Denver Moves: Transit Task Force

Meeting #6 – June 1, 2017
1. Welcome & Introductions

- Opening remarks and housekeeping
- Task Force and audience introductions
2. Project Updates

• Recent *Denver Moves: Transit* Plan work

• Early Transit Plan Action: *Denver Moves:* *Broadway*
Recent *Denver Moves: Transit Plan Work*
Neighborhood Drop-In Workshops

- Southwest Rec Center (SW)
- Montbello Denver Broncos Boys & Girls Club (Far NE)
- Cake Crumbs Bakery (NE)
- Corkey Gonzalez Branch Library (NW)
- Dazbog Coffee (E. Central)
- Colorado Light Rail Station at I-25 (SE)
- Denver Public Library Central Branch (W. Central)
Neighborhood Drop-In Workshops
Workshop & Event Feedback

Participants indicated these priorities:

• Higher frequency and enhanced bus service
• Earlier/later and more weekend service
• More fare pass programs
• More amenities at stops and stations
• More high capacity transit service
Build Your Own Transit System

- Launched mid-April
- Closing June 30
- 872 responses
  - 870 English, 2 Spanish
- Distributed via:
  - Denver.gov
  - Neighborhood workshops
  - Youth Stakeholder Group
  - Other community outlets

Shape the future of Denver’s transit.

Build your system at denvermovestransit.org
Build Your Own Transit System

Respondents…

- Live in Capitol Hill (5.9%)
- Identified as:
  - White (81.3%)
  - Hispanic/Latino/Latina (4.5%)
  - Black or African American (2.5%)
- Make between $100,000 to $149,999 (23.7%)
- Are between the ages of 25 to 34 (41.8%)

<table>
<thead>
<tr>
<th>Focus Area</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northwest</td>
<td>235</td>
<td>37.5%</td>
</tr>
<tr>
<td>West Central</td>
<td>157</td>
<td>25.0%</td>
</tr>
<tr>
<td>Southwest</td>
<td>13</td>
<td>2.1%</td>
</tr>
<tr>
<td>Northeast</td>
<td>50</td>
<td>8.0%</td>
</tr>
<tr>
<td>East Central</td>
<td>111</td>
<td>17.7%</td>
</tr>
<tr>
<td>Southeast</td>
<td>48</td>
<td>7.7%</td>
</tr>
<tr>
<td>Far Northeast</td>
<td>13</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

As of 5/28/2017; there were a total of 627 responses for this question.
## Build Your Own Transit System

<table>
<thead>
<tr>
<th>Highest Priorities</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher frequency bus service</td>
<td>542</td>
</tr>
<tr>
<td>More rail (e.g., light rail or commuter rail) in Denver</td>
<td>507</td>
</tr>
<tr>
<td>Improved access to transit stops and stations</td>
<td>467</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lowest Priorities</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>More outreach and education about transit services/programs</td>
<td>173</td>
</tr>
<tr>
<td>Access to more car share options near transit</td>
<td>145</td>
</tr>
<tr>
<td>On-demand bus (e.g., Access-A-Ride)</td>
<td>72</td>
</tr>
</tbody>
</table>

As of 5/28/2017
Youth Stakeholder Group
Denveright Community Think Tank

- Held special meeting on May 31
- Played Blueprint Denver growth game
- Had opportunity to meet 1-on-1 with city project managers
Early Transit Plan Action: Denver Moves: Broadway Broadway/Lincoln Transit Study
NACTO Transit Program Accelerator

- New initiative to share best practices, develop strategies, and advance implementation to create great transit streets

- Implement concepts of the NACTO Transit Street Design Guide

- Broadway/Lincoln identified as candidate transit corridors for near-term study and implementation readiness
Broadway/Lincoln Transit Study

• Study area:
  – Broadway (17th to I-25/Broadway Station)
  – Lincoln (5th to Colfax)

• Proposed study improvements:
  – 24-hour transit-only lane
  – Red pavement treatments for enforcement
  – Coordination with RTD bus stop consolidation

• Study anticipated to start 3Q 2017
• Study will evaluate:
  – Transit service and operational improvements (e.g., travel time savings)
  – Transit-only lane compliance (vehicle violations)
  – Other metrics (in development)

• Task Force role in prioritization and decision making

• Developing a meaningful evaluation and investment framework
Denver’s Evaluation Framework

- Build on vision and goals
- Balance priorities
- Integrate with *Blueprint Denver* and coordinate with other plans and processes
Sample Evaluation Criteria

**ENHANCE**
- Transit average speed
- Transit mode share

**SIMPLIFY**
- Stops with shelters
- Participants in travel training

**THRIVE**
- Access for seniors
- Reduction in GHG emissions

**CONNECT**
- Land use access and density
- Locally significant destinations

**SUSTAIN**
- Cost effectiveness
- Productivity
Using the Evaluation Framework

**GOALS**

- **ENHANCE**
  - Frequent Transit Network
  - Transit Corridor Capital Improvements
  - Transit Corridor Toolbox
  - Places Design Book
  - Land Use Coordination

- **SUSTAIN**
  - Transit-Supportive Programs

- **SIMPLIFY**
  - Implementation

- **THRIVE**
  - Station/stop standards

- **CONNECT**
  - Corridor typologies
  - Design standards
  - Mobility hub concepts
  - Recommendation to/from Blueprint Denver

**Denver Moves: Transit**

- Intermediate-to-high capacity transit
- Bus priority corridors
- Partnerships
- Funding strategies
- Governance
- Transit policies
### Proposed Evaluation Criteria

<table>
<thead>
<tr>
<th>Denver Moves: Transit Goals</th>
<th>Proposed Evaluation Criteria</th>
<th>Criteria applicable to:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Blueprint Scenarios</td>
<td>Corridor Evaluation: TrialNet Scenari</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Travel average speed</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Ratio of speeds in slow travel time</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Potential for transit reliability and priority right of way</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Transit mode share (walk and/or non-work trip)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Transit boardings (2) and/or boardings per capita (existing and future)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Stage with shelters, amenities, information, etc. (5) existing standards</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Number of people participating in travel training programs (3)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Areas for non-vehicle households (1)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Areas for non-vehicle households (1)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Areas for youth (1)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Areas for seniors (1)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Areas for people with disabilities (1)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Areas for seniors (1)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Areas for seniors (1)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Combined or a combination of a safe, accessible, and efficient transit system</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Service levels in underserved areas with significant transit demand</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Potential for improved public health outcomes, increased physical activity</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Reduction in Greenhouse Gas emissions (based on VMT reductions)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Neighborhood connectivity (neighborhood centers connected by corridors)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Regionally significant activity (jobs, education, health, etc.) connected</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Locally significant destinations (community centers, arts/theater connected)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Handicap access and diversity (current and future population and employment)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Economic development (new housing units and total potential)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>People and jobs served in future development areas</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Corridors connects to key job centers, or job center density</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>High-quality bus network serving transit (direct transit or Multi-Stop)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Non-transit network serving transit (connectivity measure or WalkScore)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Productivity (e.g., average hours per rider)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>Cost effectiveness (e.g., lifecycle operating and capital cost per net new rider)</td>
<td>●</td>
</tr>
<tr>
<td></td>
<td>City budget dedicated to transit projects (3)</td>
<td>●</td>
</tr>
</tbody>
</table>

#### Denver Moves: Transit Goals
- Strong, easy-to-reach area-wide network
- Fast and frequent service
- Accessible and safe for all riders
- Efficient use of public resources
- Coordinated with other modes

#### Evaluation Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Score 0</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Score 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Denver Moves: Denver Moves, Denver Right.*

**Denver The Mile High City**

6/1/2017
Lessons from Columbus

- Values-driven process shaped preliminary corridor evaluation
- Issues of equity and growth at the forefront of the evaluation

Tier 1 Screening Process

26 Corridors developed from public input, data analysis and local plans

13 Corridors moved onto Tier 2 screening

Tier 1 screening values guided the evaluation of corridors
Lessons from Salt Lake City

• Evaluation framework supported idea that frequent network could leverage strong street grid in eastern SLC
• Alternative strategies used to extend transit to some areas
• Various land use densities better accommodate different transit modes

Source: Salt Lake City Draft Transit Master Plan, October 2016
Lessons from Orange County

• Transit investment framework articulates how decisions are made for both service and capital investments
• Based on stated vision and goals and supported by detailed evaluation criteria

Consider high-capacity transit when transit corridors have:
Lessons from Nashville

• Guiding principles shaped scenarios

• Evaluation criteria—ridership, access to jobs, and equity—forced selection of 5 high capacity transit lines

• Mayor recently announced plan to advance design of first light rail corridor
Lessons from Seattle

- Investment framework shaped all aspects of plan recommendations
- Corridor selection and evaluation based on “multiple account” evaluation
- Policy and program recommendations flow from same goals
5. Short Break

KEEP CALM AND TAKE A BREAK
4. Identifying and Evaluating Priority Transit Corridors

- Approach to corridor identification and evaluation
- Mapping key criteria along corridors
- Report out and discussion
Using the Evaluation Framework

- Comprehensive Set of Corridors
  - Existing Service & Past Studies

- Initial Corridor Screening
  - Basic Criteria

- Corridor Prioritization
  - Focused Criteria

- Denver Moves: Transit Plan
Sample Corridor Analysis: Seattle

Comprehensive Set of Corridors

Initial Corridor Screening

Corridors for Prioritization

Final Plan Corridors

6/1/2017
Using the Evaluation Framework

Comprehensive Set of Corridors
EXISTING SERVICE & PAST STUDIES

Initial Corridor Screening
BASIC CRITERIA

Corridor Prioritization
FOCUSED CRITERIA

Denver Moves: Transit Plan
Comprehensive Set of Corridors

- Blueprint Denver (2002)
- Existing frequent service
- RTD network analysis
- Project team input
- Task Force input
- Agency Team input
Comprehensive Set of Corridors

- Blueprint Denver (2002)
- Existing frequent service
- RTD network analysis
- Project team input
- Task Force input
- Agency Team input
Comprehensive Set of Corridors

- Blueprint Denver (2002)
- Existing frequent service
- RTD network analysis
- Project team input
- Task Force input
- Agency Team input
Comprehensive Set of Corridors

- Blueprint Denver (2002)
- Existing frequent service
- RTD network analysis
- Project team input
- Task Force input
- Agency Team input
Comprehensive Set of Corridors

- Blueprint Denver (2002)
- Existing frequent service
- RTD network analysis
- Project team input
- Task Force input
- Agency Team input
Comprehensive Set of Corridors

- Blueprint Denver (2002)
- Existing frequent service
- RTD network analysis
- Project team input
- Task Force input
- Agency Team input
Comprehensive Set of Corridors
Our Final Corridors
Using the Evaluation Framework

- Comprehensive Set of Corridors
  - Existing Service & Past Studies

- Initial Corridor Screening
  - Basic Criteria

- Corridor Prioritization
  - Focused Criteria

Denver Moves: Transit Plan
Segments for Screening

- Break at logical points to capture changes in land use or corridor character.
- Work with smaller segments to support fine-grained results and ability to stitch pieces together.
Initial Screening Criteria

- Density
- Demographics
- Demand and Accessibility

6/1/2017
Preliminary Results

2015 Population & Employment Density within 1/4 mile of Corridors

Low-Income Population Density within 1/4 mile of Corridors
Your Turn

• Spend ~15 min at each station reviewing the analysis and maps

• Discuss the following questions:
  – How well do the criteria tell the “story” of a corridor?
  – Is anything missing? What additional information would be valuable?
  – What is the relative importance of different criteria?
Small Group Report Out
7. Upcoming Outreach and Engagement

- Youth Stakeholder Group video release
- Wrapping up the Build Your Own Transit System outreach phase
- Preliminary plans for summer engagement
Summer & Fall Engagement

• Partner with Denveright
• Target August and early September initially
• Gather feedback on priority corridors
• Keep it simple
  – Maptionnaire survey
  – In-person at local/regional fairs and festivals
8. Next Steps

• Next Task Force participation opportunity
  – Share and promote the Build Own Transit System *(closing June 30)*
  – Say hi at summer outreach in your neighborhood
  – Publicize the youth video

• Task Force Meeting #7: August 3 *(let’s discuss)*
9. Questions and Comments

www.denvergov.org/denverright