Colorado Downtown Streets

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Walk Colorado
Publication Goals

• Developed through a partnership among DOLA, CDOT and CDPHE

• Provide an easy-to-digest resource that helps communities and CDOT work together more effectively to build better downtown streets

• Support effective planning and decision-making to create better streets

• Help communities implement better streetscapes
Workshops
Which of the following is the greatest predictor of your health?

☐ Your genes?
☐ Having a primary care physician?
☐ Your address?

“When it comes to health, your zip code matters more than your genetic code.”
Short Distances to Large Gaps in Health

THE ROLE OF COMMUNITIES IN PROMOTING PHYSICAL ACTIVITY

WALKABLE COMMUNITIES
People who live in walkable neighborhoods are 2 times as likely to get enough physical activity as those who don't.

JOINT USE
The number of children who are physically active outside is 84% higher when schoolyards are kept open for public play.

RECREATIONAL FACILITIES
Teens who live in poor or mostly minority neighborhoods are 50% less likely to have a recreational facility near home.

TRAILS
People who live near trails are 50% more likely to meet physical activity guidelines.

Active Living Research
www.activelivingresearch.org

“Making the Healthy Choice the Easy Choice”

• Obesity risk increases 6% with every mile spent in the car, and decreases 5% with every .62 miles walked. ¹

• People living near trails are 50% more likely to meet physical activity guidelines. ²

• People living in walkable neighborhoods are twice as likely to get enough physical activity as those who do not. ³

• People of all ages are more likely to use parks and open spaces with trees. ⁴

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The Leanest State...
The Leanest State...

Over 75% of each race/ethnicity group most frequently rated Access to safe places to walk as a “Very important” neighborhood characteristic.

When asked to rate the conditions in your neighborhood for access to safe places to walk the following reported “Very good”:

- 34.1% Hispanic/Latino,
- 41.2% African American,
- 40.2% Other, non-Hispanic
- 52.1% White

The Attitudes and Behaviors on Health (TABS) Survey 2015
In Colorado, how much do we spend each year on obesity-related medical costs?

A. $147 billion
B. $6.38 billion
C. $1.6 billion

www.cdc.gov/obesity/causes/economics.html
$1.6 Billion

- **49,230,769** LF of 5’ wide sidewalk ($6.5 sqft)
- **50,000+** miles of bike lane ($30,000/mile)
- **3200** miles of semi-separated bike lane (15\(^{th}\)) ($500,000/mile)
- **36** miles of commuter rail (RTD Eagle P3 $2.2 billion)
Why Streets Matter:
Improve Public Health & Support a Healthy Environment

People are more inclined to walk and bike in places that feel safe and pleasant.

47% higher likelihood for people to be active at least 30 minutes a day if they live in neighborhoods with sidewalks.

Streets that encourage walking, bicycling, and transit use over private vehicle use reduce traffic, air pollution and greenhouse gas emissions. Streets can be designed to capture and clean stormwater runoff.
Why Streets Matter: Improve Public Health & Support a Healthy Environment
Why Streets Matter: Improve Public Health & Support a Healthy Environment

The Town of Windsor Joins LiveWell Colorado’s HEAL Cities & Towns Campaign

Editor’s note: This was originally released by the Town of Windsor.

The Town of Windsor Town Board voted unanimously in favor of participating in the Healthy Eating Active Living (HEAL) Campaign on Monday, July 10.

A partnership between the Colorado Municipal League, LiveWell Colorado, and Kaiser Permanente, the HEAL Cities & Towns Campaign provides training and technical assistance for municipalities to develop policies that foster healthy workplaces, healthy food access, and active communities.

"By participating in the HEAL Cities campaign, it shows our town’s investment in health and the quality of life of our residents,” said Recreation Manager Tom.
Why Streets Matter: Improve Public Health & Support a Healthy Environment

STREET (SHADE) TREES

**Definition:**
Street trees are trees that are planted within the public right-of-way to provide shade and enhance the character of the street environment.

**Benefits:**
Street trees create a more pleasant and healthy environment by providing shade and reducing the impact of pollutants.

**Application:**
Street trees are a critical component of urban design and should be integrated wherever possible. Vegetation placement must be done strategically to ensure it is aesthetically pleasing and enhances the urban environment.

**Design Considerations:**
- Select appropriate species that will thrive in local climates and soil conditions.
- Trees should be installed anywhere along a street where they would reduce the temperature throughout its root zone.
- In colder climates, isolated street trees are generally planted 10 to 20 feet back to provide additional shade.
- Trees should be placed on the east side of streets facing south.
- Avoid planting species that require excessive water or drainage.

*Note:* Colorado Street Trees are not designed to withstand high winds or heavy snow.
Why Streets Matter: Promote Safety & Increase Accessibility


- **28%** Reduced risk to pedestrians by redesigning intersections and sidewalks.
- **50%** Reduced risk to cyclists in on-road marked bicycle lanes.

**Most** people will experience limited mobility at some point in their lives. Accessible streets allow **everyone** to participate in the social and economic activity present there.
Why Streets Matter: Promote Safety

Why is 20 mph the speed limit for school zones?
Pedestrian Survival Rate by Vehicle Speed

- **20mph**: 95% survive, 5% die
- **30mph**: 55% survive, 45% die
- **40mph**: 15% survive, 85% die
Colorado residents are outliving their driving ability by 8 - 10 years.

Walking is the best means of transportation and exercise for our oldest residents.

Seniors face growing health risk from social isolation

Close to a third of Denver’s 69,000 residents older than 65 are at risk of isolation.
Why Streets Matter: Increase Accessibility & Mental Health

Walkability

Parks and Gathering Spaces

People feel:
- Independent
- Safe and secure
- Sense of belonging

+ Social Activity:
- Know neighbors
- Increased social interaction
- Watch out for each other

Social Connectedness & Positive behaviors
Motor Vehicle Injury and Fatality Data

2015:
• 122,575 motor vehicle crashes +7%
• 506 fatal crashes +12%
• 546 people were fatally injured +12%
• 216 speeding-related fatalities; = 40% of all fatalities

Pedestrian and Bicycle injury Data

Walking:
• 1,245 motor vehicle crashes involving a pedestrian
• 59 fatalities
• 316 seriously injured

Biking
• 1,019 crashes involving a bicyclist
• 13 fatalities
• 167 seriously injured

Economic and Health Benefits of Bicycling and Walking

State of Colorado

Bicycling and walking deliver $3.2B in health savings, $1.6B in activity to Colorado economy
Estimated mean annual health benefits from walking

Source: BBC Research & Consulting and Alta Planning and Design from WHO HEAT walking output.
“This shows that funding biking and walking infrastructure is a good investment for our state – not only for the health of Coloradans, but also for the health of our economy,”
WHO HEAT Tool

Health economic assessment tools (HEAT) for walking and for cycling

http://www.heatwalkingcycling.org/
What is the Transportation and Health Tool?

The Transportation and Health Tool (THT) was developed by the U.S. Department of Transportation and the Centers for Disease Control and Prevention to provide easy access to data that practitioners can use to examine the health impacts of transportation systems.

The tool provides data on a set of transportation and public health indicators for each U.S. state and metropolitan area that describe how the transportation environment affects safety, active transportation, air quality, and connectivity to destinations. You can use the tool to quickly see how your state or metropolitan area compares with others in addressing key transportation and health issues. It also provides information and resources to help agencies better understand the links between transportation and health and to identify strategies to improve public health through transportation planning and policy.

https://www.transportation.gov/transportation-health-tool
Health and Economy

• Active transportation infrastructure can catalyze real estate development

• Investments in trails, bike lanes and bicycle-sharing systems have high levels of return on investment

• There is evidence of a correlation between access to active transportation facilities and increased property values

• There is a reciprocal relationship between the private and public sectors in terms of maximizing investments in active transportation
Why Streets Matter: Support Economic Development
Why Streets Matter: Support Economic Development

Great streets:

• Reflect identity of the community well
• Are built for cars and people
• Support gathering, walking, biking
• Feel safe and comfortable
• Invite people to support businesses
• Provide necessary infrastructure and levels of service
• Support effective placemaking
BENEFITS OF GREAT STREETS

GREAT STREETS SUPPORT BUSINESSES AND ECONOMIC DEVELOPMENT

Streets provide the most immediate and consistent impression people receive about a community. They help define the character of the community and say a lot about whether it is a place worth spending time and money in. And in an era when businesses, entrepreneurs and the talent are seeking authentic and attractive communities with a high quality of life, the significance of a first impression goes well beyond whether passersby stop for lunch.

Great streets also support a community’s existing businesses. In Glenwood Springs, the installation of outdoor dining and a widened pedestrian walkway on a popular downtown street contributed to a 10 percent increase in revenues for bars and restaurants—despite the fact that some on-street parking spaces had to be removed to make room for improvements. This is due in part because shoppers who arrive by foot or bike spend an average of 8.5 - 25 percent more at businesses per month than do those arriving by car. Benefits of user-friendly streets don’t stop with increased sales tax revenues. Increasing walkability also achieves higher property values. Even during the recession, a study of five markets across the Rocky Mountain West revealed that home buyers paid an average of 12.5 percent more for homes in walkable areas.

GREAT STREETS SHAPE AND SUPPORT QUALITY DEVELOPMENT

Well-designed streets create a foundation from which communities can grow and develop. They set the stage for the type of investment and development a community wants to see in a given area. When streets are designed solely for vehicles or with an emphasis on higher speeds, they shape auto-oriented land uses that are set back from the street and have large surface parking lots, such as commercial strip malls and big box centers.

While these land uses may be a good fit for some areas, they do not support the type of environment that creates a successful downtown, main street or central business district. In downtowns, streets need to support social and economic land uses. If the street is designed to be safe and comfortable for people on foot and bike, land uses will join with the street and be accessible by foot, bike or car. This promotes activity on the street, and encourages people to linger, spending more time and money at local businesses. This is important because on a per-acre basis, downtowns and mixed-use central business districts generate far greater public wealth than conventional strip malls and big-box centers. In a study of nine communities across the Rocky Mountain west, the 2-3 story mixed-use development that is typical of Colorado downtowns generated 263 - 400 percent more county property tax per acre than single-use commercial development. Streets that enable walkable, mixed-use development help communities earn the most revenue possible from their most finite resource - land.
Well designed streets create a foundation from which communities can grow and develop
Streets reflect the character of the community
Provide constant impression(s)
Built for cars, pedestrians, bicyclists- all ages
Support gathering
Support walking and biking
Not too noisy and feel safe to get out of the car
Support businesses through services and placemaking
Shoppers who arrive by foot (instead of car) spend 8-25% more/month in area businesses
People and businesses are drawn to great places.
people will sacrifice salary for ideal community
(17% higher salary vs. 83% ideal community)
How do you make a place where people want to be?
If you build it, they will come

Not necessarily...
90% said living walking distance to community destinations was important to housing decision
Desire for authentic places
Improvements: Incremental, small wins
Implement action plan
Small and big wins
Add events to build habit of visiting downtown
We want things to do
Connect infrastructure investments strategically
Challenges?
State Highways as Main Streets
Why emphasize walking and biking?

5.5 Million Total Population (2016)

1.65 million (30%) can’t drive

3.85 million (70%) licensed drivers
Why emphasize walking and biking?

Percent Growth in Bicycle Commuting (2000 - 2011)

- National Average
- Colorado Springs
- Denver
- Aurora
Why emphasize walking and biking?

- Bicycles sold in the US in 2005: 25,000,000
- Cars and trucks sold in the US in 2005: 20,000,000

The bar chart illustrates the number of bicycles and cars sold in the US in 2005, highlighting the preference for bicycles as a mode of transportation.
Why emphasize walking and biking?

$30 Million Can Buy ...

Source: Tulsa Bicycle/Pedestrian Advisory Committee.
Why emphasize walking and biking?
KEY CONSIDERATIONS FOR SUCCESSFUL STREET DESIGN

The vitality of our downtowns is dependent on an approach to street design that is sensitive to the multifaceted role that streets play. Successful street design incorporates these seven core considerations:

1. **CONTEXT**
   Streets should be designed with an awareness of surrounding neighborhoods and adjacent land uses.

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3. **SAFETY**
   Streets should be designed so that people walking, parking, bicycling and driving can all interact safely.

4. **CONNECTIVITY**
   Good connectivity decreases travel distances and increases route options for all modes of travel, allowing more direct travel between destinations.

5. **MOBILITY**
   All modes should be able to easily move along the street.

6. **ACCESSIBILITY**
   Streets should provide comfortable access to destinations for all modes of travel and all types of people.

7. **PLACEMAKING**
   Streets play a huge role in community life and should be designed as public spaces as well as areas for mobility.
The need to balance ...

Consider ...

• Context
• Safety
• Function
• Intended Users
• Placemaking
Street Function Requires a Balance
Publication “At a Glance”

Why Streets Matter: Benefits & Considerations

What is a Street: Principles, Components & Design Elements

How to Create a Great Street: Common Issues & Answers

Implementation: Vision, Collaboration, Quick Wins & Funding
Streetscape Components
Definitions, Considerations, Benefits, Application,
Creating Great Streets

Identify Vision:
We want downtown to be more welcoming.
Implementation

Creating a Vision
Working with CDOT
Planning Process
Funding
Quick wins can take many forms and address many issues, but they all need a handful of core ingredients to be successful:

**Team**
It takes a village to implement a quick win project. Critical team members include:
- Project leader—could be someone from the list below, or a stand-alone teammate
- Agency that has jurisdiction over the street or public space affected (CDOT or local public works)
- Elected officials
- Creative designers
- Budget manager
- Community outreach leader(s)
- Installation crew (often in-house public works)

**Sense of Urgency**
A sense of urgency is essential to moving a project along. Whether it be testing a solution before the first big snowfall or during the planning of a repaving project, creating deadlines that address a purpose are helpful for implementation.

**Outreach Plan**
To generate support, the public needs to understand the purpose of the project. A strategic communications and outreach plan not only educates the public about the project but also helps gauge its success and identify potential improvements.

**Permits**
Almost anything that a municipality, group or individual might want to do on or next to a state highway, including events, temporary parklets or bike corral, will require a permit from CDOT. In almost every case this should be initiated by talking with the CDOT regional office to get advice and direction on how to proceed. This is not something that can be done quickly or on short notice. Local permits may also be needed or property owner permission if improvements are to take place on private property.

**Funding Strategy**
Quick win projects don’t follow the same funding model as most capital investments, where federal or state grants may apply. Because they are much less expensive, funding can be piecemeal from local organizations, donations or even borrowing supplies.

**Maintenance Plan**
Replacing damaged materials, repainting, and snow removal are all important considerations for the continued success of a project. Because these projects are purposefully low-cost, usually the maintenance is as well, but needs to be planned for nonetheless.

**Performance Tracking**
Being clear about the objectives the project hopes to accomplish (ex. “Increase sales tax revenue from dining with outdoor seating”) is the best way to track performance to both inform necessary adjustments and demonstrate success.
Case Studies and Quick Wins
COLORADO DOWNTOWN STREETS
A Tool for Communities, Planners, and Engineers

THE CHANGING LANDSCAPE
Our economy is undergoing significant and rapid change. Technological, demographic, lifestyle and workplace trends are transforming how people live and what they want from communities. In this landscape, streets must be designed to achieve multiple benefits. Following are some of the trends affecting how we design and build streets and transportation facilities.

LESS FUNDING MORE NEEDS:
As needs and demands grow, single-purposed solutions are increasingly difficult to afford.

CO’s Budget per resident

2013
$569
2019
$122

CHANGING PREFERENCES:
58% of people prefer a neighborhood within an easy walk.
A growing number of people are interested in the convenience and sense of place afforded by living in walkable places, whether it is easy to get to destinations on foot, bike or car.

LESS TRAVELLED:
8% from 2000 - 2012, per capita VMT drop in Colorado (even as population growth is trending up). Since the 1980s, there has been a continuous decrease in the percentage of people with a driver’s license for people aged 16 - 64.

Nationally, Vehicle Miles Travelled (VMT) has grown for 24 consecutive months.

DRIVING IS UP (BUT ALSO DOWN):

For more information, references and source information, download the full publication: https://www.colorado.gov/pacific/dola/colorado-downtown-streets

Infographic produced by: Colorado Department of Transportation

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Videos

“MINUTE ON MAIN STREET” VIDEOS

Design for the Speed You Want

How Wide Should Our Lanes Be?

Design in Context

Designing for Pedestrians

https://www.colorado.gov/pacific/dola/colorado-downtown-streets
Activity:

Diagnosing barriers to safe multimodal main streets
A few considerations ...

• Who uses the road?
• Are there specific destinations along the road (school, park, church, town hall, etc.?)
• Is there truck traffic?
• What do you want your main street to say about your community?
• What’s the average daily traffic count?
• Is there current traffic calming?
Working with CDOT

- Establish a clear vision and plan
- Get to know regional contacts
- Get the timing right: engage early and often
- Understand fiscal constraints and leverage local funds
- Build strategic partnerships to demonstrate support
- Be opportunistic: pay attention to projects coming to your community
CDOT Engineering Regions
Planning Regions
Statewide planning framework

1. Regional transportation plans
2. Statewide transportation plan
3. Statewide transportation improvement program (STIP)

- Regional needs, goals and priorities
- Statewide goals and priorities
- Projects/Programs funded for implementation
Get your project into the PLAN!
Getting it done ...

- Regional Transportation Plan
  - ✓ be active on TPR committee
- STIP
  - ✓ work directly with regional planners and your partners
- project design
  - ✓ be aware and proactive, don’t wait for CDOT to schedule public events
- project construction
  - ✓ participate in communication and in project monitoring
Working with CDOT

planning

concept design

final design

right of way

bid package

construction

const. eng.

o & m

"Shovel Ready"
## Funding: Local Sources vs. Grant Programs

**Local Sources**
- Long-term
- Taxes, fees, levies, increments
- Often managed by a financing district (DDA, URA, BID)
- Funds can often be used as match for grant programs

**Grant Programs**
- Highly competitive
- Subject to change
- May require match funding
- Sources include state or federal agencies, private foundations and non-profits

**The answer is “Both/And” not “Either/Or”**
CDOT Policy Directive 1602

“...the Department shall include the needs of bicyclists and pedestrians in the planning, design, operation and maintenance of transportation facilities as a necessary component of all programs and activities.”
Locating your CDOT Planner

R1 – 2000 South Holly Street
Danny Hermann
Denver, CO 80222
303-757-9946

R2 – 905 Erie Avenue
Wendy Pettit
Pueblo, CO 81002
719-227-3251

R3 – 222 South 6th Street, #317
Mark Rogers
Grand Junction, CO 81501
970-683-6251

R4 – 10601 West 10th Street
Karen Schneiders
Greeley, CO 80634
970-350-2167

R5 – 3803 North Main Avenue, #306
Matt Muraro
Durango, CO 81301
970-385-1430
Activity:

Identifying design elements for safe multimodal main streets
Quick Wins

Ridgway
Quick Wins

Experimenting with Paint Montrose, CO
COLORADO DOWNTOWN STREETS
A Tool for Communities, Planners, and Engineers

Great streets are more than infrastructure: they are the fundamental building blocks of successful communities. The publication and materials below are designed to help local leaders, community members, and technical professionals work together to transform their streets into safe, accessible, and vibrant places.

Get the Publication

INFOGRAPHICS

The Changing Landscape

Key Considerations for Successful Street Design

Streetscape Components

“MINUTE ON MAIN STREET” VIDEOS

Design for the Speed You Want

How Wide Should Our Lanes Be?

Design in Context

Designing for Pedestrians

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Thank you!

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