ACKNOWLEDGEMENTS

Denver Living Streets Initiative (LSI) is a multi-sector partnership created in 2007 to support the creation of great places with transportation options that work for everyone. Denver City and County staff compiled this report to document the purpose of the Living Street effort and to highlight relevant projects that illustrate its concepts.

During the public outreach phase of the project, from 2008-2010, a Living Streets Task Force provided valuable input and served as an important partner in the project. The Living Streets Task Force was comprised of the following organizations:

- American Association of Retired Persons
- Bicycle Colorado
- Bike Denver
- Colorado Department of Transportation
- Colorado Department of Public Health and Environment
- Denver Cruisers
- Downtown Denver Partnership
- Denver Regional Council of Governments
- Federal Boulevard Partnership
- Inter-Neighborhood Cooperation
- Kaiser Permanente
- LiveWell Westwood
- Metro Mayors Caucus
- Regional Transportation District (RTD)
- Transit Alliance
- Transportation Solutions

City of Denver Agencies:
- Community Planning & Development
- Public Works
- Environmental Health
- Office of Economic Development
- Parks & Recreation
- Greenprint Denver (now the Mayor’s Office of Sustainability)
- Budget & Management Office
- Human Rights & Community Partnerships
INTRODUCTION

The Introduction provides background on the Living Streets Initiative, which started in 2007. It also contains an overview of this document, highlighting key themes and topics, including an answer to the question “What are Living Streets?”

CONTEXT

Provides the framework for the Living Streets Initiative, including how it coincides with other policy goals in Denver. These pages also provide an overview of key transportation concepts and the balance between land use and transportation.

LIVING STREETS

This section defines and illustrates Living Streets. The reader will find an overview of the major categories of Living Streets -- Destination, Multimodal, and Connecting -- as well as an introduction to the performance measures, or expected outcomes, that help to demonstrate the many positive impacts of Living Streets.

TOOLBOX

The Toolbox illustrates a variety of tools that are utilized to cultivate Living Streets. Many of the tools depend on private sector investment and partnership for implementation. The toolbox is categorized into three sections: Roadway tools, Public Realm tools, and Private Realm tools.

CASE STUDIES

Denver has already implemented Living Streets throughout the city. The case studies highlight how many of the tools from the toolbox have been applied with great success, largely due to public-private partnerships.

MOVING FORWARD

What are the next steps for the Living Streets Initiative? These pages highlight recommended next steps for continuing to implement Living Streets in Denver.
INTRODUCTION

Background and Overview

Denver Living Streets Initiative (LSI) is a multi-sector partnership created in 2007 to support the creation of great places with transportation options that work for everyone. This partnership was created as a forum to explore and discuss new opportunities for building a multimodal street network; determine which opportunities were relevant and appropriate for Denver; evaluate the benefits and trade-offs associated with the opportunities; and, finally, to understand the best path towards implementation. The Initiative sought partnerships within the City, with outside organizations, and with the general public in order to best define the initiative for Denver, understand existing operational concerns, determine appropriate trade-offs, and facilitate a sense of ownership with those involved.

During its public outreach phase, LSI involved a series of public meetings and educational workshops. The Initiative also included an Education and Engagement Series that, starting in 2008, brought national and international experts to Denver to talk about living streets concepts.

This document summarizes many of the concepts and goals that were established through the public outreach phase, reflecting input from the many LSI partners including the Living Streets Task Force, community leaders, public officials, and the public at large.

To learn more about LSI and to view documents from previous public outreach visit the project web page: www.denvergov.org/livingstreets
The purpose of this document is to define Living Streets, establish important goals and concepts for Living Streets, highlight successful examples of Living Streets in Denver, and to recommend steps for continuing to implement a Living Streets network. The document establishes three types of Living Streets - Destination, Multimodal, and Connecting - and creates a Toolbox for implementing Living Streets.

WHAT ARE LIVING STREETS?

Living Streets is a city-building philosophy of working together to provide a network of streets, combined with adjacent land uses and buildings, that accommodate pedestrians, bicyclists, vehicles, and transit while creating great spaces and places.

Living Streets are vibrant places where people of all ages and physical abilities feel comfortable using any mode of travel - walking, biking, transit, and private vehicles. While Living Streets are designed to maximize the efficiency of a corridor’s capacity to move people, they also integrate the use and form of adjacent buildings to achieve great places for people.

Living Streets are similar to complete streets since they are designed to enable safe, convenient, and comfortable travel for users of all ages and abilities, regardless of mode of transportation. Living Streets look beyond the curb and sidewalk, however, and acknowledge the important role that the use and form of buildings play in the character of a street.

PARTNERSHIPS

Creating a Living Street is a coordinated effort that requires money, time and a lot of discussion. Partnerships between the City and the private sector are often an important component to implementing successful improvements. For example, private property owners may form a Special District to maintain new streetscape improvements in recognition of the value those amenities can contribute to their area (examples are highlighted in Living Streets case studies on pages 19-30).

LIVING STREETS TOOLBOX

A street is made up of several components that work together to create a balanced, multimodal corridor. Living Streets address all components of the street: (1) The Private Realm, which contains the buildings and other uses that line a street; (2) the Pedestrian Realm, which is the area between the building and curb; and (3) The Roadway, or the area between the curbs. The Living Streets Toolbox contains a variety of potential tools, divided into the three areas shown below, that can be used to design or redesign a street in accordance with Living Streets principles. The Living Streets Toolbox is found on pages 11-18.

WHAT IS A SPECIAL DISTRICT?

Special districts, formed by private property owners, are a common tool for implementing and maintaining Living Streets. They are formed when property owners along a corridor agree to an additional property assessment that is used to fund construction and/or maintenance of improvements such as street trees, planters, and special paving. Special districts include Local Maintenance Districts (LMDs) and General Improvement Districts (GIDs).
The Living Streets philosophy builds upon existing City plans and policies. Living Streets represent the essential balance between transportation and land use that is called for in Blueprint Denver. They also draw from the City’s Strategic Transportation Plan, which calls for measuring travel through “person trips” in order to maximize the multimodal capacity of each street.

Denver’s Living Streets Initiative is part of a citywide strategy to connect land use and transportation decisions. Blueprint Denver, adopted in 2002, is an integrated land use and transportation plan that shapes the future of Denver. It recognizes the vital role of transportation policy, which influences how we get from home to work, how much time we spend commuting, and the choices we have to get from one place to another. Blueprint Denver also emphasizes the importance of land use decisions. For example, when a mix of uses such as retail, office, and residential are placed close to one another, travel time from one location to another can be greatly reduced.

Blueprint Denver and the City’s Strategic Transportation Plan (STP) recommend an efficient, multimodal transportation system that complements a balanced mix of land uses. The STP focuses on creating a balanced, multimodal system that will enable Denver to grow without expanding its roadway footprint. The concepts outlined to the right are essential components of the City’s transportation network.

The concepts outlined to the right come from the STP and the Living Streets Initiative.

**TRANSFIGURATION CONCEPTS**

- **Street Network** - Each street contributes to a larger, interconnected network. The network depends on different types of streets that serve different functions. Together, the network serves all users including vehicles, transit, bikes, and pedestrians.

- **Person Trips** - Denver’s STP uses person trips to understand the capacity of a street to move people. This approach captures trips by vehicles, transit, bicyclists, and pedestrians.

- **Connected Grid** - Denver’s rectilinear grid of streets provides high connectivity and efficient routing options. During peak travel times, heavy traffic can be disbursed to different streets, providing relief for the system as a whole.

- **Travel Sheds** - Travel sheds are geographic areas that serve similar travel patterns. By focusing on travel sheds, rather than high-traffic corridors, Denver can focus on how to move all users on a variety of facilities including streets, bike routes, and transit routes.

- **Nodes** - The character of a street varies along its entire length. Nodes, often commercial in nature, are the activity center of a street. Nodes are usually focused on a major intersection(s) and may include several blocks where activity and connectivity is high, or higher than in other locations on a corridor.
The success of Living Streets requires transportation strategies that are built by balancing operational, physical, and behavioral components. All three components influence the quality of our multimodal transportation network.

**Behavioral**
Behavioral components depend on how Denverites use the transportation network. Behavioral changes can reduce travel by single-occupancy vehicles and promote alternative modes of transport such as walking, biking, and transit. Ultimately, safety for all modes depends on users following

**Example:** commuters leave their car at home in order to carpool, take transit, or bike.

**Operational**
Operational components relate to the safety and efficiency of existing facilities in the public right-of-way. They can improve the functioning of a street with minimal physical changes, such as special signals that help position transit to move efficiently.

**Example:** leading or all-pedestrian signal phases, which allow pedestrians to begin crossing the street before vehicles.

**Physical**
Physical components are the facilities, or physical attributes, that compose a street. New facilities, such as wider sidewalks or bike facilities, can be added to a street to change its character and to accommodate and/or improve the safety for more modes.

**Example:** a sidewalk is expanded to provide a wider space for pedestrian movements.
Living Streets is a city-building philosophy of working together to provide a network of streets, combined with adjacent land uses and buildings, that accommodate pedestrians, bicyclists, vehicles, and transit while creating great spaces and places. Living Streets considers the entire system of streets and how each corridor fits into the larger, multimodal network. Living Streets recognizes how the entire street works as a whole, including the roadway, sidewalk, and buildings.

**Foster Partnerships:** The Living Streets Task force, an important component of the Living Streets Initiative, was comprised of representatives from a variety of sectors. As Denver builds a Living Streets network, partnerships, and ongoing conversations between the public and private sector are essential.

**Create Livability:** Living Streets integrate the transportation network with the use and form of buildings to achieve great destinations. Living Streets consider many aspects of livability including public health, active living, economic development, diversity, and the environment.

**Explore and Implement Community Needs:** Living Streets recognizes that each street is different. Together, the network of streets provide choices so that people of all ages and mobility levels feel safe and comfortable driving, riding transit, bicycling, and walking.

**Create a Balance of Services and Investments:** The creation of Living Streets requires balancing improvements with desired transportation services. For example, an investment that reduces the number of travel lanes for cars in order to create space for bike lanes and sidewalks may impact on-street parking or the number of cars that be accommodated without delay.

**Incorporate Green Infrastructure:** Green infrastructure practices have a number of environmental and economic benefits including improved water and air quality, reduced flood risks, increased property values, and enhanced human health.
Not all Living Streets look the same, but there are common elements that demonstrate the principles of a Living Street, illustrated below.

**BEFORE**
A five-lane street with no amenity zone on the sidewalk to buffer pedestrians from the roadway. The street is primarily designed to accommodate private vehicles. Land uses are low-density and parking is located in front of the building.

**AFTER**
A travel lane is traded for on-street parking and striped bike lanes. The pedestrian network is enhanced with wide sidewalks, street trees, seating, and bulb-outs and crosswalks that make it more comfortable to cross the street. New buildings placed close to the sidewalk provide a mix of uses to generate pedestrian activity.

- Surface parking next to the sidewalk detracts from the pedestrian experience.
- Sidewalks that lack an amenity zone, or buffer, with trees are uncomfortable for pedestrians.
- Without bulb-outs and a clearly marked crosswalk, the area for pedestrian crossings is less clear for both vehicles and pedestrians.
- Wider travel lanes and the absence of on-street parking may encourage cars to travel above the speed limit, which can impact safety for bicyclists and pedestrians.

- New mixed use buildings line the sidewalk, improving the pedestrian experience and adding activity to the street.
- Wider sidewalks separated from the roadway by trees and amenities create an inviting environment for pedestrians and transit riders.
- Green infrastructure such as porous paving in the parking lane and planters designed to treat stormwater provide environmental and aesthetic benefits.
- Special material in the crosswalk creates a more visible crossing area for pedestrians.
- A shared travel lane accommodates transit as well as private vehicles.
- On-street bike lanes provide a dedicated space for bicyclists.
The Living Streets framework recognizes that streets vary in their function and should evolve to support the City’s ongoing growth. The framework establishes three functional categories of streets that, in combination, are critical to the success of the overall transportation network: Connecting, Multimodal, and Destination streets. The experience on a given corridor may vary throughout the day or over time. This means that a corridor may be a Destination Street in one location and a Multimodal Street in another, or that a street can evolve over time from one type to another.

### Types of Living Streets

#### Destination Streets

Destination Streets are designed to accommodate each mode and serve as the place where travel trips end and/or begin. Lined with a mix of land uses, typically at higher densities, Destination Streets provide an excellent walking environment.

**Key Features:**
- Prioritize pedestrians
- Slower speeds
- Mix of higher intensity land uses
- Excellent walking environment

**Denver Examples:**
- Tennyson Street
- 16th Street Downtown
- Larimer Square

#### Multimodal Streets

Multimodal Streets are designed to move high capacities of people. Unlike Connecting Streets, they place less priority on throughput. Instead, multimodal streets engage with adjacent land uses and are more comfortable for bicycles and pedestrians.

**Key Features:**
- Accommodate mix of modes
- Mixed travel speeds
- Variety of medium intensity land uses
- Comfortable for bikes and peds

**Denver Examples:**
- E 12th Avenue
- E 16th Avenue
- 14th Street Downtown

#### Connecting Streets

Connecting Streets often provide direct routes at higher speeds with a focus on transit. They typically carry higher volumes and longer trips/commutes. These streets may be collector or arterial streets.

**Key Features:**
- Designed to move people more efficiently
- Often have higher speeds
- Often have lower intensity land uses
- Prioritize transit

**Denver Examples:**
- Colorado Boulevard
- South Broadway
- Federal Boulevard
Continuing to build a Living Streets network is anticipated to create many benefits for Denver including increased transportation options, community development, economic development, public health benefits, and improved air and water quality. Understanding the impacts of Living Streets will require the collection of data to measure changes within each of these areas.

**Transportation Options:**
Streets and their supporting street network will provide options that work for drivers, transit riders, pedestrians, and bicyclists regardless of physical ability or age. Taken as a whole, the street network will serve all users.

**Community Development:**
Streets will create destinations that are part of a high-quality urban environment. Living Streets incorporate buildings that relate to the sidewalk, land uses that catalyze activity, and streetscape amenities that create place. All of these factors contribute to building strong, vibrant communities.

**Economic Development:**
Living Streets attract investments that create jobs and provide fiscal return. Even lower-cost investments by the public or private sector, such as new bike lanes, can generate increased economic activity on the street and provide an affordable transportation option for households.

**Public Health Benefits:**
A balanced street network supports active lifestyles and the physical environment will create greater opportunities for physical activity. Studies show that people are more likely to walk if they live in neighborhoods with sidewalks and if they have local destinations, such as grocery stores and services, in walking distance from their home.

**Air and Water Quality:**
More trips via transit, bicycling, and walking will benefit the environment through the air-emissions reductions commensurate with reduced auto dependency. Reduced congestion results in fewer idling vehicles. Green infrastructure uses soils and vegetation to treat pollutants found in stormwater runoff and to help reduce the urban island heat effect.

**Equity:**
The Living Streets network is intended to extend throughout all of Denver’s neighborhoods. Currently, due to limited City dollars for capital costs and no dedicated City budget for the maintenance of features such as street trees and sidewalks, it is challenging to implement and maintain Living Streets without private sector partnerships. As Denver continues to implement Living Streets, it is essential to identify strategies and funding mechanisms that allow the creation of Living Streets in all contexts, even on corridors that do not have private-sector resources like special districts, in order to ensure an equitable distribution of the Living Streets network.
Growing the Living Streets network depends on a variety of tools for designing and redesigning Denver’s streets. The Living Streets Toolbox contains many elements, from streetlamps to travel lanes, that are utilized to make all types of Living Streets, including Connecting, Multimodal. A summary of these tools is outlined on the following pages. The case studies, beginning on page 19, highlight how the City and its partners have already utilized many of these tools.

**PARTNERSHIPS**

Creating a Living Street is a coordinated effort that requires money, time, and partnerships. The toolbox for each realm of the street - Private, Pedestrian, and Roadway - includes a range of potential partners. Partnerships are often required to successfully implement Living Streets improvements.

- **The City** is a vital partner for leadership and funding. In addition to basic infrastructure and services, the City offers funding tools such as bonds, which are approved by Denver voters.

- **Private** property owners and businesses along a corridor, often organized into a special district, can contribute funding and valuable support for a Living Street project.

- **State / Federal** The State of Colorado and the Federal Government have funding sources and programs that can be valuable tools street reconstruction projects.

- **Other** valuable partners include community groups, health foundations, and non-profits invested in creating sustainable streets.

**Tools are Flexible:** The tools described on the following pages provide a starting point for creating a Living Street, but they do not set specific rules or standards. Tools may be modified or tailored to a particular street’s context and characteristics, and there may be some tools or techniques that are not covered in the Toolbox but are still appropriate for a certain corridor.

**Not Every Tool is Appropriate for Every Street:** Just as each corridor is different and part of a greater network, the tools utilized on each Living Street will vary. Certain tools, such as a bike boulevard or median, are not appropriate for some streets depending on characteristics such as traffic volume. The toolbox highlights which tools fit particularly well with the three types of Living Streets - Destination, Multimodal, and Connecting.

**Certain Tools May Require Trade-offs:** Creating a Living Street may require tough decisions, or trade-offs. For example, in order to create wide sidewalks or to add a bike lane to a corridor, travel lanes or on-street parking may need to be removed or reduced in width, which could increase traffic congestion for vehicles on that street. Creating a Living Street depends on evaluating the benefits and trade-offs that come with each tool.
The Living Streets Toolbox is divided into three areas of the street: (1) Private Realm: tools that address the private property, or buildings, lining the street; (2) Pedestrian Realm: tools that address the area between the building and the curb; and (3) Roadway: tools that apply in the area between the curbs.

**PRIVATE REALM**
The private development that lines a street. This area includes buildings and off-street parking.

**PEDESTRIAN REALM**
The area between private property and the curb or roadway.

**ROADWAY**
The area between the curbs.
PRIVATE REALM

HOW AND WHO?
Changes to the private realm are largely dependent on the private sector. Private landowners and developers are responsible for redevelopment or new construction on their property. What they can build is shaped by the zoning for that property. As part of new development, private property owners are often required to make changes in the pedestrian realm as well. The quality of the private realm and pedestrian realm are closely linked.

PRIVATE REALM TOOLS
The private realm is the area behind the sidewalk where private property - buildings and off-street parking - are located. The mix and intensity of land uses, as well as the form and design of buildings, greatly influence the quality of a street. The City’s zoning code is the primary tool that shapes the private realm. Zoning establishes the rules for land use and building design, which then determines what private owners and developers can do with their property along a particular corridor. The use and design of the private realm has a large impact on the quality of the pedestrian realm and every building has an obligation to contribute to the pedestrian realm through its use, form, and design.

DENVER ZONING CODE - HOW ZONING SHAPES THE PRIVATE REALM
Every property has zoning that sets rules about how the property can be used when it is developed or redeveloped. These rules include what uses are allowed, where buildings and parking are placed, and the design of buildings.

Building Placement: Is the building close to the street with parking behind, or is it setback with parking in front? Are pedestrian entries oriented to the sidewalk?

Use: Does the land use, or mix of uses, draw people to the street? Streets with a mix of uses, such as retail, residential, and office, tend to generate the most pedestrian activity.

Design and Form: Do buildings have lots of windows at the ground floor for people to enjoy while walking by? Are there pedestrian entries oriented to the sidewalk?
TOOLBOX: ZONING
Denver’s zoning code is context-based, which helps to ensure that new uses and development are compatible with the adjacent neighborhood. The code also uses a form-based approach to inform how buildings relate to their surroundings. The following examples show how different zone districts shape the private realm along the street. Zoning also contributes to the quality of the pedestrian realm through building setbacks, which can make the sidewalk wider, as well as building entrances and windows that make the street more interesting for pedestrians. New development or redevelopment is a great opportunity to integrate Living Streets concepts into an area.

RESIDENTIAL EXAMPLE: U-RH-2.5

- Neighborhood Context: Urban (U)
- Dominant Character: Row House (RH)
- Max Building Height: 2.5 Stories

This zone district is often appropriate for Multimodal Living Streets in an urban residential setting.

**Building Placement:** Residential buildings in the Urban Neighborhood Context typically have consistent, moderate setbacks along the street with front entries oriented to the sidewalk.

**Use:** Allows single-, two-, and multi-family residential uses. Multi-family uses help to generate more activity on the street.

**Design and Form:** Buildings are typically oriented to the street, have shallow front setbacks, and are required to have a pedestrian entrance facing the street, which helps to create pedestrian activity.

MAIN STREET EXAMPLE: C-MS-5

- Neighborhood Context: Urban Center (C)
- Dominant Character: Main Street (MS)
- Max Building Height: 5 Stories

This zone district is often appropriate for Multimodal and Destination Streets in a dense, urban setting.

**Building Placement:** All buildings typically have a consistent orientation toward the street with shallow front setbacks and parking to the rear or side of buildings.

**Use:** Allows a variety of residential, commercial, and retail uses. A mix of uses on the street generates the most pedestrian activity.

**Design and Form:** Buildings are oriented toward the street and are required to have pedestrian-friendly features such as windows at the ground floor to activate the sidewalk.

COMMERCIAL EXAMPLE: S-CC-3

- Neighborhood Context: Suburban (S)
- Dominant Character: Commercial Corridor (CC)
- Max Building Height: 3 Stories

This zone district is well-suited for Connecting Streets in a less dense, suburban setting.

**Building Placement:** Commercial buildings may or may not orient toward the sidewalk. They typically have deep front setbacks with parking and/or landscaping in front of the building.

**Use:** Allows a range of residential, commercial, and retail uses. Often these corridors have a single predominant use, such as commercial.

**Design and Form:** Buildings have varying orientation to the street and often have landscaping or parking in front. Commercial buildings must have ground floor windows.
The pedestrian realm is the area where the public and private realms meet. It is located between the curb and private property. It contains the sidewalk as well as streetscape elements including street trees and plants, pedestrian seating, lighting and signage. Oftentimes, the pedestrian realm is constructed and maintained by adjacent property owners.

**TOOLBOX: PEDESTRIAN REALM**

**HOW AND WHO?**

Although the pedestrian realm is typically within the public right-of-way, it is often constructed, modified, and maintained by adjacent property owners. In some cases, the City may construct improvements in the pedestrian realm as part of a publicly-funded construction project.

The pedestrian realm is divided into two components: (1) the pedestrian zone, where people walk; and (2) the amenity zone, which separates the walkway from the curb.

**PEDESTRIAN REALM TOOLS**

The pedestrian realm is the area where the public and private realms meet. It is located between the curb and private property. It contains the sidewalk as well as streetscape elements including street trees and plants, pedestrian seating, lighting and signage. Oftentimes, the pedestrian realm is constructed and maintained by adjacent property owners.

**TOOLBOX: PEDESTRIAN ZONE**

**Sidewalk Width**

Wider sidewalks with amenity zones are more accommodating and comfortable for pedestrians. The appropriate sidewalk width depends on a variety of factors including pedestrian volume and the character of the street. Sidewalks with an amenity zone that separates the pedestrian zone from the roadway should be a goal for all Living Streets. Sidewalks with an amenity zone are often called “detached” and those without are often called “attached.”

**Sidewalk Material**

Sidewalks should be part of every Living Street. Enhanced paving, which includes colored concrete, patterned concrete or pavers can increase the quality of the sidewalk for pedestrians and greatly improves the image of a corridor. The appropriate paving material for a sidewalk often depends on the context of the surrounding blocks. In many cases, property owners form a special district to construct and maintain special paving.
TOOLBOX: AMENITY ZONE

**Trees, Planters, and Green Infrastructure**
Street trees and planters, located in the amenity zone, are a vital component to the street. Trees provide shade for pedestrians and buffer the sidewalk from the roadway. Both trees and plants create an attractive environment for pedestrians and improve water quality and air quality. These tools should be part of every Living Street. Plantings along the street may be designed to minimize stormwater runoff and provide water quality treatment, a practice known as green infrastructure. This is an effective way to incorporate environmental enhancements that improve water and air quality while improving streetscape aesthetics.

**Street Furniture**
This tool includes a variety of elements such as benches, tables, bus stops, trash cans, and bike parking. These amenities create an attractive pedestrian environment and help to make the street a place for people to enjoy. Quality, coordinated street furniture is essential to placemaking on Multimodal and Destination streets.

**Lighting**
Pedestrian-scaled lights keep the street safe at night for pedestrians, transit riders, and bicyclists. Lighting is important for each type of Living Street. Lights enable all users to travel safely during all hours. Lighting should look similar to other street furniture and complement the rhythm of street trees on a corridor. Pedestrian lights are often only implemented when property owners form a special district to maintain them.

**Wayfinding Signage**
Just as street signs guide vehicles along the roadway, wayfinding signs help pedestrians navigate their way along a corridor. Wayfinding signage and banners also contribute to the aesthetics of a street by creating a unique image and helping to brand a node or district. This tool is often only implemented when property owners form a special district to maintain streetscape amenities such as signage.

DEVELOPING TOOLS

The following are examples of developing tools that have not been fully tested but can be utilized as a way to enhance a street for pedestrians and/or cyclists.

**Parklets**
Parklets are extensions of the sidewalk into an on-street parking lane. They can create a mini-park or outdoor cafe, greatly enhancing the pedestrian experience by creating the feel of a wider sidewalk and a place for people to gather.

**On-Street Bike Parking**
Although bike parking is often found in the pedestrian realm, it can also be in the roadway in the vehicular parking lane. This allows a large number of bikes to park in one very visible location.

**Pilot Projects**
Pilot projects include a wide range of tools to temporarily enhance a street for pedestrians, such as temporary planters or painted crosswalks. The Better Block demonstration projects in Denver are a good example.
ROADWAY

Travel lanes, including turn lanes, are how vehicles move on the street. On some streets, travel lanes may be narrowed, converted to transit only, or removed to accommodate other modes. This may entail trade-offs such as more congestion or loss of on-street parking.

Parking lanes may be parallel or diagonal. They often provide a buffer between the pedestrian realm and moving traffic.

ROADWAY TOOLS

The roadway is the area between the curbs. It is typically the portion of the street that accommodates travel for vehicles, transit, and bicycles. It can also include pedestrian elements such as enhanced crosswalks and medians. The City typically is responsible for changes to the roadway but sometimes it’s constructed and maintained by the private sector.

HOW AND WHO?

In most cases, the City and/or the State is responsible for improvements in the roadway. Sometimes, especially if there is new development that requires the construction of completely new streets, the private developer constructs the roadway.

TOOLBOX: VEHICULAR

**Travel Lanes**
Travel lanes, including turn lanes, are how vehicles move on the street. On some streets, travel lanes may be narrowed, converted to transit only, or removed to accommodate other modes. This may entail trade-offs such as more congestion or loss of on-street parking.

**Parking Lanes**
On-street parking lanes may be parallel or diagonal. They often provide a buffer between the pedestrian realm and moving traffic.

TOOLBOX: TRANSIT

**Shared Lane**
Shared transit lanes allow buses to travel in the same lanes as other vehicles. Buses cannot move as quickly as they do in dedicated lanes that are exclusively for use by transit.

**Dedicated Lane**
A dedicated transit lane allows a bus, streetcar, or light rail to travel in its own lane, separate from other vehicles, sometimes only during peak hours. This often enables higher transit speeds and capacities.
TOOLBOX: PEDESTRIAN

Enhanced Crosswalks
Enhanced crosswalks, which are often coordinated with materials in the pedestrian realm, utilize materials such as colored or patterned concrete to clearly signal to vehicles where the pedestrian crossing is located, which increases comfort for walkers.

Bulb-outs
Bulb-outs, also known as curb extensions, extend the sidewalk at the end of a block in order to minimize the distance that pedestrians must travel to cross a street. These can be a good location for green infrastructure.

Medians & Pedestrian Refuge Islands
Medians increase pedestrian safety by providing a refuge in the middle of the street for people and reducing the walking distance across the roadway. They are also a good location for plantings and green infrastructure. Planted medians are typically maintained by a special district.

TOOLBOX: BICYCLE

Shared Street Facilities
Bike facilities where cyclists share the roadway with other vehicles. Examples include sharrows and bike boulevards, which are most appropriate on residential streets with low traffic volumes.

Dedicated Space Facilities
These facilities are generally in the roadway but provide a space that is exclusive to cyclists, such as bike lanes. These tools may also include intersection treatments like a bike box.

Fully Protected Facilities
Facilities in which the travel space for cyclists is completely separated from other modes, such as a protected bike lane or shared sidewalk trails. These tools often include intersection treatments like a bike box.

TOOLBOX: OPERATIONAL

Priority Transit Signals
This tool consists of traffic signals that give priorities to transit, such as buses, to proceed at a green light prior to other modes.

Signal Timing that Prioritizes Pedestrians
Signal timing strategies such as leading pedestrian intervals or all-pedestrian phases can allow pedestrians to cross the street in advance of turning vehicles so that they have a safer experience crossing the street.

Bicycle Signals
This tool includes signals that tell bicyclists when to turn, as well as signals that give bicycles their own phase within the signal to proceed at a green light, or to turn, prior to other modes.
Tennyson Street, a mixed use main street in northwest Denver, was transformed with a comprehensive streetscaping project in 2011 to 2012. The project enhanced an already popular corridor, lined with local businesses and historic storefronts, creating a Destination Street that draws patrons from the surrounding neighborhoods as well as the greater Denver area.

**WHY**

Tennyson Street, between W. 38th and W. 44th Avenues, has a long history as a neighborhood retail district. It is a walkable, compact corridor with an eclectic mix of retailers, shops, offices, and residences. Architecturally, there is great variety in both density and character, with single-family detached Victorian homes on the same block with newly constructed multi-story infill developments.

Most of the businesses on the street are locally owned. The district benefits from the vibrancy of an artistic mix of shops and galleries. Nearby residents and visitors from other parts of the city enjoy strolling the street and window shopping, checking out a gallery, or lingering at a sidewalk café.

The streetscape improvements completed in 2012 created a true pedestrian destination. The project capitalized on the passion and commitment of businesses on the street, creating a welcoming front door for this vibrant retail district.
Prior to this project, Tennyson Street had charming destinations but a lackluster streetscape environment. The two-lane street with on-street parking had the beginnings of a pedestrian-friendly corridor, but narrow, cracked sidewalks and a lack of consistent streetscaping detracted from the street’s walkability. The new streetscape improvements created a continuous 10-foot wide pedestrian walkway. Although the curbs were not relocated, the sidewalk was effectively widened through repairs to cracked concrete and redesigning the amenity zone. The project beautified the street with 54 new street trees, the addition of public art, and consistent, scored concrete along all of the sidewalks from 38th to 44th Avenue. Bulb-outs reduced crossing distances for pedestrians and helped to slow down traffic by narrowing the roadway at the end of each block. New bike racks made the street more friendly to bicyclists.

**TENNYSON STREET TOOLBOX**

**PRIVATE REALM**

- **Neighborhood Context:** Urban (U)
- **Dominant Character:** Main Street (MS) and Mixed Use (MX)

**ROADWAY**

- **Parking Lanes:** On-street parking lanes retained but some spaces were removed to make room for bulb-outs.
- **Bulb-outs:** Added bulb-outs at pedestrian crossings.

**PEDESTRIAN REALM**

- **Sidewalk Width:** Created a continuous 10-foot wide pedestrian walkway.
- **Sidewalk Material:** Enhanced sidewalks with scored concrete pattern.
- **Trees & Planters:** Added 54 new street trees.
- **Street Furniture:** Added public art, benches, and bicycle parking to the streetscape.
- **Lighting:** Added new pedestrian-scaled lighting.
Creating a Living Street is a coordinated effort that requires money, time and partnerships. This page summarizes how Tennyson Street became a Living Street thanks to the City’s partnership with the local property and business owners, who formed a Local Maintenance District (LMD) to assess themselves to raise money for the maintenance of the streetscape improvements.

### Partnerships

**City**

**Private**
- Private property owners along the Tennyson Street corridor formed a maintenance district to maintain the streetscape improvements after completion.

### Costs and Funding

**Construction Cost**
- $2.1 million total - $525,000 per block

**Construction Funding**
- The $2.1 million streetscape project was funded by Better Denver Bonds.

**Maintenance Funding**
- The maintenance of the new streetscape improvements will be paid for by a Local Maintenance District (LMD), which is an entity formed by adjacent property owners who agree to an additional property tax assessment to fund maintenance costs.

**Timeline**

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>Denver voters approve the Better Denver Bonds program, which includes $2.1 million for streetscape improvements to Tennyson Street.</td>
</tr>
<tr>
<td>2009</td>
<td>Property owners along the street form a Local Maintenance District (LMD) to fund maintenance of the improvements.</td>
</tr>
<tr>
<td>2010</td>
<td>Public workshops on the project begin.</td>
</tr>
<tr>
<td>2012</td>
<td>Construction complete in spring 2012.</td>
</tr>
</tbody>
</table>
EXPECTED OUTCOMES

Tennyson Street is anticipated to create the following benefits. Over time, data collection will help to verify these assumptions.

More modes, more people
The streetscape improvements made the street more accommodating to pedestrians who can walk to Tennyson to enjoy the businesses and amenities on the corridor. New bike racks and calmer traffic should also encourage cyclists on the street.

Sense of place, high quality people places
An attractive streetscape environment created a new front door for this pedestrian-centered corridor. Public art and amenities have helped to create a true sense of place where people want to gather.

Attracting investment in an area
The project is anticipated to benefit businesses along the corridor and encourage them to invest in improvements to their properties.

Active lifestyles, physical activity
Now that the street is more accommodating to a variety of modes, more people should feel comfortable walking or biking, rather than driving, which supports an active lifestyle.

Air-emission reductions
The improvements are anticipated to create more pedestrian and bicycle trips, which should reduce auto trips and vehicle emissions. New street trees should also improve the air quality along the corridor.

PROJECT BENEFITS

“The investment made into the Tennyson Street streetscape has greatly enhanced the pedestrian-friendly nature of the street. Restaurant goes, shoppers, and art aficionados now have a safe, attractive, and inviting experience on Tennyson and foot traffic has increased tremendously. For sure that helped encourage renovations to buildings and attracted new tenants.” - David Decker, Byers Street Properties

LESSONS LEARNED

Each Living Streets project results in valuable lessons that will inform future efforts. The following points summarize some of the major lessons learned from Tennyson Street:

- Partnerships with the private sector were key, especially for the maintenance of new street improvements.
- Public art that is integrated into the streetscape is a unique and effective way to create an attractive, vibrant street.
- Green infrastructure practices, such as street plantings that treat stormwater runoff, could have been explored as part of the project.
14th Street in Downtown Denver, known as the Ambassador Street, was redesigned in 2010-2011 to create a vibrant Multimodal Street that serves a variety of transportation modes, connects to a mix of higher intensity land uses, and provides an excellent walking and biking environment. The street exemplifies the goals of the Living Streets Initiative.

**WHY**

Home to a variety of visitor-oriented uses including the Colorado Convention Center, the Denver Performing Arts Complex, and several hotels, 14th Street was recently transformed into Denver’s Ambassador Street. In 2009, property owners along the corridor voted to contribute $4 million to the overall $14 million cost of a large-scale streetscaping project to achieve this vision. Construction was completed in 2010 through 2011.

The project, headed by the City of Denver, the Downtown Denver Business Improvement District, and the Downtown Denver Partnership, was designed to strengthen the identity of the Ambassador Street, creating a great destination for tourists, workers, and residents to enjoy.

Spanning 12 blocks between Market Street and Colfax Avenue, the project was designed to provide a high-quality pedestrian environment as well as enhanced facilities for bicycles.
Denver Living Streets

Prior to this project, 14th Street had three travel lanes, no bike facilities, and a lackluster pedestrian environment. Utilizing elements from the Living Streets toolbox, the right-of-way was rebalanced with a focus on pedestrians and bicyclists. The transformed street has wider sidewalks, a flex lane that serves both parking and travel functions, two travel lanes, a bike lane, and an on-street parking lane. The improvements entailed significant pedestrian and streetscape enhancements including new street trees, improved pedestrian lighting, wayfinding signage, granite seating areas, and bulb-outs at intersections to minimize the pedestrian crossing distance across 14th Street.

**14TH STREET TOOLBOX**

**PRIVATE REALM**

- **Neighborhood Context:** Downtown (D)
- **Dominant Character:** Lower Downtown (LD) and Theater District (TD)

**ROADWAY**

- **Travel Lanes**
  Width and number of thru-travel lanes reduced to create room for bike and ped improvements.
- **Parking Lanes**
  On-street parking retained: parking lane on south and flex parking lane on north.
- **Dedicated Space Bike Facility**
  Dedicated 6-foot bike lane added to street.
- **Enhanced Crosswalks**
  Colored, patterned concrete added to all pedestrian crosswalks.
- **Bulb-outs**
  Added bulb-outs at pedestrian crossings.

**PEDESTRIAN REALM**

- **Sidewalk Width**
  Sidewalks widened to 19 feet on the north side and 16 feet on the south side.
- **Sidewalk Material**
  Enhanced paving and in-ground lighting added to sidewalks.
- **Trees & Planters**
  Large planters and 150 street trees added to the corridor.
- **Street Furniture**
  A cohesive palette of street furniture, including seating and bike racks, added to the street.
- **Lighting**
  Added new pedestrian-scaled lighting.
- **Wayfinding Signage**
  Monument signs with wayfinding for pedestrians added at each corner.
Creating a Living Street is a coordinated effort that requires money, time and partnerships. This page summarizes how 14th Street was transformed into a Living Street through partnerships and funding. The partnership between the City and County of Denver, the Downtown Denver Partnership, and the private property owners along the corridor was essential.

**PARTNERSHIPS**

The City of Denver contributed funding to the project through the Better Denver Bonds program. Denver voters approved the Better Denver Bonds in 2007.

Private partners included the Downtown Denver Partnership and private property owners, who formed a General Improvement District (GID) to help pay for the project.

**TIMELINE**

2005
Downtown Denver Partnership (DDP) sponsors the 14th Street Initiative in cooperation with the City County of Denver (CCD). DDP begins outreach to 14th Street property owners.

2007
Downtown Area Plan Adopted: calls for 14th Street to be transformed in a pedestrian-oriented, sustainable street.

2008
14th Street designated a “priority street” in Denver’s First Pedestrian Priority Zone document, created through DDP.

2009
Property owners and electors on 14th Street vote to form the General Improvement District (GIS) and contribute $4 million to the project.

2010
Construction begins.

2011
Construction complete.

**COSTS AND FUNDING**

**COSTS**
$14 million total - $1,166,666 per block

**CONSTRUCTION COST**
The $14 million project was funded by $10 million in Better Denver Bonds and $4 million from property owners along the corridor.

$10 million
City

$4 million
Private

$14 million Total

**MAINTENANCE FUNDING**
The maintenance of the new streetscape improvements will be paid for by adjacent property owners, primarily through the General Improvement District (GID).

100%
Private

Private

City
EXPECTED OUTCOMES
The changes to 14th Street have led to benefits in the following areas (all data provided by the Downtown Denver Partnership).

More modes, more people
The enhanced sidewalks attracted more pedestrians to the street. There has been an average 111% increase in pedestrian traffic on non-convention days. Bicycle counts at 14th and Glenarm more than doubled in both the morning and afternoon.

Sense of place, high quality people places
The new Ambassador Street is now an attractive, well-designed destination. Since the project started construction five new sidewalk cafes have opened along the corridor, just one example of the people-oriented street that was created.

Attracting investment in an area
Public investment attracted private investment along the improved corridor. Sales tax revenue for the corridor increased by 37.8%, compared to 23% for the rest of Downtown, between early 2009 and late 2012.

Active lifestyles, physical activity
The improvements to the street have led to more biking and walking. Initial bicycle and pedestrian counts on the street show an increase between 2010 and 2012, indicating that more people are enjoying active modes of transportation.

Air-emission reductions
The higher number of pedestrians and bicyclists on the street should result in fewer automobile trips and reduced car emissions. In addition, new street trees and planters should improve air quality.

LESSONS LEARNED
Each Living Streets project results in valuable lessons that will inform future efforts. The following points summarize some of the major lessons learned from 14th Street:

- Partnerships with the private sector were essential to both the construction and maintenance of the project.
- Creative solutions such as a flex lane, which serves both parking and travel functions depending on the location, can help to create multimodal balance on a street constrained by existing right-of-way width.
- Green infrastructure practices, such as street plantings that treat stormwater runoff, could have been considered as part of the project.

PROJECT BENEFITS
“Thanks to the new sense of place that was created on 14th Street through the streetscape project, we have seen significant investment by the private sector. There are four projects currently planned or under construction that total approximately $130 million in value.”
- John Desmond, Executive Vice President of Urban Planning and Environment, Downtown Denver Partnership
South Broadway is a major north-south arterial that connects the southern half of Denver with Downtown. The City, working in partnership with local businesses and property owners, started a process in 2007 to enhance the corridor between Arizona and Yale Avenues. The changes created a quality Connecting Street that features an enhanced pedestrian environment and a safer roadway for all modes.

**WHY**

South Broadway is an important business district that anchors the southern end of a major north-south thoroughfare. The corridor is home to a variety of local merchants, including several antique shops that attract customers from throughout the Denver area.

Although Broadway is a major arterial with significant vehicular traffic, the City and its partners recognized the potential for the street between Arizona Avenue and Yale Avenue to become a vibrant destination with a pedestrian-friendly atmosphere. Prior to the project, the street lacked streetscaping and the type of environment that encourages pedestrian traffic.

From the local City Council office, to businesses on the street, a collaborative effort led to a transformed street where it is easier and safer for cars, pedestrians, transit riders, and bicyclists to enjoy shopping in this unique commercial district.
The South Broadway reconstruction project transformed 17 blocks of the corridor, between Arizona and Yale, in three phases from 2010 through 2013. This major arterial with four travel lanes, a center turn lane, and on-street parking was reconstructed to create a vibrant street that better serves all modes. Improvements included the widening of the roadway by up to six feet to create a raised center median. The median provides a refuge for pedestrians crossing the street and improves aesthetics and air quality along the corridor through the addition of trees and landscaping. The project also entailed major streetscape enhancements such as new concrete sidewalks with brick accents, a palette of coordinated street furniture including bus stops and bike racks, pedestrian lighting, landscaped features with corner seat walls, and new street trees lining the entire corridor. To improve pedestrian safety, corner bulb-outs were added at the end of the on-street parking lanes on each block.

**SOUTH BROADWAY TOOLBOX**

**PRIVATE REALM**

- **Neighborhood Context:** Urban (U)
- **Dominant Character:** Main Street (MS)

**ROADWAY**

- **Shared Lane**
  Retained a shared travel lane for vehicles and buses.

- **Parking Lanes**
  The project retained on-street parking, providing a buffer between the sidewalk and traffic.

- **Median**
  Created a raised median, 6 feet wide in most locations, with landscaping.

- **Bulb-outs**
  New bulb-outs added at the end of each block.

**PEDESTRIAN REALM**

- **Sidewalk Material**
  Built new concrete sidewalks with a scoring pattern and brick accents.

- **Trees & Planters**
  Added new street trees and landscaped planters with seat walls at corners.

- **Street Furniture**
  Added a palette of streetscape furniture including bus stop benches and bike racks.

- **Lighting**
  New pedestrian lighting added to the corridor.
South Broadway relied on an important partnership between the City of Denver and local businesses, who formed Local Maintenance Districts to fund maintenance of the streetscape improvements. Funding for the $27.5 million project came from the City’s Capital Improvement Project (CIP), Better Denver Bonds, the State’s Funding Advancement for Surface Transportation and Economic Recovery (FASTER) program, and federal improvement funding.

**PARTNERSHIPS**
- The City of Denver contributed to the project through Better Denver Bonds and its Capital Improvement Project (CIP).
- Private businesses along the corridor formed local maintenance districts to fund maintenance of the improvements.
- State FASTER dollars and improvement funding from the federal government were important funding sources.

**COSTS AND FUNDING**

**CONSTRUCTION COST**
$27.5 million total - $1,617,647 per block

**CONSTRUCTION FUNDING**
The funding for the project came from a variety of city, state, and federal sources.

- **City**: $11.5 million
- **State & Federal**: $16 million

<table>
<thead>
<tr>
<th>City</th>
<th>State &amp; Federal</th>
</tr>
</thead>
<tbody>
<tr>
<td>$11.5 million</td>
<td>$16 million</td>
</tr>
</tbody>
</table>

$27.5 million Total

**MAINTENANCE FUNDING**
The maintenance of the new streetscape improvements will be paid for by adjacent property owners through Local Maintenance Districts.

**100%**

**TIMELINE**

- **2008**
  - Passage of Better Denver Bonds

- **2008**
  - Local Maintenance District (LMD) formed for S. Broadway between Arizona to Iowa.

- **2009**
  - Phase 1 construction begins (Arizona to Iowa).

- **2010**
  - Phase 1 construction complete.
  - Phase 2 construction begins (Yale to Wesley).

- **2011**
  - Phase 2 construction complete.
  - Phase 3 construction begins (Wesley to Iowa).

- **2013**
  - LMD formed for S. Broadway between Wesley and Yale.
  - Phase 3 construction complete.
EXPECTED OUTCOMES

South Broadway is anticipated to create the following benefits. Over time, data collection will help to verify these assumptions.

More modes, more people
The greatly enhanced streetscape, which focuses on the pedestrian, should encourage more people to walk along South Broadway. Bicyclists should also be better accommodated thanks to new bike racks and a street that is safer for all modes.

Sense of place, high quality people places
Attractive new streetscaping created a quality destination with a cohesive identity for the 17-block stretch. Quality treatments such as landscaping and pedestrian lighting create a destination that attracts people to linger and enjoy the shopping district.

Attracting investment in an area
The improvements to the street should encourage merchants and property owners in the area to improve their properties and storefronts, generating more economic activity in the district.

Active lifestyles, physical activity
As more people are drawn to walk and bicycle on the street, it promotes an active lifestyle with positive health benefits.

Air-emission reductions
The new landscaping, which includes new street trees in the sidewalk amenity zone and new center median, will help to improve air quality. Changes that promote use by pedestrians and bicyclists should contribute to reduced auto emissions.

LESSONS LEARNED

Each Living Streets project results in valuable lessons that will inform future efforts. The following points summarize some of the major lessons learned from South Broadway:

- Partnerships with the private sector and state/federal government were key to funding both the construction and maintenance of the project.
- Streetscaping and multimodal improvements to a street are an effective way to promote marketing and economic development for a business corridor.
- Green infrastructure practices, such as street or median plantings that treat stormwater runoff, could have been explored as a component of the project.

PROJECT BENEFITS

“The big thing on South Broadway prior and post construction has been the improved, increased and enhanced safety for all factions of people that come down there. In addition to the improved aesthetics, the crosswalks, the wider parking lanes, the pedestrian lights and traffic signals are a wonderful addition. These improvements benefit the property owners, prospective clients, drivers and pedestrians alike. It just looks and feels better.” - Michael Sharp, Board Member of South Broadway Streetscape Local Maintenance District
This document highlights some of Denver’s achievements to create a Living Streets network. Since the Living Streets Initiative began in 2007, the Department of Public Works adopted a Complete Streets Policy that formalizes the practice of promoting safe and convenient access for all users into plans, programs, and street maintenance. To ensure that the network expands and that Living Streets principles and tools continue to grow, the following next steps are recommended. Learn more about how Living Streets is moving forward at www.denvergov.org/livingstreets.

### Community Partnerships

Community support is essential to all aspects of Living Streets implementation. Community members will play a key role in the dialogue about how to grow the Living Streets network, including the trade-offs that are often inherent to designing Living Streets in existing communities. Upcoming City initiatives, such as the update to Blueprint Denver, will be a way for community members to engage in the conversation about what we value as a community and next steps.

### 1 - Pilot Projects

**Action Item**

Continue to identify and implement pilot projects that test Living Streets tools in different contexts. Pilot projects are often an effective way to demonstrate tools and test more permanent improvements.

- Involve key community partners and utilize pilot projects as a way to raise public awareness of Living Streets.

**Responsible Parties**

**Lead:** Public Works and Community Planning and Development.

Support from Department of Environmental Health, Office of Sustainability, and Parks and Recreation, as well as community and private-sector partners.

**Approach**

Partnerships with community and private-sector partners, who can provide resources, outreach, and funding, should be explored.

Examples: Better Block Jefferson Park and Better Block Five Points; 15th Street protected bike lane; on-street bike corrals on Old South Pearl Street.

### 2 - Green Infrastructure

**Action Item**

Integrate Living Streets tools with citywide goals and policies for green infrastructure.

**Responsible Parties**

**Lead:** Public Works.

Support from Community Planning and Development, Department of Environmental Health, Parks and Recreation, and Office of Sustainability.

**Approach**

Develop green infrastructure technical criteria specific to Denver’s unique climate, geography, water rights issues, and development patterns. Construct a demonstration project that showcases best practices for green infrastructure.

Examples: New York City Green Infrastructure Program; Philadelphia Green City, Clean Waters program; Portland Grey to Green Initiative.
### 3 - POLICY AND REGULATION

**ACTION ITEM**
Assess the City’s current policies, rules, and regulations that govern street and streetscape design.

- Identify issues and conflicts, especially since existing policies, rules, and regulations cross multiple departments
- Align policies, rules, and regulations - current and new - among all departments to ensure a clear, one-stop approach for customers and to ensure that the Living Streets philosophy is achieved.

**RESPONSIBLE PARTIES**
Leads: Public Works and Community Planning and Development.

Support from the Fire Department, Office of Sustainability, and Parks and Recreation.

**APPROACH**
Due to breadth of project and based on national examples, resources - such as additional staff hires - will be required.

Identify funding and dedicated staff in each department. Consider hiring a complete streets manager who can lead effort and oversee an inter-departmental staff working group.

Examples: Chicago Complete Streets Document; Boston Complete Streets Design Guidelines

### 4 - FUNDING MECHANISMS

**ACTION ITEM**
Evaluate funding models for both capital and maintenance costs for Living Streets improvements. This should be closely linked to the assessment of City policy and regulations to ensure that there are viable methods for implementing the vision for Living Streets citywide and in a variety of contexts.

**RESPONSIBLE PARTIES**

Support from Office of Economic Development and Office of Sustainability.

**APPROACH**
Explore and evaluate potential funding sources to cover the cost of implementing Living Streets-type improvements equitably throughout the City. This effort should include a study of best practices from peer cities across the United States.

Example: Federal Boulevard in Denver. The first phase of multi-modal improvements included some elements from the Living Streets Toolbox, such as a consistent 8-foot sidewalk and a planted median where possible. While there is no private sector partner along this stretch of the corridor, because it is a designated Parkway/Boulevard, Parks and Recreation was able to assume maintenance of the planted median. The second phase has benefitted from the ongoing Living Streets discussion. Funding and support of the Living Streets policy will result in the inclusion of street trees on the east side of the roadway, in addition to the consistent sidewalk and planted medians. Together these improvements will move Federal closer to the Living Streets vision. The City will also cover maintenance associated with these enhancements until private property owners along the corridor are able to take on these costs.

**Phase 1:** the first phase of the project included some elements from the Living Streets Toolbox, including a consistent 8-foot sidewalk and planted median where possible.

**More to come:** the second phase of the project will include street trees on the east side of the roadway. Additional amenities, such as pedestrian lighting, could be added when a source for the additional capital and ongoing maintenance costs is identified.

- Street Trees
- Pedestrian Lighting
- Street Furniture

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