



Let's Talk Quiet Zones

B & G Lines



**COMMUTER RAIL
OVERVIEW**

Slide 2



QUIET ZONES

Slide 6



SAFETY

Slide 11

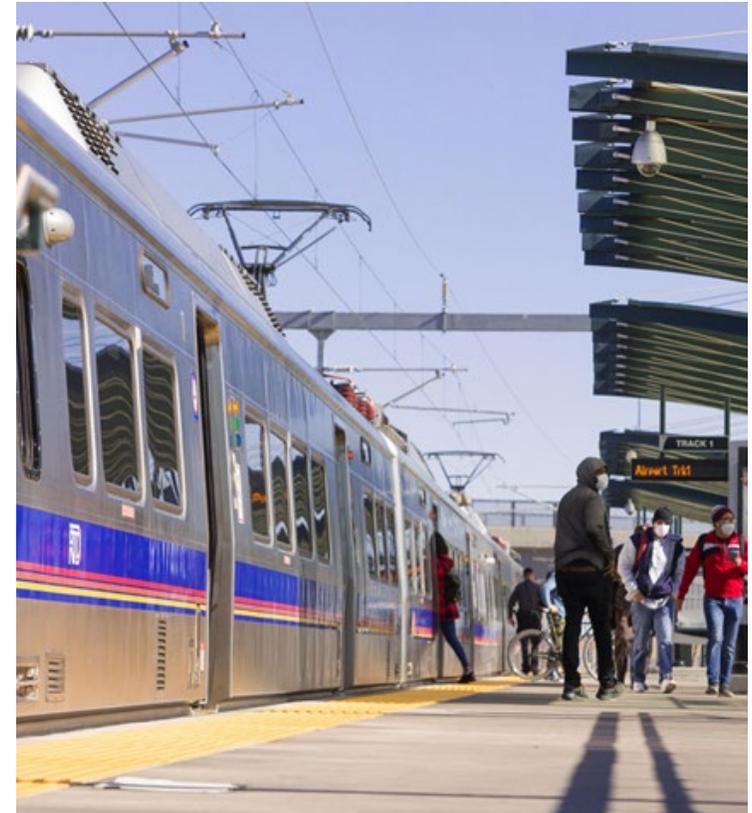


**WE WANT TO HEAR
FROM YOU**

Slide 13

Eagle P3 Project

- First major transit public-private partnership in the U.S.
- 34-year agreement with Denver Transit Partners (DTP)
 - Partial financing
 - Design and build
 - Operations, inspection and maintenance
- Three commuter rail lines, 66 commuter rail cars, Commuter Rail Maintenance Facility (CRMF)
- Regulatory agencies
 - Federal Transit Administration (FTA)
 - Federal Railroad Administration (FRA)
 - Colorado Public Utilities Commission (CPUC)



Service Lines

■ B Line

- 5.7 miles, 4 stations
- Service frequency
 - 60 min. (COVID)
 - 30 min. peak/60 min. off-peak (non-COVID)
- 1 private at-grade crossing
- 36,434 train trips 2019-2020

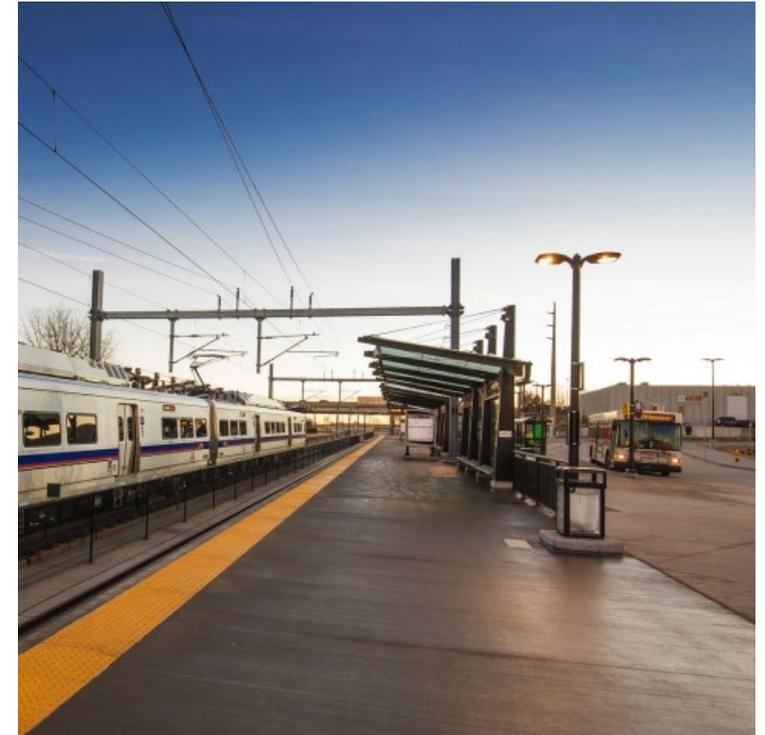
■ G Line

- 11.2 miles, 8 stations
- Service frequency
 - 30 min. (COVID)
 - 15 min. from 6 a.m.-6 p.m./30 min. all other times (non-COVID)
- 16 at-grade crossings
- 56,893 train trips 2019-2020



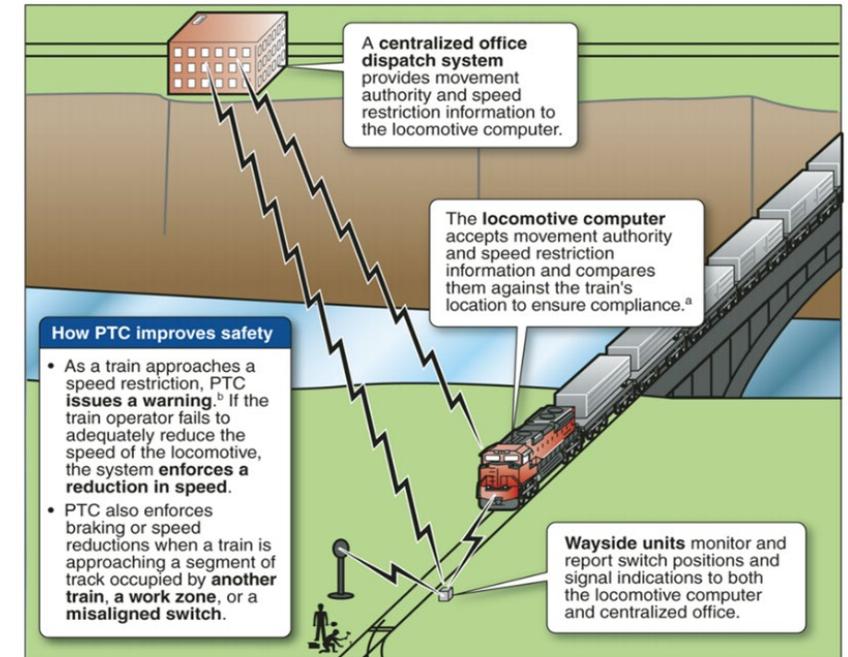
B & G Line Regional Impact

- Connects Arvada, Wheat Ridge and Westminster to Denver and beyond
- Supports local business through increased customer traffic
 - Promotion of businesses within walking distance of lines
- Creates opportunities to revitalize communities through Transit-Oriented Development (TOD)
 - Development around RTD stations has created significant real estate value
- Eagle P3 Project: \$2 billion in direct economic impact and more than \$8 billion in indirect impact



What is Positive Train Control?

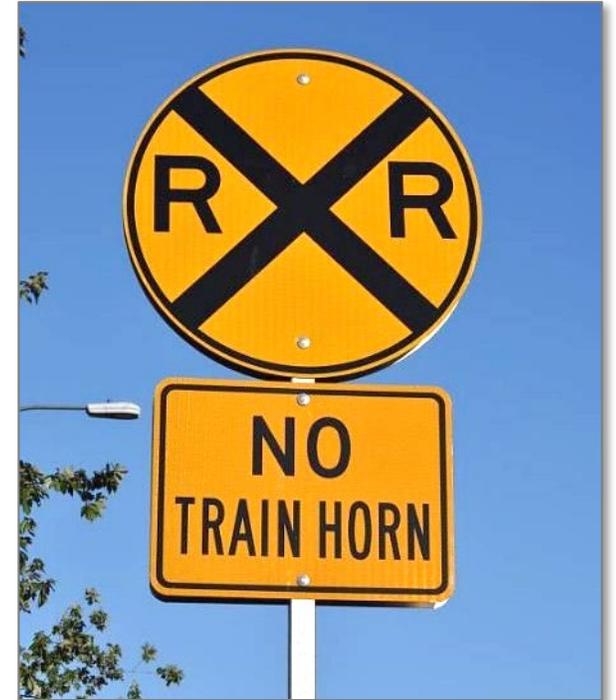
- Safety protection system that monitors and controls train movements
- Prevents:
 - Train-to-train collisions
 - Overspeed derailments
 - Incursions into established work zone limits
 - Movement of a train through a misaligned switch
- The train will automatically slow or stop if there's no operator response after eight seconds
- Trailblazers – first in the nation to build PTC into a commuter rail system from the ground up
 - First to integrate wireless crossings into PTC



Source: GAO.

What Are Quiet Zones?

- Regulatory rule allowing for no horn use by train operators under normal operating conditions
- Requested by local governments to lessen the noise impact
- Operators are legally required to use horns under certain circumstances based on federal regulations and for safety
 - **As a result, quiet zones are not always quiet**
- Applies to freight and commuter rail
 - Three commuter rail corridors shared with freight



Why the Bleeping Horns?

- Wireless software technology updates to meet FRA requirements
 - Similar to cell phone or computer software updates
- Signal drop in PTC system
- Animals, persons or work crews on or near tracks
- Vehicles in the crossing or trackway
- Movement of trains
 - Resuming operations after having stopped anywhere on the alignment
 - Backing up trains
- Each freight train making a switch move requires horn use
- Freight train operations issues – horns must sound until the issue is resolved
- Any reason the operator deems a safety risk or emergency

Some Situations Aren't Easily Seen

- Mandatory directives in effect
 - FRA requirements
 - As determined by operations
- Mechanical or software related problems
 - Gate arm timing
 - Software updates
 - Train Management Dispatch Systems (TMDS)
 - Positive Train Control (PTC)



Recent Operations Issues

- Repeated PTC and TMDS failures requiring horn use
 - Physically reset servers to reboot the system until the issues can be fixed
 - Like resetting a computer or cell phone by turning it off and on
 - RTD continues to work with DTP and Wabtec to resolve issues as quickly as possible
 - New technology needing numerous updates and revisions to meet FRA requirements
 - Do not have final PTC certification
 - Many other agencies experience the same issues on a regular basis
- Temporary stop and proceed order at the private BNSF fuel crossing
 - South of I-25 & 41st/Fox Station
 - Working on a permanent solution to continue operations without horns
 - Order will remain in effect until the solution has been implemented/tested/certified

Safety First

■ Motorists

- Be prepared to stop at rail crossings
- Understand and follow the crossing signs and warning devices
- Do not proceed until the gate arms have fully risen
- Never race a train or stop on the tracks

■ Pedestrians

- Stay alert, don't be distracted
- Stop, look and listen for approaching trains
- Follow all rail crossing signs and instructions
- Cross only at designated pedestrian or roadway crossings



Commuter Rail Accidents and Near Misses

	2019	2020	Total
Accidents	5	8	13
Near Misses	11	34	45



Supporting Our Neighbors

- Committed to notifying communities as much as possible
 - In advance when planned work or maintenance will require horns to blow
 - Expected timeframe for sounding of the horns
- When ongoing unforeseen circumstances occur:
 - RTD will notify communities as soon as we are alerted of an issue that will continue
 - Will share info on reasons and expected timeframe for sounding of the horns
 - Issues will be resolved as quickly as possible to minimize the public impact
 - Vendor will be on-site for issue response as needed





We want to hear from you

Q&A Session

Thank you.