

May 2019 Public Meetings Presentation



COLORADO

Department of
Transportation



I-25, CO Springs to South Denver PEL
Public Meetings
May 14th and 16th, 2019

I-25 South GAP Groundbreaking August 31, 2018





Purpose of Tonight's Meeting

PEL Study Conclusions:

- I-25 Mainline Recommendations
- Phasing of I-25 Improvements
- Transit Vision (Bus and Rail)
- Input and Next Steps





I-25 PEL Study Limits

Limits of potential physical improvements:

- Northern terminus at C-470/E-470 Interchange
- Southern terminus at SH 105/Monument

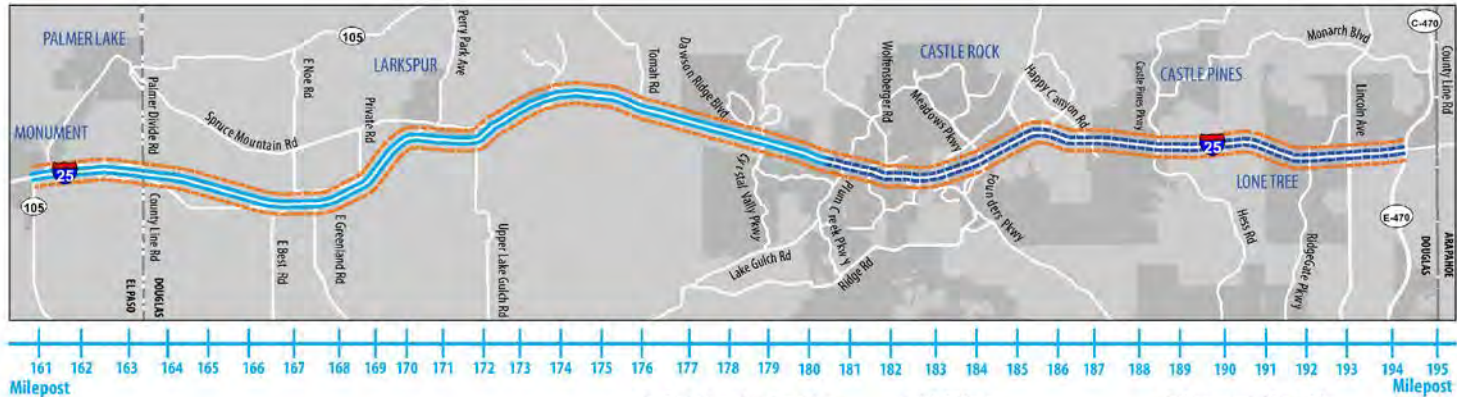




CDOT's I-25 Recommendation and Phasing

CO I-25 PEL: CO Springs Denver South Connection

I-25 Mainline Recommendation



Early Action Construction

— Gap Express Lane

Initial Phase

- - - Extend Express Lane

Subsequent Phase(s)

— Add Travel Lane Length of Corridor

Recommendation: Extend the Express Lanes* currently being constructed in the Gap north to C-470 and construct a second additional travel lane in each direction the length of the corridor between SH 105 and C-470.

Initial Phase: Extend the Express Lanes north of the Gap to C-470

- Only solution that provides reliable travel times throughout the corridor long-term
- Maximizes the effectiveness of the Express Lanes currently under construction in the Gap
- Makes bus service and rideshare more attractive
- Improves travel times in general purpose (GP) lanes
- Allows for Direct Connect access to C-470 Express Lanes
- Interim options include converting a GP lane to an Express Lane or using a shoulder lane during peak periods (PPSL)

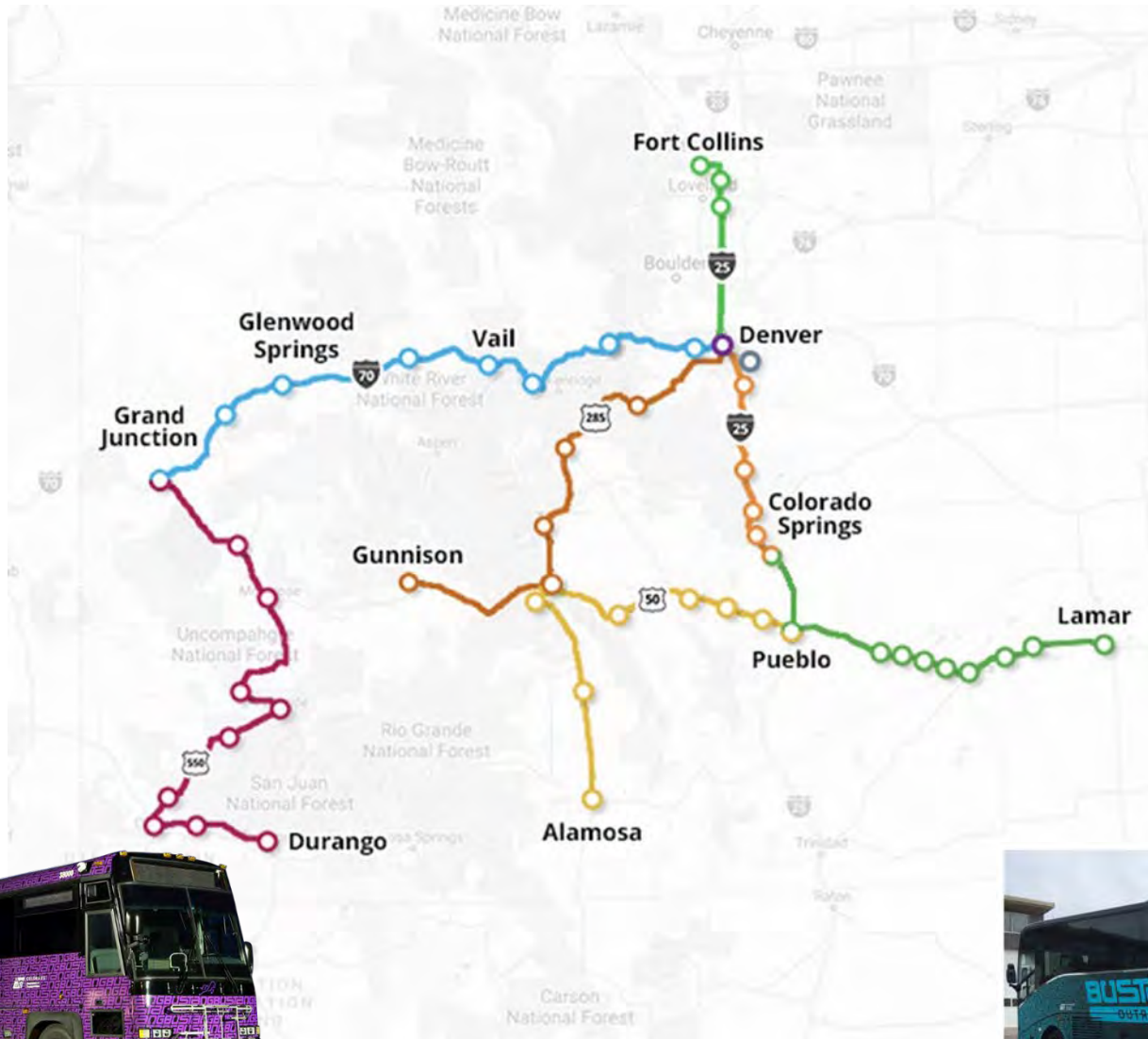
Subsequent Phase(s): Construct a Second Additional Travel Lane in Each Direction the Length of the Corridor

- Substantial travel time benefit for GP lanes
- Further improves mobility, safety, and incident management
- Potential for use as dedicated autonomous vehicle lanes
- Reduces regional vehicle hours of travel
- Operation of lane (Express Lane or GP lane) to be determined

* Express Lanes are tolled lanes with HOV 3+, transit, and motorcycles traveling for free.



Bustang and Outrider Network Plan





Existing and Proposed Bustang Stops/Service

BUSTANG: SOUTH

Existing Service:

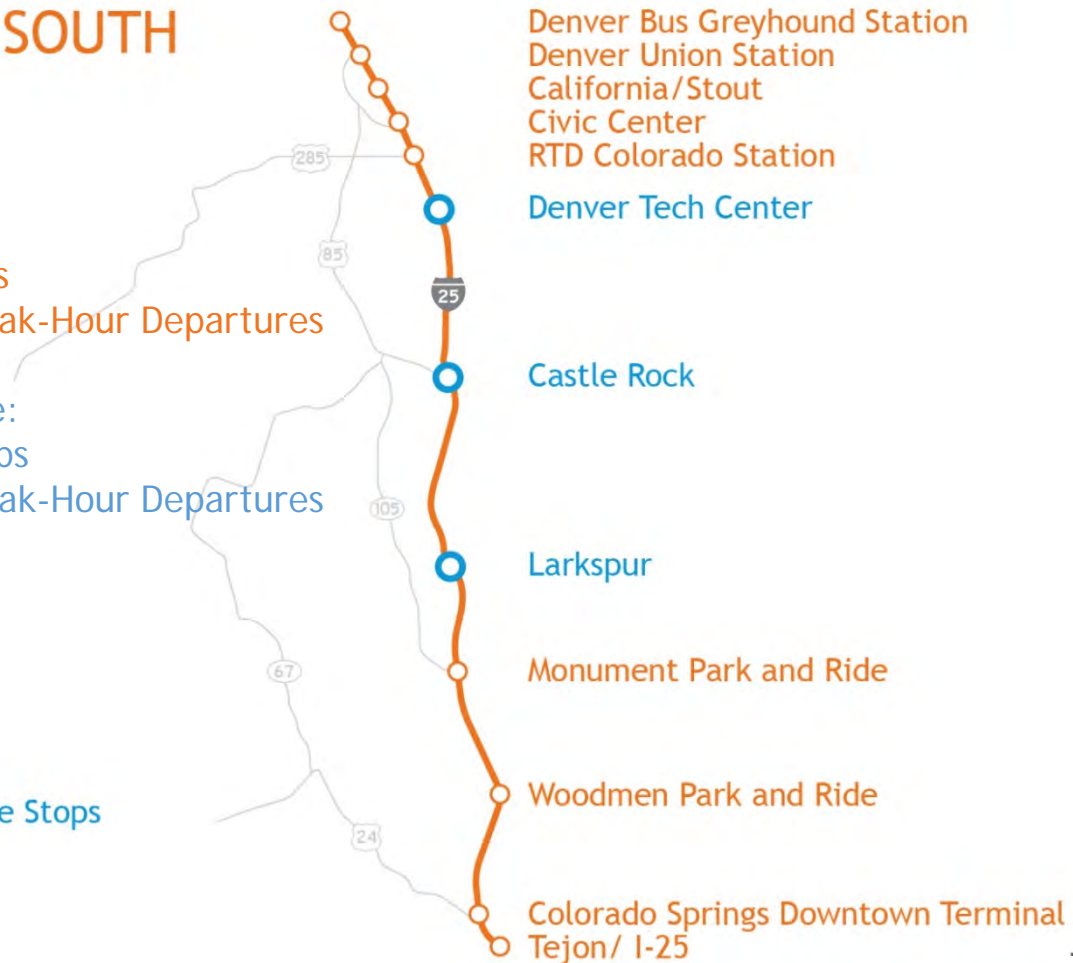
- 7 Round-Trips
- 20 Minute Peak-Hour Departures

Proposed Service:

- 28 Round-Trips
- 10 Minute Peak-Hour Departures

○ Existing Stops

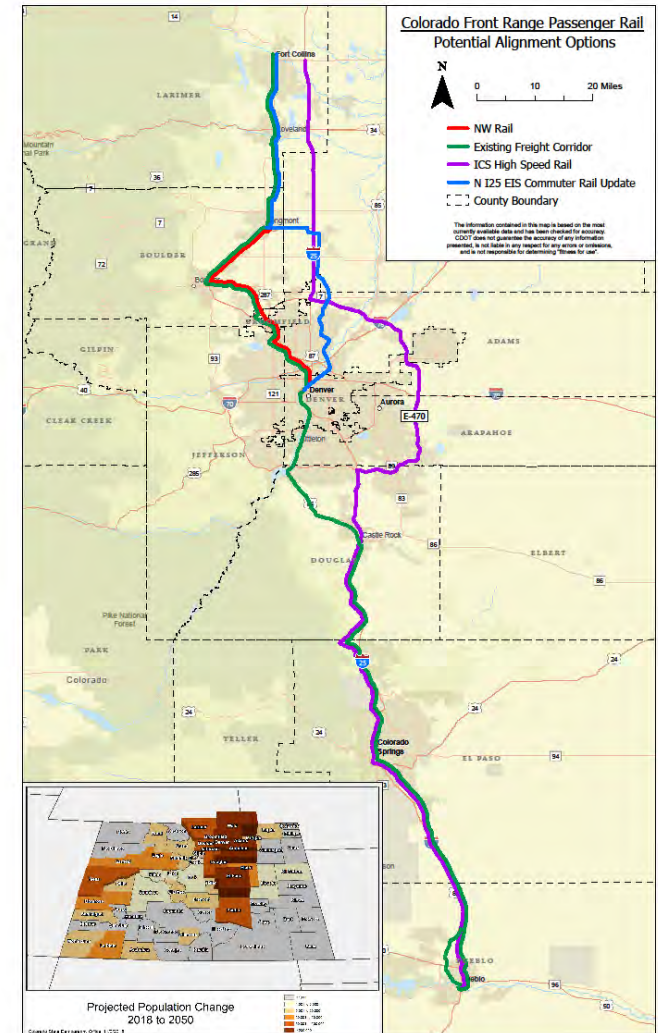
● Proposed/ Future Stops





Front Range Rail

- Governor appointed Commission
- Alignments, costs, and ridership
- PEL and Commission coordination





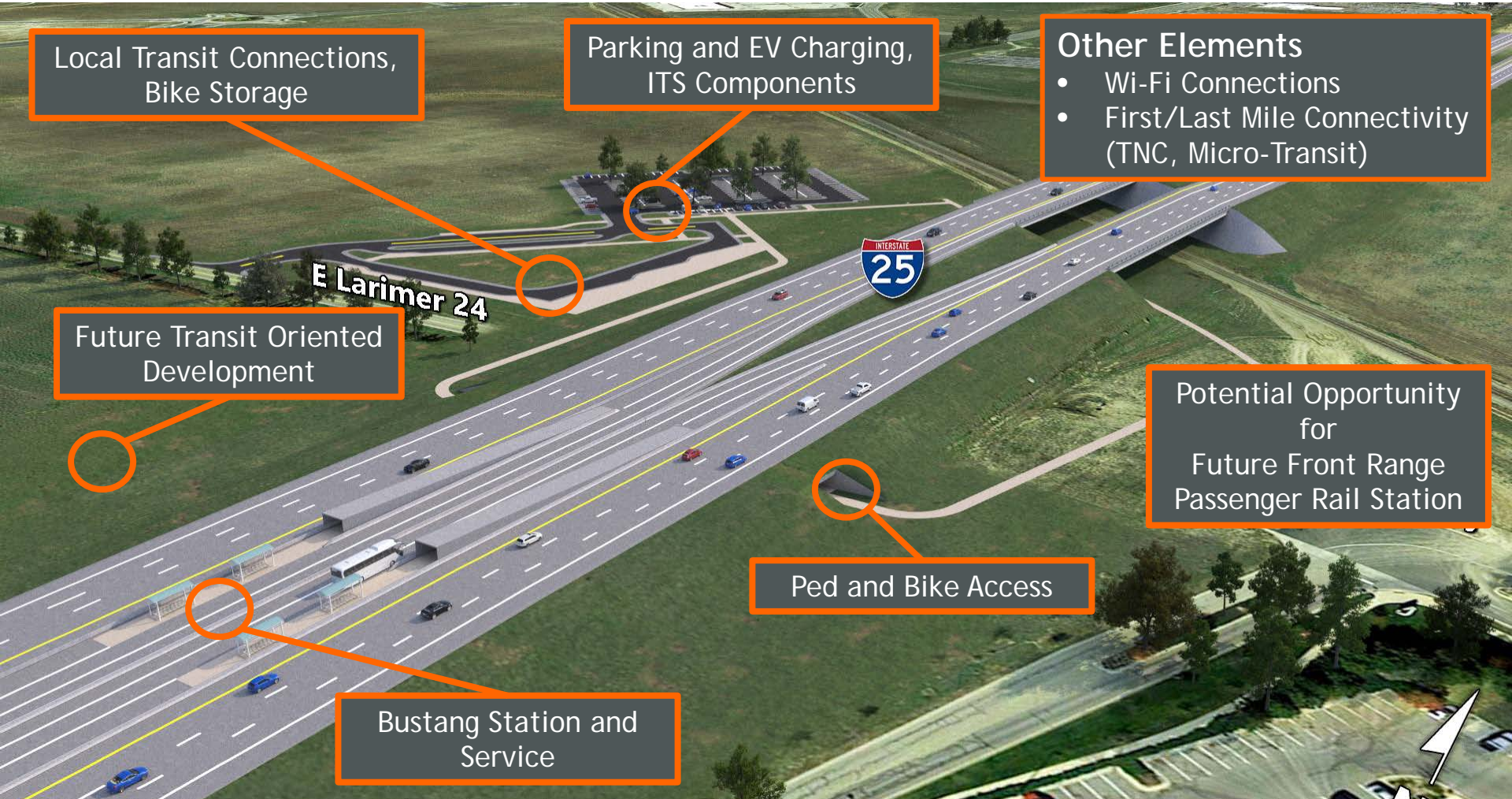
Strategic Transit-Related Projects in the I-25 PEL Study Area

Project/Location	Description	Development Stage
Monument Park-n-Ride Improvements	Slip ramps on I-25 and pedestrian improvements for the existing park-n-ride.	Preliminary Design
Castle Rock Transit Station	New multi-modal hub serving Castle Rock.	Planned
I-25 Express Lanes* between Monument and C-470/E-470	Bustang travel in Express Lanes to provide better travel time and schedule reliability	Under Construction, Planned
Troy Hill Garage*	Design and construction of new 10-bay bus maintenance facility in central Colorado Springs.	Design in Process

* Not located in the I-25 PEL Study Area, but is necessary for service.



Mobility Hub Elements (Centerra-Loveland Example)



Local Transit Connections,
Bike Storage

Parking and EV Charging,
ITS Components

Other Elements

- Wi-Fi Connections
- First/Last Mile Connectivity (TNC, Micro-Transit)

Future Transit Oriented
Development

Potential Opportunity
for
Future Front Range
Passenger Rail Station

Ped and Bike Access

Bustang Station and
Service



Supplemental Elements

PEL Study Conclusions:

- Interchanges
- Auxiliary Lanes
- Climbing Lanes
- Port of Entry
- Chain up Stations
- Wildlife Crossings





Next Steps for I-25 PEL Study and Beyond

- Finalize PEL Report in June
- Ongoing coordination with CDOT management and our Steering Committee to identify innovative funding options for the next phases
- Engage stakeholders in future projects when funding is identified

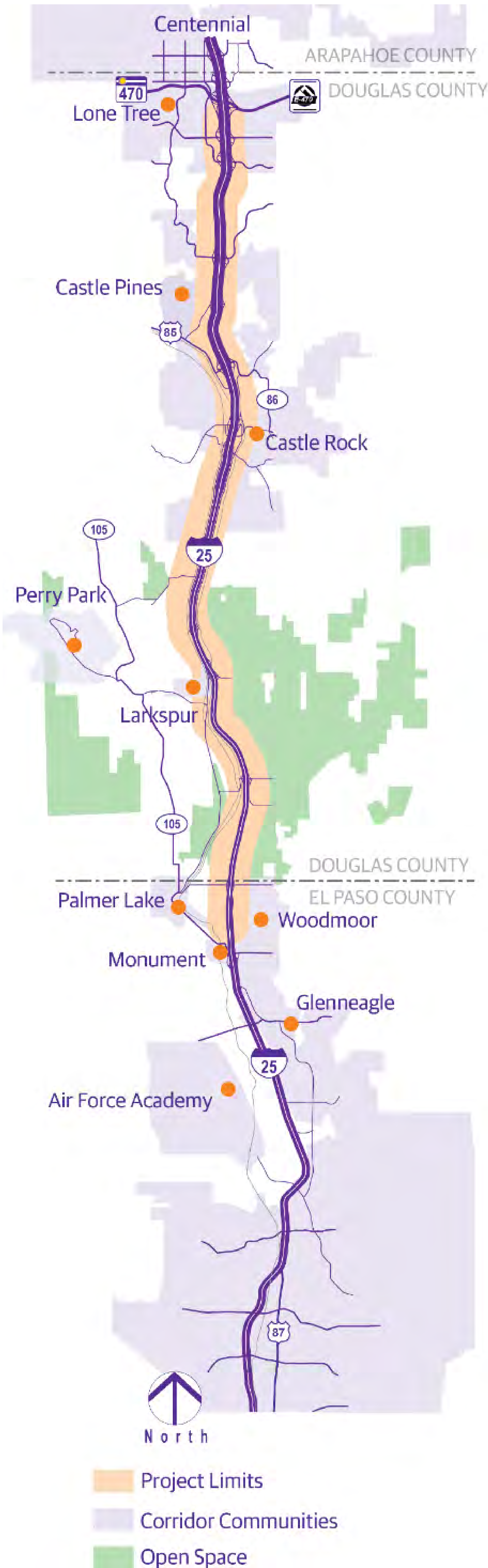




Open Discussion/Questions?



May 2019 Public Meetings Presentation



COLORADO
Department of
Transportation

WELCOME

to the

**I-25 PEL: CO Springs
Denver South Connection**

PUBLIC MEETING

Purpose of Tonight's Meeting

- Present I-25 Mainline Recommendation
- Discuss phasing of I-25 improvements
- Discuss I-25 Transit Vision (Bus and Rail)
- Gather input and next steps





Study Overview

The purpose of improving I-25 is to enhance safety and improve travel reliability and mobility of I-25 between Colorado Springs and Denver South.

SAFETY

A high number of crashes occur on the corridor. The mix of users and travel speeds, along with difficult passing conditions and limited recovery areas, present special challenges. Higher than expected crashes occur due to weather, wildlife conflicts, and darkness.

RELIABILITY

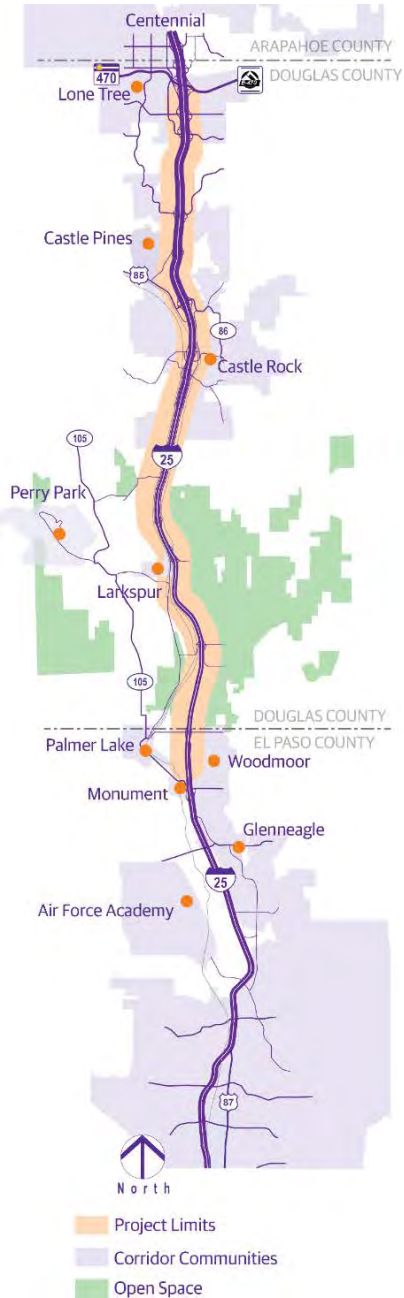
Travel times in the corridor are highly variable; unexpected and unreasonably long traffic delays are increasingly common, and delays are getting worse, particularly on weekends.

MOBILITY

Physical conditions in the corridor hamper mobility. With no reasonable alternate routes or other reliable travel options, drivers have little option but to be struck in traffic in congested conditions. Maneuvering in the corridor is challenging due to the mix of vehicles and varying operating speeds, lack of passing opportunities, steady uphill grades, and narrow shoulders and medians that do not provide adequate recovery space for disabled vehicles or shelter from severe weather.

Vision

Conduct an *open and transparent* process that builds *partnerships* and provides a roadmap to implement projects to *improve safety, travel reliability, and mobility* on this vital stretch of I-25, with special focus on *advancing an early action construction* project in the “Gap” area between Monument and Castle Rock.





Corridor Characteristics

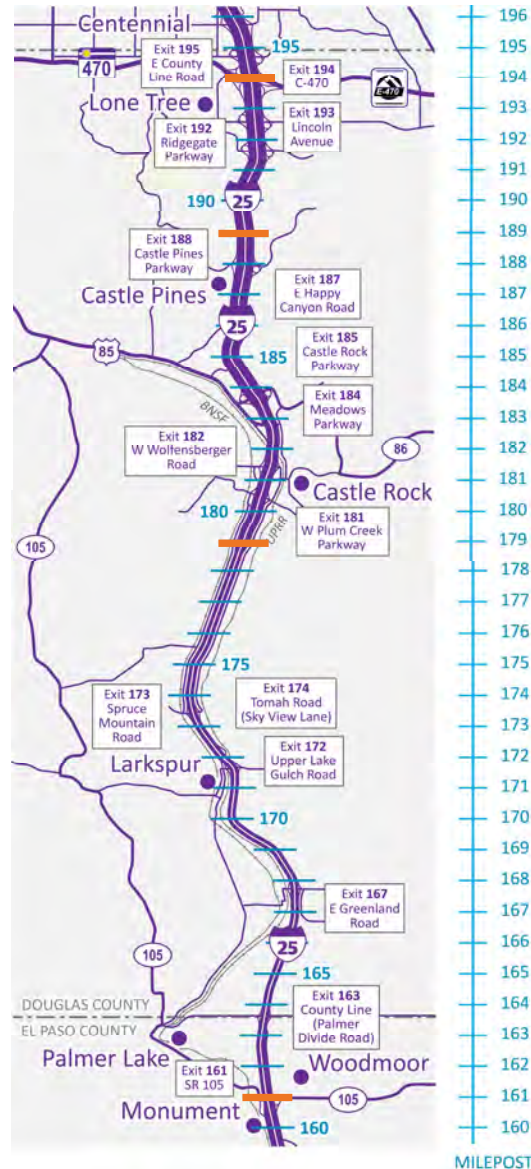
MP 161 to MP 179

Transportation Characteristics

- Two general purpose lanes each direction
- One tolled express lane in each direction (under construction)
- Wider shoulders, wildlife crossings, modified interchanges, drainage improvements under construction
- Steady gradual southbound incline
- 6 interchanges
- Truck weigh station
- 2017 Average Annual Daily Traffic (AADT): 77,000-86,000
- Trucks make up 8.4% of traffic

Environmental Characteristics

- High incidence of wildlife conflicts
- Many stream crossings, Preble's Meadow jumping mouse habitat
- Protected open space and wildlife habitat



MP 178 to MP 189

Transportation Characteristics

- Urban 6-lane
- Narrow shoulders
- 6 interchanges
- 2017 Average Annual Daily Traffic (AADT): 99,000-133,000
- Trucks make up 6.7% of traffic

Environmental Characteristics

- Developed and growing communities
- Nearby Plum Creek runs parallel to the highway and includes Preble's Meadow jumping mouse habitat
- High incidence of wildlife conflicts

MP 189 to MP 194

Transportation Characteristics

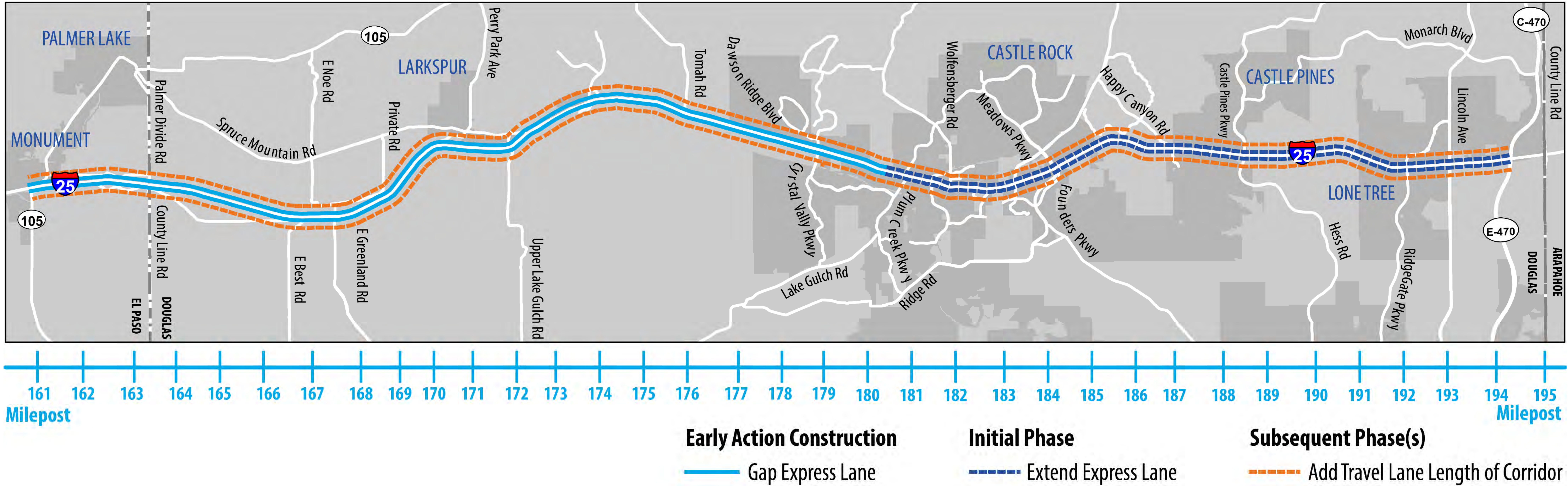
- Urban 8-lane, recently widened
- 3 interchanges
- Steep grade at Surrey Ridge
- Light rail stations at Lincoln Ave, Sky Ridge, Lone Tree City Center, and RidgeGate Pkwy (under construction)
- 2017 Average Annual Daily Traffic (AADT): 133,000-196,000
- Trucks make up 5.3% of traffic

Environmental Characteristics

- Rapidly developing commercial and residential area
- High incidence of wildlife conflicts



I-25 Mainline Recommendation



Recommendation: Extend the Express Lanes* currently being constructed in the Gap north to C-470 and construct a second additional travel lane in each direction the length of the corridor between SH 105 and C-470.

Initial Phase: Extend the Express Lanes north of the Gap to C-470

- Only solution that provides reliable travel times throughout the corridor long-term
- Maximizes the effectiveness of the Express Lanes currently under construction in the Gap
- Makes bus service and rideshare more attractive
- Improves travel times in general purpose (GP) lanes
- Allows for Direct Connect access to C-470 Express Lanes
- Interim options include converting a GP lane to an Express Lane or using a shoulder lane during peak periods (PPSL)

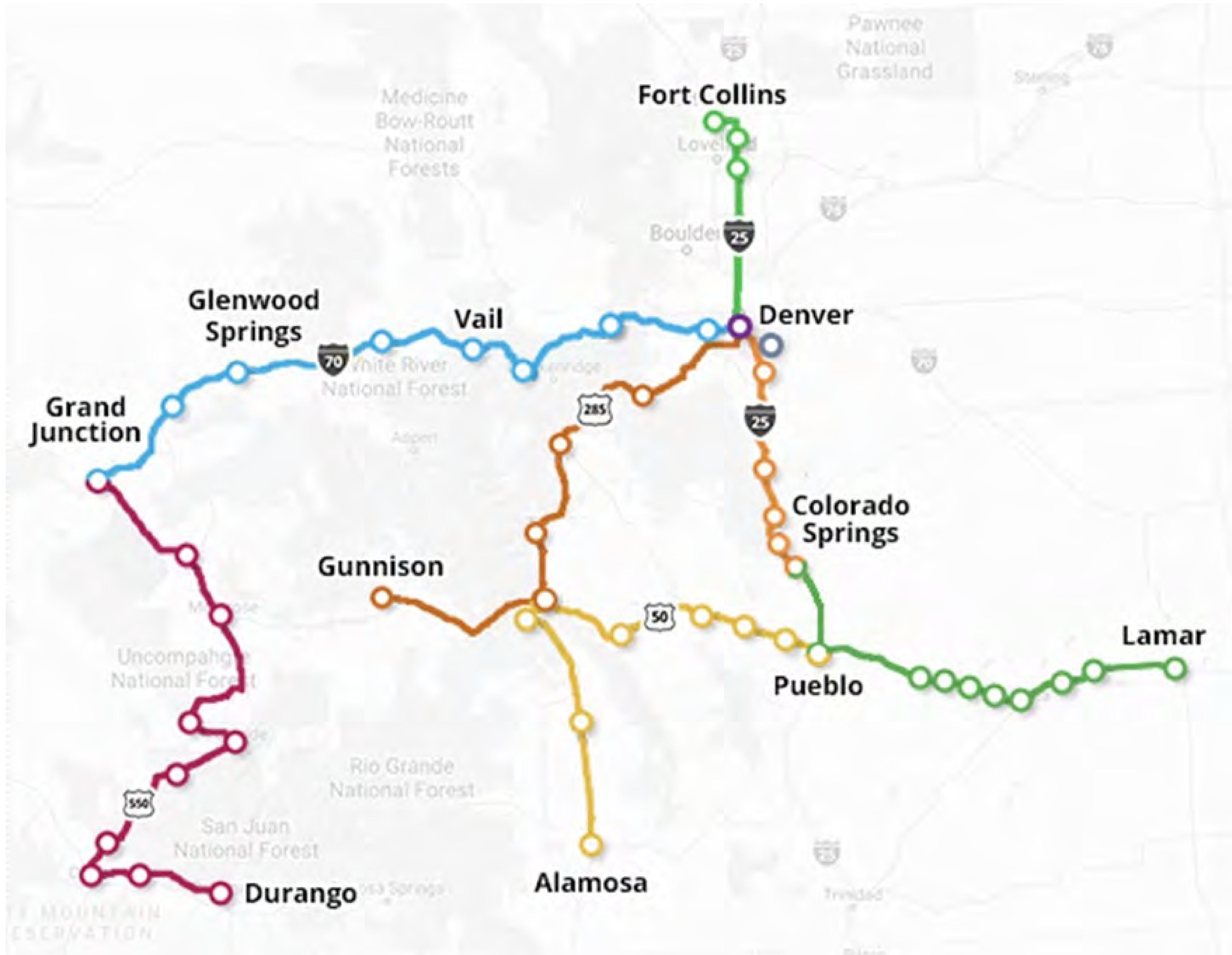
Subsequent Phase(s): Construct a Second Additional Travel Lane in Each Direction the Length of the Corridor

- Substantial travel time benefit for GP lanes
- Further improves mobility, safety, and incident management
- Potential for use as dedicated autonomous vehicle lanes
- Reduces regional vehicle hours of travel
- Operation of lane (Express Lane or GP lane) to be determined

* Express Lanes are tolled lanes with HOV 3+, transit, and motorcycles traveling for free.

Bustang and Outrider Network Plan

Strategic Transit-Related Projects in the I-25 PEL Study Area



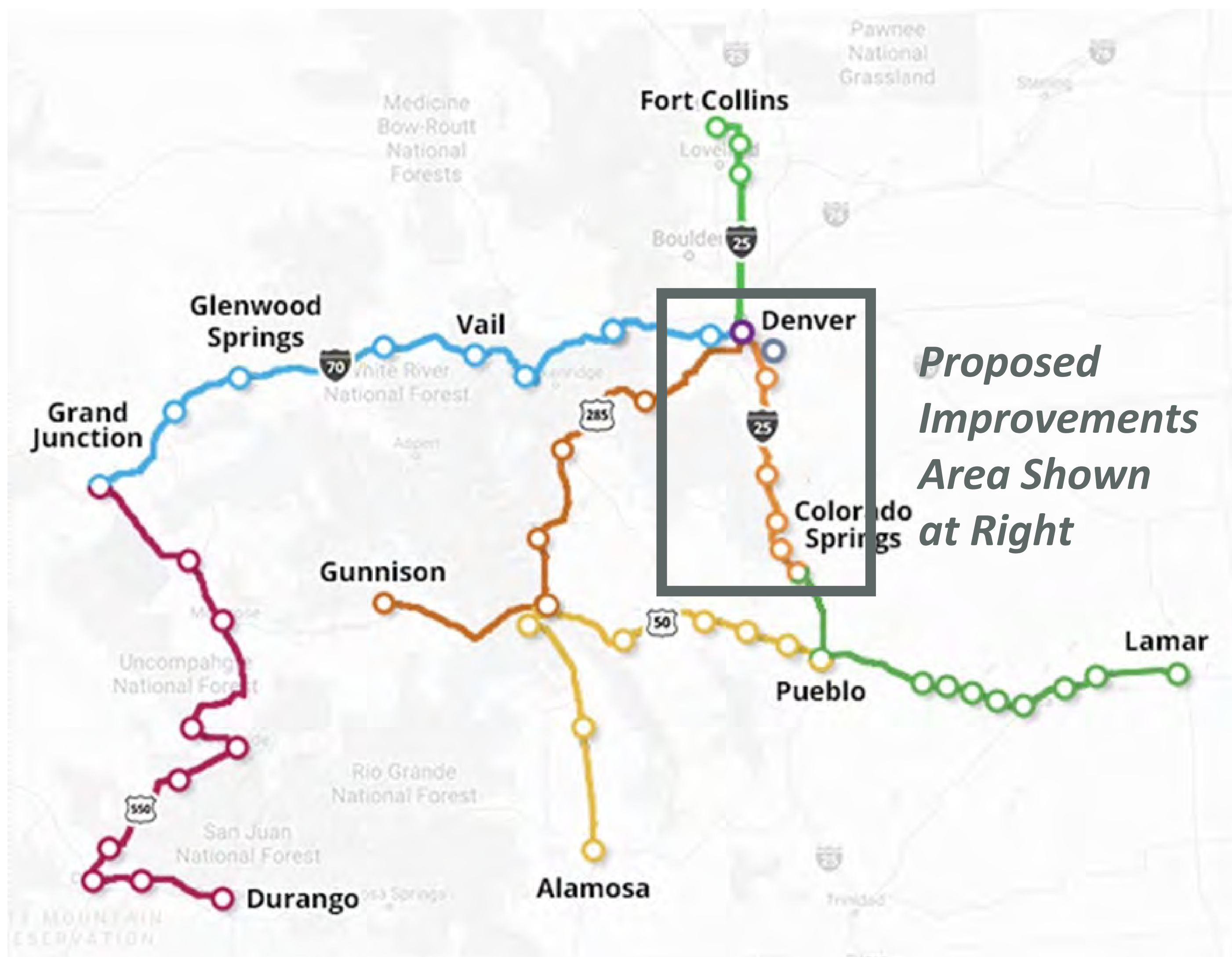
Project/Location	Description	Development Stage
Monument Park-n-Ride Improvements	Slip ramps on I-25 and pedestrian improvements for the existing Park-n-Ride	Preliminary Design
Castle Rock Transit Station	New multimodal hub serving Castle Rock	Planning
I-25 Express Lanes* between Monument and C-470/E-470	Bustang travel in Express Lanes to provide better travel time and schedule reliability	Under Construction/Planning
Troy Hill Garage**	Design and construction of new 10-bay bus maintenance facility in central Colorado Springs	Design

* Express Lanes are tolled lanes with HOV 3+, transit, and motorcycles traveling for free

** Not located in the PEL study area, but is necessary for service.

Existing and Proposed Bustang South Stops/Service

Statewide Bustang/Outrider Network Plan

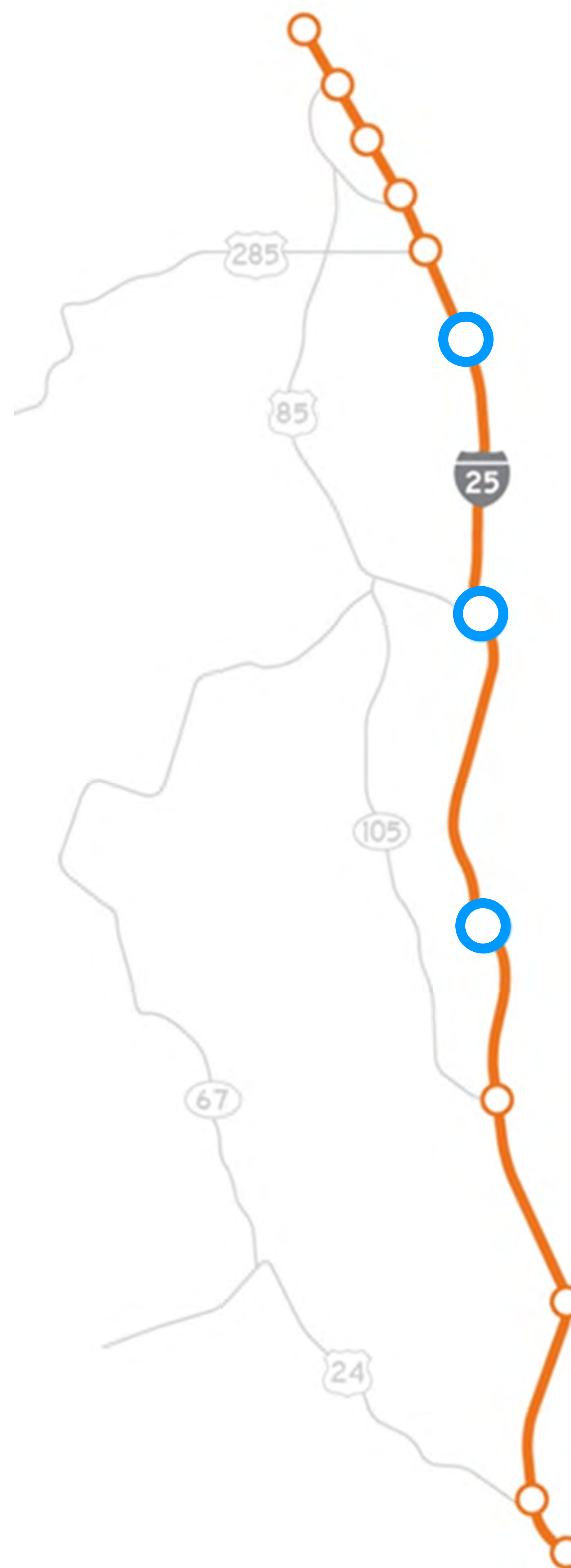


Existing Service

- 7 Round Trips
- 20-Minute Peak-Hour Departures

Proposed Service

- 28 Round Trips
- 10-Minute Peak-Hour Departures



Denver Bus Greyhound Station
 Denver Union Station
 California/Stout
 Civic Center
 RTD Colorado Station
 Denver Tech Center

Castle Rock

○ Existing Stop
 ○ Proposed/Future Stop

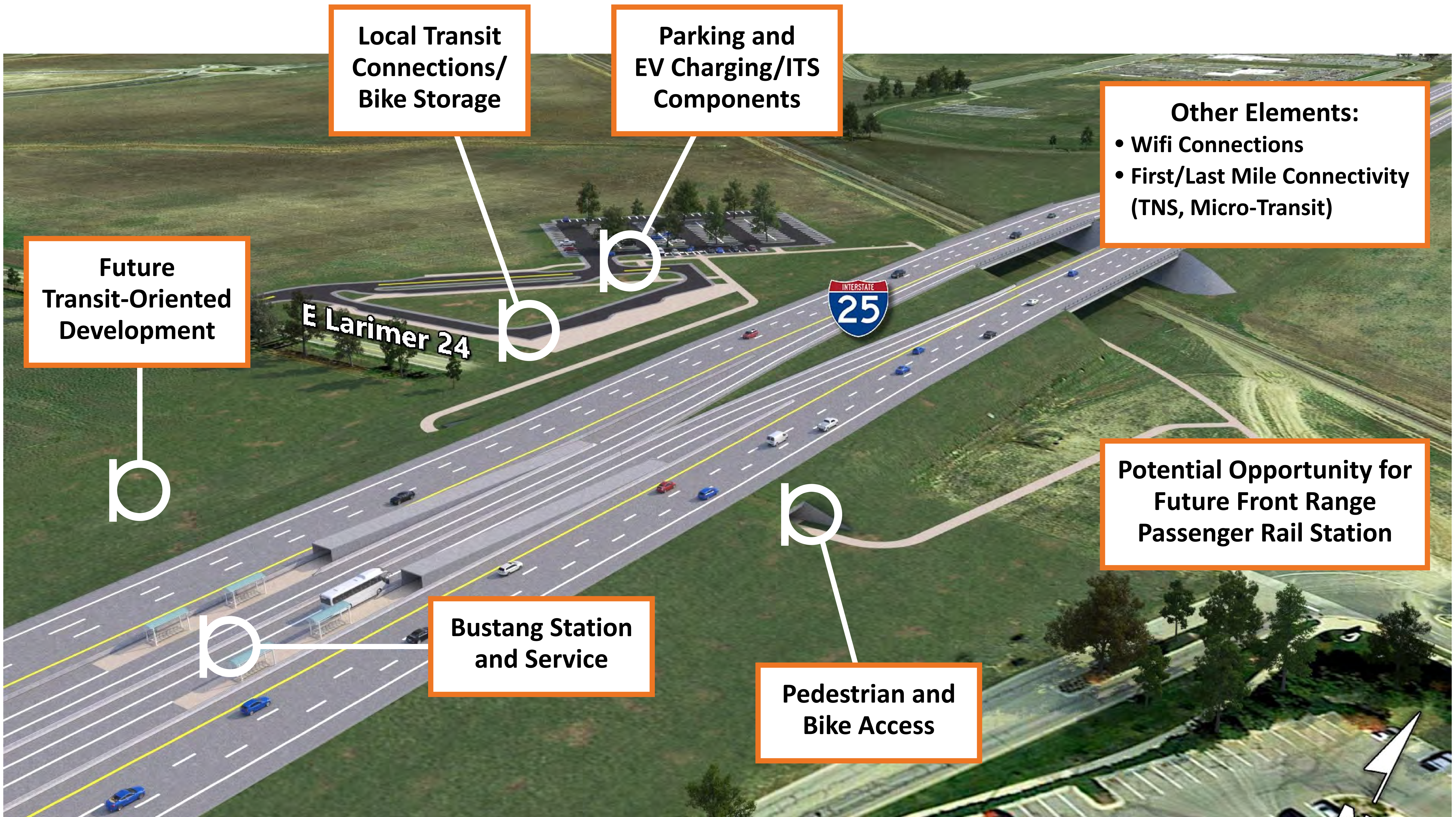
Larkspur

Monument Park-n-Ride

Woodmoor Park-n-Ride

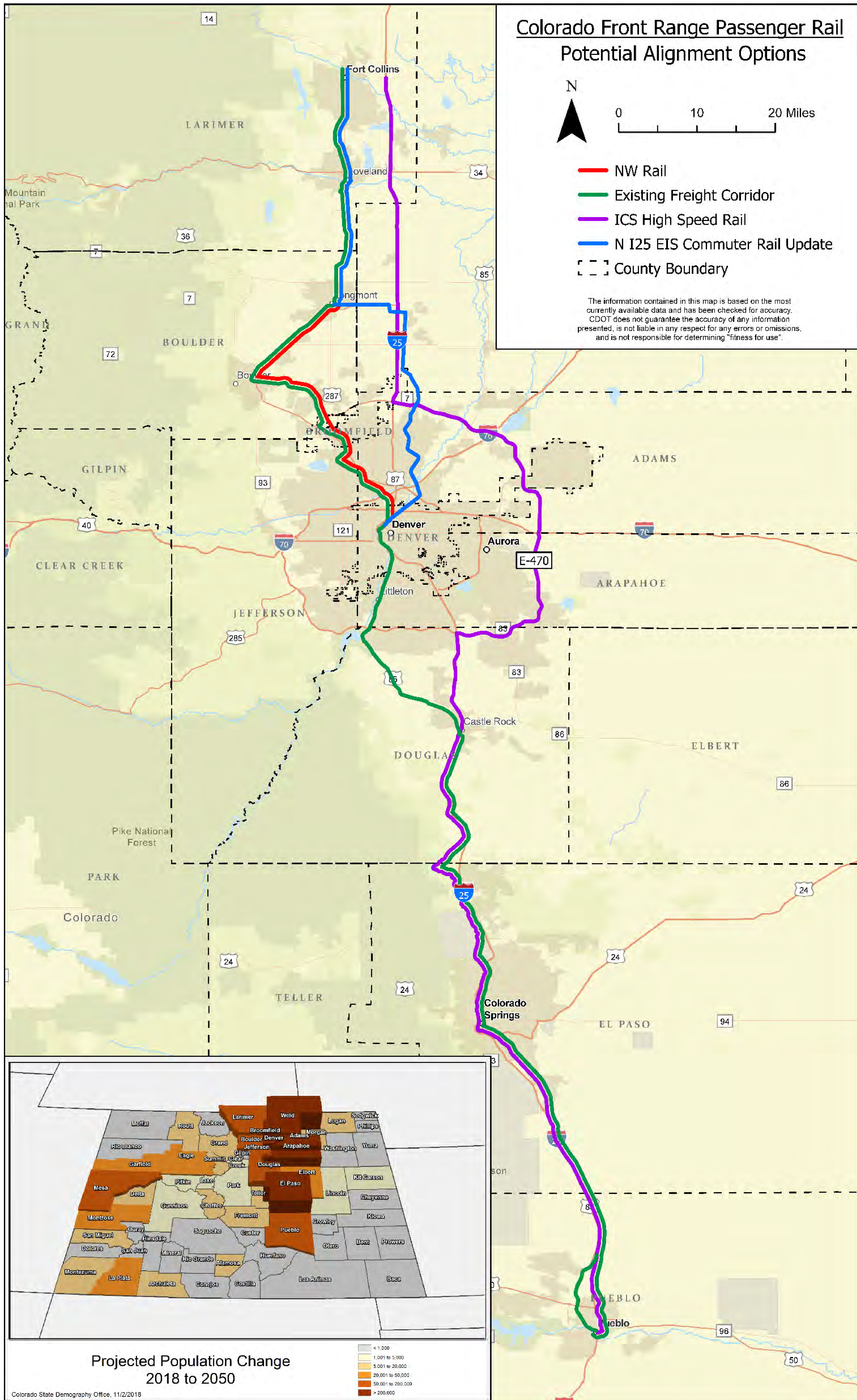
Colorado Springs Downtown Terminal
 Tejon/I-25

Mobility Hub Elements (Centerra-Loveland Example)





Front Range Rail



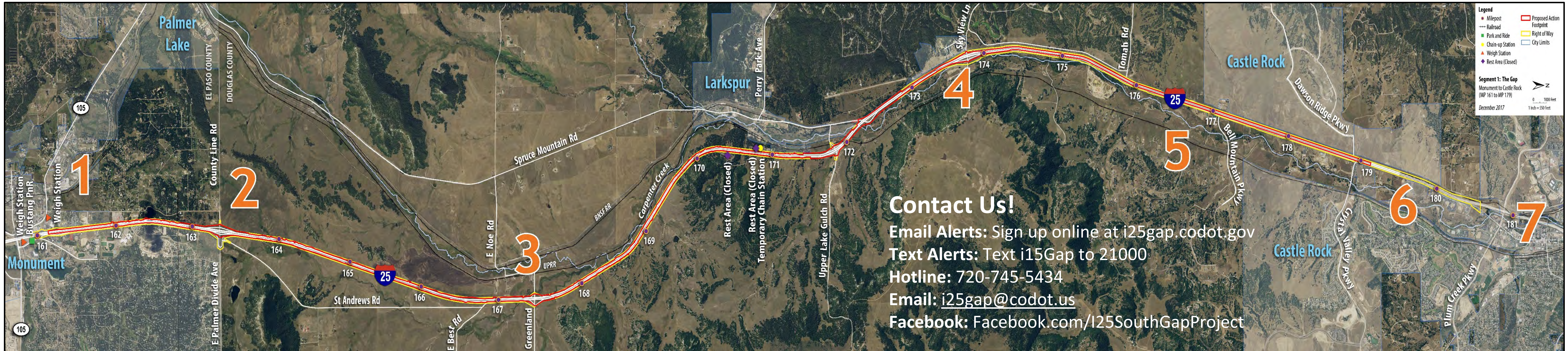
Next Steps

- **Finalize the PEL Report in June**
- **Ongoing coordination with CDOT management and our Steering Committee to identify innovative funding options for the next phases**
- **Engage stakeholders in future projects when funding is identified**





Upcoming Construction Impacts – Summer 2019



Contact Us!

Email Alerts: Sign up online at i25gap.codot.gov
 Text Alerts: Text i15Gap to 21000
 Hotline: 720-745-5434
 Email: i25gap@codot.us
 Facebook: [Facebook.com/I25SouthGapProject](https://www.facebook.com/I25SouthGapProject)

1 Traffic Crossover Near Monument Weigh Station

The Work: Adding new lanes and wider shoulders.

What to Expect: Southbound (SB) I-25 will be moved to ride head-to-head with northbound (NB) traffic. A concrete barrier will separate traffic. Placing this configuration will require overnight lane closures, but it will help maintain two travel lanes in each direction.

Timeframe: Starting in late May 2019 and lasting about 2 months.

2 County Line Ramps Near Monument

The Work: Rebuilding ramps and drainage improvements.

What to Expect: Crews will close the NB on and SB off ramps for up to 10 days at a time. Detours will maintain local access.

Timeframe: July 2019

3 Greenland Interchange Crossover

The Work: Crews will completely rebuild this one-lane box culvert into a two-lane interchange and construct a new wildlife crossing just to the north of the interchange.

What to Expect: As crews build this new bridge in halves, all I-25 traffic will be shifted to one side or the other. Periodic ramp closures will be necessary to reach this configuration.

Timeframe: Starting in June 2019. Various crossover configurations to last through 2020.

4 Sky View Lane Ramp Closures and Traffic Shift

The Work: Major drainage improvements.

What to Expect: The on-ram from Sky View Lane (Tomah Road) to NB I-25 will be temporarily closed. The East Frontage Road will also need to be closed, though not at the same time as the on-ramp. Traffic will be shifted, so both NB and SB traffic will ride head-to-head on the SB side of I-25, separated by a concrete barrier.

Timeframe: June-July 2019

5 Traffic Shift Between Castle Rock and Larkspur

The Work: So far, crews have been working in the median of I-25. This summer, work will shift to the outside.

What to Expect: Two travel lanes will remain open in both directions during peak travel times. Watch for traffic shifts and overnight lane closures. Lanes will continue to be tight, and shoulder space will vary.

Timeframe: Starting in June 2019. New alignment will last throughout 2019..

6 Frontage Road Work Near Castle Rock

The Work: Drainage improvements.

What to Expect: Daily one-way flagging on both frontage roads; overnight flagging on both frontage roads; long-term closures of sections of both frontage roads. However, both frontage roads will not be closed at the same time.

Timeframe: Flagging is underway. Full closures slated to start in June 2019.

7 Re-striping on I-25 Near Plum Creek Parkway

The Work: SB I-25 will be reworked so that both right lanes exit at Plum Creek Parkway. This moves the merge point of the construction zone.

What to Expect: Overnight closures over 2 nights for striping and overhead sign replacement.

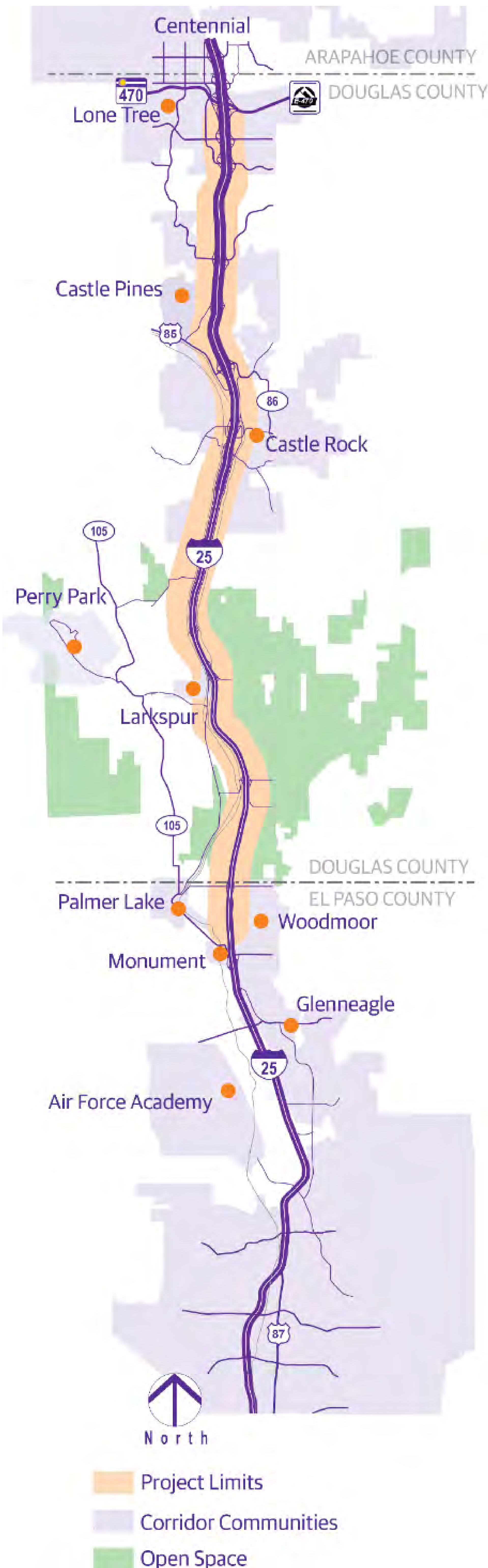
Timeframe: May 2019. New striping will last throughout the duration of the project.

PAY ATTENTION!

Watch for changing traffic patterns. speed limits will be a maximum of 65 mph Throughout the work zone.



COLORADO
Department of
Transportation



I-25 PEL: CO Springs Denver South Connection

PUBLIC MEETING Comments

**WE WANT TO HEAR FROM YOU:
Fill out a comment form or
talk to our staff here tonight.**

Project website: www.codot.gov/projects/I25COSDEN



What We Heard from the Public

CDOT held several public meetings for the I-25 PEL Study between 2017 and 2019. The meetings allowed us to gather your input on the study and the future of I-25 South, Denver to Colorado Springs.

What We Heard	Our Response
FREIGHT TRUCK ISSUES	
<p>“What are you doing about trucks? They really disrupt travel, especially when they pass each other!”</p>	<ul style="list-style-type: none"> As a part of the Gap Project, an additional lane, as well as a one-mile southbound truck climbing lane south of Greenland, were added in the Gap area to improve maneuverability and reduce congestion. The PEL Study recommends extending the Monument Hill climbing lane to the top of the hill, past County Line Road, and adding a new northbound climbing lane at Surrey Ridge, north of Castle Pines Parkway.
NEED FOR MORE LANES	
<p>“At least three general purpose lanes beyond the Express Lane are needed in the Gap.”</p>	<ul style="list-style-type: none"> The PEL Study evaluated 2040 travel demand and concluded that additional highway capacity will be needed. The PEL Study recommends extending the Express Lane north to C-470/E-470, then adding additional capacity and transit as longer-term options to meet 2040 needs.
SPEED LIMITS AND SPEEDING	
<p>“How will the recommendations improve safety? We need more enforcement for speeding and aggressive drivers!”</p>	<ul style="list-style-type: none"> Enhancing safety is a core need identified by the PEL Study. The 75-mph speed limit through the Gap and north of Castle Rock are consistent with Colorado statute for rural interstate routes. Narrow shoulders and lack of space to conduct patrol operations safely were important safety needs identified in the PEL Study. The PEL Study recommends widening shoulders, including enforcement zones, and updating incident management plans to improve patrol safety. The I-25 Gap Project included wider shoulders and enforcement zones to safely conduct enforcement operations in this narrow section.
EXPRESS LANES	
<p>“I still don’t understand or agree with why CDOT is building Express Lanes in the Gap and recommending extending them north.”</p>	<ul style="list-style-type: none"> Express Lanes met the purpose and need better, particularly related to the need for reliability and to support additional travel options, such as transit and carpooling. The PEL Study recommends extending the Express Lanes north to C-470/E-470 to serve I-25’s regional travel reliability need.
TRANSIT OPTIONS	
<p>“CDOT should invest in transit instead of building more highway lanes. But it may not be practical in this corridor.”</p>	<ul style="list-style-type: none"> Transit is a key component of the PEL Study, with short-term and long-term recommendations to improve regional bus service. Express Lanes were constructed in the Gap and recommended as part of the PEL Study to provide an opportunity for Bustang to travel more reliably. During the course of the PEL Study, Bustang service expanded to include weekend service and new service to the Denver Tech Center. Longer-term recommendations include additional Bustang stops or service frequency. The PEL Study supports ongoing efforts to advance passenger rail in the corridor and along the Front Range.
WILDLIFE	
<p>“Animal-vehicle collisions are a safety issue for drivers.”</p>	<ul style="list-style-type: none"> The Gap Project included four new underpasses and expansion of one existing underpass to provide locations for wildlife to cross under I-25 and reduce wildlife-vehicle conflicts. The PEL Study recommends additional crossings and mitigation in conjunction with implementation of future projects.



What We Heard from Resource Agencies and the Technical Working Group

The Technical Working Group (TWG) and Resource Agency Group (RAG) comprise engineering, planning, and environmental experts representing corridor jurisdictions and state and federal resource agencies. They guided technical aspects of the project and assisted in identification of critical issues and technical data/information collection.

What We Heard

Our Response

CAPACITY, FUTURE CAPACITY, AND INTERCHANGES

Retain a peak period shoulder lane (PPSL) option for implementation of future highway capacity but consider the safety importance of shoulders in decision making.

- The PEL Study recommends PPSL as a component or option for additional highway capacity, considering costs and benefits.

Adding a lane or two north of the Gap will create a lane imbalance with the existing four-lane section at C-470. Adding capacity south of C-470 without addressing capacity to the higher-volume section north will exacerbate congestion and create a new bottleneck.

- As projects from the PEL Study recommendations advance, detailed engineering and traffic analysis associated with NEPA and preliminary engineering will need to consider potential impacts to adjoining highway sections and/or require more consideration of transitions between cross sections.

More analysis is needed to determine interchange operations and needs in the Castle Rock area; interchange improvements could have impacts on the mainline recommendations.

- The PEL Study recommendations focus on meeting the I-25 purpose and need, and conflicts with interchanges from the I-25 mainline recommendation (such as narrow bridges) have been identified.
- Local planning objectives in Castle Rock will need to be coordinated with the mainline recommendations; the resulting interchange recommendations could require modifications to the conceptual mainline footprint.

The Town of Castle Rock is anticipating substantial commercial and residential development in the Crystal Valley area, south of Plum Creek Parkway. Castle Rock could become the new bottleneck, and I-25 improvements need to consider this localized growth.

- The PEL Study recommends the next phase of highway improvements extend the Express Lanes north to C-470/E-470 to serve I-25 through traffic demands for regional travel reliability.
- The PEL Study recommends a subsequent phase, once funding is identified, to add a lane (operations undefined) in each direction after the Express Lanes north of the Gap are constructed. Based on planned development in the south end of Castle Rock, the new lanes might extend from SH 105 to Plum Creek Parkway or Meadows Founders Parkway.

FREIGHT TRUCK ISSUES

Move the weigh station and include other improvements to facilitate freight use of the corridor and reduce traffic conflicts.

- The Gap Project includes an improved chain-up area at the former rest area and a southbound climbing lane north of the rest area.
- The PEL Study recommends further evaluation of how and where to relocate the weigh station/port of entry, including the potential of repurposing the former rest area on the east side of I-25 near Greenland; extension of the southbound climbing lane; and consideration of additional climbing lanes, auxiliary lanes, and chain up stations to reduce freight conflicts.

TRANSIT

The I-25 mainline recommendation needs to be integrated with transit recommendations and planned local projects.

- Transit is a key component of the PEL Study recommendations, which include short-term operational improvements for regional bus (Bustang) and longer-term implementation of passenger rail in the corridor.

Compatibility with the future Interregional Connectivity Study (ICS) for high-speed or passenger rail should be considered.

- Potential conflicts between the ICS alignment and the recommended buildout of the I-25 mainline were considered at a high-level in the PEL Study. Next steps for Front Range passenger rail will be assessed and balanced as planning for the I-25 mainline advances.

WILDLIFE

Consider and implement additional wildlife crossings to complement investments in wildlife crossings from the Gap Project.

- The PEL Study incorporated recommendations stemming from the Gap Project to continue wildlife mitigation by adding an additional overpass in the Gap area, as well as mitigation north of the Gap, if needed.



What We Heard from the Steering Committee

The Steering Committee consisted of Local, State, and Federal Elected Officials and Executive Management. The Steering committee informed the PEL process and reviewed progress and direction of the PEL for consistency with community needs.

What We Heard	Our Response
FUNDING	
What can we do to continue the momentum and secure funding for future improvements?	<ul style="list-style-type: none"> Stay engaged with CDOT and elected officials to advocate for prioritizing I-25 improvements. Consider opportunities to leverage Express Lane revenues to fund future corridor projects. Consider alternative funding and financing opportunities.
GAP PROJECT CONSTRUCTION	
How is the construction going? Have crashes increased? How is CDOT monitoring safety?	<ul style="list-style-type: none"> Construction is going well. CDOT and the contractor continually review safety and implement new practices. The contractor is keeping notes about crashes; the data are not statistically significant but it appears the number of crashes are about the same as before construction.
I-25 MAINLINE	
How will the recommendations for I-25 mainline coordinate with I-25 north of C-470 and south of Founders Parkway?	<ul style="list-style-type: none"> The PEL Study identifies long-term needs but how the vision will be implemented and how it would transition with adjoining highway sections north (and south) need to be considered as improvements advance to implementation.
How do peak period shoulders fit into the recommendations? How will safety of using the shoulders be considered if they are implemented?	<ul style="list-style-type: none"> The PEL Study did some additional evaluation of the feasibility of peak period shoulders, such as how much additional right-of-way may be needed, to inform future studies. The concerns about the safety benefits of the shoulders will be noted in the PEL Study as a consideration in the implementation plan and feasibility.
INTERCHANGES	
What level of analysis was conducted for interchanges? How many are affected by the mainline recommendation?	<ul style="list-style-type: none"> The PEL Study did not address interchange operations specifically but those interchange bridges or ramps that would be affected by highway widening were identified. CDOT will continue to work with Castle Rock to evaluate local interchanges in that area that may need modifications. (Interchanges south of Castle Rock are largely low volume and addressed by the Gap Project; interchanges to the north are either new or already planned for replacement.)
TRANSIT	
What are the options for a Bustang transit station in Castle Rock? Could a route service with multiple stops through Castle Rock work better than a single transit station?	<ul style="list-style-type: none"> The PEL Study identified the need to provide transit service in Castle Rock but not the options on how to do it. Concurrent with the PEL Study, CDOT's Division of Transit and Rail has been working with Castle Rock, Castle Pines, Douglas County, and local developers to evaluate transit station locations. Three station areas have been identified for further study. The PEL Study did not consider Bustang operations, but Bustang is flexible to serve demand as needed. If a location can attract sufficient bus ridership, a stop is considered. Multiple stops are challenging for travel times on a regional route.
What is the potential for these Bustang transit stations to serve future rail? Are there advantages to the locations for bus or rail service that we should consider now?	<ul style="list-style-type: none"> The pros and cons of the three potential transit station locations in Castle Rock, including the potential to serve future passenger rail, were considered. Long-term and shorter-term benefits differ between the options; the comparison will be included in the PEL Study.