



SOUTHWEST CHIEF & FRONT RANGE
PASSENGER RAIL COMMISSION

Transit and Rail Advisory Committee
May 8, 2020

The central graphic features a logo with a stylized mountain range and a train silhouette. Below the logo is the text "SOUTHWEST CHIEF & FRONT RANGE PASSENGER RAIL COMMISSION". The main title "Transit and Rail Advisory Committee" and the date "May 8, 2020" are centered below the logo. The background of this section is a faded image of a train station platform.



**SOUTHWEST CHIEF & FRONT RANGE
PASSENGER RAIL COMMISSION**

Southwest Chief and Front Range Passenger Rail Commission

Project Role	Current Commissioner	Organization	Notes
Public Rail Transportation Advocate	Salvatore Pace	Resident of Pueblo County	Appointment expires 7/1/2021
Public Rail Transportation Advocate	Jim Souby	ColoRail	Appointment expires 7/1/2020
Colorado Class I Freight Railroad Representative	Nathan Anderson	Union Pacific Railroad	Appointment expires 7/1/2021
Colorado Class I Freight Railroad Representative	Peter Rickershauser	BNSF Railway	Appointment expires 7/1/2020
Resident of Huerfano, Las Animas, Otero, Prowers, or Pueblo County	Richard Klein	City of La Junta	Appointment expires 7/1/2020
North Front Range Metropolitan Planning Organization (NFRMPO) Representative	Becky Karasko	NFRMPO	
Denver Regional Council of Governments (DRCOG) Representative	Jacob Riger	DRCOG	
Pikes Peak Area Council of Governments Representative	Jill Gaebler	Colorado Springs City Council	
Pueblo Area Council of Governments Representative	Terry Hart	Pueblo County	
South Central Area Council of Governments Representative	Phil Rico	City of Trinidad	
Denver Regional Transportation District (RTD) Representative	Bill Van Meter	RTD	
Colorado Department of Transportation (CDOT) Representative	David Krutsinger	CDOT Division of Transit and Rail	Non-voting Member
Amtrak Representative	Robert Eaton	Amtrak	Non-voting Member
Cheyenne, Wyoming Representative	Dale Steenbergen	Cheyenne Chamber of Commerce	Non-voting Member



Commission's Purposes (SB 17-153)

- Work to preserve Amtrak's Southwest Chief service across southeast Colorado
 - Work with neighboring states of Kansas and New Mexico to upgrade rails, ties, signal systems and other rail infrastructure on BNSF's Amtrak Southwest Chief route across the three states
 - Pursue possible Amtrak Southwest Chief service extension into Pueblo and possibly Colorado Springs from La Junta
 - Consider re-routing the Southwest Chief service between La Junta and Trinidad by way of Pueblo and Walsenburg to better serve southern Colorado
- Facilitate the development of Front Range Passenger Rail service



Front Range Passenger Rail Vision

Developing passenger rail that serves Front Range communities from Pueblo to Fort Collins is a critical component of Colorado's future.

Front Range Passenger Rail will provide a safe, efficient and reliable transportation option for travel between major population centers along the Front Range and create a backbone for connecting and expanding rail and transit options in the state and the region.



Agency Coordination

Project team members have coordinated with federal agencies including Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and Federal Highway Administration.

Three meetings occurred on the following dates, as well as several coordinating phone calls:

- October 21st
- January 13th
- April 2nd



2019 CRISI Grant Award

The Southwest Chief and Front Range Passenger Rail Commission, in partnership with CDOT and other partners noted below, successfully applied for a \$225,000 CRISI grant from the USDOT for the “Southwest Chief Thru-Car Service to Colorado Springs Feasibility Study.”

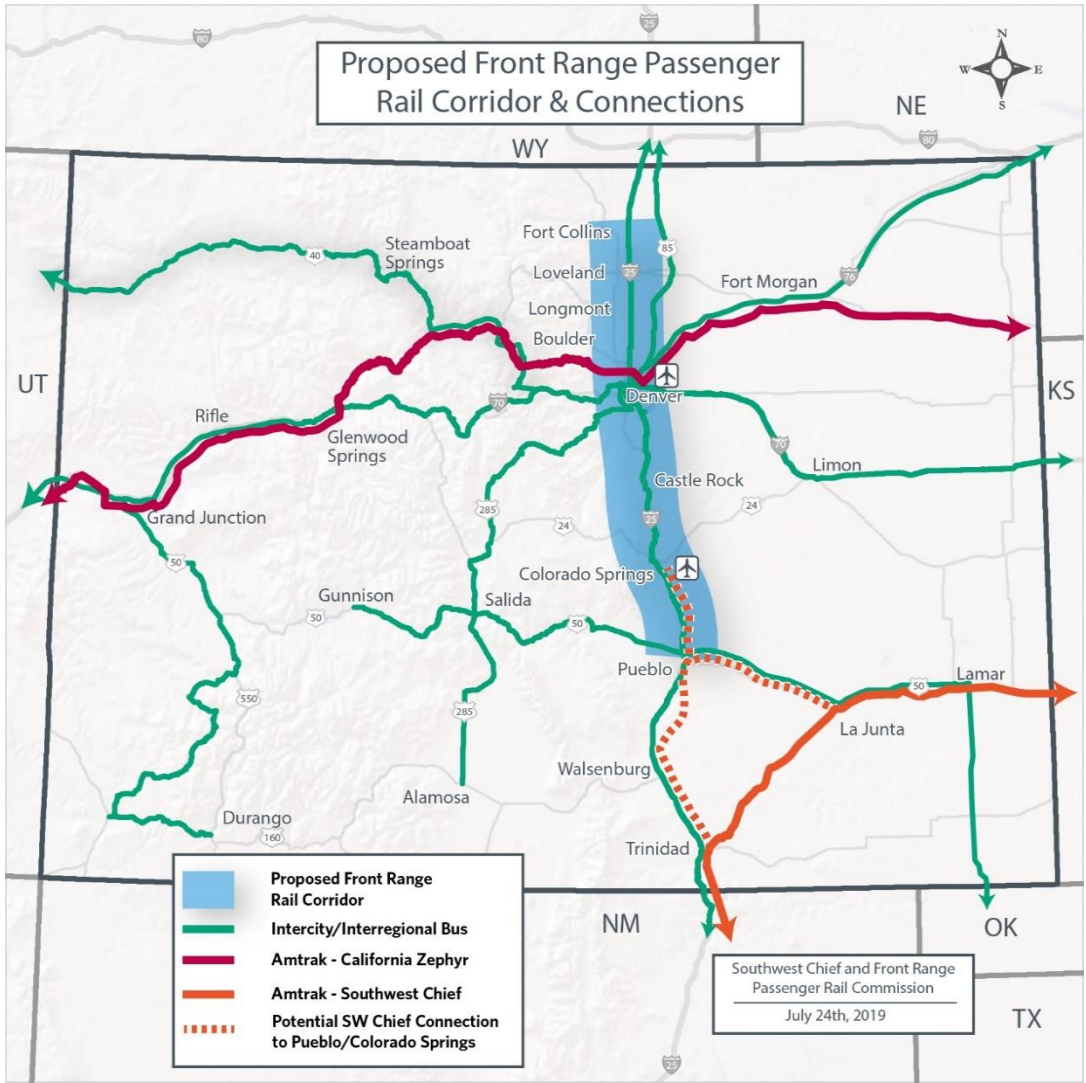
Matching partners included:

- Southwest Chief and Front Range Passenger Rail Commission: **\$159,000** (70.7%)
- CDOT: **\$50,000** (22.2%)
- Pueblo County, Colorado: **\$10,000** (4.4%)
- City of La Junta, Colorado: **\$5,000** (2.2%)
- Colorado Rail Passenger Association: **\$1,000** (0.5%)

Southwest Chief Thru-Car Service



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2020 BUILD Grant Application

- The Southwest Chief and Front Range Passenger Rail Commission and partners will be submitting an application for a 2020 BUILD Grant.
- The grant would provide an estimated \$17 million in funding for new rail, ties, turnouts, bridge decks and at-grade crossing rehabilitation in Colorado and Kansas.
- Matching partners include CDOT, Kansas DOT, Amtrak, BNSF Railway, SW Chief and Front Range Passenger Rail Commission and the Colorado Passenger Rail Association as well as the following communities: La Junta, Trinidad, and Dodge City, KS. Additional local entities may pledge match prior to the May 18 submittal of the application.



Front Range Passenger Rail Stakeholder Engagement

Segment Stakeholder Coalitions (North, Central, South)

Function: Provide project information to and obtain feedback at the local level

Members: Regional and local stakeholders

Responsibilities: Share project information with segment communities; Gather community input and share with Corridor Stakeholder Coalition

Meetings: November 2019, January 2020, April 2020

Corridor Stakeholder Coalition

Function: Create stakeholder-based recommendations for cohesive, corridor-wide project decisions

Members: Segment Stakeholder Coalition representatives

Meetings: December 2019, May/June 2020, Early Fall 2020

Level 1 Evaluation Results

Evaluation Process

STEP 1

PROJECT INITIATION AND SCOPING

What do we want
Front Range
Passenger Rail to
be?

STEP 2

LEVEL 1 EVALUATION

What are the
possibilities for
corridors and
operations?

STEP 3

LEVEL 2 EVALUATION

How do alternatives
compare?

STEP 4

ADVANCE TO NEPA

Federally required
process to advance
major infrastructure
projects

STAKEHOLDER ENGAGEMENT AND GOVERNANCE

Range of Alternatives Considered

- No Action (best bus)
- Possible Rail Alternatives with focus on Existing Transportation Corridors
 - BNSF Rail Corridor
 - Union Pacific/Great Western Rail Corridor
 - BNSF/RTD North Metro (N Line) Corridor
 - I-25 Highway Corridor
 - I-25 / E470 Highway Corridor



Fatal Flaw Evaluation



- **Operational Characteristics**
 - Serve 2045 population and employment centers
 - Provide connections with other modes (existing or planned transit)



- **Community and Environmental Impacts**
 - Severe community disruption
 - Severe impacts to natural resources



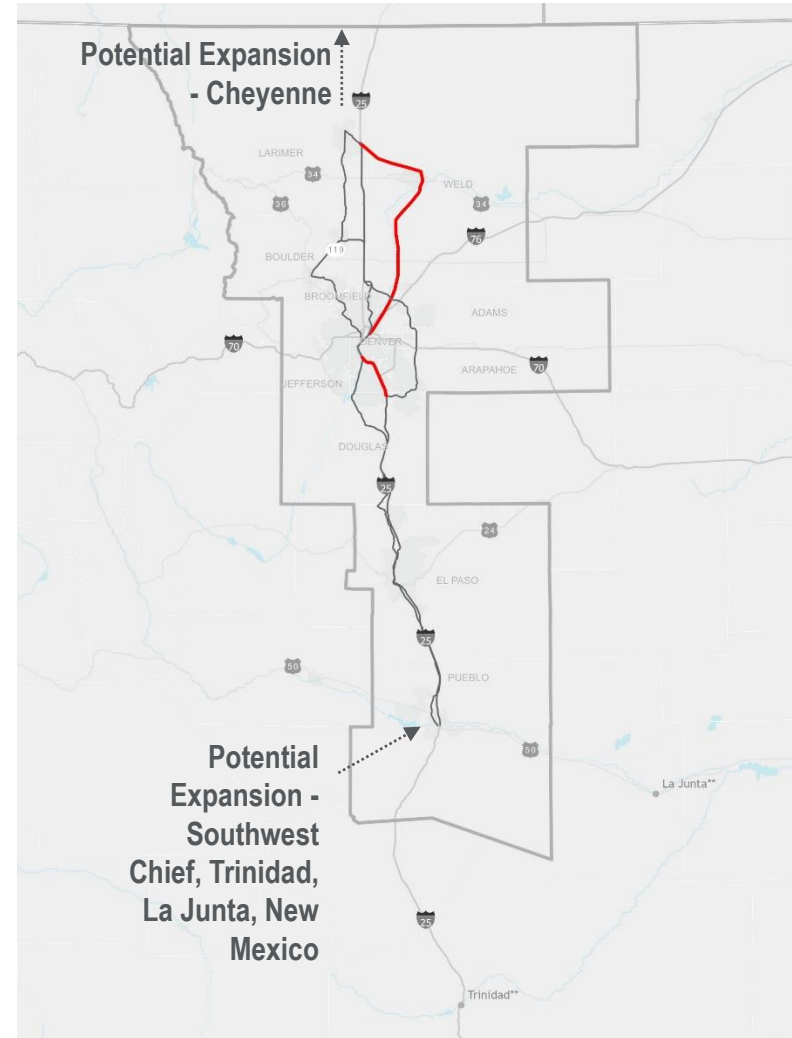
- **Financial and Economic Factors**
 - Potential to be cost-effective



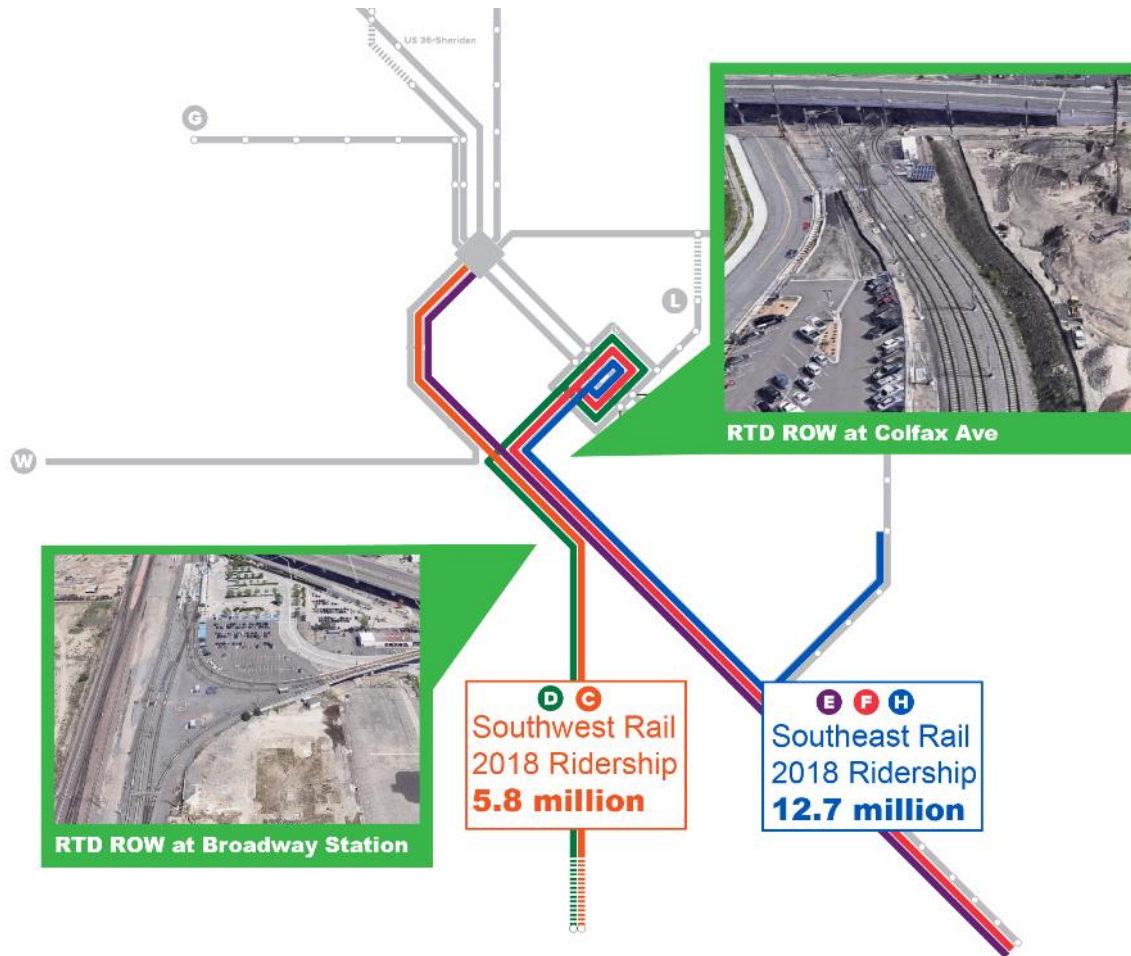
- **Feasibility and Implementation**
 - Constructible
 - Compatible with existing transportation uses
 - Some level of support

Level 1 Results

- Two corridor segments eliminated for one or more fatal flaw
- The remaining carried forward for refinement
 - Constraints identified for each corridor and each segment
 - Constraints include limited rights-of-way, areas of capacity limitations, and geometric issues (curves)



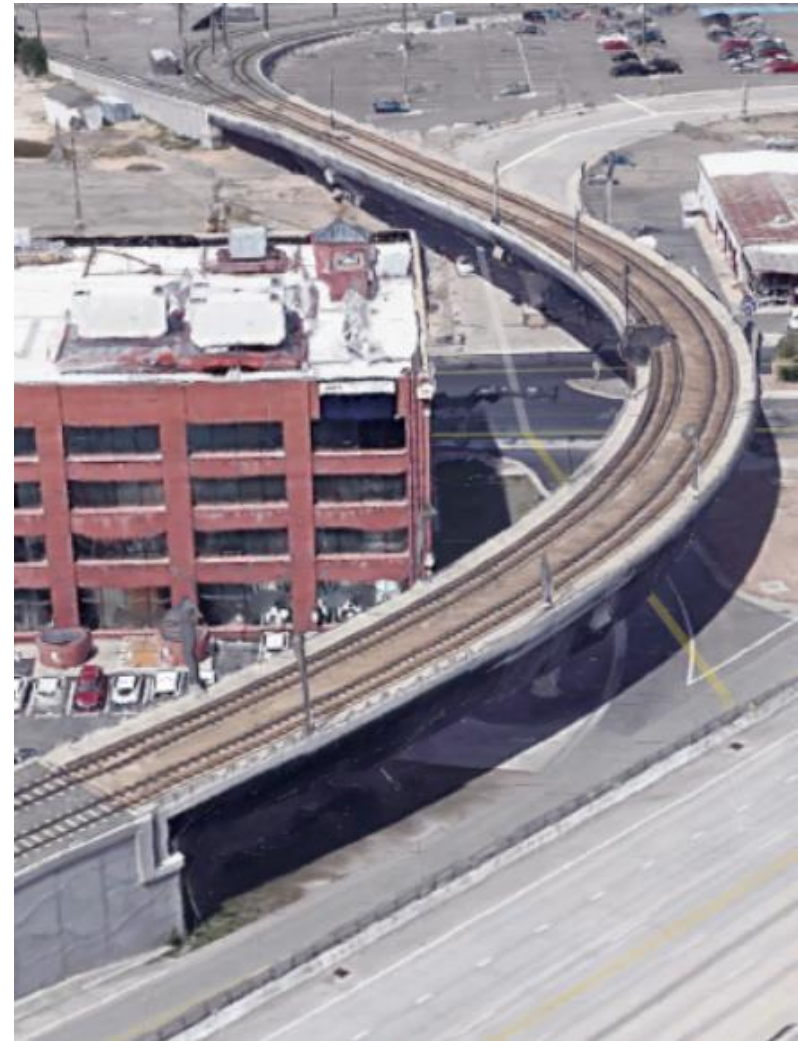
Eliminated: I-25 RTD LRT Retrofit



No available right-of-way | Severe community disruption | Interrupt RTD service for 6 years

Eliminated: I-25 RTD LRT Retrofit

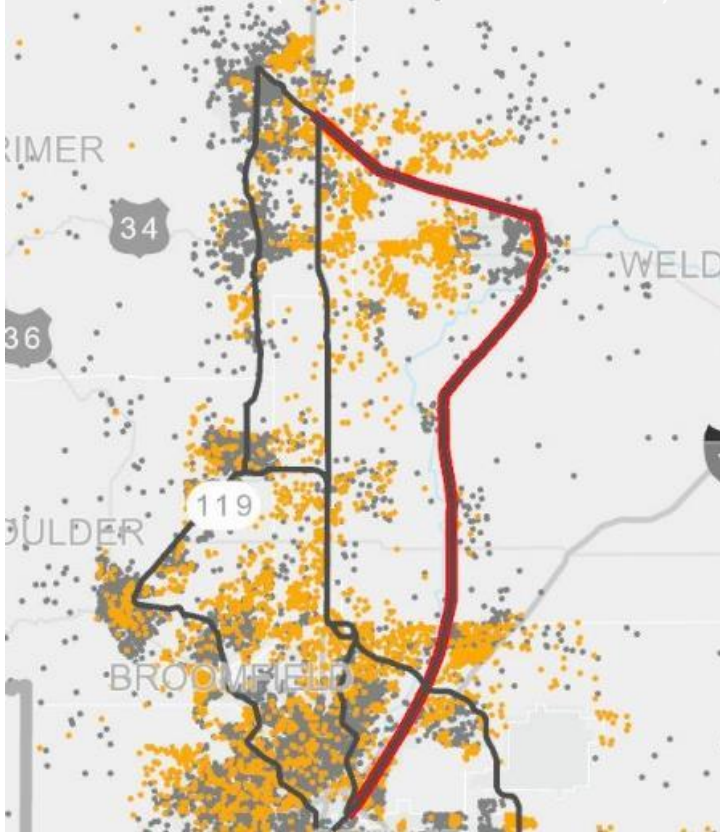
- 12 locations of vertical grades greater than 3 percent
 - Requires reconstruction
- 4 locations of horizontal clearance lower than 16 feet
 - Could potentially handle with design variance
- Platform modifications to accommodate wider vehicles (every station)
 - Modification to high-block structures for boarding for persons with disabilities
 - Gap/height difference at edge of platform needs hazard analysis



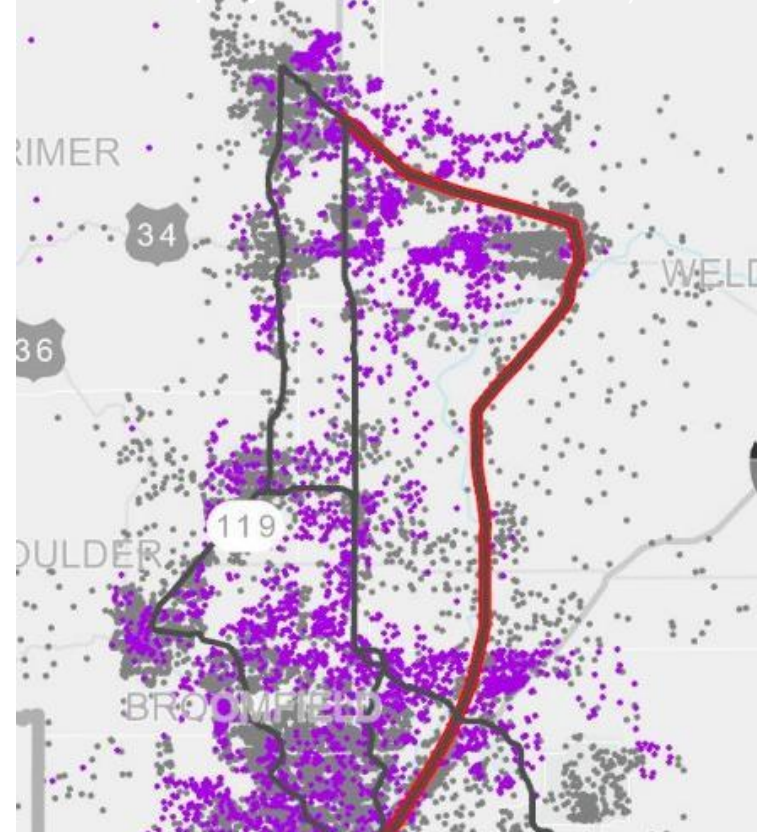
Eliminated: Union Pacific/Great Western

- Does not serve 2045 population or employment centers
- Does not provide backbone for connections with other modes
- Limited public support or benefit as a backbone alignment

Households (dot = 100 households)



Employment (dot = 100 jobs)



Level 2 Alternatives & Evaluation

Criteria for Level 2 Evaluation

Operational Considerations	Community / Environmental Impacts	Economic Considerations	Feasibility / Implementation
<ul style="list-style-type: none">▪ Travel Time▪ Ridership▪ Operating Speed▪ Reduction in Vehicle Miles Traveled (VMT)▪ Ability to Interconnect with Other Modes (Existing or Planned Transit)▪ 2040 Population Served	<ul style="list-style-type: none">▪ Community Disruption▪ Utilities and Energy▪ Air Quality▪ Natural Environment▪ Historic▪ Hazardous Materials▪ Recreational Resources▪ Noise and Vibration	<ul style="list-style-type: none">▪ Capital Cost▪ Operating Cost▪ Revenue Potential▪ Cost Effectiveness	<ul style="list-style-type: none">▪ Interaction with Freight Railroad Operations /▪ Customer Access▪ Ease of Implementation▪ Constructability▪ System Flexibility▪ Public Support

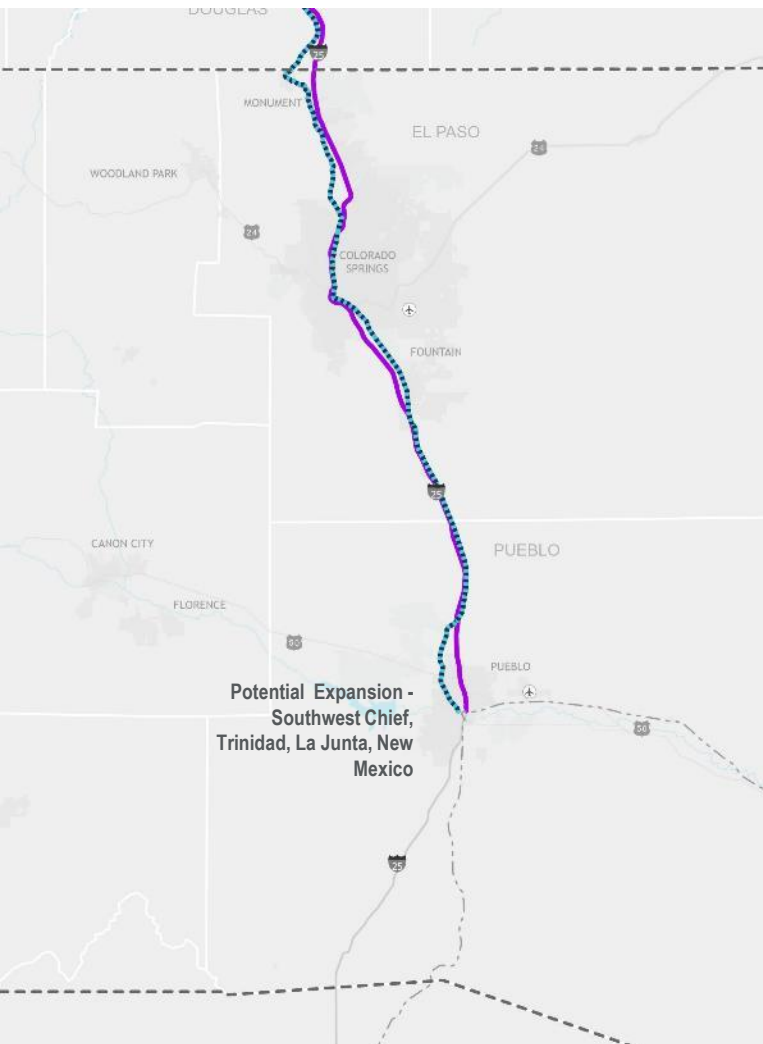
Level 2 Alternatives: South Segment

- I-25 from Pueblo to Monument (and Castle Rock)
- Consolidated mainline freight corridor from Pueblo to Monument (and Castle Rock)



Access to major
employment
centers

South Segment Considerations for Refinements



- Connections with Southwest Chief service
- Access to downtown Colorado Springs
- Topography and sensitive natural areas, especially through Air Force Academy north to Castle Rock
- Access to Denver area destinations
 - DEN Airport
 - Denver Tech Center
 - Downtown / Denver Union Station
- Future connection to Trinidad and New Mexico

Level 2 Alternatives: Central Segment

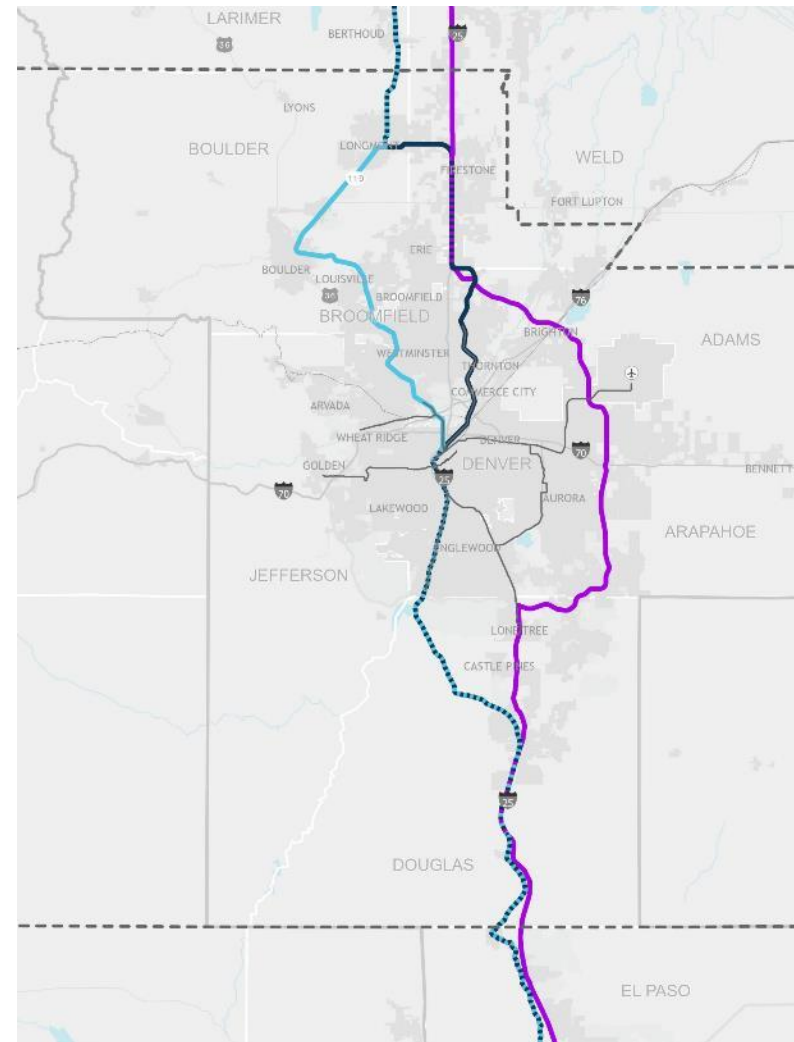
- Castle Rock to Denver : I-25 to E470 (with transfer to RTD)
- Castle Rock to Denver : Freight corridor (US 85/RTD Southwest LRT) to Burnham Yard/Denver Union Station
- Denver to Longmont: RTD North Metro + I-25 corridor
- Denver to Longmont: BNSF corridor (through Boulder)
- Denver to Longmont: E470 + I-25 corridor



Central Segment Considerations for Refinements

- Constrained right-of-way and community impacts
- Access to major destinations and interactions with RTD, particularly from south
- Divergent routes to serve communities in north Denver metro
- Burnham Yard and Denver Union Station interaction and opportunities

- ⊕ Airport
- ▭ Front Range Counties
- I-25/C-470 Highway Corridor
- BNSF Rail Corridor
- BNSF/RTD N Line Rail Corridor
- - Segment Boundary
- RTD Light & Passenger Rail

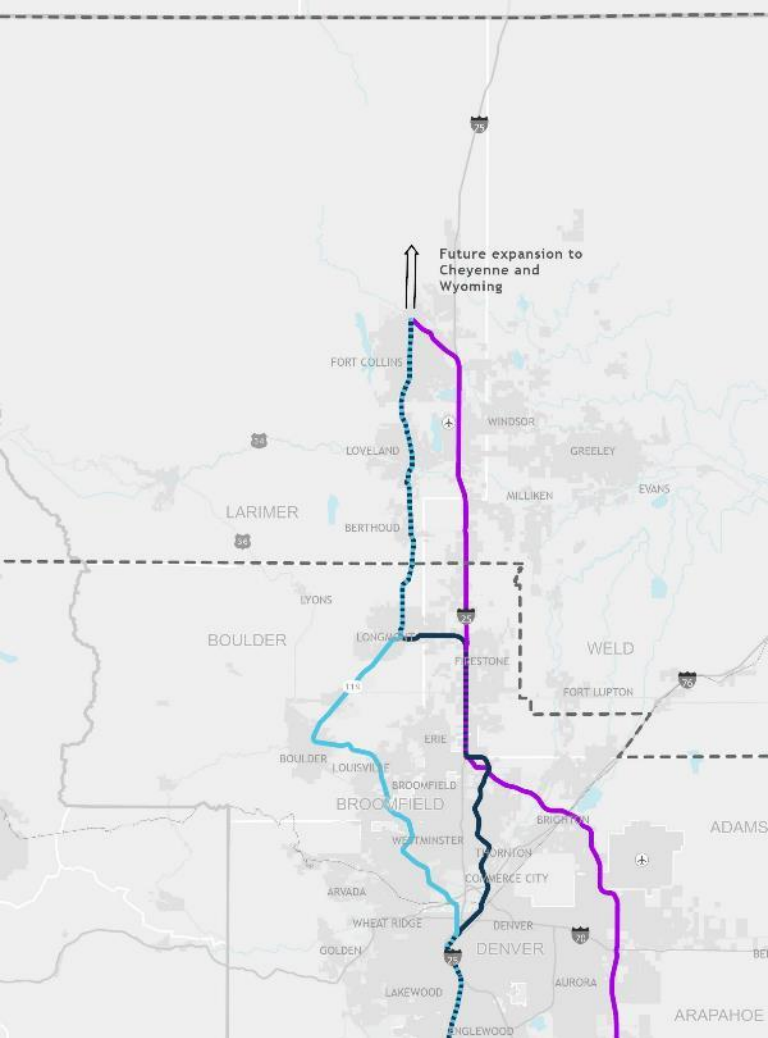


Level 2 Alternatives: North Segment

- I-25 Corridor between Longmont and Fort Collins
- BNSF Corridor (US 287) between Longmont and Fort Collins



North Segment Considerations for Refinements



- Shorter distances between communities
- Ridership analysis of trip purposes and demand
- Interaction with planned and desired intraregional transit
- Impacts through developed communities, grade separations, train speeds
- Fort Collins station location, interaction with MAX BRT and other regional transit, and future expansion north to Cheyenne

- ✈ Airport
 - ▭ Front Range Counties
 - - - Segment Boundary
- Corridor - LEGEND
- Corridor
- I-25/C-470 Highway Corridor
 - BNSF Rail Corridor
 - BNSF/RTD N Line Rail Corridor



Ridership – Preliminary Baseline Results

- Preliminary modeling has been completed for six baseline scenarios, five passenger rail scenarios and a best bus scenario
 - Results are favorable and have room for improvement
 - Ridership is expected to increase under all Rail Scenarios
 - Ridership may increase under Best Bus scenario also but not as much room for improvement
- Refinements will improve ridership
 - Engineering improvements to changes in horizontal and vertical geometry to increase speeds and travel times
 - Refinements to operating characteristics, such as improved connections or station locations
 - Mix and match best performing segments with hybrid corridors/alternatives
- Rail is projected to have higher ridership than bus
- Rail ridership projections (even these conservative early forecasts) compare favorably to existing passenger rail services around the United States.



www.frontrangepassengerrail.com



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