Over the past 140 years or so, American advocacy groups and engineering techniques for each type of roadway user have evolved separately. Our nation’s paved roadways were initially designed (and sometimes paid for) by 19th century bicyclists. But their voices were lost during the subsequent era of auto-dominated highway building.

Around the 1970s, bicyclists began gearing up once more to lobby for better “bike/ped” (ped = pedestrian) facilities. Public transit promoters also raised their voices, as did advocates for people with disabilities and older adults. The complete streets movement, born in the late 1990s, provides a forum for all of these modal advocates to join forces with transportation engineers, planners, and community leaders in an effort to create truly multimodal networks for 21st century travelers.

What Are Complete Streets?

Complete streets are roadways designed to be safe for everyone who uses them. In many places, especially in towns and cities, this can be quite a diverse group of folks. Roadway users may include drivers and passengers in cars, buses, delivery vans, 18-wheelers, and golf carts; fast-moving bicyclists who prefer riding in traffic; slower-moving cyclists (including children) who don’t want to ride near traffic; and pedestrians of all ages and abilities, including people handling wheelchairs or walkers; riding skateboards, roller blades, or Segways; pushing baby strollers; and, oh yes, walking.

Could most streets be designed to support all these types of travelers? Yes. Should every street be designed this way? No. The complete streets concept is not about trying to make each and every road in a community serve all possible users. But it does aim to make sure all travelers, regardless of their choice of travel mode, can get where they need to go. At the urging of their constituents, for adoption by municipal councils, regional planning bodies, or state legislatures. The National Complete Streets Coalition (NCSC) website has made more than 300 state and local complete streets policies accessible on an interactive Google-map atlas.

Many of the policies in the NCSC atlas take the form of relatively simple resolutions of support. Others include specific legislation, ordinances, or design guidance for public decision-making and/or agency protocols. One way or another, all complete streets policies publicly assert the commitment of a community, state, or agency to creating a multi-modal transportation network. They give a green light (pun intended) for engineers to give equal weight to all users in considering the design of a roadway project or system.

Having an established policy is “essential,” say national experts John LaPlante and Barbara McCann, “if disputes arise over projects using the new paradigm. Engineers empowered by this clear direction from their leadership often tackle the new problem of multi-modal accommodation with gusto, using problem-solving skills and trying innovative treatments.”

Taking the Next Step – Complete Street Networks

Planning techniques and advocacy groups for different travel modes aren’t the only things that have evolved separately over the past century. Many suburban communities and newer cities have, over the years, separated houses from...

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Note:
1 “What Are Complete Streets?” (National Complete Streets Coalition); <www.completestreets.org/complete-streets-fundamentals/complete-streets-faq/>.
3 “Complete Streets in the United States,” by John LaPlante and Barbara McCann (TRB Annual Conference, January 2011); <http://amonline.trb.org/12jlnh/1>.
A Road for Every Mode... continued from previous page

For our aging population, complete streets policies make sense. Take a look, for example, at what one chapter of AARP recently had to say:

“AARP Vermont, in partnership with organizations across the state, worked in 2011 to pass Complete Streets legislation to make roads safer and more accessible for all Vermonters. … Complete Streets policies ensure that state and local transportation agencies routinely design and operate the right of way to enable safe access for everyone on the road. Complete Streets guidelines make transportation planners think about how people can access the community without a car. …

AARP supports Complete Streets because as people get older they drive less or hang up the keys altogether. This life change can mean a lower quality of life, less independence, and isolation if alternative ways of getting around are not available. But there are many other reasons to support Complete Streets. Public health advocates support development of safe places to exercise as a way to combat obesity and chronic disease. Safe alternatives to driving can reduce our carbon footprint and promote livable communities that follow smart growth land use patterns. And for everyone young and old who is riding a bike or walking, safety on the road is a top concern.”

Editor’s Note: The AARP Vermont information is available at: <www.blcp.org/about/complete-streets>. Take a look also at Planning Complete Streets for An Aging America, a 2009 AARP report that Hannah Twaddell helped develop. It can be found at: <www.aarp.org> [type: “Planning Complete Streets” in AARP Search box].

The National Complete Streets Coalition

The NCSC is an excellent source of information on complete streets policies. For planning commissioners and local officials interested in learning more about complete streets, a great starting point is their web site: <www.completestreets.org>.

Burlington, Vermont, is one of a growing number of communities incorporating complete streets concepts into local transportation planning policies. The text that follows and the illustration above (prepared by ORW Landscape Architects and Planners) is from the Burlington Street Design Guidelines.

1. Curbside transit stop. On the complete street, buses pull up to the curb. Stops employ a variety of complementary streetscape elements that enhance patron comfort and contribute to the ambience of the street.
2. Traffic calming. By placing this road on a “diet,” one full lane of traffic has been eliminated and replaced with bike lanes and landscaped median islands. Textured crosswalks and enhanced street tree plantings contribute to slowing motorists.
3. Short pedestrian crossings. Refuge islands allow pedestrians to cross the street one lane at a time, breaking what was once a 40’ four-lane crossing into two 15’ jaunts with a rest in between.
4. Bike lanes. Dedicated bike lanes move bicyclists off the sidewalk. High-visibility striping and lane painting make drivers aware that bikers are a part of the traffic mix and will improve safety and convenience for all.
5. Updated utilities and lighting. Utilities are placed underground, eliminating the need for unsightly poles and wires. Cobra head fixtures are replaced by ornamental luminaires and poles.
6. Landscaped median island and turn lane. Landscaped islands can alternate with left turn lanes, where left turns are necessary. The benefits gained include increased greenery, shorter road crossings, reduced traffic speed, and predictable lane usage by vehicles.
7. Stormwater treatment. Stormwater planters collect runoff from roadway surfaces, using plants and soil to slow, absorb, and cleanse stormwater before it enters municipal storm sewers.
8. Tree belts. Tree belts provide a buffer between cars and pedestrians, a visual amenity, snow storage (in northern climes), and a place for trees in the city.
infrastructure.

Materials for short trips.

based on overworked arte-
streets or choose to leave their car at
reduce traffic congestion by allowing
alternative routes and modes can help to
improves the overall mobility of the gen-
bicycle, pedestrian, and transit options
vehicles onto a few corridors. Providing
broader array of routes helps to spread
el routes, but also more travel choices. A
communities provide not only more trav-
devolving networks of complete streets,
connections shortens travel time, which
effectively brings people closer to their
destinations. With more available con-
nects for people of all ages and
physical abilities and accommodate all
travel modes.

Any community – regardless of its size
or the complexity of its transportation
system – can realize three major benefits
from well-connected complete street net-
works: shorter trips; a wider variety of travel choices; and more cost-effective public services and infrastructure.

• Shorter trips. Creating more direct
connections shortens travel time, which
effectively brings people closer to their
destinations. With more available con-
nections, residents can get to local stores
and activities that may have simply been
off their radar before – not because they
were too far away, but because they were
too far out of the way.

• A wider variety of travel choices. By
developing networks of complete streets,
communities provide not only more trav-
el routes, but also more travel choices. A
broader array of routes helps to spread
traffic more efficiently than bunching all
vehicles onto a few corridors. Providing
bicycle, pedestrian, and transit options
improves the overall mobility of the gen-
eral population. The combination of
alternative routes and modes can help to
reduce traffic congestion by allowing
people to drive on lower-speed local
streets or choose to leave their car at
home rather than using overworked arte-
rials for short trips.

• More cost-effective public services and
infrastructure. Greater street connectivity
also allows public service providers, such
as firefighters and police, to save pre-
cious minutes reaching the scene of an
emergency by providing a variety of
alternative routes. When complemented
with more efficient development
patterns, connected streets also allow
them to serve a broader area without
having to build expensive satellite sta-
tions or patrol larger land areas. Other
public service vehicles, from school
buses to trash collection trucks, also
operate more efficiently on connected
street networks.

SUMMING UP: FIVE PATHWAYS TO COMPLETE STREETS

Below are five steps that a community
can take to advance complete, multi-
modal networks:

1. Find opportunities to explore com-
plete streets concepts with your commu-
nity, such as working with state and
regional agencies to include complete
streets concepts into a corridor study or a
transportation system plan, or inviting
the National Complete Streets Coalition
to conduct an on-site workshop for your
town.

2. Adopt a complete streets policy
that specifically addresses ways in which
you will routinely consider the needs of
all travelers in all transportation projects
and plans.

3. Promote multi-modal street design
techniques through ordinances and
guidelines.

4. Develop a five-fold network plan
that lays out coordinated, complemen-
tary routes for automobile drivers, truck
drivers, transit riders, bicyclists and
pedestrians; and

5. Create a system of “living streets”
by integrating transportation planning
with community development to make
your corridors the foundation – literally
and figuratively – for vibrant, attractive,
sustainable neighborhoods and town
centers.

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communities, government agencies, and private
organizations across the U.S.

That’s the title of an excellent posting
by Gary Toth available on Project for
Public Spaces’ web site: <www.pps.org/
blog/are-complete-streets-incomplete/>. Toth,
you may recall, co-authored with
Hannah Twaddle “Transportation Plan-
ning for Livable Communities” in our
Fall 2010 issue.

Toth highlights the importance
of thinking about streets as public places.
As he explains: “The road, the parking
lot, the transit terminal – these places can
serve more than one mode (cars) and
more than one purpose (movement).
Sidewalks are the urban arterials of cities.
Make them wide, well lit, stylish, and
accommodating. Give them benches,
outdoor cafes, and public art. Roads can
be shared spaces, with pedestrian refuges,
bike lanes, and on-street parking. Park-
ing lots can become public markets on
weekends. Even major urban arterials
can be designed to provide for dedicated
bus lanes, well-designed bus stops that
serve as gathering places, and multi-
modal facilities for bus rapid transit or
other forms of travel.”

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