

Bus Rapid Transit in the Denver Region

Regional Transportation Committee – July 16, 2024



Flatiron Flyer

- Region's first BRT service.
- Opened 2016.
- Frequent service.
- Semi-dedicated lanes/bus-on-shoulder.
- Off board fare collection.
- Transit signal priority.

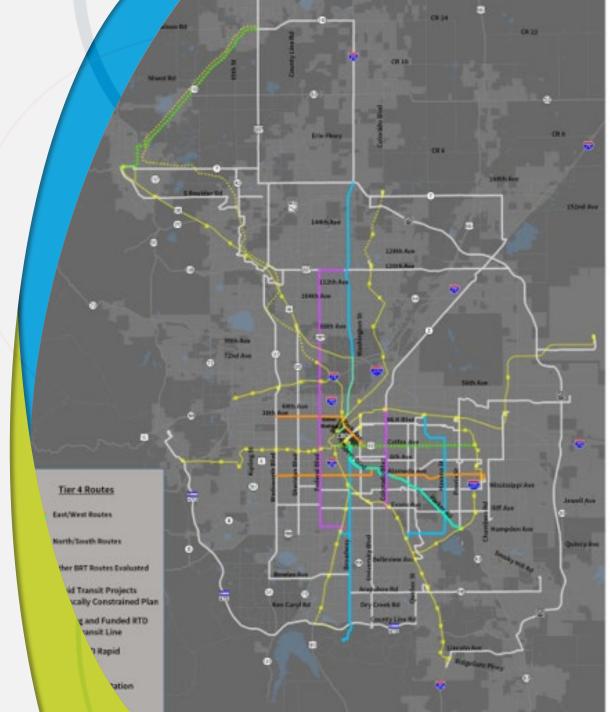


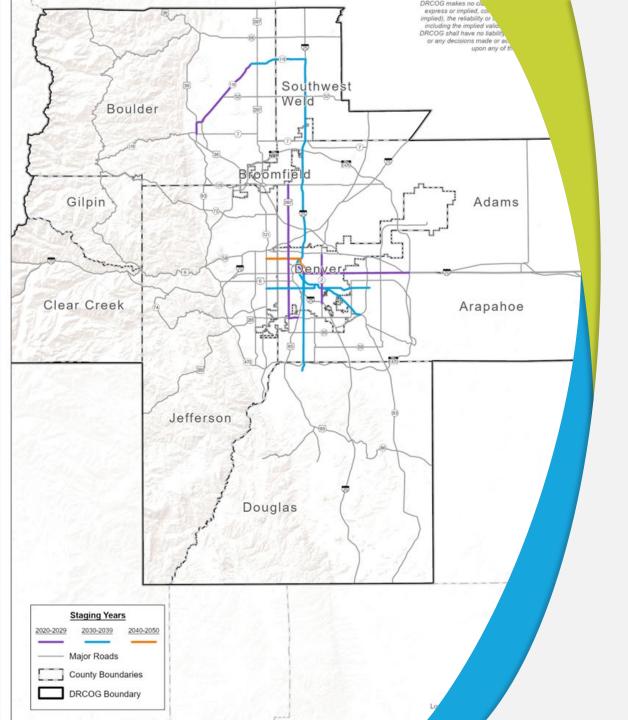


Regional BRT Feasibility Study

- Completed 2019.
- Evaluated all major corridors.
- Identified 8 corridors for BRT.
 - 38th Avenue/Park Avenue.
 - Alameda Avenue.
 - Broadway/Lincoln.
 - · Colorado Boulevard.
 - Federal Boulevard.
 - Havana Street/Hampden Avenue.
 - North I-25.
 - Speer Boulevard/Leetsdale Drive/Parker Road.







Regional Transportation Plan BRT network

2020-2030 (5 corridors).

- Colorado Boulevard.
- East Colfax & Extension.
- Federal Boulevard.
- Colorado State Highway 119.

2030-2040 (5 corridors).

- Alameda Avenue.
- Broadway/Lincoln.
- I-25 North.
- Speer Boulevard/Leetsdale Drive/Parker Road.
- Colorado State Highway 119 Extension.

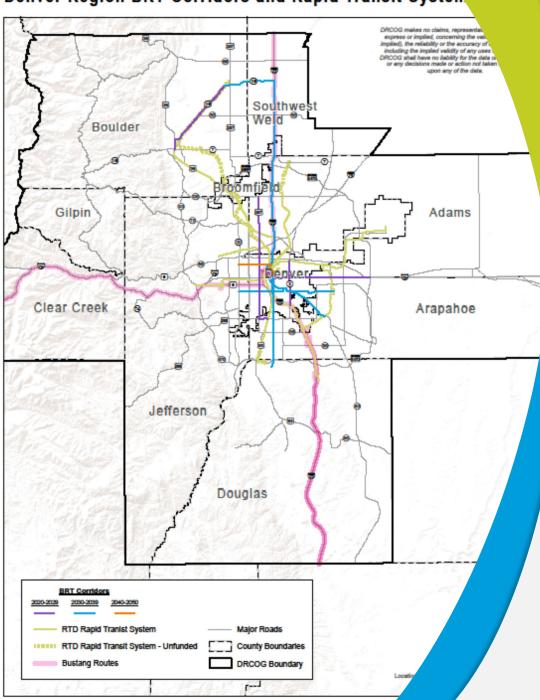
2040-2050.

38th Avenue/Park Avenue.

Bus Maintenance Facility.



Denver Region BRT Corridors and Rapid Transit System



Overall transit network

- BRT network designed to connect with overall rapid transit network.
- Existing: light rail, commuter rail, BRT.
- Fiscally constrained: BRT, Northwest Rail peak service, mobility hubs.
- Future: FasTracks buildout, Front Range Passenger Rail, I-70 mountain rail, Northwest mountain rail.

Regional BRT Network and Partnership

- BRT is important investment priority within the 2050 Regional Transportation Plan.
 - State Greenhouse Gas Rule and federal air quality conformity especially implementation timing.
 - Also included in Colorado Department of Transportation, City of Denver, and other plans.
- Regional BRT Partnership: multi-agency planning, funding & implementation collaborative.
 - Unique only multi-agency partnership in the United States?
 - More work (especially by 2030) than any single agency could lead or do alone.
 - Voluntary partnership and participation.
- Collaborate and assist multiple BRT corridors simultaneously.



Regional Bus Rapid Transit Partnership Members















The Regional BRT Partnership

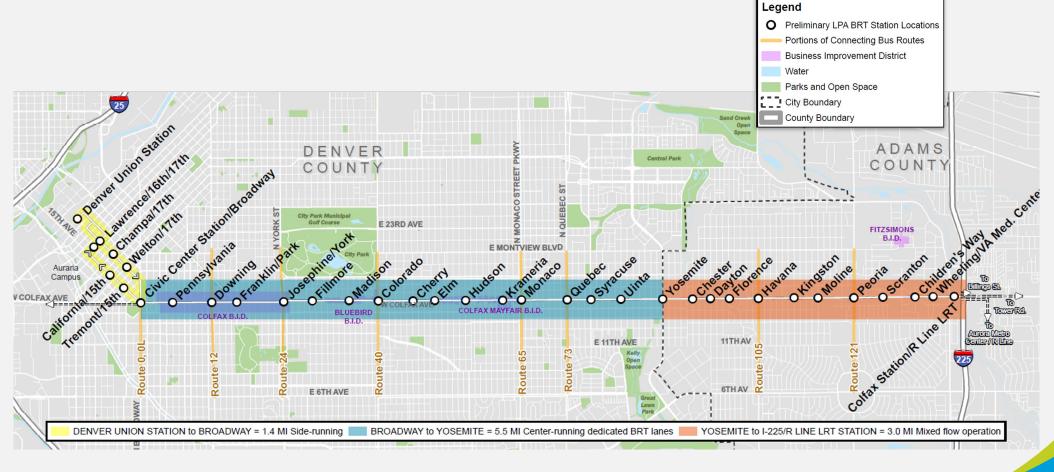
- Accelerate project development & implementation for multiple BRT corridors simultaneously, leverage resources and efficiencies.
- Costs & funding: updating project costs, developing innovative funding/financing strategies.
- Design standards: defining BRT components/elements, how to apply at project and system levels.
- Partnership development: Exploring charter, management plan, other tools.
- Pursuing federal grant(s) and potential consultant assistance.
- "Building a regional network and system, not 11 individual BRT projects."



Bus Rapid Transit corridors status

| Bus Rapid Transit Corridor | Current Project Status | Staging Period | Current Lead Agency |
|--|---|----------------|------------------------|
| East Colfax Avenue (Denver Union Station to Colfax Station) | Preparing for construction | 2020-2029 | Denver |
| Colorado State Highway 119 (Boulder to Longmont) | Preparing for construction | 2020-2029 | CDOT |
| Federal Boulevard (Wagon Road Station to Englewood Station) | Starting design, applying for FTA Small Starts | 2020-2029 | CDOT |
| Colorado Boulevard (40th/Colorado Station to Intersate 25/Colorado Station) | Starting design (Alternatives Analysis) | 2020-2029 | CDOT |
| East Colfax Avenue Extension (Colfax Station to E-470 Tollway) | Alternatives Analysis study starting 2024 | 2020-2029 | DRCOG |
| Speer Boulevard/Leetsdale Drive/Parker Road (Colfax Avenue to Nine Mile Station) | Various partial corridor studies completed | 2030-2039 | TBD |
| Alameda Avenue (Wadsworth Boulevard to R Line) | Initial corridor study concluding summer 2024 | 2030-2039 | DRCOG |
| Broadway/Lincoln (Colfax Avenue to Highlands Ranch Parkway) | Initial partial corridor study concluding summer 2024 | 2030-2039 | TBD |
| I-25 North (Denver Union Station to Colorado State Highway 119) | Not yet started | 2030-2039 | CDOT |
| SH-119 Extension (Longmont to Intersate 25) | Not yet started | 2030-2039 | TBD |
| 38th Avenue/Park Avenue (Wadsworth Boulevard to Colfax Avenue) | Corridor study starting 2024 | 2040-2050 | Denver |

East Colfax Avenue BRT scope and alignment



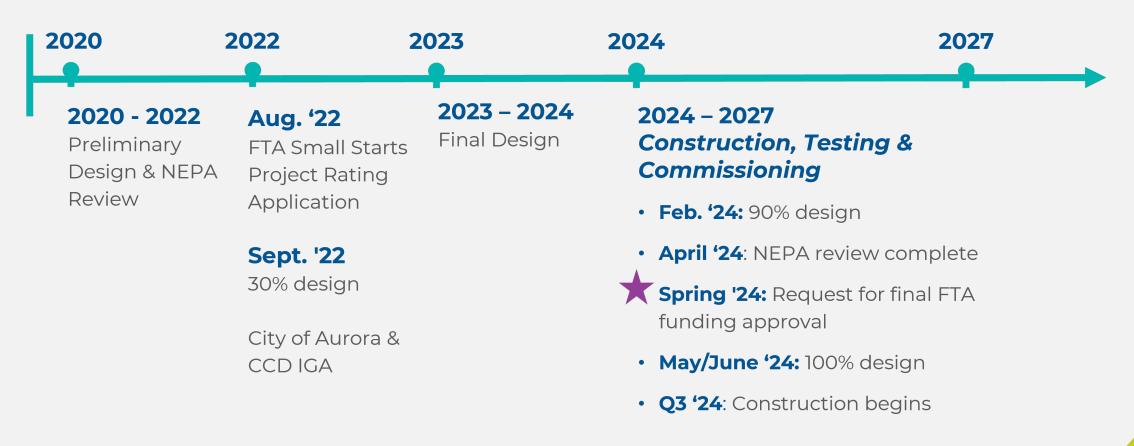


BRT station design





Project schedule



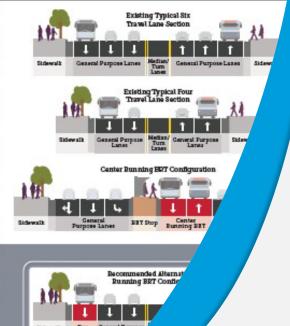
Public Engagement continuous through design & construction phases



112th Ave 104th Ave WESTMINSTER COUNTY 92nd Ave 84th Ave 80th Ave 270 72nd Ave 44th Ave 38th Ave 32nd Ave 26th Ave Alam eda Ave Exposition Ave Mississippi Ave Florida Ave Evans Ave

Side-Running Compared to Center Running BRT Configuration Considerations:

- The capital cost of the recommended alternative side-running BRT is 25% to less than center-running BRT configuration
- The recommended alternative side-running
 BRT would require modification to the
 outside curbs and sidewalks, while much of
 the street would not require reconstruction
 Center-running would require reconstructing
 the entire roadway section to account for the
 center stations increasing cost and
 construction time.
- Travel time estimates are comparable between the recommended side running configuration and a center running configuration.
- Center running and side-running BRT configurations would both require right of way acquisition at bus stations. The recommended alternative side running configuration would require less right-of-way and therefore cost less and have fewer impacts to adjacent properties.



Federal Boulevard BRT

- Wagon Road Park and Ride to Englewood Light Rail Station.
- CDOT is lead agency with multiple project partners.
- Currently in preliminary design, engineering, and environmental review.
- Will connect with B Line, G Line, 38th Avenue BRT, W Line, Alameda BRT, and D Line.
- Open by 2030.





Colorado State Highway 119 Bus Rapid Transit

- Boulder to Longmont, with later extension to Interstate 25.
- Two routes (blue and orange).
- Coalition partnership.
- Recipient of federal RAISE grant.
- Will include bikeway, bus queue bypass lanes, and other investments.
- Service start anticipated in 2026.



What is DRCOG's MPO role?

- Leadership/collaboration in Regional BRT Partnership.
- Led 2 of 3 Partnership working groups.
- Defined BRT network in Regional Transportation Plan.
- Leading development of potential Partnership consultant SOW.
- Applied for federal grant (Build America Bureau).
- Led/funded "first steps" corridor study for Alameda.
- Transportation Improvement Program corridor and project funding.
- Leading/funding Alternatives Analysis (East Colfax Extension).





Thank you!

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