Michigan Environmental Council research findings:
Ten state case studies of CSS implementation

Michigan Environmental Council conducted personal interviews with context sensitive solutions (CSS) implementers from around the country. Below, we describe ten state CSS programs, including Connecticut, Minnesota, Kentucky, Maryland, Washington, New Jersey, Utah, Vermont, Nevada, and New York.

Note: Different states have used different terms to describe their context sensitive road design programs. For the purposes of our research, we followed the lead of the Michigan Department of Transportation in using context sensitive solutions (CSS). This reflects the broad, program-wide reform approach, whereas context sensitive design (CSD) might refer only to specific design features.

Connecticut

Program features

Connecticut's Department of Transportation (ConnDOT) defines Context Sensitive Solutions as "a collaborative, interdisciplinary approach to a project's development, construction, and maintenance involving all stakeholders beginning at the earliest phase of a project." This language is also reflected in their Highway Design Manual, which states: "The CSS approach ensures that transportation projects are in harmony with communities and preserves environmental, scenic, aesthetic, and historic resources while maintaining safety and mobility."

ConnDOT revised its Highway Design Manual in 1999 after the Connecticut General Assembly passed a bill requiring them to formulate alternative design standards. This issue arose when the Assembly found that current guidelines were often inappropriately stringent, resulting in roads too wide, too straight and too flat.

ConnDOT implemented CSS as a change to their road design standards, not as a separate or additional policy to their existing standards by making it a part of their Highway Design Manual. The manual indicates that ConnDOT "will apply the principles of Context Sensitive Solutions to all projects." In so doing "The implementation of the CSS process will be a continuous effort to provide the necessary training, practices and experience to Department employees and community groups so that it can become integrated into the business processes of the Department."

ConnDOT's approach appears to be successful. Their focus on public communication led them to develop useful tools such as video simulations and models of road projects. Their formally

outlined process for identifying stakeholders gets them more involved in the project, and using stakeholder values in project design appears to successfully accomplish ConnDOT's goals for CSD: the end product is one with which all stakeholders are satisfied. The public trusts ConnDOT, which allows projects to proceed in a timely fashion with less opposition. Projects are built that would not otherwise be possible and there is greater acceptance of temporary construction.

Significantly, ConnDOT also institutionalized CSS training for transportation engineering students. This is an important feature of a successful program, because it is vital to that future transportation engineers see flexible, context-sensitive design not as an outside-the-mainstream alternative but as an accepted, validated design practice.

Implementation

ConnDOT first revised its design manual to offers designers more flexibility and include CSS. ConnDOT and the FHWA then conducted a statewide CSS Awareness Seminar in March 1999, which also covered flexibility in highway design and the application of the new Connecticut Highway Design Manual.

ConnDOT and FHWA sponsored a workshop on CSS methodology to train staff on the barriers that must be overcome in order to institutionalize CSS on November 27 and 28, 2001. The Northeast Regional Context-Sensitive Design Workshop in Westbrook, Connecticut, brought together approximately 300 participants, including ConnDOT's senior managers, CEOs of consulting and contracting firms, FHWA division office staff, representatives from Maryland and members of non-governmental stakeholder groups to develop an implementation plan for CSS.

The implementation plan put together at the workshop highlighted four specific areas that would need to be addressed if CSS were to be instituted in the state. The first area was "leadership, organization and policy," which dealt with the high-level administrative changes that need to take place. The second area was "project communication and evaluation," which addressed how a project is brought to a community and how ConnDOT then evaluates it. The third was "community and public involvement," which dealt with how ConnDOT would reach out to communities affected by transportation projects. The final area was "project management and leadership development," which primarily focused on developing CSS training.

Connecticut's CSS website: www.ct.gov/dot

Minnesota

Program features

Mn/DOT crafted a specific policy to define and support a commitment to CSD. This originally took the form of a technical memorandum articulating the goals of implementing CSD and

Mn/DOT's implementation process. It was eventually incorporated into the Mn/DOT Highway Design Manual:

"Mn/DOT is committed to developing projects within a broad community context. Context sensitive design is defined as an inclusive approach that integrates and balances community, aesthetic, and environmental values with traditional transportation safety and performance goals. Context sensitive design requires careful and imaginative planning to reflect community values, meet transportation goals, provide safety, and respect the natural and man-made environment within the established budgets and schedules. Context sensitive design requires early and continued input from both multidisciplinary professionals and stakeholders. It addresses both what can be done technologically to meet transportation demands and what may be done to enhance the design outcomes for transportation users, adjacent community residents, and the environment. This transportation planning approach is seen as adding lasting functional and aesthetic value for both the communities they traverse and serve and the users."

Implementation

The practical application of CSD occurs in Mn/DOT's road design manual. Three sections were amended to include CSD language. One of the most significant is that designers are now allowed to vary the speed of a roadway to fit the surrounding context such that "the most appropriate design speed may be a lower value that recognizes the importance of attaining maximum design flexibility and a context sensitive roadway that fits community needs and environmental constraints." A table provides a range of safe speeds for a given terrain, and the engineer may vary the speed within this safe range to fit the context of the project. Sight lines and erosion control can also be modified depending on the context. Additional language is currently being added to modify Mn/DOT's policy on road capacity to fit a CSD model.

The specific effort of Mn/DOT's to incorporate such flexibility through CSD into their design manual helps make the policy more useful and understandable for designers. As opposed to general CSD passages in an introduction, the specific design flexibility section makes the use of CSD more realistic to engineers and provides a context for understanding the relationship between safety and design flexibility.

Mn/DOT also incorporates CSD into all aspect of transportation project development, including planning, design, construction and operations. It is not considered a separate process or activity, but a philosophy of how Mn/DOT approaches project development and the resulting design tradeoffs. Mn/DOT has developed a series of documents and forums for encouraging and facilitating public participation.

The Office of Technical support maintains a webpage that provides instructions for expressing opinions to Mn/DOT. The organization has also developed a guide for its employees to follow

when seeking public involvement called "Hear Every Voice: a Guide to Public Involvement at Mn/DOT." The guide describes the background used in developing the guide along with public involvement's role in planning and project development.

Mn/DOT has implemented a variety of internal staff training efforts and is developing additional training components; is initiating research projects; and has invested in the development of a joint training program with the University of Minnesota, Center for Transportation Studies. These actions will help ensure that CSD philosophies and approaches will be understood and used by Mn/DOT staff, local units of government, and consultants to resolve various types of transportation issues.

Minnesota's CSS website: www.cts.umn.edu/education/csd/

Kentucky

Program features

The Kentucky Transportation Cabinet defines CSD as "a process of designing safe and efficient highways that extends throughout the project development phases while maintaining the proper balance with the environment and the community."

KyTC's CSS program is formalized through a series of design policy memorandums. One of the policy statements requires that applicants for the position of Project Manager on road projects must have completed the state CSS training course. Another requires public involvement plans for each project. Currently, the Kentucky highway design manual is being revised to incorporate CSS, environmental and shared decision-making principles. Accountability is reflected in the "CAP" (Communicating All Promises) process, which tracks project commitments through the life cycle of a project.

Although CSS is not fully integrated across the state, it has been adopted as a mindset, "a way of doing business, a philosophy through which KyTC delivers projects." According to John Mettille, KyTC Chief Environmental Programs Administrator, "We needed to change the mindset of our organization and our way of doing business. Flexibility had to become a core element in our thinking."

Implementation

The Kentucky Transportation Cabinet (KyTC) issued a series of guidelines for public involvement and geometric design within the CSS framework. These policy guidelines essentially require consideration of context sensitive design through the project development phases of all projects.

This effort was assisted by an Environmental Leadership workshop held in December 1998. KyTC employees and consultants used the workshop to identify the barriers set forth in current

Kentucky road design standards. The outcome reflected the proposed CSS training program as one of the vehicles for changing transportation engineer's mindset.

The CSS training program was rolled out one year later, in December 1999. KyTC made the training mandatory for all project managers, both KyTC engineers and private consultants. Essentially to get a contract to do road projects in Kentucky, the head engineer must go through the CSS training process. To date, more than 1200 people have received the training. Although the Cabinet does have written policies on the use of CSS techniques, it started with a requirement that all consultants have CSS training prior to submitting proposals for design projects.

In the training and real project applications, KyTC encourages the use of creative public outreach. The training reflects this with discussions about communication, teamwork, and public involvement. They also discuss different public involvement strategies such as visualization, facilitated groups, collaboration, citizen advisory committees, informational meetings, charrettes, neighborhood focus groups, and structured public involvement. Finally, all projects must include a public involvement/outreach plan to be approved by KyTC.

In 2002, KyTC developed in partnership with the Kentucky Highway Industries a workshop on Context Sensitive Solutions for Construction. This workshop helped to integrate construction professionals into the CSS process. This is a hugely important step because these are the people that have to actually put road projects in the ground and they have to understand the principles of CSS and how it looks on the ground.

KyTC received the FHWA's 2003 Environmental Excellence Award for its Paris Pike project. The $70 million project was a cooperative effort, as local, state and federal agencies successfully worked with design consultants, contractors, and the public to develop and build the high profile project. The project was initially proposed in 1966, but many felt that it would destroy the road's rural beauty and historical significance. Development of the project was halted when an injunction was obtained. Public interest in the project was revived following a tragic accident in 1985. The injunction was lifted in 1991 and plan development was resumed. Safety was the most significant challenge in the design and development of the project, as the dangerous two-lane road was widened to four lanes, which "fit" the existing contours. Historical landmarks, world-renowned horse farms, stone fences, significant trees, landscape features, and other environmental concerns were among the items given high priority in the design and development of the project.

Kentucky's CSS website: www.ktc.uky.edu

Maryland

Program features

Maryland was the site of the first national CSS workshop, "Thinking Beyond the Pavement" in May 1998. Sponsored by FHWA, AASHTO and hosted by the Maryland State Highway Authority (MSHA), the workshop resulted in identifying the project qualities and process characteristics associated with context sensitive project development. The following year Maryland drafted the first Implementation Strategic Plan to guide the statewide CSS implementation effort and appointed a program coordinator position to support and coordinate the implementation effort.

MSHA views CSS as an approach rather than a program. Every effort is made to integrate CSS into the agency culture so that it becomes the usual way of doing business. MSHA's Business Plan contains six Key Performance Areas with goals and objectives that reflect a process designed to address transportation problems from all perspectives, including CSS. The 6 areas are: Highway Safety, Mobility/Congestion Relief, System Preservation and Maintenance, Efficiency in Government, Environmental Stewardship, and Customer Service and Satisfaction.

Maryland defines CSD as "a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSD is an approach that considers the total context within which a transportation improvement project will exist."

Implementation

To tailor a CSS program specifically for the state, MSHA conducted four project review charettes involving a full range of project stakeholders. This helped to identify MSHA's project development process strengths and weaknesses, especially in terms of public participation. Through these charettes they developed a project evaluation instrument based on the project qualities and process characteristics of the program and the specifications of the various statewide stakeholders.

"Stakeholder participation has always been a part of project development process," says Dennis German, MSHA Design Division Chief. "Particularly in our major project programs, where there is typically significant impact to environmental and historical resources, acquisition of right-of-way, greater change in traffic capacity and flow, and broader impact to communities adjacent to or near our highway improvement projects."

In November 1999, MSHA conducted a two-day implementation workshop with 300 interdisciplinary participants. The group examined the issues identified in the charettes and began to identify improvement strategies. From this process they established four Task Teams and 12 sub-teams to review and implement the project development improvement strategies

identified at the workshop. The Task Teams and sub-Teams were charged with developing Implementation Work Plans by the summer of 2000. Each task team was sponsored by a senior manager and was made up of mid-level managers as well as staff. It was structured this way to make sure that team recommendations were well received and incorporated into the agency culture. The task teams focused on four topics: Organization and Policy, the Project Development Process, Community Involvement and Project Management and Leadership Development.

Today, MSHA tries to use the CSS process in every considered project. However, they still judge each project on the level of opportunity to use the process. According to German, "A resurfacing project does not lend itself to opportunities for the larger needs recognized by the community, such as intersection capacity improvements, streetscaping, or pedestrian lighting. However, through previous project experiences, using the CSS process, we can anticipate and implement more modest improvements that can be absorbed within a resurfacing project." This could include other community enhancement projects like upgrading crosswalks, upgrading or repairing intersection lighting, reassigning lane widths where feasible to better accommodate bicycles, or upgrading of sidewalk ramps to meet ADA criteria.

Local stakeholders continue to be involved in the decision-making process through planning, design and construction. Not every project can be constructed in exactly the way the community wants, but through a continued use and growth of CSS practices in projects there is a higher level of comfort and understanding about the positions of both parties, the community and the transportation agency.

Maryland's CSS website:

www.marylandroads.com/events/oce/thinkingbeyondpavement/thinking.asp

Washington

Program features

An executive order from the Secretary of Transportation directs WSDOT employees to implement Context Sensitive Solutions tools on all department projects, but it does not provide a strict definition of CSS. It states that the essence of CSS is "that a proposed transportation project must be planned not only for its physical aspects as a facility serving specific transportation objectives, but also for its effects on the aesthetic, social, economic and environmental values, needs, constraints and opportunities in a larger community setting. WSDOT endorses the Context Sensitive Solutions approach for all projects, large and small, from early planning through construction and eventual operation."

WSDOT's CSS directive requires that projects serve not only transportation objectives, but also meet "aesthetic, social, economic and environmental values, needs, constraints and opportunities

in a larger community setting." To implement CSS, the directive requires that WSDOT employees "engage from the project's inception with representatives of affected communities, pay attention to and address community and citizen concerns and ensure the project is a safe facility for both the user and the community."

Implementation

"Our intent is to make the CSS approach our standard way of doing business, so it is not perceived as an option," says Dave Olson of WSDOT's Design Office for Safety, Aesthetics, and Context Sensitive Design. "We are working on this through training programs, informational presentations on CSS, and additional publications that provide guidance on implementing the CSS approach to project development."

WSDOT developed the "Building Projects that Build Communities" handbook to aid their employees in communicating with the community. It encourages highway designers to partner with local communities when creating a project by requiring WSDOT employees to undertake projects jointly with groups or communities that have a "strong vested interest" in the outcome of the project. "Building Projects" divides the CSS process into five steps:

- Contact the stakeholders and involve the public.
- Work collaboratively on scope, design, review, and construction.
- Evaluate continuously to make improvements
- Implement a construction program that works for all parties.
- Use the lessons from this project in future work.

To ensure that this process is carried out, WSDOT has created "Team Agreement" form, to be completed prior to any project. The form specifies a meeting schedule for stakeholders and a decision making process. Most importantly, by signing the form, stakeholders and WSDOT agree to collaborate. "Six Month" and "End of Project" evaluation forms ensure that the WSDOT team is honoring their agreement with the community.

The office of Highways and Local Programs and the State Design Engineer is charged with developing training, rules and procedures to implement CSS. This allows local road agencies to become exposed to CSS strategies. The office engages the city and county agencies in a number of policy related efforts to implement CSS across the state. Some local agencies are more active in these efforts than others, which appears to be highly dependant on the staffing and funding levels of the local agencies.

WSDOT had some difficulty in getting participants to understand that CSS does not disregard design standards. Some external stakeholders have a perception that implementing the CSS business approach somehow places less emphasis on design standards. According to Olson, "We have been working to turn that notion around, and suggest that CSS places a greater emphasis on

understanding why the design standards exist and how they were developed. That level of knowledge then leads to better decisions on how to take advantage of the flexibility that exists within the design standards through design variances."

Recently, WSDOT hosted a regional workshop entitled "Safety, Aesthetics, and Community Partnerships: Context Sensitive Solutions." Held in spring 2002, in cooperation with FHWA, British Columbia Ministry of Transportation, and the Oregon Department of Transportation, the workshop brought together leading regional transportation professionals to share experiences in balancing community values with moving regional traffic. The workshop brought diverse stakeholders to the table to discuss transportation regionally, expanding the box in which transportation plans are examined.

Washington's CSS website: www.wsdot.wa.gov/biz/csd/

New Jersey

Program features

New Jersey's CSD implementation process is formalized through the Congestion Relief and Transportation Trust Fund Renewal Act signed into law in July, 2000. The legislation requires the New Jersey Department of Transportation to have a CSD program. As a direct result NJDOT engineers, planners, project managers and community relations representatives, as well as consultants and community leaders have been trained in its techniques: flexible design, respectful communication, consensus-building and community participation, negotiation and conflict resolution. NJDOT is the first agency in the country to actively seek out and include community members and elected officials to take the CSD training side by side with our own staff.

New Jersey defines CSS as "a collaborative, interdisciplinary approach to identifying and solving transportation problems, in which consensus building extends from defining the project need and purpose, concept evolution, design and construction through maintenance and operation. CSS maximizes the integration of the roadway into the surrounding environment/community, while providing for the road user's needs in a manner, which is fiscally feasible. CSS is an attitude and a process, not an outcome."

NJDOT's program resulted in passage of the Proactive Roadway Design Policy in 2001. This policy reflects the values of CSS in that it makes designs result in motorists driving freeways like freeways, arterials like arterials, collectors like collectors, and local streets like local streets. The designer may include elements that encourage drivers to slow down to speeds appropriate to local conditions, including traffic calming features.

Implementation

In 1999, NJDOT formed their Context Sensitive Design Implementation Team to help design a strategy for instituting CSD. The Implementation Team included representation from project managers, designers, community relation experts, civil rights advocates, a legislative liaison, planners, construction experts, operations and maintenance workers, FHWA representatives and NJ Transit representatives. The planning team laid out an implementation strategy that would include legislative backing and a strong collaborative training approach.

The training program emphasizes the use of effective public involvement techniques, implementation of design flexibility, and introducing the concept and importance of "placemaking", which is the idea of taking a project on holistically to make it exist in balance with the community. It also helps residents develop a formal concept of what they want their towns to look like in five, ten and twenty years. NJDOT can then be a partner in fulfilling that vision by working with the resident's plan and including safety and engineering standards. Training began in October 2000, and thus far over 400 staff, FHWA and NJT employees, 100 consultants, and almost 100 stakeholders, community members, elected officials, MPOs have trained side by side.

New Jersey's CSS website: www.state.nj.us/transportation/eng/CSD/

Utah

Program features

The Utah Department of Transportation (UDOT) uses CSS as a philosophy to guide for planning, designing, constructing, and maintaining safe transportation solutions in harmony with the community and the environment. The stated definition for the UDOT program reads "CSS addresses the need, purpose, safety and service of a transportation project, as well as the protection of scenic, aesthetic, historic, environmental and other community values. CSS is an approach to transportation solutions that find, recognize and incorporate issues/factors that are part of the larger context such as the physical, social, economic, political and cultural impacts."

The integration of public involvement is a core of UDOT's CSS process. Not only do community members have the opportunity to react to a project, but they also have the opportunity to help design a project based on the needs of their community. They have an opportunity to react to the project at multiple stages, not just in concept but in planning and construction.

UDOT's public involvement values encourage employees to respect and value the opinions of all stakeholders, seek balance input through proactive community outreach and ensure that public input and education events allow for complete communication. The program mentions specifically that maintaining continuous stakeholder involvement in creating a clear and

compelling vision of the context for a transportation decision, as well as defining success from a stakeholder perspective, is essential to this CSS project delivery approach.

Implementation

UDOT undertook several organizational changes to initialize its CSS program, including de-centralizing its offices and establishing Project Managers and creating regional Public Involvement Coordinators. In 2002, UDOT created a CSS Director position to fulfill the implementation strategies. Part of this position is to reach out to every UDOT employee with the CSS philosophy. More than 400 UDOT employees have had some formal training in CSS. By 2003, UDOT had finalized their definition of CSS and incorporated into their overall strategic direction, which is formalized by being part of their strategic plan.

UDOT laid out three goals for projects taken up through its CSS process: to make sure they address the transportation need, make the project an asset to the community and ensure its compatibility with the existing natural and built environment. Supporting these goals are stated objectives to take care of existing assets, make existing assets work better, and to improve safety and increase capacity.

UDOT set out to achieve these through strong interdisciplinary and interagency collaboration, and proactive stakeholder involvement. These collaborative discussions now take place throughout the planning, design, construction, and maintenance phases of each project.

Utah's CSS website: www.udot.utah.gov/index/php/m=c/tid=144

Vermont

Program features

The Vermont Agency of Transportation (VTrans) incorporated CSS themes into their operations manual, essentially using flexible standards to support revised design practices without instituting a formalized CSS program. VTrans generally follows the methods outlined in the Vermont State Design Standards. Adopted in 1997, Vermont State Design Standards adopted by Legislative Rules, were developed by the agency in close consultation with a stakeholder advisory group and take precedence over AASHTO standards. The revision emphasizes flexibility in design and the use of extensive public input and participation.

In section 5.15 of VTrans Operations Manual entitled "Special Design Guidelines" there is a distinct leaning towards the flexibility in design standards that take the historical, environmental, economic and scenic into account above the ease of building a straight road: "These Special Design Guidelines are presented to assist the designer in avoiding, minimizing, or mitigating negative impacts upon the environment and other sensitive resources as well as to enhance the

design to fit the context of the project site." A concise listing of suggested practices to achieve the context sensitive goals of the manual follows each of the different considerations.

The introduction of the manual states: "VTrans encourages local communities to be directly involved in enhancement projects. These are a means to more creatively and sensitively integrate transportation facilities into the surrounding communities."

Implementation

One of the major roadblocks to VTrans' revised design standards was resistance from their design engineers. Some, early on, felt the flexibility and lower standards compromised engineering ethics and the concern for user safety. Most of these feelings have dissipated to a degree since the standards have been in place. According to VTrans Road Program Manager Bob Shattuck, "The standards have given us greater credibility with the communities and environmental groups, and have enabled us to get projects through all the paperwork somewhat quicker."

VTrans requires public participation before the beginning of any transportation project. This is documented in section 3.12 of their Operations Manual: "The sponsor is required to involve the public in the planning and design of their enhancement project. The sponsor shall hold at least two publicly warned meetings during project development to invite participation from the community. A well-informed community will help ensure a successful enhancement project. One of these meetings must occur before the initial proposal comes to VTrans. The second meeting needs to occur before construction of the project."

The manual also includes a "Cooperative Agreement," to be filled out by VTrans employees and local stakeholders, before a transportation project begins. This agreement requires VTrans to "consult with, and act as the agent of, the (stakeholder) in performing the planning, design, preliminary engineering, right-of way/ property acquisition and construction phases of the project."

VTrans, in partnership with the Vermont Arts Council and the Village of Danville, has embarked on a multi-year CSD pilot project to integrate artistic enhancements in the redevelopment of a portion of US 2 through the village center. The goal of the project is to provide a safe, attractive, and comfortable pedestrian environment in the village while respecting the form and function of the setting, and enhancing the aesthetic appreciation of the historic, rural townscape, and still provide for the mobility needs of this NHS facility. After a two year planning process (2000 – 2002) which included the formation of a local review committee responsible for selecting both artists and engineers to design the project a final design was chosen in collaboration with the community. The project is currently under construction.

Vermont's CSS website: www.aot.state.vt.us

Nevada

Program features

Nevada does not have a formal CSS program, but they have included design standards in their transportation master plan that are inclusive to the public and consider road aesthetics. NDOT formed the Statewide Transportation Technical Advisory Committee (STTAC) as one of the elements to fulfill the requirements for discussing planning and programming issues. The advisory committees are made up of different stakeholder groups based on three different sections of the department, transportation/highways, aviation and transit. The stakeholders get the opportunity to review and comment on major projects and how they affect Nevada statewide.

Documentation shows a CSS approach to the consideration of highway design and construction. Nevada Governor Kenny Guinn says, "Highways are among the most visible artifacts of our civilization. Our highways give form to our communities and impact us every day of our lives. They connect us to each other and to the place we have chosen to call home. They welcome our guests upon arriving and send them on their way when they leave. Because they affect our ecosystems and the way our neighborhoods and places of business connect to each other, they influence the quality of life of every citizen in the state."

Implementation

Beginning in May 2000, the State Transportation Board and the Nevada Department of Transportation (NDOT) coordinated to build a plan that would preserve and protect Nevada's scenic beauty as well as speak to their extensive transportation needs. In October, 2000, a broad-based citizen's advisory committee was formed to provide master plan guidance and direction. This committee was also charged with providing policy and procedural recommendations to the State Transportation Board.

In July 2001, the University of Nevada, Las Vegas (UNLV) began working with NDOT to research highway landscape and aesthetics programs across the nation. This would serve to inform the planning process and give NDOT a broad set of best management practices to construct an aesthetics program. Concurrently the University of Nevada, Reno (UNR) began development of detailed native plant vegetation guidelines and standards to help reinvigorate the beauty and environmental health of Nevada's roadsides.

The Nevada guidebook, "Pattern and Palette of Place: A Landscape and Aesthetic Master Plan for the Nevada State Highway System," provides guidance for aesthetic treatments for various circumstances such as for city streets, rural roads, gateways, and rest areas. In many cases it also provides guidance through examples of various levels of aesthetic treatments and strategies for implementing them both economically and socially. According to the report, "This Master Plan,

coupled with project- specific public consultation, will provide us with the needed guidance to improve the appearance of Nevada's highways to reflect the beauty and the people of Nevada."

Although the specific examples provided as guidance are unique to Nevada's environment and culture, the document also discusses the process of developing a project that is aesthetically pleasing and fits into the context of its environment. As such, it is a good resource for others for guiding them in developing and establishing their own landscaping and aesthetic approach to their unique environment and culture.

Nevada's CSS website: www.nevadadot.com/pub_involvement/landscape/

New York

Program features

In 1999, a statewide CSS conference and workshop was held with executive and high-level management to kick-off CSS implementation in New York's Department of Transportation. The conference helped to identify strategies and time frames for beginning to ratify new NYDOT road design process based on a CSS planning philosophy. The conference highlighted both the need for broad-based staff training and an organized implementation plan with a team specifically charged to carry it out.

In 2000, NYDOT created a training plan for employees by identifying training courses, costs, potential training providers, and time schedules for completion. To date, about 450 individuals have been trained, beginning with executive management at the initial conference.

To formalize CSS in department processes, the NYDOT created a CSS policy document. Prepared in 2001, Engineering Instruction 01-020 reinforced that "CSS is not an aesthetic treatment; rather, CSS involves developing a transportation solution that fits into its context." The document included a dissemination of the implementation plan along with a roles and responsibilities chart for the department staff and a sample public involvement checklist. The principles of CSS were also incorporated into updates of the Scoping and Design Procedures Manuals, the Highway Design Manual, the Construction Inspection manual, the construction supervision manual and other Department manuals as appropriate.

NYDOT defines CSS as "a philosophy wherein safe transportation solutions are designed in harmony with the community. CSS strives to balance environmental, scenic, aesthetic, cultural and natural resources, as well as community and transportation service needs. Context sensitive projects recognize community goals, and are designed, built and maintained to be sustainable while minimizing disruption to the community and the environment."

NYDOT's CSS program is very comprehensive, covering all the specific departmental changes necessary as well as the individual policy changes needed to create and implement the revised

public involvement plan. The program goes beyond applying CSS to a few key projects and instead makes it a way of doing business on all projects. NYDOT has benefited from the continued involvement of their implementation team; this has helped them work the process of CSS change through other parts of the agency.

Implementation

NYDOT saw implementing CSS as a two-step process. First was the implementation and promotion of Context Sensitive Solutions in the project development process, specifically in terms of initial implementation and in developing an ongoing support process. The second step was to promote early and continuous public involvement.

NYDOT created two division-wide workgroups comprised of regional and statewide employees in the design, operations, planning, landscaping and environmental sections of the department. The Context Sensitive Solutions/Environmental Initiative workgroup was charged with advancing the idea of CSS to the regional offices and beyond by working on actual policy changes. The Context Sensitive Solutions team was charged with taking the policy changes identified by the CSS/Environmental Initiative workgroup and working with them to implement a statewide CSS program.

NYSDOT also initiated a CSS awards program to celebrate significant Regional successes. Each year, the 11 Regional CSS Project Award submissions are compiled into a portfolio for wide distribution. Of the 11 best regional CSS project submissions, an award is given to the exemplary CSS project and a plaque is awarded to the Region during the Annual Excellence in Engineering Awards ceremony. CSS pins are awarded to all regional project entry participants. This not only provides an incentive for regions to produce the best project but the stimulated competition makes every region work harder to make CSS a success.

To keep the program up to date, New York holds bi-annual CSS conferences with statewide teams, executive management and invited guest speakers from other states, including those with or without CSS programs. This helps them check the status of the program and make changes or updates.