



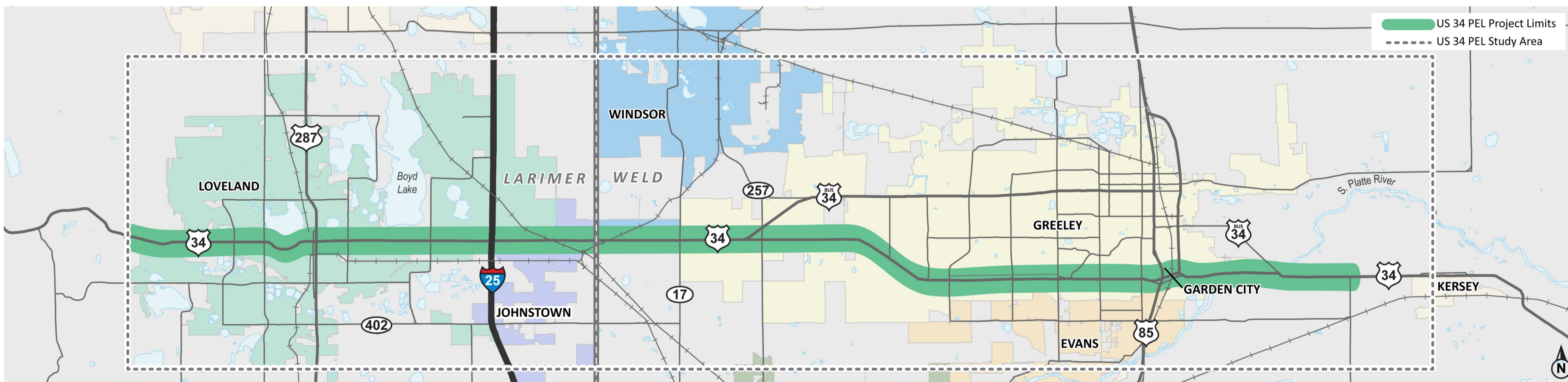
# WELCOME

to the

## US 34 Planning and Environmental Linkages Study

### and US 34/US 85 Interchange Project

# PUBLIC MEETING



# Please Sign In

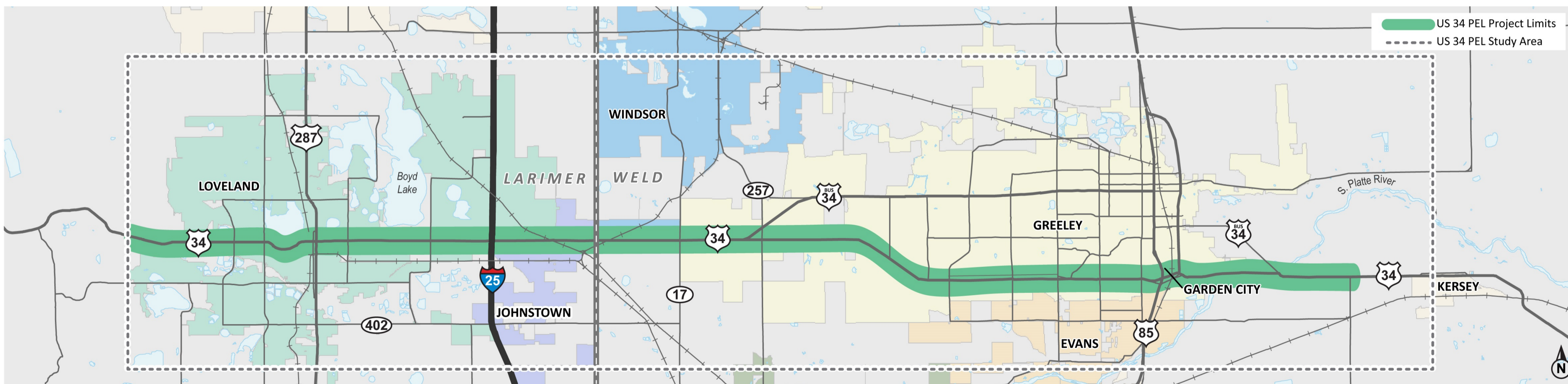


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## US 34 Planning and Environmental Linkages Study

# PUBLIC MEETING



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# US 34 PEL Study Goals and Outcomes

- A Planning and Environmental Linkages (or PEL) study typically identifies transportation and environmental concerns before project construction funding is identified and before specific problems are known.
- The goals and expected outcomes of the US 34 PEL study are:
  - Develop a vision for the US 34 corridor
  - Identify transportation solutions (near, mid, and long-term) and priorities
  - Establish costs and pursue funding for projects
  - Develop implementation strategies
  - Facilitate project development and construction
- The PEL study will leverage past studies and agreements in the corridor, and will identify projects that can move into design and construction immediately.

# Draft Purpose and Need

The purpose of highway improvements is to preserve US 34 as a vital regional transportation corridor to move people, goods, and information reliably and plan for the future by accommodating changing travel demands and opportunities.

## Needs:

- Enhance safety
- Accommodate travel demands of forecasted population and economic growth
- Increase reliability of east/west regional travel, while balancing local access and mobility

## Goals for transportation solutions:

- Be compatible with the natural and human environment
- Support community land use and aesthetics goals
- Be fiscally responsible and implementable





## Related Studies

- **US 85 PEL Study**

This is an ongoing study addressing the safety and operational needs along US 85 in northern Colorado between I-76 and the Town of Nunn. Recommended US 34/US 85 interchange as early action project.

- **US 34 Business Environmental Assessment and Widening Project**

This project widened US 34 Business in west Greeley to four lanes in 2009.

- **North I-25 Environmental Impact Statement**

In 2011, this study approved the following within the US 34 PEL study area: new tolled express lane and general purpose lanes on I-25 north to SH 14; commuter rail from Thornton to Fort Collins; bus service on I-25 from Fort Collins to Denver and on US 85 from Greeley to Denver; and reconstruction of the I-25/ US 34/ Centerra Parkway interchange. The interchange design is underway.

- **SH 402 Environmental Assessment**

In 2008, this study approved widening SH 402 from two to four lanes between US 287 and I-25.

- **SH 402 Access Control Plan**

The City of Loveland and CDOT are currently scoping an Access Control Plan for SH 402 from US 287 to I-25.

- **US 34 Environmental Assessment**

In 2007, this study approved widening US 34 to six lanes between US 287 and LCR 3 in Loveland and Larimer County.

- **O Street Arterial Corridor Study**

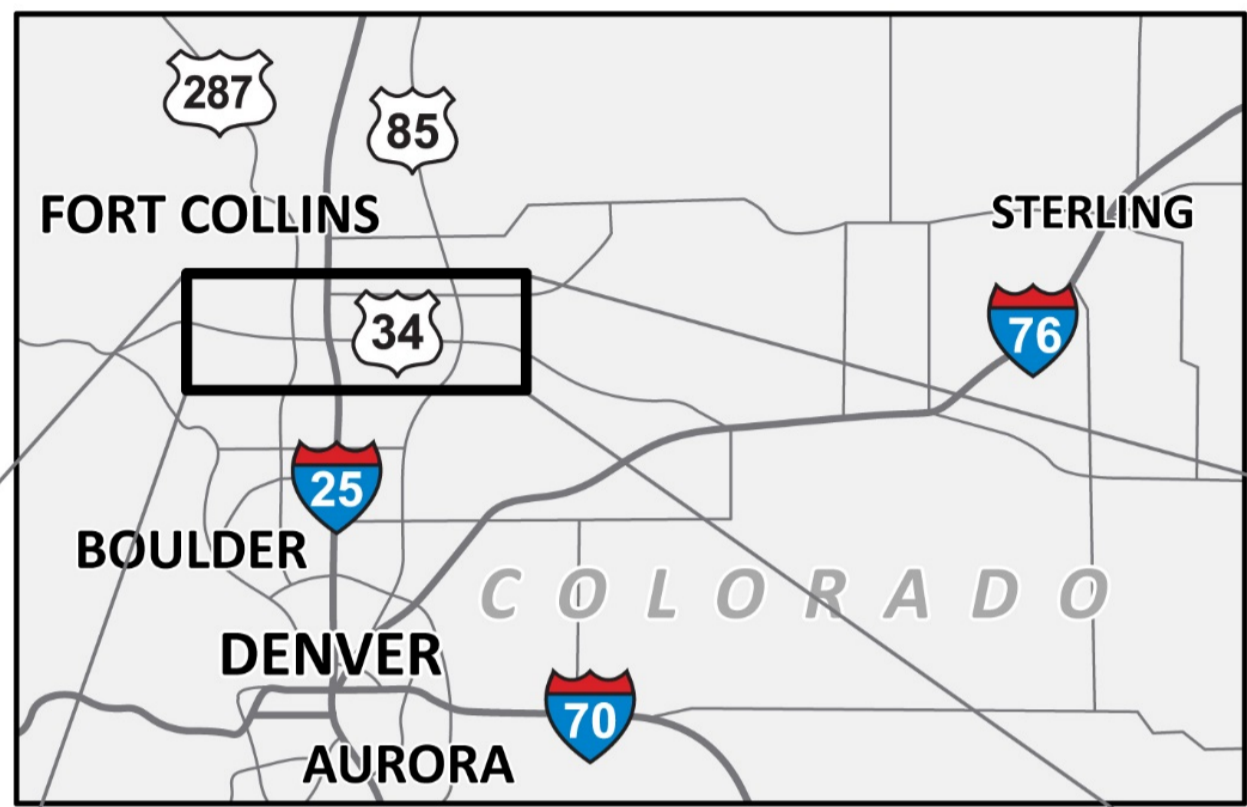
In 2008, Weld County, Greeley, and Windsor completed a study that identified a preferred alignment to connect Crossroads Blvd and O Street between SH 257 and 83rd Avenue.

- **Freedom Parkway Corridor Planning and Access Control Plan**

This is an ongoing planning effort to define a vision, future road connections, and an Access Control Plan for the Freedom Parkway corridor (LCR 18, WCR 54, 37th Street).

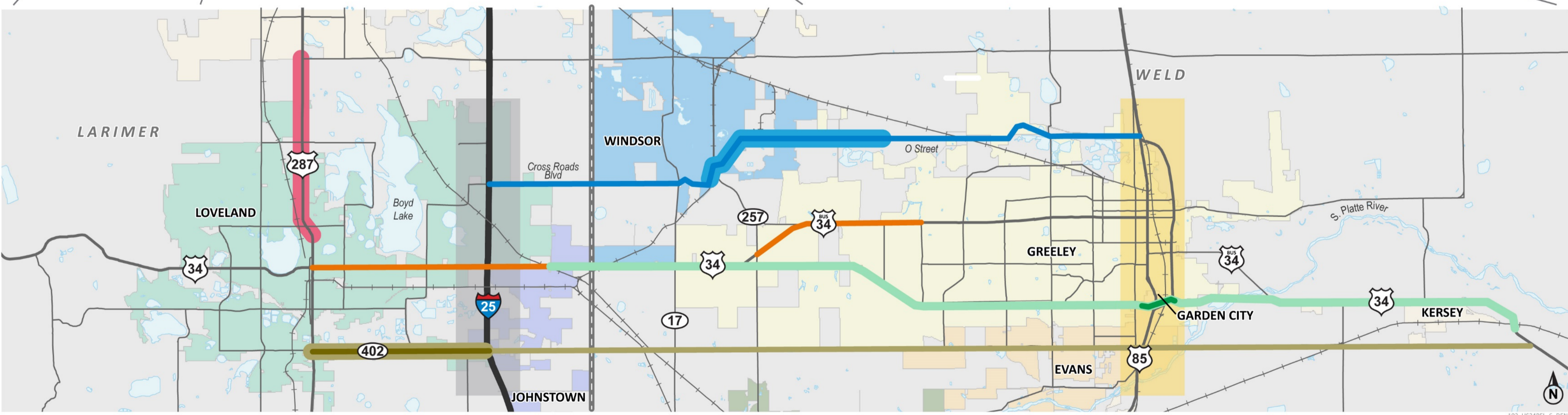


# Related Studies and Access Control Plans



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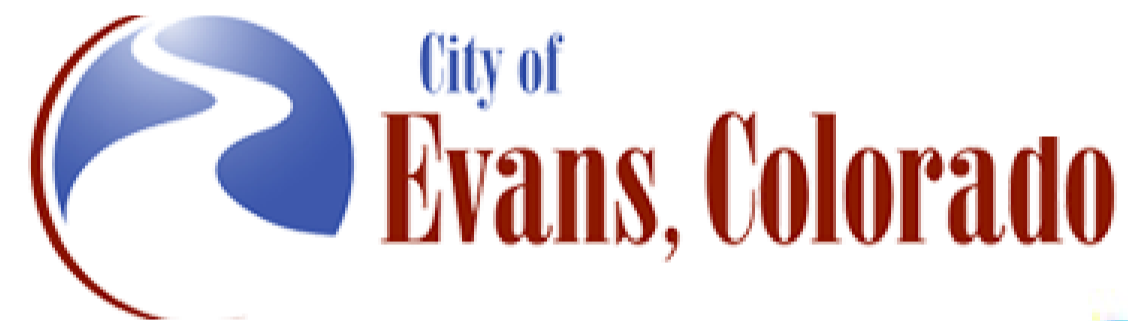
- Northeastern Quadrant Study
- US 287 Access Plan
- US 34 Environmental Assessment
- US 34 Access Control Plan and US 34 Optimization
- US 34 Business Environmental Assessment
- SH 402 Access Control Plan
- SH 402 Environmental Assessment
- Freedom Parkway
- I-25 Environmental Impact Statement
- US 85 PEL Study
- US 85/US34 Interchange
- O Street Arterial Corridor Study





# US 34 Coalition Members

The US 34 Coalition was formed in 2015 with the purpose of creating a collaborative effort to advocate for needed improvement projects along the US 34 Corridor.



The City of Evans, the City of Greeley, the City of Loveland, Larimer County, Weld County, the Town of Kersey, and the Town of Windsor are signatory members of the Access Control Planning Committee.

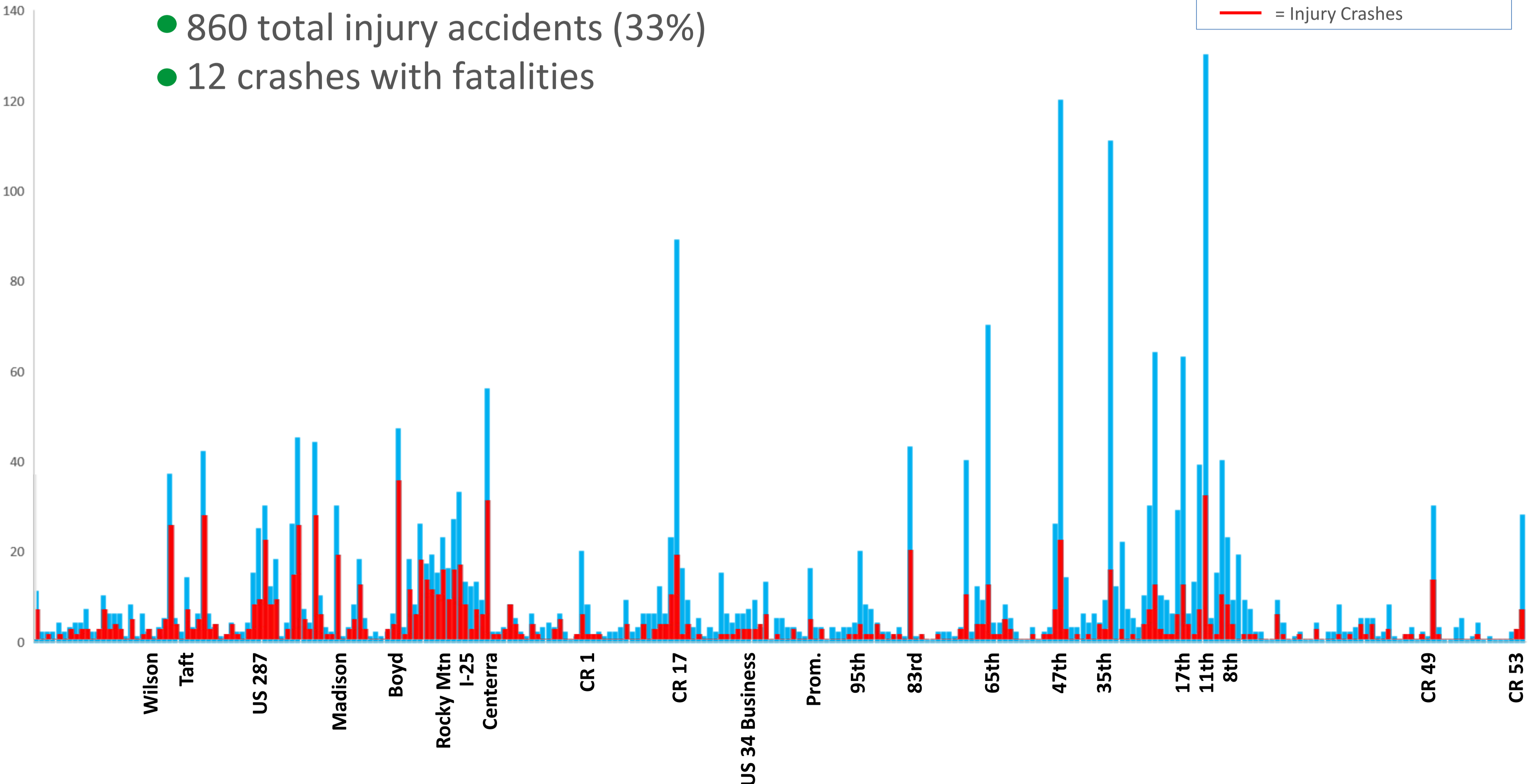


# Existing Crash Data January 2011 through December 2015

- Project limits on US 34 span 30 miles
- > 2,600 total accidents (>500 accidents per year)
- 860 total injury accidents (33%)
- 12 crashes with fatalities

LEGEND

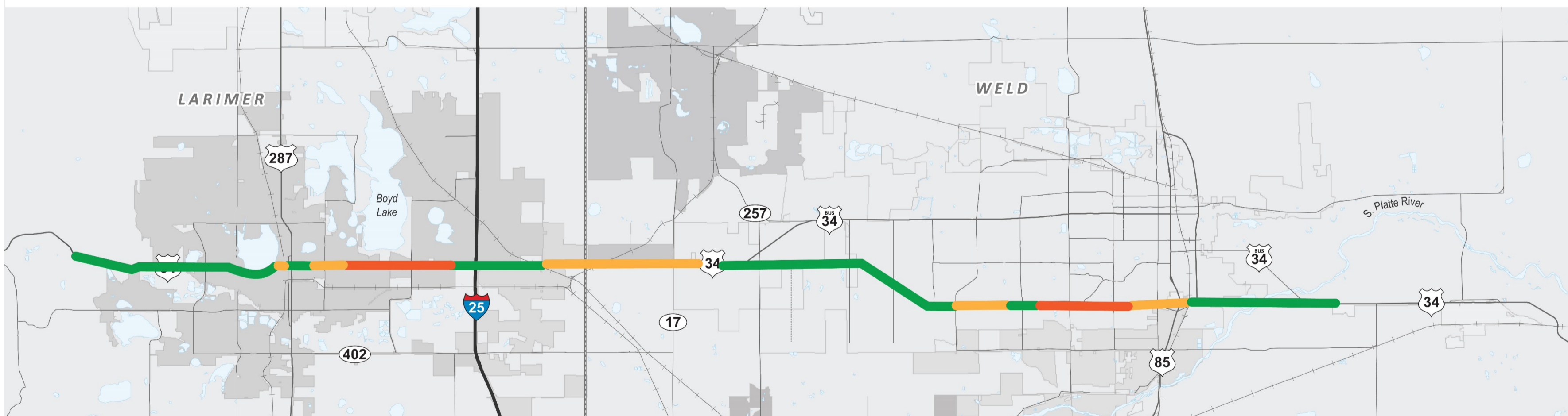
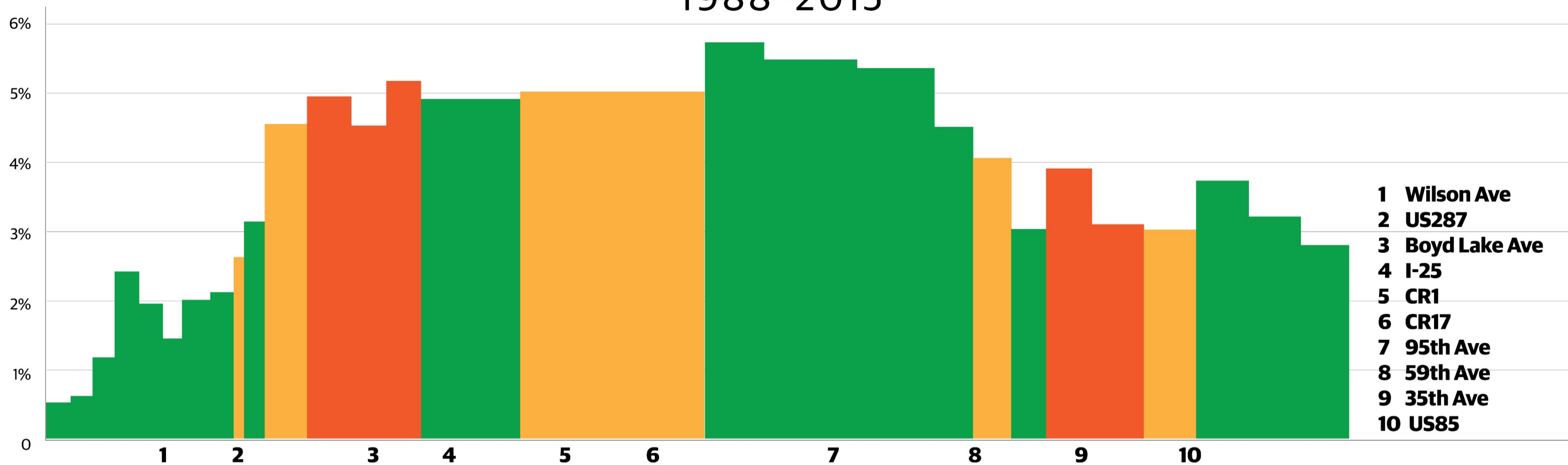
- = Crashes (all types)
- = Injury Crashes





# Traffic Volumes

## AVERAGE ANNUAL TRAFFIC GROWTH 1988-2015



**Reliable Traffic Operations – Few Delays, Travel at Posted Speed.**

**Traffic Approaching Periods of Congestion and Delays**

**Significant Intersection Delays and Low Average Speeds**

# Environmental and Social Resources of Focus

During the PEL process CDOT will focus on the following resources:

- Threatened and Endangered Species
- Traffic Noise
- Recreational Resources and Trails
- Wetlands and Surface Waters
- Floodplains
- Land Use, including Farmlands and  
Oil and Gas Operations
- Right-of-Way
- Historic Resources
- Visual/Aesthetics



Please see the adjacent maps for locations of  
key environmental and social resources.

## Land Use & Development Trends

Location	Key Issues & Future Land Uses Along US 34
Loveland	SH 287/US 34 gateway redevelopment Commercial redevelopment/ infill at key nodes Primarily multi-use commercial and employment districts planned
Kelim	Heavy industrial and residential planned
Johnstown	Scheels' development – retail, office, hospital, multifamily CR 3/UPRR intersection to accommodate future development 2534 development Primarily commercial and employment planned
Windsor	Industrial and commercial land uses planned along corridor; residential behind.
Greeley	Updating Comprehensive Plan More multifamily with greater desire for urban amenities Desire for mall redevelopment at 17th Employment, open lands, or a hybrid planned in west Greeley
Evans	US 34/US 85 interchange Connection at 35 <sup>th</sup> Street would enable economic development Retail, office, commercial, automotive commercial planned; future major commercial designated at WCR 45
Garden City	US 85 interchange Retail uses
Kersey	Planned event center at town gateway Better connection to Core Business District Light industrial and commercial planned at gateway; within town, mixed use commercial and residential planned
Weld County	Uses by Special Review (USRs) for current and planned developments; other areas to receive agriculture designation
Larimer County	Currently planning land uses

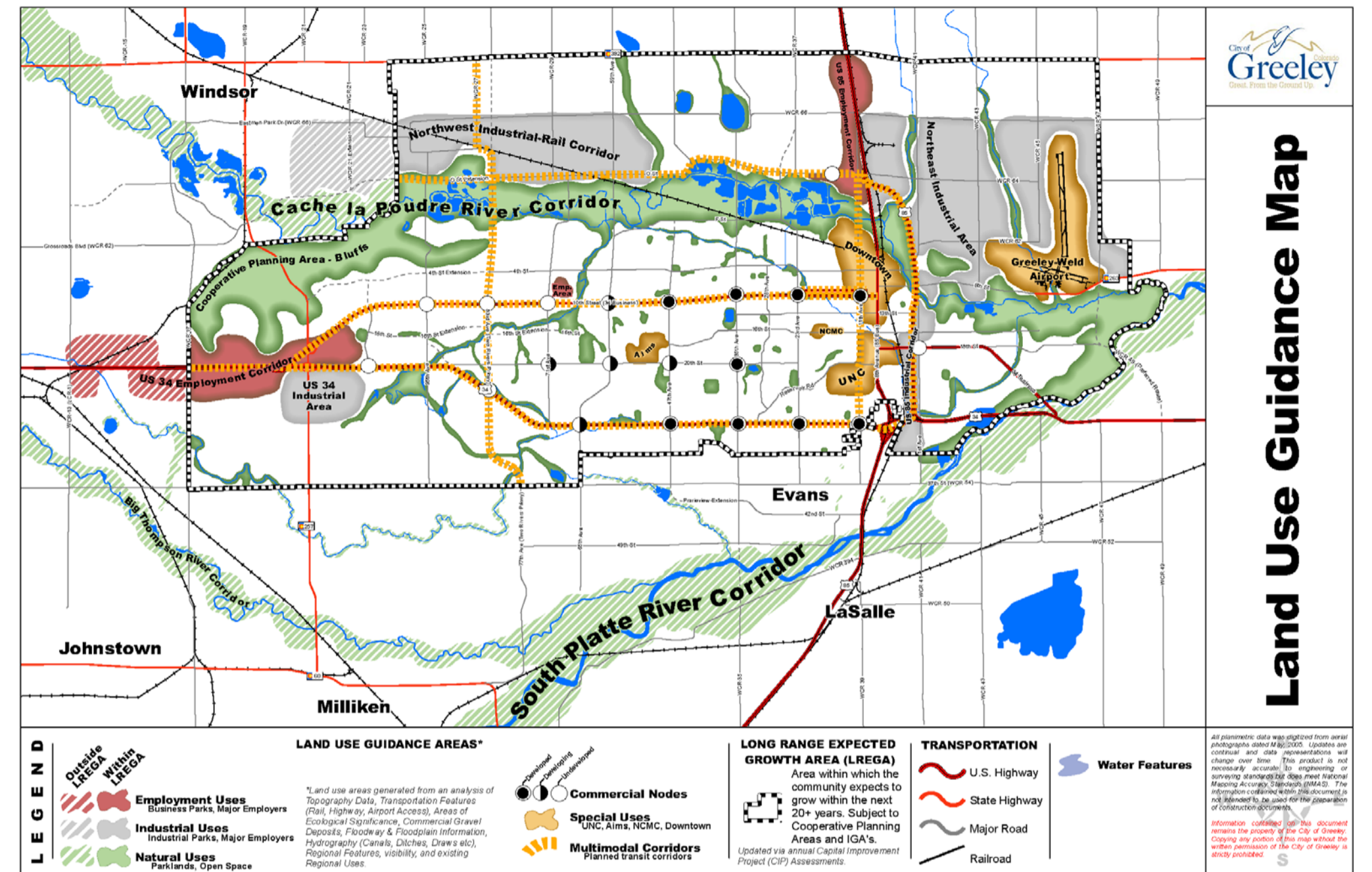
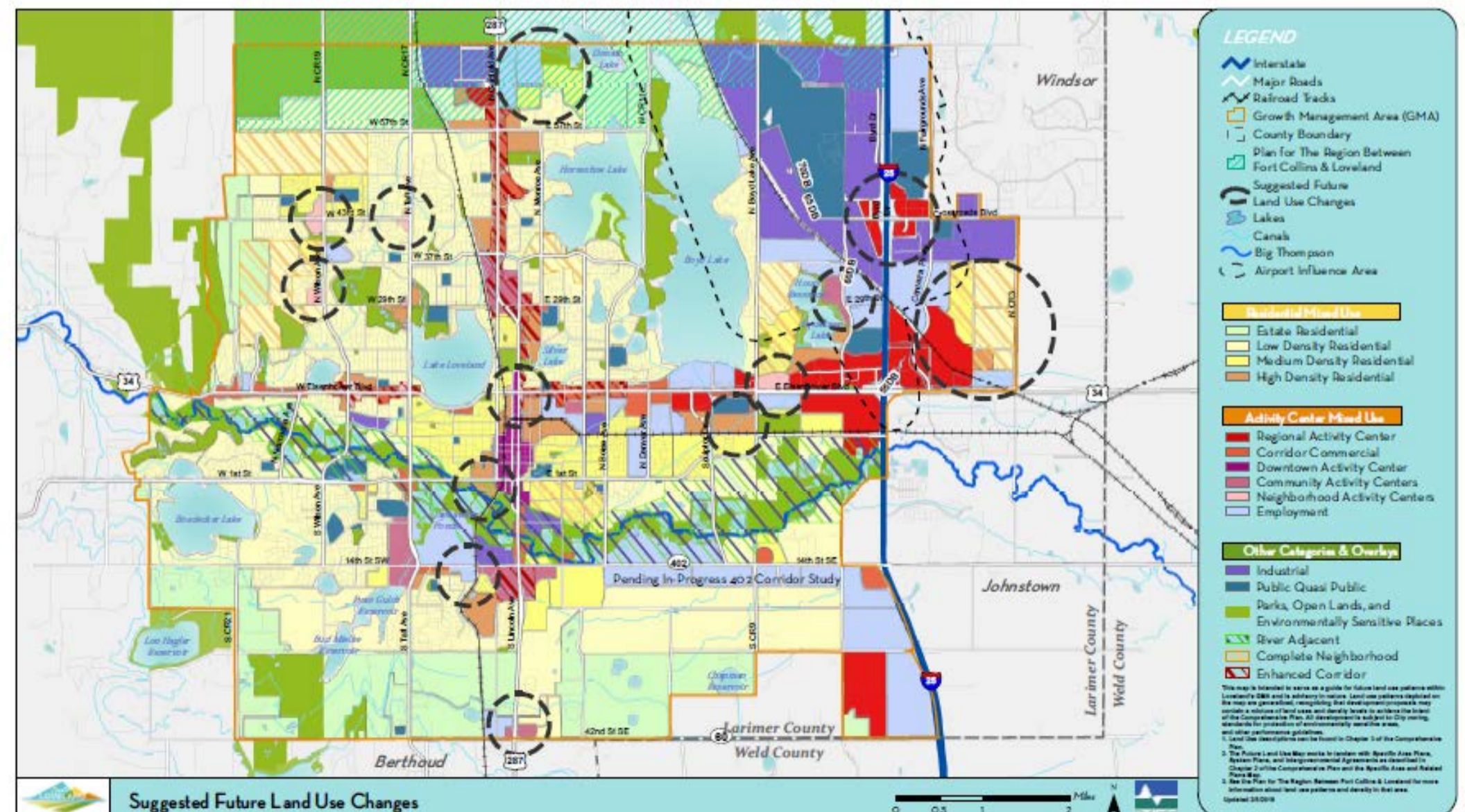
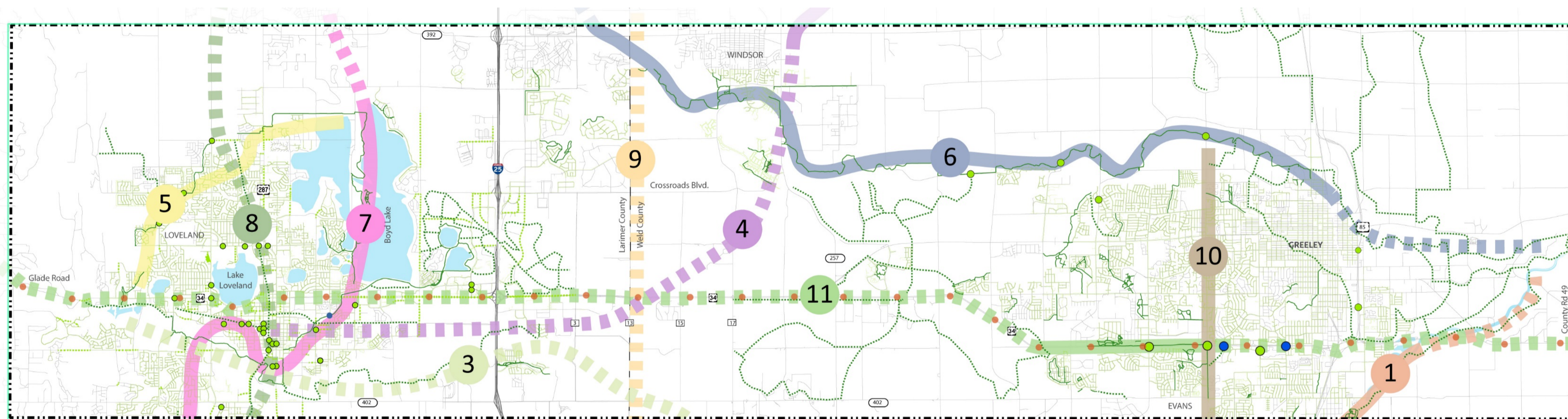


Figure 3-10. Suggested Future Land Use Changes



## Pedestrian Facilities

### Existing and Proposed Pedestrian Facilities



#### LEGEND

- |  |  |
|--|--|
| Existing   | Proposed*                                |
|  |  |
| Sidewalk   |  |
|  |  |
| Shared-Use Path/Side Path/ Rec. Trails/Off Street Trails |  |
|  | Proposed Trail Intersection Improvements |
|  | Proposed Intersection Improvements       |

#### REGIONAL NON-MOTORIZED CORRIDORS

- |  |            |                               |            |
|--|------------|-------------------------------|------------|
| Existing                                 | Proposed** | Existing                      | Proposed** |
|  |            |                               |            |
| 1: South Platte/American Discovery Trail |            | 7: Front Range Trail (West)   |            |
|  |            |                               |            |
| 3: Big Thompson River                    |            | 8: BNSF Fort Collins/Berthoud |            |
|  |            |                               |            |
| 4: Great Western/Johnstown/Loveland      |            | 9: Johnstown/Timnath          |            |
|  |            |                               |            |
| 5: North Loveland/Windsor                |            | 10: Greeley/LaSalle           |            |
|  |            |                               |            |
| 6: Poudre River Trail                    |            | 11: US 34 Non-motorized       |            |

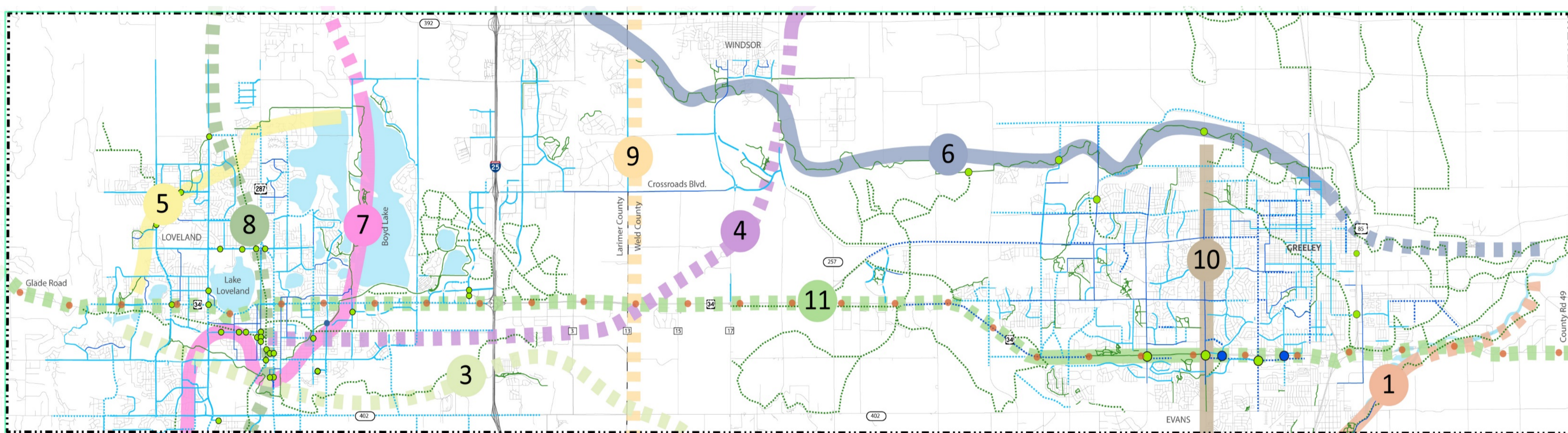
- Study Corridor Mile Posts
- Study Area

\* Proposed local bicycle facilities from following plans: City of Loveland 2035 Transportation Plan (2012), City of Loveland Bicycle and Pedestrian Plan (2015), The 2035 City of Greeley Comprehensive Plan (2011), the City of Greeley Bicycle Master Plan (2015), and Greeley Parks, Trails and Open Lands Master Plan (2016)

\*\* Proposed regional bicycle facilities from following plans: NFRMPO Regional Bicycle Plan (2013), NFRMPO Regional Transportation Plan (2015), and NFRMPO 2040 Non-motorized Plan (2017).

## Bicycle Facilities

### Existing and Proposed Bicycle Facilities



#### LEGEND

- |          |           |
|----------|-----------|
| Existing | Proposed* |
|          |           |
|          |           |
|          |           |
|          |           |
- Bike Lane
  - Bike Routes/Sharrow
  - Shared-Use Path/Side Path/ Rec. Trails/Off Street Trails
  - Proposed Trail Intersection Improvements
  - Proposed Intersection Improvements

- |          |            |          |            |
|----------|------------|----------|------------|
| Existing | Proposed** | Existing | Proposed** |
|          |            |          |            |
|          |            |          |            |
|          |            |          |            |
- 1: South Platte/American Discovery Trail
  - 3: Big Thompson River
  - 4: Great Western/Johnstown/Loveland
  - 5: North Loveland/Windsor
  - 6: Poudre River Trail
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  - 8: BNSF Fort Collins/Berthoud
  - 9: Johnstown/Timnath
  - 10: Greeley/LaSalle
  - 11: US 34 Non-motorized

- Study Corridor
- Mile Posts
- Study Area

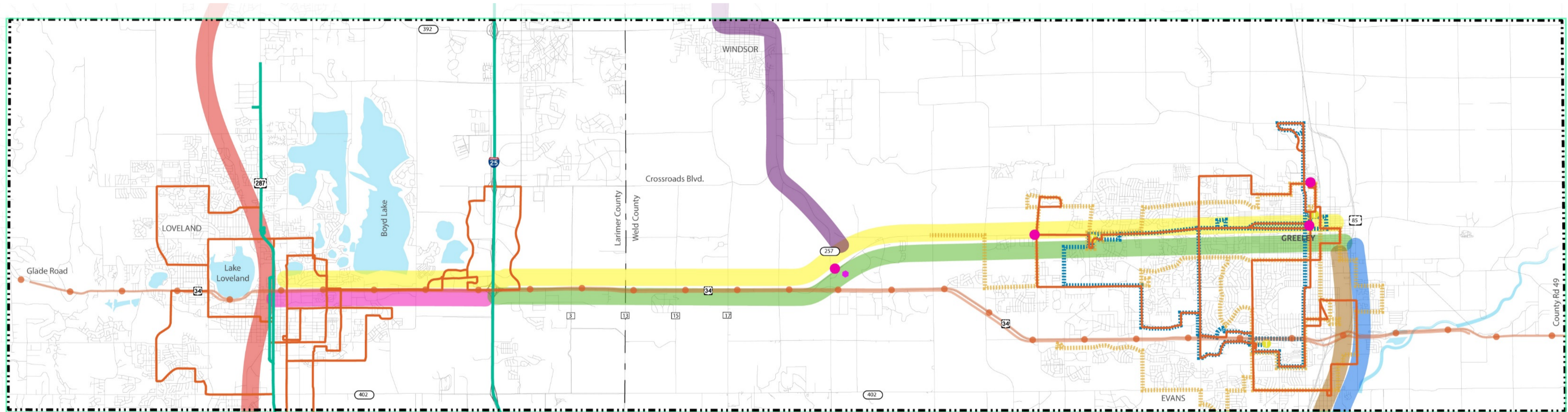
#### REGIONAL NON-MOTORIZED CORRIDORS

\*\* Proposed regional bicycle facilities from following plans: NFRMPO Regional Bicycle Plan (2013), NFRMPO Regional Transportation Plan (2015), and NFRMPO 2040 Non-motorized Plan (2017).

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## Transit Service

### Existing and Proposed Transit Service



#### LEGEND

- Existing Local Service
- Existing Regional Service (TRANSFORT - FLEX & Bustang)

- ▤▤▤▤▤▤▤▤▤▤ Greeley Proposed 30 Min Headway\*
- ▤▤▤▤▤▤▤▤▤▤ Greeley Proposed 60 Min Headway\*
- Proposed Express Bus Transit Station\*\*\*
- ◆ Carpool Lot\*\*\*

- NFRMPO REGIONAL TRANSIT CORRIDORS\*\*
- ▬ Proposed RTC 2
  - ▬ Proposed RTC 3
  - ▬ Proposed RTC 4
  - ▬ Proposed RTC 5
  - ▬ Proposed RTC 7
  - ▬ Proposed RTC 8
  - ▬ Proposed RTC 9

\* Proposed transit improvements from the City of Greeley 2035 Comprehensive Transportation Plan (2011)

\*\*\* Proposed Express Transit Station and Carpool Lot from I-25 IES Preferred Alternative. (08/2011)

\*\* Proposed Regional Transit Corridors from NFRMPO 2040 Regional Transit Element (2015).

# Access Control Plan

## What is an Access Control Plan?

An Access Control Plan controls the location, spacing, design, and operation of driveways, median openings, and street connections to a roadway.

## Access Control Plan Benefits

### Safety

- Reduces the number of conflict points and potential crashes
- Provides safe access to businesses and residences

### Increased Ability to Accommodate Traffic Demands

- Reduces travel times/smoothier traffic flow
- Less air pollution

### Good Access Management is Good for Business

- Preserves property values
- A more efficient roadway system captures a broader market area
- Provides a more predictable and consistent development environment

### Encourages Use and Development of Local Streets

- Focus through traffic on the highway
- Provide circulation options for local traffic on the local street system

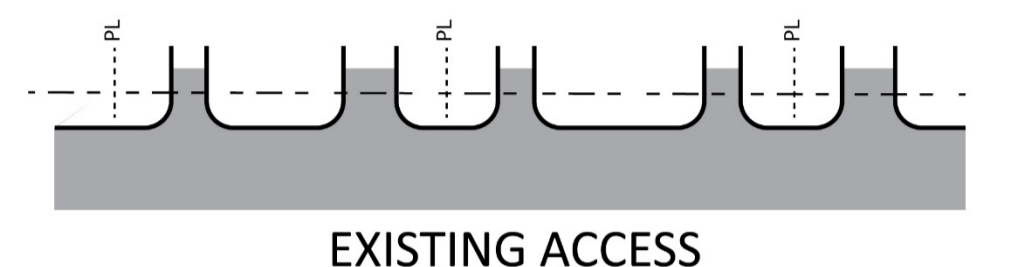
### Enhanced Corridor Appearance

- Easily locate businesses
- Opportunities for streetscaping/landscaping

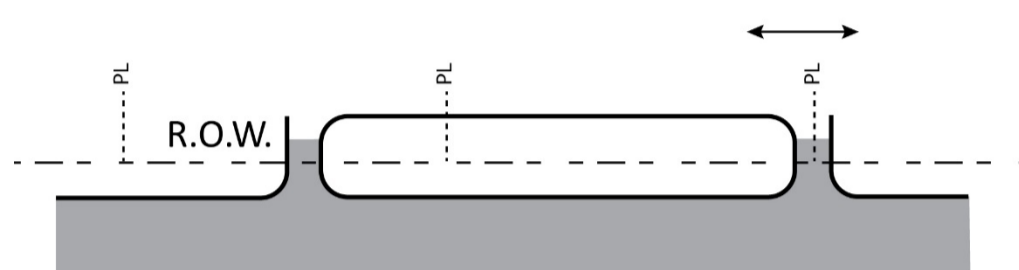


# Access Control Principles and Techniques

- Consolidate the number of direct access points to major roadways

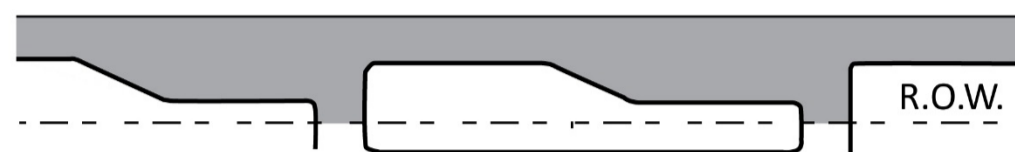


EXISTING ACCESS



CONSOLIDATED ACCESS

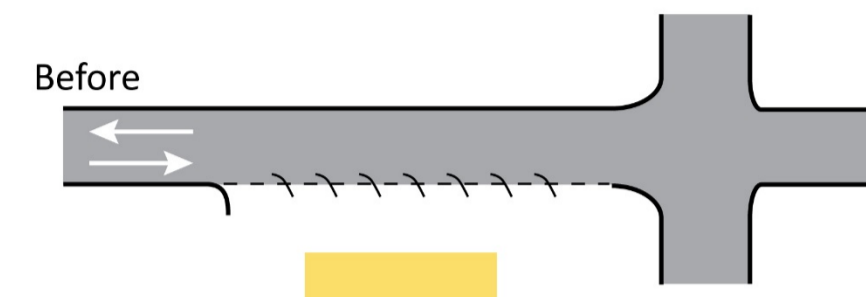
CONSOLIDATE ACCESS POINTS



Shopping Center

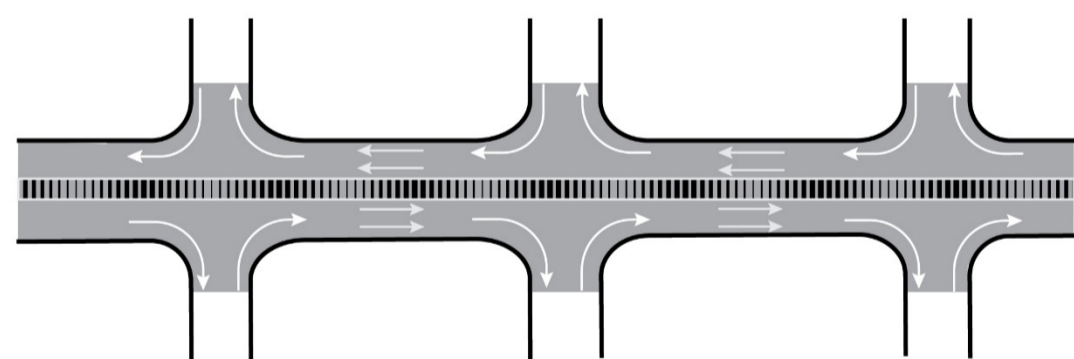
Office Building

CONNECT ADJACENT PROPERTIES

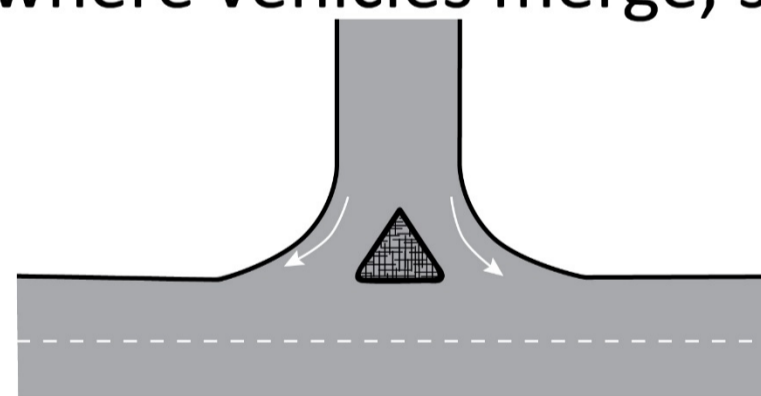


DEFINE DRIVEWAYS

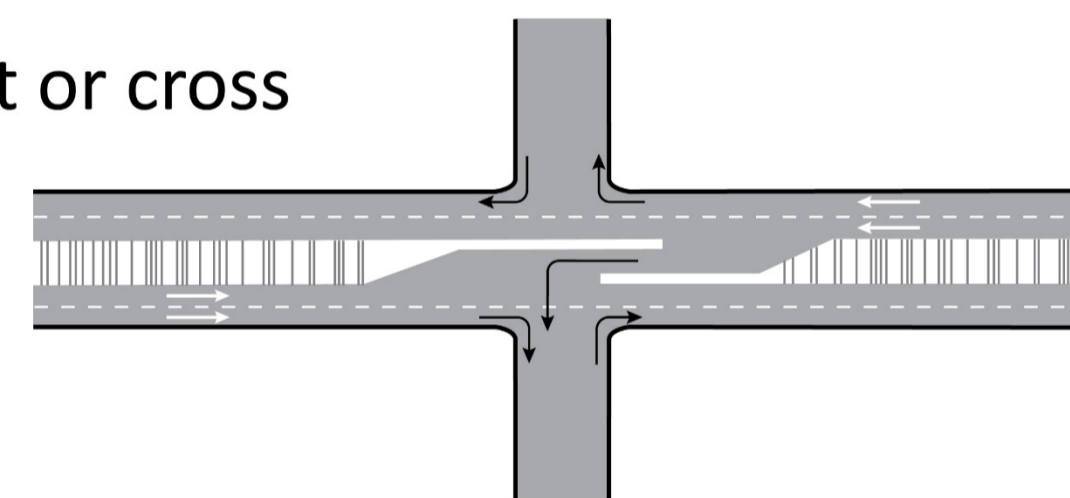
- Locate signals/intersections/interchanges to favor through traffic and preserve signal cycle length for local streets
- Minimize the number of locations where vehicles merge, split or cross



RIGHT-IN/RIGHT OUT WITH RAISED MEDIAN

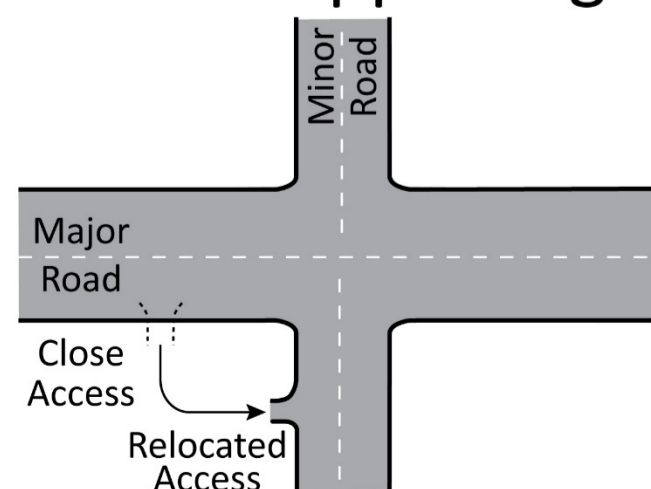


RIGHT-IN/RIGHT-OUT WITH CHANNELIZING ISLAND



DIRECTIONAL MEDIAN OPENING 3/4 MOVEMENT

- Remove turning vehicles from through traffic lanes with turn lanes or interchanges
- Provide a supporting local street network



RELOCATE ACCESS TO SIDE STREET





# Advantages of an Access Control Plan

No Access Control Plan	Adopted Access Control Plan
<ul style="list-style-type: none"><li>• Controlled by State Highway Access Code (SHAC)</li></ul>	<ul style="list-style-type: none"><li>• Replaces SHAC Criteria for access location/movements</li></ul>
<ul style="list-style-type: none"><li>• CDOT adherence to SHAC criteria</li></ul>	<ul style="list-style-type: none"><li>• Opportunity for local input</li></ul>
<ul style="list-style-type: none"><li>• Isolated individual access point analysis</li></ul>	<ul style="list-style-type: none"><li>• Corridor wide analysis</li></ul>
<ul style="list-style-type: none"><li>• Considers transportation only</li></ul>	<ul style="list-style-type: none"><li>• Considers existing/future land use</li></ul>
<ul style="list-style-type: none"><li>• First come, first served</li></ul>	<ul style="list-style-type: none"><li>• Considers adjacent access and land use interaction</li></ul>
<ul style="list-style-type: none"><li>• Follows rigid criteria from SHAC</li></ul>	<ul style="list-style-type: none"><li>• Incorporates flexibility into criteria based on corridor specific conditions</li></ul>
<ul style="list-style-type: none"><li>• No plan to understand how land use and access interact when considering land use changes</li></ul>	<ul style="list-style-type: none"><li>• Landowners/Developers know proposed access conditions up front</li></ul>

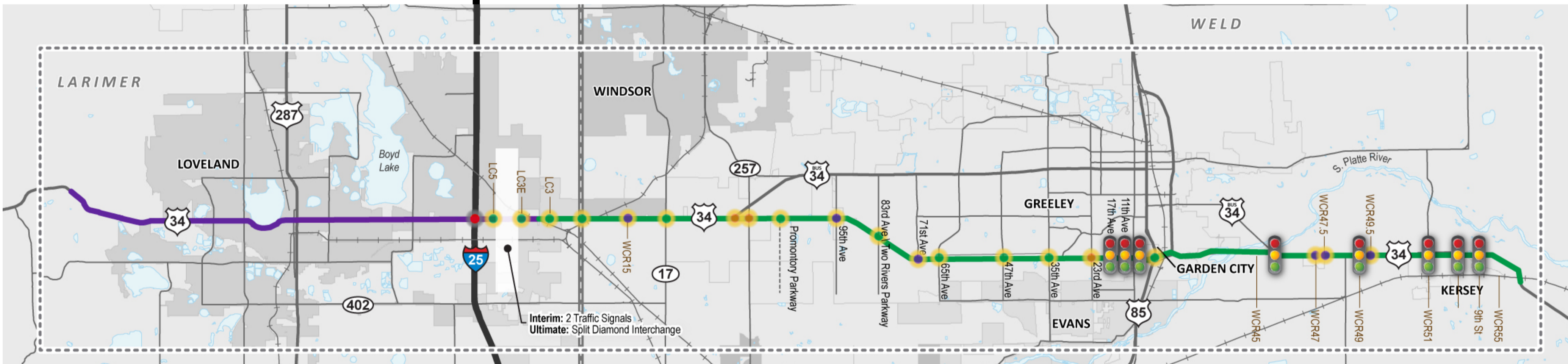


# US 34 Access Control

Concurrent with the PEL study, CDOT will update the existing US 34 Access Control Plan and develop a new access control plan where none currently exists.

Develop New Access Control Plan

Update Existing Access Control Plan



- Interchange not included in this Study Effort. To be address by a Future Feasibility Study
- Restricted Turns Intersection
- Ultimate Interchange Interim Traffic Signal
- Ultimate Interchange
- Ultimate Traffic Signal
- Future Roadway

Access Category: Non-Rural Regional Highway (NR-A) and Rural Regional Highway (R-A)

- Non-Rural Principal Highway
- Medium-High Speed/ Medium-High Traffic
- Urban

Access Category: Expressway/ Major Bypass (E-X) and Non-Rural Regional Highway (NR-A)

- Expressway
- High Speed/High Traffic
- Low Access

# Access Control Plan Implementation

## If nothing changes, nothing changes!

Access Control Plans are long range planning documents for future growth. Existing and new Access Control Plans will be implemented in phases as changes and growth occur along US 34. Portions of the plan will be implemented based on the following triggers:

1. Redevelopment that increases traffic by 20% or more
2. Publicly funded project by City, County, or CDOT
3. Safety or operational issues



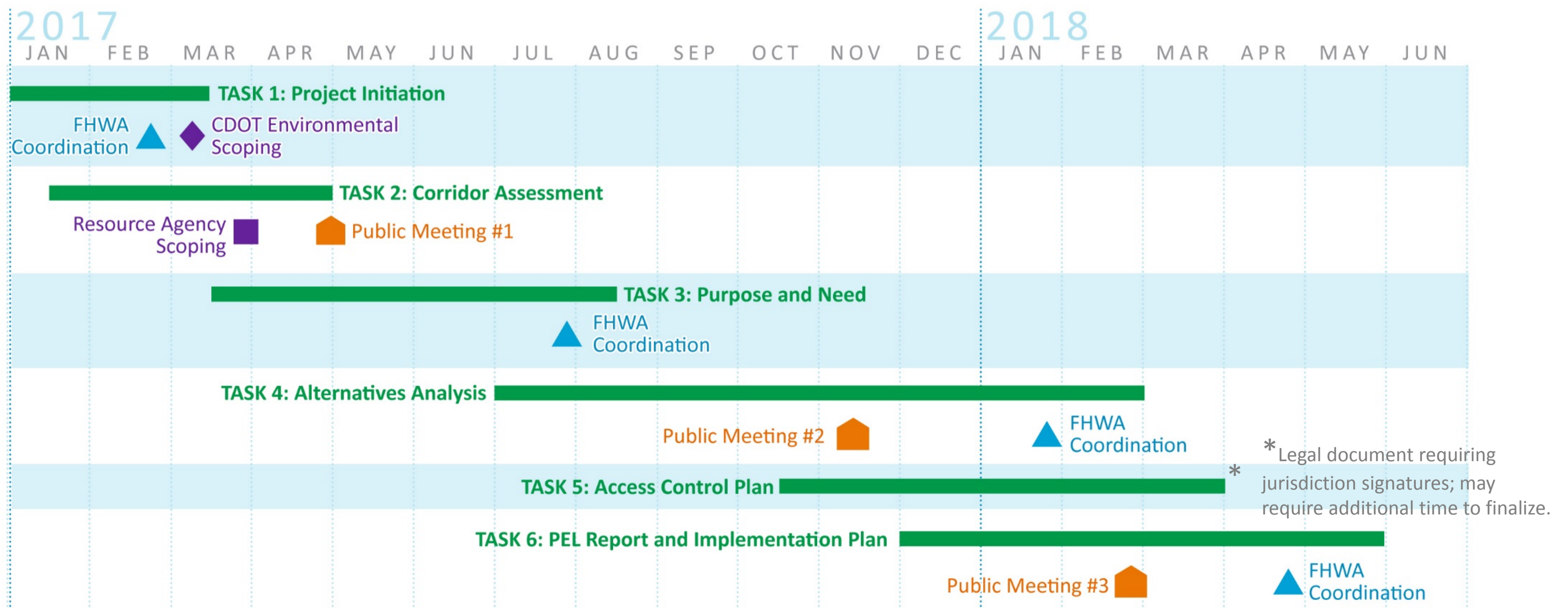
Access Control Plans are living documents that **CAN** be amended.



# Next Steps

- Develop a range of alternatives to address corridor needs.
- Evaluate alternatives for the best solutions.
- Recommend projects for immediate design and construction.
- Recommend mid-term and long-term projects.
- Complete update of existing Access Control Plan and develop new Access Control Plan where needed.
- PEL study is anticipated to be completed Summer 2018.

## US 34 PEL Study Schedule





# We want your input!

## Ways to get involved:

- Fill out a comment form tonight here at the meeting or mail it in to us by May 12, 2017.
- Visit the project website at: <https://www.codot.gov/library/studies/us-34-planning-and-environmental-linkages-pel-study>
- Send us an email at: [us34pel@codot.us](mailto:us34pel@codot.us)

# Thank you!

