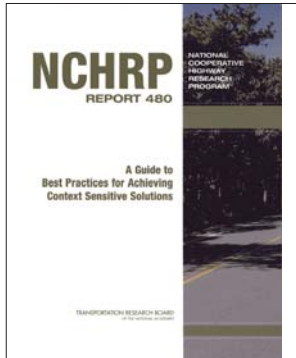


# A GUIDE TO BEST PRACTICES FOR ACHIEVING CONTEXT SENSITIVE SOLUTIONS



Transportation Research Board (2002). *National Cooperative Highway Research Program Report 480, A Guide To Best Practices For Achieving Context Sensitive Solutions*. Washington, D.C.

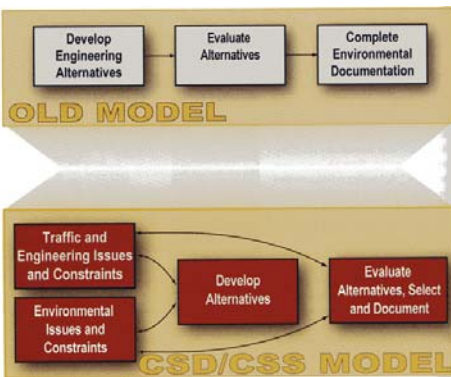
## ABSTRACT

This guide presents a multi-disciplinary approach to CSD/CSS and bridges differing viewpoints to successfully implement projects. This is a non-linear, interactive process to successfully implement projects. Each section addresses management structure, problem definition, project development and evaluation framework, alternatives development, alternatives screening evaluation and selection, and implementation for its issue area.



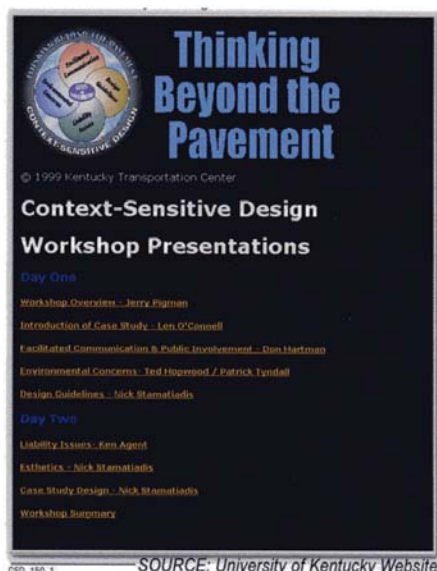
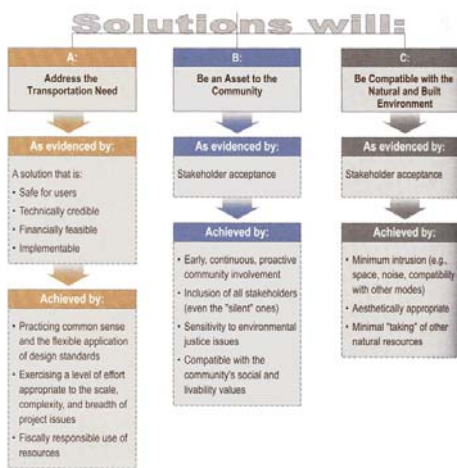
*Sections A and B.* These sections have brief introductory comments on the history of using CSS in the development of highway projects. In the 1960s, engineers began to meet resistance from the public when highway projects were perceived as having adverse impact on the environment resulting in the National Environmental Policy Act (NEPA) of 1969. Both natural and human impacts were to be evaluated. By the mid-1990s a clear consensus emerged that new approaches were needed for developing highway projects. In 1998, a conference was held for DOTs and community stakeholder groups called “Thinking Beyond the Pavement” that developed a strong vision for the CSD/CSS movement.

*Section C: Effective Decision Making* is a process that needs to be communicated at the project outset. Roles and responsibilities of project participants need to be defined. There is a need to agree on the problem definition, the evaluation criteria, and the development of alternatives in order to proceed through the alternatives screening, evaluation and selection process.



*Section D: Reflecting Community Values* begins with developing a public involvement (PI) plan to provide meaningful participation in the evolution of the project and the decision-making process. Identifying and interviewing stakeholders, selecting the appropriate PI techniques and planning for implementation are all part of the design process.

*Section E: Achieving Environmental Sensitivity* is a commitment to assure that a project “lays lightly on the land.” A CSD/CSS professional is an environmental



steward. The first step is to establish the environmental review process and the agency coordination plan. Other key elements are to develop a purpose and need for the project, engage stakeholders in the alternatives identification, identify opportunities to reduce environmental impacts, evaluate alternatives through factual analysis, and identify mitigation strategies to lessen impacts.

*Section F: Ensuring Safe and Feasible Solutions* are a result of a successful CSD/CSS process. A feasible solution must be safe and also meet constructability and financial thresholds. It is important to clearly define and adhere to established design procedures and policies in both safety and feasibility. The benefits of addressing these management concerns include overall risk management and consistency and fairness in dealing with stakeholder groups. It is important to educate the stakeholder on technical issues with easy to understand graphic representations such as computer generated visualizations and traffic operation simulations. This will help in better decision-making. It is also important to understand the safety effects of different designs.

*Section G: Organization Needs* addresses management issues and lessons learned from transportation agencies that have institutionalized CSD/CSS. Organizations implementing CSD/CSS will face the need for change in their structure, work processes, staff make-up, and most importantly their culture. CSD is a top-down initiative needing leadership at the top of the organization for implementation. CSD/CSS depends on well-defined change processes. Community values help to define solutions that are more important to the transportation user who expects outcomes. This section outlines Context Sensitive Solutions Guiding Principles which include:

- Address the Transportation Need
- Be an Asset to the Community
- Be Compatible with the Natural and Built Environment

*Section H.* This section presents a series of nine case studies demonstrating how the CSS approach works, highlighting positive benefits and lessons learned.

## SUMMARY

This is an all inclusive guide for achieving context sensitive solutions with many good ideas for implementation and case studies to demonstrate results.

## KEY WORDS

*Applicable Project Delivery Stages:* Agency, Administration, Planning, Design

*Applicable Transportation Professionals:* Administrators, Planners, Highway Engineers, Landscape Architects

*Applicable Transportation Modes:* Vehicular, Bicycle, Pedestrian, Transit

*Transportation Topics:* Alternatives, Analysis, Change, Coordination, Communication, Community, Context Sensitive Design, Context Sensitive Solution, Culture, Decision-Making, Design Criteria, Education, Engage, Environmental Review, Evaluation Process, Implementation, Management, Mitigation, Multi-Disciplinary, Outreach, Process, Public Involvement, Risk Management, Safety, Screening, Selection, Solution, Stakeholder, Structure, Values, Visualization, Visioning