Denver Moves: Transit Plan
EXECUTIVE SUMMARY

JANUARY 2019
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Denver Regional Council of Governments (DRCOG) Staff
Denver Mayor’s Youth Commission and Denver Moves: Transit Youth Stakeholder Group
DENVER MOVES

Denver is experiencing a period of rapid growth—over 7,000 people are moving to Denver every year, and 189,000 more people and 136,000 new jobs are projected by 2040. Growth presents both opportunities and challenges for cities, including an increased number of vehicles on the roadways. Growing cities like Denver are increasingly exploring and implementing transportation system investments by providing more reliable, connected, and safe mobility options, including transit, to move more people along their roadways.

The Regional Transportation District (RTD) has made significant investments in commuter rail and light rail transit over the last decade to help Denver and the region accommodate this growth. Even with these major investments in the regional transit system, Denver residents, businesses, and visitors want more frequent, reliable, and convenient connections to jobs, neighborhoods, schools, and services. City and regional agencies are challenged to find a sustainable approach to expand and improve transit in Denver.

EXECUTIVE SUMMARY

WHY DENVER MOVES: TRANSIT?

Denver is experiencing a period of rapid growth—over 7,000 people are moving to Denver every year, and 189,000 more people and 136,000 new jobs are projected by 2040. Growth presents both opportunities and challenges for cities, including an increased number of vehicles on the roadways. Growing cities like Denver are increasingly exploring and implementing transportation system investments by providing more reliable, connected, and safe mobility options, including transit, to move more people along their roadways.

The Regional Transportation District (RTD) has made significant investments in commuter rail and light rail transit over the last decade to help Denver and the region accommodate this growth. Even with these major investments in the regional transit system, Denver residents, businesses, and visitors want more frequent, reliable, and convenient connections to jobs, neighborhoods, schools, and services. City and regional agencies are challenged to find a sustainable approach to expand and improve transit in Denver.
Addressing growth challenges and opportunities by implementing transit capital investments, service improvements, and transit-supportive policies and programs will move more people along Denver’s roadways and improve connections around the city. The first step in addressing Denver’s transit needs is the development of Denver’s transit plan, *Denver Moves: Transit*, to establish the near- and long-term local transit vision and identify transit-supportive strategies and actions to meet Denver’s mobility needs.

The City and County of Denver (the City) plays a key role in advancing many actions identified in this plan, depending on priorities and available funding and resources. Successful implementation will also require coordination, investments, and participation from partners, including RTD and other local and regional agencies, advocacy and non-profit organizations, employers, and neighborhood groups.

**WHY NOW?**

Rapidly growing cities across the country, like Denver, are realizing that local government must be more active in planning, developing, funding, and even operating transit if they want to deliver on economic and quality of life goals. RTD operates a transit system connecting Denver and the region, but local transit does not provide the frequent, connected, and reliable service Denver needs to meet the city’s mobility needs both now and in the future. The *Denver Moves: Transit* vision and implementation strategies and actions help support ongoing growth and local mobility needs by improving transit and connecting more people to more places, sustaining Denver as a healthy and vibrant community.
Denver’s Transit Challenges and Opportunities

Denver faces a variety of transit-related challenges addressed in the Denver Moves: Transit plan, highlighting the need for more transit investments that provide higher-quality and more reliable and connected transit in Denver. These challenges are further discussed in the State of the System Report (Appendix B):

- More people are driving alone to work in Denver and transit ridership is declining
- Frequent bus service does not reach everyone and access to rail service is limited
- Bus stops with shelters in Denver are limited
- Inefficiencies in the bus system affect the rider experience
- Bicycle and pedestrian access to transit stops and stations is challenging in many areas
- The costs of housing and transit are high in Denver

Denver Moves: Transit is the first step for the City to support the regional and local transit system by identifying local transit improvements, enhancing bicycle and pedestrian access to transit, and identifying important first/last mile solutions.

A CHANGING CITY

As Denver continues to grow, impacts to the transportation system will increase with more vehicles traveling into, out of, and within Denver. In addition to the impacts due to growth, travel behaviors are shifting nationwide, including in Denver:

- Technology is changing the face of transportation and how people connect, live, work, and travel
- The number of older adults is increasing as baby boomers reach retirement and desire to age in place
- Millennials are driving less
- Transportation options influence where people live

Identifying the actions the City, in partnership and coordination with RTD and other community organizations and businesses, can advance to achieve the vision:

- Meet Denver’s mobility, safety, economic, and environmental goals
- Enhance interagency coordination by creating a local transit vision that leverages RTD’s investments in rail and bus and improves the current transit system
- Articulate the City’s role in supporting transit by setting a transit vision for Denver and
Supports sustainable growth.
Denver is growing at an unprecedented rate. Transit supports growth by moving more people within the same right-of-way footprint—accommodating new residents and employees efficiently.

Supports a healthy environment.
Tailpipe emissions are the leading contributor to ozone and other air pollutants. Meeting new air quality standards will be difficult without a reduction in single occupancy vehicles and congestion, as well as a move to alternative fuels.

Attracts talent and makes Denver more competitive.
Quality transit service helps to attract and retain a talented work force.

Makes Denver a better place to visit.
Visitors expect quality public transportation to get around a world-class city.

Boosts the region's economy.
By 2040, Denver will add more than 136,000 jobs.* Transit can help people reach these jobs and expand economic mobility.

Supports accessibility and affordability.
Transit reduces household transportation costs and provides access for residents who are not able or cannot afford to drive, allowing them to access work, shopping, medical appointments, and social activities.

Supports accessibility and affordability.
Transit reduces household transportation costs and provides access for residents who are not able or cannot afford to drive, allowing them to access work, shopping, medical appointments, and social activities.

Contributes to active, healthy lifestyles.
Transit riders walk an average of 19 minutes per day, nearly reaching the Center for Disease Control’s recommendation of 22 minutes a day of moderate aerobic activity.

*Source: DRCOG
What is Denver Moves: Transit?

Denver Moves: Transit is Denver’s first local transit vision and guiding framework that identifies near- and long-term transit system investment and improvement strategies and actions to move more people more efficiently and safely as Denver continues to grow and develop as a city.

Denver Moves: Transit was developed through technical analysis and community input and will be used to guide investment decisions to meet Denver’s current and future mobility needs. The plan recommends transit capital improvements along corridors and at stops and stations, service frequency improvements, safe and accessible connections to transit, and transit-supportive programs and policies.

Denver Moves: Transit Goals

Through community input (see Chapter 2 and Appendix C), feedback from the Denver Moves: Transit Task Force, and with extensive technical analysis, the Denver Moves: Transit goals were developed to align with the overarching Denveright vision and to meet Denver’s mobility needs and priorities. These goals guided the work of the project team and were used to identify corridors for service and capital investments, establish policy and programmatic strategies and actions to support transit improvements, and guide the development of metrics to help track how the plan is implemented.

Denver Moves: Transit Goals

**ENHANCE**
Make transit more appealing by making it **reliable and competitive** with driving, increasing the **frequency** of transit service, enhancing the **passenger experience**, and increasing transit ridership.

**SIMPLIFY**
Make transit easier to use by improving **legibility** and **rider information**, investing in **new technologies**, and expanding **educational transit programs**.

**CONNECT**
Connect people and places to transit by strengthening **regional and neighborhood connections**, integrating with **land use development** patterns envisioned in **Blueprint Denver**, and enhancing **multimodal access and first/final mile connections** to and from transit.

**THRIVE**
Improve community health and access to opportunity by developing a more **equitable** and more **affordable** system for all, improving the **environment**, and promoting **community health**.

**SUSTAIN**
Support a transit system in Denver that will be successful over the long-term by pursuing **sustainable funding** sources, identifying **resources** (staffing, programs, policies, and more) to support the expanding system, and developing an approach to **tracking progress**.

VISION FOR DENVER: TRANSIT AS A FIRST CHOICE

By providing a more convenient, reliable, and connected transit system in Denver that is competitive with driving, transit becomes a first choice of travel for more trips in Denver. Transit improvements also provide higher-quality service to existing transit riders, especially those who rely on transit as their primary mode of travel.
Denver Moves: Transit was developed as part of Denveright, a set of community-driven plans that shape Denver’s future land use, mobility, parks, recreational resources, and more. Community input informed the creation of the Denveright “vision elements” that shaped the Denver Moves: Transit goals.

To create a Denver Moves: Transit plan that reflects the vision, values, and mobility needs of the people who live, work, and play in Denver, the project team gathered community input over 18 months. Feedback from thousands of people around the city—of all ages, abilities, and neighborhoods—provided a clear picture of what transit improvements are most important, both today and in the future. This input shaped the Denver Moves: Transit plan. The project team, in coordination with Denveright, engaged with the community at events, workshops, open houses, and through online surveys. The plan was also informed by the Denver Moves: Transit Task Force, Denveright Think Tank, and Denver Moves: Transit Youth Stakeholder Group.
EXECUTIVE SUMMARY
**Denver Moves: Transit Outreach Milestones**

Analysis alone did not create the *Denver Moves: Transit* goals, strategies, and actions—community input was an important part of identifying the types of transit improvements needed for Denver. The graphic below shows how community input informed the plan. The project team also gathered public input at additional community events in coordination with *Denveright*. Chapter 2 and Appendix C provide details about the engagement activities and key findings, including how this input helped shape the plan goals, identify the most important corridors for transit improvements, and inform the policy and programmatic strategies and actions to support transit capital and service investments.

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**Denver Moves: Transit Outreach Timeline**

- **SUMMER 2016**
  - Shaped development of the *Denveright* vision
  - Shaped development of the *Denver Moves: Transit* goals

- **FALL 2016**
  - Shaped development of the *Denveright* vision
  - Shaped development of the *Denver Moves: Transit* goals

- **WINTER 2017**
  - Confirmed the draft *Denver Moves: Transit* goals
  - Shaped development of the *Denver Moves: Transit* strategies

- **SPRING 2017**
  - Shaped development and prioritization of *Denver Moves: Transit* strategies and corridor improvements
  - Informed prioritization of future projects and programs
  - Confirmed the community vision for transit identified in previous corridor and neighborhood plans/studies

- **SUMMER 2017**
  - Shaped development and prioritization of *Denver Moves: Transit* strategies
  - Informed prioritization of future projects and programs
  - Confirmed early *Denver Moves: Transit* strategies and actions

- **FALL 2017**
  - Major Transit Investment Corridors Pop-up Engagement and Online Survey

- **WINTER 2018**
  - Preliminary Recommendations Open Houses and Online Survey
Key Themes from Community Input

Four key themes emerged from the input received from residents, commuters, and visitors during the plan’s development. These key themes and related findings helped inform the development of the Denver Moves: Transit goals, strategies, and actions. Residents, commuters, and visitors want Denver to have:

**Higher-quality and more reliable and frequent transit**, making transit more competitive with driving and more convenient overall.

**Improved access and connections to transit**, including safe and convenient pedestrian and bicycle facilities to improve access to transit.

**Safer and more comfortable stops and stations**, with amenities at stops and stations such as bus shelters, lighting, and landscaping to improve the overall experience of waiting for the bus or train.

**More accessible and equitable transit** to ensure that people can access, ride, and depend on transit regardless of age, race, income, or physical ability. The cost of riding transit must be affordable for all and competitive with the cost of driving.

**WHAT DOES THE COMMUNITY WANT DENVER MOVES: TRANSIT TO ACCOMPLISH?**

During the first phase of Denver Moves: Transit, members of the community were asked what goals they would like to see Denver Moves: Transit accomplish. The community’s top responses included:

- Help to create a more livable community
- Create great places at stops and stations
- Support economic development and access to jobs
- Improve community health

The community also indicated they wanted the plan to:

- Make it easier to travel between neighborhoods
- Improve walking and biking connections to transit
- Add high-capacity transit
- Make buses faster and more reliable
- Improve connections to existing rail
DENVER’S BIG MOVES: STRATEGIES AND ACTIONS FOR ACHIEVING THE GOALS

To successfully achieve the Denver Moves: Transit goals and support other citywide and regional mobility, economic, and environmental goals, the City and its partners should invest in and improve transit in five key areas. These “Big Moves” (shown on the following page) are supported by strategies and associated implementation, programmatic, and policy actions that are discussed in detail in Chapter 3.

While transit service enhancements and capital investments are a major component of achieving Denver’s transit vision, other actions are needed. The actions described in Denver Moves: Transit will help to ensure a complete transit system in Denver through transit-supportive street design and land use, partnership opportunities, transit service improvements and capital investments, and improvements to multimodal access and connections. The 13 strategies and their associated actions are not presented in a specific order for implementation. Rather, they are proposed to begin in the near-term (1-5 years) or mid-term (6-10 years) but may be adjusted to long-term (11-20 years) initiation to match priorities and resources. Chapter 4 identifies early actions the City, in coordination with partners, is advancing during the next few years. In addition to these actions, the Transit-Friendly Streets Guide (Appendix D) is an important resource to inform Denver’s transit improvements and investments.

Achieving the Denver Moves: Transit goals by implementing the actions listed in Chapter 3 will require coordination with Blueprint Denver, Game Plan, 80x50 Climate Action Plan, Denver Moves: Bicycles, Denver Moves: Pedestrians and Trails, Vision Zero, Green Infrastructure Implementation Strategy, and many other Denver and regional goals, plans, programs, and initiatives.
## Denver’s Big Moves and Strategies

### Implement High-Quality and Reliable Transit

1. Provide high-quality and reliable transit service through implementation of transit capital investments.
2. Design and enhance transit stops and stations to create a comfortable and safe experience for transit riders.
3. Provide priority to transit on High- and Medium-Capacity Transit Corridors to ensure reliable and safe transit service.

### Provide Frequent Service

4. Develop a network of corridors with frequent transit service.

### Improve Access and Connections to Transit

5. Integrate and improve pedestrian and bicycle facilities and amenities that provide access and connections to transit.
6. Support the implementation of Vision Zero through application of safe access and connections to transit.
7. Encourage first and final mile services, programs, and technology to increase options for transit access and connections.
8. Evaluate curb lane management and off-street parking strategies to support multimodal access and connections.

### Build a Sense of Place

10. Promote transit-supportive land use and development.

### Make the Most of our Investments

11. Continue to promote, educate, and encourage the use of transit.
12. Support expansion of affordable fare programs and fare payment technology.
13. Encourage the use of sustainable technology in transit and evaluate and promote the environmental benefits of transit.

Actions associated with each Big Move and strategy are listed in Chapter 3. Successful implementation will require coordination, investments, and participation from partners including local and regional agencies, advocacy and non-profit organizations, employers, and neighborhood organizations.
Implement High-Quality and Reliable Transit Through the Implementation of the Transit Capital Investment Corridors

Denver Moves: Transit identifies 21 Transit Capital Investment Corridors based on technical analysis and community input. These corridors merit significant improvements and make strong connections as well as the highest densities of jobs and households in Denver.

The recommendations for the Transit Capital Investment Corridors are organized into three types, based on level of investment, as shown on the map. These investments support the City’s 20-year growth strategy in Blueprint Denver.

The Regional Coordination Corridors identify where investments in improved transit service and infrastructure could be extended beyond the city limits. RTD and jurisdictions in the RTD region can work together to enhance these regional corridors.

The existing local bus network and first and final mile services, as described in Big Move: Improve Access and Connections to Transit (Chapter 3), will be essential in connecting people to the Frequent Transit Network and Transit Capital Investment Corridors.

For more details about the Transit Capital Investment Corridors, see Chapter 3 and the Transit-Friendly Streets Guide (Appendix D).
The Frequent Transit Network (FTN) is Denver's vision for a network of transit corridors identified for phased implementation of frequent transit service. The FTN is envisioned to provide transit services that are scheduled to arrive more often throughout the day, seven days a week. In 2018, only three bus routes (0, 15, 16) and the combined Southwest (C, D) and Southeast (E, F, H) rail lines meet or are close to meeting the FTN standard.

By 2040, the goal is for 75% of households and 75% of jobs in Denver to be within one-quarter mile of the FTN and one-half mile from an enhanced stop or station.

The existing local bus network and first and final mile services, as described in Big Move: Improve Access and Connections to Transit (Chapter 3), will be essential in connecting people to the Frequent Transit Network and Transit Capital Investment Corridors.

The FTN vision focuses on the bus network within Denver. The City will work with RTD and jurisdictions within the RTD region to explore opportunities to increase frequency on the regional rail network as well.
The City’s Transit Program

To successfully initiate and manage the Denver Moves: Transit actions described in Chapter 3, the City has begun developing a Transit Program to build capacity to implement Denver’s transit priorities. This program creates a guiding framework for the City to more effectively prioritize and advance the planning, design, and delivery of transit capital investments. It also supports the City’s partnership and coordination with RTD to implement transit service improvements to meet Denver’s transit vision and mobility needs.

More personnel and resources dedicated to transit are needed to manage and implement a growing Transit Program for a city of Denver’s size. The Transit Program will be supported by other City departments and resources, including industry experts and consultants, as needed through different project phases and for programmatic and policy action implementation.

The City’s Transit Program is organized into three supporting programs to implement and coordinate the key investments of Denver Moves: Transit:

- Transit Capital Investment Corridors
- Speed and Reliability and Stop and Station Improvements
- Frequent Transit Network

Additionally, Transit Program staff will provide technical input to City projects, participate on RTD project teams, and manage programmatic actions that require initiation by and coordination with partner organizations and agencies.
EXECUTIVE SUMMARY:

Early Actions

Building on the momentum of the transit projects already underway in Denver, such as Colfax BRT and Broadway/Lincoln transit improvements, the City is moving forward with a number of important and highly beneficial early actions during the next few years, as shown on the following page. These early actions focus on building the City’s Transit Program and prioritizing projects, pursuing funding, and implementing transit improvements that have identified funding and resources. These early actions also ensure public and private projects and programs begin incorporating the Denver Moves: Transit goals, strategies, and actions.

Preparing for Mid- and Long-Term Implementation

Transit Capital Investment Corridors have a longer implementation timeline to accommodate the planning, design, and construction of their improvements. As the City’s Transit Program capacity to implement major projects and programmatic actions in parallel grows, Phase 2 and 3 projects will be prioritized as resources are identified. The City’s programmatic approach is intended to be flexible to support adjustments to the phasing and implementation depending on resources and priorities.
**EARLY ACTIONS**

- **Build the City’s capacity to manage and implement the Denver Moves: Transit capital investments** through the development of the City’s Transit Program. The program will also support ongoing coordination with RTD to implement improved transit service.

- **Develop an implementation plan** *(Denver Moves: Transit Phase 2)* that establishes priorities and timelines for High- and Medium-Capacity Transit Corridor implementation.

- **Develop corridor typologies, a stop and station inventory and typologies**, and update the Transit-Friendly Streets Guide.

- **Continue pursuing funding mechanisms** to implement transit infrastructure improvements.

- **Ensure that public and private projects integrate guidelines and actions** from Denver Moves: Transit, including the Transit-Friendly Streets Guide.

- **Work with RTD to develop a phased implementation strategy** for the Frequent Transit Network.

- **Support the implementation of Denver Moves: Pedestrians and Trails and Denver Moves: Bicycles** to improve access and connections to transit.

- **Ensure transit improvements support** the City’s Vision Zero program.

- **Develop a shared-use mobility plan** to identify shared mobility strategies to help meet Denver’s mobility goals and address multimodal facilities at transit stops and stations.

- **Ensure curb lane management** strategies and projects support transit reliability, ridership, access, and connections.

- **Support the implementation of Blueprint Denver**, including encouraging and incentivizing a mix of land uses and transit-supportive densities along the Transit Capital Investment Corridors.

- **Work with other City departments to integrate strategies to understand and mitigate involuntary displacement**, including identifying best practices from other cities and developing a consistent approach to evaluating displacement in planning and implementation of major transit investments.

- **Encourage new development and preservation of affordable housing** along the Transit Capital Investment Corridors and FTN.

- **Support the continued development of the City’s transportation demand management (TDM) program** to include strategies for new private development, capital projects, and established land uses.

- **Continue to support implementation of the RTD Pass Program Working Group (2018) recommendations**, including pass and fare programs for low-income populations, youth, and college students as well as updated EcoPass programs.

- **Begin identifying actions** *(e.g., implementation of first/last mile services and programs)* that will require coordination, investments, or participation from local and regional agencies, advocacy and non-profit organizations, employers, and neighborhood organizations. Begin identifying partnership opportunities to initiate these actions.
COSTS AND FUNDING

*Denver Moves: Transit* establishes Denver’s transit vision, achieved through the phased implementation of near- and long-term transit capital and service improvements and transit-supportive policy and programmatic actions, in coordination with partners. It is a financially unconstrained plan. These investments and actions vary in cost and level of investment, implementation resource needs, and partner roles.

Implementation costs for the *Denver Moves: Transit* actions, to be calculated during future planning phases and projects, will help guide the City’s prioritization and delivery of projects as well as identify resource needs. In addition to the funding and staffing resources provided by the City, participation and investments from partner agencies and organizations will be needed to support implementation. Local, regional, federal, and other partner funding resources can be leveraged to help implement *Denver Moves: Transit*; however, new funding strategies and resources will also be needed.

Transit Capital Investment Corridors Estimated Implementation Costs and Level of Investments

For planning purposes and to help determine resource and funding needs and potential approaches to plan, design, and build the 158 miles of Transit Capital Investment Corridors (see page ES-12), three examples of scalable conceptual cost estimate combinations were developed (see “Transit Capital Investment Corridors Estimated Implementation Costs and Level of Investments” on page ES-19). The cost estimates are shown in 2018 dollars and do not include maintenance and operations costs, which will be identified separately in coordination with RTD. Future corridor studies and design projects, expanding on the *Denver Moves: Transit* guiding framework, will provide a more in-depth evaluation of each corridor including development of detailed cost estimates.

**TRANSIT CAPITAL INVESTMENT CORRIDOR IMPLEMENTATION COST ESTIMATE ASSUMPTIONS**

The conceptual estimated costs in the figure on page ES-19 were informed by the capital cost estimates per mile and mode assumptions shown in Figure 4-3 in Chapter 4. Since capital costs can vary widely depending on the mode, design, and individual needs and character of a corridor, a range of costs is provided for a low, medium, and high level of capital investment. For example, BRT could be implemented in a High-Capacity Transit Corridor with a low to medium level of investment ($20-50 million per mile), while a streetcar would require a higher level of investment ($80 million per mile).
Developing potential combinations of different levels of capital investments helps guide project prioritization and implementation. For example, the left column of the figure on the following page shows that if all of the High-Capacity Transit, Medium-Capacity Transit, and Speed and Reliability Corridors were implemented at the highest level of investment (rail, BRT, and enhanced bus, respectively), the total estimated cost is $5 billion for 158 miles of transit capital investments in Denver. In comparison, the right column shows that implementing 158 miles of transit corridors with the lowest level of investment (BRT, rapid bus, and enhanced bus) for each corridor type would cost an estimated $1 billion.

A build-out year for implementation of the Transit Capital Investment Corridors has not yet been established. As implementation priorities and resources are defined, beginning in Denver Moves: Transit Phase 2, the City will refine the combinations of corridor investments and identify a timeline to implement the Transit Capital Investment Corridors in coordination with other projects and programs. Cost estimate ranges for each of the Transit Capital Investment Corridors are provided in the Transit-Friendly Streets Guide (Appendix D).

Other Costs

- **Service Improvement Costs:** During upcoming Denver Moves: Transit phases, the City will continue to work with RTD to identify the transit service improvements needed to meet Denver’s goals to provide more high-quality, frequent, and reliable service. Since most current RTD bus service in Denver does not meet the City’s FTN vision of providing all-day frequent service—with transit arriving every 15 minutes or less from 6 AM to 10 PM every day—additional funding will be needed to implement the FTN. The City will work with RTD to develop a phased implementation strategy for the FTN, calculate operating and other resource costs (e.g., buses), and estimate potential operating cost savings as transit capital investments are implemented.

- **Maintenance and Operations Costs:** Transit capital and service improvements are critical components of a complete transit system; however, other actions are required to grow and sustain an improved transit system in Denver, including maintenance and operations. As implementation priorities are developed, the City will work with RTD to identify the respective agency roles and determine costs for operations and maintenance of Denver Moves: Transit improvements and investments.

- **Programmatic and Policy Action Costs:** The City will play a key role in advancing a number of the programmatic and policy actions discussed in Chapter 3; however, full implementation of these actions will require coordination, investment, and participation from partners. Most programmatic actions likely will be initiated, funded, and/or managed by private or non-profit organizations. As programmatic action priorities are identified, costs to initiate and manage these actions will be determined by partners or in coordination with the City in a future planning phase.
**EXECUTIVE SUMMARY**

**Transit Capital Investment Corridors Estimated Implementation Costs and Level of Investments**

**Scalable Conceptual Cost Estimate Combinations**

<table>
<thead>
<tr>
<th>Corridor Type</th>
<th>Significant Rail Investment</th>
<th>No Rail Investment Significant Bus Investment</th>
<th>No Rail Investment Low Bus Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Capacity Transit (6 Corridors)</td>
<td>6 Rail</td>
<td>3 Full BRT</td>
<td>6 Moderate</td>
</tr>
<tr>
<td>Medium-Capacity Transit (7 Corridors)</td>
<td>7 Moderate</td>
<td>7 Moderate BRT</td>
<td>7 Low-End BRT</td>
</tr>
<tr>
<td>Speed and Reliability (7 Corridors)</td>
<td>7 High-End BRT</td>
<td>7 Moderate BRT</td>
<td>7 Low-End BRT</td>
</tr>
</tbody>
</table>

**TOTAL COST ESTIMATE**

- $5.0B (158 miles)
- $2.5B (158 miles)
- $1.0B (158 miles)

**Notes:**

a. Cost estimates are shown in 2018 dollars and are for planning purposes only. Estimates do not include maintenance and operations costs; those costs will be determined during a future planning phase in coordination with RTD. The Peoria and Tower Speed and Reliability corridors were not included in these cost estimates - these corridors were identified during the Neighborhood Planning Initiative (NPI) and will be further evaluated during future corridor studies and design projects. High-Capacity Transit Corridors, particularly rail and full BRT, often include placemaking features and streetscape enhancements in addition to the core transit investments. For other types of corridor investments, additional placemaking features and streetscape enhancements are not included in the cost estimates shown, but may be identified through future corridor studies. The graphic illustrates example scalable investment combinations for each type of corridor. As priorities and resources are defined in Denver Moves: Transit Phase 2, the combinations of corridor investments will likely be refined. Future corridor studies and design projects, building on the guidance of Denver Moves: Transit, will provide a more in-depth evaluation of each corridor including defining the transit mode, alignment, and design and developing detailed costs for each corridor.

b. The map on page ES-12 identifies the Transit Capital Investment Corridors. See Chapter 4 for more information about the level of investment and cost assumptions used to calculate the estimates shown above.

c. See Chapter 3 for more information on the range of investments for each corridor type.

d. The Transit-Friendly Streets Guide (Appendix D) provides cost estimates for each of the Transit Capital Investment Corridors. The Guide also describes the various types of transit improvements in more detail.

e. There are 21 capital investment corridors. However, for cost estimation purposes, there are 20 corridors in the above graphic. The Brighton portion of the Brighton/48th/Green Valley Ranch corridor is a Medium-Capacity Transit Corridor, while the remainder (east of Colorado) is a Speed and Reliability Corridor. The Peoria and Tower Speed and Reliability corridors were not included in the above graphic - these corridors were identified during the Neighborhood Planning Initiative (NPI) and will be further evaluated during future corridor studies and design projects.
Funding

Several City transit projects currently underway, in coordination with RTD, are funded through existing City sources such as the Capital Improvement Program (CIP), grants from RTD, and the GO Bond. To implement the recommended capital investments and service improvements needed to achieve the Denver Moves: Transit goals, partnerships with agencies (including RTD) and existing and new funding strategies and sources will be needed. Implementation of the High- and Medium-Capacity Transit Corridors is critical to supporting the city’s 20-year growth strategy identified in Blueprint Denver.

The Denver Moves: Transit plan does not identify specific funding sources for capital improvements (e.g., enhanced stops, transit signal priority, pavement markings, improved pedestrian infrastructure, etc.) or service enhancements (e.g., greater service frequency, longer hours of operation), as those will be identified through other processes and future projects. However, there are a number of local, regional, state, and federal sources the City can leverage to fund the projects and programs included in the plan. Successful implementation of Denver Moves: Transit requires coordination, investments, and the participation of partners, including RTD and other local and regional agencies, advocacy and non-profit organizations, employers, and neighborhood organizations.

Denver’s Comprehensive Plan 2040 Goals and Policies Supporting Funding for Transit

Denver’s Comprehensive Plan 2040 is the vision for Denver—guiding city leaders, institutions, and citizens to shape the city over the next 20 years. Composed of a vision framework and elements, the plan knits together a set of long-term, integrated goals that provide a guide for the future. Denver Moves: Transit benefits from and supports the Comprehensive Plan’s vision and goals, including goals and policies regarding the need for multimodal funding:

Goal: Expand and improve funding options for multimodal infrastructure by:

- Exploring new funding tools that will enable increased investments in mobility projects and services, and
- Continuing to make significant increases in the City’s annual budget allocation for capital investment in mobility and increasing budgets for maintenance and operations.

Policy: Develop a comprehensive funding approach to implementation of Comprehensive Plan 2040.
**EXECUTIVE SUMMARY**

**Increase Transit Commute Trips in Denver**

- **2015 Existing Mode Share**
  - 73% Drive Alone
  - 6% Transit
  - 6% Walk/Bike
  - 15% Other

- **2030 Mode Share Goal**
  - 50% Drive Alone
  - 15% Transit
  - 15% Walk/Bike
  - 20% Other

Source: U.S. Census American Community Survey, 2016 1-Year Estimate

**Access to the Frequent Transit Network**

In **2015**, **25%** of households and **47%** of jobs are within ¼ mile (10-minute average walk) of bus routes that meet the City’s FTN standard and ½ mile of enhanced stops/stations.*

By **2040**, **75%** of households and jobs are within ¼ mile (10-minute average walk) of the FTN and ½ mile from enhanced stops/stations.

Source: Analysis based on population and employment projections from DRCOG, 2015.

* In 2018, only three bus routes (0, 15, 16) and the combined Southwest (C, D) and Southeast (E, F, H) rail lines meet or are close to meeting the FTN standard.

**TRACKING PROGRESS**

The City’s Transit Program, in coordination with partners including RTD and other City departments, will report on Denver Moves: Transit’s progress toward achieving Denver’s transit vision to guide future transit investments. Progress will be tracked using metrics including change in mode share, increases in transit ridership, implementation of corridors, and improvements in transit performance, as illustrated in the examples to the right and others listed in Chapter 4. Some metrics are anticipated to be measured on a project-by-project basis, while others will be measured at a citywide level. Metrics may be created or modified during Denver Moves: Transit Phase 2 and future planning phases as implementation details, such as stop and station typologies, are further defined.
SUPPORTING OTHER CITYWIDE GOALS AND INITIATIVES

Investing in and improving the transit system in Denver will help to support and to achieve many other citywide mobility, economic, and environmental goals and initiatives. The Transit Program will coordinate with and inform other citywide efforts to:

- **Increase transit commute trips and reduce single-occupant commute trips** to support the City’s mobility goals as well as Denver’s 80x50 Climate Action Plan goal to reduce greenhouse gas emissions.

- **Apply safe access and connections to transit** to support Denver’s Vision Zero goal to reduce traffic-related deaths and serious injuries.

- **Implement high-quality and frequent transit investments citywide** to support the 20-year land use vision described in Blueprint Denver and to reinforce the importance of access between transit and housing as defined in Housing an Inclusive Denver.

- **Increase transit service and investments** in Denver to support the Comprehensive Plan 2040 goal of reducing the amount of cost-burdened households.

- **Increase and improve pedestrian and bicycle access and connections to transit** by implementing Denver Moves: Pedestrians and Trails and Denver Moves: Bicycles.
Next Steps

As implementation of the *Denver Moves: Transit* strategies and actions begins, there remains much work to be done. The City’s Transit Program is envisioned to lead many of the next steps, with the support of RTD and other agency and community partners. The community played an important role in shaping *Denver Moves: Transit*, and there are opportunities to stay involved. The next phases of *Denver Moves: Transit* will be connected with ongoing neighborhood planning efforts and corridor studies that offer more avenues for public feedback. The City will continue to work closely with community members to help make transit a first choice of travel for more trips in Denver.