Regional Complete Streets Toolkit

Steering Committee Meeting #1

Presented by:
Beth Doliboia
Lisa Houde
Trung Vo

December 3, 2020
Agenda

Project and Steering Committee Overview

Public Engagement Summary

Draft Regional Street Typology
• Purpose and Function
• Development and Assignment
• Review Process

Breakout Group Discussion
PROJECT OVERVIEW
Create a toolkit that provides:

1) guidance for local governments to plan, design and implement Complete Streets, and

2) strategies and support to decision makers, planners and designers to ensure multimodal elements are incorporated into transportation projects.
Support connectivity and the development of a safe and comfortable transportation network for all modes and all users.

Promote the use of the latest design criteria and guidelines for multimodal facilities.

Establish a vision for how and local governments could adopt and apply a Complete Streets policy.

**Develop a multimodal street design typology.**

Develop a Complete Streets toolkit to create awareness and provide guidance on a variety of street design measures

Provide project definition design/function guidance for project sponsors applying for funding
Integrate into Metro Vision Regional Transportation Plan 2050

Regional Complete Street typologies will be incorporated into the plan update to assist with defining investment priorities and strategies.
Provide Resources for Complete Streets Implementation

**Project Goals**

- Provide Resources for Complete Streets Implementation
- Complete Streets Typology Design Treatment Details
Encourage Cross-Jurisdictional Collaboration
REGIONAL COMPLETE STREETS STEERING COMMITTEE
As a member of the Complete Streets Steering Committee, we are asking you to commit to contributing to the success of the Complete Streets Toolkit by:

1. Representing your jurisdiction/organization
2. Contributing to the development of project deliverables
3. Engaging in stakeholder engagement activities
<table>
<thead>
<tr>
<th>Activity</th>
<th>Participation</th>
<th>Time Estimate</th>
<th>Influence on Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Kickoff</strong></td>
<td>All CSSC members</td>
<td>1.5 hours</td>
<td>Initiate the project</td>
</tr>
<tr>
<td><strong>Workshops (3)</strong></td>
<td>All CSSC members</td>
<td>1.5 to 2 hours each</td>
<td>Understand and direct project development guidance, street typology, and design toolkit</td>
</tr>
<tr>
<td><strong>Member Government Online Survey</strong></td>
<td>All member governments</td>
<td>~15 minutes</td>
<td>Contribute to an inventory of existing Complete Streets practices</td>
</tr>
<tr>
<td><strong>Focus Interviews (3)</strong></td>
<td>One member government for each</td>
<td>30 minutes</td>
<td>Further develop inventory of existing Complete Streets practices</td>
</tr>
<tr>
<td><strong>Focus Group Meetings (4)</strong></td>
<td>A subset of member governments for each</td>
<td>1 hour</td>
<td>Discuss regional street types</td>
</tr>
<tr>
<td><strong>Draft Toolkit Review</strong></td>
<td>All member governments</td>
<td>Varies</td>
<td>Provide comments and revisions to finalize Toolkit</td>
</tr>
</tbody>
</table>
PUBLIC ENGAGEMENT SUMMARY
Purpose of engagement

- **Meaningful opportunities** for both public and stakeholder input

- Answer the question: What makes a **Complete Street**?
  - Design elements
  - Good and not-so-good examples around the region

- Willingness to make **tradeoffs**

- Input will **inform toolkit development**
Interactive map and questionnaire

• Available Sept. 17 – November 10

• Promotion
  • Bike to Wherever Week eblast – 40,000
  • DRCOG transportation mailing lists two eblasts – 2,000

• Social media posts

• Follow-up requests to share with communications staff
Results

- 725 Map Comments
- 571 Stakeholders
- 2,074 Site Visits
- 375 Questionnaire Responses
Questionnaire respondent locations
Highest priorities for street design

- Safety for all users: 250
- Comfortable sidewalks: 243
- Comfortable bikeways: 234
- Street trees and landscaping: 169
- Fast reliable transit: 104
- Plentiful vehicle travel lanes: 56
- Parking for vehicles: 34
- Other: 13
- Vehicle loading zones: 9
Sidewalk amenities that make street feel safe and comfortable

- Wide sidewalks: 238
- Landscaping and street trees: 237
- Lighting: 203
- Parking for bikes, scooters, etc.: 135
- Comfortable waiting areas for transit: 112
- Outdoor seating: 90
- Benches and trash cans: 64
- Public art: 50
60% of respondents would add **over 5 minutes** to their drive to allow for other street improvements

76% of respondents **would support moderately or significantly limiting** on-street parking to make streets safer and more comfortable for all users.
Map comments

crossing

bikes

lanes

north
dangerous

street

traffic

intersection

cyclists

people

parking

speed

drivers

vehicles

access

narrow

cross

protected

pedestrian

sidewalk

better

great

colfax

noble

trail
Most common themes

PEDESTRIAN AND BIKE SAFETY (328)
CONCERNS ABOUT SPEED (106)
EXAMPLES OF COMPLETE STREETS (104)
NEED FOR BIKE LANES (100)
IMPORTANCE OF SAFE CROSSINGS (100)
“12th Avenue (esp. at Madison St.) is perfectly scaled for walking, biking, driving, and the RTD route that services 12th. No matter which of the above forms of transportation I take along 12th it feels safe and efficient.”

“Businesses close to the street, Plenty of sidewalk to walk, slower traffic speeds, trees”
Example Complete Streets comments

Colorado Blvd, Idaho Springs

“Great big sidewalk, access to open park area.”

Heritage Road, Golden

“good pedestrian comfort, also roundabouts slow traffic. raised bike lanes help riders not comfortable in an on street bike lane.”
STREET TYPOLOGY INTRODUCTION
What is a Street Typology?

• A collection of common street designs
• Each prioritizes users and various elements based on the context and character
• Based on roadway function, modal priorities, and built environment
• Does not replace functional classification
• Changes along segments of a roadway
• Aspirational
Functional classification and regional street typology

- Street typology does not replace functional classification
- One street type could apply to multiple functional classifications

<table>
<thead>
<tr>
<th>OCSSI Design Handbook categories:</th>
<th>Multimodal Freeway Corridor</th>
<th>Movement Corridor</th>
<th>Mixed Land Use Corridor/Hub</th>
<th>Industrial / Business Park Street</th>
<th>Neighborhood Main Street</th>
<th>Downtown Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREEWAY OR THE TOLL ROADS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation Corridor:</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MPAH CLASSIFICATIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal Arterial:</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major Arterial:</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Arterial:</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Secondary Arterial:</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Divided Collector Arterial:</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Smart Streets (Special Designations):</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Collector Arterial:</td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
What is the function of a regional street typology?

- Inform DRCOG project prioritization
- Encourage cross-jurisdictional collaboration
- Incentivize Complete Streets planning/design
- Provide resources
Montgomery County, MD Street Types (12)

- Downtowns
- Town Centers
- Industrial
- Neighborhoods
- Rural Areas
Ames, Iowa Street Types (8)

**STREET TYPES: ACCESS-ORIENTED**
Access-oriented streets emphasize peoples’ ability to reach destinations and individual properties along a street by any mode. Access-oriented streets are typically lower-speed with higher levels of foot traffic.

**SHARED STREET**
A street or alley with no curbs or separate areas for various types of transportation. Emphasizes nonmotorized access; pedestrians have priority.

**MIXED USE STREET**
A street with high amounts of a diverse mix of retail, housing, office and/or education, with people using several types of transportation to circulate.

**INDUSTRIAL STREET**
A low traffic street, often with a high percentage of truck traffic, accessing centers of manufacturing and large-scale retail.

**NEIGHBORHOOD STREET**
A low traffic street with housing and separated sidewalks, sometimes with on-street parking. A variation called “bicycle Boulevard” is available, which optimizes the street for bicycle traffic through traffic calming and diversions also includes pedestrian enhancements.

**STREET TYPES: BALANCE OF ACCESS AND THROUGHPUT**
Streets that balance access and throughput allow an acceptable level of motor vehicle throughput while maintaining a high level of comfort and convenience for people using transit, walking, and biking.

**MIXED USE AVENUE**
A street with a diverse mix of retail, housing, office and/or education, with people using several types of transportation to circulate, but with increased transit and motor vehicle demand compared to that of a Mixed Use Street.

**AVENUE**
A street with a moderate amount of traffic, wider than a Neighborhood Street. These may include on-street parking and bike lanes.

**BOULEVARD**
A street with moderate to high amounts of traffic, with a landscaped median used to separate lanes of traffic and provide refuge for crossing pedestrian and bicycle traffic.

**STREET TYPES: THROUGHPUT-ORIENTED**
Throughput-oriented streets emphasize the efficient movement of people at greater distances, often at higher speeds. Safety maximizing throughput typically requires physically separating modes and limiting the number of intersections and driveways.

**THOROUGHFARE**
A street with moderate to high amounts of traffic, used most often used for longer distance travel and automobile oriented uses.
Complete Streets
Design Guidelines

Final Draft | July 2020
What will the street typology include?

Guidance on:

- Mode priority (transit, bikes, and pedestrians)
- Design speed
- Priority of on-street parking
- Width of sidewalk
- Lane widths
- Medians (allowed / required / optional)
What will the street typology include?

High level design treatment guidance for:

- Intersections and crossings
- Sidewalks
- Bikeways
- Traffic calming
- Street trees
- Etc.
Compatibility and priority for elements in constrained corridors.
STREET TYPOLOGY DEVELOPMENT & ASSIGNMENT
Data Gathering
- Planning Geographies
- Transportation Networks
- Focus Group Meetings

Street Type Development
- Names
- Descriptions
- Critical Data

Street Type Assignment
- Automatic Assignment
- Manual Assignment
- Consistency Check
- Stakeholder Review
Street Types in the Denver Region

1. Downtown Commercial Street
2. Downtown Mixed Use Street
3. Neighborhood Main Street
4. Mixed Use Street
5. Regional Connector Street
6. Neighborhood Connector Street
7. Industrial Street
8. Special Street
9. Rural Road
10. Mountain Road
11. Limited Access Highway
Downtown Commercial Street

- Generally arterials (and some collectors) in a central business district/larger downtown urban core with multiple destination streets.
- Highly-activated buildings and relatively continuous street wall.
- Support high user volumes, commercial vehicle traffic, pedestrians, and bicyclists.
- Short blocks and diverse intersections.
Downtown Mixed Use Street

- Generally collectors and minor arterials in a central business district/larger downtown with a varied mix of uses including a combination of retail, office, residential and restaurants.

- Usually smaller scale than Downtown Commercial Streets.

- Support high levels of walking, bicycling, transit, and frequent parking turnover.
Downtown Mixed Use Street [update examples]

Pearl Street, Downtown Boulder

Broadway, Denver
Neighborhood Main Street

- Generally collectors and minor arterials with a mix of retail, services and restaurants on a ground floor with little to no setback and a relatively continuous street wall

- Street level uses are highly activated, including cafe seating in the right-of-way

- Support gathering and community events and are characterized by public places such as libraries and neighborhood squares

- Often serve as hubs for bus routes and walking and bicycling destinations
Mixed Use Street

- Generally collectors and arterials with a varied mix of uses including a combination of retail, office, residential and restaurants

- Buildings tend to be pedestrian-oriented, typically multi-story, usually with a shallow front setback
Mixed Use Street

Coffman Street, Longmont

University Boulevard, south Denver
Regional Connector Street

• Generally arterials with mainly commercial uses including shopping centers, auto services, and other auto-oriented uses and features

• Buildings are often set back with on-site parking between the street and primary buildings and limited off-street access between parcels/developments

• High-volume and fast-moving traffic and heavily used commuter routes, as well as transit routes

• Continuous routes intended to link communities, destinations, and other regional connections
Regional Connector Street

28th Street, Boulder

Lincoln Avenue, Lone Tree
Neighborhood Connector Street

- Generally collectors and minor arterials with primarily housing and neighborhood edges fronting the street

- Other adjacent uses include schools, civic uses, parks, and small retail nodes

- Street edge is often defined with modest to large setbacks, fences, and landscaping
Neighborhood Connector Street

Ward Road, Arvada

Melody Drive, Thornton
• Generally collectors and arterials in areas that are mostly or exclusively heavier industrial with mainly manufacturing and distribution uses

• Buildings are generally large footprint, low-rise, and tend to be setback from the street with limited off-street access between parcels/developments
Industrial Street

S Platte River Drive, Denver

E 52nd Avenue, Commerce City
• Generally highways and arterials in less developed areas

• May be adjacent uses but with large setbacks, frontage roads, and access drives, and limited to no off-street access between parcels/developments

• Primary function is throughput for motor vehicles
• Highways, arterials and collectors with steeper, varying grades with forest and open space predominantly along the roadway edge

• Residential and small-scale commercial are often accessed from these roads, but with little to no frontage

• Limited shoulders and switchbacks are common
Mountain Road

Golden Gate Canyon Road, Golden

Meadow Drive, Evergreen

US 40, north of Empire
Limited Access Highway

• Highways, arterials and collectors with steeper, varying grades with forest and open space predominantly along the roadway edge

• Residential and small-scale commercial are often accessed from these roads, but with little to no frontage

• Limited shoulders and switchbacks are common
Special Street

- Generally collectors and arterials in areas that are mostly or exclusively heavier industrial with mainly manufacturing and distribution uses

- Buildings are generally large footprint, low-rise, and tend to be setback from the street with limited off-street access between parcels/developments
STREET TYPE ASSIGNMENT REVIEW
Review Process

- Review list of street types
- Review street type assignment layer for your community in Google Earth or in pdf
- Add suggested revisions to the Comment Inventory spreadsheet
- Due Thursday, 12/17
Project Contacts

**Beth Doliboa**  
DRCOG  
bdoliboa@drcog.org  
303-480-5647

**Trung Vo**  
P.E., AICP  
Toole Design  
tvo@tooledesign.com  
720-204-7061 x551
Discussion Questions

What preliminary feedback do you have about the list of street types?

How do you think street type assignments should influence DRCOG’s project application and prioritization process?

What else do you need to complete your review of the street type assignments?