



Context Sensitive Design/Thinking Beyond the Pavement

Subject: **ACTION:** Context Sensitive Solutions (CSS)

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From: King W. Gee (Original signed by)
Associate Administrator for
Infrastructure

Reply to HIPA-20
Attn of:

To: Resource Center Managers
Division Administrators
Federal Lands Highway Division Engineers

As we strive to improve the quality of transportation decision making by promoting strategies that establish a better link between transportation planning and environmental review processes at the systems planning level as well as the project level, one of the key strategies is the CSS approach to project development. One of the Vital Few strategies is for FHWA to provide guidance, information, and training to States on "integrating the planning and environmental processes" and encouraging context-sensitive solutions/context-sensitive design (CSS/CSD).

Guidance and training for CSS/CSD is evolving. Both FHWA and AASHTO have recently initiated actions to develop CSS/CSD training. Also, the NCHRP report on the experiences of the five pilot States in implementing CSS/CSD has been completed and will be issued later this year. Much of the training developed will be based on the findings in this report.

However, given the identified need for training within FHWA and State DOTs at multiple levels, and given the strategic goals of the Vital Few, we should not wait for the FHWA or AASHTO training development to be completed. Some training and guidance resources developed by other organizations are already available and we, FHWA and State DOTs, should take full advantage of them in order to become familiar with and trained in CSS/CSD concepts and implementation as early and quickly as possible. As listed in the attachment, the American Society of Civil Engineers, the Project for Public Spaces and the Kentucky Transportation Cabinet through the Kentucky Transportation Center already have training available. The listing is only for major efforts we are aware of and includes those applicable on a nationwide basis. Many State DOTs have developed State specific training for their own people. However, they may or may not be applicable or available to other States.

If you have questions we are prepared to offer technical assistance to your staff and the State DOT, you may contact Seppo Sillan, (202) 366-1327, seppo.sillan@fhwa.dot.gov or Harold Peaks, 202-366-1598, harold.peaks@fhwa.dot.gov.

Attachment

TRAINING

Context Sensitive Solutions (CSS): Context Sensitive Design (CSD) and Beyond:

This is a 2-day seminar offered by the **American Society of Civil Engineers** and developed and taught by CH2MHill. It provides an overview of CSS--what CSS is, how highway and other transportation projects can benefit from it, and how to implement the CSS approach. For more information, see the web site: <http://www.asce.org/conted/seminars/transportation.cfm#Context>

CSS Training: A Course for Transportation and Planning Professionals The course by **Project for Public Spaces** offers practical help and technical guidance in applying CSS. Held in a 3-day series of courses, the first session teaches a unique place making approach to evaluating and planning for places. Day two offers an engineering-oriented session that deals with the trade-offs between DOT mobility priorities and the community needs of CSD. The final day teaches specific consensus-building techniques, with emphasis on listening skills and inclusiveness. For more information, see the web site: http://www.pps.org/CSS/css_training.htm

CSS Workshops: Some States have developed training for their own staff. Such training is usually very specifically oriented towards its own procedures and needs. Some may be adaptable to other States also, especially if they are in the same regional area and are facing similar issues. For example, **University of Kentucky Transportation Center (KTC)** developed and has held a series of in-State CSS workshops for participants in the project development phases of a project. However, in addition, KTC has tailored and presented these workshops in more than 12 other States also. For more information, see web site: <http://www.ktc.uky.edu/>

PENNDOT has a course that provides tools/techniques to build skills in flexible design resulting in CSS. It includes defining CSS, place making and field scoping in context of community, community consensus building through continuous community/public involvement, visualization techniques, flexibility of design standards and criteria, construction cost and maintenance, tort liability and funding. For more information see web site:

<http://www.dot2.state.pa.us/ECMS/ECMSHome.nsf/frmecmsframeset?Open> (Go to "Training Calendar" and look under Bureau of Design course listings).

PENNDOT is also creating a 1-day "overview" of CSS for construction and maintenance staff. It should be ready next year.

Training proposed or under development

CSS: This will be State directed training developed through **AASHTO** (Center for Environmental Excellence) with involvement from HEP, HIF, RCs and NHI. This course will be directed at the executive level of State DOTs and will build off the training commitment made by the five CSD pilot States.

CSS: Process and Application Course: This will be a 3-day **NHI** course targeted primarily toward FHWA and State DOT engineers, planners and environmental specialists. The principal objectives of the course are to allow the participants to understand the collaborative, interdisciplinary CSS approach to a transportation project (planning through construction stage) and its associated benefits; understand the important correlation between using flexibility in applying industry design standards (e.g. AASHTO "Green Book") and maintaining safety standards; understand the importance of achieving environmental sensitivity; understand that aesthetics and the incorporation of community values and themes are an integral part of a good design, and describe the tools and techniques available to facilitate obtaining consensus amongst all the project's stakeholders, whether transportation professionals or laymen, for example, computer visualization, conflict resolution, communication and facilitation techniques.

PUBLICATIONS

Flexibility in Highway Design: This Guide was developed by FHWA in 1997 and is about designing highways that incorporate community values and are safe, efficient, effective mechanisms for the movement of people and goods. Several case studies are included. This document is on line at <http://www.fhwa.dot.gov/environment/flex/index.htm>

Geometric Design Practices for European Roads - Mobility, Safety, Community Issues, Context-Sensitive Design, Joint FHWA AASHTO International Technology Exchange Program, June 2001. This document is on line at http://international.fhwa.dot.gov/Pdfs/converted_to_html/geometric_design/Geometric_Design2.htm

A Guide to Best Practices for Achieving Context Sensitive Solutions (NCHRP Report 480, available late 2002). Report draws on the experiences of the five pilot state DOTs and FHWA's Eastern Federal Lands office to present best practices for achieving CSS. The report covers effective decision making, community values, achieving environmental sensitivity, ensuring safe and feasible solutions and organizational needs. The report also includes information on several case studies.

Design Flexibility Case Study Report by AASHTO Task Force on Environmental Design, 1997. A report on eight case studies chosen to demonstrate design

criteria which were chosen to lessen environmental impacts and address mitigation

When Main Street is State Highway - Blending Function, Beauty and Identity by Maryland State Department of Transportation, State Highway Administration, 2001. This handbook presents ideas on organizing, developing, and working cooperatively on highway improvement that are in line with community goals and transportation needs. This document is on line at <http://www.marylandroads.com/businesswithsha/projects/ohd/mainstreet/mainstreet.asp>

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FHWA CSS/CSD web sites: <http://www.fhwa.dot.gov/csd/> and <http://www.fhwa.dot.gov/environment/csd.htm>