PBIC Webinar

Statewide Complete Streets: How states are working with communities for friendlier roads

Stefanie Seskin, National Complete Streets Coalition
Lauren Blackburn, North Carolina DOT
Paula Reeves, Washington State DOT
Chris Berrens, Minnesota DOT

April 10, 2 pm
Today’s Presentation

- Introduction and housekeeping
- Audio issues?
  Dial into the phone line instead of using “mic & speakers”
- PBIC Trainings and Webinars
  www.pedbikeinfo.org/training
- Registration and Archives at
  pedbikeinfo.org/webinars
- PBIC News and updates on Facebook
  www.facebook.com/pedbike
- Questions at the end
Statewide Complete Streets

Stefanie Seskin
Deputy Director, National Complete Streets Coalition
Smart Growth America

April 10, 2014
An approach to transportation decisions

Safe, comfortable, and convenient places for walking, driving, bicycling, and taking public transportation
Balancing needs while approaching every project from the mindset that people will walk, bicycle, drive, and take public transportation.
What we know:

• Most trips are not commute trips
• Half of the trips in urban areas are ≤ 3 miles
• Yet 72% are made by car
• Short trips, not long trips, cause capacity issues
• Short trips are great opportunity for other modes
  • But only if the facilities are comfortable, connected, and feel safe
“Policy”

• Broadly defined
• Formal document with clear vision and intention to make inclusive transportation decisions
• All ages, abilities, incomes, preferences, races and ethnicities
• Walking, bicycling, taking transit, driving all types of vehicles
• Land use
“Accommodations”

- “Accommodate” ≠ appeasing some users
- Must think beyond minimum, especially for non-automobile modes
Statewide Complete Streets policies

- Total: 27 + DC + Puerto Rico
- Legislation: 17 states
- DOT policies: 15 states
Challenges
Long-term planning process is broken.

The graph shows the trend of U.S. VMT (trillions) from 1997 to 2017. The actual trend is represented by the black line, and various projections are shown in different colored lines. The projections include 1999, 2002, 2004, 2006, 2008, 2010, 2013 (HPMS), and 2013 (trend). The graph indicates a significant increase in VMT over the years.
Lack of vision
What if we project different outcomes?
Rethink our investments

• Pipeline projects far outweigh funding opportunities
• Extensive existing system needs maintenance
• …and replacement.
Measure progress toward established vision

- Right-size projects or eliminate them
- Engage in project selection and criteria
Role model in design

• Regardless of the share of streets that are on state network
• Excitement and reluctance both can lead to poor design decisions
Role model in design

• Consolidate and update design guidance to be clear, practical, and multimodal
• Allow local leadership and flexibility
Partners in funding

• Competitive grant program
  • Expertise and readiness in local government
• Cost sharing
• Non-motorized safety emphasis in SHSP
Land use happens

- Joint transportation/land use corridor studies
- Integrated corridor management
Communication

- Easy to access
- Clear explanations
- Partner for meaningful public input
Complete Streets Policy Development

July 2009
✓ Complete Streets Policy Adopted

July 2012
✓ Design Guidelines Released

Download the Guidelines at www.completestreetsnc.org
NCDOT Complete Streets policy definition

Complete Streets is North Carolina’s approach to interdependent, multi-modal transportation networks that safely accommodate access and travel for all users.
Goals of the Complete Streets Policy

- To establish transportation choices
- Support transportation safety goals
- Support economic development goals
- Support public health goals
- Support local community-building
- Support environmental goals
Context and Classification

Street Design Type
Main Street    Avenue    Boulevard    Parkway    Freeway
Local/Subdivision St.    Rural Road
Pedestrian/Bicycle Oriented
Auto/Truck Oriented

Functional Classification
Local    Collector    Arterial
Motor Vehicle Zone (or Shared Vehicle Zone)

The motor vehicle zone generally consists of the paved street way of a street. Motor vehicle zone elements include the travel lanes, turn lanes and( or) bus lanes, curb, and pavement across the gateway areas, and( or) if buffer zones to the travel lanes. Traffic lanes are important for vehicle movement and properly designed to accommodate vehicle speeds. The overall cross section of the road should include at least two lanes in each direction or two-way, and the width and incorporation of turn lanes. It is also important to consider how elements from the gateway areas impact on-office areas. Street width, for example, can affect the width of sidewalks to ensure the street is the most accessible for all users. The majority of street cross-sections in these guidelines show a width of lane widths from 10 feet to 12 feet. The recommended for 10 to 11 feet is for streets with low volumes and low-speed traffic, with volumes less than 12 feet wide are both safe and appropriate, can help to reduce the number of pedestrians who travel on the street, and the risk of motorcycles or other users of the street. Additional considerations include the need for turn lanes at intersections. Significant width and need for turn lanes should be evaluated within the context of the larger corridor.

A shared bicycle lane allows for both, motorized and non-motorized vehicles, and typically includes additional pavement for bicycles. The presence of a cycle lane has higher volumes and slower speeds in a separate bicycle lane. If a shared vehicle zone is used instead, it might consist of additional lanes for vehicles and bikes, with shared lane markings, or on very low-volume, low-speed streets, a regular travel lane. The travel lane is not considered part of the travel lane.

Parking may or may not be provided along a street. The relationship between parking lanes and vehicular lanes with shoulder or buffer on both sides, or parking, with vehicular lanes may need to be wider, depending on the demographic and context. In parking zones adjacent to the sidewalk, additional buffer may be provided. Transit services, and other transit the motor vehicle zone for turn lanes if transit facilities are not provided or appropriate.
URBAN/SUBURBAN MAIN STREET

PLAN VIEW

KEY ELEMENTS

- May function as an arterial, collector or local street. May function as a collector serving as a primary thoroughfare for traffic circulation in a limited area. May function as a local street for an outlying business district.
- Designed to carry vehicles at low speeds.
- A destination street for a city or town, serving as a center of civic, social and commercial activity.
- Serves substantial pedestrian traffic as well as transit and bicycles.
- Characterized by wide sidewalks, crosswalks and pedestrian amenities, due to emphasis on pedestrian travel.
- Bicycle lanes are allowed but typically not necessary on these streets due to lower speeds and volumes and the desire to keep pedestrian crossing distances to a minimum.

STREET CROSS-SECTION ZONES

- Sidewalk Zone: The pedestrian walk area is of sufficient width to allow pedestrians to walk safely and comfortably. Pedestrians are the priority on a main street.
- Green Zone: Consists of the area between the sidewalk zone and curb. Includes street trees and other landscaping, as well as interspersed street furnishings and pedestrian-scale lighting in a landscaped amenity zone.
- Parking/Transit Zone: Accommodates on-street parking and transit stops. Width and layout may vary.
- Bicycle Zone: A zone for bicyclists separate from vehicular traffic.
- Motor Vehicle / Shared Vehicle Zone: The primary travel way for vehicles. A shared vehicle zone has mixed traffic (cars, trucks, buses and bicycles).
- Development Zone: Development should be pedestrian-oriented with narrow setbacks and an active street environment.
STREET COMPONENT DIMENSIONAL GUIDELINES

<table>
<thead>
<tr>
<th></th>
<th>Sidewalk Zone (feet)</th>
<th>Green Zone (feet)</th>
<th>Parking/Transit Zone (feet)</th>
<th>Motor Vehicle/Shared Vehicle Zone (lane width: feet)</th>
<th>Bicycle Zone (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Business District</td>
<td>10’-12’</td>
<td>6’-8’</td>
<td>8’-10’</td>
<td>10’-13’ (see note 4)</td>
<td>6’ lanes (see note 4)</td>
</tr>
<tr>
<td>Urban Center / Suburban Center</td>
<td>12’-20’</td>
<td>6’-8’</td>
<td>8’-10’</td>
<td>10’-13’ (see note 4)</td>
<td>6’ lanes (see note 4)</td>
</tr>
<tr>
<td>Suburban Corridor / Urban Residential / Suburban Residential</td>
<td>8’-10’</td>
<td>6’-8’</td>
<td>8’-10’</td>
<td>10’-13’ (see note 4)</td>
<td>6’ lanes (see note 4)</td>
</tr>
</tbody>
</table>

NOTES

1. Sidewalk zone should typically extend to the front of buildings. Sidewalks are the most important element on a main street, because pedestrians are the priority.

2. Green zone may include hardscaping, landscaping, street trees, lighting, and related pedestrian/bicycle/transit amenities. Hardscaping (with street trees in appropriately-designed planters) is typical for access to on-street parking and transit.

3. Parking is expected on main streets. Parking zone dimension may vary depending upon type of parking provided. Angle parking is allowed, preferably reverse angle parking. Angle parking will require a wider dimension than shown.

4. Shared lanes are the preferred treatment, due to the low speeds. In this case, travel lanes should be 12' to allow for maneuvering and opening car doors. Shared lane markings can be used on streets < 35 mph. If bicycle lane is provided, it should be 6' wide, and motor vehicle lane should be narrowed to 10'.
MAIN STREET INTERSECTION

STREET ZONES

- **Development Zone**: Development should be pedestrian-oriented with narrow setbacks and an active street environment.

- **Sidewalk Zone**: The pedestrian walk area is of sufficient width to allow pedestrians to walk safely and comfortably. Pedestrians are the priority on a main street.

- **Green Zone**: Consists of the area between the sidewalk zone and curb. Includes street trees and other landscaping, as well as interspersed street furnishings and pedestrian-scale lighting in a hardscaped amenity zone.

- **Motor Vehicle/Shared Vehicle Zone**: The primary travel way for vehicles. A shared vehicle zone has mixed traffic (cars, trucks, buses and bicycles).

- **Parking/Transit Zone**: Accommodates on-street parking and transit stops. Width and layout may vary.
Complete Streets Training Overview

- Four regional workshops in 2012
- 24 two-day training courses in 2013 (24 completed, 3 in 2014)
- State and local engineers and planners are strongly encouraged to attend
- Conference to celebrate success stories
Project Specific Context & Process
US 421 Widening in Boone

- Widening of corridor by NCDOT – main route into town and campus
- Town desired a multimodal outcome with gateway features
- Municipality worked with NCDOT to incorporate bike lanes and sidewalks, in addition to other features
- Good example of late-stage coordination
Main Street Clayton
QUESTIONS?
WSDOT’s
Complete Streets & Main Street Highways

Paula Reeves, AICP CTP
WSDOT Local Programs Division

Pedestrian and Bicycle Information Center Webinar
April 10th, 2014
WSDOT’s Local Programs Division

We provide educational, technical, and financial support with federal oversight to local customers to help them achieve their transportation goals...

- We are stewards of federal transportation funding
- We provide technical expertise and services related to federal and state requirements
- We promote cooperative planning and partnerships
Community Design
to better balance the regional need for moving automobile traffic with the community need for a vibrant, connected and safe pedestrian environment.
The Research:
*State Highways as Main Streets: A Study of Community Design*

- Some State Highways in Washington serve as ‘main streets’ providing local access as well as regional mobility.

- Design affects community livability and safety: these roads have the highest rates of pedestrian and traffic collisions in the state.

- Late stage design changes in projects on these highways have increased costs and delayed projects.
The Research

- System Analysis
- Case Studies

**Storefront Studio Program**
University of Washington
College of Built Environments
Department of Architecture
## What is a Main Street Highway?

### Step 1: Screening

<table>
<thead>
<tr>
<th>Variables</th>
<th>Units of Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Route within City Limits</td>
<td>Y, N</td>
</tr>
<tr>
<td>Highway of Statewide Significance</td>
<td>Y, N</td>
</tr>
<tr>
<td>National Highway System</td>
<td>Y, N</td>
</tr>
<tr>
<td>State Access Control Classification</td>
<td>Y, N</td>
</tr>
<tr>
<td>Federal Functional Classification</td>
<td>Principal arterials, Minor arterial streets, Collector streets, Local streets</td>
</tr>
<tr>
<td>Design Speed</td>
<td>MPH</td>
</tr>
<tr>
<td>Posted Speed</td>
<td>MPH</td>
</tr>
<tr>
<td>Year of Incorporation</td>
<td>Year</td>
</tr>
<tr>
<td>Freight Classification</td>
<td>T-1 more than 10 million tons per year; T-2 4 million to 10 million tons per year; T-3 300,000 to 4 million tons per year; T-4 100,000 to 300,000 tons per year; T-5 at least 20,000 tons in 60 days</td>
</tr>
<tr>
<td>Collision History</td>
<td>Number of collisions involving bicyclists and pedestrians</td>
</tr>
<tr>
<td>Variables</td>
<td>Units of Measure</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Land Use – Locally Adopted Zoning</td>
<td>CBD, Mixed Use, Commercial Center</td>
</tr>
<tr>
<td>Proportion of visible buildings that are commercial</td>
<td>Percentage (25%, 50%, 75%, 100%)</td>
</tr>
<tr>
<td>Proportion of street frontage with dead space</td>
<td>Percentage (25%, 50%, 75%, 100%)</td>
</tr>
<tr>
<td>Proportion of street frontage with parked cars</td>
<td>Percentage (25%, 50%, 75%, 100%)</td>
</tr>
<tr>
<td>Number of travel lanes</td>
<td>Number both directions</td>
</tr>
<tr>
<td>Average travel lane width</td>
<td>Feet</td>
</tr>
<tr>
<td>Average shoulder width</td>
<td>Feet</td>
</tr>
<tr>
<td>Average median width</td>
<td>Feet</td>
</tr>
<tr>
<td>Average sidewalk width</td>
<td>Feet</td>
</tr>
<tr>
<td>Total curb to curb width</td>
<td>Feet</td>
</tr>
<tr>
<td>Total back of sidewalk to back of sidewalk width</td>
<td>Feet</td>
</tr>
<tr>
<td>Posted speed limit</td>
<td>MPH</td>
</tr>
<tr>
<td>Crosswalk spacing</td>
<td>Feet</td>
</tr>
<tr>
<td>Visible curb extensions (y, n)</td>
<td>Y, N</td>
</tr>
<tr>
<td>Average building setback</td>
<td>Feet</td>
</tr>
<tr>
<td>Average building height (stories)</td>
<td>Stories</td>
</tr>
<tr>
<td>Uniform building height (y, n)</td>
<td>Y, N</td>
</tr>
<tr>
<td>Number of pedestrians visible</td>
<td>Count</td>
</tr>
<tr>
<td>Average daily traffic</td>
<td>Volume</td>
</tr>
<tr>
<td>Visible bicycle lane</td>
<td>Y, N</td>
</tr>
<tr>
<td>Visible buildings that are historic</td>
<td>Y, N</td>
</tr>
</tbody>
</table>
Main Street Highways

Research identified approximately 500 miles of “Main Street” highways bisecting 180+ cities based on criteria applied consistently across the state.
Why Define Main Street Highways?

• Ensure a **measurable** link between goals and transportation investments
  --Outcomes vs. throughput or volume to capacity ratio

• Develop the most cost effective transportation projects
  --Ensure fewer scope and schedule changes

• Identify partnerships, opportunities, and resources.
  --Transportation, historic preservation, environmental, economic development, utilities, etc..
Research Findings

• Scope changes:
  -- More common on Main Street Highways
  -- 48% of all projects on Main Street Highways vs. 38% on other parts of the state system

• Retrospective review:
  -- 40 projects or 20% of WSDOT’s scope, schedule and budget changes could have directly benefited from additional community design before projects were scoped

• Average possible cost avoidance per project:
  -- Estimated at over $9 million dollars or 30% of project cost
Main Street Highways

Pedestrian and Bicyclist Collisions and Fatalities on Main Street Highways
2010 through 2012

State Highways that also serve as City Streets in core commercial areas or “Main Street Highways” – serve as both thoroughfares and community access routes.
Moving Forward…

- Complete Streets Act
- Practical Design Reform
- New Community Engagement Goal
Washington’s Complete Streets Act

- Created a framework for a Complete Streets Grant program
- Directed WSDOT to consult with local agencies and consider the needs of all users during project planning and design
WSDOT’s Practical Design

Practical Design – a strategy that emphasizes return on investment, encouraging flexibility, innovation, and multi-modal solutions by increasing the focus on project purpose and need throughout all phases of project development.

- New Main Streets Section in WSDOT’s Design Manual
- New Policy on Design Speed
Improved Coordination & Community Engagement

RCW 47.24.020 – When city streets also operate as state highways within the corporate limits of cities and towns, the city has full responsibility for and control over any facilities beyond the curbs and, if no curb is installed, beyond that portion of the highway used for highway purposes.
WSDOT Resources

State Highways as Main Streets: A Study of Community Design and Visioning Publications
http://www.wsdot.wa.gov/Research/Reports/700/733.1.htm

Contacts:

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http://www.wsdot.wa.gov/LocalPrograms/Planning

UW Storefront Studio
http://www.storefrontstudio.org/
Minnesota Department of Transportation
Complete Streets Policy Implementation
Overview:

• Historical Background

• Complete Streets Policy

• Supporting Technical Memorandum

• What MnDOT is Currently Doing

• Development of Complete Streets Project Reports

• Challenges & Opportunities
Complete Streets Beginnings

Key Moments

2008 – MnDOT provided the state legislature with a complete streets feasibility study for the state of Minnesota.

2010 – MN Legislature enacted a law requiring MnDOT to implement complete streets.

2013 – Advisory group developed an outreach process that culminated with a MnDOT Complete Streets Policy and supporting Technical Memorandum that formalizes the standard MnDOT is now held to throughout project development.
Complete Streets Policy

Policy Statement

The Minnesota Department of Transportation requires that the principles of “Complete Streets” are to be considered at all phases of planning and project development in the establishment, development, operation, and maintenance of a comprehensive, integrated, and connected multimodal transportation system.
Complete Streets Policy

Principal Points

• The policy is a direct response to the Minnesota Complete Streets law
• It affects virtually all phases of road activity on trunk highways, from planning to maintenance
• It’s consistent with MnDOT’s Vision and Statewide Multimodal Transportation Plan
• Increase the use of transit, bicycling, and walking as a percentage of all trips
• Preservation projects should be addressed to extent possible
Complete Streets Policy

Policy Assumes Exemptions...

- Users are legally prohibited from using a roadway (eg. Non-motorized vehicles on the interstate)
- Demonstrated absence of current and future need
- Environmental or safety detriments outweigh enhanced modal access
- Constraints related to local government opposition or right of way acquisition
- Inability to negotiate operational and maintenance responsibility
CS Tech Memo to the Agency

• Provides technical direction on how the agency now views Complete Streets elements
• Outlines key considerations at each stage of project development
• Calls for the development of a clear protocol for identifying compliance

In the past, the question has typically been “why” to design for anything beyond cars and trucks. Being a complete streets shop means turning that around to asking “why not” instead.
Devil in the Details

• What type of documentation is needed?
• How do we approach preservation projects?
• What type of analysis would justify a lack of future demand/need?
• How should we determine if environmental or safety impacts are greater than the benefits of enhanced multimodal access?
• What process indicators should we use?
• How much flexibility should there be?
• How do we handle cross movements?
What MnDOT is Doing

**Internally**
- Created a working group of MnDOT staff directly impacted by Complete Streets policies and designs to develop a weigh in which to integrate Complete Streets into project development
- Outreach with districts and staff throughout MnDOT to address practical and logistical concerns as well as questions
- Developing a mechanism for accountability

**Externally**
- Developing a targeted communications plan for our transportation stakeholders throughout the state
- Creating a guidance document for external partners
- Revising the Bikeway Facility Manual
- Creating a Statewide Pedestrian Plan and Freight System Plan
Project Reports

Summary
- Project Type
- Existing Site Characteristics
- Special Roadway Designations

Overall Project Improvements

Provisions by User Group
- Pedestrian
- Bicycle
- Freight
- Transit
- Other
More detail can be found at our Complete Streets webpage:

http://www.dot.state.mn.us/planning/completestreets/
Discussion

⇒ Archive at www.pedbikeinfo.org/webinars
  ▪ Downloadable and streaming recording, transcript, presentation slides

⇒ Questions?
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  ▪ Lauren Blackburn
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  ▪ Paula Reeves
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