Complete Streets Initiative
Updates for Hennepin Co. Complete Streets Task Force

Scott Bradley – Director of Context Sensitive Solutions – May 16, 2011

Your Destination...Our Priority
Understanding Context Sensitive Solutions

CSS Philosophy Core Strategies

- Strive towards a shared stakeholder vision to provide a basis for decisions
- Demonstrate a comprehensive understanding of contexts
- Foster continuing communication and collaboration to achieve consensus
- Exercise flexibility and creativity to shape effective transportation solutions while preserving and enhancing community and natural environments
In Alignment With Context Sensitive Solutions

- Flexibility in Highway Design Initiative
- Complete Streets Initiative
Understanding Flexibility in Design

It’s Difficult To Balance Competing Objectives Within Overly Conservative Design Approaches & Standards
Complete Streets Feasibility Study Findings

Complete Streets Policy Is Feasible In Minnesota

Complete Streets does not mean “all modes on all roads” as the goal but it does mean:

• Develop a balanced transportation system integrating all modes via planning inclusive of each mode

• Provide for all surface modes and users of all ages and abilities … motorists, freight, transit riders, bicyclists and pedestrians
Complete Streets Feasibility Study Findings

Comments To Note From Agency Interviews

- In urban areas, space allocation is of more concern than capital costs
- Design flexibility is critical to achieving Complete Streets
- Comprehensive planning is the most cost effective approach
- Operations and maintenance costs are of more concern
Mn/DOT made a commitment to partner with a broad coalition to build upon its approach to Context Sensitive Solutions in developing and implementing a Complete Streets vision & policy for its road system.

Mn/DOT’s State Aid Division was to provide the leadership in the partnership.

An external advisory group was to advise Mn/DOT on the transition work planning and future CS implementation efforts.
Complete Streets legislation was also part of a transportation policy bill signed into law in Minnesota on May 15, 2010.

The legislation supports Mn/DOT’s efforts to lead a statewide partnership approach for implementing Complete Streets.

The commissioner shall implement a complete streets policy after consultation with stakeholders, state and regional agencies, local governments, and road authorities. The commissioner shall address relevant protocols, guidance, standards, training and requirements and shall integrate related principles of context sensitive solutions.
Minnesota Complete Streets Initiative
Partnering with Mn/DOT - External Advisory Group

- ADA of Minnesota
- Association of MN Counties (2)
- Builders Association of Minnesota
- MN Association of Townships
- MN Complete Streets Coalition (6)
- MN Dept of Employment and Economic Development
- MN Federal Highway Administration
- MN Dept of Health
- MN Housing Finance Agency
- MN Dept of Natural Resources

- MN Legislature
- MN Pollution Control Agency
- MN Dept of Public Safety
- MN Public Transit Association
- MN Transportation Alliance
- League of MN Cities (2)
- Metro Transit
- Metropolitan Council (MPO)
- West Central Initiative (RDC)
- Hennepin County
- City of Rochester
Complete Streets Come In Many Forms
For Many Circumstances, Constraints and Opportunities
Planning Challenges

Balancing Surface Transportation Systems by Integrating All Modes as the Goal via Planning Inclusive of Each Mode
Grand Rapids Pilot Planning Project
TRB Strategic Highway Research Program 2 Grant Recipient

Using and Evaluating a SHRP 2 Collaborative Decision Making Tool and Framework
Applied to Multi-Jurisdictional Complete Streets Network Planning in Grand Rapids
Planning & Guidance Challenges

Leveraging Development and Redevelopment so Land Use and Transportation Become Mutually Supportive in Design and Functions

Re-examining Multi-functional Arterials and their Context Zones

Roadways in Context (PennDOT / NJDOT)

Smart Transportation Guidebook
# Planning & Guidance Challenges

## Regional Arterial

<table>
<thead>
<tr>
<th>Regional Arterial</th>
<th>Rural</th>
<th>Suburban Neighborhood</th>
<th>Suburban Corridor</th>
<th>Suburban Center</th>
<th>Town/Village Neighborhood</th>
<th>Town/Village Center</th>
<th>Urban Core</th>
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<tbody>
<tr>
<td>Lane Width¹</td>
<td>11' to 12'</td>
<td>11' to 12' (14' to 15' outside lane if no shoulder or bike lane)</td>
<td>11' to 12' (14' to 15' outside lane if no shoulder or bike lane)</td>
<td>11' to 12' (14' outside lane if no shoulder or bike lane)</td>
<td>10' to 12' (14' outside lane if no shoulder or bike lane)</td>
<td>10' to 12' (14' outside lane if no shoulder or bike lane)</td>
<td>10' to 12' (14' outside lane if no shoulder or bike lane)</td>
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<tr>
<td>Paved Shoulder Width²</td>
<td>8' to 10'</td>
<td>8' to 10'</td>
<td>8' to 12'</td>
<td>4' to 6' (if no parking or bike lane)</td>
<td>4' to 6' (if no parking or bike lane)</td>
<td>4' to 6' (if no parking or bike lane)</td>
<td>4' to 6' (if no parking or bike lane)</td>
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<td>Parking Lane³</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>6' parallel</td>
<td>6' parallel; see 7.2 for angled</td>
<td>6' parallel; see 7.2 for angled</td>
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<td>Bike Lane</td>
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<td>5' to 6' (if no shoulder)</td>
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<td>5' to 6'</td>
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<td>Median</td>
<td>4' to 6'</td>
<td>16' to 18' for LT; 6' to 8' for pedestrians only</td>
<td>16' to 18' for LT; 6' to 8' for pedestrians only</td>
<td>15' to 18' for LT; 6' to 8' for pedestrians only</td>
<td>16 to 18' for LT; 6' to 8' for pedestrians only</td>
<td>16 to 18' for LT; 6' to 8' for pedestrians only</td>
<td>16 to 18' for LT; 6' to 8' for pedestrians only</td>
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<td>Curb Return</td>
<td>30' to 50'</td>
<td>28' to 35'</td>
<td>30' to 50'</td>
<td>25' to 50'</td>
<td>15' to 40'</td>
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<td>15' to 40'</td>
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<td>Travel Lanes</td>
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<td>4 to 6</td>
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<td>2 to 6</td>
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<td>Clear Sidewalk Width</td>
<td>NA</td>
<td>5'</td>
<td>5' to 6'</td>
<td>5' to 6'</td>
<td>6' to 8'</td>
<td>6' to 8'</td>
<td>6' to 12'</td>
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<tr>
<td>Buffer⁴</td>
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<td>Shy Distance</td>
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<td>NA</td>
<td>NA</td>
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<tr>
<td>Total Sidewalk Width</td>
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<td>5'</td>
<td>5' to 6'</td>
<td>5' to 6'</td>
<td>6' to 14'</td>
<td>10' to 16'</td>
<td>12' to 16'</td>
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<td>Speed</td>
<td>45-55</td>
<td>35-40</td>
<td>35-55</td>
<td>30-35</td>
<td>30-35</td>
<td>30-35</td>
<td>30-35</td>
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Allocation Of Space Challenges
How Much Space Do You Need and For What?

Exploring Flexibility in Design to Balance Competing Objectives and Optimize the Return Upon Investment
Accessibility & Safety Challenges
Managing Speed Really Matters

Figure 1. Vehicle Impact Speed and Pedestrian Injury Severity (from DETR)

- 40 mph
- 30 mph
- 20 mph

Research in the UK by Department of Environment, Transport and Regions
Complete Streets Comparisons - Urban

Does this Existing Condition Appear to be a Complete Street?

Is this More of a Complete Street within the Existing Footprint?
Complete Streets Comparisons - Urban

Is this More of a Complete Street within the Existing Footprint?

Is this More of a Complete Street within the Existing Footprint?
Research & Guidance Challenges
Research & Guidance Challenges

Related Research Projects Recently Funded By Mn/DOT & LRRB

Planning & Implementation of Complete Streets at Multiple Scales / Evaluating Multimodal Trade-Offs & Informants for Applying Flexibility in Design for Complete Streets
(Mn/DOT T.L. - Scott Bradley ... Investigators - Carissa Schively Slotterback & Cindy Zerger (U of MN)

Implications of Modifying State Aid Standards: Urban, New or Reconstruction
(Mn/DOT T.L. - Paul Stine ... Investigators – Dr. David Noyce (U of W) & Howard Preston (CH2M Hill)
An Operations Challenge

Complete Street in Summer  How About in Winter?

Multimodal Operations & Maintenance Needs are Year-Round
Complete Streets Questions?

Julie Skallman – Mn/DOT
State Aid Division Director
julie.skallman@state.mn.us

Scott Bradley – Mn/DOT
Context Sensitive Solutions Director
scott.bradley@state.mn.us

MN Complete Streets Coalition
www.mncompletestreets.org

Mn/DOT CS Website - www.dot.state.mn.us/planning/completestreets/

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