Study Goal & Desired Outcomes

• Study Goal
  • Develop a data driven process to identify feasible BRT corridors

• Desired Outcomes
  • Develop a District-wide BRT network
  • Identify multiple corridors for near-term BRT investment
  • Identify one or more projects ready for FTA Small Starts project development
RTD Annual Ridership Projections
Tiered Evaluation Methodology

CANDIDATE CORRIDORS
Identify all Potential Corridors

TASKS
* Identify all corridors for evaluation of BRT feasibility

RESULTS
* Identify potential corridors for advancement to Tier 1 evaluation

TIER 1
Identify High Demand Travel Corridors

TASKS
* Evaluate candidate corridors

RESULTS
* Identify top 20-30 corridors for advancement to Tier 2 evaluation

TIER 2
Identify Congestion and/or Delay

TASKS
* Evaluate top 20-30 corridors retained in TIER 1

RESULTS
* Identify top 10-20 corridors/corridor segments for advancement to Tier 3 evaluation

TIER 3
Identify Viability of Capital Investment

TASKS
* Evaluate top 10-20 corridors/corridor segments retained in TIER 2

RESULTS
* Identify top 5-10 corridors/corridor segments for advancement to TIER 4 evaluation

TIER 4
Final Evaluation & Prioritization

TASKS
* Evaluate 5-10 corridors/corridor segments retained in TIER 3

RESULTS
* Identify multiple corridors for near-term BRT investment
Recap of Stakeholder Engagement

• December 2018
  • RTD Local Government/Planning Meeting (preliminary Tier 2)

• January 2019
  • DRCOG TAC

• February 2019
  • RTD Board (finalized Tier 2/initiate Tier 3)
  • DRCOG RTC and Board

• March 2019
  • CDOT Coordination Meeting

• May 2019
  • RTD Local Government/Planning Meeting (preliminary Tier 3/initiate Tier 4)

• June 2019
  • Local Agency Bus Tour

• July 2019
  • DRCOG TAC
Results of Stakeholder Engagement

• Developed a District-wide Regional BRT Network that could be phased in over time
• Include language that assured stakeholders of RTD’s support of local agency BRT investments
• Updated evaluation to include passenger miles of travel and reduced stop spacing
• Added all NAMS corridors to the BRT Network
• Removed phasing from the BRT Network
• Created two categories of BRT: corridors likely to compete well for FTA funds and corridors that may have more success seeking local and state funds
Proposed District-wide BRT Network
Tier 3 Evaluation and Results
Tier 3 Routes
Tier 3 Evaluation

• Goal - Identify viability of capital investment
  • Right-of-way availability
  • Viability of lane repurposing
  • Viability of exclusive or semi exclusive lanes
  • Meets FTA definition of BRT
  • Alignment with agency plans/policies

• Result - Identify top corridors for Tier 4 evaluation
Federal Blvd  TIER 3 Evaluation

Evaluation Summary
The Federal Boulevard corridor travels through Lakewood, Federal Heights, Sheridan, Westminster, the City and County of Denver, and Adams and Arapahoe counties. Adams County’s Mobility Connections (2014) identifies the need for a BRT study for Federal Boulevard; the Denver section of the route is currently being evaluated for multimodal improvements in the Federal Boulevard Corridor Study. Westminster has plans to conduct a planning study for their section of the corridor in the near future. The staff of both Denver and Adams County indicate that they would support repurposing travel lanes for transit use on Federal Boulevard, while other communities along the corridor are either unsure or unknown if they would support lane conversions/repurposing for transit use along Federal Boulevard. There is good potential for repurposing travel lanes based on existing and future traffic volumes and available space along the corridor.

Community Support for BRT

<table>
<thead>
<tr>
<th>Community</th>
<th>Very Likely</th>
<th>Likely</th>
<th>Indifferent</th>
<th>Unlikely</th>
<th>Very Unlikely</th>
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<tr>
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<td>✔</td>
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<td>Adams County</td>
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<td>✔</td>
<td>✔</td>
<td>✔</td>
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</table>

Source: RTD Regional BRT Cost Agency Community Support Survey, February 2015
Survey responses not retrieved from Englewood, Federal Heights, Arapahoe County.

Physical Viability
Route Length: 19.7 miles

- 61% Green
- 15% Yellow
- 24% Red

Existing Federal Blvd at 104th Ave looking north

- Repurpose 12” travel lanes into transit lanes
- 90’ ROW
- 140’ ROW

Existing Federal Blvd at 65th Ave looking north

- 86’ ROW
- 100’ ROW

Existing Federal Blvd at Colorado Ave looking north

- Repurpose 14” travel lane into transit lane
- Repurpose 10’ of existing ROW into transit lane
- 72’ ROW
- 100’ ROW

Key:
- ☐ 3” potentially available for BRT
- ☒ 12”-24” potentially available for BRT
- ☐ 34” potentially available for BRT

LEGEND
- Existing Bus Network
- Existing LRT and Station
- 34” BRT Projects in Planning
- Planned Transit Station
- Planned BRT Station

BRT Arterial Study 14-016 16-039 16-040
Tier 3 Results
This extensive level of analysis focuses on those corridors that appear to have high potential to compete well for FTA Small Starts funding.

Tier 4 analysis is necessary to test adherence to Small Starts project justification criteria.

Corridors that are not Federal funding candidates did not require this level of analysis.
Tier 4 Route Development and Evaluation
### Federal Boulevard

**Existing Peak Service Plan**

<table>
<thead>
<tr>
<th>Route</th>
<th>Peak</th>
<th>AM Peak Pk</th>
<th>PM Peak Pk</th>
<th>AM Off Pk</th>
<th>PM Off Pk</th>
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<tbody>
<tr>
<td>20</td>
<td>Expo to LUMBER</td>
<td>30</td>
<td>15</td>
<td>30</td>
<td>30</td>
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<tr>
<td>30</td>
<td>Expo to LUMBER</td>
<td>30</td>
<td>15</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>31</td>
<td>31st &amp; Pearl to CBD</td>
<td>30</td>
<td>na</td>
<td>na</td>
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<tr>
<td>31L</td>
<td>31st &amp; Pearl to CBD</td>
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<tr>
<td>36L</td>
<td>Littleton to CBD</td>
<td>30</td>
<td>na</td>
<td>na</td>
<td>na</td>
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2017 Average Weekday Boardings: 10,025

**Proposed Peak Service Plan**

<table>
<thead>
<tr>
<th>Route</th>
<th>Peak</th>
<th>AM Peak Pk</th>
<th>PM Peak Pk</th>
<th>AM Off Pk</th>
<th>PM Off Pk</th>
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<tbody>
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<td>10</td>
<td>15</td>
<td>15</td>
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<tr>
<td>20</td>
<td>Expo to LUMBER</td>
<td>30</td>
<td>10</td>
<td>30</td>
<td>30</td>
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<tr>
<td>30</td>
<td>31st &amp; Pearl to CBD</td>
<td>30</td>
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<tr>
<td>31L</td>
<td>31st &amp; Pearl to CBD</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>36L</td>
<td>Federal/ Expo to LUMBER</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

1.0 miles Speed & Reliability improvements & median

1.5 miles Repurpose existing shoulder, turn lanes, & median

2.0 miles Repurpose through lanes

3.0 miles Speed & Reliability improvements

2.0 miles Repurpose existing turn lanes & access control

1.9 miles Speed & Reliability improvements

**Legend**

- Mobility Hub
- Transit Signal Priority (TSP)
- Bi-Directional Queue Jump with TSP
- Green-Line Queue Jump with TSP
- Speed & Reliability Improvements
- Dedicated Transit Lanes with TSP
- Existing Bus Network
Tier 4 Preliminary Analysis
VMT and Boardings

RIDERSHIP

2040 BRT Daily Boardings
KEY
- <10,000
- 10,000 - 13,000
- >13,000
Tier 4 Preliminary Analysis
Travel Time Savings

AVERAGE TRAVEL TIME SAVINGS

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Alameda</td>
<td>22%</td>
</tr>
<tr>
<td>Parker/Leetsdale/Speer</td>
<td>16%</td>
</tr>
<tr>
<td>Colorado</td>
<td>22%</td>
</tr>
<tr>
<td>Havana</td>
<td>12%</td>
</tr>
<tr>
<td>38th/Park</td>
<td>11%</td>
</tr>
<tr>
<td>I-25</td>
<td>9%</td>
</tr>
<tr>
<td>Federal</td>
<td></td>
</tr>
<tr>
<td>Broadway</td>
<td>22%</td>
</tr>
</tbody>
</table>
Tier 4 Preliminary Analysis
Next Generation Technology Readiness

NEXT GENERATION TECHNOLOGY READINESS

- Low
- Medium
- High

- Alameda
- Parker/Leetsdale/Speer
- Colorado
- Havana
- 38th/Park
- Federal
- Broadway
Tier 4 Preliminary Analysis
Capital Cost

**CAPITAL COST** (does not include vehicles)

- Alameda: $43M
- Parker/Leetsdale/Speer: $80M*
- Colorado: $25M
- Havana: $47M
- 38th/Park: $30M
- I-25: $69M
- Federal: $60M
- Broadway: $39M

*Cost based on improvements identified in CCD GO SPEER LEETSDALE

**CAPITAL COST per MILE**

- Alameda: $2.9M
- Parker/Leetsdale/Speer: $7.2M
- Colorado: $3.9M
- Havana: $4.0M
- 38th/Park: $4.1M
- I-25: $4.2M
- Federal: $3.0M
- Broadway: $2.4M
Tier 4 Preliminary Analysis

O&M Cost

ANNUAL OPERATING & MAINTENANCE COST

O & M COST/BOARDING

- Alameda: $1.81
- Parker/Leetsdale/Speer: $1.25
- Colorado: $1.30
- Havana: $1.95
- 38th/Park: $1.84
- I-25: $2.13
- Federal: $3.44
- Broadway: $2.28
Economic Development (Commercial, Multifamily, Jobs)
## FTA Small Starts Evaluation

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Economic Development</th>
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</thead>
<tbody>
<tr>
<td>Population density</td>
<td>Transportation policies</td>
</tr>
<tr>
<td>Number of jobs</td>
<td>Land use policies</td>
</tr>
<tr>
<td>Affordable housing</td>
<td>Non-transit dependent linked trips</td>
</tr>
<tr>
<td>Parking supply</td>
<td>Transit dependent linked trips</td>
</tr>
<tr>
<td></td>
<td>Total linked trips</td>
</tr>
<tr>
<td></td>
<td>Cost effectiveness</td>
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</table>

### Mobility Improvements

<table>
<thead>
<tr>
<th>Non-transit dependent linked trips</th>
<th>Transit dependent linked trips</th>
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</thead>
<tbody>
<tr>
<td>Total linked trips</td>
<td>Cost effectiveness</td>
</tr>
</tbody>
</table>

### Environmental

| Vehicle miles traveled |
Equity Mapping

*Source – US Census Bureau 2017 ACS 5-year estimates, Table B17001: Poverty Status
# DRAFT Matrix of Tier 4 Results

<table>
<thead>
<tr>
<th></th>
<th>Alameda Ave</th>
<th>Speer Blvd/ Leetsdale Dr/ Parker Rd</th>
<th>Colorado Blvd</th>
<th>Havana St</th>
<th>38th Ave/Park Ave</th>
<th>I-25</th>
<th>Federal Blvd</th>
<th>Broadway</th>
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</thead>
<tbody>
<tr>
<td><strong>2040 Daily Boardings</strong></td>
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<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<td>●</td>
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<tr>
<td><strong>Daily Vehicle Miles Traveled Reduction</strong></td>
<td>●</td>
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<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td><strong>Average Travel Time Savings</strong></td>
<td>●</td>
<td>●</td>
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<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td><strong>Technology Readiness</strong></td>
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<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>●</td>
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<tr>
<td><strong>Capital Cost per Mile</strong></td>
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<td>●</td>
<td>●</td>
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<tr>
<td><strong>O&amp;M Cost per Boarding</strong></td>
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<td>●</td>
<td>●</td>
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<tr>
<td><strong>Safety</strong></td>
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<tr>
<td><strong>Economic Development Potential</strong></td>
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<td>○</td>
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<td>●</td>
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<tr>
<td><strong>Small Starts</strong></td>
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<td><strong>Equity</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Top 25% ●

Bottom 25% ○
Schedule and Stakeholder Engagement

• RTD Local Government/Planning Meeting (August 14)
• DRCOG RTC/DRCOG Board of Directors (August 21)
• RTD Board of Directors, Present final report (October 8th)
Discussion
Supporting Materials/Maps
Tier 3 Corridor Development and Evaluation
North I-25 TIER 3 Evaluation

Evaluation Summary
The North I-25 corridor travels through Northglenn, Thornton, Westminster, the City and County of Broomfield, the City and County of Denver, and Adams County. The North I-25 corridor has been identified for express bus service in the North I-25 Environmental Impact Statement (2013) and further evaluated in the North I-25 Planning and Environmental Linkages Study (2014). Broomfield also notes BRT on I-25 in their Transportation Plan (2016). Staff across all communities support BRT service in the managed lanes (existing and planned) on north I-25.

This corridor will be progressed for further evaluation into Tier 4 of the RTD Regional BRT Feasibility Study.

Community Support for BRT

<table>
<thead>
<tr>
<th></th>
<th>Very Strong Support</th>
<th>Strong Support</th>
<th>Neutral</th>
<th>Weak Support</th>
<th>Very Weak Support</th>
</tr>
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<tbody>
<tr>
<td>Broomfield</td>
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<td>✔️</td>
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<td></td>
<td></td>
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<tr>
<td>Denver</td>
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<tr>
<td>Northglenn</td>
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<td></td>
</tr>
<tr>
<td>Westminster</td>
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<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adams County</td>
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<td>✔️</td>
<td>✔️</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: RTD Regional BRT Corridor Feasibility Study, February 2019
Survey responses not revealed from position.

Physical Viability
Route Length: 17.5 miles

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>0% Green</td>
<td></td>
</tr>
<tr>
<td>0% Yellow</td>
<td></td>
</tr>
<tr>
<td>5% Red</td>
<td></td>
</tr>
<tr>
<td>99% Gray</td>
<td></td>
</tr>
</tbody>
</table>

Key:
- Green: Potentially available for BRT
- Yellow: 10-15% potentially available for BRT
- Red: 24% potentially available for BRT
- Gray: Existing/Planned Managed Lanes Available for BRT

Legend:
- Existing Bus Network
- Existing & Planned
- Planned Rapid Transit Line and Station
- Rapid Transit Projects in FasTrack Conceptual Plan

Proposed Thornton Park & Ride Station looking north

- 12' transit bypass lanes
- 13' transit loading lanes

RTD Corridor Study: 04/09/2019
Sheridan Blvd TIER 3 Evaluation

Evaluation Summary
The Sheridan Boulevard corridor travels through the communities of Arvada, Edgewater, Lakewood, Lakewood, Mountain View, Westminster, and Wheat Ridge, as well as the City and County of Denver and Adams and Jefferson counties. Adams County’s Kipling Connection (2016) identifies the need for BRT service on Sheridan Boulevard between US 36 and 77th Ave Denver Moves: Transit (2008) identifies Denver’s section of Sheridan Boulevard as a speed and reliability benchmark bus to rail corridor, and City of Arvada staff support BRT service on Sheridan Boulevard.

There is limited potential for repurposing existing travel lanes along Sheridan Boulevard due to existing and future traffic volumes and the limited space along the corridor. No specific planning has been initiated to evaluate these trade-offs.

This corridor is recommended to be a long-term priority for implementation of BRT service.

Community Support for BRT

Source: RTD Regional BRT Cost Agency Community Support Survey, February 2013
Survey responses not received from Edgewater, Lakewood, Lakewood, Jefferson County

Key
- 9-11” potentially available for BRT
- 12-15” potentially available for BRT
- 16” presently available for BRT

Legend
- Existing Bus Network
- BRT
- Planned Rapid Transit Line and Station
- Planned 9TH ST Station
- Existing BRT/Light Rail Station
- Limited EIS/US 36 Study

Physical Viability
Route Length: 14.2 miles
11% Green 36% Yellow 53% Red
Federal Blvd TIER 3 Evaluation

Evaluation Summary
The Federal Boulevard corridor travels through Lighthouse, Federal Heights, Sheridan, Westminster, the City and County of Denver, and Adams and Arapahoe counties. Adams County’s Mobility Connections (2016) identifies the need for a BRT study for Federal Boulevard; the Denver section of the route is currently being evaluated for multimodal improvements in the Federal Boulevard Corridor Study. Westminster has plans to conduct a planning study for their section of the corridor in the near future. The staff of both Denver and Adams County indicate that they would support repurposing travel lanes for transit use on Federal Boulevard, while other communities along the corridor are either unsure or unknow if they would support lane conversions/repurposing for transit use along Federal Boulevard. There is good potential for repurposing travel lanes based on existing and future traffic volumes and available space along the corridor.

Community Support for BRT

<table>
<thead>
<tr>
<th>Community</th>
<th>Very Likely</th>
<th>Likely</th>
<th>Unlikely</th>
<th>Very Unlikely</th>
<th>TRC</th>
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<tbody>
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</table>

Source: RTD Regional BRT Cost/Liability Community Support Survey, February 2023
Survey results not retrieved from Englewood, Federal Heights, Arapahoe County.
Park Ave/38th Ave TIER 3 Evaluation

Evaluation Summary
The 38th/Park Avenue corridor travels through Wheat Ridge, the City and County of Denver, and Jefferson County. Denver Metro Transit (2019) recommends 38th Avenue as a medium capacity (rapid bus to full BRT) transit corridor and Park Avenue as a high capacity (BRT to nil) transit corridor. Denver staff indicate high levels of support for repurposing travel lanes for transit use, but Wheat Ridge staff are unsure if they would support repurposing travel lanes based on existing and future volumes and space along the corridor, though some segments are very constrained as Wheat Ridge staff indicate.

This corridor will be progressed for further evaluation into Tier 4 of the RTD Regional BRT Feasibility Study.

Community Support for BRT

Source: RTD Regional BRT Local Agency Community Support Survey, February 2019

物理评价
路线长度：7.2英里
25%绿色 11%黄色 60%红色

现有的35街在Jay St的东北

38街在18街的南

物理现状

路线长度：7.2英里
25%绿色 11%黄色 60%红色

现有的35街在Jay St的东北

38街在18街的南

现有道路

规划的BRT站

现有固定快速公交线路

规划的BRT站

BRT站

32
Speer Blvd/Leetsdale Dr/Parker Rd

TIER 3 Evaluation

Evaluation Summary
The Speer/Leetsdale corridor travels through Aurora, Glendale, the City and County of Denver, and Arapahoe County. The section of the route that travels through Denver was evaluated in the Go Speer/Leetsdale Study (2017), which recommends BRT service and developed cross sections throughout the corridor. Denver staff also support the repurposing of travel lanes for transit use and queue jumps or bus bypass lanes along the corridor. City of Aurora’s Aurora Pikes (2018) also identifies this corridor as a high frequency transit corridor, but staff is unsure if they would support repurposing of travel lanes for transit use along the Aurora section of this route without further analysis.

This corridor will be progressed for further evaluation into Tier 4 of the RTD Regional BRT Feasibility Study.

Community Support for BRT

<table>
<thead>
<tr>
<th>Measure</th>
<th>Aurora</th>
<th>Denver</th>
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</thead>
<tbody>
<tr>
<td>Overall Support</td>
<td>5/5</td>
<td>5/5</td>
</tr>
<tr>
<td>Likelihood of Operating Level Support</td>
<td>5/5</td>
<td>5/5</td>
</tr>
<tr>
<td>Likelihood of Financial Support for Capital Improvements</td>
<td>5/5</td>
<td>5/5</td>
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<tr>
<td>Likelihood of Financial Support for Annual Operations &amp; Maintenance Costs</td>
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<tr>
<td>Likelihood of Identifier Official Promoting Transit Improvement Candidate Conditions</td>
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</tbody>
</table>

Source: RTD Regional BRT Corridor Agency Support Survey: February 2019
Survey responses not included from Broomfield, Weld, Adams County
Broadway/Lincoln TIER 3 Evaluation

Evaluation Summary
The Broadway/Lincoln corridor travels through Centennial, Englewood, Littleton, the City and County of Denver, and Arapahoe and Douglas Counties. Broadway/Lincoln has existing transit only lanes north of I-25, and Denver Metro Transit (DRTA) identifies the entire Denver portion of the corridor as a high-capacity (BRT to m/i) transit corridor. Denver staff is interested in expanding the transit only lanes along Broadway/Lincoln south of the existing service. However, community service south of Denver along the remaining route are either unsure or did not respond to inquiries about the potential for repurposing travel lanes for transit use along the corridor. Overall, the corridor offers good potential for repurposing travel lanes based on existing and future volumes and space along the corridor.

This corridor will progress for further evaluation into Tier 4 of the RTD Regional BRT Feasibility Study.

Community Support for BRT

<table>
<thead>
<tr>
<th>Centennial</th>
<th>Denver</th>
<th>Survey Feedback</th>
<th>Survey Analysis</th>
<th>BRT Feasibility Study</th>
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<tr>
<td>Yes</td>
<td>Yes</td>
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</table>

Survey: RTD Regional BRT Feasibility Study (February 2021)
Survey responses not received from Englewood, Arapahoe, and Douglas County.

Physical Viability
Route Length: 13.9 miles
- 63% Green
- 0% Yellow
- 23% Red
- 14% Gray

Existing Broadway at Taft Ave looking north
- Repurpose two 10' parking lanes into transit lanes
- Repurpose 4' of 6' median into transit lane

Existing Broadway at Geddes Ave looking north
- Repurpose 2' of excess lane width into transit lanes

Key
- 0-25% potentially available for BRT
- 26-50% potentially available for BRT
- 51-75% potentially available for BRT
- >75% potentially available for BRT

Legend
- Existing Bus Network
- Existing BRT Lanes Available for BRT
- Planned BRT Line and Station
- Planned Rural and Urban Transit
- Planned Rapid Transit
- Existing BRT/Light Rail Sections
- Planned Rapid Transit Improvements in Facility Based Plan

BRT Feasibility Study 1.4.2019
University Blvd TIER 3 Evaluation

Evaluation Summary
The University Boulevard corridor travels through Centennial, Cherry Hills Village, Englewood, Greenwood Village, the City and County of Denver, and Anaprao and Browns Creeks. Denver Moves Transit 2025 has identified Denver's section of the corridor as a medium-capacity (over transit) to full BRT) transit corridor. No other communities have formally recommended BRT transit service along the corridor. There is limited potential for repurposing travel lanes due to existing and future traffic volumes and the limited space along the corridor. No corridor-specific planning has been initiated to evaluate these trade-offs.

This corridor is recommended to be a long-term priority for implementation of BRT service.

Community Support for BRT

Sources: RTD Regional BRT Local Agency Community Support Survey, February 2022
Survey responses not received from Cherry Hills Village, Englewood, Arapahoe County, Douglas County

Physical Viability
Route Length: 13.4 miles
30% Green 48% Yellow 22% Red

Existing Downey St at 6th Ave looking north
Repurpose 2nd of existing lane into transit lane
Repurpose 1st of existing lane into transit lane

Existing University Blvd at Maplewood Ave looking north
Repurpose 4th of existing lane into transit lane
Repurpose 3rd of existing lane into transit lane

Key
8-11% potentially available for BRT
12-19% potentially available for BRT
24+ potentially available for BRT
6th Ave TIER 3 Evaluation

Evaluation Summary
The 6th and 8th Avenue corridor travels through Aurora, the City and County of Denver, and Arapahoe County. Denver Move: Transit (2039) identifies 6th Avenue as a speed and reliability (enhanced bus) transit corridor and Denver staff indicate support for travel lane conversion on 6th Avenue. There is good potential for repurposing travel lanes along 6th and 8th Avenues due to relatively low traffic volumes and the potential for repurposing existing space (parking) along the corridor. However, no specific planning has been initiated to evaluate these trade-offs.

Although this assessment indicates the potential for BRT service, the lower level of service recommended (enhanced bus) in Denver Move: Transit (2039) makes this corridor a long-term priority for implementation of BRT service.

Community Support for BRT

Colorado Blvd TIER 3 Evaluation

Evaluation Summary
The Colorado Boulevard corridor travels through Glendale, the City and County of Denver, and Arapahoe County. Denver Moves: Transit (2019) identifies Colorado Boulevard as one of six future high-capacity (full BRT or rail) service transit corridors. Denver staff indicate a high level of support for repurposing travel lanes on Colorado Boulevard for transit use.

This corridor will be progressed for further evaluation into Tier 4 of the RTD Regional BRT Feasibility Study.

Community Support for BRT

|---------------|--------|----------------------------|---------------------------------------------------------------|-----------------------------------|---------------------------------|----------------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|

Source: RTD Regional BRT Local Agency Community Support Survey, February 2019. Survey responses not received from Glendale, Arapahoe County.

Key
- 4.1" potentially available for BRT
- 4.1" potentially available on RTD
- 0" potentially available for BRT

LEGEND
- Existing Bus Network
- Planned Regional Transit Line and Station
- Existing & Planned Rapid Transit Line and Station
- Rapid Transit Projections for Future Consideration Plan

Physical Viability
Route Length: 14.2 miles
0% Green 12% Yellow 88% Red

A) Existing Colorado Blvd at 23rd Ave looking north
- Repurpose 12' of existing ROW into transit lane

B) Existing Colorado Blvd at Ohio St looking south
- Repurpose 12' right turn lane into transit lane

BRT Aerial Study: 16-498-261019
Monaco Pkwy TIER 3 Evaluation

Evaluation Summary
The Monaco Parkway corridor travels through the City and County of Denver and Arapahoe County. Denver Metropolitan Transit (DMMT) did not identify Monaco Parkway as a trenched corridor. No corridor-specific planning has been initiated on Monaco Parkway, but there is good potential for repurposing travel lanes in some areas due to the relatively low existing and future traffic volumes along Monaco Parkway. However, available space is limited due to the historically designated central parkway north of 6th Avenue.

This corridor is recommended to be a long-term priority for implementation of BRT service.

Community Support for BRT
- Strongly supportive
- Somewhat supportive
- Somewhat unsupportive
- Strongly unsupportive
- Strongly neutral

Survey responses not received from Arapahoe County

Regional BRT Network

Physical Viability
Route Length: 9.7 miles
74% Green  22% Yellow  4% Red

Existing Monaco Pkwy at 12th Ave looking north

Existing Monaco Pkwy at Harvard Ave looking north

Key
- 0-1% potentially available for BRT
- 12-31% potentially available for BRT
- 24% potentially available for BRT

Existing Bus Network

Existing Rapid Transit Line and Station

Planned Rapid Transit Line and Station

Input Transit Projects in FTA Capital Grant and Plan

Existing BRT/TRANS Station

Planned BUSH/TRANS Station

Legend

Source: DMTA Regional IIAA (Local Agency Community Support Survey, February 2013)
Survey responses not received from Arapahoe County
Quebec St TIER 3 Evaluation

Evaluation Summary
The Quebec Street corridor travels through Centennial, Greenwood Village, the City and County of Denver, and Arapahoe County. Community plans have not identified the implementation of BRT on Quebec Street, but there is good potential for repurposing travel lanes along Quebec Street due to existing and future traffic volumes. Community support for BRT at the staff and planning levels has been initiated by Denver to assess potential multimodal improvements along the corridor.

Although this assessment indicates the potential for BRT service, the lower level of service recommended (enhanced bus) in the City’s Move Denver’s Transit (2019) makes this corridor a long-term priority for implementation of BRT service.

Community Support for BRT

<table>
<thead>
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<th></th>
<th>Centennial</th>
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<th>Greenwood Village</th>
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<td>Likelihood of Financial Support for Capital Improvements</td>
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<td>Likelihood of Financial Support for Annual Operations &amp; Service Costs</td>
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<tr>
<td>Likelihood of Political Officials Prioritizing Improvement Projects</td>
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</table>

Source: CDOT Regional BRT Local Agency Community Support Survey, February 2020

Key:
- Green: 100% potentially available for BRT
- Yellow: 75% - 99% potentially available for BRT
- Red: 0% - 24% potentially available for BRT
Evaluation Summary

The Alameda Avenue corridor travels through Aurora, Glendale, Lakewood, the City and County of Denver, and Jefferson and Arapahoe counties. Denver Metro's Transit (DMT) identifies Alameda Avenue as a medium-capacity (rapid transit to full BRT) transit corridor and Lakewood 2025 recommends exploring dedicated transit lanes on Alameda Avenue. However, no corridor-specific planning has been initiated on Alameda Avenue. There is moderately good potential for repurposing travel lanes along Alameda Avenue due to relatively low existing and future traffic volumes and available space along the corridor.

This corridor will be progressed for further evaluation into Tier 4 of the RTD Regional BRT Feasibility Study.

Community Support for BRT

<table>
<thead>
<tr>
<th></th>
<th>Aurora</th>
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</thead>
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</tr>
<tr>
<td>Unfavorable</td>
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<td>○</td>
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</tbody>
</table>

Source: RTD Regional BRT Study Agency Community Support Survey, February 2023

Survey responses not included from Denver, Glendale, Arapahoe County, Jefferson County

Physical Viability

Route Length: 15.7 miles
45% Green | 32% Yellow | 23% Red

Key
- D11: potentially available for BRT
- D22: potentially available for BRT
- X24: potentially available for BRT

Legend
- Existing Bus Network
- Existing & Potential Rapid Transit Line and Station
- Planned Rapid Transit Line and Station
- Planned ERT/LRT Station
- Planned BRT/Hub Station
- Existing BRT/Hub Station
- Existing LRT/Hub Station
- Planned ERT/LRT Station
- Planned BRT/Hub Station
Havana St/Hampden Ave TIER 3 Evaluation

Evaluation Summary
The Havana Street-Hampden Avenue corridor includes Havana Street on the north and Hampden Avenue on the south. This corridor travels through Aurora, the City and County of Denver, and Adams and Arapahoe counties. Aurora Places (2018) is currently being updated to include Havana Street as a high-frequency transit corridor, and Denver Moves: Transit (2018) identifies Hampden Avenue as a speed and reliability enhancement bus transit corridor. City of Aurora staff indicate support for bus bypass lanes/jumps, and Denver staff are likely to support general-purpose travel lane conversion for priority bus use. Denver has also noted corridor-specific planning along Hampden Avenue with the Hampden Avenue Corridor Study, although this study does not recommend transit lanes. There is another potential for repurposing travel lanes along Havana and Hampden Avenue based on existing and future traffic volumes and available space along the corridor.

This corridor will be progressed for further evaluation into Tier 4 of the RTD Regional BRT Feasibility Study.

Community Support for BRT

| Source: 2018 Regional BRT Local Agency Community Support Survey, February 2019 | Survey respondents: 404 and 467 from Arapahoe County |

<table>
<thead>
<tr>
<th>Aurora</th>
<th>Denver</th>
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</thead>
<tbody>
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</table>

Physical Viability
Route Length: 12.0 miles
- 57% Green
- 35% Yellow
- 8% Red

Key:
- 10-15 generally available for BRT
- 15-30 generally available for BRT
- 20 generally available for BRT

Legend:
- Existing Bus Network
- Planned Rapid Transit Line and Station
- Planned BRT/STD Line
- Rapid Transit Projects in Scarcely Constrained Areas
Evans Ave TIER 3 Evaluation

Evaluation Summary
The Evans Avenue corridor travels through Aurora, Englewood, Lakewood, the City and County of Denver, and Arapahoe and Jefferson counties. Denver Moves: Transit (2019) identifies Denver’s section of the corridor as a medium-capacity (rapid transit to full BRT) transit corridor. Denver staff have indicated a high level of support for repurposing travel lanes on Evans Avenue. No other communities have formally recommended BRT type transit service along the corridor. There is also limited potential for repurposing existing travel lanes due to existing and future traffic volumes and the limited space along the corridor. No specific planning has been initiated to evaluate these trade-offs.

Community Support for BRT

This corridor is recommended to be a long-term priority for implementation of BRT service.

Source: RTD Regional BRTLeod Agency Community Support Survey, February 2019
Survey respondents not received from Englewood, Lakewood, Arapahoe County, Jefferson County
Tier 4 Corridor Development
I-25

Existing Peak Service Plan

**I-25**

**Proposed Service Plan**

1. In peak period, long from Wilson to 120th St operates at 15 min frequency and short pattern operates at 5 min frequency.
2. 1:30pm and 14th Ave on-Bus and walk-up stations.
3. Peak period short pattern from Wagon Rd makes same stops downtown as 122X.

**Legend**

- **Mobility Hub**
- **Transit Signal Priority (TSP)**
- **Bi-Directional Queue Jump with TSP**
- **One-Way Queue Jump with TSP**
- **Existing & Planned Rapid Transit Line and Station**
- **Existing & Planned Rapid Transit Line and Station**
- **Plan Projects in Flaccus Constrained Plan**
- **Existing BRT Line Network**
- **Existing BRT Network**

- **I-25**
- **Wagon Rd.**
- **Civic Center**
- **Wilson Station**

**RTD**

Regional BRT Feasibility Study

50 YEARS OF MOVING PEOPLE

Denver, CO 80202

44

5.8 miles

Use existing toll lane in peak travel direction.

5.8 miles

Use existing general purpose lane in off-peak travel direction.
Federal Boulevard

Existing Peak Service Plan

<table>
<thead>
<tr>
<th>Route</th>
<th>Destination</th>
<th>Peak Pk</th>
<th>Midday</th>
<th>Off Peak</th>
<th>AM</th>
<th>PM</th>
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2017 Average Weekday Boardings: 10,025

Proposed Peak Service Plan

<table>
<thead>
<tr>
<th>Route</th>
<th>Destination</th>
<th>Peak Pk</th>
<th>Midday</th>
<th>Off Peak</th>
<th>AM</th>
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</tbody>
</table>

1.5 miles Repurpose existing shoulder, turn lanes, & median

1.0 miles Speed & reliability improvements & median

2.0 miles Repurpose through lanes

1.5 miles Repurpose two-way left turn lanes

2.0 miles Repurpose existing turn lanes & access control

1.9 miles Speed & reliability improvements

LEGEND

- Mobility Hub
- Transit Signal Priority (TSP)
- Bidirectional Queue Jump with TSP
- Planned Rapid Transit Line and Stations
- Rapid Transit Projects in Fully Constrained Plan
- Existing Bus Stop Station
- Planned Bus Stop Station
- Speed & Reliability Improvements
- Dedicated Transit Lanes with TSP
- Existing Bus Network

BRT
Regional BRT Feasibility Study

RTD
50 YEARS OF MOVING PEOPLE
38th Ave/Park Ave

Existing Peak Service Plan
- Applewood Village to CBD
- 2-3 trips/hr

Proposed Peak Service Plan
- Applewood Village to Wazworth
- 6 trips/hr
- Transfers to CBD

*Supplemental trips in peak period, peak direction
2017 Average Weekday Boardings: 1,952

LEGEND
- Mobility Hub
- Transit Signal Priority (TSP)
- Speed & Reliability Improvements
- Dedicated Transit Lane with TSP
- Queue Jump with TSP
- Existing & Funded Rapid Transit Line and Station
- Planned Rapid Transit Line and Station
- Existing BUSTANG Station
- Planned BUSTANG Station
Speer Blvd/Leetsdale Dr/Parker Rd

Existing Peak Service Plan
- 5 trips/hour

Proposed Peak Service Plan
- 6 trips/hour

2017 Average Weekday Boardings: 4,133
Broadway/Lincoln

Existing Peak Service Plan

Proposed Peak Service Plan

Legend:
- Mobility Hub
- Transit Signal Priority (TSP)
- Bi-Directional Queue Jump with TSP
- One-Way Queue Jump with TSP
- Speed & Reliability Improvements
- Dedicated Transit Lane with TSP
- Existing Bus Network
- Existing BRT Lanes Available for BRT
- Existing & Funded Rapid Transit Line and Station
- Planned Rapid Transit Line and Station
- Dedicated Rapid Transit Projects in Finally Coordinated Plan
- Existing BUSTAG Station
- Planned BUSTAG Station

1.9 miles Existing transit lanes
5.4 miles Speed & reliability improvements
3.7 miles Repurpose existing area within curb, a combination of through lanes, parking, auxiliary lanes, & median space
1.25 miles Repurpose existing through lanes

2017 Average Weekday Boardings: 9,420

50 YEARS OF MOVING PEOPLE

RTD
Colorado Blvd

60th/Dahilia
49
49th/Colorado Stat.
Colorado Stat.
Southmoor

4 trips/hr

 Proposed Peak Service Plan

60th/Dahilia
49th/Colorado Stat.
Colorado Stat.
Southmoor Station

8 trips/hr

2017 Average Weekday Boardings: 4,856

LEGEND

Mobility Hub
Transit Signal Priority (TSP)
Bi-Directional Queue Jump
with TSP
One-Way Queue Jump
with TSP
Speed & Reliability
Improvements
Dedicated Transit
Lanes with TSP
Existing Bus Network

Existing & Funded
Rapid Transit Line and Station
Planned Rapid Transit Line and Station
Projected Feasibility
Constrained Plan
Existing BUSTAGE Stations
Planned BUSTAGE Stations

Regional BRT Feasibility Study

DENVER
GLENDALE
SOUTH
NORTH
Alameda Ave

Existing Peak Service Plan

<table>
<thead>
<tr>
<th>Route</th>
<th>Segment</th>
<th>Mid-Day Peak</th>
<th>Mid-Day Off-Peak</th>
<th>AM</th>
<th>PM</th>
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<td>3L</td>
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<td>15</td>
<td>na</td>
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*Peak direction frequency
2017 Average Weekday Boardings: 3,878

Proposed Peak Service Plan

<table>
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<tr>
<th>Route</th>
<th>Segment</th>
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LEGEND
- Mobility Hub
- Transit Signal Priority (TSP)
- Bi-Directional Queue Jump with TSP
- One-Way Queue Jump with TSP
- Speed & Reliability Improvements
- Dedicated Transit Lane with TSP
- Rapid Transit Projects in Fiscally Constrained Plan
- Planned Rapid Transit Line and Station
- Existing BUS系统 Station
- Planned BUS系统 Station
Havana St/ Hampden Ave