Workshop on
Context Sensitive
Design for Local Units of
Government

May – June, 2002

Hosted by:
Center for Transportation Studies
University of Minnesota

Sponsored by:
Minnesota Department of Transportation
Federal Highway Administration

With assistance from:
Workshop Participant Manual
Acknowledgements

The materials in this participant Manual were prepared by the University of Minnesota Center for Transportation Studies and Zan Associates, Inc., with assistance from the Minnesota Department of Transportation and the Federal Highway Administration.

The University of Minnesota Center for Transportation Studies would like to thank the following individuals who contributed their expertise and experiences as well as their time to this project:

**Minnesota Department of Transportation**
- Scott Bradley, Mn/DOT Office of Technical Support
- Mark Gieske, Mn/DOT Office of State Aid
- Julie Skallman, Mn/DOT Office of State Aid
- Bob Brown, Mn/DOT Metro Division
- Lynnette Roshell, Mn/DOT Office of State Aid
- Rick Kjonaas, Mn/DOT Office of State Aid
- Gary Mueller, Mn/DOT Office of Technical Support
- Dave Hall, Mn/DOT Office of Bridges

**Center for Transportation Studies**
- Laurie McGinnis, Associate Director
- Jim Grothaus, Project Manager
- Teresa Washington, College of Continuing Education

**Consultants**
- Charleen Zimmer, Zan Associates
- Dan Meyers, URS-BRW
- Beth Bartz, SRF Consulting Group, Inc.
- Denny Eyler, SRF Consulting Group, Inc.
- Howard Preston, Howard R. Green Company
Introduction

“Context Sensitive Design for Local Units of Government” is a one-day workshop designed for transportation planners and engineers by the University of Minnesota Center for Transportation Studies (CTS) for the Minnesota Department of Transportation (Mn/DOT) with assistance by Zan Associates. This participant manual is intended to orient you to the workshop, to provide you with the information you need regarding schedule and activities, and to provide you with session materials for use during the workshop and reference materials for your review after the workshop.

Workshop Objectives

The primary objective of this workshop is to have participants enhance their existing experience and skills as necessary to integrate context sensitive design principles into their existing project development processes and apply the principles of context sensitive design so that their projects ultimately:

- Are more responsive to communities and stakeholders;
- Attain a level of design excellence;
- Leave a lasting public works legacy; and
- Are developed in a timely and cost-effective manner.

Workshop Goal

The goal of the workshop is to plan and design a transportation facility so that it fits its physical, cultural, social and environmental setting and is recognized as an asset by the community in which it is located.

Background

The Federal Highway Administration (FHWA) has provided leadership in encouraging context sensitive design through their examination of the American Association of State Highway and Transportation Officials (AASHTO) roadway engineering design standards in their 1997 publication, “Flexibility in Highway Design”, a copy of which is included in this reference manual. Developed in collaboration with AASHTO, Scenic America, the National Trust for Historic Preservation and the Bicycle Federation, the publication
Workshop Participant Manual

Introduction

“identifies and explains the opportunities, flexibilities, and constraints facing designers and design teams responsible for the development of transportation facilities.” (p. iii).

Building on this effort, FHWA conducted a national working conference, “Thinking Beyond the Pavement” in 1988 where 325 people from 39 states (transportation professionals and stakeholders representing public agencies, elected officials, private businesses and citizen perspectives) worked together to identify the common qualities of successful transportation projects and articulate principles to achieve more flexible design. The conference also articulated goals for encouraging the use of “context sensitive design” and implementing training programs for engineers nationwide.

To implement this goal, FHWA provided funding to five “pilot” states to develop Context Sensitive Design training workshops. Minnesota, along with Utah, Connecticut, Kentucky, and Maryland, was provided funding to develop a Context Sensitive Design Curriculum and to hold several three-day workshop targeted toward state DOT Project Managers. The efforts of Minnesota and the other four pilot states have been shared with DOT’s across the country in hopes of having training available nationwide.

After conducting the three-day workshop several times, it was agreed by Mn/DOT, FHWA and CTS that a shorter workshop was needed that could be targeted more directly to issues encountered by city and county engineers and transportation professionals, particularly when working on state-aid projects. With funding support from FHWA, Mn/DOT contracted with CTS to develop a one-day workshop on context sensitive design for local units of government. The workshop will be incorporated into the regular Technology Transfer Program of the Center for Transportation Studies.

Approach

The intent of this workshop is to share information regarding context sensitive design, its role in meeting the strategic objectives of Mn/DOT, and practical methods to define and accommodate context within the Mn/DOT state-aid process and the project development process of local units of government. The emphasis will be on identifying context and designing to accommodate it as a seamless part of project development. Context sensitive design is NOT another step in the project development process, but IS an
Workshop Participant Manual

Introduction

integral part of a successful project process and contributes to a successful project outcome.
In keeping with this approach, the “Context Sensitive Design for Local Units of Government” workshop uses Minnesota case studies to define and illustrate context sensitive design elements in roadway planning projects. The workshop also employs small group design and discussion of current roadway projects that give you the opportunity to get hands-on experience in designing in a context sensitive manner. The workshop will also provide you with an opportunity to consider current project assignments and discuss with instructors and fellow participants how a context sensitive design process might improve the project development process.

**Workshop Structure**

The workshop is presented as a one-day course. There are three lecture sessions, three working case study sessions, and a panel discussion of implementation issues. The lecture sessions are focused around: (1) context sensitive design principles, (2) flexibility in design standards, and (3) integrating design with community. The working case study sessions apply these concepts to a roadway design project.

**Working Case Studies**

At the heart of the “Context Sensitive Design for Local Units of Government” workshop is the working case study. You will be organized into teams of 10-15 people, each working on a design project. Materials about the case study that are provided include a written description of the project, aerial photographs reflecting existing conditions, photographs of the area, and other materials providing information on the project context. A more detailed description of the case study project can be found in the “Introduction to Working Case Study” section of the manual.

Your team will be asked to use a context sensitive design process, applying the principles of context sensitive design to the case study, in developing a design concept for the case study project. Teams will present the findings of their work at the end of the workshop. Team working sessions will be interspersed with presentations thereby allowing you to apply concepts presented and to anticipate issues to be discussed.
Introduction

The instructor and Mn/DOT staff will facilitate the working case studies. The facilitator’s role is to introduce your team to the case study, to serve as an informational resource on the project, and to provide guidance and expertise in context sensitive design.

Evaluation

Evaluation is a critical part of this workshop. If this is to serve as a model training program, elements of which may be reproduced elsewhere in Minnesota or throughout the nation, it is important to have your feedback about what worked and what could be made to work better. Please take the time to fill out the evaluation forms, which you will find in the “Evaluation” section of your Participant Manual. You will be asked to complete an evaluation at the end of each session. At the end of the day, you will be asked to complete an evaluation form for the working case study and the entire workshop. Your comments and suggestions will be an important component for planning future presentations of this workshop.
Workshop Participant Manual

Table of Contents

- Workshop Overview
- Workshop Manual Introduction
- Session 1: Principles of Context Sensitive Design
- Session 2: Introduction to Case Study
- Case Study Session A: Understanding Context
- Session 3: Flexibility in Design Standards
- Session 4: Getting It Built
- Case Study Session B: Developing Design Concept
- Session 5: Integrating Design with Community
- Case Study Session C: Integrating Design with Community
- Toolkit
CSD for Local Units of Government

Case Study Evaluation

<table>
<thead>
<tr>
<th>Name (optional):</th>
<th>____________________________________________________________________________________________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The facilitators were well organized and prepared for the program.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>The case study added to my understanding of Context Sensitive Design.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>The case study materials were clear and helped me understand the information presented.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>The case study encouraged me to think about how Context Sensitive Design concepts could be applied to my current assignments.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th>Overall Working Case Study rating.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Excellent</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

6. Of the ideas discussed during these sessions, what will be most helpful to you in your daily work?

7. Other comments or suggestions:
8. Suggestions for future case studies:
# CSD for Local Units of Government

## Workshop Evaluation

<table>
<thead>
<tr>
<th>Name (optional):</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

### Session 1: “Principles of Context Sensitive Design”

The presenter was well organized and prepared for the program.
The presentation materials were clear and helped me understand the information presented.
The material presented was appropriate to my level of expertise and experience.

**Overall session rating**: Excellent

Comments:

### Session 3: Flexibility in Design Standards

The panelists were well organized and prepared for the program.
The material presented was clear and helped me understand the implementation of context sensitive design.
The material presented was appropriate to my level of expertise and experience.

**Overall session rating**: Excellent

Comments:

### Session 4: “Getting It Built” Panel

Comments:
## CSD for Local Units of Government

### Workshop Evaluation

The panelists were well organized and prepared for the program.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

### 4. Session 5: Integrating Design with Community

<table>
<thead>
<tr>
<th>The presenter was well organized and prepared for the program.</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The presentation materials were clear and helped me understand the information presented.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>The material presented was appropriate to my level of expertise and experience.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**Overall session rating:**

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Poor</th>
</tr>
</thead>
</table>

**Comments:**

The material presented was clear and helped me understand the implementation of context sensitive design.

<table>
<thead>
<tr>
<th>The material presented was appropriate to my level of expertise and experience.</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
</table>

**Overall session rating**

<table>
<thead>
<tr>
<th>Excellent</th>
<th>Very Good</th>
<th>Good</th>
<th>Poor</th>
</tr>
</thead>
</table>

**Comments:**

Name (optional): __________________________
### CSD for Local Units of Government

**Workshop Evaluation**

Name (optional): ________________________________________

Please provide your rating and comments of the overall workshop.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I now have a good understanding of Context Sensitive Design.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2. The Working Case Study design sessions helped me better understand Context Sensitive Design.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3. I will apply Context Sensitive Design to my current assignments.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4. I feel confident in the resources and support available to me in applying the principles of Context Sensitive Design.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5. The workshop met my expectations for the training.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6. The Participant Reference Manual was well-organized and provided helpful information.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7. The facility was well-suited for the workshop.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

8. What questions or concerns do you still have about applying Context Sensitive Design to your daily work?

9. What other materials or information would still be helpful to you?

10. What were your objectives or expectations for this training? Were these objectives met? Did they change during the course of the workshop?

11. What suggestions would you have for future offerings of this workshop?
CSD for Local Units of Government

Workshop Evaluation