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COMPLETE STREETS

Description:

The goal of a complete streets strategy is to provide mobility for all users by maximizing the number of mobility/transit options available. Walking, biking, small motorized vehicles (scooters, wheelchairs, golf carts, etc.), mass transit, and autos are all given equal consideration. Walking and biking are promoted. The specific safety needs of those with acute mobility issues, such as frail older people and younger individuals with disabilities, are an essential component of the design process.

Depending on the context, using a complete streets design methodology will produce different results depending on the context. For example, an appropriate design for a major boulevard in a dense urban setting will differ from that for a road in a low-density residential area. However, certain elements do occur frequently enough to be considered as “best practices”: wide sidewalks, curb extensions, and pedestrian islands allow pedestrians to walk comfortably at their own pace; narrow lanes and other traffic calming measures slow motor traffic, reducing accidents; shelters protect transit users as they wait for a bus or train; and bicyclists ride in bike lanes or widened road shoulders, and are provided with bike racks. Landscaping and public art are often included.

Complete streets rely on network connectivity to reach their potential. For example, a sidewalk along a single block is not enough to turn that block’s residents into pedestrians; to be used, the sidewalk must connect to a destination, such as a school, a market, a park, a downtown area. Each additional destination added to the network will result in increased use of the network.

The complete streets agenda arose in reaction to the traditional approach to transportation planning, in which streets were designed primarily for the benefit of automobiles, which led to the creation of a “barrier effect,” in which those unable or disinclined to drive become isolated and dependent for transport on those that do drive. Car-oriented streets can diminish a sense of community (since such street design can greatly reduce contact among neighbors) and can affect development patterns, favoring strip malls and other signs of sprawl.

Governments are increasingly adopting complete streets policies. Legislation is under consideration at both the Federal and the New York State levels that would require future road projects to consider pedestrian, bicycle, and other transit uses; and laws have already been adopted by the City of Buffalo and Erie County. Complete streets are a natural complement to Transit-Oriented Development (TOD) projects, which are based on the concept of multi-modal transportation. Such policies are cited as strategies to promote personal health (by encouraging physical activity) and community health (by reducing air pollution from car usage). The

benefits of complete streets policies have resulted in an increasing range of advocacy groups championing their adoption.

Benefits:

For residents:

- Designing to allow the use of multiple forms of mobility and transit accommodates the needs of people of all ages and abilities, including children, older adults, individuals with disabilities, and persons who are unable to drive:
 - Provides greater independence, decreased isolation, and easier access to amenities, family, and friends.
 - Decreases the need for caregivers and parents of children to play the role of “chauffer.”
- Improves health and fitness by encouraging biking and walking.
- Strengthens a sense of community by increasing contact among all residents.

For the community:

- Increases safety and reduces injuries for users of all transport modes:
 - Timing for street-crossing is increased, and audible signals supplement visual street-crossing cues.
 - Pedestrians are provided with sidewalks that are clearly separated from traffic.
 - Cross walks are improved and increased in number.
 - Bicyclists are protected from cars by having their own separate lane or, if they share the road with cars, benefit from reduced traffic speeds.
 - Both pedestrians and drivers with slow reaction times benefit from reduced traffic speeds.
- Aids economic development:
 - Promotes vibrant pedestrian retail corridors.
 - Improves access to retail businesses by all residents and visitors, including those who are unable to drive.
- Addresses environmental issues:
 - Reduced automobile-use results in:
 - Reduced use of fossil fuels;
 - Reduced air pollution from vehicle emissions; and
 - Reduced traffic congestion.

Impediments or barriers to development or implementation:

- *Inertia:* Many transportation departments and transportation engineers remain invested in a “cars first” mentality. For example, metrics still used to evaluate the design of streets may be limited to only *vehicle* design speed and level of service. Or, traffic modeling may fail to consider reduced car-use that would result from people who choose to use alternative transport modes.

- *Lack of follow-through:* Complete streets policies are sometimes adopted without establishing methods/steps for implementation—for example, creation of design standards, and education of those responsible for implementation.
- *Costs:* Providing adequate bike and pedestrian paths may require an expansion of a road's right-of way. The costs of acquiring this from adjacent property owners may be too high; or, property owners may resist the appropriation of their land, even if adequate compensation is offered.
- Though a complete streets strategy is scalable to a range of different population densities, benefits may not accrue to rural areas that are too sparsely populated to justify the cost of transit options, street re-designs, sidewalks, or bike lanes.

Resource—examples:

- Killingsworth Street, Portland, Oregon. The expansion of a light rail line prompted Portland's Office of Transportation to improve connectivity between the rail line and local businesses and residences. Working closely with the community, Portland's Office of Transportation crafted a comprehensive plan that increased space and safety for pedestrians, bicyclists, and transit riders. Additional improvements included the installation of street trees, ornamental street lighting, benches, and artwork. The project helped launch an economic revitalization of the neighborhood. Contact: Winston Sandino, Project Manager, Portland Department of Transportation, (503) 823-5767, winston.sandino@portlandoregon.gov, <http://www.portlandonline.com/transportation/index.cfm?c=36376>.
- 28th Street, Boulder, Colorado. Boulder's Transportation Division sought to change the city's main corridor into a "gateway" of which the city could be proud. An outside consulting firm was hired to organize public participation in the design process. The result is a truly multi-modal street accommodating pedestrians, bicyclists, transit riders, and motorists. An emphasis on aesthetics resulted in the addition of numerous artworks and drought-resistant landscaping. Boulder was a winner of the Exemplary Human Environment Initiatives (EHEI) award from the Federal Highway Administration. Contact: Noreen Walsh, Senior Planner, Boulder Department of Transportation, (303) 441-3266, walshn@bouldercolorado.gov, http://ci.boulder.co.us/index.php?option=com_content&view=article&id=294&Itemid=3674.

Resource—written and web:

- National Complete Streets Coalition—the most prominent organization promoting the adoption of complete streets, the coalition is a one-stop source of information, including the benefits of complete streets, links to reports and presentations, a guide on changing policy, and complete streets efforts and campaigns in the news: <http://www.completestreets.org>.
- Jana Lynott, Jessica Haase, Kristin Nelson, Amanda Taylor, Hannah Twaddell, Jared Ulmer, and Barbara McCann (2009), *AARP: Planning Complete Streets for*

an Aging America. Washington, DC: AARP, Public Policy Institute. This report targets the ways in which older adults can benefit from complete streets policies. A list of best design practices is included.

- Brief: http://assets.aarp.org/rgcenter/il/inb167_streets.pdf.
 - Full Report: <http://assets.aarp.org/rgcenter/ppi/liv-com/2009-12-streets.pdf>.
- *A Resident's Guide for Creating Safe and Walkable Communities* (2008). Washington, DC: Federal Highway Administration. The *Guide* addresses common pedestrian safety problems and offers potential remedies. http://safety.fhwa.dot.gov/ped_bike/ped_cmunity/ped_walkguide/index.cfm.
 - Institute of Transportation Engineers (ITE), Washington, DC—ITE's online *Bookstore* (<http://www.ite.org/emodules/scriptcontent/Orders/index.cfm>) lists numerous publications related to designing complete streets (some free; some for a cost), including:
 - *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities* (2006). Report provides guidance on street design from a transportation planner's point of view. View report online: <http://www.ite.org/bookstore/RP036.pdf>.
 - *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach, an ITE Recommended Practice* (March, 2010). Can view on line, at no cost, by registering with the ITE Bookstore: <http://www.ite.org/emodules/scriptcontent/Orders/ProductDetail.cfm?pc=RP-036A-E>.
 - *Complete Streets Resource List*, American Planning Association, Washington, DC. Provides links to resources on a variety of complete streets topics: <http://www.planning.org/research/streets/resources.htm>.
 - Laura K. Khan, et al. (2009), *Recommended Community Strategies and Measurements to Prevent Obesity in the United States*. Atlanta, GA: Centers for Disease Control and Prevention. Report cites policy options that communities can adopt to tackle obesity. Many of these policies represent elements of a complete streets program. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5807a1.htm>.
 - *Street Design Manual* (2009), New York, NY: City Department of Transportation. The manual provides an extensive list of design solutions for development densities ranging from low-level residential to central business districts. Many pictures and diagrams of examples are provided. <http://www.nyc.gov/html/dot/html/about/streetdesignmanual.shtml>.

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