Complete Streets 101: The Basics

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This presentation is, in part, adapted from Smart Growth America’s National Complete Streets Coalition’s Introduction to Complete Streets Module.
1. What are Complete Streets?
2. Urban Planner’s View of Complete Streets
3. Elected Official’s View of Complete Streets
What are Complete Streets?

Complete Streets are safe, comfortable, and convenient for travel for everyone, regardless of age or ability – motorists, pedestrians, bicyclists, and public transportation riders.
What Makes a Complete Street?

No template – a complete street is determined by the context

Common Design Elements:

– Sidewalks
– Adequate Crosswalks
– Bike Lanes
– Bus Stops
– Street Trees/Plantings

Source: Town of West Jefferson, NC/Governing Magazine)
Benefits of Complete Streets

Improved Safety
Better Community Health Outcomes
Social Equity
Economic Competitiveness and Lower Costs
Environmental Improvements
Streets Can Benefit Communities

- Increase capacity
- Improve safety
- Better health
- Economic growth
- Lower emissions
- Reduce costs
- Smarter growth
- Provide choices
• Michigan is the 9th most dangerous state for cyclists with 24 deaths annually of 2.4 deaths per million residents (2012 – Governing Magazine)

• Nationally, bicyclist deaths increased 15% between 2009 and 2014; pedestrian fatalities increased 16% during the same time period
Safety Benefits

• Automobile crashes declined in 70% of complete street projects and injuries were down 56%.

• Complete Streets improvements averted over $18 million in collision costs in one year. Typically, the averted cost of collisions in just the first year is much larger than the original project cost!

• 3 Projects in Seattle aimed to reduce speeding and make the street more inviting for walking and biking – all 3 used road diets, added bike lanes and cross walks. Speeding decreased between 11% and 75% on these roads and collisions causing injury decreased between 17 and 33%

(source: Safer Streets, Stronger Economies)
“Safety in Numbers” – the more people biking on streets, the safer the streets become for everyone biking. (NACTO July 2016)

As lane miles increase, the number of cyclists increase and risk decreases

• Designing intersections for pedestrian travel can reduce pedestrian risk by **28%**

Source: King/Ewing 2003
Europe has more bike-ped travel

Portion of all trips

Pucher, AJPH Sept 2003
... and far fewer deaths

Deaths per 100 million km travel

- US
- Germany
- Netherlands

Pucher, AJPH Sept 2003
Obesity is lower in places where people use bicycles, public transportation, and their feet.

Pucher, "Walking and Cycling: Path to Improved Public Health," Fit City Conference, NYC, June 2009
States with the lowest levels of biking and walking have, on average, the highest rates of obesity, diabetes, and high blood pressure.
The Centers for Disease Control and Prevention cited adoption of Complete Streets policies as a recommended strategy to prevent obesity.
One third of regular transit users meet the minimum daily requirement for physical activity during their commute.
Livable Communities

Walkable communities = happier communities

Residents of walkable communities:
• are more likely to be socially engaged and trusting
• report being in good health and happy more often
Real estate values increase as neighborhoods become more walkable. (Leinberger)

- There is a five-step “ladder” of walkability, from least to most walkable.
- On average, each step up the walkability ladder adds $9 per square foot to annual office rents, $7 per square foot to retail rents, more than $300 per month to apartment rents and nearly $82 per square foot to home values.
- As a neighborhood moves up each step of the five-step walkability ladder, the average household income of those who live there increases some $10,000.
- Retail in a place with high walkability scores generates 80 percent more in retail sales as compared to the place with fair walkability.
$8 million public investment in streetscape improvement 2003-2004

$8 million in private investment in following 2 years

32 new business establishments

$80,000 in sales tax annually
• On average, before the recession (2000 to 2007), retail and office space in walkable urban places had a 23 percent premium per square foot valuation. During the recession (2008 to 2010) that premium nearly doubled to 44.3 percent
Residents of more walkable places have lower transportation costs and higher transit access, but also higher housing costs than residents of less walkable places.

The more walkable a place, the more access to jobs. For example, residents of places at walkability level 4 on average can access over 15 percent more jobs in the region within 90 minutes than residents in places at level 3.
• Population is aging – by 2025, 20% of population will be over 65. 21% of those over 65 do not drive.

• Half of all non-drivers over age 65 would like to get out more often. More than half of all non-drivers over 65 stay home because of a lack of transportation options.
• 20% of the population have disabilities that limit daily activities.

• Complete Streets include accessible curb ramps, transit stops and crosswalks that make the public space accessible to people with disabilities.
• Americans spent 18 cents of every dollar on transportation.

• The poorest fifth of families spend more than double that figure.

• Complete Streets give people more control over their expenses, replacing expensive car travel with cheaper options like walking, riding bikes, and taking public transportation.
Of all trips taken in metro areas:

50% are three miles or less

28% are one mile or less

65% of trips under one mile are now taken by automobile

2001 NHTS
Environmental Benefits
Environmental Benefits
Environmental Benefits
Environmental Benefits
Environmental Benefits

Source: City of Portland, OR

Source: City of Philadelphia Green Streets Design Manual
Studies have indicated that living in more compact, mixed-use neighborhoods is related to reduced vehicle miles traveled and lower transportation costs.
How can my Town Build Complete Streets?

1. Set a **vision**.
2. Include **all modes**.
3. Emphasize **connectivity**.
4. Applicable to **all** phases of all applicable projects.
5. Specify and limit **exceptions**, with **management approval** required.
6. Uses latest design standards and is **flexible**.
7. **Is context-sensitive**.
8. Set **performance standards**.
9. Include **implementation** steps.
Does My Community Have Complete Streets?

Photo: City of Seattle

Photo: City of Ann Arbor
Are My Community’s Streets Complete?

Photos: Google Earth
Questions?