Peak Service Study
Northwest Rail

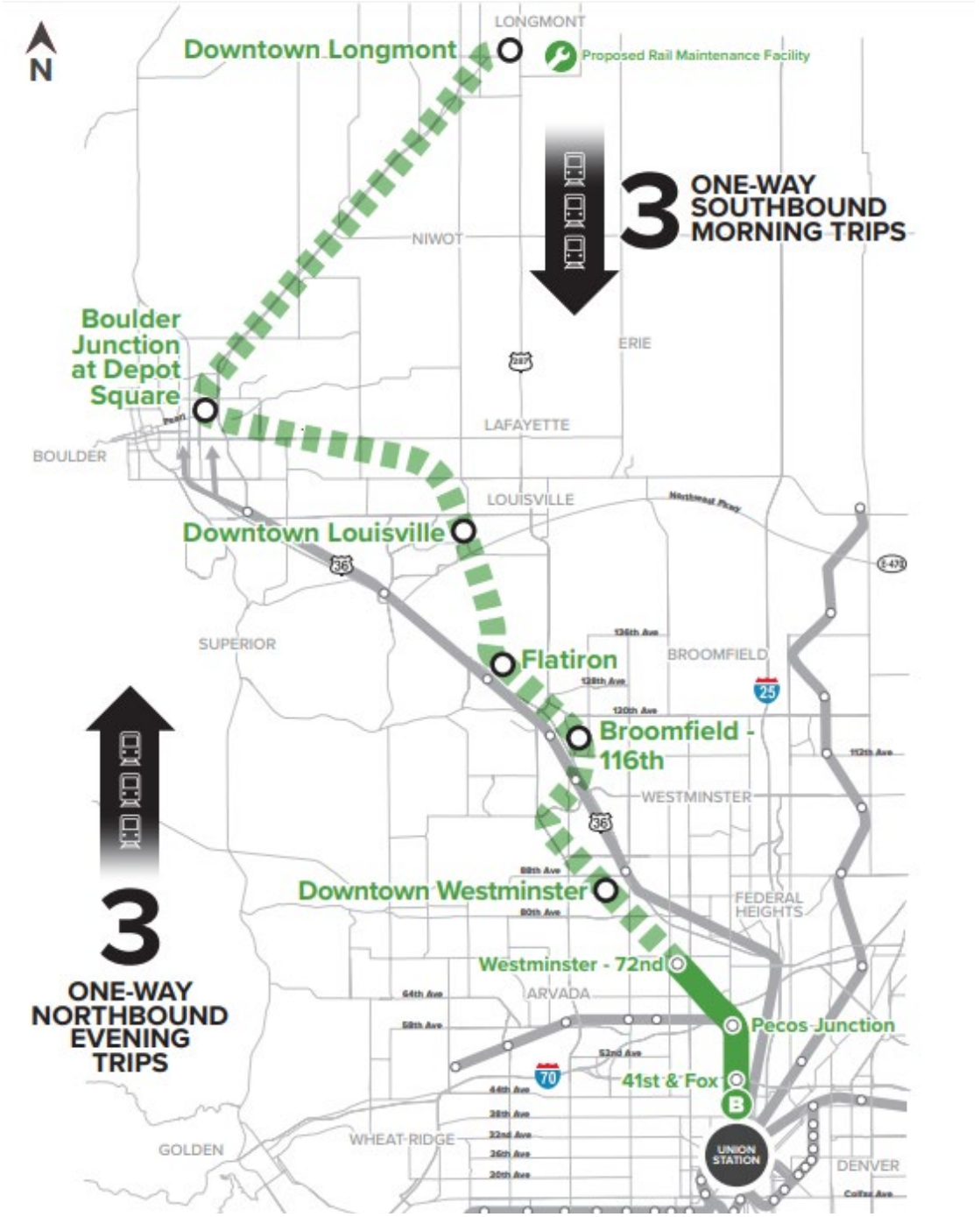
Overview and Study Update

DRCOG Regional Transportation Committee

July 16, 2024

Overview

- Project Status
- Required Infrastructure
- Common Set of Facts
- Opportunities
- Community and Stakeholder Engagement



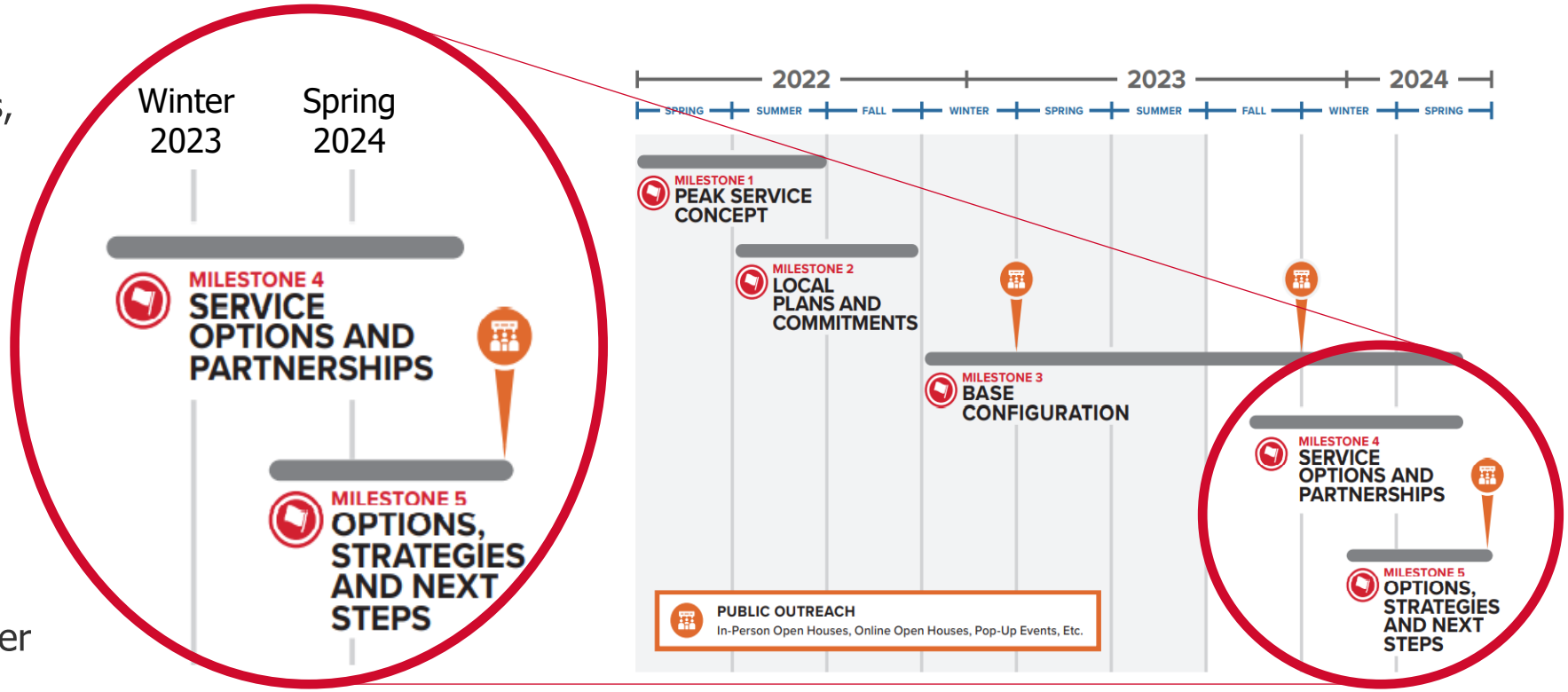
Project Status

Finalizing Peak Service Feasibility Study

- HDR completing Milestone 3 Base Configuration requirements, initiating Milestone 4
- BNSF Railway 30% design, 30% costs pending

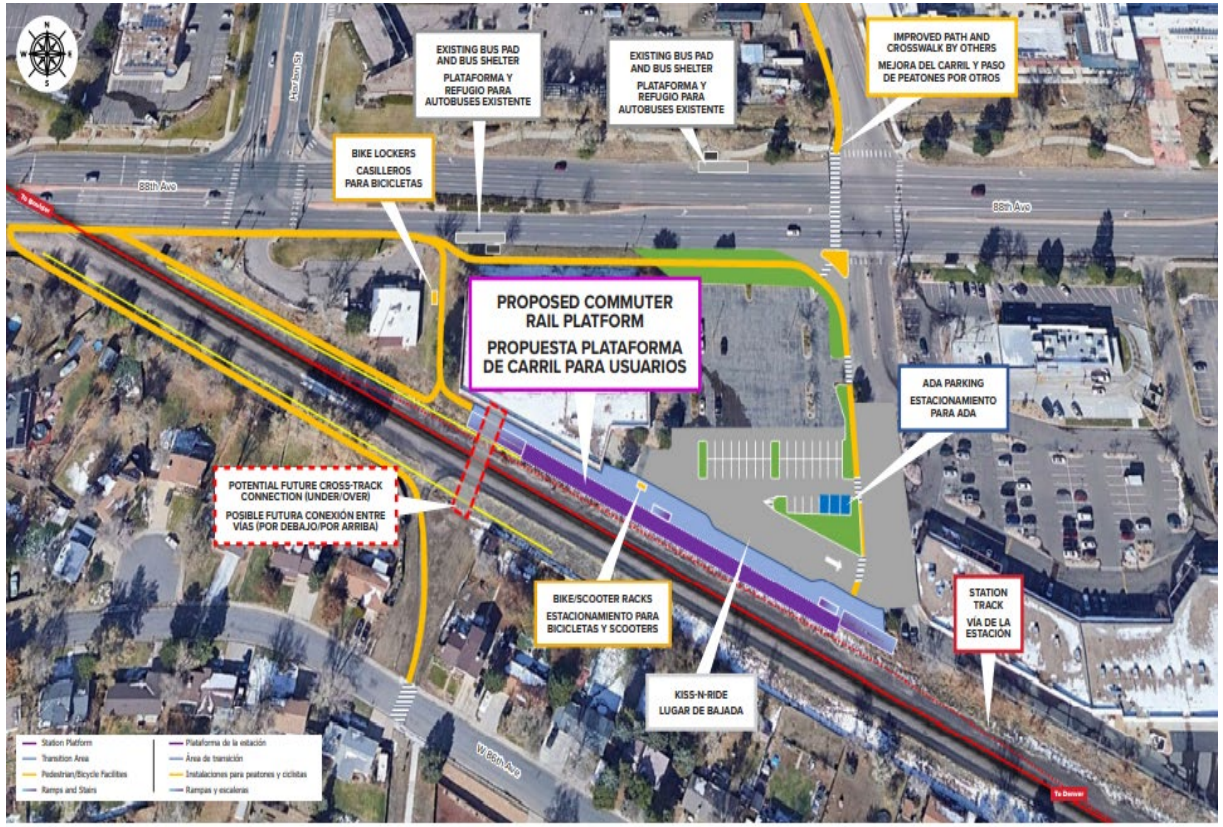
FRPR District

- HNTB Service Development Plan (SDP) in progress
- RTD and Front Range Passenger Rail (FRPR) District identifying opportunities for efficiencies in delivery/operations



Required Infrastructure

- **Six New Stations**
  - RTD standard commuter rail station design
  - Level boarding platforms on sidings (accessibility compliance)
- **Three Freight Passing Sidings**
  - 7.2 total miles (minimizes stopped trains at roadway crossings)
- **Track Improvements for Speed and Reliability**



Planned Station Design for Downtown Westminster

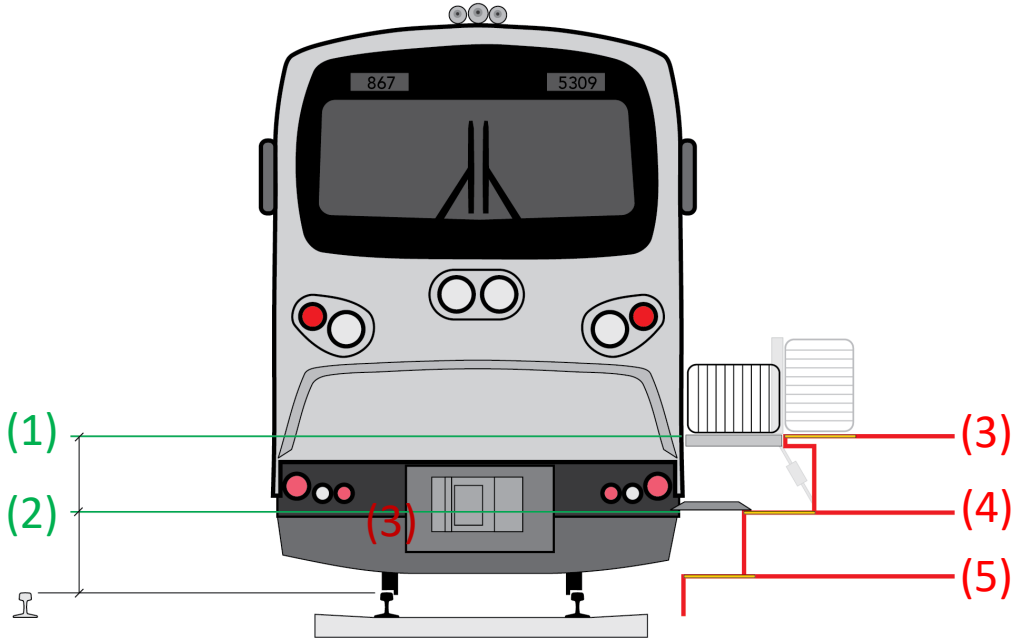
Required Infrastructure (cont'd)

- **Drainage Upgrade Requirements**
- **41 At-grade Crossings**
  - 22 quiet zones established; 8 planned by cities/counties
  - Safety improvements at modified crossings
- **Rail Maintenance Facility in Longmont**
- **Mid-day Layover Facility at Westminster Station**

Planned Station Location for Boulder Junction at Depot Square

Required Infrastructure: Accessibility Compliance

- **Why are high-level boarding platforms recommended for Northwest peak service?**
  - Equitable and operationally efficient outcome
  - Requirements
    - Level boarding
    - Equal service to all Northwest corridor stations and existing high-platform B Line stations
  - Operating conditions
    - Low-level platform at Denver Union Station would likely interfere with Amtrak and FRPR District operations
    - Northwest Peak Service and B Line service should operate from the same platforms



(1) RTD Standard Commuter Rail Platform Height
(2) Standard Low Floor Vehicle Height
(3) Mechanical Bridge Across Platform or High Block Gap
(4) Manual Bridge Across Platform Gap
(5) Not ADA Accessible

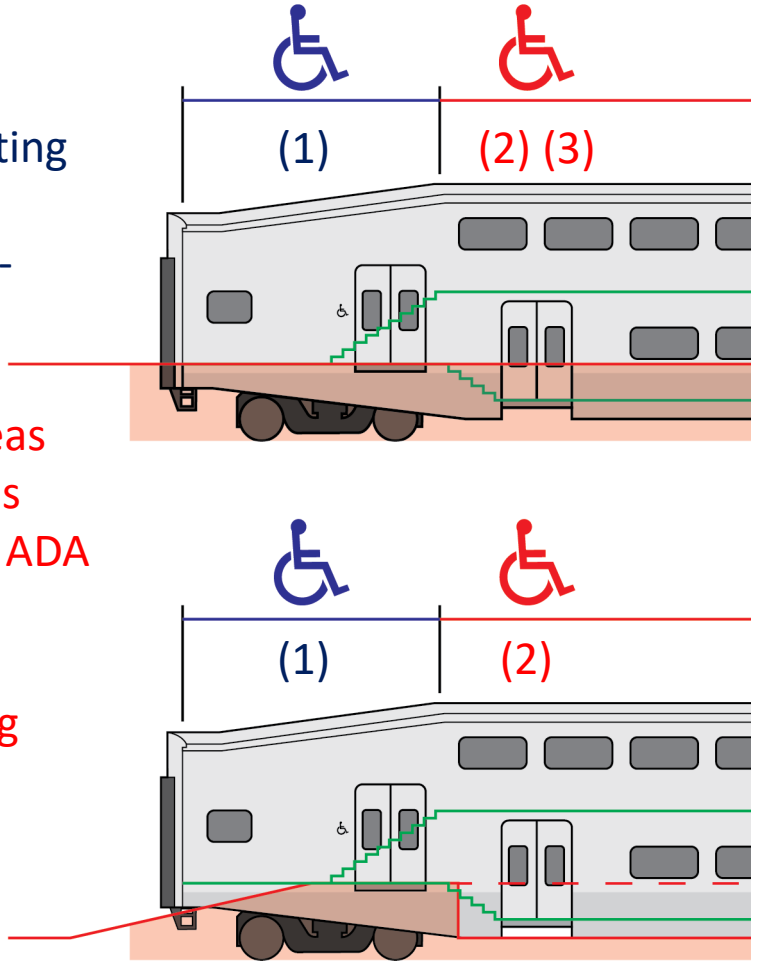
Required Infrastructure: Accessibility Compliance

- **Why are high-level trains recommended for Northwest peak service?**
  - Low floor cars can never serve high platforms
  - Mini-high blocks no longer accepted by FTA when level boarding is possible
  - Disadvantages of cars serving multiple platform heights:
    - Require operable lifts or platform gap fillers
    - Higher design, installation, and maintenance cost
    - Inferior and unequal access
    - Added dwell times
    - May "trap" ADA customers

(1) Accessible at Existing High Platform Stations and Mini-High Blocks with Bridge Plates

(2) Low Floor Car Areas and Low Platforms Not Accessible to ADA Passengers

(3) Low Floor Doors Blocked at Existing High Platforms



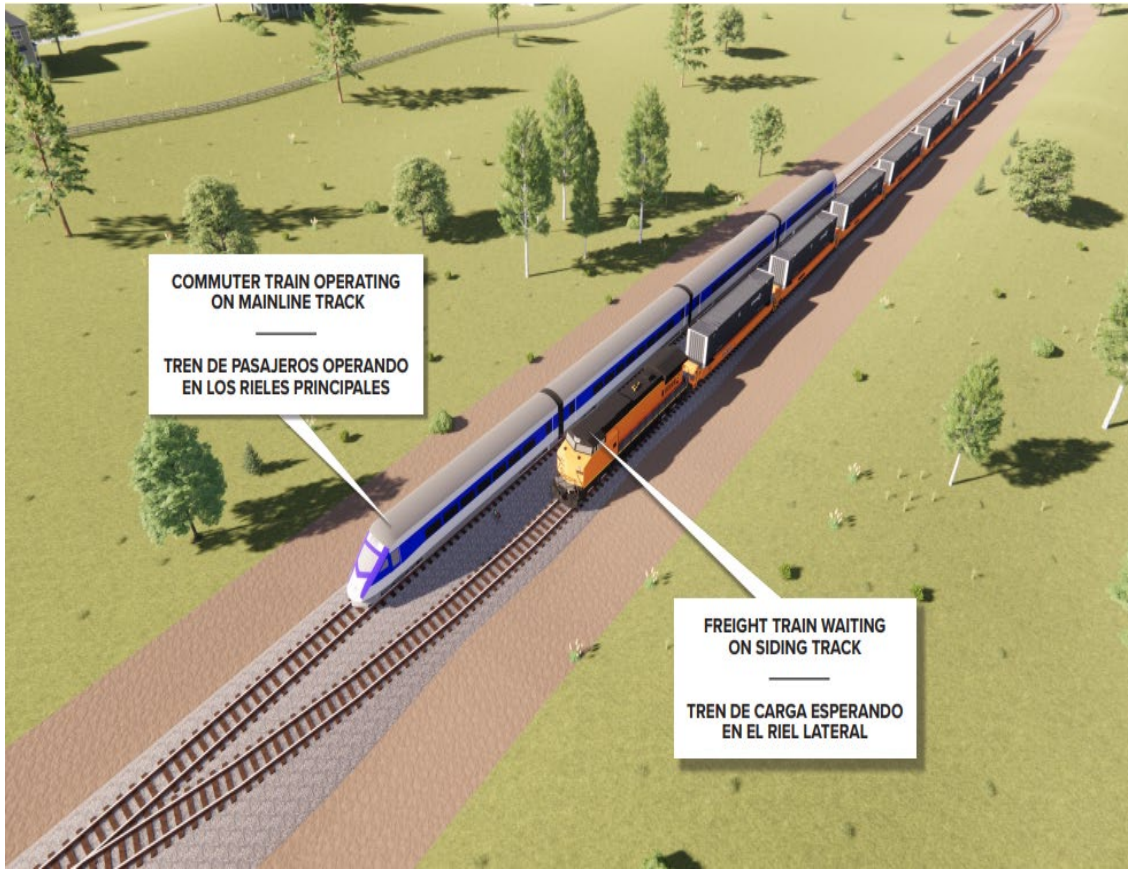
Peak Service Feasibility Study Analysis

- **Key Considerations**
  - Initial level of service
  - Operational requirements
  - Required infrastructure
  - Cost to build and operate
  - Travel time
  - Projected ridership
  - Benefits and impacts
- **Focused on RTD Service Only**
  - Establishes the baseline required for a partnership with FRPR District and BNSF

Public Meeting

Common Set of Facts

- **Capital Costs**
  - Stations and accessibility compliance
  - Track improvements and sidings
  - Acquisition of easement from BNSF
- **Operating Costs**
  - Operating and maintaining trains and stations
  - Train operations (TBD), dispatch (BNSF/DTO), and track maintenance (BNSF)
- **Ridership Projections**



Typical Freight Siding

Common Set of Facts (cont'd)

Impacts and Benefits

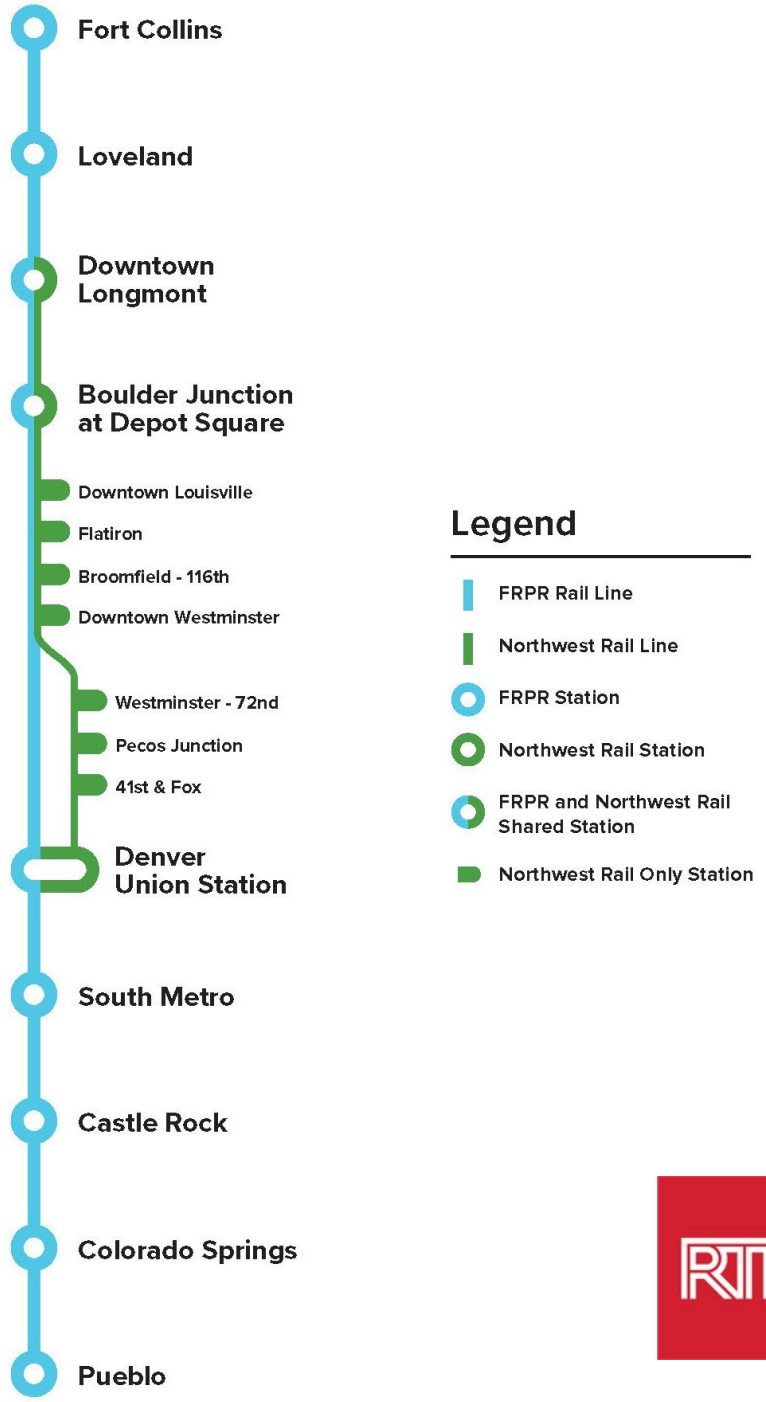
- Environmental impacts (NEPA assessment factors)
- Environmental justice and equity (including Title VI factors)
- Land use impacts and transit-oriented development opportunities
- Avoiding actions that preclude FRPR requirements
- Public/stakeholder identification of issues

Service Characteristics

- Travel time
- Required infrastructure (station parking and access)

Opportunities

- **Northwest Rail Peak Service and Front Range Passenger Rail**
  - Separate projects, overlapping route, several shared stations
- **Economies of Scale are Possible**
  - Probable joint operational efficiencies
  - Potential synergies arising from a common fleet type
  - Possible to share and reduce operations and maintenance costs
  - Potential to share in track improvement costs
  - Potential to share in cost of safety systems and crossing upgrades



Community and Stakeholder Engagement

- **2023 Activities**
- **Two Corridor-wide Open House Events**
  - January-February 2023 – Boulder, Westminster
  - November 2023 – Longmont, Broomfield
- **Local "Pop-up" Events**
  - June-October 2023 – 14 community-based events
  - 885 visitors
- **Monthly Study Advisory Team Meetings**
- **One-on-one Concept Design Meetings**
- **Board Committee Update**
  - April 2023
  - October 2023

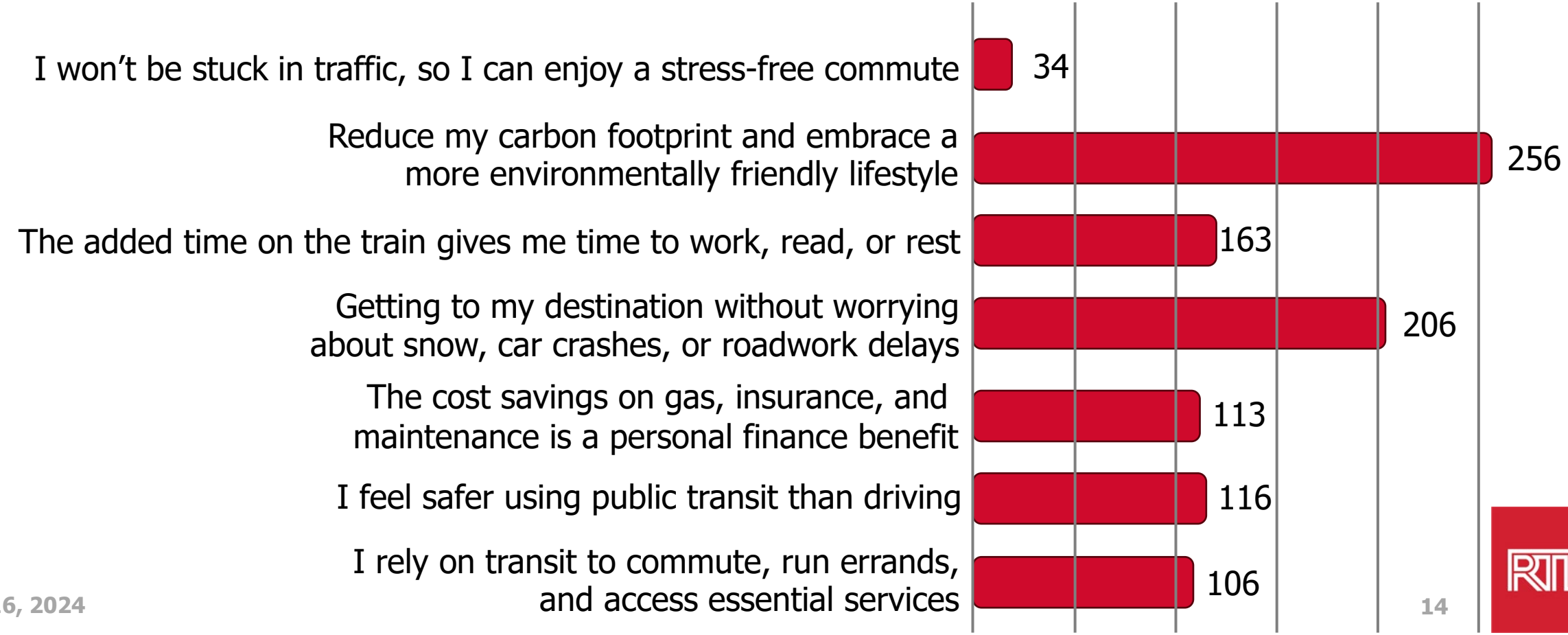
Public Outreach Popup Event

Community Engagement (cont'd)

- **Activities Since October 2023 Board Committee Update**
- **November 2023 Public Meetings**
  - 30 attended in Longmont
  - 100 attended in Broomfield
- **RTD Study Website Comment Form**
  - 785 e-mail sign-up and comments
- **Self-Guided Online Meeting**
  - 6,019 total views
  - 2,598 engaged sessions (clicked a call-to-action,
    video, survey, etc.)
  - 393 total survey responses

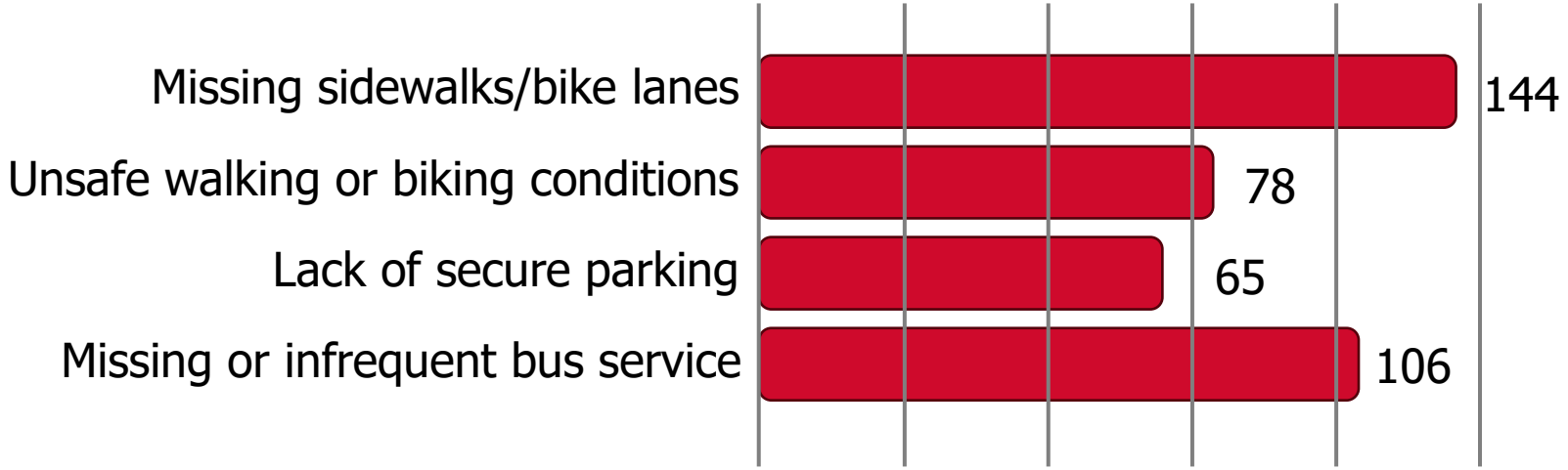
Survey Input – Peak Service Benefits

What do you see as the benefits of the peak rail service plan? Pick 3.



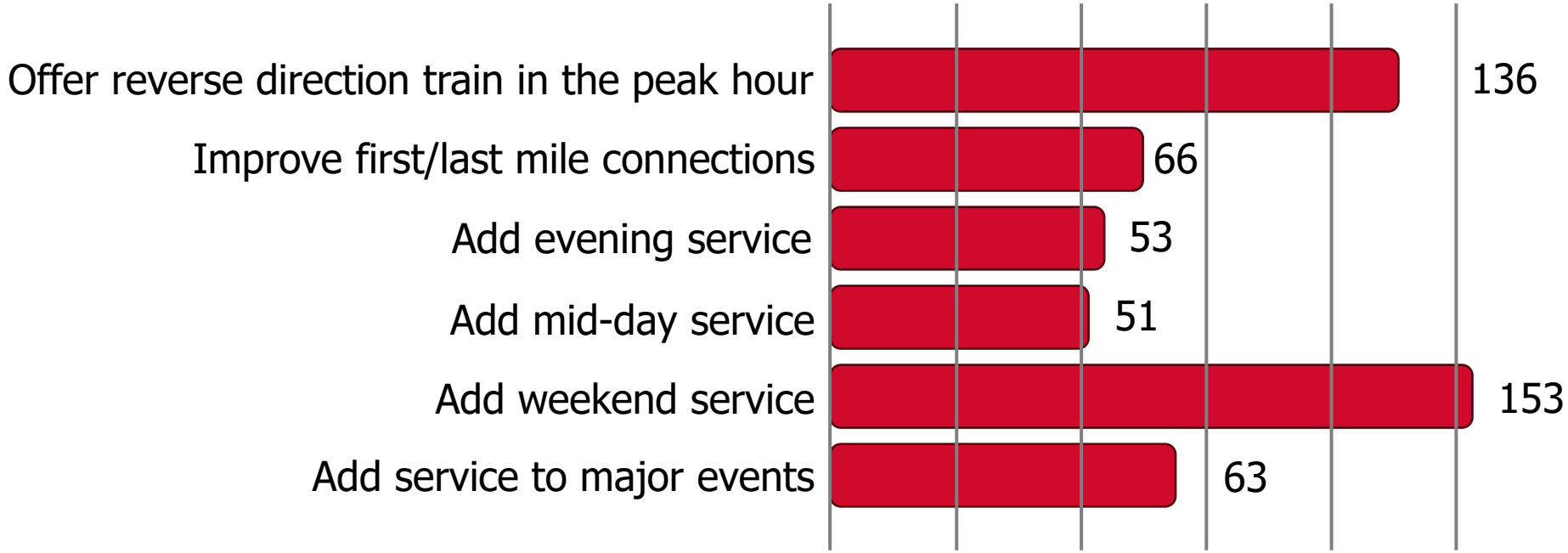
Survey Input – Peak Service Station Barriers

What do you believe is your greatest barrier to accessing the station?



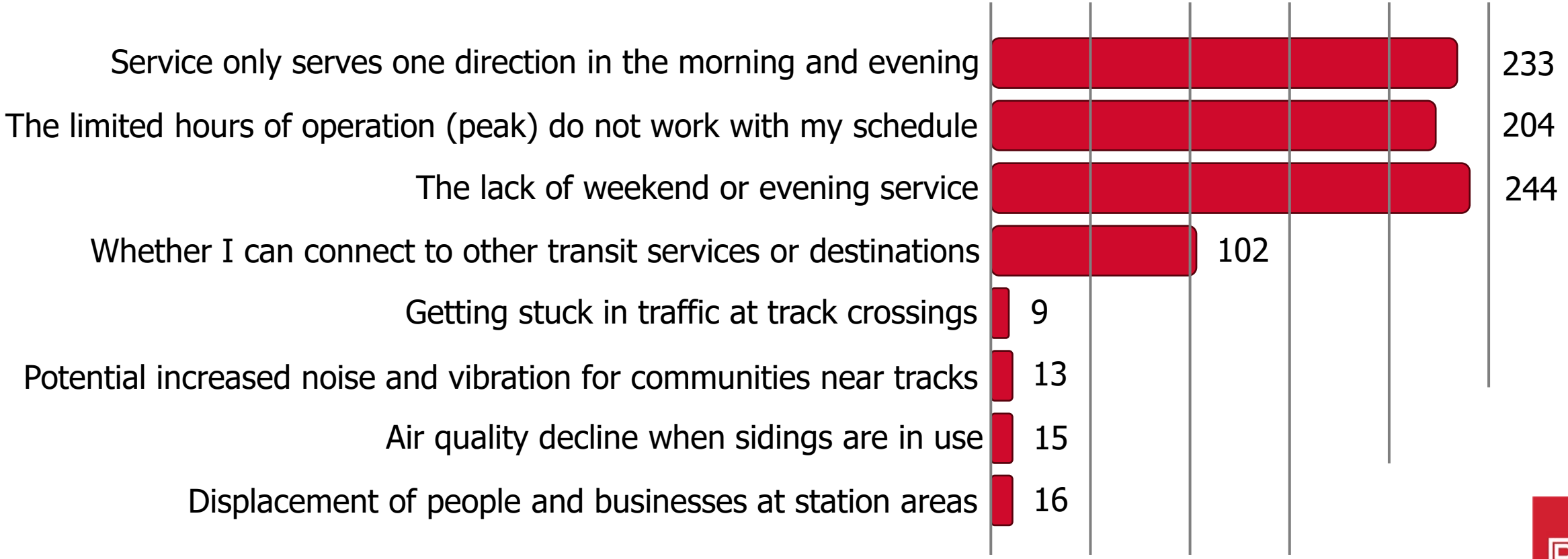
Survey Input – Peak Service Enhancements

How can peak service be enhanced to better meet your needs and expectations?



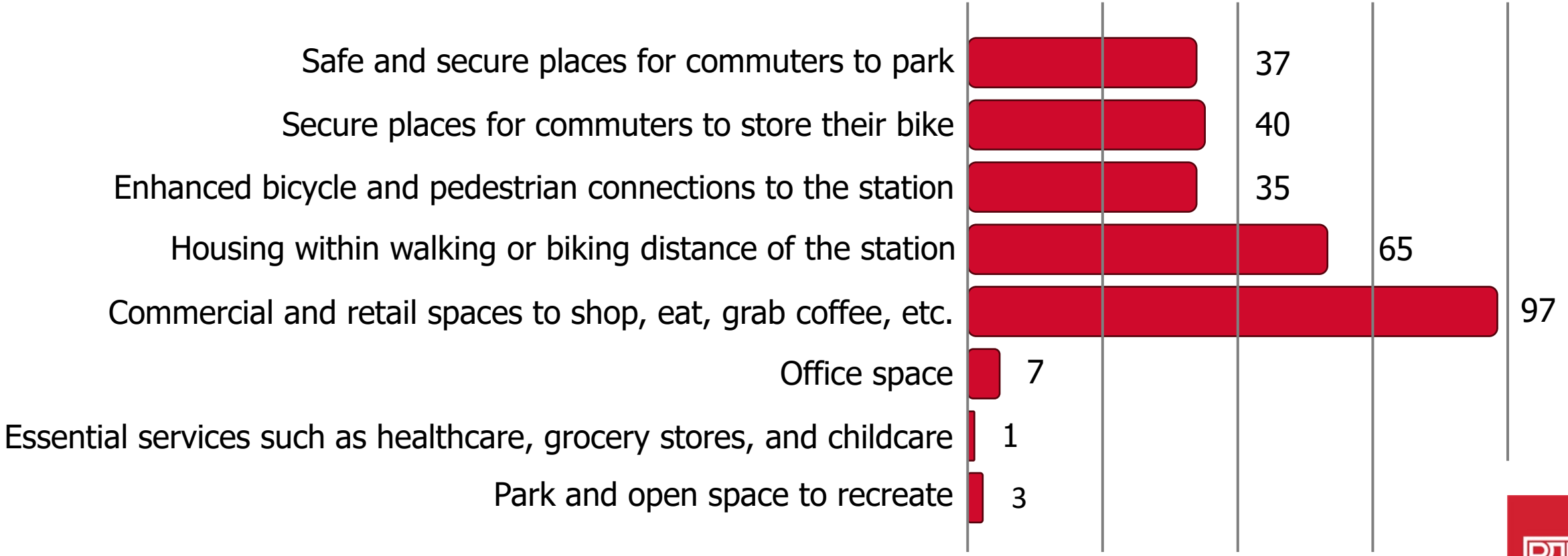
Survey Input – Peak Service

What concerns you most about peak rail service?



Survey Input – Future Stations

What is the most important element to include at or adjacent to future stations? Pick 1.



Next Steps – Look Ahead to Key Efforts

- **Identify the Required Infrastructure**
  - Inventory cost for track and siding improvements, systems, crossings, stations, and fleet
  - BNSF 20% design and rough cost estimates complete, 30% (final scope) in progress
- **Complete the Common Set of Facts**
  - BNSF costs for easement and track construction
  - RTD costs for station and maintenance/storage facility construction
  - Fleet acquisition cost
  - Operating and maintenance, and ongoing expenses to BNSF
  - Ridership

Next Steps – Look Ahead to Key Efforts (cont'd)

- **Explore Opportunities**
  - Evaluate an implementation framework in partnership with FRPRD, CTIO, and CDOT as required in SB24-184
- **Continue Community and Stakeholder Engagement**
  - Identify periodic community and stakeholder touchpoints as RTD and partners explore project delivery options (ongoing RTD commitment following feasibility study completion)
  - Address challenges with station concept designs for Louisville and Boulder through local agency collaboration and further public engagement (future action between RTD and cities)

Thank you.

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