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# Northwest Rail Peak Service Feasibility Study Conclusion

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# Outline

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Orientation



BNSF  
Coordination



Summary  
Report



Funding  
Considerations



Passenger Rail  
Opportunities

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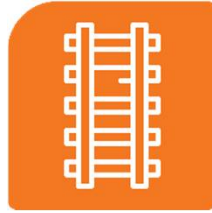


# Orientation

# What is Northwest Rail?



Proposed commuter rail service from Denver Union Station to Boulder that terminates in Longmont



39-mile extension from Westminster Station to Longmont would use existing freight railroad tracks owned by Burlington Northern Santa Fe (BNSF) Railway



RTD is evaluating an initial peak service approach as a **first step** toward full-day rail service to Boulder and Longmont

## History

2004

### FasTracks Passes

Voters approved a new tax to build transit expansion program

2010

### Environmental Evaluation (EE)

EE recommended building 11 new stations and a second track alongside the BNSF freight track

2013

### Northwest Area Mobility Study

RTD and local transportation partners prioritized cost-effective, near-term mobility projects (e.g., BRT) to advance while pursuing Northwest Rail as a longer-term goal

2016

### B Line Opens

First Northwest Rail segment to southern Westminster begins service

2017

### Peak Service Concept

Stakeholders requested evaluation of a peak hour commuter rail starter service

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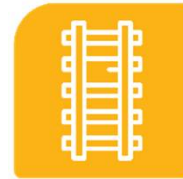


# What is the Peak Service Study?



Assessing feasibility of initial peak period service from Longmont to Denver:

- 3 weekday Southbound morning trips
- 3 weekday Northbound evening trips



Coordinating with BNSF Railway, owner of the rail line that Northwest Rail would use



Partnering with local jurisdictions to plan six new stations in Westminster, Broomfield, Louisville, Boulder, and Longmont



Evaluating potential train types and technologies



Identifying feasible locations for a commuter rail maintenance facility in Longmont



Exploring opportunities for partnership with Front Range Passenger Rail and integration with adjacent mobility projects

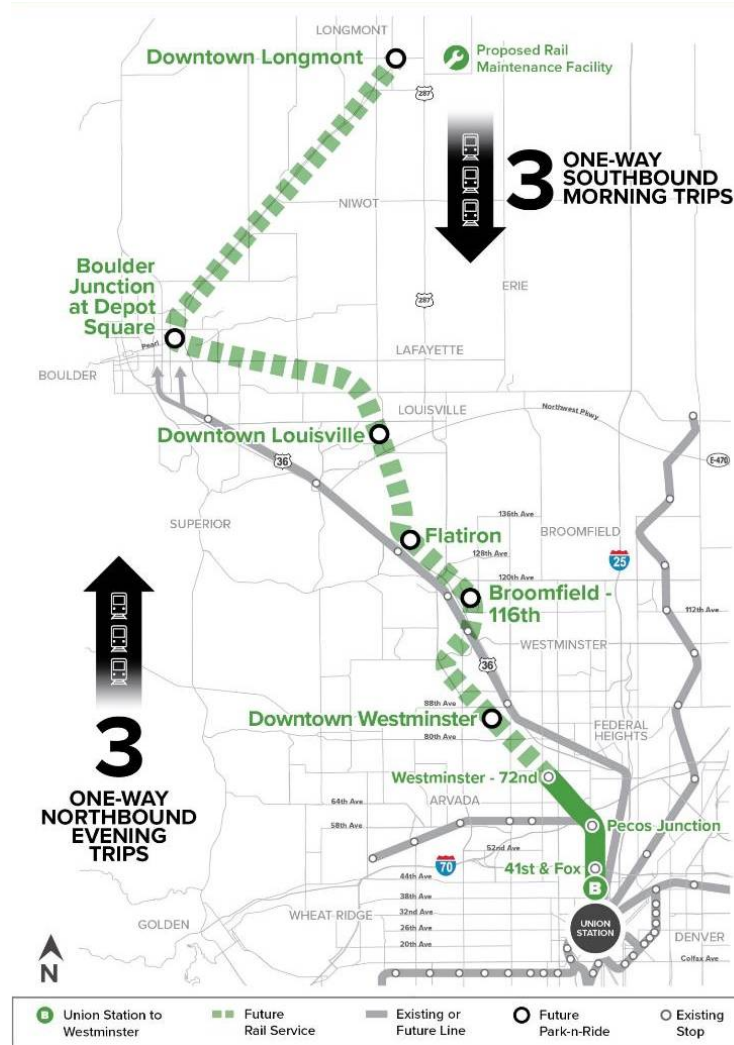
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# Proposed New Stations

- § Downtown Longmont
- § Boulder Junction at Depot Square
- § Downtown Louisville
- § Flatiron
- § Broomfield•116th
- § Downtown Westminster

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# Partners and Collaboration

*Collaborative effort between RTD, local transportation partners, BNSF Railway, CDOT, and Front Range Passenger Rail District to develop a safe, reliable, and connected multimodal transportation network*

## Study Advisory Team



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# BNSF Coordination



# BNSF 30% Design

§ BNSF/Wilson & Co. delivered 30% Preliminary Design package

## § Improvements Required:

§ Railway

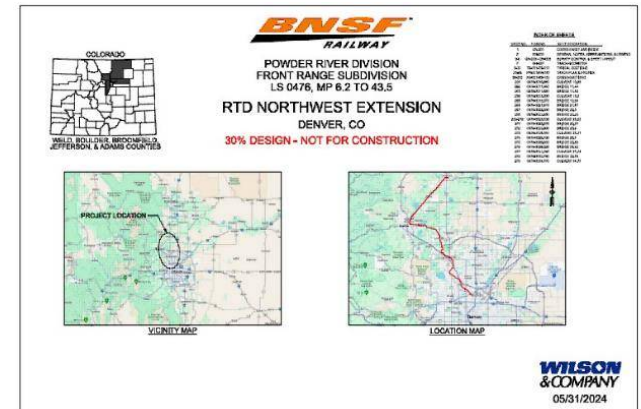
§ Drainage

§ Crossings

§ Structural (e.g., bridges, walls)

## § Preliminary Construction Cost Estimate:

§ Design and build all trackway improvements



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# Required Agreements

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- § BNSF-provided Infrastructure Improvements
- § Access Easement (weekday time blocks)
- § Maintenance of Way (track maintenance, etc.)
- § Dispatching and potentially train operators

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# Summary Report

# Common Set of Facts

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## § Categories

- BNSF Requirements
- Operating Specifications
- Infrastructure Needed
- Ridership Projections
- Capital and operating cost estimates

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# Common Set of Facts: BNSF Requirements

## § Infrastructure—one-time capital cost\*

- Trackway improvements
- Includes positive train control, station and freight sidings, train signal and communications, and regulatory requirements

## § Access Easement—one-time capital cost

- Long-term/permanent property acquisition
- Dedicated daily operating window

## § Maintenance of Way—annual operating cost

## § Dispatch and Coordination of Train Operations—annual operating cost

\* Infrastructure assets will require periodic renewal during operating periods



# Common Set of Facts: Operating Specifications

§ **Six runs:** Three during AM peak period, three during PM peak period

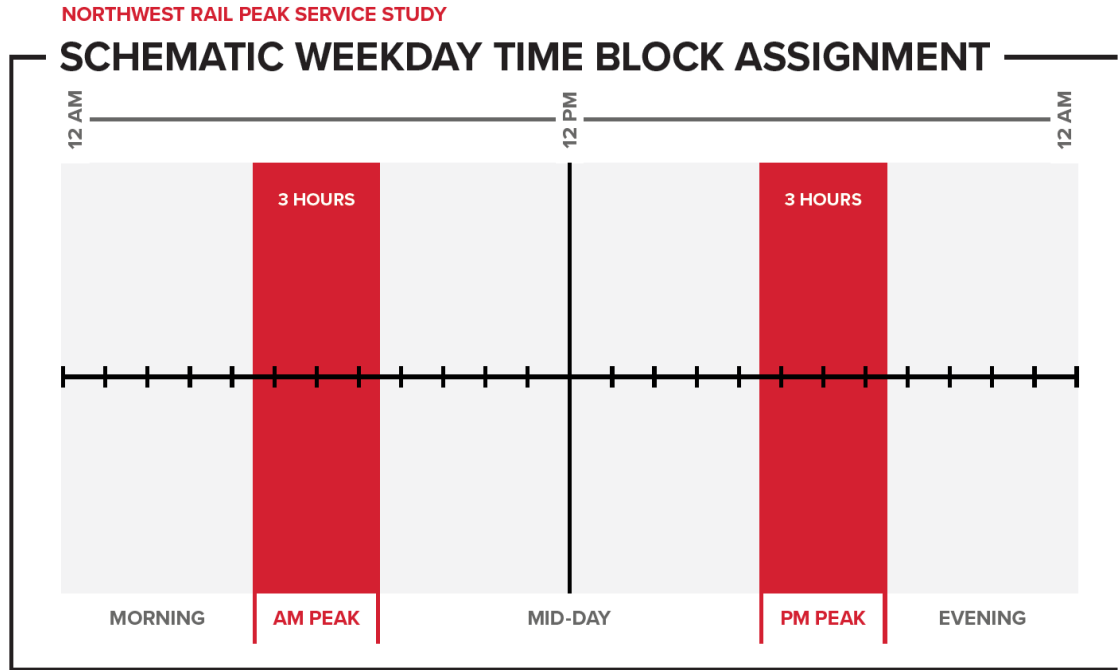
§ **Run time:** 65 minutes (+/- 2 min.) between Longmont and DUS

§ **Defined blocks of time** during which freight is suspended for passenger service

- Three-hour window for AM peak service
- Three-hour window for PM peak service
- Includes safety buffer before and after

§ **Dispatch:** BNSF and RTD/Denver Transit Operators

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# Common Set of Facts: Infrastructure Needed

§ Six new stations with separate sidings

§ Three freight sidings (totaling 8.2 miles)

- Between Old Wadsworth and US 36 – approx. 1.85 miles long
- Between Baseline Road and 55<sup>th</sup> Street – approx. 4.84 miles long
- Between North 55<sup>th</sup> Street and North 63<sup>rd</sup> Street – approx. 1.47 miles long

§ Modification of track for **mid-day storage site** at existing Westminster Station

§ Required Improvements

- Drainage
- Crossings
- Signals and Positive Train Control
- Structures  
(e.g., bridges, walls)



# Common Set of Facts: Projected Ridership

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§ **Estimated Ridership:** 1,100 daily boardings in 2030

- Based on 2019 DRCOG Regional Travel Demand Model

§ **Locomotive-hauled coaches** included as basis of cost estimates

- Trainset: One locomotive, one coach car, and one cab car
- Five total trainsets recommended

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# Common Set of Facts: Estimated Capital Costs

§ Estimates: \$650m (2024 dollars)

§ Access Easement Agreement

- Estimated based upon Northstar Line commuter rail serving the Minneapolis metropolitan area

§ Included Elements

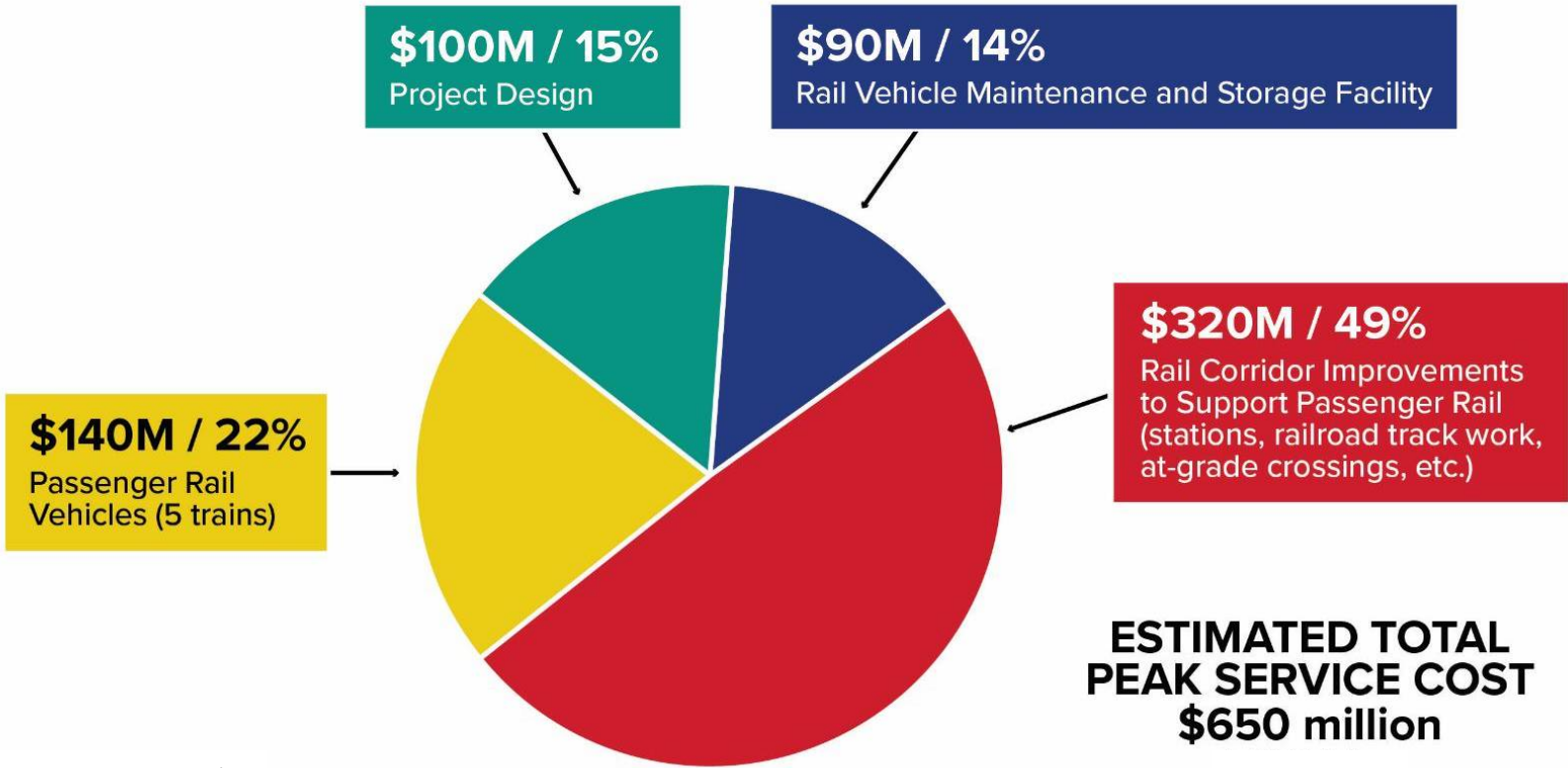
- Stations
- Structures
- Accessibility features
- Trains
- Track improvements
- Commuter Rail Maintenance Facility
- Sidings



## NORTHWEST RAIL PEAK SERVICE STUDY

# COMMON SETS OF FACTS

CAPITAL COSTS



(2024 dollars)

# Common Set of Facts: Estimated Operating Costs

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## § Estimates: \$12–16M (2024 dollars)

- Estimated based upon National Transit Database reported costs

## § Included Elements

- Train maintenance (RTD)
- Station maintenance (RTD)
- Train control and dispatch (BNSF/RTD proportionate cost)
- Track maintenance (BNSF/RTD proportionate cost)
- Train operators (RTD, BNSF, or qualified third party)

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# Funding Considerations

# Financial Position and Forecast

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## § 2025-2029 Five-year Financial Forecast (FYFF)

§ Available funding for current Operations and Maintenance (O&M) and State of Good Repair

§ Fund balances meet Fiscal Policy

§ No additional funding available for capital or operations expansion

## § Potential opportunities

§ New debt issuance for capital

§ Committed ongoing state funding for debt service and O&M

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# Considerations – Capital Cost

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§ New Revenue Bond Issuance Requires Voter Approval

§ Certificates of Participation (COP)

§ Lease-purchase with unencumbered collateral

§ Collateralized asset belongs to COP issuer

§ Higher borrowing costs

§ Further investigation with bond counsel, etc. needed

§ Borrowing \$650m

§ Approximately \$40m annual debt service

§ Possible credit rating downgrades

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# Considerations – O&M Cost

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- § \$12-\$16m annual cost not forecasted/budgeted
- § Offset with reductions elsewhere absent additional funding
- § Future asset renewal and replacement periodic significant costs
- § Operating cost/rider (excluding depreciation)
  - § 2023 Light Rail/Commuter Rail combined: \$7.86
  - § Northwest Rail: \$42.78-\$57.04

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# Passenger Rail Opportunities



# Passenger Rail Opportunities

- § Two separate studies with different purposes
  - § Foundational to inform potential joint operations
  - § No preclusion of separate services or potential joint service
- § SB24-184 legislation supports development of transit and rail infrastructure solution

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**The Differences Between Commuter and Intercity Rail**  
 Throughout the US, commuter and intercity rail services operate on the same tracks.



Commuter Rail		Inter-City Rail
Serves one metropolitan area connecting suburbs to an urban core.		Connects cities across the state.
2-4 Miles	<b>Station Distance</b>	20-30+ Miles
35-45 Miles Per Hour	<b>Average Speed</b>	45-55+ Miles Per Hour*
20-75 Miles	<b>Service length</b>	50-300+ Miles / < 750 Miles

\* Average running speed between stops is 65-90 Miles Per Hour

# Notable Elements

## § RTD Rail Only (FasTracks Peak Service)

- Cost exceeds FISA
- Federal grants opportunities limited

## § RTD + Intercity Rail

- Joint delivery and operations
- Cost sharing and operational efficiencies
- Federal discretionary grants – increased opportunities based upon NOFOs



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