Complete Streets

A Case Study

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What is a Complete Street?

• Safe, comfortable, and convenient for travel via auto, foot, bicycle, and transit
• Policy ensures that the entire right of way is routinely designed and operated to enable safe access for all users
• Creates a complete network of roads
• Streets designed to fit into the context of the surrounding neighborhood
• Combining social, economic, and environmental practices together to create a cohesive unit.
• Low maintenance landscaping, raised medians, aesthetics
What is a Complete Street?
Sidewalks and Bike Lanes
Convenient Street Parking

Nord Avenue, Chico, CA by Dan Burden
Trees and Landscaping
Safety Practices
Businesses and Pedestrians

Nord Avenue, Chico, CA by Dan Burden
Complete Streets Movement

- Forty-two jurisdictions nationwide adopted policies in 2008. In total, 120 jurisdictions have adopted policies or have made written commitment to do so.

http://www.completestreets.org/complete-streets-fundamentals/complete-streets-atlas/
Midwest Movement

http://www.completestreets.org/complete-streets-fundamentals/complete-streets-atlas/
Boulder, Colorado, Regional Map
Boulder Graph compared to US

Figure 7: Percent of All Miles from 1990 to 2006/2001: Boulder Compared to the U.S.

- Boulder: Personal Vehicles
- U.S.: Personal Vehicles
- Boulder: Transit
- U.S.: Transit

National Research Center, Inc, 2007
Boulder’s Phase Layout

City of Boulder, Colorado
### Boulder’s Transportation Master Plan Phases

#### Multi-Modal Corridor LSA

<table>
<thead>
<tr>
<th>Current Funding</th>
<th>Action Plan</th>
<th>Vision</th>
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<tbody>
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<td><strong>Multimodal Corridor Investments</strong></td>
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<td><img src="image1.png" alt="Map of 11 of 42 Corridor Segments" /></td>
<td><img src="image2.png" alt="Map of 21 of 42 Corridor Segments" /></td>
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<td>Shaded areas represent corridor investments.</td>
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#### Transit

- **Maintain current C7N**
  - HOP
  - BOUND
  - $KIP
  - DART
  - JUMP
  - STAMPEDE
  - DASH

- **Maintain CNT plus Leap and Orbit**

- **Grid-based City and County C7N**

- **Maintain existing Special Transit funding**

- **Increase funding to 25% of total Special Transit costs**

- **Web-based real time transit information**

- **Increase Special Transit funding in response to growing aged population**

- **Web-based real time transit information for all buses traveling within the City of Boulder**
- **Green** – multi-use path
- **Blue** – designated bike route
- **Red** – on-street bike lane
- **Orange** – paved shoulder
- **Purple** – bike lane
28th Street Frontage Road
Transportation Connections Plan

• 28th Street is a major arterial road in Boulder that connects a nearby retail district with several neighborhoods and serves as a gateway into the city as well.

• Implemented:
  – Street improvements
  – Landscaping
  – New crosswalks
  – New bus stops
  – New bus pull out lanes
  – Street furniture
  – Updated sidewalks
  – Updated bike lanes
  – Artistic design
  – New signage
  – New median
  – Retaining wall
  – Bring in new businesses

Before: Future site of retaining wall & landscaping

After: Retaining wall & landscaping

Before: 28th Street & Arapahoe Avenue

After: New bus stop

City of Boulder, Colorado
Before: 28th Street north of Colorado Ave.

After: 28th Street north of Colorado Ave.

Before: College Underpass

After: College Underpass
- **Blue** – Designated existing bike routes
- **Red** – On street bike lane existing
- **Purple** – Sidewalk connection existing
- **Blue** – Designated existing bike routes
- **Red** – On street bike lane existing
- **Purple** – Sidewalk connection existing
- **Green** – Multi-use paths to be built

City of Boulder, Colorado
St. Louis, Missouri
Great Street Initiative

• Launched by the East-West Gateway Council of Governments in the city of St. Louis, Missouri in 2006.

• Goal:
  – To trigger economic and social benefits by centering communities around interesting, lively, and attractive streets that serve all modes of transportation.
  – To provide a “digital guidebook” for other communities to use to create their own Great Street Initiatives.

"It's no big mystery. The best streets are comfortable to walk along with leisure and safety. They are streets for both pedestrians and drivers. They have definition, a sense of enclosure with their buildings; distinct ends and beginnings, usually with trees. The key point again, is great streets are where pedestrians and drivers get along together."

--Allan Jacobs
Great Streets Principles

- **Great Streets are representative of their places.** A Great Street reflects the neighborhood through which it passes and has a scale and design appropriate to the character of the abutting properties and land uses.
- **Great Streets allow people to walk comfortably and safely.** The pedestrian environment on, along and near the street is well-designed and well-furnished. The relationship between the street and its adjacent buildings is organic, conducive to walking, and inviting to people.
- **Great Streets contribute to the economic vitality of the city.** Great Streets facilitate the interaction of people and the promotion of commerce. They serve as destinations, not just transportation channels. They are good commercial addresses and provide location value to businesses that power the local economy.
- **Great Streets are functionally complete.** Great Streets support balanced mobility with appropriate provision for safe and convenient travel by all of the ground transportation modes: transit, walking, bicycling, personal motor vehicles and freight movement.
- **Great Streets provide mobility.** Great Streets strike an appropriate balance among the three elements of modern mobility: through travel, local circulation and access. The right balance varies with the function of the street and the character of its neighborhoods and abutting properties.
- **Great Streets facilitate place-making.** Great Streets incorporate within them places that are memorable and interesting. These may include plazas, pocket parks, attractive intersections and corners, or simply wide sidewalks fostering an active street life.
- **Great Streets are green.** Great Streets provide an attractive and refreshing environment by working with natural systems. They incorporate environmentally sensitive design standards and green development techniques, including generous provision of street trees and other plantings and application of modern storm water management practices.
Great Street Lessons

• Thinks of the street corridor as a unit – its design includes *both the space and the walls*.

• Great Streets can be major contributors to the public realm and high quality of life of neighborhoods and districts

• The “Street Type needs to serve the Development Type”

• Spend your money on the verticals (trees, frontages) first

• The most critical livability measures (“buffering”) happens right at the street/building level

• Cities need to provide leadership on the vision for public realm design – individual stakeholders want to know how their efforts fit into an attractive “big picture”
The Great Streets Initiative provides a “digital guidebook” for communities to use as a reference or to jump start their own initiative.

It contains a number of different design options for all types of neighborhoods:
- downtown main streets
- mixed-use districts
- small town downtowns
- residential neighborhood office employment areas
- commercial service corridors
Multi-way Boulevard Arterial Design

• The design incorporates a buffer for pedestrians from vehicular activity and slows traffic speed by parking areas.
• Octavia Boulevard in San Francisco
• Design with a buffer for pedestrians.
Great Streets Initiative Strategies

• **Ensure great street design is possible.** Great street design includes recommendations such as narrower travel lanes (less than 12-feet wide) and the use of medians to help reduce travel speeds and improve safety. However, some communities have adopted street standards that make the implementation of these elements difficult or impossible. At a minimum, street standards need to include the allowance of variances in appropriate areas, such as great street thoroughfares. Ideally, municipalities should consider overlay districts or the adoption of new street standards that not only allow but promote street design consistent with great streets.

• **Involve all agencies early in the planning process.** For every aspect of great street design, there is a department or agency responsible for it. Therefore, a city hoping to make great streets happen, must include all the relevant stakeholders from the professional community. Environmental impacts, traffic, architectural review, DOT, FHWA when appropriate, public works, public art, ACCESS MANAGEMENT are just examples of the many entities that can help plan successfully for great streets.

• **Prioritize public involvement.** Community members are the most meaningful advocates of great streets. When citizens are given the opportunity to collaborate meaningfully in the development of a great street plan, not only does it build consensus but it results in a plan that meets the needs of the community-at-large.

• **Incentivize great streets.** Many communities have prioritized desired development patterns by providing incentives. The incentive may target private development or for umbrella agencies, it may target member jurisdictions. Incentives for the private sector may include expedited review processes, tax incentives or complementary public investments. Incentives for jurisdictions may include matching funds or prioritized funding for qualifying projects.

• **Plan and coordinate improvements with neighboring agencies.** Thoroughfares that are good candidates for great street improvements may cross jurisdictions. To avoid piecemeal implementation of great streets, communities should collaborate with neighboring communities and the MPO to ensure sensible planning, design, and implementation.

• **Create overlay districts.** Overlay districts are special zoning districts that may be applied 'on top' or in addition to existing zoning. Overlay districts vary in size and may incorporate a thoroughfare, a commercial center or a neighborhood. The point of overlay districts to make possible a special set of regulations and standards that encourage development whose size, scale, mass, architectural design, among other qualities, respects the existing or desired character of the district. Overlay zoning districts typically supersede or supplement the regulations of the base zoning districts. Local governments can create overlay districts with special standards that not only allow, but encourage planning and design consistent with the recommendations for great streets.