Denver Moves: Downtown

Community Task Force

WORKSHOP #2
APRIL 29, 2019
Meeting Purpose
• Overview of ongoing technical analysis

• Share themes from broader community input

• Present and gather feedback on draft Level 1 scenarios
Project Update
PROJECT OVERVIEW

• Re-envision the downtown transportation system
• Advance multimodal improvements
• Develop near-term and long-term projects
• Develop or test early action projects
REVISED PROJECT VISION

To support the continued growth of Denver’s vibrant city center, downtown’s transportation systems will safely accommodate more people by encouraging healthy mobility options, prioritizing the pedestrian experience, and efficiently moving goods.
REVISED GOALS

Goal 1: Create additional capacity through mode-shift by providing a variety of attractive travel choices

Goal 2: Make downtown streets safe

Goal 3: Design streets as inviting spaces for people with opportunities to enhance the natural environment

Goal 4: Create a flexible and adaptable street network

Goal 5: Make downtown accessible and easy to navigate for all users

Goal 6: Provide a transportation system that supports a thriving downtown economy
JANUARY-APRIL 2019
TECHNICAL WORK:

• Transit Visioning Workshop
• State of the System
• Public survey
• Initiated Level 1 Scenarios
• Peer City Review
• Downtown Denver has added 14,000 households since 2000

• Downtown will add another 24,000 households by 2040

• RiNo, the Central Platte Valley and River Mile are all expected to have similar high rates of population growth

• Downtown Denver has added 4.8 million sq. ft. of office space since 2000

• Today downtown hosts approximately 130,000 jobs

• By 2040, over 200,000 people will work downtown in 10 million sq. ft. of new office space
The public right-of-way is a space that serves people walking, rolling, driving, and taking transit. In downtown, that space is not always divided according to demand. The following graphics show the amount of space dedicated to each mode on four different downtown roadways, and the percentage of overall right-of-way per mode vs. the percentage of travelers utilizing each mode for peak hour travel.
SCENARIO DEVELOPMENT PROCESS: WHERE WE’RE GOING

ESTABLISHING A PROJECT FOUNDATION
- Project Management Plan
  - Task 1

UNDERSTANDING THE STATE OF DOWNTOWN MOBILITY
- Data Collection & Analysis
  - Task 3

DEVELOPING A DOWNTOWN MOBILITY VISION
- State of the System Report
  - Task 4
  - Task 5.1 & 5.2

IMAGINING A RANGE OF SCENARIOS
- Performance Measures

FINDING THE PREFERRED ALTERNATIVES
- Network Scenario Development & Screening
  - Projects / Strategies
    - Apply Tier 1 Screening
      - Projects not consistent with Vision & Goals
      - Projects consistent with Vision & Goals
  - Alternative Development & Screening
    - Theme 1
    - Theme 2

TESTING & MODELING
- Apply Tier 2 Screening
- Preferred Alternative

CREATING A VISUAL FRAMEWORK

CHARTING THE PATH
- Implementation Strategy
  - Near Term
  - Mid-Term
  - Long Term
  - Task 8

EARLY IMPLEMENTATION WORK PRODUCTS
- Potential Projects
  - Retime downtown traffic signal network
  - Create 30% plans for high conflict intersections
  - Develop operations plans for new transit service
  - Design transit stop amenities
  - Complete study of mobility hub benefits and potential locations
SPRING 2019 PUBLIC ENGAGEMENT

• Engaged over 900 people through online community survey

• Engaged 200 people through:
  o Curtis Park Neighborhood
  o Mayor’s Pedestrian Advisory Committee
  o Golden Triangle Neighborhood
  o DDP Public Realm Council
  o DDP Mobility Council
  o Mayor’s Bicycle Advisory Committee
  o INC Transportation Committee
COMMUNITY SURVEY

• Open March 20 - April 14

• Deployed through:
  o Media release
  o Project website
  o Social media
  o Project email updates
  o Newsletters to stakeholders
    o add’l distribution to their partners

• Received 930 unique surveys including in-person engagement at:
  • Rockies Opening Day Event
  • Denver Streets for People Summit
### How do you travel to/from downtown?

<table>
<thead>
<tr>
<th>Mode</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive alone</td>
<td>30%</td>
</tr>
<tr>
<td>Carpool</td>
<td>5%</td>
</tr>
<tr>
<td>Uber/Lyft/Taxi</td>
<td>2%</td>
</tr>
<tr>
<td>Bus</td>
<td>10%</td>
</tr>
<tr>
<td>Rail</td>
<td>10%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>20%</td>
</tr>
<tr>
<td>Walk</td>
<td>5%</td>
</tr>
<tr>
<td>Scooter</td>
<td>0%</td>
</tr>
<tr>
<td>Other - please specify</td>
<td>5%</td>
</tr>
</tbody>
</table>

### What mode would you like to use more if you could?

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<th>Mode</th>
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</table>

### What’s the main reason preventing you from using your preferred mode of transportation?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>Cost</td>
<td>30%</td>
</tr>
<tr>
<td>Access</td>
<td>10%</td>
</tr>
<tr>
<td>Convenience</td>
<td>20%</td>
</tr>
<tr>
<td>Safety</td>
<td>10%</td>
</tr>
<tr>
<td>Can’t get to where I need...</td>
<td>5%</td>
</tr>
<tr>
<td>Not reliable</td>
<td>5%</td>
</tr>
<tr>
<td>Habit</td>
<td>0%</td>
</tr>
<tr>
<td>Other - please specify</td>
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</tbody>
</table>
What would make downtown streets feel safer?

- Slower traffic
- More protected lanes for bikes and scooters
- Longer pedestrian crossing times
- Narrower streets / shorter crossing distances
- Restrict right turns at red lights
- Greater buffer between traffic and people walking
- Better lighting for people walking and at bus stops
- Other – please specify

What would improve your experience traveling around downtown?

- Faster and more reliable transit
- More trees and plantings
- More street furnishings
- More street cafes and activities
- More signage to help people find their way around
- Reduced congestion at busy intersections
- Repaired and widened sidewalks
- A more connected bicycle lane network
- More "smart city" technology
- Easier-to-locate parking
- Other – please specify
SURVEY CROSS ANALYSIS: DRIVE ALONE

What mode would you like to use more if you could to get downtown?

- Drive alone
- Carpool
- Uber/Lyft/Taxi
- Bus
- Rail
- Bicycle
- Walk
- Scooter
- Other – please specify

What’s the main reason preventing you from using your preferred mode of transportation?

- Cost
- Access
- Convenience
- Safety
- Can’t get to where I need to go
- Not reliable
- Habit
- Other – please specify
What would make downtown streets feel safer?

**Pedestrians**
- Slower traffic
- More protected lanes for bikes and scooters
- Longer pedestrian crossing times
- Narrower streets / shorter crossing distances
- Restrict right turns at red lights
- Greater buffer between traffic and people walking
- Better lighting for people walking and at bus stops
- Other – please specify

**Cyclists**
- Slower traffic
- More protected lanes for bikes and scooters
- Longer pedestrian crossing times
- Narrower streets / shorter crossing distances
- Restrict right turns at red lights
- Greater buffer between traffic and people walking
- Better lighting for people walking and at bus stops
- Other – please specify
What would improve your experience traveling downtown?

**Pedestrians**

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Peer City Review
Denver’s citywide SOV mode share is 10% higher than the closest peer as of 2016, and is the only one to increase since 2000.
SEATTLE

Focus on strategic transit investments, easy access to frequent and prioritized bus service and a comprehensive curb space management and on-street parking pricing system.

Vision Zero

- Arterial Speed Limit – 25 MPH | All Other Streets – 20 MPH
- Re-Timed Traffic Signals To Limit Speed To 23-25 MPH

Transit

- RapidRide BRT Service (~60,000 Daily Riders)
  - 10 Minute Frequency, 7 days per week (2/3 Households Within 10 Minute Walk)
  - Off-Board Fare Payment and Speed and Reliability Treatments

Curb Space Management

- Policies Set Prioritizing Curb Use Across Entire City
WASHINGTON D.C.

Comprehensive bicycle planning and bike way investments to ensure a high-quality, low-stress network that connects to destinations that prospective riders are trying to access.

Walking and Biking
  • Installing Unsignalized Mid-Block Crossings
  • 2,300 Capitol Bikeshare Bikes and 500 Stations

Transit
  • Bus Shelter Update Program
  • 6 Circulator Routes Since 2005
    • (5 million Trips Per Year, 10min Frequency)

Curb Space Management
  • Adding 24-Hour TNC Pick Up/Drop Off ZoneS
PORTLAND
Long-term, strategic investment in infrastructure that supports safe and accessible walking and bicycling, along with frequent and prioritized transit.

Walking and Biking
- 188 Miles of Bike Lanes / 77 Miles Of Neighborhood Greenways
- Public Bike Racks
- ADA Curb Ramps

Transit
- Frequent and Prioritized
- 24 Hour Service On Key Lines
- Electrifying Bus Vehicle Fleet
Draft Scenarios
01 | BASELINE AND EXISTING PROGRAMMING
02 | PREVIOUS RECOMMENDATIONS
03 | CAMPUS-STYLE TRANSPORTATION
04 | GATEWAY ORIENTED
05 | ENHANCED CURBSIDE
06 | REIMAGINED RIGHT-OF-WAY
07 | GREEN AND HEALTHY
08 | TRAFFIC CALMING
09 | HUBS AND SPOKES
Baseline and Existing Programming

Overview

In 2040, the only changes to mobility systems downtown are those programmed as of 2019.
**Previous Recommendations**

**Overview**

In 2040, downtown realizes a synthesis of all projects, policies, and regulations recommended by previous planning studies.

**Key Components**

- **Transit Vision:** Focus on Denver Moves: Transit Corridors
- **The 5280**
- **Extend MetroRide to Golden Triangle**

**Concept Map**

- **How Well Does This Scenario Achieve The Project’s Goals?**

  - 1. Increases Capacity Through Mode Shift: ByProviding Choices
  - 2. Makes Downtown Streets Safe
  - 3. Creates Involving Spaces and A Great Downtown
  - 4. A Flexible and Adaptable Street Network
  - 5. Accessible and Navigable
  - 6. Supports A Thriving Downtown Economy
Campus-Style Transportation

Overview

In 2040, downtown feels distinct and moves at a quieter, slower pace. Drivers have access to a smaller network consisting of two-way streets, but are encouraged to switch to other modes at the periphery. Some streets provide very limited vehicular access, instead prioritizing walking and short transit shuttle rides.

Key Components

- One-Way to Two-Way Street Conversions
- Transit Vision: Riders and Shuttles
- Minimize Vehicular Use With Pedestrian Focused Design
- Parking on the Periphery
- Complete Bicycle Network

How Well Does This Scenario Achieve The Project’s Goals?

- Increases Capacity Through More Safe & Diverse Streets
- Makes Downtown Streets Safe
- Creates Inning Openness & A Greater Downtown
- Flexible and Adaptable Infrastructure
- Accessible and Navigable
- Supports A Thriving Downtown Economy
Gateway Oriented
Overview

In 2040, people enter downtown through one of several clear gateways. Vehicular travel is funneled to select corridors, while most streets prioritize multimodal safety and comfort.

Key Components

- One-Way to Two-Way Street Conversions
- Optimize Existing System
- Transit Vision: Optimize Existing System
- Optimize Existing Gateways For Increased Vehicular Capacity
- Improve Multimodal Facilities At Neighborhood Entry/Exit Points

Concept Map

How Well Does This Scenario Achieve The Project’s Goals?

1. Increases Capacity Through Mode Exit By Providing Choices
2. Makes Downtown Streets Safe
3. Creates Inviting Spacious and A Great Downtown
4. A Flexible and Accessible Street Network
5. Accessible and Navigable
6. Supports A Thriving Downtown Economy
**Enhanced Curbside**

**Overview**

In 2040, flexible curb space gives downtown streets a wider range of uses. Allowing for public seating and public open space, loading zones, high capacity micromobility parking, and other activities along the curb creates a downtown mobility network that adapts to varied activities throughout the day.

**Key Components**

- Repurpose Existing Curbside Uses
- Incorporate Emerging Technologies
- Maintain Existing Travel Lanes
- Complete Bicycle Network

**Concept Map**

**How Well Does This Scenario Achieve The Project’s Goals?**

- Increases Capacity Through Mode Shift By Providing Choices
- Makes Downtown Streets Safe
- Creates Iterating Spaces and A Greener Downtown
- A Flexible and Adaptible Street Network
- Accessible and Navigable
- Supports A Thriving Downtown Economy
Reimagined Right-of-Way
Overview

In 2040, the public right-of-way is no longer dominated by vehicular travel lanes. Instead, emerging technologies allow for adaptations of the space to accommodate different modes, travel patterns, and public uses throughout the day.

Key Components

- Reconstruct Streets
- Repurpose Existing Vehicular Travel Lanes

How Well Does This Scenario Achieve The Project’s Goals?

1. Increases Capacity Through Mode Shift by Providing Choices
2. Makes Downtown Streets Safe
3. Creates Inviting Spaces and a Greater Downtown
4. A Flexible and Adaptable Street Network
5. Accessible and Navigable
6. Supports A Thriving Downtown Economy
Green And Healthy
Overview

In 2040, downtown is blanketed by a canopy of trees and inviting social spaces. Bike and pedestrian space is organized around large planters and green stormwater infrastructure in the public right-of-way, with high-capacity transit service moving along key connections.

Key Components
- Pedestrian Prioritized Streets and Intersections
- Civic Hubs and Inviting Social Spaces
- Increase Downtown Tree Canopy
- Green Stormwater Infrastructure
- Transit Vision: Hubs and Shuttles

Concept Map

How Well Does This Scenario Achieve The Project’s Goals?

1. Increases Capacity Through Mode Shift By Providing Choices
2. Makes Downtown Streets Safe
3. Creates Inviting Spaces and A Greener Downtown
4. A Flexible and Accessible Street Network
5. Accessible and Navigable
6. Supports A Thriving Downtown Economy
Traffic Calming
Overview

In 2040, people are comfortable navigating throughout downtown on foot, in wheelchairs, or using slow-speed micromobility services. Buses offer a more reliable trip into the area than cars.
Hubs And Spokes
Overview

In 2040, downtown mobility is organized around high-capacity, high-frequency transit routes along corridors adjacent to the area identified by the Denver Moves: Transit. Exclusive transit lanes connect the system, and enhanced pedestrian and bicycle facilities emanate from these corridors.

Key Components

Complete Bicycle Network
Dedicated Transit Lanes
Transit Vision: Focus on Denver Moves: Transit Corridors
Improve Multimodal Facilities At Neighborhood Entry/Exit Points

How Well Does This Scenario Achieve The Project’s Goals?

1. Increases Capacity Through Mode Shift By Providing Choices
2. Makes Downtown Streets Safe
3. Creates Meaningful Spaces And A Greater Downtown
4. A Flexible And Adaptable Street Network
5. Accessible and Navigable
6. Supports A Thriving Downtown Economy