Denver Moves: Transit Task Force

Meeting #7 – August 3, 2017
1. Welcome & Introductions

- Opening remarks and housekeeping
- Task Force and audience introductions
- Denver’s Mobility Action Plan
- Upcoming events and good-to-knows
Youth Stakeholder Group Video
Denver’s Mobility Action Plan

• To create freedom of choice and shift the way people travel throughout Denver

• Increase mobility options, improve safety, address climate change, improve public health, and create smart connections
Denver’s Mobility Action Plan

• Plan goals include:
  – Reduce traffic fatalities and serious injuries through the Mayor’s Vision Zero program (by 2030)
  – Reduce single-occupancy vehicle commuters to 50% (by 2030)
  – Increase bike/pedestrian commuters to 15% (by 2030)
  – Increase transit commuters to 15% (by 2030)
  – Reduce greenhouse gas emissions by 80% by 2050 (80 x 50 process and sustainability goals)
  – Other goals (see website)
Denver’s Mobility Action Plan

• 40 specific tactile actions (safety, TDM, transit, bicycle, pedestrian, parking, electric vehicles, funding, smart technology solutions)

• Visit the Mobility Action Plan website for more details:
Broadway/Lincoln Transit Study Update

• Implementation and activation of improvements beginning late summer 2017 (12-month study)
  – Red pavement markings, transit lane covered to 24-hours, bus stop location and service changes

• Broadway (17th to I-25 Broadway Station) and Lincoln (5th to Colfax)

Photo Source: San Francisco Municipal Transportation Agency
Denveright Engagement

• Community Think Tank Meeting
  – August 8th: growth, pedestrians and trails

• Denveright in the Community
  – Check the Denveright calendar: https://www.denvergov.org/content/denvergov/en/denveright/calendar.html
Upcoming Events & Good-to-Knows

• Rail~Volution Conference (Sept 17-20)
  http://railvolution.org/the-conference/conference-information/

• 7th Annual Transit Event/Transportation Summit (Oct 23rd)
  http://www.transitalliance.org/annualtransitevent
Upcoming Events & Good-to-Knows

• Vision Zero (draft plan)  
  https://www.denvergov.org/content/denvergov/en/transportation-mobility/vision-zero.html

• Transit Alliance Citizens’ Academy (apply for Fall 2017)  
  http://www.transitalliance.org/citizens-academy

• Blueprint and Denver Moves: Pedestrians & Trails public meetings
2. Project Updates

- Recent *Denver Moves: Transit* Plan work
- Schedule moving forward
Build Your Own Transit System

• Mid-April to mid-July
• 1,500 online responses
• 900 paper responses
• Distributed via:
  – Denver.gov
  – Neighborhood workshops
  – Stop and station pop-ups
  – Youth Stakeholder Group
  – Other community outlets
Drop-In Workshops & Station Outreach
Participants indicated these priorities:

• Higher frequency and enhanced bus service (60%)
• More fare pass programs (50%)
• More high capacity transit service (46%)
• Earlier/later/more weekend service (46%)
• More amenities at stops and stations (43%)
Online Tool

- Respondents selected preferred improvements, weighing trade-offs between cost and benefits
- Budget of $100
Key Findings (Online Tool)

• Who did we hear from?
  – Young to middle age, white, higher income
  – Own a car and ride transit infrequently

• How do they use transit?
  – Choice riders
  – Use transit when convenient (airport, downtown, events)

• How do they want to improve the system?
  – More direct, frequent, and reliable service
  – More rail and more high frequency bus
Prioritized Improvements (Online Tool)

- More rail (e.g., light rail or commuter rail) in Denver
- Higher frequency bus services
- Improved pedestrian and bicycle access to transit
- More fare pass programs
- Better transit connections
- Rider information/technology at bus stops
- Improved transit legibility (e.g., better maps, wayfinding, and trip planners)
- Transit priority treatments (e.g., transit-only lanes or signal priority)
- More amenities at transit stops (e.g., shelters, seating, lighting)
- Bus Rapid Transit (BRT)

Improvement Category:
- Access and Connections
- Customer Amenities, Programs, and Information
- Capital Improvements
- Transit Service
Making Decisions

Transit System Improvement Priorities (N=1,354)

- I want transit service to be more reliable: 3.7
- I want more direct connections on transit between neighborhoods: 3.7
- I want more/improved bicycle and pedestrian connections to transit: 3.1
- I want to make it more comfortable to wait for and ride the bus or train: 2.7
- Other: 2.6

Average Priority Score

8/3/2017
Transit Plan Goals

• More than 75% of respondents felt the goals capture what they hope the plan will accomplish.
Transit Preferences

What would help you ride the bus or train more often? (N=1,222)

Preference

- If the bus or train went where I needed to go
- If transit ran more often
- If my transit trip was shorter or more direct
- If the cost of transit was lower
- If transit ran earlier or later
- If there was always room for my bike on transit
- If transit was safer
- If transit was more comfortable
- If I could always get a seat on the bus or train
- If I understood how to ride transit/more information available

Proportion of Respondents

- 68.2%
- 55.4%
- 54.8%
- 29.9%
- 17.3%
- 14.7%
- 11.7%
- 8.8%
- 5.3%
- 0.1%
Variations by Group

- Older riders want more frequent bus service, younger riders want more rail service
- Regular transit riders want more frequent service
- Occasional transit riders want more rail service and more direct transit service
Update on Corridor Screening

- Comprehensive Set of Corridors
  - EXISTING SERVICE & PAST STUDIES
- Initial Corridor Screening
  - BASIC CRITERIA
- Corridor Prioritization
  - FOCUSED CRITERIA

Denver Moves: Transit Plan
Key Questions for August Engagement

• Top 5 of the recommended corridors
• High-level feedback on evaluation criteria
Task Force Roadmap

**TOPICS**
- Draft Goals & Objectives
- Decision-Making & Evaluation Tools
- Evaluation Framework: Setting Priorities

**KEY QUESTIONS**
What feedback do you have about the vision and elements?
What goals should we set for Denver Moves: Transit?
How will we know if we have accomplished those goals?

**TOPICS**
- Preliminary Blueprint Scenarios
- Adding Transit to the Mix
- Approach to Prioritizing Corridors

**KEY QUESTIONS**
What questions do you have about the Blueprint scenarios?
How should we evaluate options and set priorities as part of Denver Moves: Transit?
Do you have feedback on our evaluation and prioritization approach?

**TOPICS**
- Potential Transit Priority Corridors
- Exploring the Analysis
- Creating Complete Corridors

**KEY QUESTIONS**
How do the transit priority corridors align with your expectations?
Are there additional or replacement corridors that should be considered?
What should be included in a "complete corridor"?

**TOPICS**
- Improving Access & Connections
- Identifying Multimodal Hubs
- Policy & Program Toolbox

**KEY QUESTIONS**
What are your community's top priorities for improving transit access?
Where are multimodal hubs needed? What should they include?
What policies and programs can support transit in Denver?

**TOPICS**
- Project Costs
- Funding Options
- Implementation & Phasing
- Draft Plan Engagement

**KEY QUESTIONS**
What feedback do you have about funding options that should be considered?
How should trade-offs be made to support implementation?
How can we best engage the public in reviewing the draft plan?

**TOPICS**
- Draft Denver Moves: Transit Plan
- Bringing it all Together
- Next Steps

**KEY QUESTIONS**
What feedback do you have on the draft plan?
What will you do encourage others to provide feedback on the plan?
How can you support implementation of the plan?
Questions?
3. Key Transit Planning Concepts: Introduction to a Frequent Transit Network

• Overview of key transit planning concepts
• Role of an FTN in land use and mobility planning
• Discussion of Denver’s existing network of frequent routes
Task Force Session on Frequent Networks
By “ridership” we always mean “productivity,” riders per unit of service cost. This tracks with farebox recovery.

Transit outcomes arise from “three legged stool”:
- Service
- Land Use
- Street Design

RTD controls only one leg (and City controls two)!
The Ridership Recipe

• High All-Day Frequency …
• … following patterns of …
  – Density
  – Walkability
  – Linearity
  – Proximity

Why? Because this is how you bring the *most* useful destinations within reasonable travel time of the *most* people.
Why Frequency Matters to Ridership

Speed and reliability matter, but frequency is the most neglected element.

Frequency is a “cubed” benefit:
• Go when you want to go.
• Make connections easily, to get to more places.
• Less risk of being stranded by a disruption.

For trips <5 mi or so, frequency is the dominant element of travel time.
Land Use Drivers of Ridership

- Density
- Walkability
- Linearity
- Proximity
Density

How many people are going to and from the area around each stop?

High Ridership

Lower Ridership
Walkability

Can the people around the stop walk to the stop?

High Ridership

Lower Ridership
Linearity

Can transit run in straight lines that are useful to through-riders?

High Ridership

Lower Ridership
The Ridership-Coverage Tradeoff

But is Ridership What You Want?
Both goals are important, … but they lead opposite directions!

Ridership Goal

• “Think like a business.”
• Focus where ridership potential is highest.
• Support dense and walkable development.
• Max. competition with cars
• Maximum VMT reduction

Coverage Goal

• “Think like a public service.”
• “Access for all”
• Support low-density development.
• Lifeline access for everyone.
• Service to every member city or electoral district.
So What Is the Frequent Network?
What is the Frequent Network

• Useful, liberating, cost-effective transit that comes near most people’s homes.

• Designed for maximum ridership and productivity.

• Useful enough to influence location choices.

• Drives enough mode shift to support:
  – Transit priority
  – Lower parking requirements.
  – Higher density
Frequency does 3 great things

• Go when you want to go. (Less waiting.)

• Connect from one line to another easily, so you can get to many places. *Frequency is what makes a network!*

• Less risk of disruption.
  – If the bus breaks down, another comes soon.
Frequency as key to affordability

• Good enough to confer useful liberty, and

• Abundant enough that it can’t drive up housing prices everywhere.

• Supports lower parking requirements → affordability
The Genius of the Frequent Grid
The Genius of the Frequent Grid

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WALK A

RIDE

CONNECT

B
The Genius of the Frequent Grid
The Genius of the Frequent Grid
But frequency is hard to explain

- Elevators?
- Traffic signals?

Imagine that there's a gate at the end of your driveway that opens only once an hour!
“Turn up and go.”

A network for people in a hurry.

Frequency is Freedom
Frequent Network as Co-ordinator

The more functions use it, the better it works!

City Government

- Land Use Planning
- Zoning
- Off-St. Parking
- Street Design
- Transit Priority
- Stop Access
- On-St. Parking
- Law Enforcement

Agreed Frequent Network

Transit Agency

- Service Planning
- Service and Operating Standards
- Marketing
- Public Information
- Capital Priorities

Signals to Private Sector (e.g. Real Estate)
Case Studies
Seattle

- A City of Seattle project.
- Arises from land use plans and informs their further iteration.
- Key guide to street design work.
- Transit agency has grown more supportive.
Funding Initiatives

More buses, more options, more Seattle.

TRANSPORTATION LEVY TO MOVE SEATTLE
Seattle FTN role:

• Built story to support local funding initiatives
• Focus of local service buy-ups
• Guides:
  – Transit access improvements
  – Parking policy
  – Street design standards
  – TDM efforts

• Originated by City Dept of Transportation.
• Adopted by City Council.
• Reflected in transit agency’s new long range plan (both service and capital.)
Portland

TRIOMET

Frequent Service

Hillsboro

Beaverton

Tigard

Gresham

JARRETT WALKER + ASSOCIATES
Portland

• Mostly planned in 1982.
• Public brand created in 2002 – one of the first.
• Guides transit agency investment priorities.
  – Resisted cutting during downturn.
• City of Portland now uses as a guide to land use and especially parking.
• Also referenced in regional (MPO) planning docs.
Vancouver
Vancouver

- FTN developed by transit agency.
- Very prominent in information system.
- Regional government (=MPO) sets and updates targets for pop and jobs on FTN.
  - Achieved by mix of FTN expansion and intensification.
- Regional gov’t defines “Frequent Transit Development Areas”.

“Over half of all population and jobs will be on the Frequent Network.”
-- Regional Goal 3
Salt Lake City

A City of Salt Lake project, advised and supported by transit agency.
Initial FTN network arises out of existing land use plan.

Future FTN serves areas in Salt Lake City with highest likelihood to use transit.
By 2040, 73% of the people projected to live and/or work in Salt Lake City will be within a quarter-mile walking distance of the FTN.
Salt Lake FTN is tied to:

- Transit stop design & amenities
- Transit access improvements
- Parking policy
- Street design standards
- Land use updates
- TDM in new development

- A City project
- Adopted by City Council
- Strong involvement from UTA in plan development
- Presented to UTA Board as informational item
Breaking Through the Circularity

• How can we plan if around the Frequent Network if it isn’t there yet?
• How can we put the Frequent Network there if you haven’t planned around it.

Consider defining a network in tiers.
Breaking Through the Circularity

- How can we plan if around the Frequent Network if it isn’t there yet?
- How can we put the Frequent Network there if you haven’t planned around it.

Consider defining a network in tiers.

EXISTING – Already on the street.
Breaking Through the Circularity

• How can we plan if around the Frequent Network if it isn’t there yet?
• How can we put the Frequent Network there if you haven’t planned around it.

Consider defining a network in tiers.

PLANNED – Necessary conditions are present, except funding.
EXISTING – Already on the street.
Breaking Through the Circularity

• How can we plan if around the Frequent Network if it isn’t there yet?
• How can we put the Frequent Network there if you haven’t planned around it.

Consider defining a network in tiers.

CANDIDATE – Conditions are promising but not all present.
PLANNED – Necessary conditions are present, except funding.
EXISTING – Already on the street.
Questions?
4. Short Break
5. Small Group Activity & Discussion: Designing Your Frequent Network
So where should the network be?

• Assume frequent = <15 min, 15 hours every day.
• Think about two tiers of priority.
• Top tier (orange) is about the amount of service you have now.
• Second priority tier (purple) is double that amount.
• Think about coherent routes, not just segments.
• Ask yourself:
  – Do we have density, walkability, linearity?
  – Is the development that justifies this service existing, or coming soon, or coming later?
  – Will the network seem “equitable”?
How much frequent service?

1. We don’t even need what the orange sticks represent.
2. The orange sticks are enough.
3. We need what the orange and purple sticks represent.
4. We need even more than that.
Small Group Report Out
6. Next Steps

• Next Task Force participation opportunity: *Share the August newsletter*
  – Youth Stakeholder Group video, corridor outreach, results of Build Your Own System survey, and more!
• Task Force Meeting #8: October 4 (Visit Denver)
• Additional Task Force Meeting: February 1, 2018
7. Questions and Comments

www.denvergov.org/denveright