
moving people.

Letter from Mayor John Hickenlooper

Dear Denver Community,

Join us as we embark on an exciting new vision in transportation.

The Denver Strategic Transportation Plan stretches from today's reality to tomorrow's promise of an efficient, safe and sustainable transportation system that reflects our community's values and keeps pace with our diverse travel needs.

This plan was created by the Denver community under the leadership of Denver Public Works, with support from other City agencies. It incorporates vast input from Denver residents and private sector transportation experts. It is an innovative plan that represents a new way of thinking about how we get people where they need to go. It sheds a traditional focus on "car trips" and concentrates instead on "person trips," opening our thinking to a broad range of transportation options.

During the extensive public process that helped shape this plan, we heard our community's strong desire for multimodal solutions to our current and future transportation needs. You asked for solutions that reduce our dependence on cars and our need to continue to widen our roadways, solutions that incorporate rapid transit, bicycles and walking as daily travel options.

The Strategic Transportation Plan delivers these options for every part of our community. It is a plan that will allow all of us to make better transportation choices that support our personal and collective values. It asks something of all of us in exchange for maintaining Denver far into the future as a livable, connected community.

As gasoline prices rise to unprecedented levels, and with uncertainty surrounding future availability of fossil fuels, there is no better time to introduce this innovative plan for meeting Denver's ongoing transportation needs.

Welcome aboard!

Sincerely,

John W. Hickenlooper
Mayor

Letter from Guillermo “Bill” Vidal

Dear Denverite,

I am pleased to present Denver's Strategic Transportation Plan (STP), a road map for transportation policy now and into the future. The STP examines Denver's transportation system against our current and future mobility needs, community objectives and values, and provides a blueprint for future travel in the Mile High City.

As a thriving city at the heart of a growing metropolis, Denver anticipates a growing population, placing much greater demands on our existing transportation system. The STP identifies and prioritizes those needs.

Because Denver is primarily a city of mature neighborhoods and districts, it was important to adopt an innovative approach in exploring how our existing transportation infrastructure — combined with strategic investments in myriad multimodal solutions — will keep Denver moving.

This Strategic Transportation Plan is innovative, indeed. Denver's team of planners and engineers identified 12 travel sheds within the City. These study areas, defined by geographical boundaries, have characteristics and facilities serving similar travel patterns. By analyzing travel sheds rather than merely measuring demand on high-traffic corridors, the STP recognizes the importance of moving people, not just cars.

Key to this innovative analysis is the recognition that mobility and livability depend on multimodal transportation solutions. In other words, a viable urban system must incorporate a variety of options for daily travel: transit, bicycles, walking and automobiles.

This plan addresses the desires of a broad base of community interests to find multimodal solutions to our future transportation demands. The STP outlines those opportunities in each of Denver's 12 travel sheds, providing information for all the strategies and pointing out the physical, operational and behavioral improvements and investments necessary to meet our mobility needs.

Talented, experienced staff at Denver Public Works and other City departments, professional consultants and an engaged public created the STP. I hope you share my appreciation for this progressive analysis on how we can keep Denver moving!

Sincerely,

Guillermo “Bill” Vidal
Manager, Denver Public Works

Acknowledgements

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STP Key City Staff Committee

Budget & Management Office
City Attorney's Office
Community Planning and Development
Denver International Airport
Denver Office of Cultural Affairs
Denver Public Library
Environmental Health
Office of Economic Development
Parks and Recreation
Public Works
Theatres and Arenas

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Vision

A great city is livable for all of its citizens now and in the future.

The STP creates a multimodal transportation system to support a livable, connected and sustainable city.

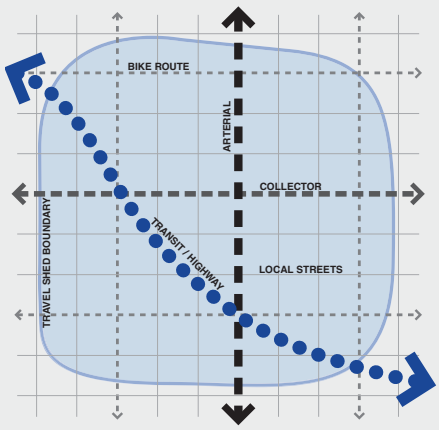
Innovation

A transformative approach to transportation.

Plans for travel sheds, not just travel corridors.

Move people, not just vehicles.

Does not grow Denver's road footprint.



TRAVEL SHEDS

Travel sheds are study areas defined by geographical boundaries that have characteristics and facilities serving similar travel patterns.

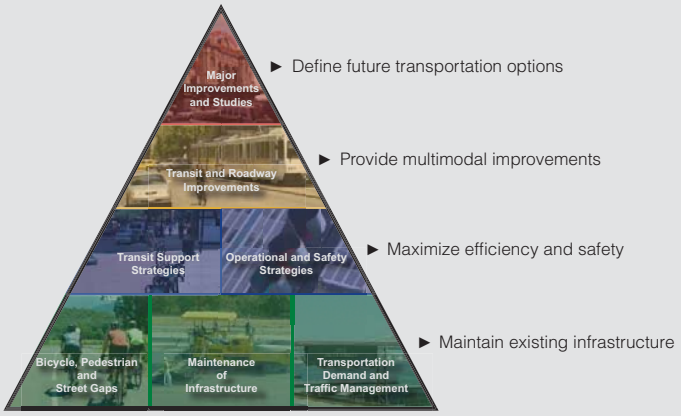
By analyzing travel sheds rather than measuring demand on high traffic corridors, the STP recognizes the importance of moving people, not just vehicles.

Strategy

Maintenance and efficiency are fundamental to our current transportation system, followed by improvements and planning for future transportation.

A balance of behavioral, physical and operational recommendations are included.

The result is a comprehensive plan for each travel shed.



moving people.

PERSON TRIPS

Most transportation planning is based on vehicle travel rather than moving people. The Denver STP uses "person trips."

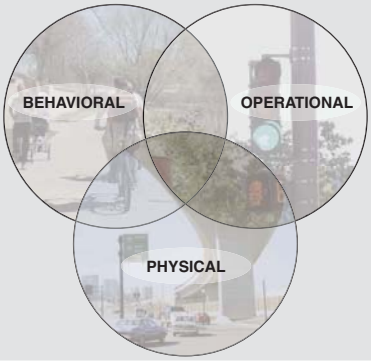
Maximum number of cars on a street

Distribution of people served by these cars

The same number of people on a bus

The same number of people on a pedestrian and bicycle-friendly street

Behavioral, physical and operational factors interact to encourage people to walk, bike and use transit.



The result is a comprehensive list of potential projects and strategies for each travel shed.

✔	Maintenance of infrastructure
✔	Bicycle, pedestrian and street gaps
✔	Transportation demand and traffic management
✔	Transit support strategies
✔	Operational and safety strategies
✔	Transit and roadway improvements
✔	Major improvements and studies

Process

The Strategic Transportation Plan (STP) is a multimodal transportation plan initiated by the Denver Department of Public Works, with support from other city agencies and interested stakeholders, to understand and address the current and future transportation needs of the City and County of Denver. The STP also serves as a unique and innovative approach to identifying future system needs and community values, and provides a method to incorporate them into future transportation decisions and solutions. The STP builds upon several previous city planning efforts, including:

- Denver Comprehensive Plan (2000)
- Bicycle Master Plan Update (2001)
- Blueprint Denver (2002)
- Game Plan (2003)
- Pedestrian Master Plan (2004)
- Downtown Multimodal Access Plan (2006)
- Greenprint Denver (2006)

The ideas and strategies incorporated in Blueprint Denver were adopted as a supplement to Plan 2000 [Denver's Comprehensive Plan 2000]. Several key elements central to the success of Plan 2000 provided the framework for Blueprint Denver, which includes the following vision as related to the transportation system: "… residents will enjoy a greater variety of convenient transportation options and alternative mobility choices." Plan 2000 also lists certain objectives that must be pursued to achieve the vision of success. These objectives include creating a city wide land-use and transportation plan, and supporting the development of a clean, efficient and innovative transportation system.

There are several key concepts that are central to Blueprint Denver's successful implementation. The plan directs growth to Areas of Change and manages and limits change in Areas of Stability. This is accomplished, in part, by improving the function of streets. Multimodal streets accommodate more trips by more people in the same amount of space by improving transit and providing better pedestrian and bicycle facilities. Multimodal streets consider all types of transportation to be equally important. In accordance with Plan 2000, implementing the tools presented in the plan will enhance existing multimodal and intermodal transportation connections while also ensuring that future development will feature a range of diverse and well-integrated transportation choices. The result will be an improved environment for pedestrians, bicyclists and transit users and less reliance on single-occupant vehicles.

Making the Blueprint Denver Vision a Reality

Blueprint Denver (2002) was the first step in planning an integrated land-use and transportation strategy for Denver, and called for an expanded transportation study. The STP implements the transportation component of Blueprint Denver by identifying both short- and long-term needs for the Denver transportation system. The STP determines transportation-related strategies for Denver to accommodate projected regional population growth of 1.3 million people by the year 2030. The STP supports the development of a clean, efficient and innovative transportation system. The STP also identifies transportation improvements to complement and support the regional FasTracks program, a 12-year, public transportation expansion plan for the Denver region, developed in 2004 by the Regional Transportation District (RTD). It identifies the transportation improvements from our other partners: CDOT, DRCOG, and the private sector. The STP considers future growth and transportation system demands, and balances these demands with community-identified needs. The result: a comprehensive approach to investing city resources wisely on the right projects — and the right solutions.

The Strategic Transportation Plan Team

The project team for the STP was led by Denver Public Works staff and included engineering and transportation planning consultants, an advisory committee, a technical committee, and a key staff committee.

Advisory Committee

Mayor John Hickenlooper appointed a wide range of stakeholders with an interest in the outcome of the process to the advisory committee. Committee members included Denver City Council members, regional agency representatives and interested citizens. The role of the advisory committee was to provide advice on policy and political considerations, general plan direction and consistency of the STP with Blueprint Denver, as well as to make recommendations to the Manager of Public Works.

Technical Committee

The technical committee included representatives of the public, city agencies, technical and regional staff. Technical committee members provided advice and direction for the study based on their technical expertise and assisted in guiding the final recommendations.

Key Staff Committee

The key staff committee included representatives from various city departments. Key staff members provided review and feedback on the STP process, and advised the project team of any concurrent interdepartmental goals or other city efforts for consideration.

Public Outreach & Community Process

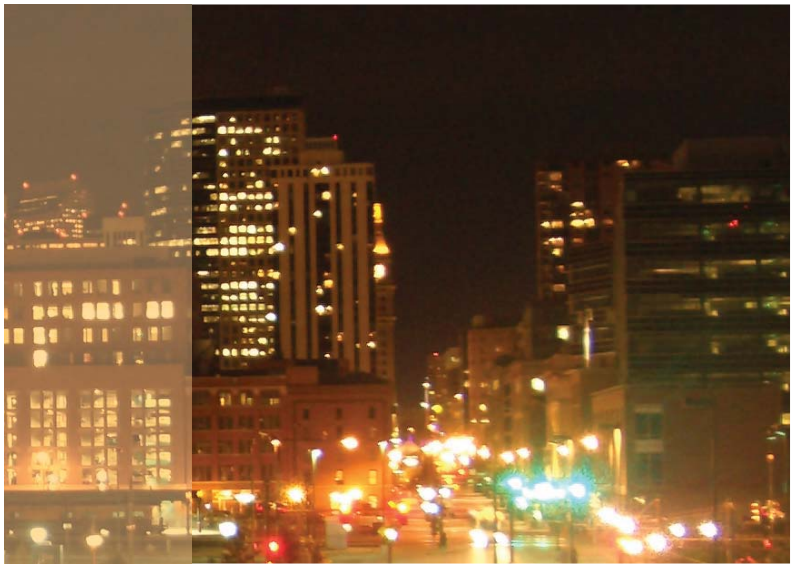
The public was engaged throughout the STP process through the STP website (KeepDenverMoving.com), as well as through a series of town meetings, focus groups, and outreach to community groups. Public input was used to determine the community values that guided the STP process, performance measures, and final recommendations.

KeepDenverMoving.com

The website developed for the STP, KeepDenverMoving.com, was used to share information with the public and solicit public input. The website was updated with reports, presentation materials and minutes from community meetings. The site also provided online forms for community comments, surveys and worksheets, to facilitate discussions about community values and priorities for transportation in Denver.

Town Meetings and Focus Groups

Town meetings, which included presentations and question-and-answer sessions, were held during the STP process. Open focus group discussions also were used during the analysis and revolved around three areas of the city used as pilot locations to determine travel areas of focus. These successful community participation events effectively conveyed citywide transportation needs to the project team. A total of six meetings were held to solicit this important community input.



Challenge

More people are going places — and more often. Each time a person goes somewhere, whether to work, shopping or on an errand, it is counted as a trip. Today in the U.S., the majority of trips are taken as single occupants in a private automobile rather than carpooling, walking, biking or using transit. Of all trips taken in our nation's metro areas, 50% are 3 miles or less and 28% are 1 mile or less. The majority of trips less than 1 mile are taken using a private vehicle rather than another mode of transportation. Yet, when asked:

- 52% of Americans want to walk or bike more;
- 55% of Americans would prefer to drive less and walk more;
- 71% of adults biked or walked to school in 1975. Today, only 17% of children do so; and
- 8% of children were overweight in 1975. Today, 25% of children are overweight.

In addition, the following trends are affecting the individual transportation trip choices that we make:

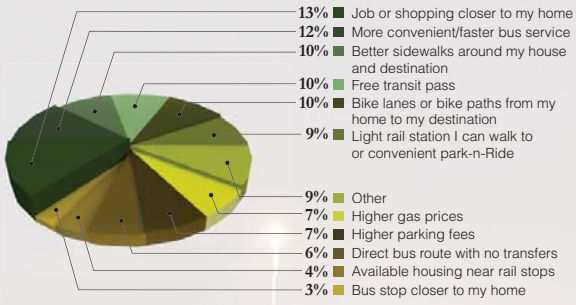
- Increase in fuel costs and the impetus to decrease reliance on fossil fuel sources.
- Need to reduce air pollution and improve public health.
- Initiatives to reduce greenhouse gas emissions.
- Emphasis on sustainable transportation — creating technically and environmentally sound solutions to the problems of urban transportation.

It is also important to note that more than 30% of Americans do not drive because they are elderly, not yet of driving age, are unable to drive due to a disability, or they simply cannot afford to drive. The overall percentage of non-drivers is likely to increase as the Baby Boomer generation ages beyond 65 and as gas prices continue to rise.

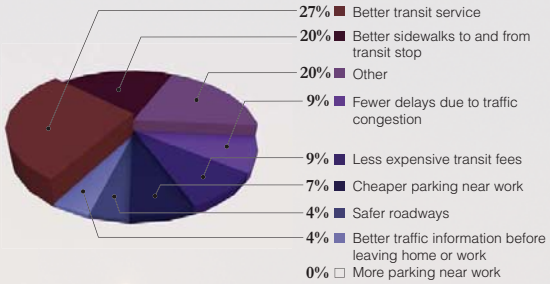
In Denver, the results of the STP public involvement process and a project-related community values survey (2005) were even more telling. For the public outreach efforts, the Community Values Worksheet was developed as a tool to initiate public discussion about what is important to the community and how these values should be applied to decisions about the future transportation system. The outcome was consistent with the national data, indicating that many people would prefer to commute less by automobile and instead use an alternative mode of transportation. Clearly, while many people desire to use alternate modes of transit, there are physical, behavioral and operational impediments to changing their reliance on the automobile. The results also confirmed that providing a more connected transportation system with multimodal options cannot be achieved easily and will require significant planning to accommodate the range of system users and their needs. The end strategy needs to consider many different facets of the transportation system, and ensure that it functions effectively and efficiently.

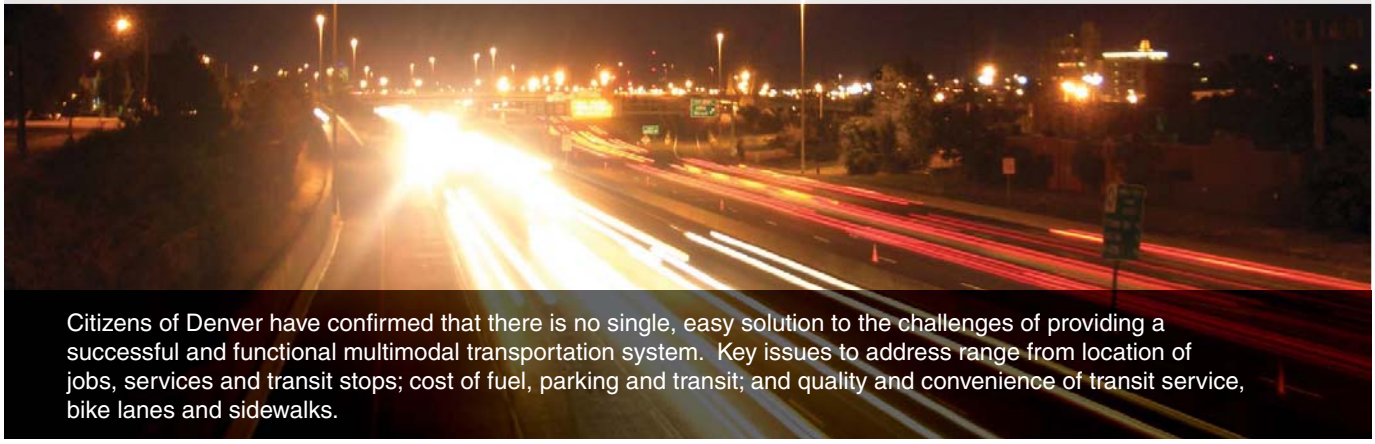
At an STP town meeting, the public was asked:

What would it take to reduce your number of trips taken by private automobile?



If you could improve the transportation conditions of your current commute, what would you suggest?





Citizens of Denver have confirmed that there is no single, easy solution to the challenges of providing a successful and functional multimodal transportation system. Key issues to address range from location of jobs, services and transit stops; cost of fuel, parking and transit; and quality and convenience of transit service, bike lanes and sidewalks.

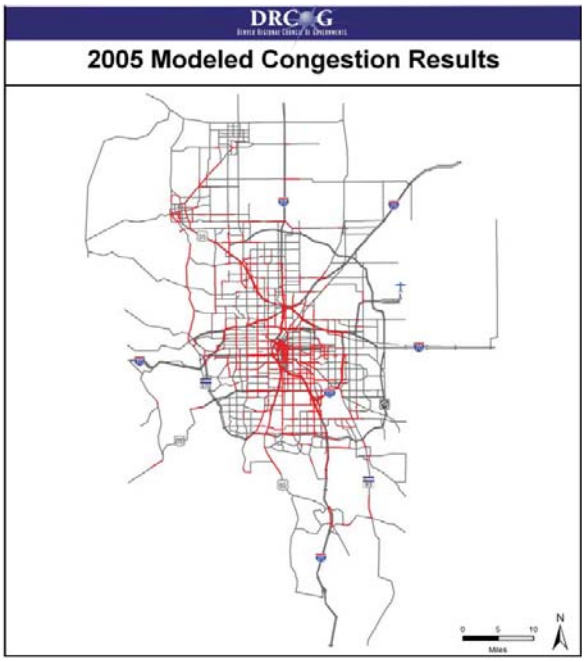
Traffic congestion is increasing. It is characterized by slow speeds, longer trip times and increased delays. Traffic congestion is primarily attributed to the number of vehicles on a road exceeding the capacity of that road to carry vehicles during peak times. Traffic congestion impacts include:

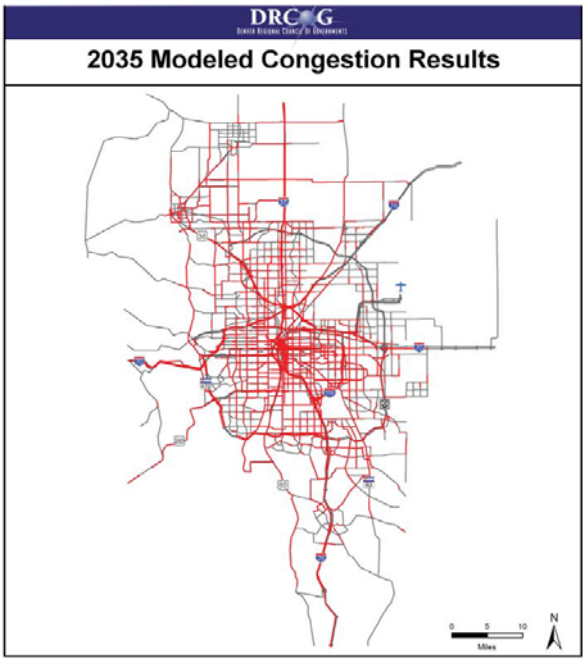
- Increased stress and frustration can lead to road rage, which can increase accidents and reduce the overall health of people.
- Wasted fuel and increased air pollution is a result of increased idling, acceleration and braking.
- Regional economic health is reduced since drive time is a non-productive activity.
- Local businesses are affected with higher shipping costs and decreased reliability to provide timely deliveries and service.
- Personal/leisure time with family and friends is lost due to the time it takes to travel.

Individual vehicle trips continue to grow in the City and County of Denver and throughout the metropolitan area, meaning traffic congestion will continue to grow. Due to continued growth in Denver and the region, all types of trips will grow at a steady rate through the year 2030. Though the total number of trips is growing, the transportation system (primarily the roads on which we drive) is not changing. This means that the width of the roads, and therefore the number of lanes in our existing transportation system, are not increasing significantly. This is especially true when compared to the increase in population and overall increase in the number of trips people are taking. So, while more people — whether in vehicles, on bicycles, using transit or walking — are forecast to be on the streets, the streets are not growing to accommodate the increase. Even with transit improvements through the RTD FasTracks program, vehicle delay is climbing and will increase rapidly after 2015.

The Denver transportation system affects the region as a whole.

The Denver transportation system is a major factor in sustaining the quality of life and economic health of the region. Creating balance in future multimodal investments in the travel system is important. Comparing the 2005 regional congestion map to the 2035 regional congestion map, it is clear that congestion will continue to increase over time, particularly on major thoroughfares accessing the regional hub.





Challenge

The Transportation System Affects You

The Denver transportation system directly and indirectly affects your quality of life, environmental and community health, and the economic vitality for you, your family, your neighborhoods, and your businesses.

Over the past several years, our primary reliance on motor vehicles has resulted in increases in:

► Urban Sprawl

People choose to live farther away from their workplace in order to afford housing but don't always take into consideration the price of transportation as part of their daily, weekly, monthly or annual costs. These costs are not limited to financial costs of gas, insurance, car payments, and parking, but also include personal costs due to travel that takes time away from family, friends and outside interests.

► Traffic Congestion

A transportation system that is well-connected, such as the grid system, allows traffic to be more evenly dispersed. A transportation system that is not well-connected concentrates traffic onto major corridors, even if only a short trip is necessary. Analysis of data shows that most trips on major roadways are for 1 mile or less and often are a result of a lack of connectivity. Because Americans are taking more trips, the total number of miles driven continues to increase, as does our reliance on the automobile.

► Number and Length of Automobile Trips

Separation of land uses leads to numerous trips, even if many are for short distances. For instance, you may do your shopping in one shopping center or two adjacent shopping centers, but because of the layout of the parking lot, the focus of circulation and access on vehicular movement, too often it is easier to get in your car to drive from one location to the next, even if you may only be moving a few hundred feet or, at most, a couple of blocks.

► Consumption of Land for Parking and Roadways

Roadways alone account for an average 30% of any city's land use. Parking adds to the overall percentage of a city's land that is dedicated strictly to automobiles, and in some cities takes up more land area than all other land uses combined.

► Safety Concerns

More vehicles on the road and increasing traffic congestion often lead to frustration and impatience. This frustration and impatience often results in drivers making riskier movements. The situation is complicated by the fact that as Americans, we are all guilty of occasionally driving too fast because we are rushing to work or to pick up the kids, or we are distracted by talking on the phone or performing some other task while driving. The combination of multi-tasking and frustration can lead to increased potential for conflicts.

► Community & Environmental Health Impacts

Air and water quality are negatively impacted due to the burning of fossil fuels. The increases in traffic volume impact the level of noise near major roadways and excessive signage lends to visual clutter and an overall sense of disorganization of our roadways.

► Health Issues (including respiratory illnesses, obesity and mental health)

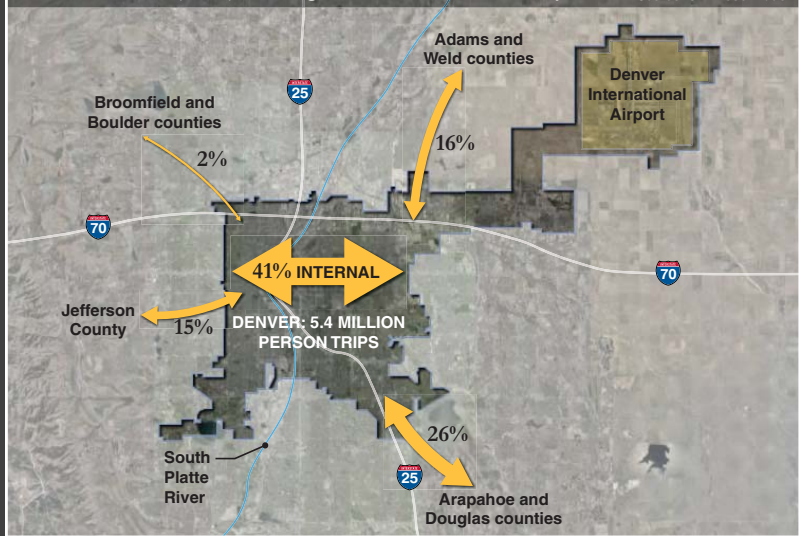
Reliance on automobiles as the predominant mode of transportation has influenced the built environment of American cities. The placement of buildings is often dictated by the ease of access and circulation by automobiles rather than people. Automobile access can affect the width and continuity of sidewalks, placement of parking, relationship of the street and adjacent buildings, and the overall public place that a street should or could be. Although this is less true in older cities, younger cities like Denver have in many ways grown up around the automobile.

Together, community planners and transportation and health professionals are recognizing that transportation and the built environment play a role in the health of our local neighborhoods, communities and cities, as well as individual health. The success of our urban corridors and the overall transportation system affect the

2030 Daily Trip Distribution by County

Of the total 5.4 million predicted daily trips in 2030, 2.2 million (41%) of the trips will stay within the city, and 3.2 million (59%) will begin or end outside the city.

Source: STP 2030 Model



As part of the STP data analysis, daily trips were analyzed to determine origin-destination patterns of Denver trips by county. The figure to the left shows patterns of travel within Denver and the interaction with the surrounding counties for the year 2030. The results show that less than half (41%) of Denver trips remain within the city. The strongest outside interaction with Denver are with Arapahoe and Douglas counties, with more than a quarter of the trips to or from Denver beginning or ending in those counties. Adams and Jefferson counties each have about the same interaction with Denver, with approximately 15%. Relatively, Boulder and Broomfield have minor (2%) interaction with Denver.

economic, environmental, community, and physical health of every citizen as well as the city and the region. This situation is not unique to Denver. Every city in America has streets that are unattractive and, in many instances, unhealthy.

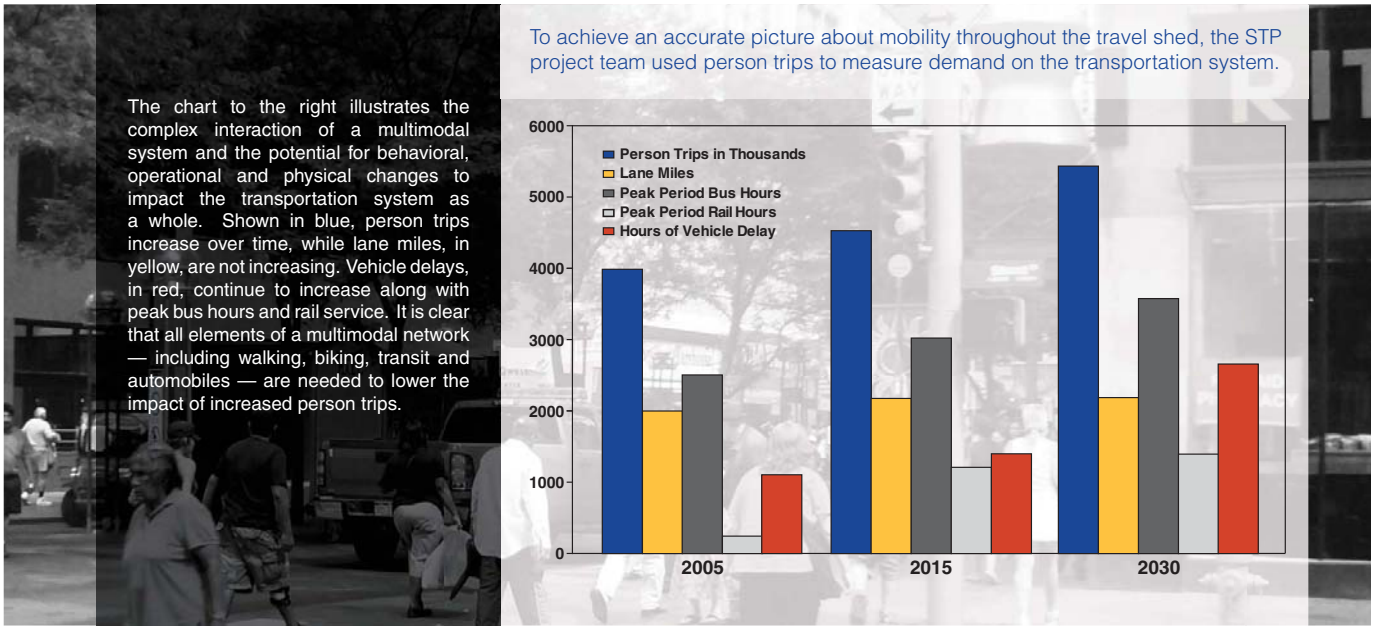
It is becoming more difficult for Americans to maintain a healthy, active lifestyle because in many ways, we have designed activity out of our daily routines in favor of more automated, sedentary lifestyles. One need only pick up the newspaper or magazine to find evidence that Americans are facing alarming increases in obesity and obesity-related diseases such as diabetes. In fact, the Centers for Disease Control indicates that today's generation of children is likely to be the first to have a life expectancy shorter than their parents, the root cause of which can be traced (at least in part) to inactivity.

Simultaneously, many American communities are preparing and planning for the Baby Boomer generation to retire and anticipate increases in the non-driving population, as well as an increase in adults who may need mobility-assisted devices. Combined, the total non-driving population of Americans is currently estimated at more than 30% and is expected to increase as the Baby Boomers age.

Current statistics and projections of health in Denver show that the number of adults with a healthy body weight has been declining since 2003, as has the number of adults who engage in physical activity. One of the factors linked to obesity and physical fitness is the poor condition and lack of connectivity of sidewalks and striped bicycle lanes or designated off-street bicycle paths, particularly in lower-income or high-risk neighborhoods.

► Summary

How Denver as a community chooses to improve its transportation system in the future will impact you and your family. How you and your family use Denver's transportation system also can inform future improvements to the system. In Denver and across America, the demand for efficient, safe and reliable transportation has historically focused on the automobile. As Americans, we indicate in polls and surveys that we want to walk, bike and take transit more often. However, our behavior illustrates a continued preference to drive. Multimodal investments in infrastructure may influence our future behavior, but infrastructure alone cannot change anyone's behavior.



The chart to the right illustrates the complex interaction of a multimodal system and the potential for behavioral, operational and physical changes to impact the transportation system as a whole. Shown in blue, person trips increase over time, while lane miles, in yellow, are not increasing. Vehicle delays, in red, continue to increase along with peak bus hours and rail service. It is clear that all elements of a multimodal network — including walking, biking, transit and automobiles — are needed to lower the impact of increased person trips.

To achieve an accurate picture about mobility throughout the travel shed, the STP project team used person trips to measure demand on the transportation system.

Vision

What We Heard From You: Community Values & Desired Outcomes

Denver is fortunate to be at the heart and soul of the Denver metro area. The city benefits from a concentration of cultural and entertainment venues, a high number and variety of jobs, and a wide range of housing choices. The city is further enhanced by the highest level of existing and future RTD bus and rail transit service, relatively dense development, a widespread grid street system, a network of bicycle and pedestrian trails and routes, and a climate with over 300 sunny days, allowing ample opportunity for walking and biking. There is no doubt that Denver is fortunate and has much to be proud of, but there is still room for improvement.

Through the STP, Denver seeks to build on these assets by investing in a more balanced, multimodal transportation system. Guided by input from the public process and refined by technical experts, this comprehensive and cooperative approach resulted in a plan that combines community-identified needs and desired outcomes with strategies and viable solutions.

Analysis of the community responses indicated that although there is a desire for change to the transportation system among Denver's citizens, there was no clear solution. So the STP team combined the community values and desired outcomes identified during the process. The team used the following five primary areas to guide the STP and future improvements to the transportation system:

A MULTIMODAL Transportation System:
- ► Safe pedestrian connections
- ► Comprehensive bicycle system
- ► Dependable transit options
- ► Efficient and well-maintained infrastructure

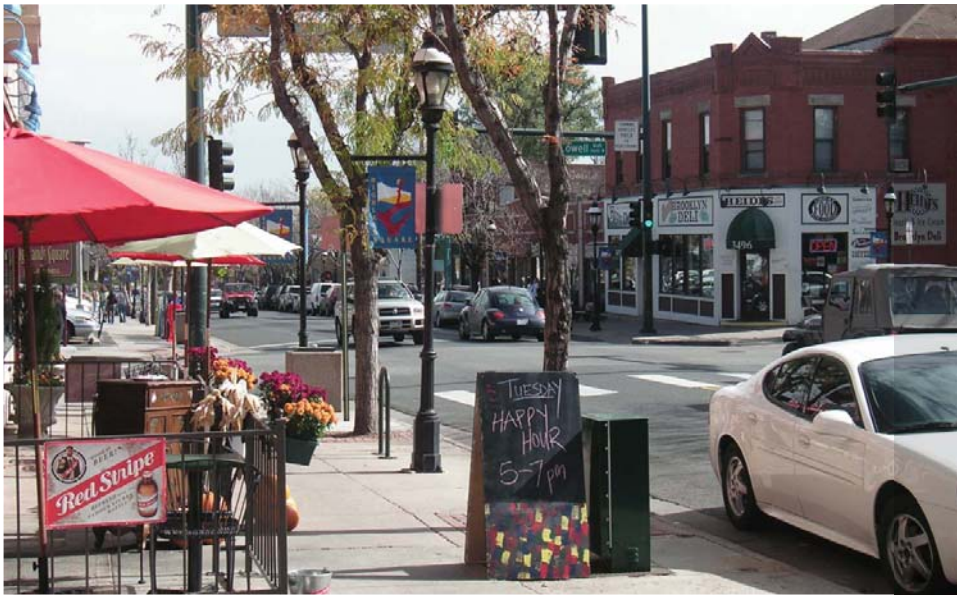
A SAFE, EFFICIENT & RELIABLE Transportation System:
- ► Connected multimodal system
- ► Safe transportation network
- ► Manage congestion
- ► Accessible to all

A CONNECTED Transportation System:
- ► Link land use and transportation
- ► Enhance connections between modes
- ► Offer transportation choices

A GREEN & SUSTAINABLE Transportation System:
- ► Limit roadway footprint
- ► Align with Greenprint Denver
- ► Promote alternative public transit modes
- ► Improve air and water quality
- ► Provide alternatives to fossil fuel

A Transportation System that supports a HEALTHY, LIVABLE COMMUNITY:
- ► Mixed-use streets support great neighborhoods
- ► Provide transportation choices that improve community health and well-being
- ► Promote pedestrian-friendly, mixed-use development
- ► Integrate land use and transportation choices

Together, these five primary areas provide guidance to the city in the consideration and prioritization of future transportation improvements. However, it is important to acknowledge that improvements to the system and the success of the system will depend in large part on the users of the system and the transportation choices they make. Simply put, a successful multimodal transportation system requires both infrastructure and system improvements as well as a willing population to embrace such change.



Innovation

Understanding the challenge and mapping out a solution

In order to plan for a future that is multimodal and supports the community values generated through the public input process, the project team developed an innovative approach that combined the technical modeling and analysis found in a traditional transportation planning effort, with a more comprehensive look at citywide transportation needs and community desires. The STP process included the following key elements to plan for a multimodal future:

- Use of geographical areas called "travel sheds" to provide an analysis of the transportation system that looks at an area with similar travel patterns;
- Measurement of all trips in a travel shed instead of only studying vehicle demand in major corridors;
- Use of travel shed and program improvement recommendations that help establish priorities for transportation funding;
- Use of "person trips" instead of just auto trips to evaluate impacts caused by all types of travel, including bicycles, pedestrians, transit and private and commercial vehicles;
- Measurement of transportation capacity instead of only counting lane miles; and
- Limiting the transportation footprint.

Travel Sheds

The travel shed idea was derived from the theory of a watershed. A watershed is a broad look at the inter connection of streams and tributaries that drain into a larger river basin. A travel shed takes a broad look at the collection of streets and mobility routes that feed into the larger, connected transportation system. The project team identified 12 travel sheds in the City and County of Denver on which to focus the analysis. Travel shed boundaries were based on areas that shared similar characteristics, such as trips that start and finish in the same area and geographic features that create barriers to travel movement. Use of travel sheds also accounted for mobility issues that cause the individual travel sheds to be inter connected.

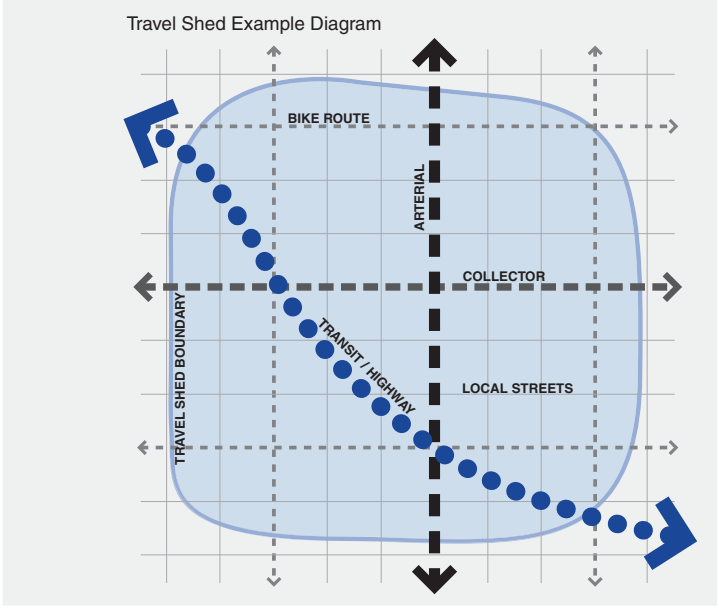
The use of travel sheds allowed for a broader community analysis. The project team could then analyze the effectiveness of the layout of streets, including the grid and arterial system, transit routes, bike routes, and pedestrian throughways, how they connect and how well people move through the system.

It is not the goal of the STP to eliminate automobiles from the transportation system. In order to preserve Denver's neighborhoods and communities and thus its quality of life, Denver as a city and regional leader must focus on increasing the "person trip" capacity of its existing roadways by finding a greater balance among all the modes.

The project team used the concepts of person trip demand and person trip capacity to identify gaps in the transportation system. As can be seen by the graphic below, the person trip capacity of a street is much different for various types of transportation.

Maximum number of cars on a street

Distribution of people served by these cars



Person Trips

Another innovative idea used by the project team was the use of "person trips." Traditionally, transportation planning has focused on automobile or vehicle trips by measuring vehicle miles traveled (VMT). The STP project team determined that person trips is a more accurate measure by which to evaluate the impacts caused by all types of travel, including bicycles, pedestrians, public transit and private and commercial vehicles. The use of person trips allowed the project team to identify the existing travel conditions for all modes in each travel shed and forecast conditions for 2030. The project team analyzed the total number of trips taken by all modes of travel in the corridors within each travel shed and called this "person-trip demand." The demand was then compared to the total person-trip capacity. If the demand for person trips exceeded the capacity, this was highlighted as a "gap" in the transportation system. The gaps found in each travel shed highlighted the areas within the city that need further evaluation to better understand transportation needs and potential solutions. Once the mobility needs were evaluated, recommendations were then categorized into transportation improvement strategies for each travel shed.

The same number of people on a bus

The same number of people on a pedestrian and bicycle-friendly street

Strategy Moving People Forward

In order to achieve the desired multimodal transportation outcomes for Denver, numerous types of improvement strategies are recommended, ranging from annual maintenance to longer-term projects. Maintenance of infrastructure generally consumes the majority of annual funding. All of the improvement strategy categories are divided into the following segments:

- ► Behavioral — Support efforts within the Denver community to reduce travel by single-occupancy vehicles and promote alternative modes of travel such as walking, biking and use of the public transit system.
- ► Operational — Improvement of the function or efficiency of existing facilities in the public right-of-way with minimal changes to the physical footprint and equipment.
- ► Physical — A new facility that can be added to or changed within the public right-of-way.

Strategies for Behavioral Change

Partner with other internal agencies and external organizations to study, educate, support and implement specific approaches to reduce single-occupancy vehicular travel.

Transportation Demand and Traffic Management

Fund promotional and operational programs designed to encourage the use of alternative travel modes, carpooling and other trip-reduction strategies. Those include promotion of existing and future transportation management organizations (TMOs) similar to Transportation Solutions, the existing TMO in the Cherry Creek area.

Strategies for Operational and Physical Changes

Meeting the operational and physical goals of the STP requires a substantial investment in maintaining the operational functions and physical infrastructure of the transportation system. Maintenance of the existing system comprises a significant portion of the overall Denver Public Works budget. In 2007, approximately $12 million of Public Works' $22 million Capital Improvement Program (CIP) was appropriated to annual maintenance programs, which include street repaving, bridge maintenance, traffic-signal reconstruction, and sign replacement. In November 2007, Denver citizens voted to approve the dedication of 2.5 mills in increased property taxes annually to repair infrastructure. This additional mill levy funding is being utilized to augment Public Works' annual capital maintenance budget. Approximately $32 million was appropriated to Public Works' capital maintenance programs in 2008 from this mill levy. Voters also approved the 2007 Better Denver Bond Program, a comprehensive effort to invest in the ongoing maintenance and enhancement of many city facilities, as well as the construction of new city facilities. Both the Better Denver Bond Program and maintenance mill levy initiatives have significantly increased Public Works' ability to address existing maintenance needs, and will be crucial to supporting a multimodal transportation system.

Maintenance of Infrastructure

Maintenance of infrastructure is critical to achieving a long service life of transportation assets, such as signs and signals, pavements, bridges, sidewalks and trails. Investment to maintain these assets is more cost effective than allowing them to deteriorate to the point where full replacement is necessary. The benefit of a properly maintained infrastructure also includes improved traffic flow, a safer travel environment, and less frustration and vehicle-repair costs for the traveling public.

Bicycle, Pedestrian and Street Gaps

Bicycle improvements include filling in "missing links" in the bicycle network, major capital projects such as bicycle grade separations (bridges), and annual staffing and program costs to support efforts to encourage bicycle and pedestrian travel. Pedestrian improvements include critical connections to complete uniform linkages, upgrades to substandard sidewalk sections, and right-of-way acquisition for new sidewalk construction. Street gap projects — such as filling a gap in the street grid across a gulch — will provide a more complete transportation network.

Transit Support Strategies

Key investments include upgrading transit service frequency, expanding hours of operations, expanding transit route structure, enhancing transit stops and passenger amenities, and improving transit operations by implementing strategies such as Transit Signal Priority (TSP), an operational strategy that gives priority to the movement of transit vehicles through traffic signal-controlled intersections.

Operational and Safety Strategies

Recommendations include limited capacity improvements (such as turn lanes), traffic signal upgrades, safety improvements, medians, and pedestrian and bike enhancements that can be implemented within the existing rights-of-way. Primary focus should be directed toward improvements like signal timing changes, signing and pavement markings, Intelligent Transportation Systems, and coordination needed for multimodal connectivity and improved safety.

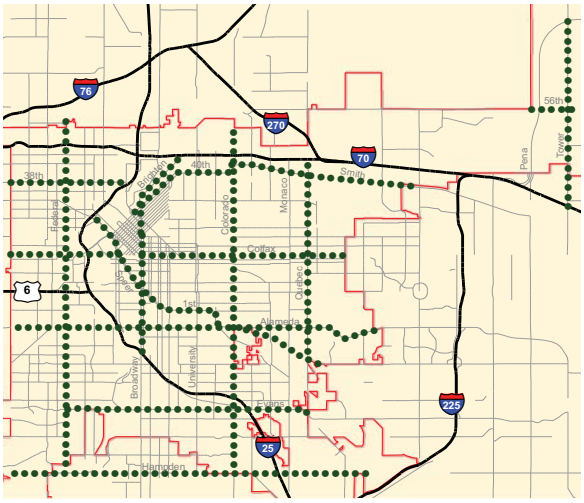
Transit and Roadway Improvements

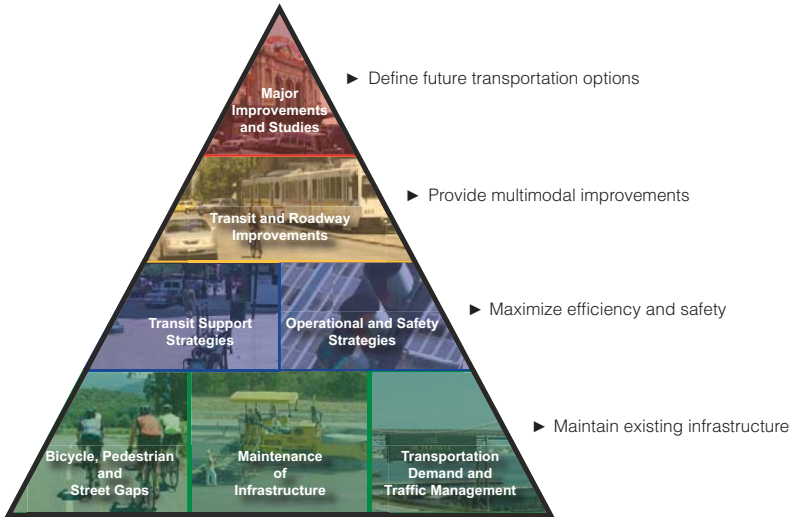
Improvements such as complete intersection- or interchange-reconstruction projects can be implemented to eliminate capacity constraints and improve safety. Improvements such as lane balancing and transit service expansion remove gaps in the system so that congestion is reduced and transit ridership is increased. Access control could be implemented on a roadway by constructing medians that help define where turns are allowed from driveways to improve overall function.

Major Improvements and Studies

The most complex solutions in the travel sheds often involve major investments and right-of-way acquisition. Significant up-front studies are often necessary to determine the most appropriate transportation investments and to achieve consensus among stakeholders. Several projects/studies of this magnitude are already underway, including the I-70 East Environmental Impact Statement (EIS), the 56th Avenue Environmental Assessment (EA), and RTD's FasTracks Program.

Map of Investment Corridors





Setting Priorities to Maximize Our Investment

A key to the plan strategy is the establishment of priorities to maximize the funding available. Maintenance, maximizing efficiency and improving system safety are essential. Providing multimodal improvements help serve the expected increase in person-trip demand without increasing the roadway footprint, and continued planning through major studies defines the future transportation network as a system.

Strategy Policies for Moving People Forward

The Denver STP analysis developed recommendations for Denver's travel future. Strategies and project lists for 2015 and beyond for each travel shed were generated using traditional transportation solutions, but the STP has an emphasis on multimodal solutions that not only help mangage congestion, but also are necessary to keep Denver moving.

Short-Term Steps

Many of the studies and projects identified in the STP are underway as a result of FasTracks and the traditional sources of funding from CDOT, the federal government and the private sector. Thanks to the Better Denver bond package that passed in November 2007, several of the identified projects have or will receive funding to move forward. The Speer-Leetsdale Major Investment Corridor and the process to begin a NEPA-like study of the Quebec Major Investment Corridor also have been started.

Long-Term Steps

For the long-term (2015 and beyond) the City and County of Denver must continue to pursue options to maintain and improve the multimodal transportation system. Implementation of the recommendations in the STP will require action in several areas to solve the long-term transportation issues that may arise. The following steps can be taken now to plan for the future:

Completion of FasTracks

Implementation of the RTD FasTracks program is an integral part of providing more multimodal options throughout the Denver area. Meeting the current construction schedule of FasTracks is the central strategy to absorb the growing demand on the system while managing congestion to levels that exist today.

Leverage Available Non-City Funding

Continue to leverage federal and state matching funds to complete new infrastructure projects and maintain the existing transportation system through capital improvement planning and programming.

Development of New Funding

Be a leader in finding new local and regional solutions to fund transportation improvements and programs. Look at options for transportation infrastructure finance, including the potential for public and private partnerships. As the employment and entertainment center of the metropolitan area, Denver attracts a very high level of traffic from the surrounding region, making transportation a regional issue with the need for regional solutions.

Plan for Moving People Beyond 2015

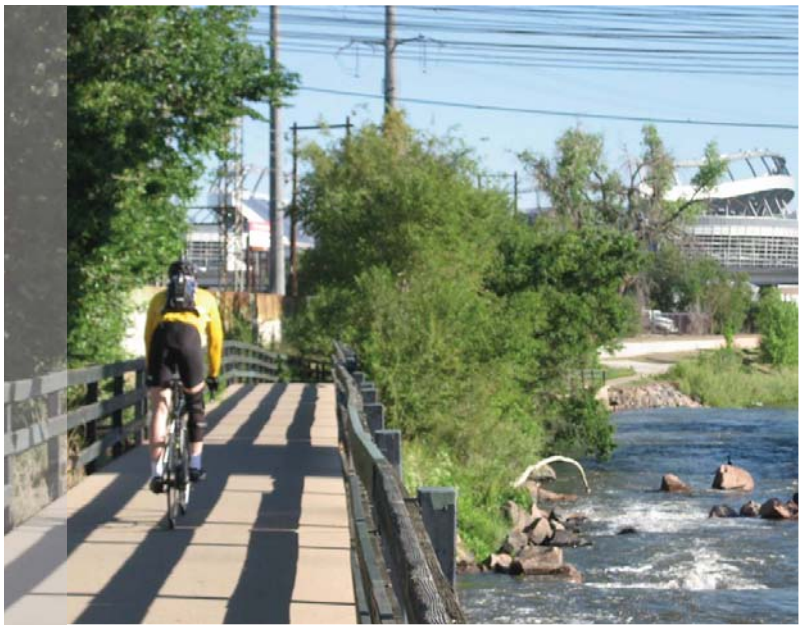
Pursue the further expansion of a comprehensive regional transportation program beyond 2015. Multimodal improvements in regional transportation, especially in the area of transit, will increase the person-trip capacity of our streets. However, beyond FasTracks there are no improvements of this type to follow. Continuing to make physical and operational improvements to alternative modes of transportation will provide travel options that reduce fossil fuel dependency and absorb growing demands. This will continue to be an important strategy to meet our transportation needs beyond 2030.

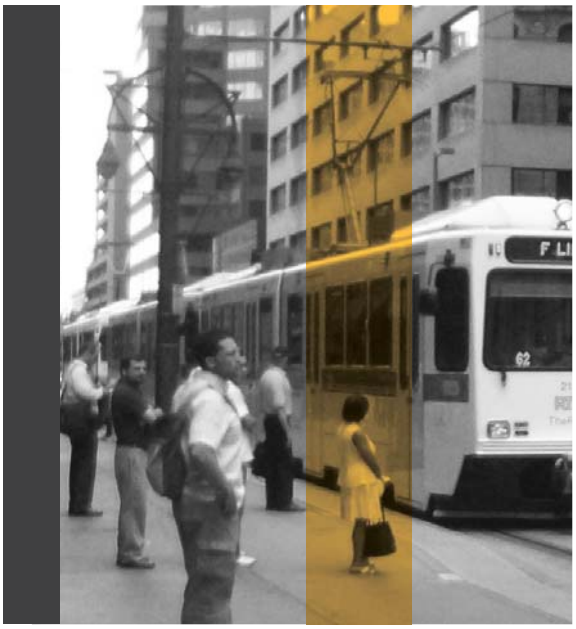
Support "Sustainable Growth" and Urban Infill

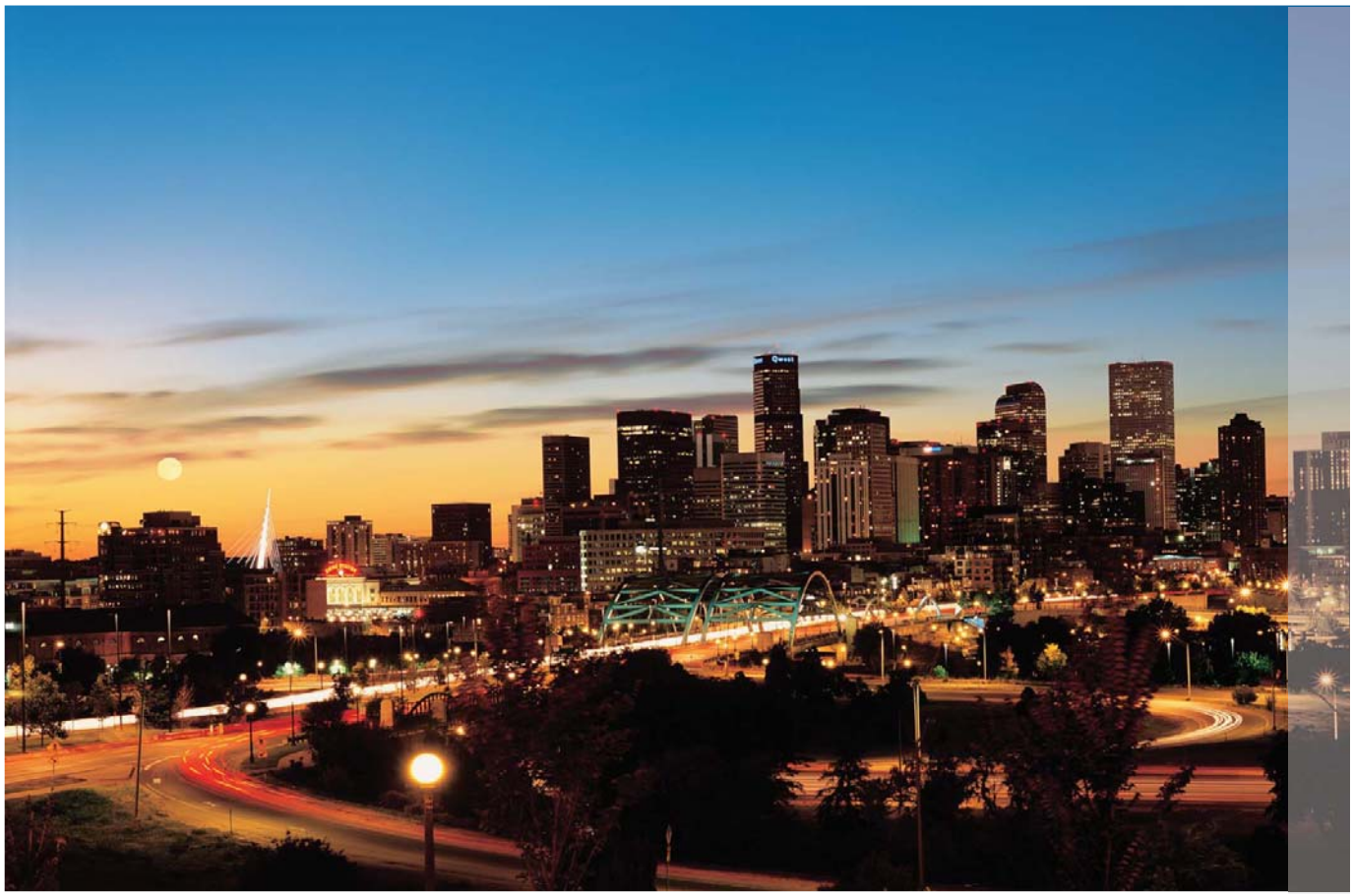
Ensure that the transportation investments support sustainable growth through redevelopment and urban infill, particularly within the Areas of Change as defined by Blueprint Denver as well as in alignment with the goals of sustainable growth as outlined by the mayor's Greenprint Denver goals.

Encourage Shifts in Travel Behavior

Educate the public about transportation options and provide incentives to promote behavioral changes. Infrastructure investments must be maximized to include and encourage use of all modes of transportation, including transit, pedestrian and bicycle options, and increased use of travel demand management such as telecommuting and flexible work schedules. Together, these mobility options and tools will add up to a healthier future for the entire metropolitan area by providing the city and its residents the opportunity to get the most out of the investments made to the transportation system.



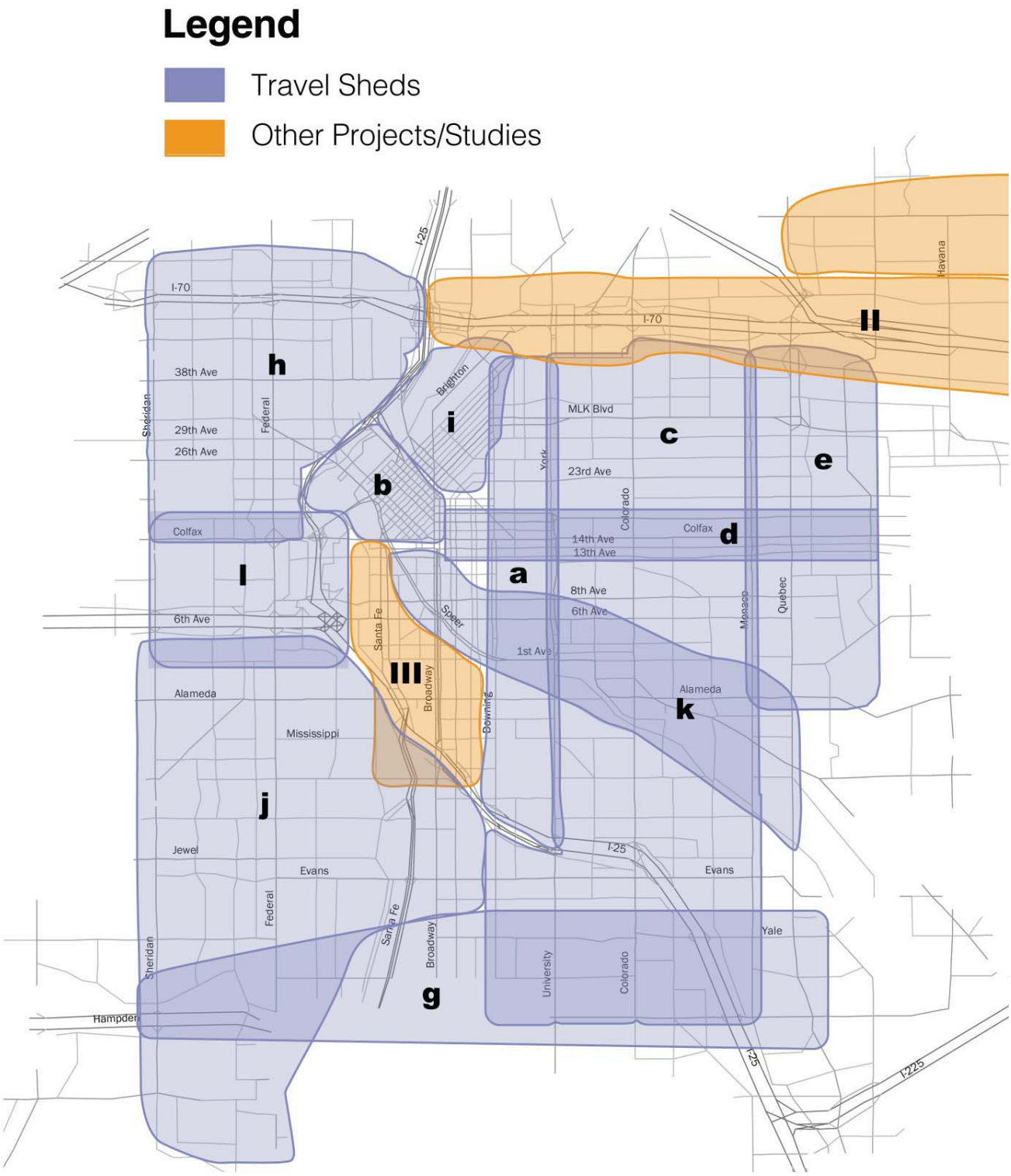


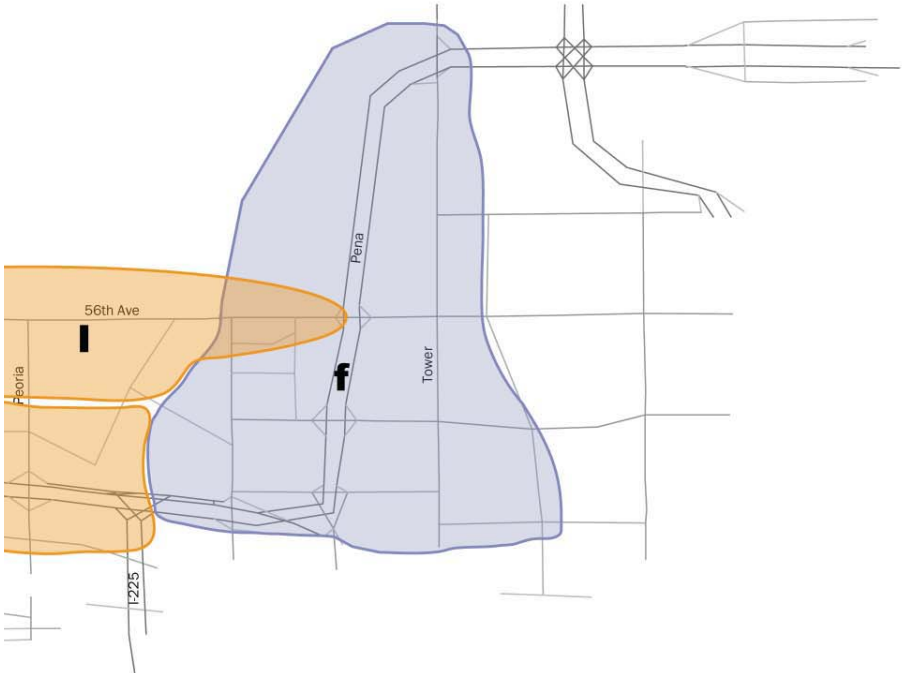


Denver and the metro region are continuing to grow. Projections indicate more than 1.3 million additional people will move to the metro area by 2030.

Strategy Travel Shed Recommendations

The final recommendations for each travel shed are based on an analysis of person-trip demand compared to the person-trip capacity. Projects and strategies were developed, categorized and prioritized based on available funding. The individual and general recommendations are outlined for each travel shed and are based on the community values and technical analysis during the STP planning process.





Travel Sheds

Other Projects / Studies

The following areas of the city are being specifically analyzed by major studies that are underway or recently completed:

I. 56th Avenue EA

II. I-70 EIS

III. Valley Highway EIS / Broadway NEPA

Central Denver Travel Shed

Travel Shed Boundaries

The Central Denver Travel Shed is loosely bordered by Clarkson Street to the west, 40th Avenue to the north, York Street and University Boulevard to the east, and Evans Avenue to the south. Major arterial roads run through the travel shed, including Colfax Avenue, 6th Avenue, 8th Avenue, East 1st Avenue, I-25, East Evans Avenue, Downing Street and University Boulevard. The East Colfax and Speer/Leetsdale Travel Sheds pass through the Central Denver Travel Shed.

Travel Shed Characteristics

All major arterial roads in the Central Denver Travel Shed are city-owned roadways with the exception of I-25 and Colfax Avenue, which are designated state highways and/or part of the interstate system owned by CDOT. The Central Denver Travel Shed is a grid system with many intersects that provide good connectivity for travel. One exception is Washington Park, which limits traffic flowing east-west in the southern portion of the travel shed. Roadways in this area are older and more urban, with narrow lanes and limited control for turning from driveways. The sidewalks on major arterials, although numerous, are in poor condition and are substandard when compared to current design guidelines. Bicycle routes run throughout the travel shed, although signage and connectivity are both inconsistent. Many missing links exist for bike paths in this area, particularly along the Cherry Creek Trail.

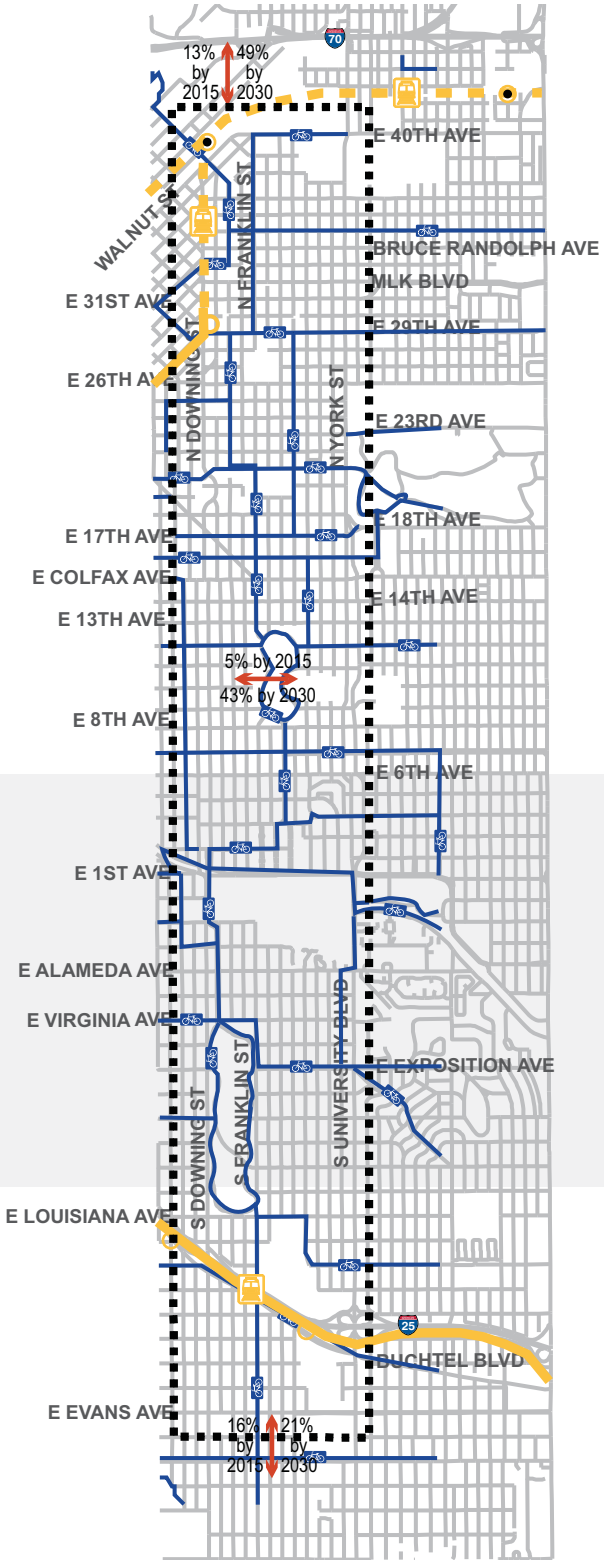
Trips in the Travel Shed

Almost two-thirds of trips through the Central Denver Travel Shed are pass-through, meaning they neither start nor end within the travel shed's boundaries. One-third of trips begin within the travel shed and end outside the shed. Less than 2% of trips both begin and end within the shed's boundaries. The total amount of travel in the Central Denver Travel Shed is expected to increase by more than 33% by the year 2030. In addition, trips that pass through the travel shed are expected to increase at a higher rate than trips that begin within the shed's boundaries.

Travel Shed Improvement Recommendations

Current north-south capacity is anticipated to meet 2030 demand in the north and central portions of the Central Denver Travel Shed. However, in the south end of the shed, north-south demand will exceed capacity. The same is true for future east-west demand despite the recent addition of the Southeast Corridor light rail line. Attention to this travel shed focused on maintenance and improvements to existing infrastructure without adding additional roadway capacity. Enhancing existing transit as well as expanding bicycle and pedestrian access to connect neighborhoods, the Cherry Creek shopping area, and the Southeast Corridor light rail stations will address some of the anticipated capacity issues.

Also refer to overlapping travel sheds: East Colfax, Speer/Leetsdale



Legend

- Study Area Boundry
- Future Transit Station
- Future Transit Line
- Existing Transit Station
- Existing Transit Line
- Investment Corridors
- Bike Routes and Trails
- Forecast Growth in Person Trips to and from Travel Shed
- Blueprint Denver Areas of Change

Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
Periodically update signal progression plans on major arterials		•		✔	✔
Mill levy program (eligible maintenance infrastructure includes 50 total traffic signals, 7 bridges, 272 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)		•	•	✔	✔
State highway surface treatment program		•	•	✔	✔
Bicycle and Pedestrian System Gaps					
Cherry Creek Trail safety upgrades (along 1st Ave. from Downing to University)			•		✔
Bike trail north of Buchtel between University and Franklin			•		✔
Improve bike route designation through City Park		•			✔
Install improved pedestrian crossings or traffic calming in the vicinity of the new I-25 LRT stations		•	•		✔
Enhance bicycle connectivity within travel shed	•	•			✔
Install more visible signage for on-street routes		•			✔
Identify new bike routes to the Southeast Corridor LRT stations		•			✔
Widen sidewalks along 17th Ave.		•	•		✔
Provide countdown pedestrian heads at 17th/18th/York, University/Ohio, Downing/Exposition, Downing/Kentucky, and University/1st Ave. intersection		•			✔
Facilitate the enhancement of pedestrian crossings within the travel shed			•		✔
Pedestrian bridge between the University LRT station and the neighborhoods to the north			•		✔
Prohibit right turns on red in the Cherry Creek and 17th Ave. pedestrian districts		•			✔
Add pedestrian route lighting to improve access to LRT and bus stops			•		✔
Transit Support Strategies					
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Operational and Safety Strategies					
University/Evans intersection improvements			•		✔
Left turn channelization at Alameda/Downing			•		✔
17th/18th/York/Josephine reconstruction (See East Colfax)			•		✔
York/31st/Martin Luther King intersection improvements			•		✔
York/Bruce Randolph intersection improvements			•		✔
Transit and Roadway Improvements					
Realign 19th Ave. through Children's Hospital redevelopment			•		✔
Reconstruct 40th Ave. including curb, gutter and sidewalk from Franklin to York St.			•		✔
Increase transit service between LRT stations and Cherry Creek (FastConnects)		•			✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

Downtown Travel Shed

Travel Shed Boundaries

Interstate 25 loosely borders the Downtown Travel Shed to the northwest. The shed is bordered by Logan Street to the east and 11th Avenue to the south. Several major arterial roads run through this travel shed, including Colfax Avenue, Broadway, Lincoln Street, Park Avenue, Auraria Parkway and Speer Boulevard.

Travel Shed Characteristics

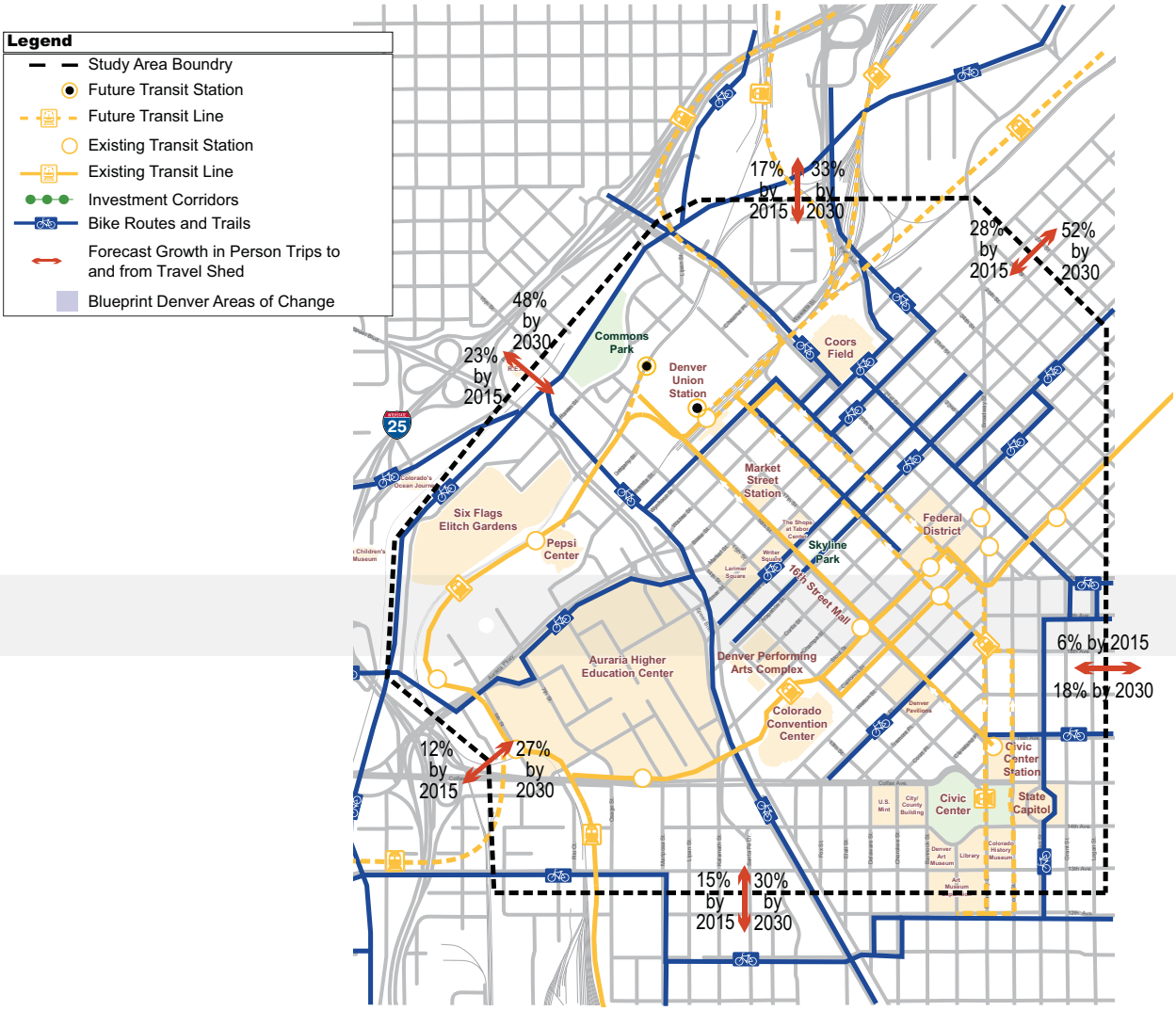
The Downtown Travel Shed is the employment and attraction epicenter of the Denver Metro region. Several barriers define the boundaries of this shed and limit connectivity, including I-25, the Platte River, Speer Boulevard and Cherry Creek. These barriers also limit mobility within the shed since few access points restrict ways to traverse the shed's several waterways and the interstate. Connectivity challenges exist at intersections such as Colfax and Broadway. Adding to the complexity of the travel shed is the fact that the majority of land in the Downtown Travel Shed was designated as an "Area of Change" by the 2002 Blueprint Denver plan.

Trips in the Travel Shed

Traffic flows into the Downtown Travel Shed via Speer Boulevard, Park Avenue, Auraria Parkway, Colfax Avenue and Broadway/Lincoln Streets, as well as existing light rail lines. More than 72% of vehicle and transit trips end in the Downtown Travel Shed. Approximately 7% of existing transit trips pass through the shed. These percentages are expected to remain consistent, but as FasTracks expands, transit stops will multiply. By 2030, an increase of 40% in total trips is expected for the Downtown Travel Shed. Transit trips alone will increase by 94%.

Travel Shed Improvement Recommendations

Due to the drastic increase in transit trips forecast for this travel shed, major improvements in transit are recommended and are already underway. Travel routes in the FasTracks plan will converge at Denver's Union Station, which is within the Downtown Travel Shed's boundaries. Construction of the West, Gold, North Metro, I-70 East, and U.S. 36 transit improvements will significantly increase transit capacity in the downtown area. The construction of these rail lines will require ongoing coordination between RTD, DRCOG, CDOT and the City and County of Denver.



Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
Mill levy program (eligible maintenance infrastructure includes 5 total traffic signals, 23 bridges, 113 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
Downtown signal retiming		•	•	✔	✔
State highway surface treatment program		•	•	✔	✔
Bicycle and Pedestrian System Gaps					
Enhance pedestrian crossings that link adjacent neighborhoods and major attractions to downtown		•			✔
Signal timing changes such as Barnes' Dance, leading pedestrian intervals and countdown signals		•			✔
Design treatments such as high-visibility crosswalk markings, advance stop lines, pavers, colored concrete, additional signage, and sign-mounted flashers		•			✔
Pedestrian crossing enhancements at Platte St. and 16th St.			•		✔
16th Ave./Broadway bicycle connection			•		✔
Bike station at Denver Union Station (DUS)			•		✔
Lawrence pedestrian underpass of southbound Speer Blvd.			•		✔
12th Ave. Cherry Creek ramp			•	✔	
California St. sidewalk/streetscape			•	✔	
14th St. streetscape			•	✔	
Colfax Ave. and 14th Ave. pedestrian improvements (Justice Center)			•	✔	
Continue to build upon the downtown bike lane grid		•			✔
Provide a new connection between the Pepsi Center and Cherry Creek Trail away from Speer/Wewatta		•	•		✔
Connect the Platte River Trail to the Auraria Campus with the West Corridor Project		•	•		✔
Add a bike lane to Water St. (15th St. - 23rd Ave.)		•	•		✔
Construct a new bridge from Elitch Gardens to the Children's Museum			•		✔
Transit Support Strategies					
Downtown circulator service from DUS to Civic Center and Cultural Complex, including street reconstruction and stops		•	•	✔	✔
Convert downtown circulator to fixed guideway					✔
Support existing or potential transportation management associations (TMAs)				✔	✔
16th Street Mall reconstruction				✔	
Welton/Downing corridor stations master plan		•	•	✔	
Civic Center Station Plan	•	•	•		✔
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Operational and Safety Strategies					
Galapago St./Colfax Ave./Welton St. intersection operational improvements		•	•	✔	
All downtown streets should have minimum sidewalk width of 16 feet on both sides		•			✔
One-way circulation system is maintained on numbered streets		•			✔
Four-lane one-way streets are candidates for narrowing		•			✔
Colfax Ave. / Speer Blvd. grade-separated interchange			•		✔
Signal upgrades:					
• Colfax Ave. and Glenarm Pl.		•	•		✔
• 16th St. and Wynkoop St.		•	•	✔	
• 15th, 16th, 17th, 18th streets and Wewatta St.		•	•	✔	
• 16th, 17th, 18th. 20th streets and Chestnut St.		•	•	✔	
• Speer Blvd. and Wewatta St.		•	•		✔
East Colfax Avenue / Grant Avenue intersection improvements			•		✔
Transit and Roadway Improvements					
Central Street promenade: Central Street from 16th St. to 20th St.			•	✔	
Golden Triangle/Central Business District access improvements			•		✔
Larimer St. reconstruction from 15th St. to 17th St.			•	✔	
Reconfigure Colfax Ave./Tremont St./13th St./Delaware St. intersection		•	•	✔	
Broadway median, 20th St. to Blake St.			•		✔
Reconfigure intersections along Broadway at 19th St. and 21st St.			•		✔
Cherry Creek to 15th, Wewatta St. roadway improvements			•		✔
Major Improvements and Studies					
Denver Union Station implementation	•	•	•	✔	
Complete multimodal reconstruction of Broadway/Lincoln (STP Investment Corridor)	•	•	•		✔
Complete multimodal reconstruction of Colfax (STP Investment Corridor)	•	•	•		✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.

Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

East Central Travel Shed

Travel Shed Boundaries

Several streets loosely border the East Central Travel Shed, including South Downing Street, University Boulevard and Broadway to the west; I-70 to the north; Monaco Parkway and Holly Street to the east; and Quincy Avenue to the south. Colorado Boulevard, Colfax Avenue and Evans Avenue are main arterial roads that run through the East Central Shed. The travel shed has three other travel sheds that pass through it: the East Colfax, Speer/Leetsdale and Hampden Travel Sheds. The East Side Travel Shed overlaps the eastern edge.

Travel Shed Characteristics

Colorado Boulevard has been designated as an Investment Corridor to facilitate multimodal north-south connections and to support the vision of Blueprint Denver. Evans Avenue also is a designated Investment Corridor within this travel shed.

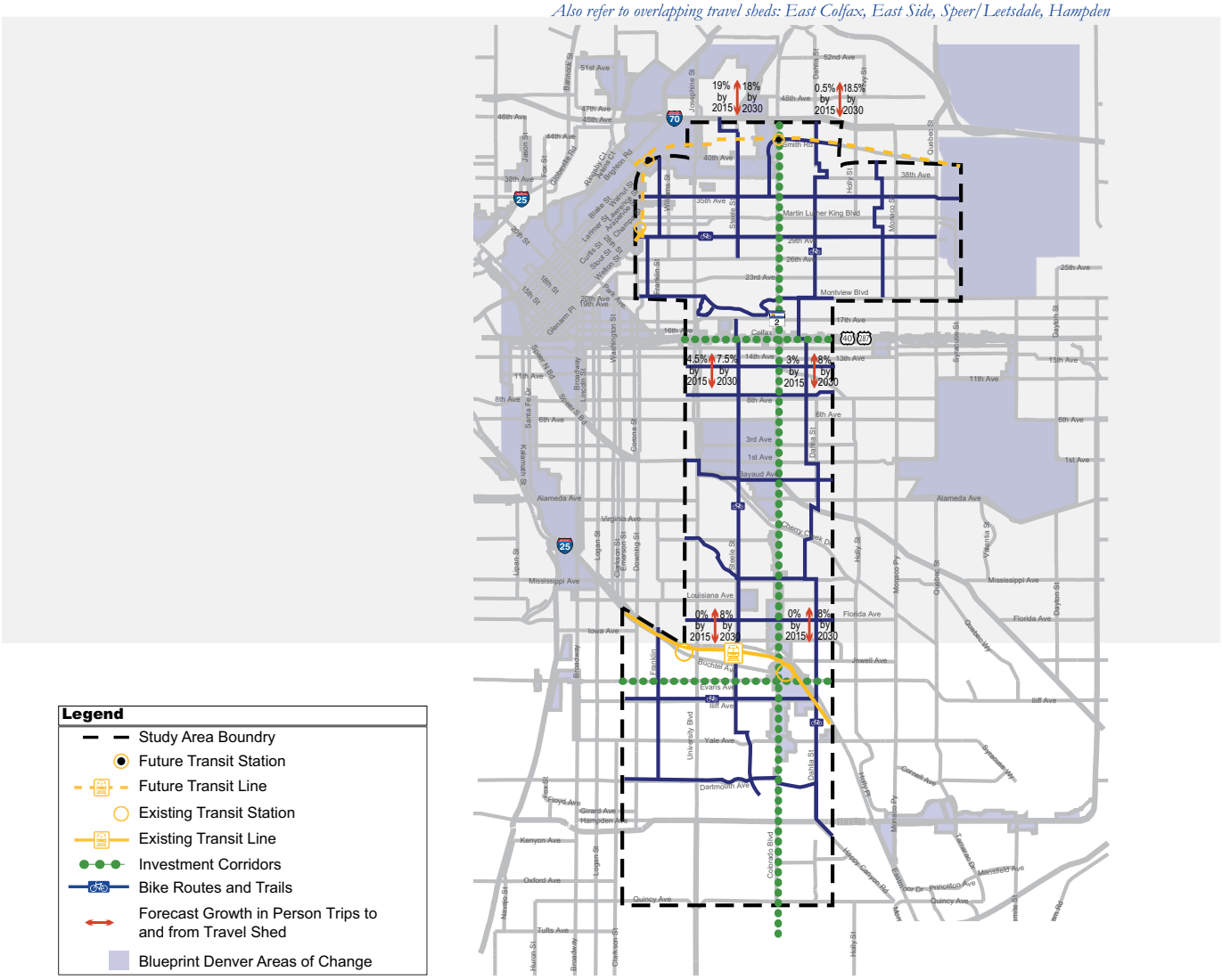
Trips in the Travel Shed

Trips to and from Downtown Denver primarily pass through the northern part of the East Central Travel Shed. In addition, the percentage increase in trips by 2030 is expected to be the highest in the northern section. Trips in the southern end of the travel shed are primarily pass-through trips to adjacent areas. In the eastern part of the travel shed, north-south trips flow from south of the Lowry neighborhood to Stapleton.

Travel Shed Improvement Recommendations

Improvements within this travel shed focus on land use within the two designated improvement corridors. Enhancements to transit and improvements to pedestrian and bicycle connections will address safety and access issues along Colorado Boulevard. The Evans Avenue corridor also needs enhanced transit and attention to traffic operations, freight management and safety issues. In addition, the same improvements are recommended for 17th Avenue, 18th Avenue, York and Josephine streets.

Also refer to overlapping travel sheds: East Colfax, East Side, Speer/Leetsdale, Hampden



Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
State highway surface treatment program			•	✔	✔
Mill levy program (eligible maintenance infrastructure includes 60 total traffic signals, 34 bridges, 1,131 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
Bicycle and Pedestrian System Gaps					
Colorado LRT Station pedestrian bridge			•	✔	
Transit Support Strategies					
Transit enhancements on Colorado Blvd.		•	•		✔
Enhance transit routes to serve as feeders to major transit corridors		•			✔
Transit enhancements on Evans Ave.		•	•		✔
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Operational and Safety Strategies					
Install intelligent transportation systems along Colorado Blvd. from I-70 to Hampden Ave.		•			✔
Transit and Roadway Improvements					
Reconstruct 40th Ave., including curb, gutter and sidewalk, from York St. to Colorado Blvd.			•		✔
Major Improvements and Studies					
Complete multimodal reconstruction of Colorado Blvd. (STP investment corridor)	•	•	•		✔
Complete multimodal reconstruction of Alameda Ave. (STP investment corridor)	•	•	•		✔
Complete multimodal reconstruction of Evans Ave. (STP investment corridor)	•	•	•		✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

East Colfax Travel Shed

Travel Shed Boundaries

Several streets loosely border the East Colfax Travel Shed, including Emerson Street to the west, 23rd Avenue to the north, Alton Street to the east and 9th Avenue to the south. Major arterial roads that run through the shed include Colfax Avenue, Colorado Boulevard, Park Avenue, Monaco Parkway, and Quebec Street. In addition, several paired couplets, meaning sister one-way streets, include 13th and 14th avenues, 17th and 18th avenues and Josephine and York streets. The East Colfax Travel Shed passes through the Central Denver, East Central and East Side travel sheds from west to east.

Travel Shed Characteristics

East Colfax spans eight Denver neighborhoods and touches a broad range of land uses, although surrounding streets are primarily residential.

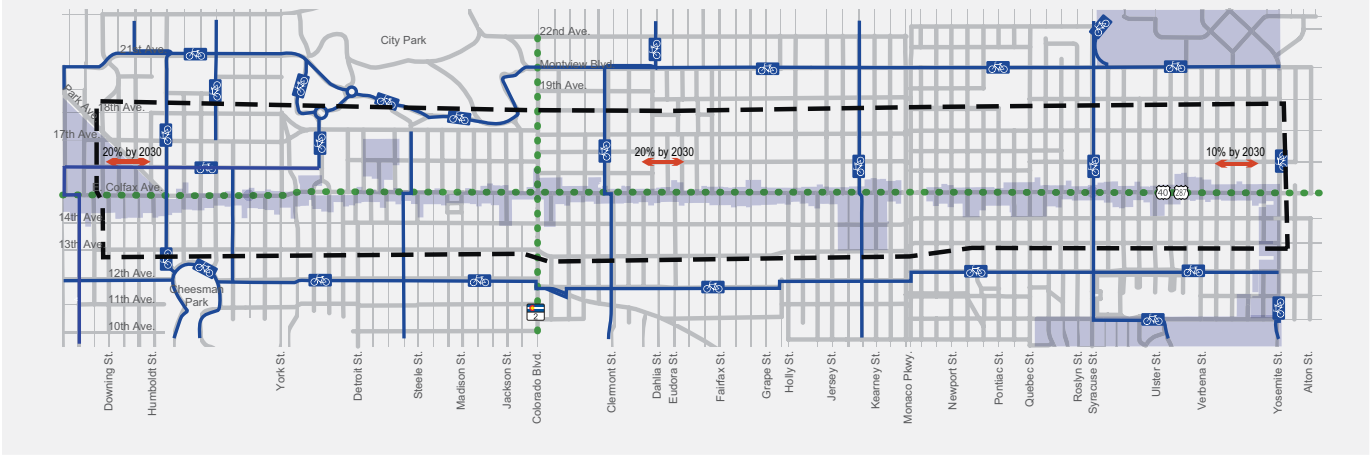
Trips in the Travel Shed

Currently, about 75% of the traffic in the East Colfax Travel Shed are pass-through trips. These pass-through trips are expected to increase slightly to roughly 78% by 2030 due to the continued development of Downtown Denver, including its new residential developments. The East Colfax Travel Shed is also a major transit corridor and has one of the highest levels of ridership in the RTD system.

Travel Shed Improvement Recommendations

Due to a modest projected increase of pass-through trips in the East Colfax Travel Shed, major capacity-related improvements are not recommended for this area. Instead, attention should focus on safety enhancements as well as pedestrian- and bicycle-connectivity improvements. A streetcar is suggested for the corridor as part of the continuing Colfax Avenue revitalization efforts.

Also refer to overlapping travel sheds: Central Denver, East Central, East Side



Legend

- Study Area Boundry
- Future Transit Station
- Future Transit Line
- Existing Transit Station
- Existing Transit Line
- Investment Corridors
- Bike Routes and Trails
- Forecast Growth in Person Trips to and from Travel Shed
- Blueprint Denver Areas of Change

Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
Mill levy program (eligible maintenance infrastructure includes 4 total traffic signals, 2 bridges, 209 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
State highway surface treatment program		•	•	✔	✔
Bicycle and Pedestrian System Gaps					
Widen sidewalks to facilitate pedestrian connectivity and access to transit	•	•			✔
Construct missing sidewalk connection (Colfax Ave. between Gaylord and Vine streets)			•		✔
Transit Support Strategies					
Improve pedestrian connections to surrounding neighborhoods	•	•			✔
Improve transit connections in developing areas	•	•			✔
Implement pedestrian and transit improvements along East Colfax Ave. within the existing BIDS			•	✔	
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Operational and Safety Strategies					
Evaluate and implement more signalized pedestrian crossings		•	•		✔
Mark pedestrian zones, bike facilities and bus stops clearly		•			✔
Target high-accident locations for improvement		•			✔
Improve street lighting			•		✔
Signal upgrade at 13th and Josephine streets		•	•	✔	
Regional signal systems control (traffic signal system improvement project eligible)		•	•		✔
Transit and Roadway Improvements					
17th/18th/York/Josephine reconstruction			•		✔
Upgrade intersection at Colorado Blvd. and 17th Ave.			•		✔
Corridor transit upgrade (like streetcar, bus rapid transit, etc.)		•	•	✔	✔
Bus transit priority/intelligent transportation system improvements (Senate Bill 1 project)		•	•	✔	
Evaluate moving/consolidating access points on Colfax Ave.		•			✔
Major Improvements and Studies					
Colfax Ave. and Colorado Blvd. intersection reconstruction			•		✔
Complete multimodal reconstruction of Colfax Ave. (STP investment corridor)	•	•	•		✔
Complete multimodal reconstruction of Colorado Blvd. (STP investment corridor)	•	•	•		✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

East Side Travel Shed

Travel Shed Boundaries

Several streets loosely border the East Side Travel Shed, including Monaco Parkway to the west, I-70 to the north, Central Park Boulevard/ Yosemite Street to the east and Alameda Avenue to the south. Two major arterial roads run through the East Side Travel Shed, including Colfax Avenue and Quebec Street. The East Colfax Travel Shed passes through the travel shed along Colfax.

Travel Shed Characteristics

Much of the East Side Travel Shed is designated as an "Area of Change" by Blueprint Denver. A significant portion of the travel shed consists of well-established residential neighborhoods, but the area also includes two of Denver's largest redevelopment projects: Stapleton and Lowry.

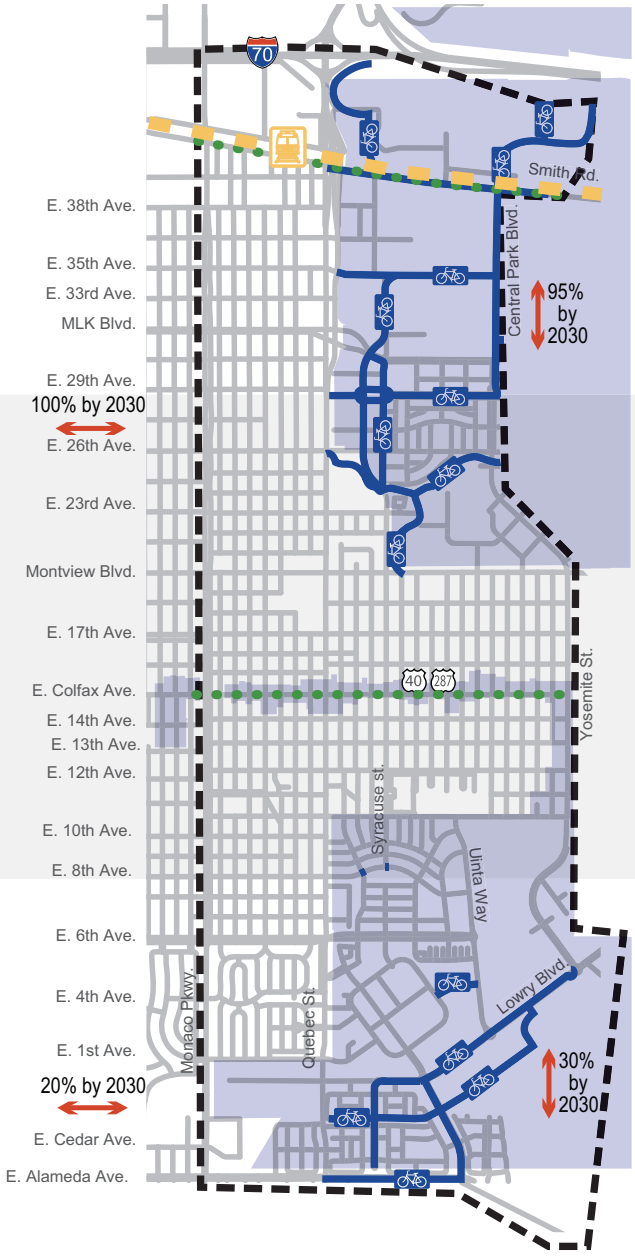
Trips in the Travel Shed

Due to recent and future redevelopment in the area, the East Side Travel Shed will see significant growth in person trips. Traffic demand in some areas of the travel shed will double by 2030.

Travel Shed Improvement Recommendations

Improvements within the East Side Travel Shed focus on maintaining mobility and safety. Attention to bicycle and pedestrian routes and facilities will encourage multimodal transportation within the area and connect people to transit.

Also refer to overlapping travel shed: East Colfax



Legend

- Study Area Boundry
- Future Transit Station
- Future Transit Line
- Existing Transit Station
- Existing Transit Line
- Investment Corridors
- Bike Routes and Trails
- Forecast Growth in Person Trips to and from Travel Shed
- Blueprint Denver Areas of Change

Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
Mill levy program (eligible maintenance infrastructure includes 20 total traffic signals, 8 bridges, 334 miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
State highway surface treatment program		•	•	✔	✔
Bicycle and Pedestrian System Gaps					
Coordinate with Parks and Recreation to develop on- and off-street bike routes			•		✔
Construct missing sidewalk connections as properties redevelop			•		✔
Upgrade pedestrian access on Quebec St. from 6th Ave. to 13th Ave.			•		✔
Upgrade pedestrian access on 23rd Ave. from Monaco Pkwy. to Quebec St.			•		✔
Add Lowry Blvd.-Westerly Creek grade separated trail crossing			•		✔
Transit Support Strategies					
Support existing or potential transportation management associations (TMAs) (Stapleton TMA)	•			✔	✔
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Operational and Safety Strategies					
Quebec intersection improvements at 13th St. and 23rd Ave.			•		✔
Target high accident locations for improvement		•			✔
Improve street lighting			•		✔
Regional signal systems control (traffic signal system improvement project eligible)		•	•		✔
Transit and Roadway Improvements					
Evaluate conversion of two-way roadways to one-way street couplets		•	•		✔
Evaluate addition of new travel lanes within the travel shed		•	•		✔
Evaluate construction of reversible lanes within the travel shed		•	•		✔
Add/improve turn lanes within the travel shed			•		✔
Construct bus pullouts within the travel shed			•		✔
Improve street connectivity between Denver and Aurora in the vicinity of Stapleton			•	✔	
Central Park Blvd. interchange		•	•	✔	
Stapleton road improvements			•		✔
Major Improvements and Studies					
Major Investment Corridor Study of Quebec St. (NEPA) and implementation	•	•	•	✔	✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

Gateway Travel Shed

Travel Shed Boundaries

Several streets loosely border the Gateway Travel Shed, including Chambers Road/Peña Boulevard to the west, Peña Boulevard to the north, Picadilly Road to the east and 40th and 38th avenues to the south. Four major arterial roads run through the shed, including Peña Boulevard, Tower Road, 56th Avenue and E-470.

Travel Shed Characteristics

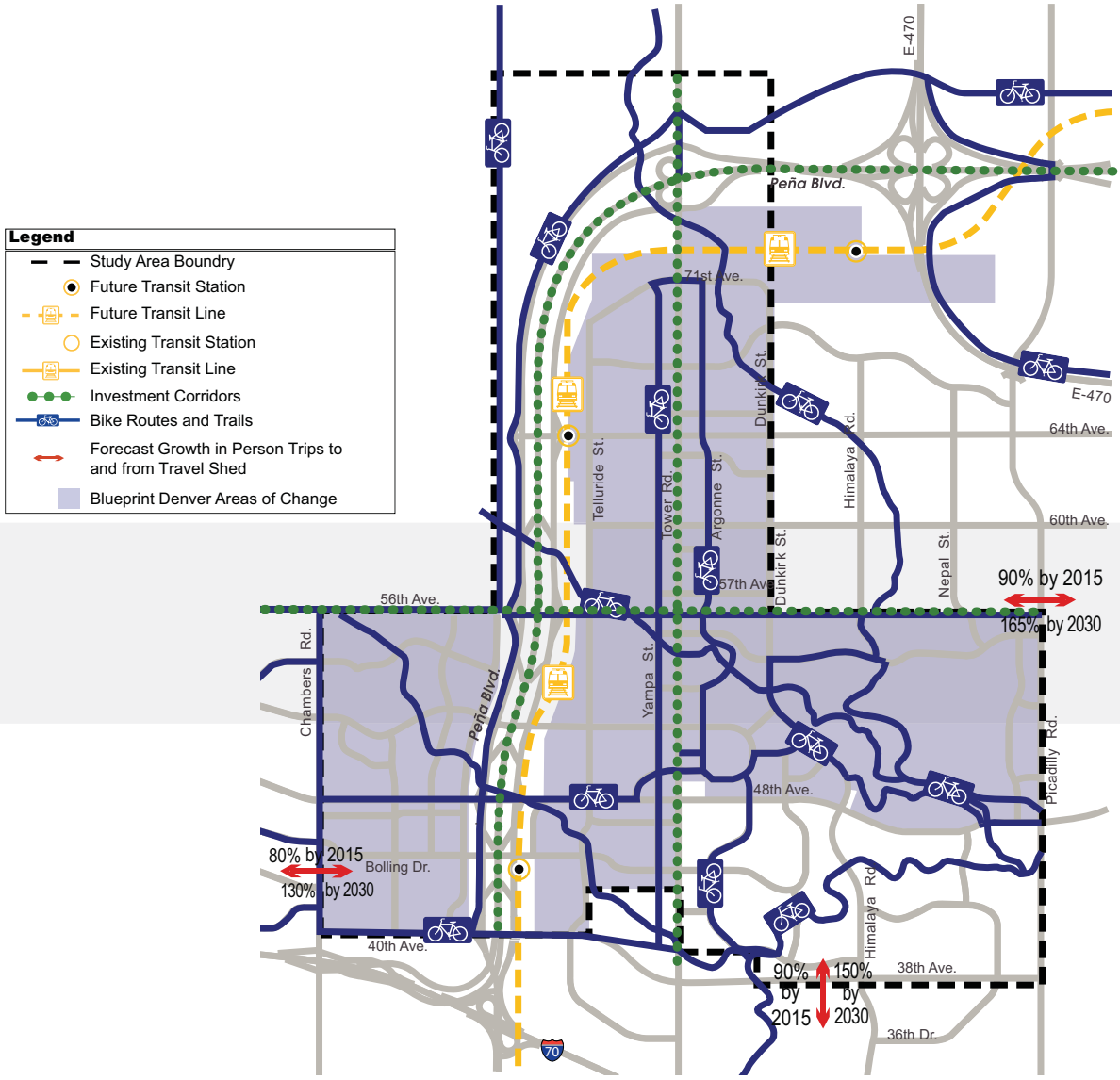
Denver International Airport (DIA) and Rocky Mountain Arsenal National Wildlife Refuge are two important land uses within this area and limit connectivity through the travel shed. Trips to and from DIA generate most of the traffic on Peña Boulevard. Much of the area is a designated "Area of Change" by Blueprint Denver.

Trips in the Travel Shed

The Gateway Travel Shed is expected to be one of the fastest growing sheds in the City and County of Denver. Person trips are expected to triple in some areas by 2030.

Travel Shed Improvement Recommendations

As Peña Boulevard is the main connector to the airport, improvements to the corridor should enhance access and flow to DIA while serving other travel demand in the area. The Gateway Travel Shed will need an integrated multimodal transportation system to meet demand generated by new transit-oriented development — a byproduct of FasTracks and the future East Corridor light rail line. Enhanced bicycle and pedestrian routes with new and widened roads will be required to connect users to transit. In addition, expanded bus systems will support travel demand.



Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
Construct new traffic signals (25 locations)			•		✔
State highway surface treatment program			•	✔	✔
Mill levy program (eligible maintenance infrastructure includes 5 total traffic signals, 5 bridges, 249 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
Bicycle and Pedestrian System Gaps					
Bicycle and pedestrian facilities to support East Corridor rail stations			•		✔
Improve bicycle and pedestrian trail system connecting neighborhoods and communities			•		✔
Transit Support Strategies					
Encourage transit ridership by adding priority treatments (FastConnects)	•	•			✔
Encourage transit-oriented development	•				✔
Enhance transit routes to serve as feeders to major transit corridors	•				✔
Introduce bus routes and bus facilities to support East Corridor commuter rail (FastConnects)		•			✔
Encourage new transit connections and increased bus service to support development	•	•			✔
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Transit and Roadway Improvements					
Identify funding for design and construction of 64th Ave./Pe Peña a Blvd. Station			•		✔
Identify funding for design and construction of 72nd Ave./Dunkirk St. Station			•		✔
Widen 48th Ave. to four lanes with Peña Blvd. right-of-way and construct two traffic signals at the Pena ramps			•	✔	
Widen 56th Ave. to four lanes with PeñaBlvd. right-of-way and construct two traffic signals at the Pena ramps			•	✔	
Intersection improvements at Peoria St. and 56th Ave.			•	✔	
Intersection improvements at Chambers Rd. and 56th Ave.			•	✔	
Reconstruct Tower Rd. bridge over First Creek to accommodate four travel lanes and a bicycle / pedestrian connection under the bridge			•		✔
Construct Telluride St. as two-lane arterial south of 56th Ave. and four-lane arterial north of 56th Ave.			•		✔
Widen Tower Rd. to six-lane arterial			•		✔
Construct Dunkirk St. as two-lane arterial north of current terminus			•		✔
Widen Picadilly Rd. to four-lane arterial north of 48th Ave. and six-lane arterial south of 48th Ave.			•		✔
Widen 38th Ave. to four-lane arterial from Himalaya Rd. to Picadilly Rd.			•		✔
Widen 48th Ave. to six-lane arterial from Chambers Rd. to Picadilly Rd.			•		✔
Widen 56th Ave. environmental assessment implementation (Quebec St. to Havana St.)			•	✔	
Widen 56th Ave. environmental assessment implementation (Havana St. to Peña Blvd.)			•		✔
Construct 64th Ave. as four-lane arterial			•		✔
Construct 71st Ave. as two-lane arterial east of Tower Rd. and four-lane arterial west of Tower Rd.			•		✔
Construct grade-separated crossings of Peña Blvd. at 45th Ave., 51st Ave., and 60th Ave. (refer to 64th station access study for 60th Ave. grade separation)			•		✔
Major Improvements and Studies					
East Corridor FasTracks		•	•	✔	
Peña Blvd. NEPA study		•	•		✔
Complete multimodal reconstruction of 56th Ave. (Investment Corridor)	•	•	•		✔
Complete multimodal reconstruction of Tower Rd. (Investment Corridor)	•	•	•		✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

Hampden Travel Shed

Travel Shed Boundaries

The Hampden Travel Shed is loosely bordered by Sheridan Boulevard to the west, Yale Avenue to the north, South Yosemite Street to the east and Hampden Avenue to the south. Eight major arterials run through this travel shed: South Sheridan Boulevard, South Federal Boulevard, South Santa Fe Drive, South Broadway, South University Boulevard, South Colorado Boulevard, I-25 and Hampden Avenue. The Hampden travel shed crosses through both the East Central and Southwest travel sheds.

Travel Shed Characteristics

The Hampden Travel Shed has been identified as a major investment corridor. The Hampden Avenue corridor has several changes in functional characteristics. Hampden changes from a high-speed freeway to a low-speed arterial that inhibits mobility. Unbalanced travel lanes combined with inefficient and overcapacity intersections limit mobility in the travel shed. Pedestrian facilities are substandard or missing along the corridor. Pedestrian facilities at transit stops, recreational areas, commercial areas and crossing barriers such as Santa Fe Drive are insufficient.

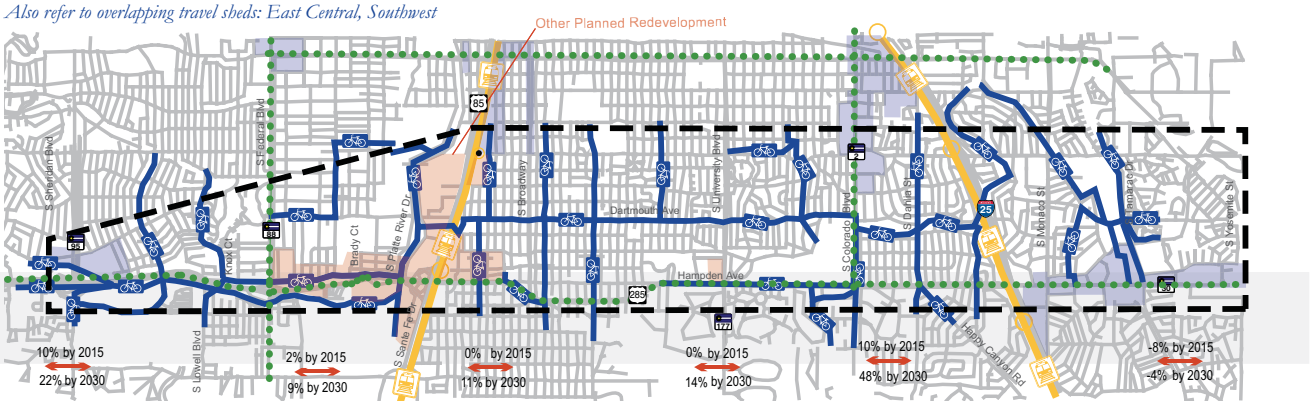
Trips in the Travel Shed

Trips in the Hampden corridor are generally long trips or connect to two major north-south light rail lines, the southeast and southwest corridors. Existing light rail lines have a high number of riders. Person-trip growth rate is modest compared to other areas in the city. However, because the corridor is already congested, the increase in person trips is expected to cause deterioration in regional mobility.

Travel Shed Improvement Recommendations

The Hampden Travel Shed will require significant capital investments to achieve an increase in mobility. Multiple municipalities have jurisdiction over the Hampden corridor, meaning that inter-agency coordination and cooperation will be key in shaping the future of the area. Projected increased use of the southeast and southwest corridor light rail lines means that additional transit feeder/connecting systems will need to be added along with pedestrian and bicycle connections. The improvements to the corridor will be complex and regional.

Also refer to overlapping travel sheds: East Central, Southwest



Legend

- Study Area Boundry
- Future Transit Station
- Future Transit Line
- Existing Transit Station
- Existing Transit Line
- Investment Corridors
- Bike Routes and Trails
- Forecast Growth in Person Trips to and from Travel Shed
- Blueprint Denver Areas of Change

Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
State highway surface treatment program			•	✔	✔
Mill levy program (eligible maintenance infrastructure includes 15 total traffic signals, 20 bridges, 391 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
Bicycle and Pedestrian System Gaps					
Bear Creek Trail Fenton St. to Lamar St.			•	✔	
Bear Creek Trail Construction Phase 2 (Lamar St. to Wadsworth Blvd.)			•	✔	
Bike/pedestrian bridge over Santa Fe Dr. near Englewood Station			•		✔
Hampden Ave. sidewalk gap closures near Southmoor Station, Monaco St. & I-25			•	✔	
Missing sidewalk:					
• Federal Blvd., Amherst Ave. to Hampden Ave.			•		✔
• Sheridan Blvd., just north of Hampden Ave.			•		✔
• Hampden Ave., Wellshire Golf Course frontage			•	✔	
• Hampden Ave. from Colorado Blvd. to Happy Canyon Rd.			•	✔	
• Hampden Ave. from Happy Canyon Rd. to Dayton Way			•		✔
Special crossing on Sheridan Ave.; Quincy Ave. to Hampden Ave.			•		✔
Special crossing on Hampden Ave. at Raleigh St. intersection			•		✔
Pedestrian improvements at Hampden Ave. and Tamarac St. intersection			•		✔
Pedestrian improvements at Hampden Ave. and Monaco Pkwy. intersection			•	✔	
Pedestrian improvements at Hampden Ave. and Tiffany Plaza intersection			•		✔
Pedestrian improvements to connect Yale Station from Highline Canal to west			•	✔	
Transit Support Strategies					
Expand existing parking, build new parking at transit stations (part of TOD planning)			•		✔
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Support existing or potential transportation management associations (TMAs) (Southeast Corridor TMA)	•			✔	✔
Enhance transit routes to serve as feeders to major transit corridors	•				✔
Increase bus service on Hampden Ave. connecting southeast and southwest corridor LRT Rail (FastConnects)		•			✔
Implement FastConnects at Sheridan Blvd., Englewood Station and Southmoor Station		•			✔
Operational and Safety Strategies					
Yosemite St. at Jefferson Ave. intersection turn-lane improvements		•	•		✔
East Yale Way at Colorado Blvd. intersection turn-lane improvements		•	•		✔
Signal upgrades on Hampden Ave. at Akron, Florence, Poplar, Roslyn, Galena, Holly, Sherman and Brady streets		•	•	✔	
Regional signal systems control (traffic signal system improvement project eligible)		•	•		✔
Transit and Roadway Improvements					
Widen Yale Ave. to 4 lanes from Holly St. to Monaco Pkwy.			•		✔
University Blvd. at Harvard St. intersection improvements			•		✔
University Blvd. at Hampden Ave. intersection reconstruction			•		✔
Happy Canyon Rd./Dahlia St. at Hampden Ave. intersection reconstruction			•		✔
Lane balancing on southbound Havana St. from Yale Ave. to Florence St.			•		✔
Widen Hampden to 6 lanes from Colorado Blvd. to I-25			•		✔
Hampden Ave. at Knox Court grade-separated interchange			•		✔
Santa Fe Blvd. at Dartmouth Ave. grade-separated interchange			•		✔
Hampden Ave. at Brady Court grade-separated interchange			•		✔
Develop and implement access control plans on Hampden Ave., Federal Blvd. and Sheridan Blvd.		•	•		✔
Reconstruct interchange at Hampden Ave. and Sheridan Blvd.			•		✔
Reconstruct interchange at Hampden Ave. and Federal Blvd.			•		✔
Replace Broadway bridge at Hampden Ave.			•		✔
Major Improvements and Studies					
Major investment corridor study of Hampden Ave. (NEPA) and Implementation	•	•	•		✔
Complete multimodal reconstruction of Federal Blvd. (STP Investment Corridor)	•	•	•		✔
Complete multimodal reconstruction of Colorado Blvd. (STP Investment Corridor)	•	•	•		✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

Northwest Travel Shed

Travel Shed Boundaries

The Northwest Travel Shed is loosely bordered by Sheridan Boulevard and Harlan Street to the west, 52nd Avenue to the north, I-25 to the east and Colfax Avenue to the south. Five major arterial roads run through this travel shed, including I-70, Federal Boulevard, Colfax Avenue and Speer Boulevard.

Travel Shed Characteristics

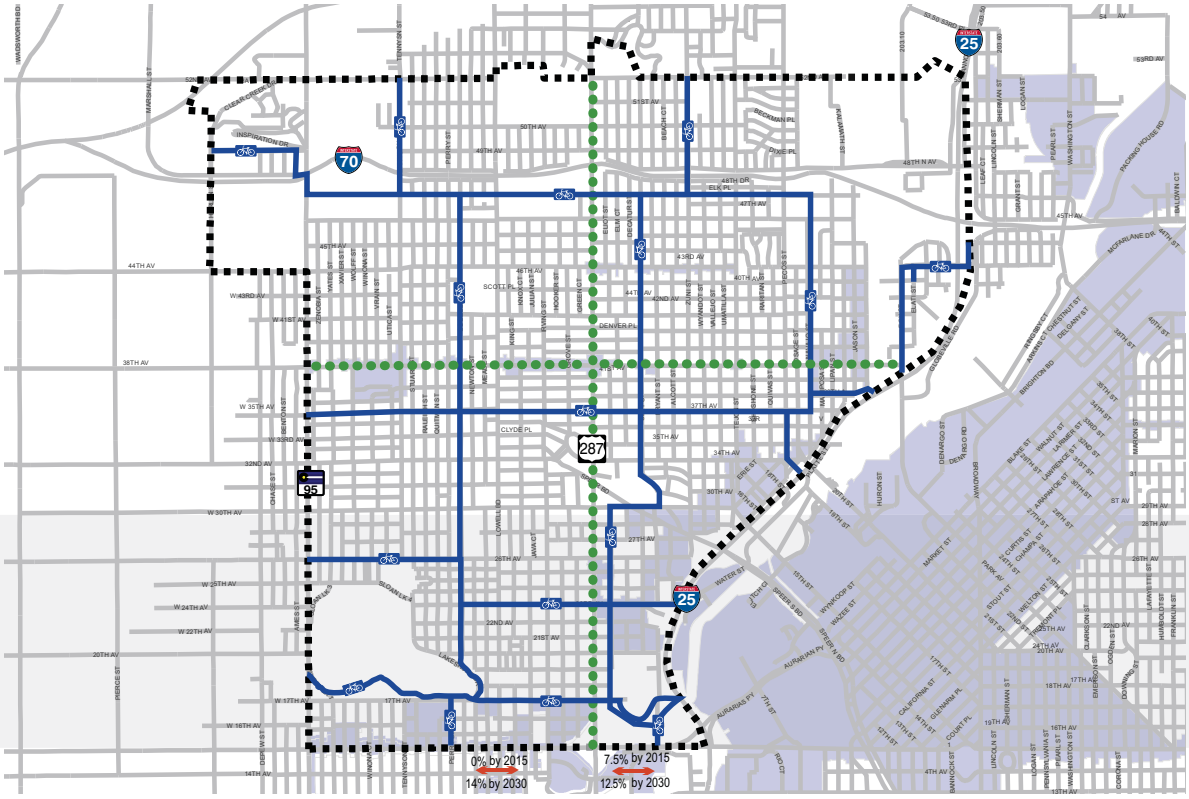
Interstate 70 and I-25 serve as barriers to connectivity in the Northwest Travel Shed. Federal and Sheridan boulevards are key north-south corridors, while 32nd Street, 38th Street and Speer Boulevard provide connections to I-25 and Downtown Denver. The travel shed includes a large percentage of residential areas that value the walkability of their neighborhoods. Federal Boulevard, a major transit corridor in the travel shed, is designated as a commercial corridor in Blueprint Denver and serves to accommodate travel resulting from downtown's special events. Blueprint Denver designates much of this travel shed as an "Area of Stability," although isolated "Areas of Change" exist.

Trips in the Travel Shed

Trips to and from Downtown Denver characterize most of the traffic in the Northwest Travel Shed. Other trip patterns include trips to the East Colfax Corridor, the Southwest Travel Shed and trips south toward West Colfax and 6th Avenue. Growth in person trips by the year 2030 is modest compared to other travel shed study areas.

Travel Shed Improvement Recommendations

Pedestrian-oriented improvements are a focus within this travel shed. Improved and expanded transit routes along 32nd and 38th streets as well as Speer and Federal boulevards will serve the increased travel demands in this area. Investments to Federal Boulevard should focus on transit, pedestrian amenities, safety improvements and access-control elements. Bikeways and bike facilities also should be included as this travel shed is redeveloped.



Legend

- Study Area Boundry
- Future Transit Station
- Future Transit Line
- Existing Transit Station
- Existing Transit Line
- Investment Corridors
- Bike Routes and Trails
- Forecast Growth in Person Trips to and from Travel Shed
- Blueprint Denver Areas of Change

Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
State highway surface treatment program			•	✔	✔
Mill levy program (eligible maintenance infrastructure includes 50 total traffic signals, 43 bridges, 471 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
Bicycle and Pedestrian System Gaps					
Construct missing sidewalk connections (Sheridan Blvd. from 17th to 25th streets)			•		✔
Sidewalk and pedestrian amenity improvements along Federal Blvd.			•		✔
Bicycle commuter marketing campaign	•				✔
Clear Creek bike trail adjacent to 48th Ave.			•		✔
Denver portion of grade separation of 52nd Ave. at Clear Creek			•		✔
Add bike lanes on 16th St. north of Highlands pedestrian bridge		•			✔
43rd Ave. bridge across BNSF line			•		✔
Inca St. bike/pedestrian bridge over 38th Ave. underpass: Inca St. alignment		•	•	✔	
Sidewalk and pedestrian amenities on Tennyson St. between 38th and 44th streets			•	✔	
Transit Support Strategies					
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Transit enhancements on 38th Ave.		•	•		✔
Transit enhancements on Federal Blvd.		•	•		✔
Transit enhancements on 32nd Ave./Speer Blvd.		•	•		✔
Complete a transit station study for the RTD Gold Line stop in Denver		•	•	✔	
Operational and Safety Strategies					
Safety improvements at 38th Ave. and Federal Blvd.			•		✔
Safety improvements at 32nd Ave. and Speer Blvd.			•		✔
Signal upgrades on Sheridan Blvd. at 26th St.		•	•	✔	
Signal upgrades on Federal Blvd. at 44th St.		•	•	✔	
Add a traffic signal at Lakeside Amusement Park (on Sheridan Blvd.)		•	•		✔
Add ITS along Federal Blvd. from Colfax Ave. to Speer Blvd.		•			✔
Add VMS at Invesco Field access points		•			✔
Enhance incident management routes for 6th Ave. using ITS		•			✔
Transit and Roadway Improvements					
Widen Pecos St. from I-70 to 52nd St.			•		
38th Ave. and Sheridan Blvd. intersection improvements			•		✔
38th Ave. underpass enhancements			•	✔	
Sheridan Blvd. at Colfax Ave. intersection improvements			•		✔
Major Improvements and Studies					
Complete multimodal reconstruction of Federal Blvd. (STP investment corridor)	•	•	•	✔	✔
Northwest Rail FasTracks	•	•	•	✔	
U.S. 36 Bus Rapid Transit FasTracks	•	•	•	✔	
Gold Line FasTracks	•	•	•	✔	
Complete multimodal reconstruction of 38th Ave. (STP investment corridor)	•	•	•		✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

River North Travel Shed

Travel Shed Boundaries

The River North Travel Shed is loosely bordered by I-25 to the west; I-70 to the north; Josephine, Williams and Downing streets to the east; Park Avenue to the southwest; and Welton Street to the southeast. Four major arterial roads run through this travel shed, including I-25, I-70, Park Avenue and Brighton Boulevard/Broadway.

Travel Shed Characteristics

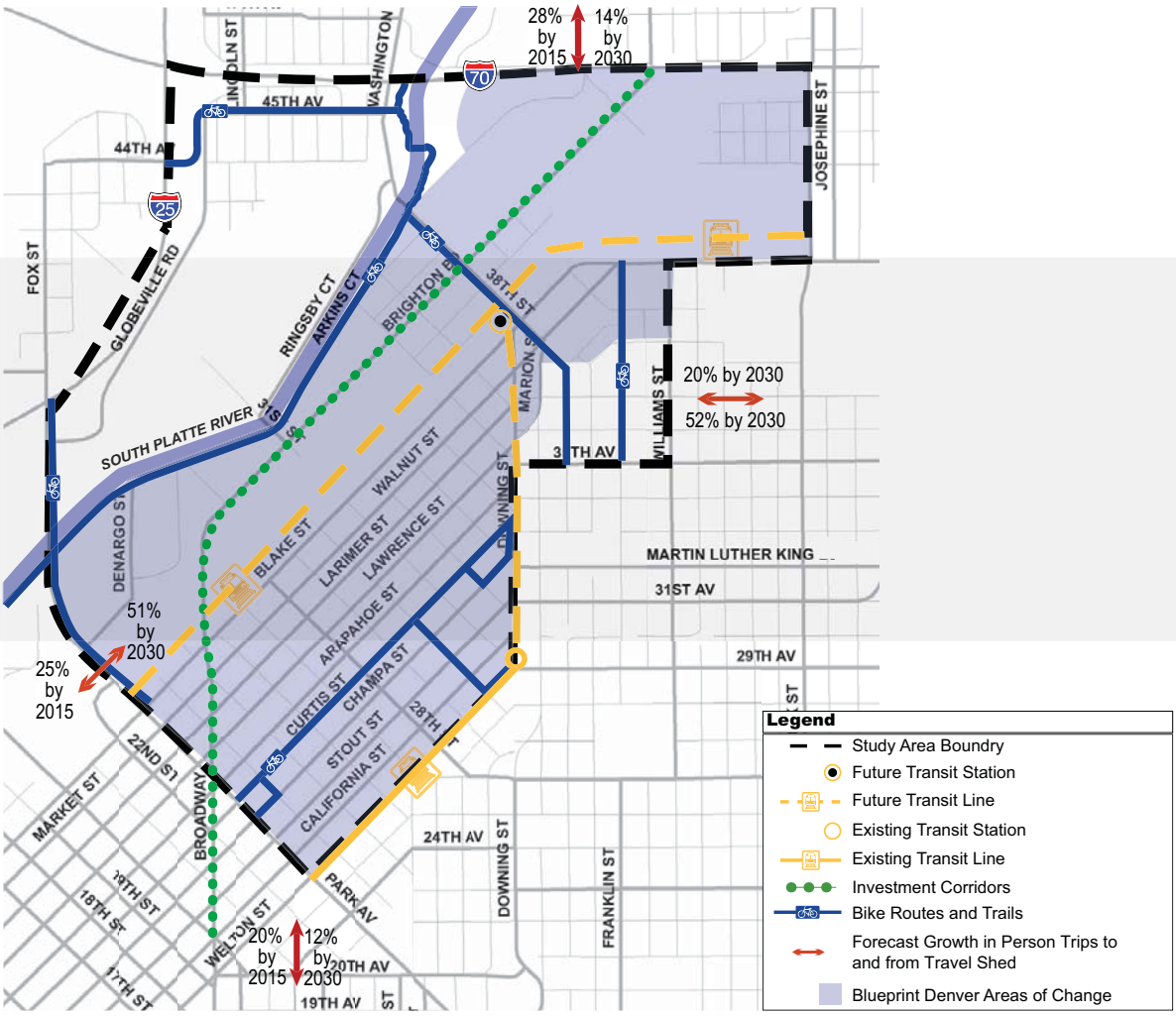
Much of the River North Travel Shed is designated as an "Area of Change" by Blueprint Denver. The area is isolated from central Denver with fewer intersects to main arterials, which makes travel more of a challenge. I-25, I-70, the Platte River and railroad lines all serve as barriers to connectivity between the River North Travel Shed and surrounding areas. Most of the streets in this study area follow downtown's diagonal street grid, which leads to complicated intersections at the boundaries of the shed where streets meet the traditional grid pattern.

Trips in the Travel Shed

The River North Travel Shed is largely free from congestion, although minor congestion exists at the intersections of Park Avenue West and Broadway; 38th and Downing streets; and 38th Street and Brighton Boulevard. Congestion is expected to increase at these intersections along with anticipated growth. Currently there is adequate pedestrian and bicycle mobility within established residential neighborhoods and recently redeveloped areas. However, much of the area remains industrial and could benefit from the enhancement of multimodal facilities. The Central Corridor light rail line runs along the eastern edge of the travel shed. Growth of person trips is anticipated at higher rates than other study areas since the shed is predominantly designated as an "Area of Change" by Blueprint Denver.

Travel Shed Improvement Recommendations

The River North Travel Shed has changed significantly in recent years and will continue to redevelop and rejuvenate. Development in the area has triggered an interest in multimodal transportation options. Improvements in this area should focus on bicycle and pedestrian connections to the new commuter rail station that is planned within the travel shed's boundaries as well as implementing the vision of Blueprint Denver.



Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
State highway surface treatment program			•	✔	✔
Mill levy program (eligible maintenance infrastructure includes 20 total traffic signals, 7 bridges, 106 lane miles, alleys, signs and markings, curbs and gutters, curb ramps			•	✔	✔
Bicycle and Pedestrian System Gaps					
46th Ave. Platte River connection			•		✔
47th Ave. & York St. bike/pedestrian crossing of Union Pacific Railroad			•		✔
Cole/Clayton neighborhood connections across 40th Ave.			•		✔
40th Ave. bus stop and sidewalk improvements			•		✔
43rd Ave. bike and pedestrian bridge			•		✔
Curtis Park connection to Platte River Trail			•		✔
Include pedestrian amenities in Denargo Market/29th Ave. area			•		✔
Transit Support Strategies					
38th Ave./Blake St. Station operational study (next phase)	•	•	•	✔	
Swansea Station master plan	•	•	•	✔	
Encourage high-density and mixed-use developments that support increased transit service (38th Ave./Blake St.)	•		•	✔	
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Operational and Safety Strategies					
Welton St. signal improvements based on I-70 East Corridor rail changes		•			✔
Revisit 2-way conversion project recommendations based on future infastructure improvements (I-70 East)		•			✔
Transit and Roadway Improvements					
Reconstruct Brighton Blvd. from 31st to 44th streets (including medians and sidewalk)			•		✔
31st St. & Brighton Blvd. intersection improvement			•		✔
Arkins and 31st St. signalization with Denargo Market (29th St. and Brighton Blvd.)			•		✔
Downing/Marion/38th streets geometric and signal improvements			•		✔
Create double left eastbound 40th St. to northbound Josephine St.			•		✔
Major Improvements and Studies					
North Corridor FasTracks	•	•	•	✔	
38th St. roadway widening from Blake St. to Brighton Blvd.			•		✔
Additional river crossing (35th or 36th streets)			•		✔
Potential I-70 East EIS realignment will require improvements to 46th Ave.			•		✔
Washington St. improved to 4 lanes from 47th to 52nd avenues			•		✔
Complete multimodal reconstruction of Brighton Blvd./N. Broadway (STP Investment Corridor)	•	•	•		✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

Southwest Travel Shed

Travel Shed Boundaries

The Southwest Travel Shed is loosely bordered by Wadsworth Boulevard to the west; Colfax Avenue to the north; I-25, Tejon Street, Lipan Street, Logan Street and Santa Fe Drive to the east; and Bowles Avenue to the south. Seven major arterial roads run through this travel shed, including 6th Avenue, Colfax Avenue, Alameda Avenue, Evans Avenue, Federal Boulevard, Sheridan Boulevard and Hampden Avenue. The Hampden Travel Shed overlaps with the southern portion of the Southwest Travel Shed.

Travel Shed Characteristics

There is a strong industrial presence in this travel shed as well as a major and highly utilized bike path along the South Platte River. Designated "investment corridors" according to Blueprint Denver include Federal Boulevard, Alameda Avenue and Evans Avenue. The area north of Alameda is designated as an "Area of Change."

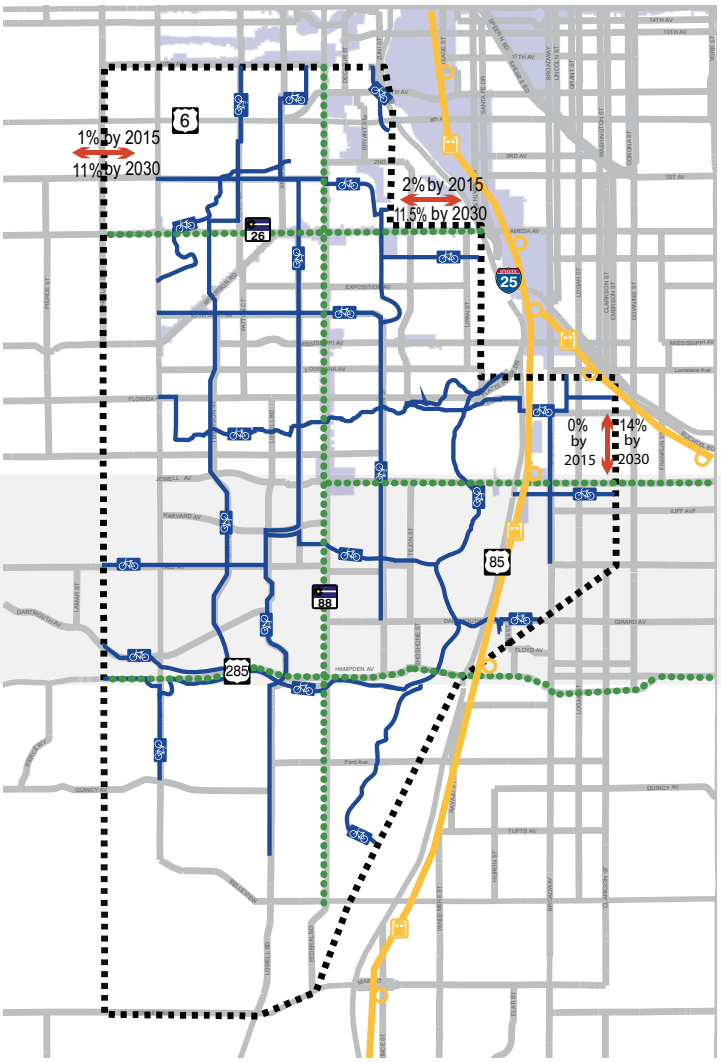
Trips in the Travel Shed

Travel patterns in the Southwest Travel Shed are predominantly to and from Downtown Denver and the West Colfax/6th Avenue corridor. Federal Boulevard serves as a continuous north-south corridor while Alameda and Evans serve as continuous east-west routes that support cross-town transit. Growth in person trips is modest compared to other study areas.

Travel Shed Improvement Recommendations

Improvements in the Southwest Travel Shed need to address cross-town trips along Hampden and Evans avenues and improve connectivity and reliability of transit in the area. Federal Boulevard improvements should focus on enhancements to transit, pedestrian amenities, safety improvements and access control. Improvements along Evans Avenue should address transit, freight issues, safety improvements and traffic operations elements. Recommendations for Hampden Avenue include transportation demand and traffic management efforts to address the increasing congestion. Alameda Avenue requires additional traffic operations and safety elements. Finally, improvements to pedestrian and bicycle connections are recommended for all "Areas of Change."

Also refer to overlapping travel shed: Hampden



Legend

- Study Area Boundry
- Future Transit Station
- Future Transit Line
- Existing Transit Station
- Existing Transit Line
- Investment Corridors
- Bike Routes and Trails
- Forecast Growth in Person Trips to and from Travel Shed
- Blueprint Denver Areas of Change

Recommendations

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
State highway surface treatment program			•	✔	✔
Mill levy program (eligible maintenance infrastructure includes 40 total traffic signals, 55 bridges, 761 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
Bicycle and Pedestrian System Gaps					
Bike/pedestrian bridge over Santa Fe Dr., Kalamath St., CML, I-25 and South Platte River along Bayaud Ave.			•		✔
Bikeway along Quincy Ave. from Lowell Blvd. to Pierce St.			•	✔	✔
Bike connection to Grant Ranch			•		✔
Grade-separated crossing on Alameda Ave. for Weir Gulch Trail			•		✔
Iliff Ave. bridge connection to Evans LRT station			•		✔
At-grade link to Florida Trail			•		✔
Transit Support Strategies					
Alameda Station: S. Cherokee St. bike/pedestrian path			•		✔
Transit enhancements on Federal Blvd.		•	•		✔
Enhance transit routes to serve as feeders to major transit corridors	•				✔
Conduct a transit station study to determine the space available for expansion and enhancement (Evans, Alameda)		•		✔	✔
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Operational and Safety Strategies					
Alameda Ave./Morrison Rd./Knox Ct. southside signal changes and bulb outs		•	•		✔
Add ITS from Dartmouth Ave. to North Federal Blvd. along Alameda Ave./Morrison Rd./Knox Ct.		•	•		✔
Retime signals along Evans Ave. from Federal Blvd. to Lowell Blvd.		•			✔
Transit and Roadway Improvements					
Broadway/I-25 NEPA implementation			•	✔	
Broadway reconstruction:			•		✔
• Iowa to Asbury Ave.					
• Wesley to Yale Ave.			•	✔	
• Asbury to Wesley Ave.			•	✔	
Gates redevelopment			•	✔	
Quincy Avenue between Pierce St. and Sheridan Blvd.			•	✔	
Iowa Ave. underpass improvements between Broadway St. and Santa Fe Dr. including bike and pedestrian connections			•		✔
Alameda Ave. from Santa Fe Dr. to Lincoln St.			•		✔
Santa Fe Dr./Kalamath St./CML Underpass			•		✔
Evans Ave. operational improvements: Broadway St. to Evans Ave. LRT Station		•		✔	
Alameda Ave. widening from Lipan St. to Santa Fe Dr.			•		✔
Major Improvements and Studies					
Complete multimodal reconstruction of Federal Blvd. (STP investment corridor)	•	•	•		✔
Complete multimodal reconstruction of Alameda Ave. (STP investment corridor)	•	•	•		✔
Complete multimodal reconstruction of Evans Ave. (STP investment corridor)	•	•	•		✔
Valley Highway EIS Implementation including Federal Blvd. from 5th to 7th avenues, Phase I & II record of decision	•	•	•	✔	✔

Note 1. Funding for implementation of the projects noted as "future" has yet to be determined. Prioritization and identification of projects will evolve.
Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

Speer / Leetsdale Travel Shed

Travel Shed Boundaries

The Speer/Leetsdale Travel Shed follows the corridor from 14th Avenue and Speer Boulevard to the north, along 1st Avenue to Steele Street, to Alameda Avenue, to Leetsdale Drive, to Parker Road in the south. The travel shed includes all surrounding areas. Several major arterial roads cross the travel shed, including Broadway, Lincoln Street, University Boulevard, Colorado Boulevard and Monaco Parkway. Several arterial roads that do not cross the corridor are considered a part of this travel shed, including 6th Avenue, 8th Avenue, Alameda Avenue and Cherry Creek Drive. The Speer/Leetsdale Travel Shed crosses through the Central Denver and East Colfax travel sheds.

Travel Shed Characteristics

The Speer/Leetsdale Travel Shed spans 15 long-established neighborhoods. The Cherry Creek trail system is a major bicycle and pedestrian amenity for the city, although the creek serves as a barrier to street-grid connectivity in the travel shed.

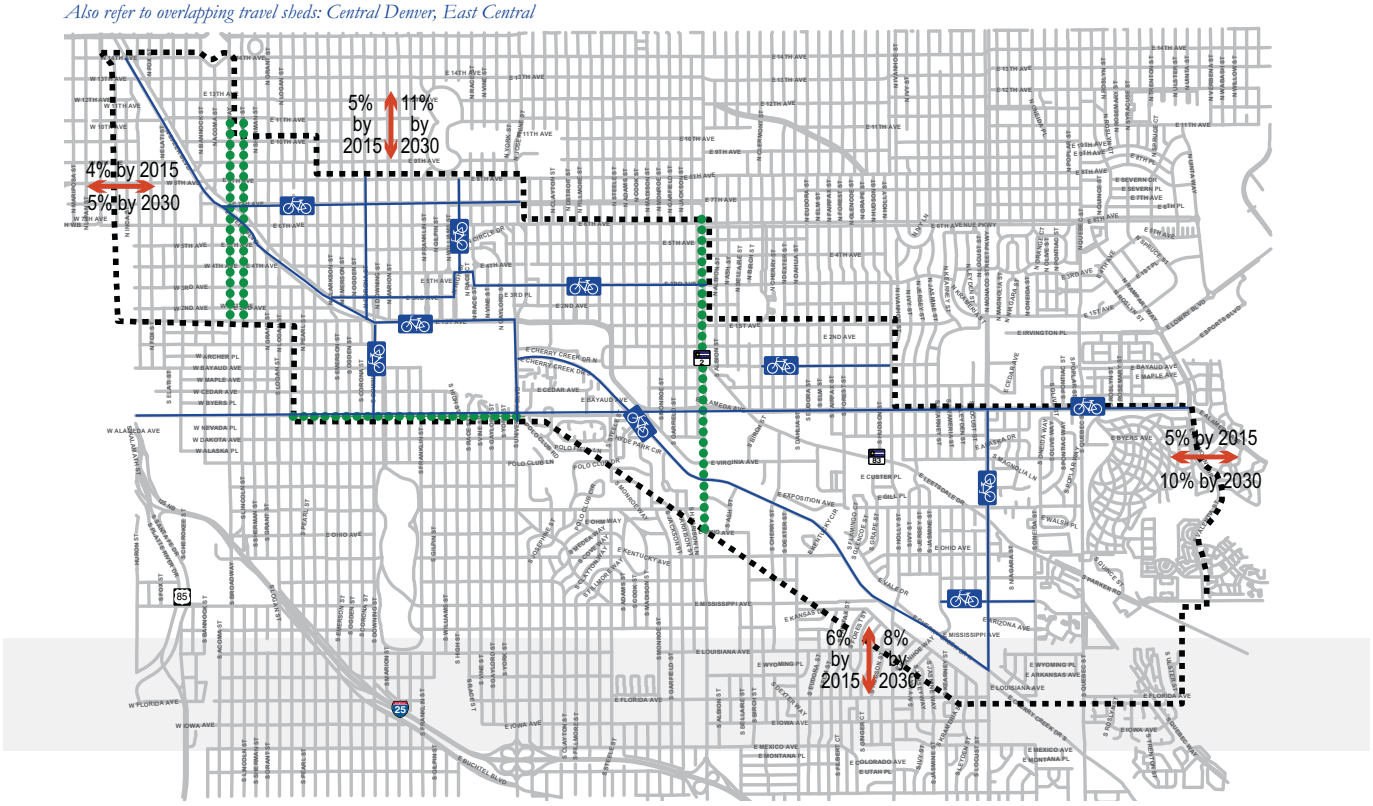
Trips in the Travel Shed

Speer Boulevard carries high volumes of traffic between the Cherry Creek area and downtown Denver. In 2005, 57% of travel in this shed was pass-through trips, and the number is expected to increase to 60% by 2030. Demands on this corridor's transportation system are expected to grow while traffic volume is expected to increase moderately. The greatest increase is anticipated north of Alameda between Colorado Boulevard and Quebec Street.

Travel Shed Improvement Recommendations

Due to the projected increases in traffic congestion, the Speer/Leetsdale Travel Shed was designated a "major investment corridor." Considerations in this area include increased bicycle and pedestrian connections, improved bus service, HOV or transit bypass lanes and fixed guideway transit systems such as light rail or streetcar.

Also refer to overlapping travel sheds: Central Denver, East Central



Legend

- Study Area Boundry
- Future Transit Station
- Future Transit Line
- Existing Transit Station
- Existing Transit Line
- Investment Corridors
- Bike Routes and Trails
- Forecast Growth in Person Trips to and from Travel Shed
- Blueprint Denver Areas of Change

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
Complete radium street repavement within the travel shed			•		✔
Mill levy program (eligible maintenance infrastructure includes 50 total traffic signals, 14 bridges, 501 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
State highway surface treatment program		•	•	✔	✔
Bicycle and Pedestrian System Gaps					
Cherry Creek trail safety upgrades (along 1st Ave. from Downing St. to University Blvd.)			•		✔
Cherry Creek trail — elimination of at-grade road crossings at Holly St. and Monaco Pkwy.			•		✔
1st Ave. streetscape (Steele St. to Colorado Blvd.)			•		✔
Leetsdale Blvd./Kearney St. bicycle/pedestrian overpass			•		✔
Bike trail through Burns Park with improved Leetsdale Blvd. crossing at Cedar Ave.			•		✔
Highline Canal Trail grade separation at Leetsdale Blvd. (coordinate w/ intersection reconstruction project)			•		✔
Widen sidewalks on Colorado Blvd. bridge over Cherry Creek			•		✔
Pedestrian crossing improvements along 1st Ave between University Blvd. and Steele St.			•		✔
Pedestrian crossing improvements at 1st Ave./Steele St., Ellsworth Ave./Steele St., and Bayaud Ave./Steele St.			•		✔
Bike stations at major activity centers			•		✔
Pedestrian districts with "gateway" treatments and wider sidewalks around high-priority areas (Cherry Creek shopping center & Cherry Creek North)			•		✔
Transit Support Strategies					
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Implement transit-signal priority at traffic signals (FastConnects)		•	•		✔
Support existing or potential transportation management associations (TMAs)	•			✔	✔
Enhance transit routes to serve as feeders to major transit corridors		•	•		✔
Encourage transit ridership by adding pedestrian/bicycle connections to surrounding community		•	•		✔
Operational and Safety Strategies					
Regional signal system controls (traffic signal system improvement project eligible)		•	•		✔
Mark pedestrian and bicycle facilities and bus stops clearly		•			✔
Turn-lane improvements at arterial-arterial and arterial-collector intersection			•		✔
Initiate red light, neighborhood cut-through and speed enforcement	•				✔
Physical/operational improvements at high hazard locations		•	•		✔
Increase promotion and marketing of new programs	•				✔
Transit and Roadway Improvements					
Widen Alameda Ave. from Steele St. to Colorado Blvd.			•		✔
Cherry Creek Drive South street reconstruction (University Blvd. to Colorado Blvd.)			•	✔	
Leetsdale Blvd./Colorado Blvd./Bayaud Ave. intersection reconstruction			•		✔
Leetsdale Blvd./Parker Rd./Mississippi Ave. intersection reconstruction			•		✔
Leetsdale Blvd./Quebec St. intersection reconstruction			•		✔
Leetsdale Blvd./Monaco Pkwy. intersection reconstruction (potentially grade-separated)			•		✔
Develop access control plans along arterial corridors		•			✔
Dedicated bus lanes or separate busways (FastConnects)		•			✔
Consider HOV lanes on arterial streets		•			✔
Consider installation of landscaped medians during all improvement projects		•	•		✔
Major Improvements and Studies					
Major investment corridor study of Speer Blvd./Leetsdale Blvd. (NEPA) and implementation	•	•	•	✔	✔
Complete multimodal reconstruction of Colorado Blvd.	•	•	•		✔
Complete multimodal reconstruction of Broadway/Lincoln streets	•	•	•		✔

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Travel Shed Stats

West Side Travel Shed

Travel Shed Boundaries

The West Side Travel Shed is loosely bordered by Sheridan Boulevard to the west, 17th Avenue to the north, I-25 to the east and 1st Avenue to the south. Five major arterial roads run through this travel shed, including Sheridan Boulevard, Federal Boulevard, Colfax Avenue, I-25 and 6th Avenue.

Travel Shed Characteristics

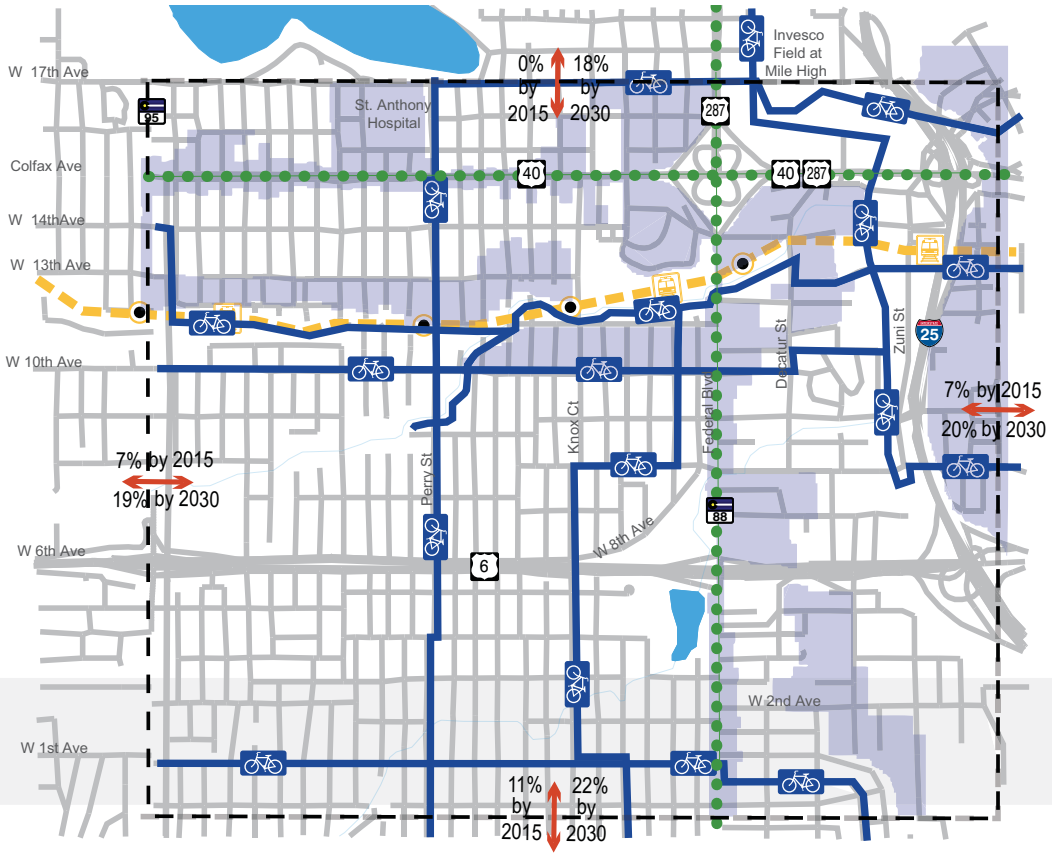
Major arterial roads in the West Side Travel Shed are state or interstate highways. I-25, 6th Avenue and Lakewood/Dry Gulch serve as barriers to connectivity in the West Side Travel Shed due to limited exits and transects in the street system. Traffic is funneled to major arteries that cross I-25 and 6th Avenue. Uncontrolled turns from driveways, unbalanced or narrow lanes, substandard or missing sidewalks, and missing bicycle connections characterize many of the roads in this area.

Trips in the Travel Shed

More than 86% of trips in the West Side Travel Shed are pass-through trips. The total number of person trips in this shed will increase to more than 18% by 2030, according to estimates. Trips originating in the travel shed are expected to increase at a faster rate than pass-through trips.

Travel Shed Improvement Recommendations

The West Corridor light rail line is expected to increase east-west capacity to satisfy person-trip demand by 2030. However, increasing north-south demand is expected to exceed capacity by 2030. Redevelopment work for the West Corridor light rail line should include providing better access to light rail stations, increased connectivity for bicycle and pedestrian paths, and increased north-south street connections.



Legend

- Study Area Boundry
- Future Transit Station
- Future Transit Line
- Existing Transit Station
- Existing Transit Line
- Investment Corridors
- Bike Routes and Trails
- Forecast Growth in Person Trips to and from Travel Shed
- Blueprint Denver Areas of Change

	Form of Improvement			Implementation Time Frame	
	Behavioral	Operational	Physical	2015	Future
Maintenance of Infrastructure					
Mill levy program (eligible maintenance infrastructure includes 20 aging signals, 29 aging bridges, 260 lane miles, alleys, signs and markings, curbs and gutters, curb ramps)			•	✔	✔
State highway surface treatment program		•	•	✔	✔
Bicycle and Pedestrian System Gaps					
Construct missing sidewalk on Sheridan Blvd. from 15th to 17th avenues, and 10th to 15th avenues			•		✔
10th Ave. and Osage St. pedestrian improvements			•	✔	
Special pedestrian crossing improvements on Colfax Ave.			•		✔
Extension of Lakewood Gulch trail to the west through Lakewood			•		✔
Additional north-south crossings of Weir Gulch			•		✔
Transit Support Strategies					
Provide improved shelters, lighting, benches and amenities at bus stops		•	•		✔
Encourage transit ridership by enhancing bus stops	•		•		✔
Knox Ct. bicycle & pedestrian connection to West Corridor Light Rail Station			•	✔	
Bike & pedestrian connections at light rail transit stops			•		✔
Bike lockers and racks at light rail transit stops			•		✔
Encourage high density and mixed-use developments that support increased transit service (Decatur TOD)	•		•	✔	✔
Encourage redevelopment as high-density and mixed-use that works well with transit	•			✔	✔
Implement pedestrian and transit improvements along West Colfax within the existing BID	•	•	•	✔	✔
Operational and Safety Strategies					
Signal retiming on Federal Blvd.		•	•		✔
Regional signal system controls (traffic signal systems improvement project eligible)		•	•		✔
Turn lane construction at Federal Blvd. at 10th Ave.			•		✔
Incident management (6th Ave. alternate routes project)		•	•		✔
Special event traffic management (Invesco Field at Mile High)		•			✔
Transit and Roadway Improvements					
Lane balancing (Federal Blvd., 7th Ave. to Colfax Ave.)			•		✔
Intersection improvements:					
• Sheridan Blvd. at 1st Ave.			•		✔
• Sheridan Blvd. at 6th Ave.			•		✔
• Sheridan Blvd. at 10th Ave.			•		✔
• Sheridan Blvd. at Colfax Ave.			•		✔
Develop and implement access control plans on Federal Blvd., Sheridan Blvd., and Colfax Ave.		•	•		✔
Additional north-south street crossing of Lakewood Gulch between Perry St. and Sheridan Blvd.			•		✔
Increase transit service through new bus routes (FastConnects)		•			✔
Local circulator service to/from special event venues and LRT stations		•			✔
New transit connections and increased bus service in developing areas		•			✔
Major Improvements and Studies					
Valley Highway EIS implementation including Federal Blvd. from 5th to 7th avenues (See Southwest)	•	•	•	✔	✔
Federal Blvd. EA implementation, Alameda Ave. to 5th Ave. (CDOT)			•	✔	
West Corridor Light Rail transit design & construction (RTD-FasTracks)			•	✔	
New bridge for West Corridor Light Rail at Sheridan Blvd.			•	✔	
New bridge for West Corridor Light Rail at Federal Blvd.			•	✔	
Complete multimodal reconstruction of Federal Blvd. (STP investment corridor)	•	•	•		✔
Complete multimodal reconstruction of Colfax Ave. (STP investment corridor)	•	•	•		✔

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Note 2. Refer to the glossary for definitions of terminology.

Travel Shed Stats

Glossary

Accessibility: A measure of the ability of all people to travel among various origins and destinations, especially focusing on the extent to which facilities are barrier-free and useable by all, especially persons with disabilities, including wheelchair users.

Access control: Control of movement onto or off roadways. Strategies include restricting the intersections and interchanges of other streets, restricting or limiting the number of driveways, or controlling these entrance points in some manner, as with traffic signs, signals or raised medians. Partial-access restriction that gives preference to through traffic.

Air pollution: The presence of unwanted material in the air in sufficient amounts and under such circumstances as to potentially interfere with human comfort, health or welfare, or with full use and enjoyment of property.

Alternative modes: Modes of transportation other than automobile. Includes bus and rail transit, carpool, motorcycle or scooter, bicycle, and pedestrian modes.

Americans with Disabilities Act (ADA): A federal civil rights law enacted in 1990 that mandates the provision of access to public facilities for persons with disabilities. Title 2 of the law applies to transportation facilities and transit vehicles.

Area of Change: Blueprint Denver defines an Area of Change as a place where growth and change are either desirable or underway. Many of the Areas of Change are near existing or future transit stations where transit-oriented development (TOD) is desired. Others are large new development or redevelopment areas such as Downtown Denver, Stapleton Redevelopment, Lowry Redevelopment, and Gateway/Green Valley Ranch.

Areas of Stability: Blueprint Denver describes Areas of Stability as fairly stable residential neighborhoods where minimal change is expected during the next 20 years. These areas include the vast majority of Denver. The goal is to maintain the character of these areas, yet accommodate some new development and redevelopment. Some Areas of Stability need public infrastructure, additional services or investment in housing to maintain and improve quality of life. Others need development and design standards to maintain their character.

Average Daily Traffic (ADT): The total volume of traffic during a given time period divided by the number of days in that time period equals the average traffic in a one-day time period.

Average Wait Time (AWT): Average time spent by passengers at a station or bus stop waiting for transit service.

Average Weekday (AWD): A measurement of average traffic conditions during any one weekday, i.e., Monday through Friday.

Barnes' Dance: The innovative concept of halting all traffic at an intersection and allowing pedestrians to cross in any direction, including diagonally.

Behavioral Strategies: A set of strategies designed to encourage the public to change their travel choices and use of transportation facilities.

Blueprint Denver: Blueprint Denver is the first step in implementing the vision of Denver's Comprehensive Plan 2000. It serves as an integrated land use and transportation plan and was adopted in 2002 as a supplement to the Comprehensive Plan. Key land use concepts include directing growth and redevelopment to Areas of Change, while preserving Areas of Stability. The major transportation concepts include identification of Enhanced Transit Corridors, implementation of the FasTracks rail system, and the designation of multimodal streets that are based on land use function rather than just transportation classification.

Bus Rapid Transit (BRT): Buses using and occupying a separate right-of-way for the exclusive use of public transportation services. A transit mode that combines the quality of rail transit and the flexibility of buses. BRT vehicles can operate on bus lanes, HOV lanes, expressways or on ordinary streets. In addition, BRT vehicles are designed to allow rapid passenger loading and unloading, with more doors than ordinary buses.

Capacity: A measure that accesses the ability to hold and accommodate a certain volume of traffic. For example:

- The number of trains or buses that a station can handle in a given time period; or
- The number of passengers who can be served in a given time period on a bus, other transit vehicle or station; or
- The number of passengers who can be served in a given time period at a given service level on a particular transit service; or
- The number of passengers who can be served in a given time period at a given service level in one direction; or
- The number of automoblies that can be handled per lane per hour.

Capital Improvements Program (CIP): Denver's Capital Improvements Program (CIP) provides direction for both the acquisition of new major assets and the repair and rehabilitation of existing assets. These assets include the city's parks, roads, public art, theaters, curbs and gutters, sidewalks, traffic signals, bike paths, sewer lines, airport, parking spaces, buildings, etc. – all commonly known as infrastructure. The funding sources for these capital expenditures are extremely diverse. They include general obligation and revenue bonds; federal and state grants; private funds; certificates of participation; tax-increment financing; revenue from special revenue and enterprise funds; and annually appropriated capital funds.

Colorado Department of Transportation (CDOT): The state agency responsible for planning, building and maintaining Colorado's highway and bridge transportation system (formerly the Colorado Department of Highways).

Commuter rail: Commuter rail is a transit mode that is a multiple-car, electric- or diesel-propelled train. It is typically used for local, longer-distance travel between a central city and adjacent suburbs, and can operate alongside existing freight or passenger rail lines or in exclusive rights of way.

Community Values (CVs): Part of the STP's public involvement process, the community values list reflects what is important to the community and how these values should be applied to decisions about the future transportation system.

Congestion: Condition on any transportation network or facility that occurs as a measurement of how the use of the automobile affects speeds, trip times and queuing. Congestion occurs anytime traffic demand is great enough so that the interaction between vehicles slows the speed of the traffic stream. As demand approaches the capacity of a road (or of the intersections along the road), extreme traffic congestion sets in.

Corridor: A broad geographic area between two points that connects major sources of trips and includes a number of streets, highways and transit-route alignments.

Delay: The extra amount of time it takes to traverse a given roadway segment minus the amount of time it would take to traverse that roadway segment at the posted speed limit if there were no interference, e.g., the amount of time spent not moving due to a traffic signal being red.

Denver Comprehensive Plan 2000 (Plan 2000): A document created to define the vision of what Denver residents want for their community through a series of goals, visions of success, objectives and strategies.

Denver Regional Council of Governments (DRCOG): A nonprofit association of 55 local governments dedicated to enhancing and protecting the quality of life in the nine-county Denver region. DRCOG works to promote a regional perspective toward the most pressing issues facing the metropolitan area and to address those issues through cooperative local government action. In 1977, DRCOG was designated as the metropolitan planning organization (MPO) for Boulder, Denver, Douglas and Jefferson counties, as well as portions of Adams and Arapahoe counties. The DRCOG MPO process creates a partnership among state, local government, and transit operations in providing transportation improvements.

DRCOG MetroVision Plan: DRCOG's MetroVision Plan is the Denver region's plan for future growth and development. It is adopted by the DRCOG board of directors, representing 51 municipalities and counties. It is a single, comprehensive guide for regional planning that integrates previously separate plans for growth, development, transportation, and water-quality management. The plan outlines strategies to help the region preserve Denver's quality of life while also positioning it to benefit from growth.

Denver Union Station (DUS): Denver's future main hub station for Amtrak and other passenger services. The Denver Union Station master plan serves as the blueprint for preserving the current station and transforming it into a transportation hub for the entire RTD FasTracks system. Development of a vision for Denver Union Station was made possible by a unique partnership among four entities: the City and County of Denver (Denver), the Colorado Department of Transportation (CDOT), the Denver Regional Council of Governments (DRCOG) and the Regional Transportation District (RTD).

Environmental Impact Statement (EIS): A document that must be submitted for approval to the U.S. Environmental Protection Agency and the U.S. Department of Transportation for transportation projects that significantly affect the human environment. This approval is necessary before the projects can be designed or constructed.

Enhanced transit corridor: Designation of corridors by Denver's Blueprint Denver for implementation of enhanced bus transit services such as higher frequency bus service, Bus Rapid Transit (BRT), and priorities for Intelligent Transportation Systems (ITS) investments, including bus priority signalization.

FastConnects: Denver Regional Transporation District's (RTD's) concept to improve transit service for suburb-to-suburb travel. FastConnects are designated points where transit services are planned to minimize wait time between transfers. Service is designed so that buses and trains traveling to multiple destinations are timed to arrive at a major destination or transfer facility at the same time, minimizing the time a passenger has to wait. Designated FastConnects points will be outside central business districts at locations such as park-n-Rides, rail stations, designated shopping centers or employment centers where bus routes connect.

FasTracks: The Denver Regional Transportation District's (RTD) 12-year comprehensive plan approved by the voters in November 2004 to build and operate high-speed rail lines and expand and improve bus service and park-n-Rides throughout the region, including:

- 122 miles of new light rail and commuter rail;
- 18 miles of bus rapid transit service;
- 57 new transit stations;
- 21,213 additional parking spaces at transit park-n-Rides;
- Enhanced bus service and FastConnects (convenient and timely bus transfer points) throughout the region; and
- Redevelopment of Denver Union Station into a multimodal transportation hub at the center of the FasTracks system.

Greenprint Denver: An action agenda initiated by the mayor's office to support sustainable development for the City and County of Denver and to improve the environment with transportation-related goals, including an emphasis on increased public transit access and use and a decreased reliance on single-occupancy automobiles.

Improvement Strategies: The three major categories or types of improvements to the transportation system used by Denver's STP: behavioral, operational and physical.

Intelligent Transportation Systems (ITS): The use of automated systems and information technologies on our transportation network, including communications and safety systems to assist in traveler decisions and traffic flow.

Investment corridors: Key transportation corridors that are vital to community and regional mobility. They generally cross multiple travel sheds and are key connectors for Blueprint Denver's identified "Areas of Change."

Intermodal: Those issues or activities that involve or affect more than one mode of transportation, including transportation connections, choices, cooperation and coordination of various modes. Also known as "multimodal."

KeepDenverMoving.com: The Strategic Transportation Plan website used as one tool for public outreach.

Level of Service (LOS): A qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience.

Light Rail Transit (LRT): Steel wheel/steel rail transit constructed on city streets, semi-private right-of-way, or exclusive private right-of-way. A major advantage to this mode is operation in mixed street traffic at grade. LRT vehicles can be coupled into trains, which require only one operator and often are used to provide express service.

Major investment corridor: Travel shed areas defined by the Strategic Transportation Plan where major capital programs will be required for future transportation infrastructure investment. Generally, these corridors will involve federal funds, high-capacity, multimodal needs (to serve both trips within Denver and traveling through the city), and a detailed environmental study.

Mass transit: The general term used to identify bus, fixed rail, or other types of transportation service available to the general public that move relatively large numbers of people at one time.

Mill levy program: A tax assessed on real estate by the local government. The tax is usually based on the value of property (including the land) you own.

Modal split: A term that describes how many people use alternative forms of transportation. Frequently used to describe the percentage of people using private automobiles as opposed to the percentage using public transportation.

Mode (of transportation): A particular form or method of travel (e.g., walking, automobile, bicycling, public transit, bus, train).

Multimodal: Those issues or activities that involve or affect more than one mode of transportation or a path that can be traversed through different forms of travel. Includes transportation connections, choices, cooperation and coordination of various modes. Also known as "intermodal."

Multimodal streets: A transportation concept defined in the Blueprint Denver plan that proposes streets be viewed as a means to move people through various forms of travel and not just through single-occupancy vehicles.

National Environmental Policy Act of 1969 (NEPA): A federal law passed in 1969 considered to be the "national charter" for protection of the environment. NEPA requires that, to the extent possible, the policies, regulations and laws of the federal government be interpreted and administered in accordance with the environmental protection goals of the law. NEPA requires the preparation of an environmental impact analysis (EIS) or study on all major federal actions significantly affecting the human environment.

Operational strategies: A set of Denver STP improvement strategies designed to improve the function or efficiency of existing facilities in the public right-of-way without changes to the physical equipment or infrastructure.

Peak period or peak hours: The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon/evening (p.m.) peak. It is the period when demand for transportation services is heaviest.

Person trips: Travel by a person from one location to another by any means, including walking, by bicycle, on a transit vehicle, or as a driver or passenger in a private vehicle. The STP uses person trips as a measure of demand on the transportation system.

Public transportation: Passenger transportation service that is local, metropolitan or regional in scope and is available to any person who pays a prescribed fare. Includes transportation by bus or rail, either publicly or privately owned, which is provided to the public on a regular and continuing basis. Also known as "mass transit," "mass transportation," "public transit" and "transit."

Physical strategies: A set of Denver STP improvement strategies designed to provide design and construction of new physical facilities or infrastructure that can be added to or changed within the public right-of-way (ROW).

Program street: STP term for streets requiring a coordinated approach for the design of multimodal improvements.

Public right-of-way (ROW): Publicly owned property used for transportation and utility infrastructure, including sidewalks, through travel lanes, parking lanes, tree lawn areas between detached sidewalks and streets, roadway median strips, parkways, bridges, and alleys.

Ridership: The number of rides taken by people using a public transportation system or service such as a bus or light rail in a given time period.

Regional Transportation District (RTD): A special district serving eight counties in the Denver region, created in 1969 by the Colorado General Assembly to develop, operate and maintain a public transportation system (bus, rail, stations, park-n-Ride lots, etc.).

Strategic Transportation Plan (STP): A multimodal transportation plan prepared by Denver's Department of Public Works – with support from other city agencies, the general public, and interested stakeholders – to understand and address the current and future transportation needs of the City and County of Denver.

Transit Signal Priority (TSP): An operational strategy that facilitates the movement of transit vehicles — either buses or on-street rail (light rail or streetcars) — through traffic signal-controlled intersections. Objectives include improved schedule adherence and improved transit travel time efficiency while minimizing impacts to normal traffic operations. Also known as "bus priority signalization" or "queue jumping."

Transportation Systems Management (TSM): Measures involving operational improvements to existing transportation facilities that maximize their person-moving capacity, reduce the severity and duration of temporary delays (i.e., crash or weather) and improve safety by incorporating advanced technologies and communications to optimize the efficiency of transportation systems. The package of TSM strategies may include a number of options designed to improve traffic flow and increase the number of people using alternate modes of transportation.

Transportation Demand Management (TDM): Measures that focus on ways to increase traffic capacity without major construction of new travel facilities. This includes developing alternative transportation modes and incentives to use alternate modes so that fewer vehicles are needed to transport the same number of people. Management strategies include carpooling/vanpooling, bicycling, shuttle systems, alternative work hours, parking controls, telecommuting, and HOV lanes.

Transportation Management Organization (TMO/TMA): Public-private partnership for a defined geographic area of the city that develops alternative transport and transportation demand management programs. Also known as Transportation Management Association (TMA).

Transit-Oriented Development (TOD): Development around transit stations that takes advantage of the proximity to transit access. The goals of TOD include reduced vehicle use and increased pedestrian access. Elements include compact, mixed-use development patterns with facilities and design that enhance the environment for pedestrians in terms of safety, walking distances, comfort and the visual appeal of the surroundings. Sometimes referred to as Transit-Oriented Communities, or Transit Villages.

Travel Shed: Term used within the Denver STP to describe 12 study areas of the city that have transportation characteristics and facilities that serve similar origin-destination patterns for travel.

Travel time index: The ratio of peak-period travel time to free-flow travel time expressing the average amount of extra time it takes to travel in the peak relative to free-flow travel.

Trip: A one-way movement of a person or vehicle between two points for a specific purpose; sometimes called a one-way trip to distinguish it from a round trip.

Variable message sign (VMS): An electronic sign that includes provisions for message changes to notify drivers of traffic congestion, incidents, detours and other safety information.

Volume-to-capacity ratio (v/c ratio): A measure of the amount of traffic on a given roadway in relation to the amount of traffic the roadway was designed to handle.