PURPOSE AND NEED

PURPOSE:
The purpose of the Go Speer Leetsdale project is to implement improvements along the Speer/Leetsdale corridor that equitably and cost-effectively accommodate the corridor’s current and growing person-trip demand. Go Speer Leetsdale will work to attain the corridor vision by enhancing existing transportation options and providing additional mobility and access options for all individuals using the corridor while improving quality of life and enhancing economic development opportunities.

Bicycle Mobility Needs
- Address inadequate and disconnected bicycle facilities.
- Improve ease of use for bicyclists.
- Address locations with demonstrated bicycle safety concerns.

Pedestrian Mobility Needs
- Address inadequate and disconnected pedestrian facilities.
- Improve ease of use for pedestrians.
- Address locations with demonstrated pedestrian safety concerns.

Transit Mobility Needs
- Accommodate increasing person-trip demand resulting from population and employment growth.
- Address unreliable transit travel times and delay that result from vehicular congestion.
- Accommodate increasing trips while still providing improved corridor-long commutes.
- Address substandard accessibility and rider comfort at transit stops and stations.

Vehicular Mobility Needs
- Reduce congestion resulting from increasing person-trip demand related to population and employment growth.
- Improve operations at intersections and corridor locations with higher than expected crash frequency and severity.

Livability Needs
- Provide transportation solutions that support livability concepts for everyday life by a range of transportation modes.

Transportation Access and Equity Needs
- Identify convenient and cost-effective mobility options for all users of the corridor.
VISION STATEMENTS

Speer Leetsdale Corridor is a place where . . .

. . . transportation systems and facilities contribute to “complete communities” by promoting choices for the comfortable and efficient movement of people and goods, inspiring sustainable urban development patterns and providing convenient, safe and convenient access to jobs and other activities.

. . . there is a viable choice to leave automobiles at home and take advantage of an efficient, safe, well-maintained, comfortable and seamless network of transit and accessible pedestrian and bicycle routes.

. . . technology advances out of the lab and onto the street in support of an innovative and highly functional multimodal corridor.

. . . regional and local agencies, businesses and stakeholders partner to protect the environment and to design and help to implement a corridor that is a source of community pride and healthy living.
Surgery Needed on Main Artery in Denver

Denver Becomes International Model for Multi-Modal Synergy as 2/3s of Households Give up Cars

DRCOG Gives Speer-Leetsdale a Clean Bill of Health

You Can Hear the Birds

Pedestrian & Bicyclists Third Class Citizens on Speer/1st/Leetsdale Corridor

Leetsdale Car Museum Draws Thousands of Visitors Wondering Why People Lived Like That

Pedestrians Endangered Species on Cherry Creek Trail

Pizza Delivery Banned in Cherry Creek - Can’t Get it Hot!

Emergency Delivery on Speer During Rush Hour

Cherry Creek Inventor Creates Jet Pack for Shoppers

Drones Now Delivering Pizza & Groceries in Cherry Creek
**Problem:** Cherry Creek Trail capacity constraint along 1st Ave.

**Primary Solutions:**

- **BP 1**: Widen existing trail on 1st (existing ROW) – Reconfigure 1st Avenue between Downing and Steele to widen the Cherry Creek Trail adjacent to the roadway and provide designated bicycle and pedestrian routes and connections into the Cherry Creek Shopping District. **Retained**

- **BP 2**: Widen existing trail on 1st (new ROW or easement) – Coordinate with Denver Country Club to acquire ROW or an easement along 1st Avenue between Downing and University to widen Cherry Creek Trail adjacent to the roadway. Reconfigure 1st Avenue between University and Steele to provide designated bicycle and pedestrian routes and connections into the Cherry Creek Shopping District. **Retained**

- **BP 3**: New Downing/Marion and Dakota/Alameda trail alignment – Sign and/or stripe an alternate bike route between University and Downing to provide another east-west connection. **Retained**

- **BP 4**: Bike and pedestrian connection across Cherry Creek – A new structure connecting Alameda on either side of Cherry Creek. **Retained**

- **BP 5**: Improve on-street connections to Cherry Creek Trail east of Cherry Creek and Parallel Routes – This option would sign and/or stripe existing north/south streets to include a bicycle facility. This would primarily include increasing route connectivity between Leetsdale and the Cherry Creek Trail and providing alternate east-west parallel paths to Leetsdale. **Eliminated due to cost and impact to median with limited capacity improvement potential.**

- **BP 6**: Cherry Creek Trail capacity improvement (east of CO Blvd) – This option would increase capacity of the Cherry Creek Trail east of Colorado Boulevard by widening the existing trail facility or building a parallel facility to separate bicycles from pedestrians. **Eliminated because capacity along this corridor does not provide improvement directly to the Leetsdale travelshed.**

- **BP 7**: High Ease of Use Bicycle/Pedestrian Facility along Leetsdale (new ROW) - A high ease of use bike facility combines the comfortable/accessible user experience of a separated path with the on-street infrastructure of a conventional bike lane. It would be physically separated from motor traffic and distinct from the sidewalk. **Retained**
**Bike & Pedestrian NEEDS**

### Complementary Solutions

**Problem: Substandard intersection crossings**

**CS 1> Crossing Locations** – These improvements include ensuring that functional ADA compliant curb ramps are provided at all pedestrian crossings and that existing sidewalk facilities are well-maintained and navigable by wheelchairs. Crossing improvements would also focus on protecting and increasing comfort for bicycles and pedestrians. These treatments could include rectangular rapid flash beacons (RRFBs) or high-intensity activated crosswalk beacons (HAWK signals) to warn vehicles of the presence of bicycles and pedestrians where appropriate.

- Speer Boulevard / Lincoln Street (EB & WB)
- Speer Boulevard / Logan Street (EB & WB)
- WB Speer Blvd / Pennsylvania St / 4th St
- Speer Boulevard / Washington Street (EB & WB)
- Speer Boulevard / Clarkson Street (EB & WB)
- WB Speer Boulevard / Emerson Street
- Speer Boulevard / Corona Street (EB & WB)
- 1st Avenue / Downing Street (EB & WB)
- 1st Avenue / Gilpin Street
- 1st Avenue / University Boulevard
- 1st Avenue / Clayton Street
- 1st Avenue / Steele Street
- Steele Street / Ellsworth Avenue
- Steele Street / Bayaud Avenue
- E Alameda Ave / Cherry Creek N Drive
- Alameda Avenue / Colorado Boulevard
- Alameda Avenue / Leetsdale Drive
- Leetsdale Drive / Cherry Street
- Leetsdale Drive / Elm Street
- Leetsdale Drive / Forest Street
- Leetsdale Drive / Holly Street
- Leetsdale Drive / Jersey Street
- Leetsdale Drive / Kearney Street
- Leetsdale Drive / Exposition
- Leetsdale Drive / Monaco Parkway
- Leetsdale Drive / Oneida Street
- Leetsdale Drive / Quebec Street
- Midblock crossings Quebec to Mississippi
- Parker Road / Mississippi Avenue

All complementary/spot location improvement options move to STAGE 3

**Problem: Inadequate trail to street connections**

**CS 2> Connection Locations** - Connection improvements would be focused on improving bicycle and pedestrian access to the Cherry Creek Trail through a variety of treatments such as formalizing crossings where trails rise to street level and redesigning ramp connections from trail to street.

- WB Speer Boulevard / Lincoln Street
- WB Speer Boulevard / Logan Street
- East of EB Speer Boulevard / Logan Street
- WB Speer / Pearl Street
- WB Speer Boulevard / Emerson Street
- WB 1st Avenue / Downing Street
- Cherry Creek Trail between Bayaud and Cherry Creek N Drive

All complementary/spot location improvement options move to STAGE 3

**Problem: Lack of wayfinding**

**CS 3> Wayfinding Improvements** - Includes wayfinding and route signage, regulatory signage, and warning signage for motorists, bicyclists, and pedestrian travel. Signs would mark the junction of two or more routes and inform users of access to key destinations (including distance and/or travel times). Wayfinding would be identified at key locations along the entire corridor.

All complementary/spot location improvement options move to STAGE 3
Transit NEEDS

Primary Solutions:

- **T 1> Local Bus Improvements** – This option would improve existing corridor transit service. Improvements could increase the frequency of existing service or add new routes. This could be additional local bus service, circulators, shuttles, or regional service. The goal of these improvements would be to increase service frequency and improve overall travel time for longer commutes.

- **T 2> Enhanced Bus** - This option would focus on localized improvements at key intersections to promote improved transit travel times and reliability, by utilizing transit signal priority and/or queue jumps. Could require intersection redesign but could be used by any combination of circulators, shuttles, and regional service.

- **T 3> High Capacity Transit in Exclusive Lanes (existing right-of-way)** - This option would repurpose the existing cross section to dedicate a travel lane to transit only or potentially managed lane use. This would provide significant travel time improvement over existing bus service that currently runs in general purpose lanes. Could accommodate bus or any transit service option. Travel lanes can be managed through a variety of tools and techniques to achieve a desired performance such as higher speeds or reduced congestion. Managed lane techniques include, but are not limited to, high-occupancy vehicle (HOV) use, electric vehicle priority, hybrid vehicle use, and tolling. Lanes can be managed full time or during peak periods only to achieve desired goals.

- **T 4> High Capacity Transit in Exclusive Lanes (new ROW)** – Building on the previous two options, this would provide extensive infrastructure improvements and exclusive lanes to promote significant travel time improvements throughout the corridor. Depending on design, this option could accommodate a variety of modes and transit service options. Lanes could be managed as described in T 3.

- **T 5> High Capacity Transit in Contraflow/Reversible Lane** - This would modify the previous option by providing a single direction exclusive lane in locations where the highest congestion and travel delay occurs. Existing ROW would be used when possible but would likely require the acquisition of new ROW in select areas. The lane would operate inbound in the AM peak periods and outbound in the PM peak periods. Travel in the off peak direction would occur in the existing general purpose lanes.
Transit NEEDS

Complementary Solutions:
All complementary/spot location improvement options move to STAGE 3

CS 1> ADA Bus Stop Improvements – Add ADA infrastructure including pads (clear, level landing areas 5’x 8’) and ramps, where required, and/or repair sidewalk connections/slopes, to stops that limit accessibility.

- Speer & Downing SB
- 1st & Lafayette EB
- 1st & Gilpin WB
- 1st & Vine WB
- 1st & University WB
- University Blvd & Cherry Creek N Dr SB
- 1st & Fillmore EB
- Alameda & Colorado SB
- Alameda & Leetsdale EB
- Leetsdale & Forest WB
- Leetsdale & Holly WB
- Leetsdale & Hudson WB
- Leetsdale & Oneida WB
- Leetsdale & Quebec SB
- Leetsdale & Quince WB
- Leetsdale & Quince EB

CS 2> Mobility Hubs - Mobility hubs are generally major transit station areas surrounded by significant levels of transit service as well as high residential and employment development potential; places of connectivity where different modes come together seamlessly with a high concentration of working/living/shopping/ playing. Mobility hubs can incorporate a number of amenities/strategies including real-time transit information, bike share/bike stations, ride or commute share, bus bulb outs, enhanced pedestrian crossings, enhanced pedestrian and bicycle facilities, etc. Smaller hubs may provide a select set of services while larger hubs would provide full service local and regional mobility to patrons.

- Speer Blvd/ Lincoln St / Broadway
- Speer Blvd / Pearl St
- Speer Blvd / Corona/Downing Street
- Steele St / Ellsworth Ave
- Steele St / Bayaud Ave
- 1st Ave/ Colorado Blvd
- Alameda Ave / Colorado Blvd
- Leetsdale Dr / Forest St
- Leetsdale Dr / Monaco Pkwy
- Leetsdale Dr / Quebec St

CS 3> Focused Enhanced Bus Service or Circulator - Small-vehicle, neighborhood-focused circulators that would operate at major activity centers; could be fixed-route (similar to the Lone Tree Link) or demand response. The purpose is to provide high-frequency, convenient non-SOV movement throughout the neighborhoods for residents, employees and visitors. Targeted areas include:

- West end
- Cherry Creek
- East end

- ADA Bus Stop Improvements
- Mobility Hubs
- Focused Enhanced Service or Circulator
Vehicular Needs

Reduce congestion resulting from increasing person-trip demand related to population and employment growth.

Improve operations at intersections and corridor locations with higher than expected crash frequency and severity.

Primary Solutions:

V 1> Additional general purpose lanes (new ROW) – This would add one travel lane in each direction along the corridor. These lanes would operate as general purpose lanes would be available to all users. This would require the acquisition of substantial new ROW. **Eliminated because it would not support bike and pedestrian enhancements or desired livability concepts.**

V 2> Burns Park vehicular couplet – This option would seek to alleviate some of the congestion along the Alameda Avenue segment of the corridor by converting segments of Leetsdale, Alameda, 1st Avenue, and Steele to one-way streets. **Eliminated due to limited ability to add capacity to the corridor and negligible travel time savings.**

V 3> Access control on Leetsdale – This option would create an access control plan on Leetsdale to reduce conflict points and improve comfort and safety for all modes of travel. The access control plan could evaluate the potential to consolidate access locations and/or restricting movements and existing access points.

V 4> Raised median on Leetsdale – In addition to V 3 - access control, this option would add a raised median along Leetsdale to help control access and left turn movements and to create a pedestrian and bicyclist crossing refuge.

V 5> Alameda Improvements from Cherry Creek N Drive to Colorado – Denver’s STP calls for widening of Alameda from Steele to Colorado Boulevard to increase intersection throughput and reduce delay. **Eliminated as a vehicle-focused widening option that would not support bike and pedestrian enhancements or desired livability concepts.**
Complementary Solutions:  
*All complementary/spot location improvement options move to STAGE 3*

**CS 1> Intersection Improvements with Notable Vehicle Benefits** - Complex intersections (such as Alameda & Leetsdale) can be confusing and present safety concerns. Complex signal phasing can result in long delays for all modes. These intersections can benefit from unique analysis and design to result in an intersection that can more adequately address the needs of all modes. Improvements modifications may include reducing the overall size of the intersection through curb extensions and medians to reduce vehicle turning speeds and reallocate space for bicyclists and pedestrians. In some cases, intersections might be able to be reconfigured to add space for adjacent pedestrian plazas.

- WB Speer Boulevard / Broadway
- EB Speer Boulevard / Broadway
- WB Speer Boulevard / 6th Avenue
- WB Speer Boulevard / Grant Street
- EB Speer Boulevard / Grant Street
- EB Speer Boulevard / Logan Street
- WB Speer Boulevard / Washington Street
- EB Speer Boulevard / Washington Street
- WB Speer Boulevard / Clarkson Street
- EB Speer Boulevard / Clarkson Street
- WB Speer Boulevard / Downing Street
- EB Speer Boulevard / Downing Street
- 1st Avenue / Gilpin Street
- 1st Avenue / University Boulevard
- 1st Avenue / Clayton Lane
- 1st Avenue / Detroit Street
- 1st Avenue / Milwaukee Street
- 1st Avenue / St. Paul Street
- 1st Avenue / Steele Street
- Steele Street / Ellsworth Avenue
- Steele Street / Bayaud Avenue
- Alameda Avenue / Colorado Boulevard
- Alameda Avenue / Leetsdale Drive
- Leetsdale Drive / Cherry Street
- Leetsdale Drive / Elm Street
- Leetsdale Drive / Forest Street
- Leetsdale Drive / Holly Street
- Leetsdale Drive / Exposition Avenue
- Leetsdale Drive / Monaco Parkway
- Leetsdale Drive / Niagara Street
- Leetsdale Drive / Oneida Street
- Leetsdale Drive / Quebec Street
- Parker Road / Mississippi Avenue

**CS 2> Streetscaping** – Streetscape elements are functional and aesthetic items that are traditionally located within the pedestrian realm and provide utility and amenity to all users. Elements can include trees and planters (for aesthetics and storm water management), lighting, benches, seating, bicycle racks, bollards, public art, wayfinding signage, etc. These elements are recommended throughout corridor.

**CS 3> Travel Demand Management** – This option would explore strategies intended to reduce reliance on single occupancy vehicles for all trips and instead explore incentives or disincentives to encourage new behaviors. Strategies could include free or discounted RTD transit passes, parking management, flexible working hours/ telecommute, peak period roadway access pricing, or private or public shuttle services.