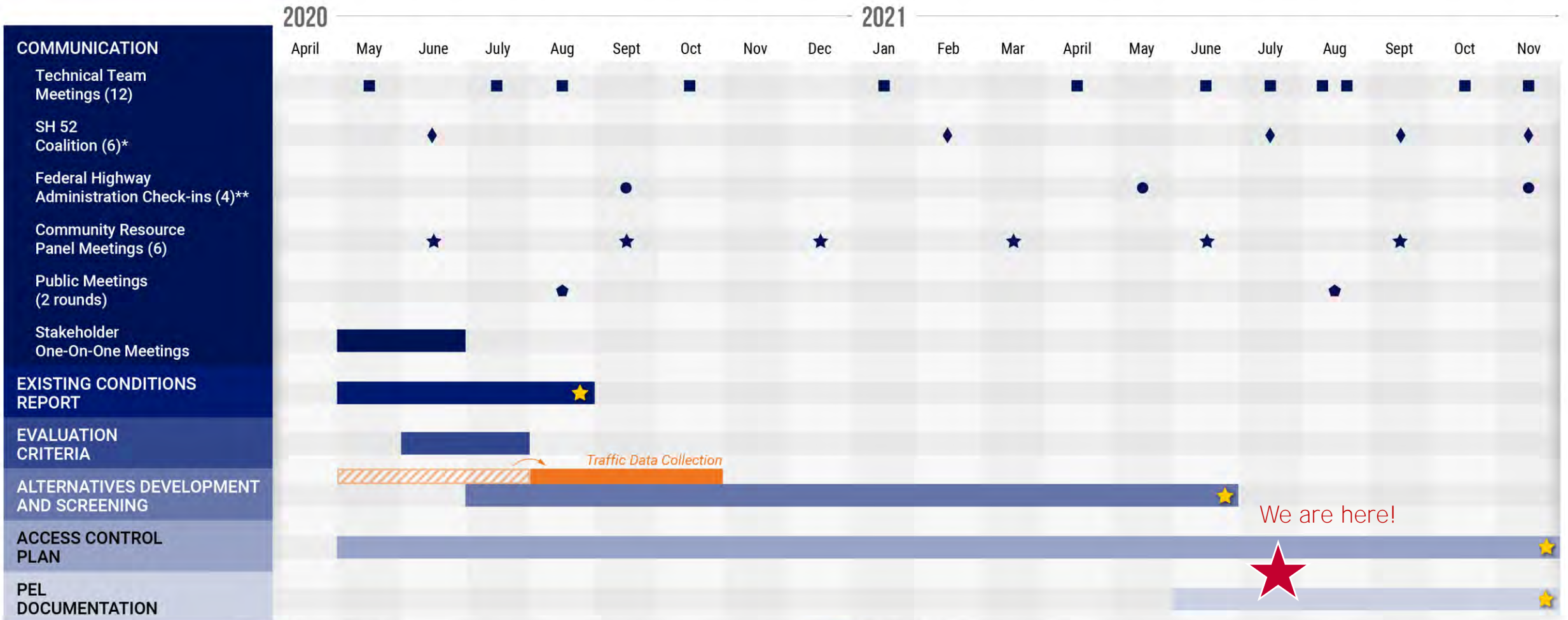
PEL Process Graphic

CO 52 Planning and Environmental Linkages (PEL) Study and Access Control Plan (ACP) CO 119 to CO 79





Project Schedule and Milestones



We are here!



*First meeting occurred Feb. 27th

**First check-in occurred 2019

★ Deliverables



Coalition Presentation Schedule

Topic	Date
Kick-off Meeting	February 2020
Study Reason and Vision	June 2020
Evaluation Criteria and Alternatives Process	February 2021
Project Updates and Public Meeting Review	July 2021
Corridor Projects	September 2021
Final PEL Review	November 2021



4 SH 52 Coalition Meetings

16 PMT Meetings

60 Mini-PMT Meetings

10 Technical Team Meetings

Recent Meetings

- o Glens Coalition HOA Meeting (7/8)
- o Boulder County Alternatives Meeting (7/12)
- o Bicycling Organization Meeting (7/20)

23 Stakeholder Meetings

12 ACP Meetings with Stakeholders



COLORADO
Department of Transportation

PEL Study

July 22, 2021



Additional Corridor Analysis

- Origin/Destination Trip Pattern Analysis
- Telework (Work from Home) Analysis
- Traffic Forecasting and Screenline Analysis Memo
- Transit Analysis
- Funding Memo

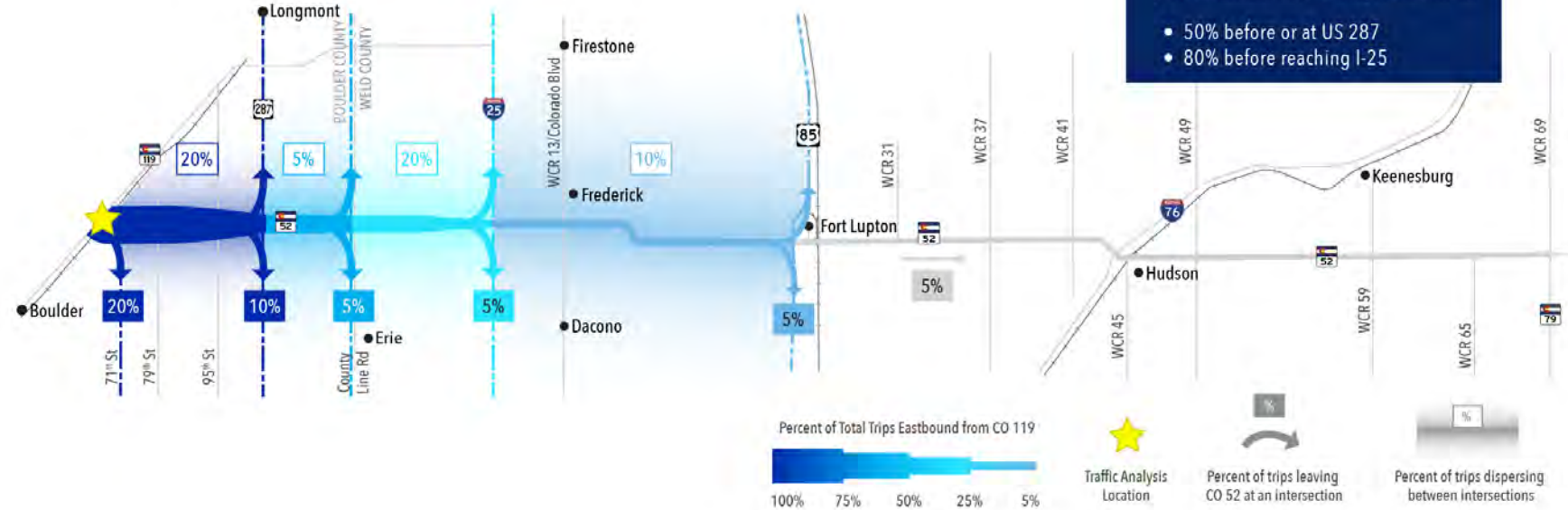




Origin/Destination Trip Pattern Analysis

- Insight on traffic flow through the corridor
- Majority of trips exit CO 52 before or at first major highway access
- 2015 and 2045 trip patterns are similar
- Increase in percentage of trips to new development areas in 2045:
 - I-25 area
 - Ft Lupton

EB CO 52 from CO 119 - 2045 PM Peak Hour Trip Distribution

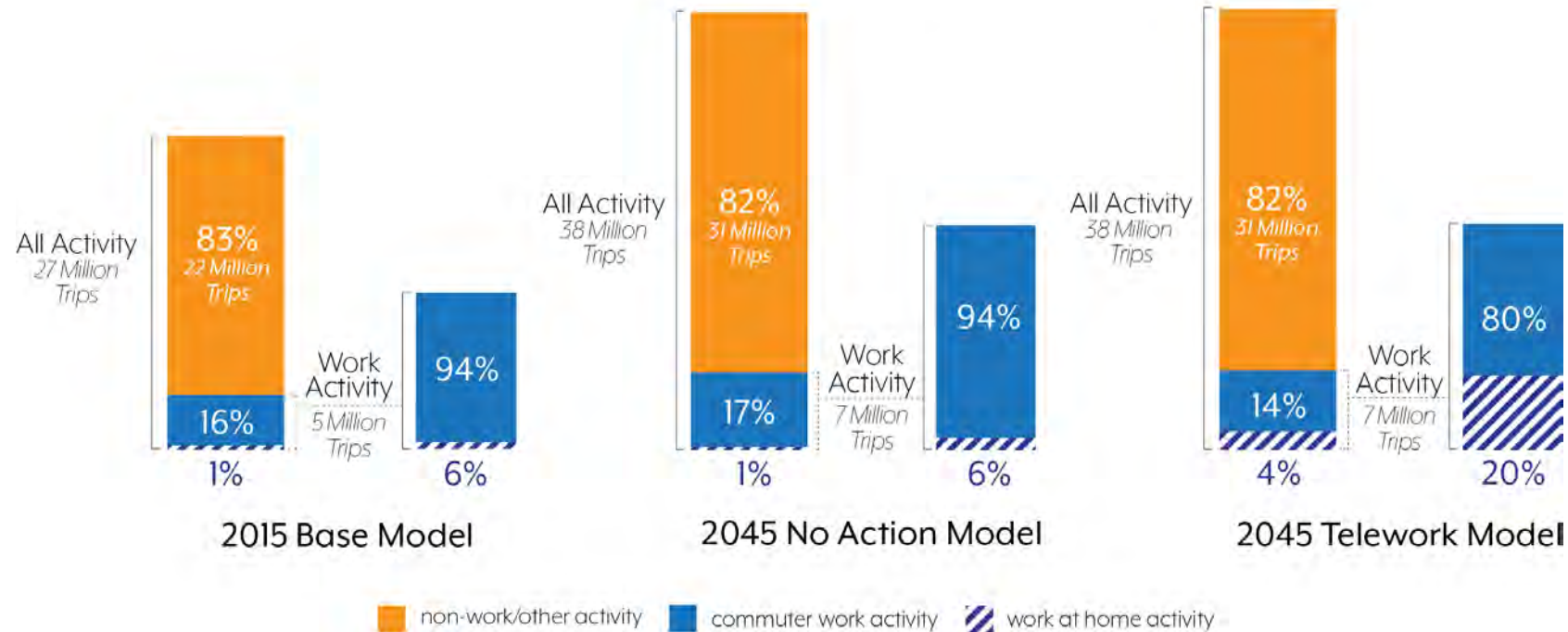




Telework (Work from Home) Analysis

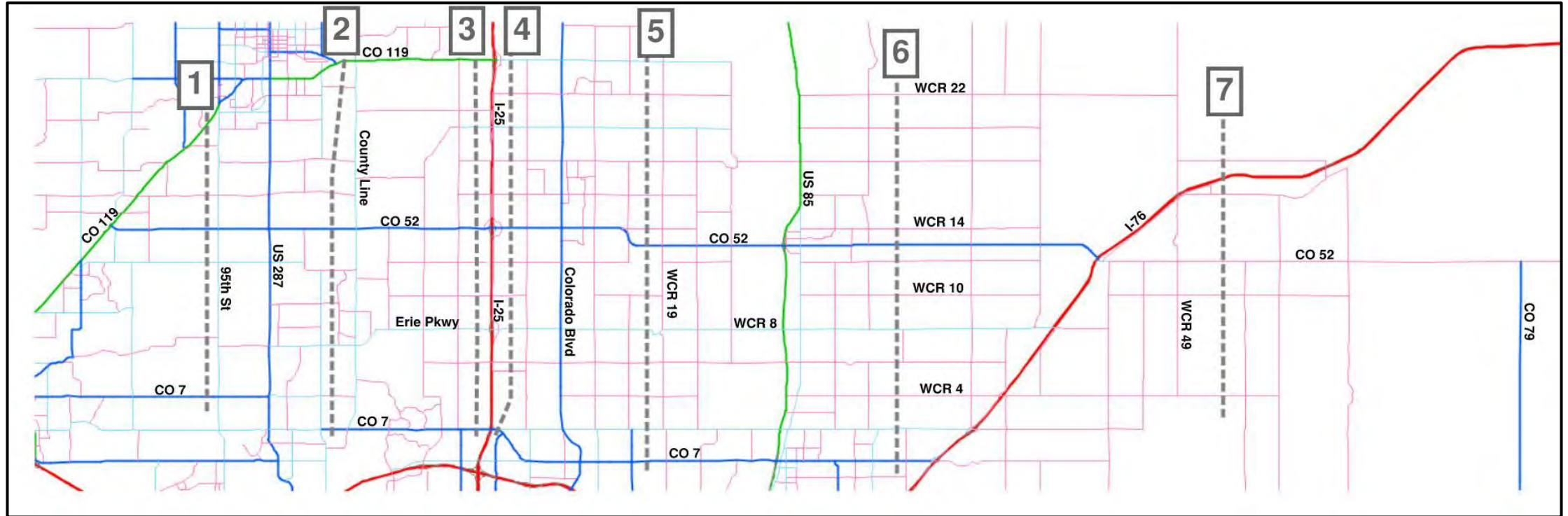
- Analysis was based on the StateFocus travel demand model's telework assumptions, as well as other Metropolitan Planning Organizations and regional models to identify transit trends in telecommuting, both before and after the pandemic.
- 20% of all work activity trips can be estimated to be telecommuting 'trips'
- This means that in the 2045 model, 1.4 million trips are estimated to be telecommuting 'trips'

Base Models vs. Telework Model Trip Estimations
(Statewide Estimates)





Traffic Forecasting and Screenline Analysis Memo



Though volumes along CO 52 increase by approximately 35% to 55% at the screenlines west of Dacono/Frederick compared to the No Action scenario, the major highways that parallel the highway, CO 119 and CO 7, experience minimal impact to daily volumes.



Transit Analysis

- Daily ridership forecasts from the travel demand model in year 2045 indicates fewer than 200 riders per day for a transit route along CO 52.
- A lack of dense employment/population centers along the corridor is likely the greatest factor in the ridership forecasts.
- From these findings, expanded transit options in the corridor are not warranted right now.

Scenario 1



Scenario 2



Scenario 3





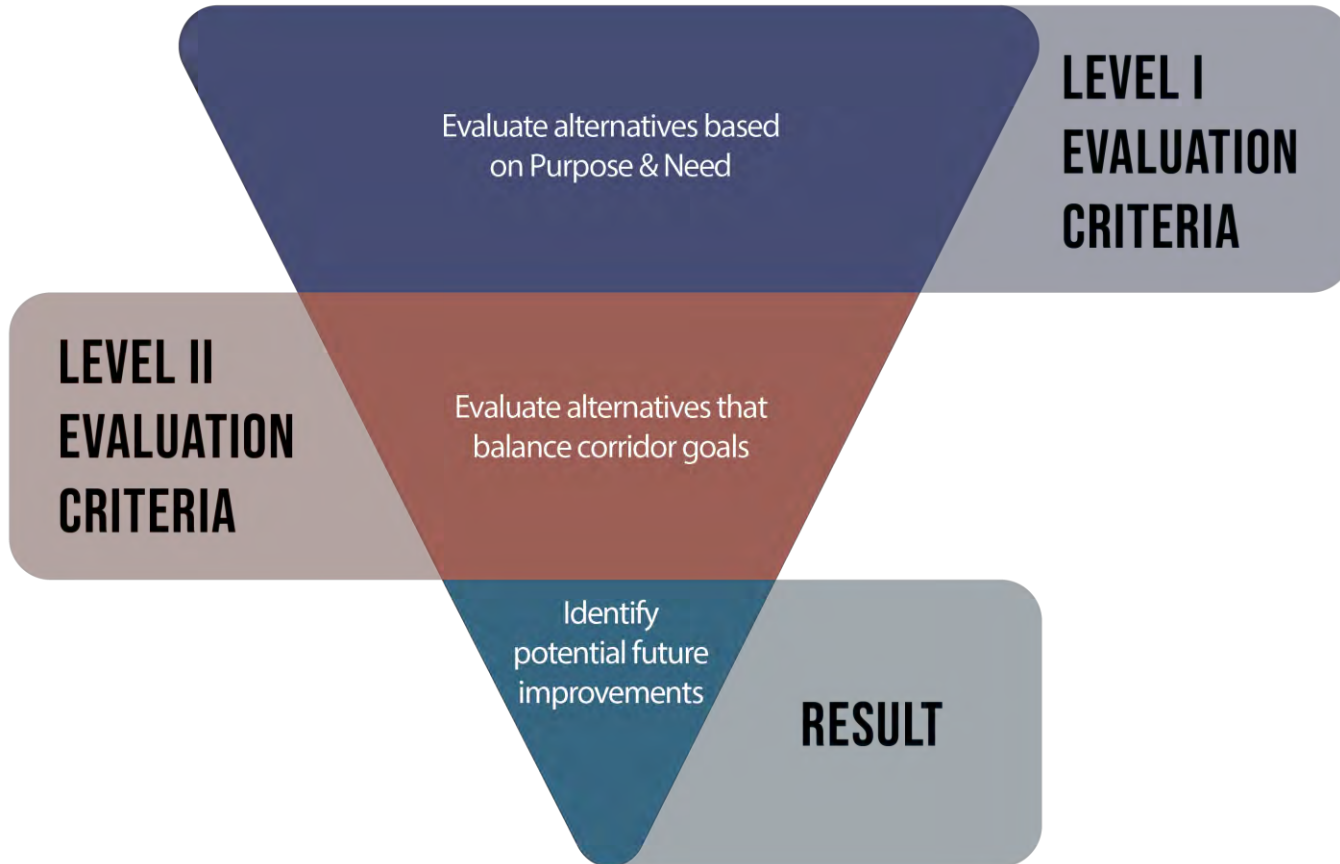
Funding Memo

- Provides summary descriptions of existing and potential federal, State, local and private funding sources
- Depending on the investment category, specific projects could pursue funding opportunities with local (cities and counties), regional (Regional Transportation District (RTD), Denver Regional Council of Governments (DRCOG), or North Front Range Metropolitan Planning Organization (NFRMPO), State (CDOT) and federal partners





Level 2 Evaluation Matrix: Agency Review



All agencies to provide feedback on the Level 2 Evaluation Matrix by End of July

- Met with Boulder County on 7/12
- Please let us know if you would like to set up a meeting with the project team



COLORADO

Department of Transportation

Alternatives: Areas Studied in Detail



US 287 & CO 52 Intersection: Partial CFI Layout

- Full 4-lane model = LOS D
- Middle 4-Lane model = LOS C
- West 4-lane model = LOS D



- SH 52 approaches are almost unchanged
- Focuses on US 287 approaches
- Crossover intersections are approximately 500 feet from signal
- Overall footprint may require slight widening from current footprint

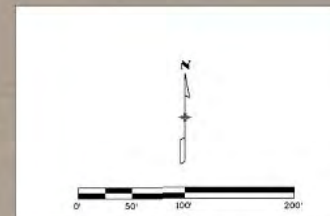


Draft WCR 59 Roundabout Exhibit



Design Criteria Legend

	Entry Width	14-18', Commonly 15'	NCHRP 672 (6.4.2)
	Exit Radius	100-200' is Common	NCHRP 672 (6.4.6)
	Entry Radius	50-100' for Single Lane Urban, Commonly 50-90', Used Higher Values Since Rural & High Speed	NCHRP 672 (6.4.5)
	Truck Apron	Generally 3-15', Wider for Smaller Inscribed Diameter, Use 18' as Discussed in Previous Meeting	NCHRP 672 (6.4.7.1)
	Circulatory Width	Typically 16-20'	NCHRP 672 (6.4.3)
	Inscribed Diameter	90-180', Use 150' as Discussed in Previous Meeting	NCHRP 672 (1.3)

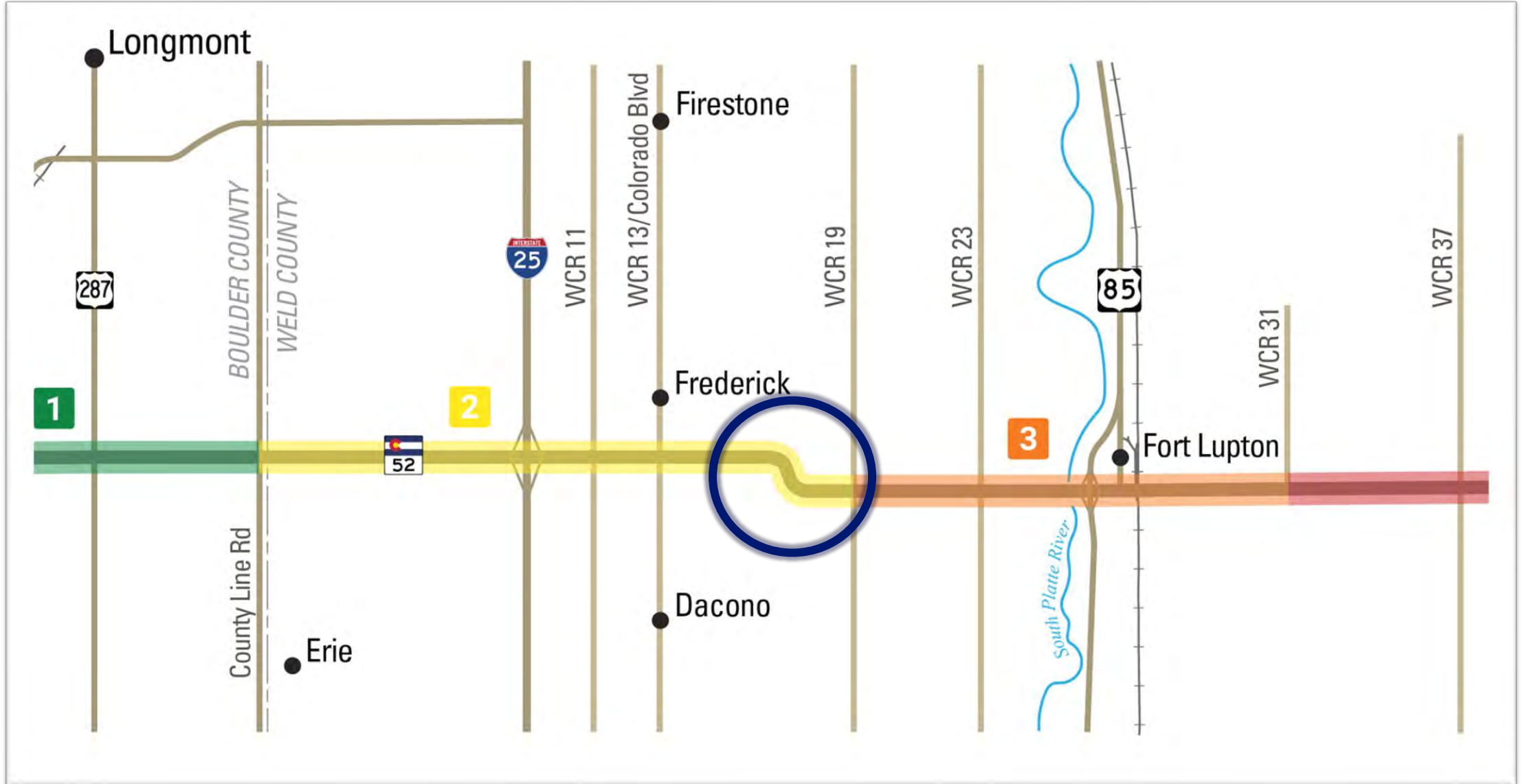


CO 52 & WCR 59

07-19-2021



Reverse Curves Location





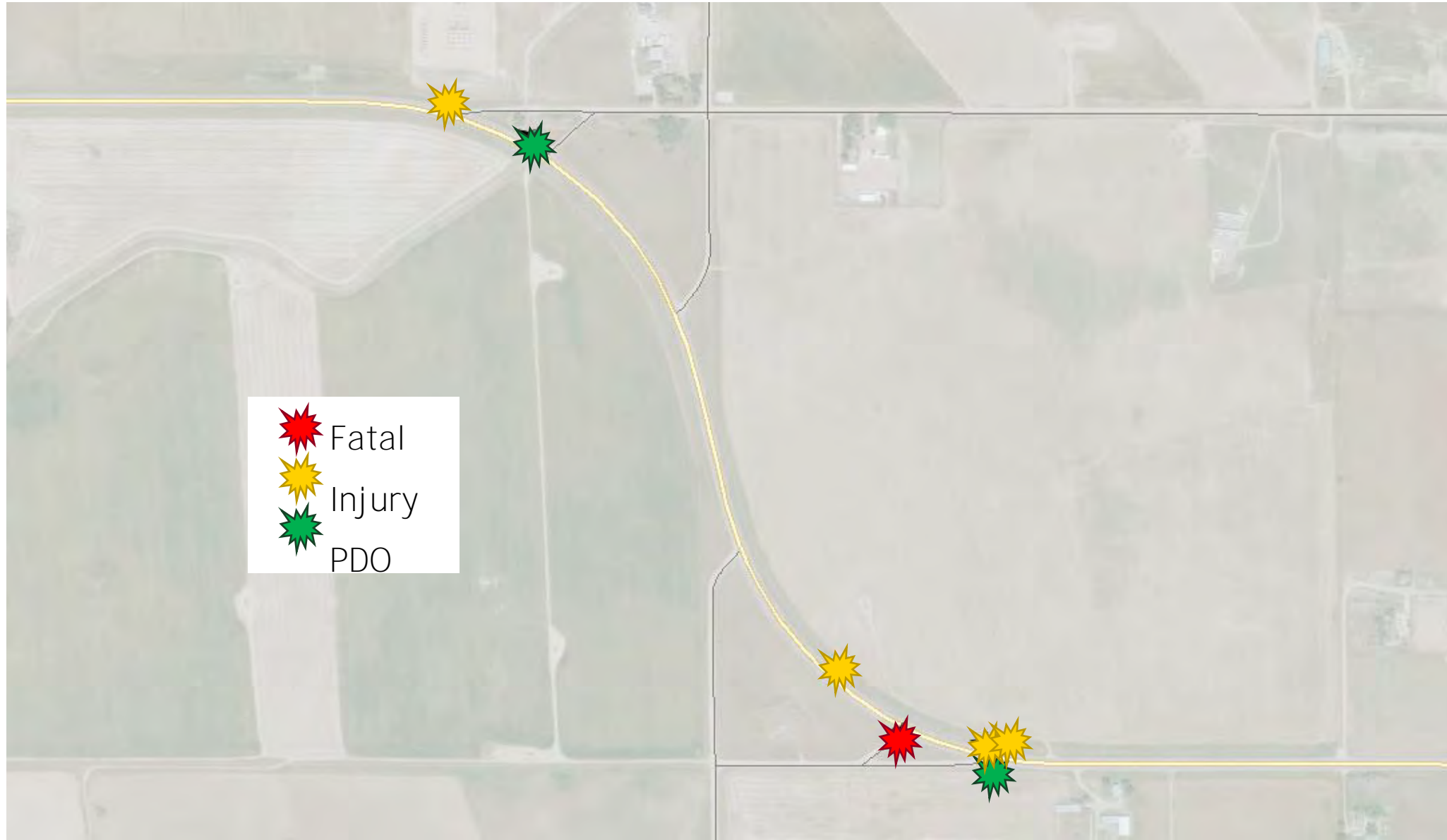
Existing Conditions

- Geometry
 - Spiral curve
 - 8% Superelevation
 - Vertical
- Documented Crash History





Crashes by Severity





Existing Alignment



8% R=1200'



4% Superelevation Alignment



4% R=3890'

8% R=1200'

Pros

- Flatter curves
- Lower superelevation (better for winter)
- Does not preclude a signal

Cons

- Larger impact



6% Superelevation Alignment



6% R=2320'

8% R=1200'

Pros

- Flatter curves
- Lower superelevation (better for winter)
- Smaller impact
- Does not preclude signal

Cons

- ROW impact



Reverse Curves - Comparison of Alignments

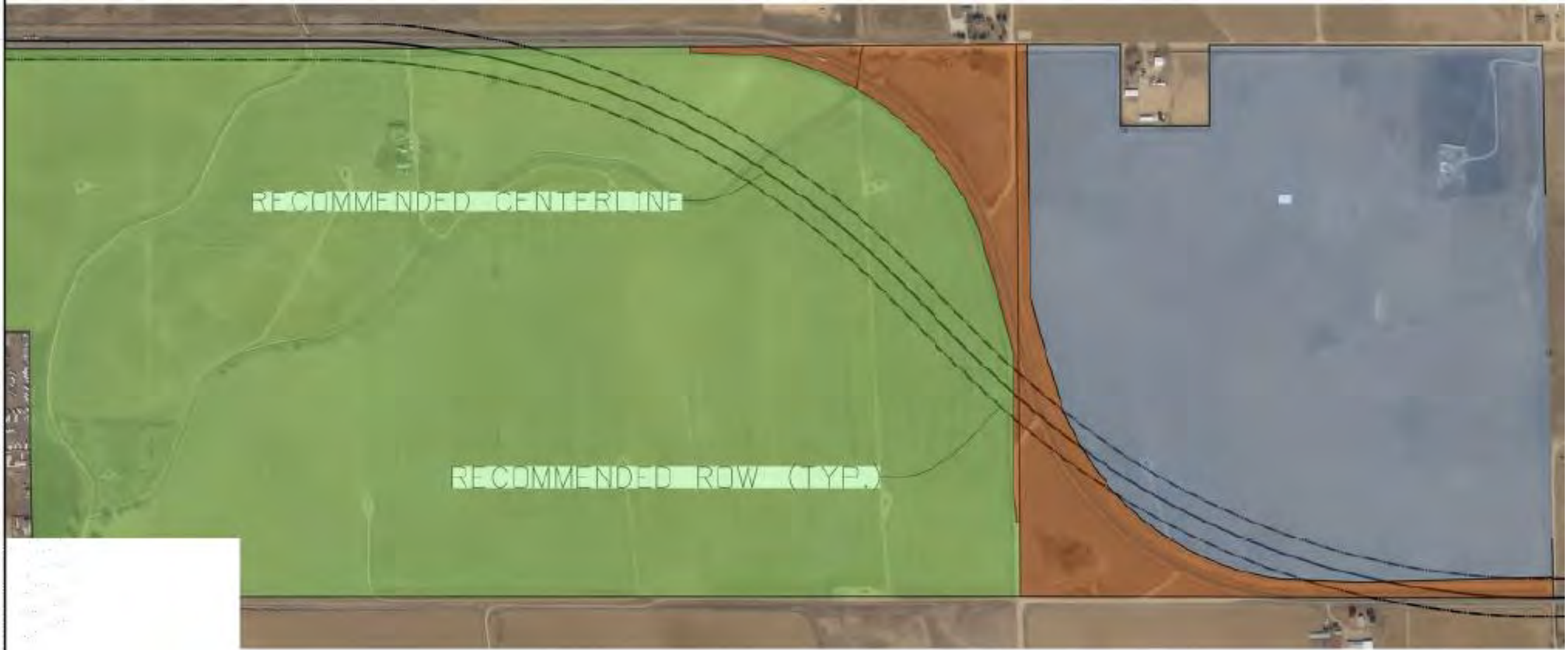


4%	R=3890'
6%	R=2320'
8%	R=1200'



Right-of-Way Preservation Discussion

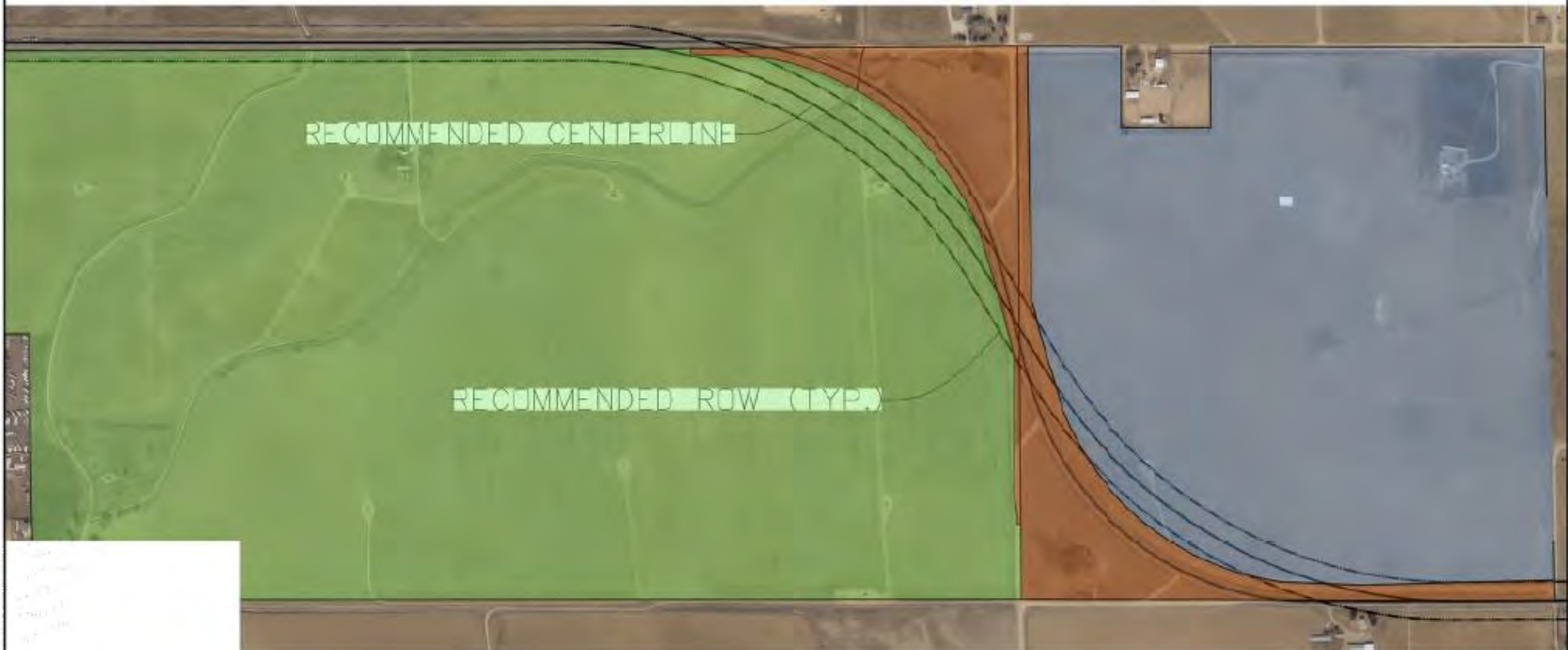
4%





Right-of-Way Preservation Discussion

6%





Right-of-Way Preservation Discussion

8%





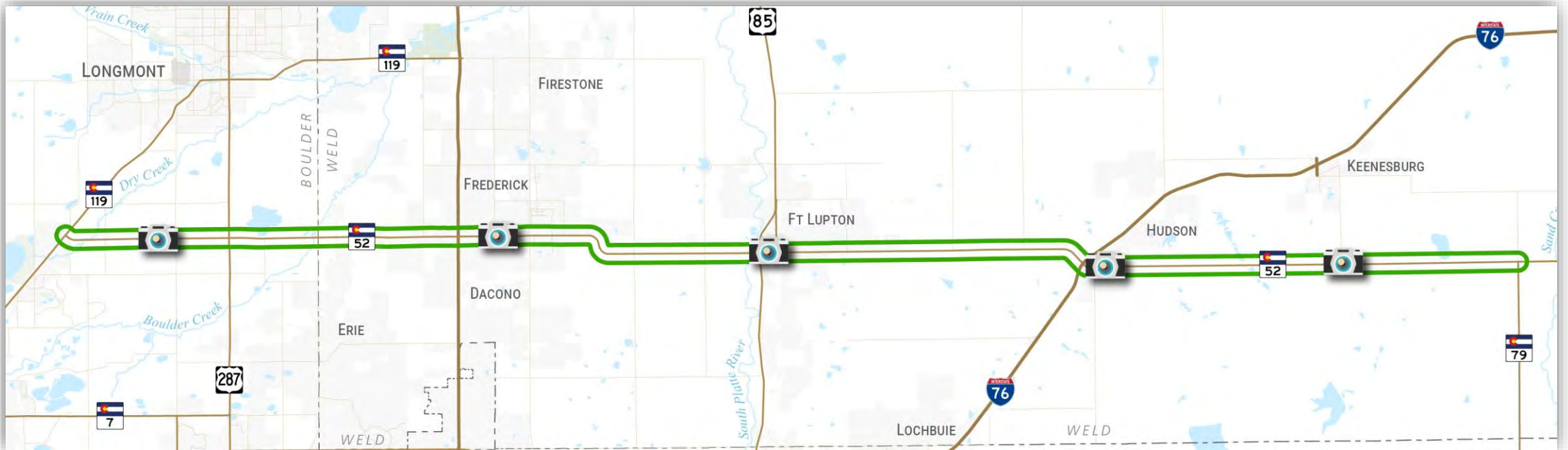
COLORADO
Department of Transportation

Visualizations



Visualization Locations

- Boulder County (trail separation location) - *In progress*
- Dacono/Frederick - Forest Ave.
- Fort Lupton - east of Grand Ave.
- Hudson - Beech St.
- WCR 59 - *In progress*





Dacono/Frederick - Existing



Dacono/Frederick - Proposed



Dacono/Frederick - Both



Ft. Lupton - Existing



Ft. Lupton - Proposed



Ft. Lupton - Both



Hudson - Existing



Hudson - Proposed



Hudson - Both



COLORADO
Department of Transportation

Communications

July 22, 2021



August Virtual Open House

Aug 20 - Sept 3, 2021 | Available Anytime, 24/7 | co52pel.com/pelopenhouse



CO 52 Planning and Environmental Linkages Study and Access Control Plan

EN

- **Welcome**
- PEL Orientation
- Existing Conditions
- Purpose and Need
- Data Collection
- Alternatives Analysis
- Introducing Alternatives
- Visualizing Alternatives
- Provide Feedback
- Next Steps



ENGAGE

Sign In

View Tutorial

WELCOME TO THE CO 52 PEL STUDY

Online Open House

Please let us know you're here by signing in on the left

At the onset of this project, the team held a virtual public engagement opportunity in August 2020. If you would like to review materials presented at the previous meeting, please select the button below.

Public Engagement #1 Materials



Outreach Methods

- Postcards
- Coordination with Local Agency PIOs
- Eblasts

 **COLORADO**
Department of Transportation

Colorado State Highway 52:
Planning & Environmental Linkages Study
and Access Control Plan Notification


52

We want to hear from YOU!

Public Input Opportunity!

What: Provide your comments on CO Hwy 52
Who: CO Hwy 52 Users
When: August 20th through September 3rd
How: Online at www.co52pel.com/publicmeeting

If you have any questions about the project or the upcoming virtual public engagement, please contact us at 720-336-0187.



Survey/Comment Opportunities

Corridor Alternatives

Corridor Needs and Goals

?

Participation

Access Control Plan



COLORADO

Department of Transportation

Access Control Plan



Access Control Plan



- Discuss Final IGA
- Outstanding access comments
- Currently under review by CDOT Headquarters
- On track to be completed by November 2021



Project Next Steps



- Level 2 Matrix Evaluations
 - Please reach out if you would like to set up a meeting!
- Finalize IGA and Circulate for Signatures
- August Virtual Open House (8/20 - 9/3)
- Next PEL/ACP Presentation to Coalition: September 23, 2021 (Corridor Projects)



COLORADO

Department of Transportation

Questions

