

Context Sensitive Solutions

by Susan Stitt, Planning Services Section Chief, Bureau of Urban Program Planning, IDOT

Community Environment

Multimodalism

Usability

Context Sensitive Solutions or CSS is an interdisciplinary approach that seeks effective, multimodal transportation solutions by working with stakeholders to develop, build and maintain cost-effective

transportation facilities which fit into and reflect the project's surroundings - its "context." Through early, frequent, and meaningful communication with stakeholders. and a flexible and creative approach to design, the

resulting projects should improve safety and mobility for the traveling public, while seeking to preserve and enhance the scenic, economic. historic, and natural qualities of the settings through which they pass.

"Context" as it applies to transportation projects can be defined as "all

elements related to the people and place where a project is located." This includes both visible elements such as environmental or historic resources and invisible elements such as community values, traditions, and

> expectations. While transportation agencies have experience dealing with the former, the latter "intangibles" can sometimes be more challenging to identify and work with for transportation professionals.

Context is identified through early and continuous

collaboration with stakeholders. Stakeholders for a project include any person or organization which has a direct stake in the project being considered. This can be anything from a small group of residents and businesses affected by the redesign of

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Please pass this on to other interested parties in your office.



Safety





From the Desk of . . .

This issue of the Illinois
Interchange has been dedicated to
Context Sensitive Solutions (CSS).
This newsletter provides background
information on CSS, details how local
agencies will be impacted, and
answers some frequently asked
questions. It also provides
stakeholders with outside resources to
learn more about CSS from a national
perspective.

CSS may also be referred to as Context Sensitive Designs (CSD) by other organizations including the Federal Highway Administration (FHWA); however, whether CSS or CSD terminology is used, the concept is the same. The primary goal of CSS is for Illinois Department of Transportation (IDOT) to work with communities (stakeholders) impacted by a project early in the planning stages to alleviate concerns and improve the quality of life in the area. CSS is not just public outreach; CSS attempts to involve stakeholders in decisions. Nevertheless, IDOT has the responsibility of making the final decisions and may not always be able to accommodate stakeholders' ideas.

The Illinois legislature has mandated that the department

perform CSS on certain types of projects; furthermore, each Regional Engineer has the discretion to conduct CSS on other projects. Therefore, CSS will not be a part of every project at this time. As IDOT implements this program, more projects will likely use CSS; however, at this time, a majority of CSS projects will be new construction, reconstruction, and major expansions. Local agencies will be a primary stakeholder on these CSS projects.

The phrase "Thinking Beyond the Pavement" is often used. IDOT is "thinking" about Safety, Usability, Multimodalism, Environment, and Community for CSS. These five areas will drive IDOT's CSS initiative. IDOT has issued a departmental policy; however, procedures and methods for CSS implementation are still under development. IDOT has used CSS concepts in projects like the Prairie Parkway planning, I-74 reconstruction, and the new Mississippi

River Bridge planning. These projects provide a solid base for IDOT to build an effective CSS process.

The Bureau of Local Roads & Streets has been involved with IDOT's CSS development and will continue to represent local agencies as CSS expands. The Technology Transfer Center will take the lead in educating local agencies through our training program (see survey on page 10). The initial training will provide a basic background of CSS; however, training will also be available if your agency would like to implement CSS on your local projects.

Please contact your district office or myself with any questions on CSS.

Kevin Burke, P.E. T² Program Manager



Context Sensitive Solutions...

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a rural intersection to thousands of individuals when a major roadway or transit extension is being built. Stakeholders can include residents and landowners near a project, advocates for policy, community and historic interests, elected officials, government agencies, and many others.

Stakeholders should be involved from the early stages of the project, especially before major decisions are made. The form and frequency of the contacts with stakeholders will be determined by the individual transportation issues involved. It is important to have a systematic method for reaching out so that representatives of all possible individual stakeholders can be organized and can communicate clearly with the transportation agency.

CSS seeks to ensure that stakeholders' views are carefully considered in the decision-making process. The information gained from partnering with stakeholders is then used by the transportation agency to develop an informed solution to the transportation issue and to plan and design transportation projects that "fit" into their surroundings.

1998 Thinking Beyond the Pavement Conference

"Context-Sensitive Design is another way of saying 'to think beyond the pavement' about the impact a travelway will have on the area it transverses, including the people who live, work, or pass through the area. Context-sensitive design asks questions first about the need and purpose of the transportation project, and then address equally: safety, mobility, and the preservation of scenic, aesthetic, historic, environmental, and other community values. Context-sensitive design involves a collaborative, interdisciplinary approach in which citizens are part of a design team."

The Workshop Participants Vision: Qualities of Excellence in Transportation Design:

- The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.
- The project is a safe facility both for the user and the community.
- The project is in harmony with the community and preserves environmental, scenic, aesthetic, historic and natural resource values of the area, i.e., exhibits context sensitive design.
- The project exceeds the expectation of both designers and stakeholders, and achieves a level of excellence in people's minds.
- The project involves efficient and

- effective use of resources (time, budget, community) of all involved parties.
- The project is designed and built with minimal disruption to the community.
- The project is seen as having added lasting value to the community.

The Workshop Participants Vision: Characteristics of the Process Which Would Yield Excellence:

- Communication with all stakeholders is open and honest, early and continuous.
- A multi-disciplinary team is established early, with disciplines based on the needs of the specific project and with the inclusion of the public.
- A full range of stakeholders is

- involved with transportation officials is the scoping phase. The purposes of the project are clearly defined and consensus of the scope is forged before proceeding.
- The highway development process is tailored to the circumstances. A process is employed that examines multiple alternatives and that will result in consensus on approaches.
- A commitment to the process from top agency officials and local leaders is secured.
- The public involvement process, which will include informal meetings, is tailored to the project.
- The landscape, the community, and valued resources are understood before engineering design is begun.
- A full range of tools for communication about project alternatives is used (e.g., visualization).

IDOT and **CSS**

by Susan Stitt, Planning Services Section Chief, Bureau of Urban Program Planning, IDOT

Policy Adopted

Effective August 1, 2005, the Illinois Department of Transportation adopted its Context Sensitive Solutions (CSS) policy (D & E-21). This policy outlines the guidelines for the Division of Highways, Office of Planning and Programming, Office of Public and Intermodal Transportation and the Division of Aeronautics to incorporate CSS processes into projects.

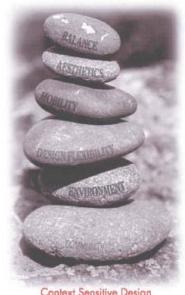
Pursuant to this policy, CSS will apply to the "planning, design, construction and operation of all projects involving new construction, reconstruction and major expansion of transportation facilities."

The objective of IDOT's CSS process is to "provide cost-effective transportation facilities which involve:

- 1. A balance between mobility, community needs and the environment while keeping safety paramount.
- 2. Involving stakeholders in the decision-making process early and continuously throughout the development of the project.
- Addressing all modes of transportation in the planning and design of the project.
- 4. Using all appropriate disciplines to help plan for and design the project.
- 5. Applying the flexibility inherent in our design standards to fit a project into its surroundings and add lasting value to the community it serves.

6. Incorporating aesthetics as part of basic design.

In order to determine the project's scope, elements and funding, the CSS process should commence at the earliest stages of the project's development. The CSS process shall include Stakeholder Involvement Processes that are:



Context Sensitive Design
The road best traveled

- 1. Applicable to a wide range of projects.
- 2. Flexible and modular.
- Simple enough to avoid adding another layer of process to an already lengthy planning and design schedule.

The Department is ultimately responsible for the safety and integrity of the state transportation system and therefore must make the final

decisions regarding any and all aspects of the projects. Project elements developed through the CSS process, may require cost participation from sources outside of the Department.

As stated above, this policy is unique in that it covers not only Highways projects, but those of other offices and divisions in IDOT responsible for the development of major transportation projects. The full text of the Department's policy can be found at its CSS website at www.dot.il.gov/css/home/html.

Next Steps

With the policy adopted, the next steps involve the implementation of that policy. Each individual office or division must develop procedures and guidance to implement the Departmental Policy for their respective major projects. The focus of these efforts will be on stakeholder involvement plans tailored to each entity's specific needs.

Even prior to the policy's adoption, IDOT had begun work on the development of a CSS training program. A training cadre was developed and includes instructors from all IDOT regions and the FHWA as well as a partnership with the the American Council of Engineering Companies (ACEC). The training program, as designed, will consist of three classes – an Awareness Class, an Approach Class, and a Local Agency Class.

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IDOT and **CSS**...

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The CSS Awareness Class will consist of a half day class targeted toward supervisors who will be involved in the CSS process. The class will provide a background on CSS, the basic concept and principles, and will provide supervisor's with the understanding of IDOT's CSS policy and how the CSS process is addressed in all phases from planning through operations.

The CSS Approach Class will be a two-day hands-on class intended for all employees involved in Phase I and Phase II who will be involved in the CSS process during project development as well as employees in the Bureaus of Construction and Operations. This class is intended to provide employees with the basic knowledge and skills to collaboratively develop transportation projects by addressing the needs of a broad range of stakeholders and special interest groups. The class will include case studies of IDOT specific projects. The class will include ten specific CSS class modules covering the following areas:

- Expectations of CSS
- CSS Terminology
- What is CSS
- History of CSS
- Benefits of CSS
- What is Context
- What is a Stakeholder
- Stakeholder Involvement
- Flexibility in Design
- Construction and Maintenance

The class will also include projects which focus on individual modules. Employees will learn to

identify and involve stakeholders in the stakeholder involvement process and how to evaluate the alternatives in design flexibility and to document all phases of the CSS process to ensure compliance with the Department's policy. The class will discuss in detail the CSS process as the project moves

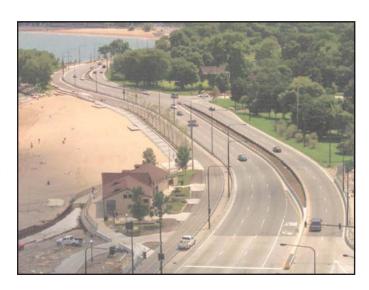
through planning, design, construction and operation phases. Both this class and the Awareness Class should start this winter.

The Local Agency Class will be a half-day class taught by instructors from IDOT's Bureau of Local Roads. The class will discuss IDOT's CSS Policy and will be geared toward information that is of interest to local agencies. Much of the focus will be on the role of local agencies as stakeholders and the potential use of CSS by local agencies. A survey regarding your interest in this training is included in this brochure. A training schedule will be developed over the winter with training to begin in the spring.

What Does this Mean to Me?

Local Agencies are not currently required to use CSS, however the Department will do everything it can to support your efforts should you decide to utilize this process. Local agencies are always stakeholder in IDOT CSS projects.

Why might a local agency con-



South Lakeshore Drive Reconstruction -Boardwalk at 57th Street Bridge

sider utilizing a CSS process? For many of the same reasons that IDOT will be utilizing this process. Today's project stakeholders have become more knowledgeable and more demanding regarding transportation projects. Stakeholders expect more, better, and faster projects within budget and with their input and they are not shy about demanding that these expectations be met. Achieving consensus in response to context is critical for delivering projects in a timely manner. The CSS process is a means to achieve this consensus.

Where Can I Learn More?

Countless resources are available to provide more information regarding Context Sensitive Solutions. The Illinois Department of Transportation's CSS website (www.dot.il.gov/css/home/html) contains further information regarding the department's activities. In addition, it contains links to many other valuable resources.

Frequently Asked Questions

What is Context Sensitive Solutions?

Context Sensitive Solutions (CSS) is an interdisciplinary approach that seeks effective, multimodal transportation solutions by working with stakeholders to develop, build and maintain cost-effective transportation facilities which fit into and reflect the project's surroundings – its "context". Through early, frequent, and meaningful communication with stakeholders, and a flexible and creative approach to design, the resulting projects should improve safety and mobility for the traveling public, while seeking to preserve and enhance the scenic, economic, historic, and natural qualities of the settings through which they pass.

How does CSS change the process of planning and implementing projects?

The Illinois Department of Transportation (IDOT) has, over the years, been developing and utilizing many methods for involving stakeholders in the process of planning and implementing transportation projects. The CSS approach looks to make this involvement a regular process and would

involve stakeholders early and often throughout the process, especially before major decisions are made.

Does CSS apply to all IDOT projects?

No. IDOT will utilize a Context Sensitive Solutions (CSS) process in the planning, design, construction and operation of all projects involving new construction, reconstruction and major expansion of transportation facilities. This is pursuant to Public Act 093-0545.

Who are Stakeholders?

Generally speaking, a stakeholder is any person or organization that has a direct stake in the project being

considered. This can be a small group of residents and businesses affected by, for instance, the redesign of a rural intersection; or, this could include thousands of individuals when, for instance, a major new roadway or transit extension is being built.



So, do Stakeholders make the decisions regarding projects?

No, IDOT is ultimately responsible for the safety and integrity of the state transportation system and therefore must make the final decisions regarding any and all aspects of the projects. Safety, the integrity of the transportation system, and good stewardship of the public's transportation dollars all remain IDOT's primary responsibilities. The information gained from partnering with stakeholders is then used by IDOT to develop an informed solution to the transportation issue.

Is CSS required on local projects?

No. However, the Department encourages the use of this process. Involving stakeholders early and often in the development of the project can help develop a more informed solution to a transportation issue and can actually reduce delays in the implementation of a project.

Will additional funds be available for CSS?

No. The department will use the CSS process to develop the scope of the project; however, a certain percentage or dollar amount will not be dedicated for CSS. Any additional costs which may be associated with CSS will come from the project's existing funding source(s).

How Can I Get More Information?

www.dot.il.gov/css/home.html

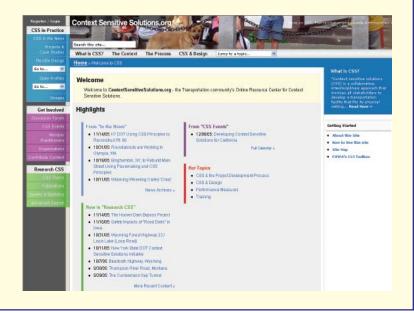
This website provides information about IDOT's implementation of CSS and links to various sources. It is maintained by IDOT's CSS Communications Work Group.

www.fhwa.dot.gov/csd

This website provides information on Context Sensitive Design/Thinking Beyond the Pavement efforts throughout the United States. The Federal Highway Administration (FHWA) and the American Association of State Highway and Transportation Officials (AASHTO) are working in cooperation with the following partners in maintaining, updating and hosting the site: FHWA Federal Lands Highway; Connecticut Department of Transportation; Kentucky Transportation Cabinet; Maryland Department of Transportation, State Highway Administration; Minnesota Department of Transportation; and Utah Department of Transportation.

www.ContextSensitiveSolutions.org

While this website seeks to be a resource for state and local transportation agencies and practitioners, community stakeholders (elected officials, regional and local agencies, key NGO partners, citizens, business and property owners) will find useful information here as well. Our goal is to promote communication, information sharing, and participation by all the stakeholders in transportation projects.



Context Sensitive Solutions Research and Activities

by Kathy Ames, Deputy Director of Planning and Programming, IDOT

A recent survey conducted by the American Association of State Highway and Transportation officials (AASHTO) looked at the implementation of Context Sensitive Solutions (CSS) across the country. States were asked about their current activities, best practices and other resources they

would like to share as well as challenges and areas which they would like to improve. The results indicate that 98% of states are taking steps to promote CSS.

Given this widespread awareness of CSS, it is not surprising that a wide variety of activities have taken place and are being planned across the country. In June, as part of the 3rd International Symposium on Highway Geometric Design, a preworkshop was held entitled "Overcoming Obstacles to Context Sensitive Design of Urban Streets and Arterials." The purpose of the workshop was to present and

identify international concerns, ideas, research, and potential best practices associated with geometric design and achieving context sensitive design of urban streets and arterials. It was a "working workshop, with a geometric focus, to improve and institutionalize the implementation of CSS in transportation project development. In other words, to identify how can and

should we be doing things differently? Proceedings of the workshop can be found at www.trb.org/conferences/geodesignsym/default.asp.

A new national CSS website, http://www.ContextSensitiveSolutions.org, sponsored by FHWA and NPS, created by Project for Public Spaces and



South Lakeshore Drive Reconstruction - 31st Street Gateway

Scenic America, in partnership with AASHTO, ITE, FTA, and NACTO, has been launched. The site is for domestic and international practitioners and provides a good source for information.

FHWA has developed a new CSS Program and Activities Report to summarize CSS related projects and activities that are being sponsored or championed by the FHWA Offices of Federal Land Highway, Infrastructure, National Highway Institute, Planning and Environment, Research, Resource Centers and Safety. The report is being updated quarterly and is available on the FHWA CSS web page, http://www.fhwa.dot.gov/csd.

The Transportation Research Board (TRB) Task Force on Context Sensitive **Design and Solutions** has ongoing studies and papers in development. Papers and conference sessions are also scheduled for the TRB 2006 Annual Meeting in January in Washington, D.C.. Further information regarding the activities of the Task Force and other TRB activities can be found at www.trb.org.

The "Midwest Region CSD&S

Workshop, Overcoming Roadblocks to Project Excellence" was held in August in Minneapolis. This workshop was sponsored by FHWA, MnDOT, and the University of Minnesota Center for Transportation Studies. The workshop included a combination of keynote general sessions, concurrent tracks, roundtable discussions,

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CSS Training Survey for Local Agencies

by David Speicher, Engineer of Local Roads and Streets, IDOT Region 3/District 5

Public involvement is an integral part of any successful transportation project. The "traditional" method for designing a transportation project was for transportation officials to identify a problem, design a solution, and then offer the solution to the public for approval. While this type of planning addresses the basic issues of mobility and safety, it also has the potential today to cause a great deal of concern with residents, advocates, businesses and elected officials who may feel their interests are not being considered. CSS will involve all project stakeholders early and often throughout the planning and design process, especially before major

decisions are made.

The Department is currently developing various classes to educate IDOT personnel, local agencies, and consultants on the CSS process. The classes are being developed by the Department CSS Steering Team and a cadre of IDOT, Federal Highway Administration staff and the American Council of Engineering Companies (ACEC). CSS training classes will be offered to Local Agencies through the T2 Training Program. The CSS for local agencies class will be taught by IDOT Local Roads personnel and specifically formatted to meet the needs of local agencies throughout the state.

At this time, we ask you to complete the attached CSS Training Survey. This information will help the Department determine the number and location of classes to be presented to the Local Agencies for this year. Please enter the number of employees from your staff that will require training for each class and return the survey to Kevin Burke, T2 Program Manager, by January 13, 2006.

If you have any questions about the CSS for Local Agencies training classes, contact Kevin at 217/785-5048 or David Speicher, D5 Local Roads Engineer, at 217/466-7252.

Context Sensitive Solutions (CSS) for Local Agencies Course Description

<u>PURPOSE</u>: To provide local agencies with the understanding of the department's policy on CSS and how the CSS process will involve local agencies.

<u>TOPICS TO BE COVERED</u>: Understanding of the department's CSS Policy; Understanding of the basic CSS approach; Understanding of the benefits of using CSS for projects conducted by their local agency; and Understanding of their local agency's role as a stakeholder for CSS projects done by the department.

<u>FOR WHOM DESIRED</u>: The class is intended for local agency staff who will be responsible for implementing CSS for their agency, or who will represent their agency's interests as a stakeholder

LENGTH OF COURSE: 1/2 day.

PDH's: 3.0

Local Agency Training Survey for Context Sensitive Solutions

Please complete the survey form below by providing the contact information and indicating the number of students that would be interested in attending the

Context Sensitive Solutions class.

Mail to: Illinois Department of Transportation

Bureau of Local Roads and Streets

Technology Transfer Center

2300 South Dirksen Parkway, Room 205

Springfield, IL 62764

Fax to: 217/785-7296



Covered Bridge on Old US 40 in Cumberland County

Local Agency	Contact Person
Mailing Address	Telephone
City-State-Zip	E-mail Address

CSS Research and Activities . . .

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poster exhibits, and mobile mini-workshops. Attendees included federal, state, and local governments, stakeholder associations and nonprofit organizations, community and neighborhood organizations, and consultants. Information regarding the workshop including copies of presentations can be obtained at www.cts.umn.edu/education/csd/ workshops.html.

The AASHTO Annual meeting held in September included a session entitled "Investing in Transportation for and with Communities: Context Sensitive Solutions." The session provided an opportunity for community leaders and elected officials to share the successes of their partnerships with the State departments of transportation in design transportation

facilities that are responsive to the character, safety and mobility of their communities and regions. **Speakers** focused on the project, program and institutional elements that made a positive difference in planning, designing and constructing these facilities.



More information regarding this meeting can be found at www.aashto.org. CSS was also a session topic at the annual AASHTO Mississippi Valley Conference held in

Chicago this summer. Information regarding this session can be found at http://www.michigan.gov/mdot/0,1607,7-151-33580-123679—
,00.html.

Calendar of Events

85th Transportation Research Board	January 22-26, 2006	Washington, D.C.
92nd Transportation & Highway Engineering (THE) Conference	February 21-22, 2006	Champaign, Illinois
16th Traffic & Transportation Conference	ce March 2-3, 2006	East Peoria, Illinois
7th Structural Engineering Conference	April 6, 2006	Champaign, Illlinois
NACE Annual Meeting	April 9-13, 2006	Grand Rapids, Michigan
2006 Asphalt Pavement Innovations Conference	April 11-12, 2006	Peoria, Illinois
APWA North American Snow Conference	ce April 30 - May 2, 2006	Peoria, Illinois
APWA Illinois Chapter Conference	May 3-5, 2006	Peoria, Illinois

The Technology Transfer (T²) Program is a nationwide effort financed jointly by the Federal Highway Administration and individual state departments of transportation. Its purpose is to transfer the latest state-of-the-art technology in the areas of roads and bridges by translating the technology into terms understood by local and state highway or transportation personnel.

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Visit our website at www.dot.il.gov/blr/t2center.html



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