

# Memo

## New Mexico Department of Transportation

**SUBJECT:** Infrastructure Design Directive  
IDD-2006-08 (Context Sensitive Solutions &  
Context Sensitive Design Directive)

**DATE:** 9-08-2006

**TO:** Office of Infrastructure Divisions  
Transportation Design Community

**FROM:** Steven P. Harris, Chief Engineer  
Office of Infrastructure Divisions

**FILE REFERENCE:**  
PSESHARE:Design Directives

In an effort to fulfill the agency's commitments to Context Sensitive Solutions and Design, this directive has been prepared to addresses traditional objectives as well as serving to preserve of other valued objectives. These objectives include such elements such as scenic, aesthetic, environmental and other historical resources combined with community values.

Attached to this memo are the Secretary's Directive on Context Sensitive Design and Solutions as well as the Department's new directive on this policy. I encourage you to employ these elements in every one of your projects.

As a reminder, the Design Directives reside in the PSESHARE drive. General Office staff is to utilize the \\asgopinon\pseshare drive to access the Directive. District and Regional Office staff can access the Directive utilizing the appropriate District drive as indicated below:

District 1	\\d1flsv03\design\$
District 2	\\d2flsv01\public\pse_section
District 3	\\d3-blade1\district3\ps&e_section
District 4	\\d4flsv04\designshared
District 5	\\D5flsv02a\D5Design
District 6	\\d6flsv02\pse_section

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To: All NMDOT Employees

From: Rhonda G. Faught, P.E., Cabinet Secretary

Re: Secretary's Directive on Context Sensitive Design and Solutions (CSS):

This Directive instructs all NMDOT employees and others involved in the planning, development, construction, maintenance, and operation of all State transportation and support facilities to apply and adhere to CSS principles on all department projects.

### **Context Sensitive Design Solutions (CSS)**

Context Sensitive Solutions is a model for transportation project development that has recently received much discussion and broad acceptance. Its essence is that a proposed transportation project must be planned not only for its physical aspects as a facility serving specific transportation objectives of maintaining safety and mobility, but also for its effects on the aesthetic, social, economic and environmental values, needs, constraints and opportunities in a larger community setting. In following NMDOT's Guiding Principles, NMDOT endorses the CSS approach for all projects, large and small, from early planning through construction and eventual operation.

This means that NMDOT employees working on projects and facilities should:

- Engage from the project's inception with representatives of affected communities, including elected and appointed officials and a widely representative array of interested citizens.
- Assure that transportation objectives of projects are clearly described and discussed with local communities in a process that encourages reciprocal communication about local views and needs in the overall project setting.
- Pay attention to and address community and citizen concerns.
- Ensure the project is a safe facility for both the user and the community.
- Consider the appropriate level of multi-modal relationships for enhanced mobility

CSS is a process that places a high value on seeking and identifying the "range of stakeholder wants", and if possible include desired project characteristics by, incorporating stakeholder values through project involvement and team consensus. NMDOT's belief is that consensus is highly advantageous to all parties and may help avoid delay and costs of project delivery.

The NMDOT will use CSS as an approach to plan, design, construct, maintain, and operate its transportation system. These solutions use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, mobility, maintenance, and

performance goals. Context sensitive solutions are reached through a collaborative, interdisciplinary approach involving the project stakeholders.

The context of all projects and activities is a key factor in reaching decisions. As of now it will be considered for all State transportation and support facilities when defining, developing, and evaluating options. When considering the context, issues such as funding feasibility, maintenance feasibility, traffic demand, impact on alternate routes, impact on safety, and relevant laws, rules, and regulations must be addressed.

## GOALS

Often times across New Mexico, communities desire that their main street be an economic, social, and cultural asset as well as provide for the safe and efficient movement of people and goods. In urban areas, communities want transportation projects to provide alternatives and opportunities for enhanced modal choice for travel and visual quality. In natural areas, projects can fit aesthetically into the surroundings by including contour grading, aesthetic bridge railings, and special architectural and structural elements. Addressing these needs will assure that transportation solutions meet more than transportation objectives.

CSS meet transportation goals in harmony with community goals and natural environments. They require careful, imaginative, early planning, and continuous community involvement. The Department's design manuals, Federal Highway Administration (FHWA) regulations, FHWA's Flexibility in Highway Design publication, the American Association of State Highway Transportation Officials' A Policy on Geometric Design of Highways and Streets, NCHRP Report 480, Best Practices for Context Sensitive Design and Context Sensitive Solutions, and many of the new guidelines in CSS principles and solutions all share a philosophy that explicitly point out the inherent flexibility within the design and engineering manuals and standards we use and where through sound engineering analysis and judgment design exceptions and variances can be processed or where through early use of CSS principles design exceptions and variances are not needed. This design philosophy seeks transportation solutions that improve mobility and safety while complementing and enhancing community values and objectives.

## PLAN

The Secretary will create and develop an environment in which innovative actions, such as CSS, can flourish:

- Recognizes and highlights individuals, teams, and projects that advance the goals of this policy.

- Encourages staff to conduct and participate in meetings and conferences to expand the knowledge of CSS solutions internally and externally.

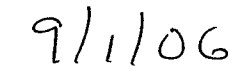
The NMDOT, through the CSS Division, will:

- Aid development and support of CSS transportation facilities.
- Aid in revising manuals and procedure documents to facilitate the application of CSS.
- Initiate and coordinate research to enable CSS.
- Encourages innovation, flexibility, and application in design.
- Facilitates coordination with resource agencies to assure facilities and activities are in harmony with the surrounding environment.
- Ensures communities have the opportunity to be actively involved in the environmental stage of the project development process.
- Ensures CSS commitments are sustained, as warranted, as a project moves through the environmental approval process.
- Support the inclusion of CSS when programming transportation projects.
- Communicate the importance of CSS solutions to the New Mexico Transportation Commission.
- Encourages the development of funding partnerships for CSS.
- Proactively ensure early and continuous involvement of stakeholders.
- Are responsive to requests by local communities, resource and other agencies, and the general public for CSS solutions.
- Assist in applying CSS solutions to local and other projects within the State right-of-way.

Approved by:



Rhonda G. Faught, PE  
NMDOT Cabinet Secretary



Dated

NEW MEXICO DEPARTMENT OF TRANSPORTATION

08/25/06

**CONTEXT SENSITIVE SOLUTIONS and CONTEXT SENSITIVE DESIGN DIRECTIVE (IDD-2006-08)**



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Steven P. Harris, PE. Chief Engineer  
Office of Infrastructure Divisions

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**AUTHORITY:** Section 109 of Title 23 of the United States Code permits a design for new construction, reconstruction, and resurfacing of highways on the National Highway System to take into account the constructed and natural environment of the area, and other modes of transportation, and requires state design standards on non National Roads.

**PURPOSE:** Context Sensitive Solutions and Context Sensitive Design addresses traditional objectives such as safety and mobility with other valued objectives such as preservation of other valued objectives such as scenic, aesthetic, environmental, and other historic resources and other community values.

**DEFINITIONS:** As used in this directive:

1. "Context sensitive solutions and design" means a collaborative, interdisciplinary approach involving stakeholders for the development of a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, and other community values while maintaining safety and mobility.
2. For National Highway System routes under NMDOT jurisdiction, "context sensitive design" also includes the context sensitive design principles enacted by the federal government under Section 109 of Title 23 of the United States Code.

**GUIDANCE**

**Context Sensitive Solutions (CSS)** can create balanced multi-modal transportation solutions.

The enhancements provided to a corridor or project through correct identification of "context" improves the quality of our projects and enhances quality of life for all of us.

The balancing of multi-modal transportation solutions allows for preservation of community, improved safety and mobility, enhanced quality of life, and community acceptance of a project.

CSS process will be integrated into all major projects- as formal scope direction in Consultant RFP's, and at less intensive levels for lower level projects. The NMDOT requires CSS Management Plans as part of all our major projects. The NMDOT will incorporate CSS principles in Planning, Development & Design with NEPA integration, and practices for CSS in construction and maintenance.

The NMDOT will:

- Include CSS as part of project development and project development and planning teams will support the use of CSS principals in our transportation facilities.
- Encourage innovation, flexibility, and application in design.
- Facilitate coordination with resource agencies to assure facilities and activities are in harmony with the surrounding environment.
- Ensure communities have the opportunity to be actively involved in the environmental stage of the project development process.
- Ensure CSS commitments are sustained, as warranted, as a project moves through the environmental approval process.
- Support the inclusion of CSS when programming transportation projects.
- Communicate the importance of CSS solutions to the New Mexico Transportation Commission.
- Encourage the development of funding partnerships for CSS.
- Proactively ensure early and continuous involvement of stakeholders.
- Be responsive to requests by local communities, resource and other agencies, and the general public for CSS solutions.
- Assure CSS solutions are applied to local and other projects within the State right-of-way.

**PROCEDURES and RESOURCES for use and REFERENCE:**

- a. NMDOT Cabinet Secretaries Directive for Context Sensitive Solutions (attached)
- b. AASHTO "A Guide for Achieving Flexibility in Highway Design – 2004
- c. NCHRP- Report 480, " A Guide to Best Practices for Achieving Context Sensitive Solutions
- d. Existing Guides and Links on NMDOT CSS Weblink