

CSS NATIONAL DIALOG

Conducted for the Context Sensitive Solutions Virtual Team

FHWA Office of Human and Natural Environment

November 2008 through September 2010



Final Report October 2010

Prepared by the
Center for Transportation and the Environment
for the
Federal Highway Administration



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CTE expresses deep appreciation for the practitioners across the country who submitted their work to the National Dialog. The depth and breadth of the application of CSS principles in planning, project development, and transportation programs across the country is evidence of their high level of commitment and expertise. This project would not have been possible without their continued dedication and commitment to the transportation industry and to the communities where they work.

1 INTRODUCTION

Over recent years, the Federal Highway Administration (FHWA) has pursued a suite of projects and programs as part of their Context Sensitive Solutions (CSS) Program. This Program is the agency's focused effort to achieve the FHWA objective of incorporating CSS into all aspects of transportation planning and project development. The Program includes a wide variety of past, current, and planned activities including: the development and delivery of CSS training; integrating CSS concepts into university curricula; support and sponsorship of CSS-related research projects, including technical guidance handbooks, competitions and conferences; and internal and external partnerships to link CSS with planning and project development.

The CSS Program has four major activity areas:

- Building CSS Capacity: Training and Outreach
- Developing a Toolbox to Apply CSS
- Raising Awareness and Advancing CSS Implementation
- CSS National Dialog: Sharing Information

Within each of these areas, the FHWA sponsors a number of activities, targeted toward various audiences, to develop new resources, deliver information, and build awareness and involvement among transportation professionals and allied disciplines. In the fall of 2008, FHWA engaged the Center for Transportation and the Environment (CTE) to develop and deliver CSS National Dialog activities. The objectives of this current initiative are:

- Deliver CSS principles and messages to a wide array of partner organizations
- Strengthen and broaden the constituency for CSS
- Discover partnership opportunities
- Bring in new perspectives
- Foster a community of practice

The specific activities and scope of the current effort were designed to meet these objectives in several ways:

- Collect a broad range of exemplary case studies in the application of CSS principles to planning, project development, and programs
- Conduct a series of regional workshops across the country, followed up by a national webcast as a capstone event
- Collaborate with University Transportation Centers to build connections with students and the research community
- Promote the networking opportunities and educational resources of the CSS Program, specifically the CSS Clearinghouse (www.contextsensitivesolutions.org)

What is CSS?

Federal Highway Administration (FHWA) defines Context Sensitive Solutions (CSS) 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*
- *An approach that considers the total context within which a transportation improvement project will exist*

*CSS principles address both the transportation decision-making **process** and project **outcomes**. A CSS process relies on "open, honest, early and continuous" communication, and draws from the knowledge that communities and other stakeholders bring to a transportation question. With a focus on collaboration and consensus, CSS meaningfully involves stakeholders in transportation planning, design, and implementation. CSS means taking a flexible approach to designing a transportation project, so that the infrastructure fits into the natural and human environment, its **context**.*

The activities were supported throughout by a Steering Committee convened to represent federal, state, and local transportation agencies, as well as professionals that could provide insight into the growing interest in strengthening the connections between transportation and community development, sustainability, and public health.

This report describes the CSS National Dialog activities carried out by CTE from November 2008 through August 2010. The report is designed to document the activities, provide a ready reference that brings together the materials and insights from the series of workshops, and offer guidance for future CSS Program activities.

The report is organized as follows. The second section of the report reports the activities of the project team and the steering committee, how case studies were solicited and selected for presentation at regional workshops, and how the workshops were convened. Section 3 describes the regional workshop formats and presents some statistical information on workshop participants. Section 4 synthesizes the themes and concepts discussed at the workshops. The final section, Section 5, offers suggestions for next steps for the National Dialog. Further documentation of the workshops and project activities are provided in the Appendices.

2 CASE STUDY SOLICITATION AND DEVELOPMENT OF WORKSHOPS

In late fall of 2008, FHWA and CTE jointly developed a list of potential Steering Committee members for the current activities of the CSS National Dialog. The list was developed to include a broad range of disciplines including engineers, transportation and community planners, landscape architects, managers and policy makers, and academics. Invitations were also extended to individuals who had been very recently involved in cutting edge work related to new design guidelines and development activities, as well as the HUD-USDOT-EPA Interagency Partnership for Sustainable Communities. The project staff sought to convene a group that represented a wide range of perspectives, both within and outside the transportation agency. Also important was a strong recognition of the importance of interdisciplinary collaboration and the new coalitions needed to address the emerging livability and sustainability agenda. By March 2009, 34 persons from local, state, regional and national organizations had accepted the invitation to participate as Steering Committee members (see text box below).

The Steering Committee participated in the project in several ways:

- Designing and publicizing the solicitation for best practices case studies
- Developing criteria and evaluating submitted case studies for presentation at workshops
- Identifying and reaching out to potential workshop hosts
- Providing energy and support for ongoing dialog
- Providing access to new networks and constituencies

Steering Committee participation was weighted toward the initial stages of the project, and was carried out by regularly scheduled conference calls.

The initial work of the Steering Committee focused on developing criteria for evaluating case studies that demonstrated a sound application of CSS principles. The criteria included not only the extent to which design was tailored for project context, but also how CSS principles shaped a planning process, a transportation program, or how a transportation agency was organized and carried out routine work. The criteria emphasized how transportation decisions were made (the quality of the **process**) and the tangible and intangible results for the transportation agency and stakeholders (the quality of the **outcomes**). (See Appendix A for the evaluation criteria.) The criteria were incorporated into an electronic evaluation form so reviewers could conduct and submit their reviews remotely.

Case Study Solicitation and Evaluation

Once criteria were established, an electronic submission form was developed to collect information related to the criteria, along with general descriptive information about a case study. In order to effectively draw out the important details of any type of submission without presenting potential submitters with an extraordinarily long form, the decision was made to develop four separate submission forms, each designed to collect information on a different type of case study:

- **Implementation of CSS in Transportation Project Design and Construction**
 - Examples in this category could include:
 - Exemplary public outreach efforts for project scoping and delivery
 - Innovative design solutions to balance safety, multi-modal operations, and other community goals
 - Successful use of inter-disciplinary teams to foster a shared stakeholder vision
 - Preservation or enhancement of environmental, scenic, aesthetic, historic, or natural resource values
- **CSS in Transportation Planning**
 - Examples in this category could include:
 - Exemplary public outreach efforts for long-range planning efforts
 - Integrating planning with project development and environmental review processes
 - Innovative approaches to connecting planning-level decisions with the community context and natural environment
 - Promoting partnerships for multi-modal or cross-jurisdictional planning
- **Context-Sensitive Programs for Project Delivery**
 - Programs are agency-wide efforts rather than work on a specific project. Examples could include:
 - Programmatic approaches to design that promote flexibility to fit the context, such as design manuals
 - Programs that meaningfully engage stakeholders on an on-going basis
 - Programs that promote inter-disciplinary, cross-jurisdictional or multi-modal transportation agency collaboration
 - Public information programs, such as wayfinding or visitor interpretive programs
- **Organizational and Institutional Advancements for Systematic Implementation of CSS**
 - Examples in this category could include:
 - Using CSS principles as evaluation criteria for agency performance
 - Exemplary documentation systems for internal and/or external communication
 - CSS training programs for the current or future transportation workforce

Submitters thus were able to select the form best suited to their particular case study. This approach allowed for tailored questions to different types of submissions and helped minimize the transportation-focused jargon that might not translate well outside state departments of transportation. While some submitters were uncertain about which form to use and some submissions were made under a category that may not have been the closest fit, the form was flexible enough to collect adequate information and narrative details that this did not pose a problem.

CSS National Dialog Steering Committee Members

Paul Anderson, USFS/FHWA Environmental Streamlining Liaison, USDA Forest Service Engineering, Rosslyn, VA

Jeff Beard, Vice President, American Council of Engineering Companies, Washington, DC

Thomas Bennett, Landscape Architect and Urban Designer, PB PlaceMaking, Portland, OR

Brian Bochner, Senior Research Engineer, Texas Transportation Institute, Texas A & M University, College Station, TX

Scott Bradley, Chief Landscape Architect, Minnesota DOT, St. Paul, MN

Yuvonne Cantrell, Area Engineer - Design, FHWA, Charleston, WV

Brad Cownover, Director of Scenic Conservation Services, Scenic America, Washington, DC

Jim Daisa, Senior Project Manager, Kimley-Horn and Associates, Inc., San Ramon, CA

Robert Dirks, Design & Construction Team Leader, FHWA Indiana Division, Indianapolis, Indiana

Karen Dixon, School of Construction and Environmental Engineering, Oregon State University, Corvallis, OR

Kirk Fauver, Statewide Planning Engineer, FHWA Texas Division, Austin, TX

Jeff Forster, Operations Engineer, FHWA, North Dakota Division, Bismarck, ND

Norman Garrick, Director, Center for Transportation and Urban Planning, University of Connecticut, Storrs, CT

Jacky Grimshaw, Vice President for Policy, Center for Neighborhood Technology, Chicago, IL

Kris Hoellen, Director, Conservation Leadership Network, The Conservation Fund, Shepherdstown, WV

Julie Hunkins, Quality Enhancement Unit, North Carolina DOT, Raleigh, NC

Julie Lamb, Environment and Planning Bureau, Tennessee DOT, Nashville, TN

Randall Looney, Environmental Coordinator, FHWA Arkansas Division Office, Little Rock, AR

Mary McDonough, Office of Safety Design, FHWA, Madison, WI

Laurie McGinnis, Associate Director, University of Minnesota, Center for Transportation Studies, Minneapolis, MN

Dee Merriam, Community Planner, Healthy Community Design, Centers for Disease Control and Prevention, Atlanta, GA

John Norquist, President and CEO, Congress for the New Urbanism, Chicago, IL

Jon Obenberger, Pre-Construction Group Team Leader, FHWA, Washington, DC

Keith Robinson, Principal Landscape Architect, Caltrans Headquarters, Sacramento, CA

Martha Roskowski, Program Manager, GO Boulder, Boulder, CO

Gabe Rousseau, Bicycle & Pedestrian Program Manager, FHWA and USDOT, Washington, DC

Janette Sadik-Khan, Commissioner, Chair Reconnecting America, NYC DOT, New York, NY

John Seabrook, Design & Construction Operations Engineer, FHWA, Washington, DC

Mike Sims, Assistant City Manager, City of Terrell, Terrell, TX

Mark Taylor, Safety and Design Team, FHWA, Lakewood, CO

Gary Toth, Senior Director, Transportation Initiatives, Project for Public Spaces, New York, NY

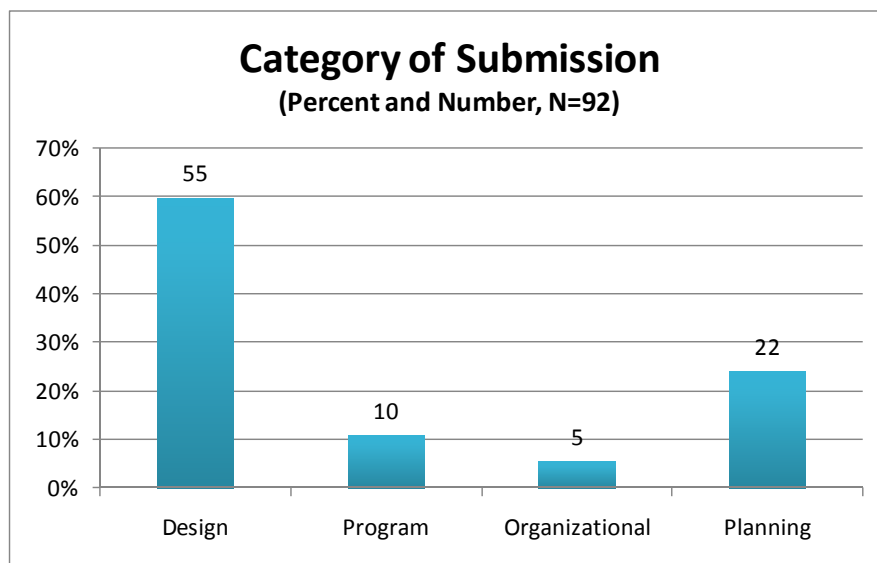
Robert Welch, Branch Chief, Transportation Division, Denver Service Center, National Park Service, Denver, CO

Clark Wilson, Development, Community and Environment Division Smart Growth Office, US EPA Headquarters, Washington, DC

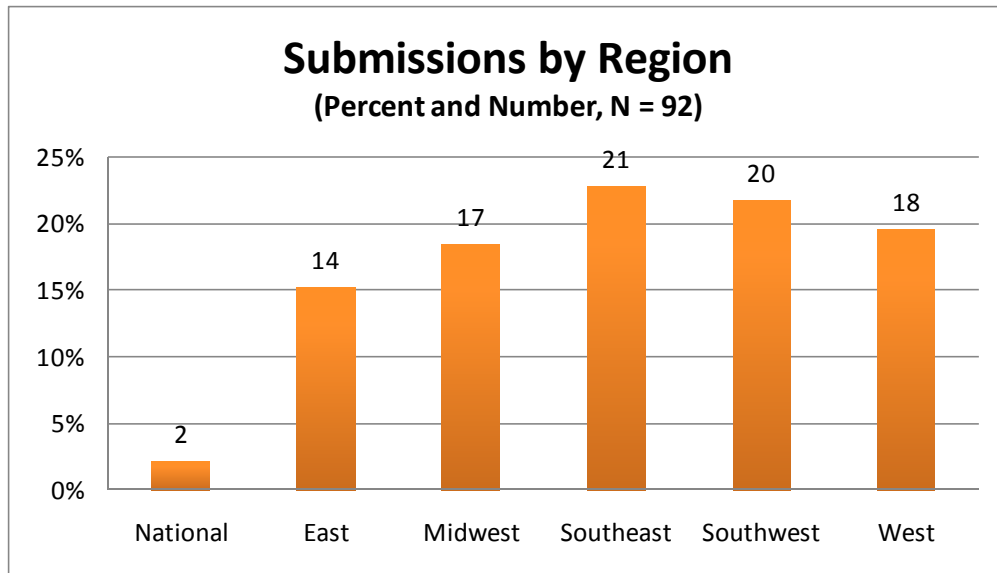
Erika Young, Transportation Director, National Association of Regional Councils (NARC), Washington DC

Following a beta test of the electronic submission form by several Steering Committee members, final revisions to the form and submission instructions were made. (See Appendix B for the electronic submission forms.) The solicitation for case study submissions and the project website (cssnationaldialog.org) was officially rolled out in April 2009. The solicitation was distributed via marketing emails, at several major conferences, to various organizations (state DOTs, MPOs/RPOs, LTAP, ITE, etc.) and over the professional contact networks and listservs of the Steering Committee and project staff. The solicitation was also posted at numerous websites (ASLA, CNU, CSS Clearinghouse, CTE).

The response to the solicitation was outstanding. Over the course of an 10 week submission period, 92 case studies were received from 17 states. The figure below displays the submissions received, by category. It is notable that CSS is increasingly adopted as a viable approach to transportation planning; nearly one-quarter of the submissions represented planning efforts for regional Long Range Transportation Plans, corridor plans, and downtown-focused plans. Also noteworthy are the submissions related to program delivery and organization-wide applications. While few in number, some very strong submissions were received in these two categories. A complete list of submitted case studies is provided in Appendix C.



By region, submissions were evenly distributed across the country; two of the submissions are national in nature (a design guide and a consultant firm's in-house training program). The distribution suggests that CSS has indeed become well-known and part of transportation practice across the country. The consistent distribution was a positive development for the National Dialog, and supported the development of well-rounded agendas for each of the regional workshops.



All case studies submitted to the National Dialog have been transferred to the CSS Clearinghouse database of Projects and Case Studies. The case study database is searchable by keyword or name of project. The extensive resources and up-to-date information collected provide a rich resource for current and future practitioners. Visit the database in the 'Projects and Case Studies' section at the CSS Clearinghouse web site (www.contextsensitivesolutions.org)

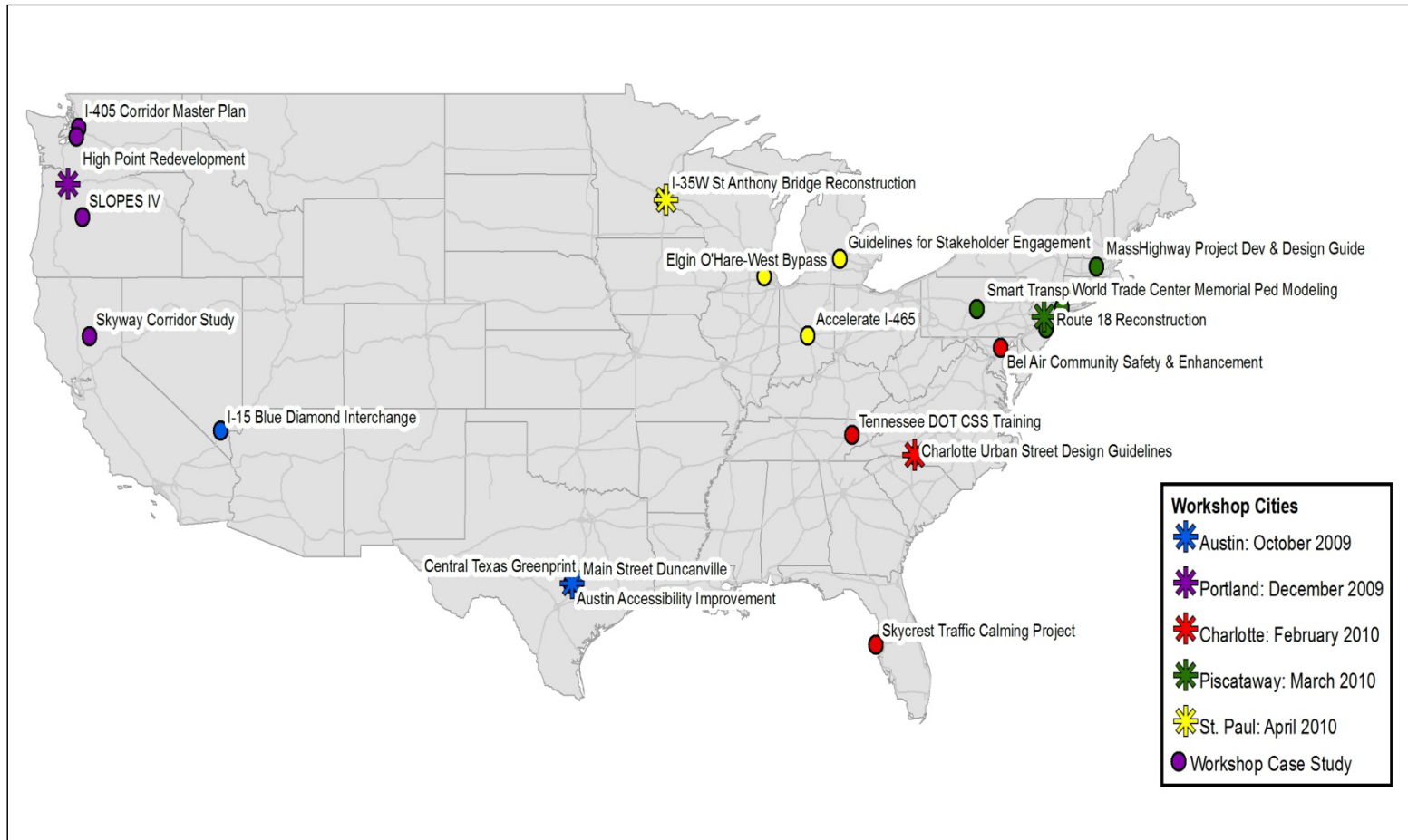
Once the submission period had closed, the Steering Committee began their evaluation of the submissions. Case studies were assigned to Steering Committee members and project staff took care to avoid assigning case studies to a reviewer in the same region who may have had extensive knowledge of a submission. For their evaluations, Steering Committee members were provided with the completed submission forms, most of which included additional information (images, plan documents, or project website links). Comments and scores were compiled and submissions were grouped by general geographic regions of the country to assist in developing agendas for the regional workshops.

Next, a set of four case studies for each region were selected for presentation. The selection of case studies for presentation was based on several factors including:

- Steering Committee evaluations and comments
- Providing a range of topics and points of discussion for each workshop
- Highlighting emerging issues and approaches for the region

Once a group of case studies was identified for each regional workshop, invitations were issued. Generally, the response was very positive and travel support ensured the participation of those under budget and travel restrictions. The map below displays the case studies by geographic location and workshop where they were presented. One-page fact sheets for each of the presented case studies, developed for distribution at the workshops, are available in Appendix D. The fact sheets are also available online at www.cssnationaldialog.org.

Workshop Locations and Presented Case Studies



Workshop Sites and Schedule

With evaluations complete and case studies grouped by region, project staff identified the locations and hosts for the workshops. Generally, locations at University Transportation Centers were preferred with the idea that workshops would be accessible to students, academics and researchers as well as practitioners, and a university site would help reduce costs. Additional considerations included proximity/accessibility to participants and available dates and capacity of facilities. In some cases, Steering Committee members provided contacts and facilitated negotiations of hosting with local organizations. The following organizations were confirmed as hosts:

- Austin, Texas: Texas Department of Transportation
 - Local Coordinator: Brian Bochner, University Transportation Center for Mobility (Texas Transportation Institute)
 - Date: October 20, 2009
- Portland, Oregon: Portland State University and the Oregon Transportation Research and Education Consortium
 - Local Coordinator: Jon Makler, Portland State University
 - Date: December 7, 2009
- Charlotte, North Carolina: City of Charlotte
 - Local coordinator: Jeb Blackwell
 - Date: February 4, 2010
- Piscataway, New Jersey: New Jersey Local Technical Assistance Program (NJ LTAP), the Center for Advanced Infrastructure and Transportation, and Rutgers University
 - Local Coordinator: Janet Leli, NJ LTAP
 - Date: March 16, 2010
- St. Paul, Minnesota: University of Minnesota and Minnesota Department of Transportation
 - Local coordinators: Jim Grothaus and Lori Green
 - Date: April 22, 2010

3 REGIONAL WORKSHOPS AND NATIONAL WEBCAST

A general format for the regional workshops was developed, designed for a focused, one-day event. The agendas began with a brief welcome and introduction to the National Dialog and an update of current activities and policy directions at the federal level from FHWA. These segments of the program were tailored to the audience at each workshop.

Introductory sessions were followed by presentations of each of the four case studies selected for the region, with time for presenters to respond to questions about their case studies. Presenters were individuals who had extensive, hands-on involvement in the case study they were presenting. Frequently presenters included a project partner, collaborator, or client in their session segment, adding further depth to the material presented.

A discussion panel followed the case study presentations. Panelists were drawn from the region and offered their reactions to the case studies and insights into the region's challenges and opportunities for greater application of the principles of CSS.

The Steering Committee and local liaisons were consulted for leads on panelists. Furthermore, Steering Committee members were also included whenever possible, either on the panel or in the role of moderator. Generally, the panel comprised of individuals invited from:

- The FHWA Division office serving the region
- The state DOT
- A regional or local organization (MPO, city government, regional transit authority, etc.)
- A partner agency or NGO active in transportation issues

The panel discussions were lively discussions of the case studies presented as well as challenges and opportunities in transportation in the region. The perspectives and experience of the panelists were invaluable in providing regional context, especially by their ability to point out specific examples, policies, and practices that were familiar to the regional audience. Participants indicated that, in most cases, the panel discussions were the most interesting and informative sessions at the workshops. Workshop agendas, including names and affiliations of all presenters and panelists, are provided in Appendix E.

Aside from the formal presentations and panel discussions, each workshop included a segment dedicated to discussion of current challenges and opportunities in the host region. A series of prompt questions were developed to launch the discussion and the format and content were structured to build on the case study presentations. The discussion, however, was not limited to the discussion questions; the unique dynamics of each workshop shaped the discussion at each workshop. The workshop staff moderating the participant discussions sought to focus on several topics:

- How do the case studies provide examples of practices that apply to this region?
- How do the CSS principles apply to your work?

- How could the CSS principles be more broadly adopted in your agency, organization, and the region?
- What are the challenges to greater integration of the CSS principles into transportation practice?

These discussion topics were chosen to help increase the impact of the case studies, and promote discussion and evaluation of the extent to which CSS principles are applied in the region. The discussion segments were also opportunities for FHWA to direct participants toward resources and for participants to share resources with one another.

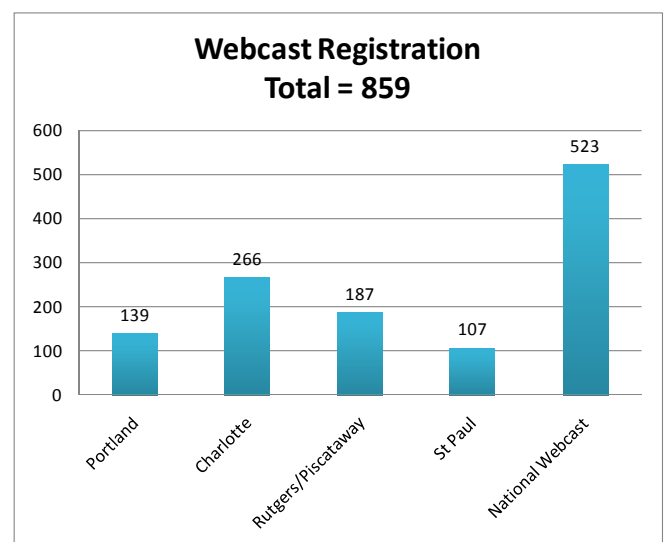
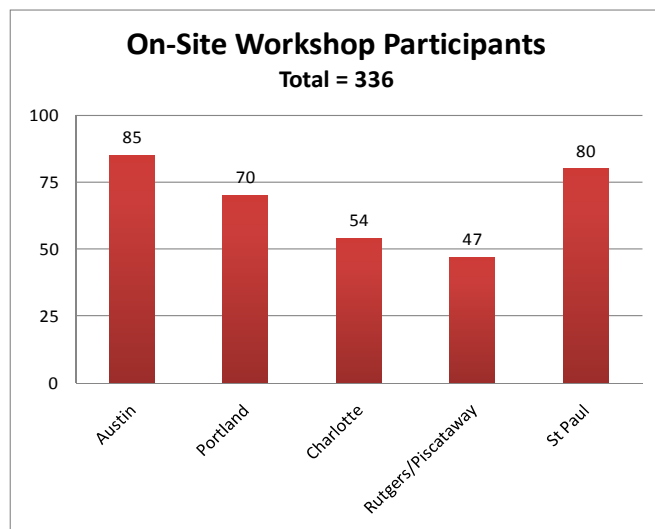
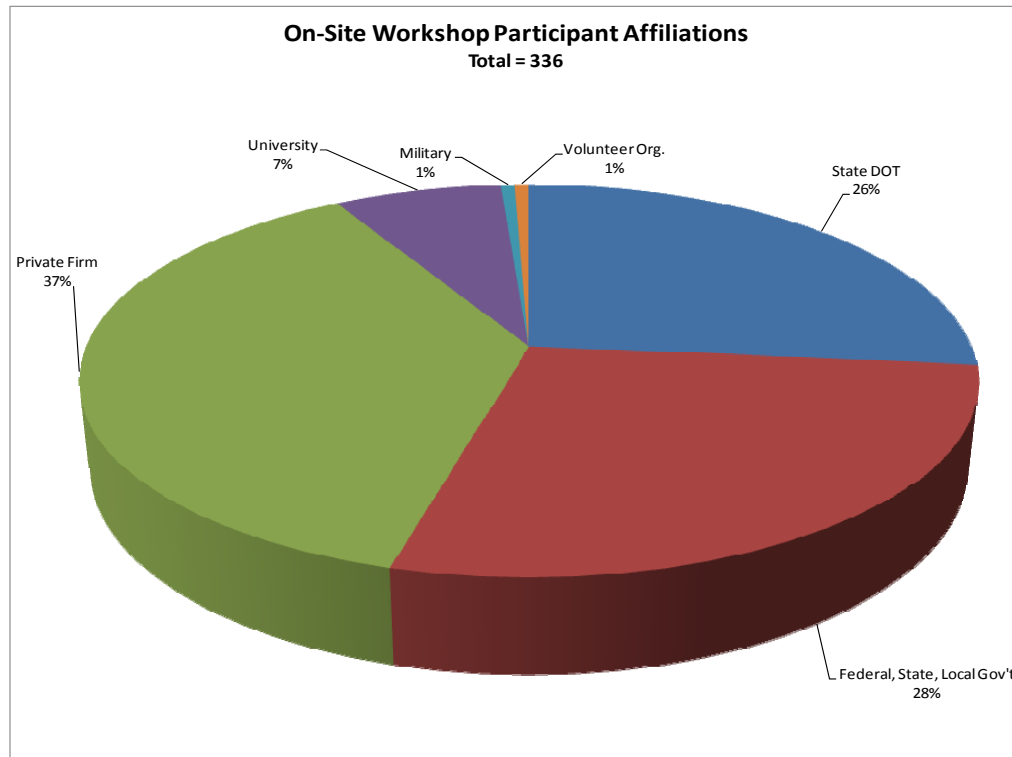
Workshop participants were encouraged to continue their engagement with CSS topics and ideas by exploring CSS outreach and research products. Participants were referred to the CSS Clearinghouse website where an extensive database of case studies and other resources are available. The CSS on-line discussion forums at the CSS Clearinghouse website were specifically promoted as an opportunity for ongoing discussion.

Strong demand for the first workshop in Austin led staff to simultaneously webcast all subsequent workshops, broadening the geographic reach and improving accessibility of the workshops. These webcasts are archived for on-demand viewing and will serve as a long-term resource on CSS.

As the regional workshop series drew to a close, staff planned for a national webcast that could serve as a capstone event for the project. A two-hour program was planned, with three case studies presented from previous workshops invited to participate, highlights of other activities in the FHWA CSS Program, along with a moderated discussion with FHWA staff. The webcast format is hoped to serve as a template for future CSS outreach activities of national interest. Emailed questions from web viewers were accepted, although time did not permit all questions for be answered during the webcast. These additional questions were posted to the discussion forum dedicated to the National Dialog at the CSS Clearinghouse web site. See Appendix F for the national webcast agenda.

Each workshop was marketed within the region using regionally based listservs, newsletters, and professional email contact networks. Advance registration was strong for nearly all the workshops, with events generally limited to 100 participants because of space constraints. An on-line registration system was used; there was no registration fee for participants. Combining attendance for the five workshops, the largest share represented private consultant firms (37%). This was followed by federal agencies, local governments and state agencies (other than DOTs; 28%), and state DOTs (26%). The remaining attendees were from universities, the military, or volunteer organizations.

Statistics on participation, by workshop and by affiliation of participants, are presented on the following page. It should be noted that the low attendance for the Rutgers workshop was likely a result of severe weather just prior to the workshop and that the workshop was scheduled during the university's spring break. Further, attendance was usually below registration, likely because no registration fee was charged.



4 THEMES AND FINDINGS

Despite the broad range of participants, case studies, and regional differences represented at the workshops and the final webcast, some common themes emerged. These themes offer a picture of current and emerging practices related to applying the CSS principles.

CSS and Emerging National Policy

CSS offers a framework that positions transportation agencies and practitioners to align projects and programs with national policy initiatives; especially the FHWA Livability Initiative, the HUD/DOT/EPA Partnership for Sustainable Communities, the FHWA Eco-Logical program, and Complete Streets. The current policy environment is strongly influenced by the recognition that roadways significantly shape communities, both physically and functionally. The CSS principles support a process that recognizes this important relationship and offer guidance on how to deliver the best possible outcomes for communities. Further, the CSS principles promote collaborative, integrated approaches to transportation planning, design, and operations, all critical components of emerging policy initiatives.

National Dialog Case Studies to Explore

High Point Avenue Redevelopment: urban project that integrated street design, traffic calming, housing redevelopment, and storm water management

Main Street, Duncanville: downtown revitalization plan for economic development with streetscape improvements and TOD under a form-based zoning district

CSS and Transportation Decision- Making Processes

The National Dialog call for submissions generated a substantial number of case studies demonstrating the application of CSS principles to transportation planning. This can be understood as recognition of the importance of sound process, early stakeholder engagement, and the consideration of a range of factors and conditions before reaching an advanced design. This development also demonstrates the utility of the CSS principles in complying with the planning guidance set forth in SAFETEA-LU, which requires consultation with relevant stakeholders during planning.

Another area of rising interest among transportation agencies is the development and adoption of design guidance that emphasizes flexibility, attention to context, stakeholder engagement, and collaborative processes. These guidelines give transportation agency staff tools that incorporate the principles of CSS and demonstrate a high level of support from management and DOT administration. The development of guidelines specific to cities or states is a signal that agencies recognize the need to make CSS an integral part of day-to-day practice and are

National Dialog Case Studies to Explore

SLOPES IV: Programmatic biological opinion for Oregon DOT bridge projects that uses a tiered approach to permitting

Skycrest Traffic Calming Project: citizen charrettes developed system-wide traffic calming and pedestrian safety improvements while improving neighborhood aesthetics

PennDOT's Smart Transportation, MassDOT's Project Development and Design Guide, and Michigan DOT's Guidelines for Stakeholder Involvement: state DOT policy and guidance to integrate the principles of CSS into day-to-day work

providing their employees with the tools and institutional support needed to do so. It is noteworthy that these case studies emphasized the importance of applying the CSS principles to the process of developing CSS-based guidance, not only in the guidance itself.

The National Dialog also compiled case studies related to programmatic approaches to project delivery. These case studies emphasized the importance of cultivating productive working relationships and the value of sustaining these relationships over time. Programmatic approaches continue to be of interest to transportation agencies as they are recognized to be an effective way to reduce costs and save time.

"You have to give it away to get it back, be willing to trust that the communities and constituencies you are working with are going to be able to come up with sane solutions. For example, MassDOT sat on the sidelines while a task force wrote their project development process and the first principle is about mobility and safety. But the political and social capital you get from that process is huge."

--Andy Wiley-Schwartz, New York City DOT, panelist, Rutgers workshop

Another category of submissions emphasized approaches to stakeholder engagement. Many of these case studies demonstrate the value of using a suite of methods to connect with and involve stakeholders in projects. These case studies are notable for the high degree of public satisfaction with project outcomes and community ownership of the design.

Many workshop discussions centered on the need to link the various pieces of transportation decision making. For example, planning decisions need to be linked to project development, policy needs to be connected with implementation, and stakeholders need to be integrated into the process so that their input meaningfully shapes outcomes. This integration is at the process and institutional level, and is part of developing frameworks for stronger integration of areas of work such as land use, habitat conservation, transit, and roadway systems.

Educating the Current and Future Transportation Workforce

A frequent comment by workshop participants was the challenge presented by the common interpretation of design guidelines as 'standards'. This leads to a lack of flexibility and lowers interest in exploring potential alternative solutions to a design problem. This signals an ongoing need to develop a fuller understanding of design guidelines and how they are properly used in solving design problems.

National Dialog Case Study to Explore

Tennessee DOT's CSS Training Program: an agency-wide initiative to communicate and guide implementation of CSS principles

The case studies and workshop discussions also highlighted the need to reinvigorate the engineering curriculum to reflect future transportation challenges. The case studies and panelists demonstrate that successfully meeting the challenges of transportation planning and project development requires being prepared to work in an interdisciplinary environment, skillfully engage stakeholders, and possess expert design skills founded on a strong design ethic.

New Avenues for Collaboration and Engagement

While the transportation industry has long considered impacts to communities and natural systems, there is a growing recognition among partner agencies, advocacy groups, decision makers, and the public, that transportation infrastructure must be well integrated into our human and natural environments. While a few case studies collected by the National Dialog highlight new partnerships and outreach methods, this concept received much more attention during the workshop discussions. Panelists and participants noted that new coalitions and interests are forming, and successful delivery of the integrated and coordinated outcomes demanded by the public and favored by emerging policy will require transportation agencies to be open to forming new relationships with these entities.

National Dialog Case Studies to Explore

Austin Accessibility IMprovement: partnership between an MPO and an NGO to identify and prioritize infrastructure improvements for disabled

World Trade Center Pedestrian Modeling: a technical model provided important feedback on proposed designs and served as the convening point for an interdisciplinary design team on a complex project

These themes illustrate the value of CSS as a guiding framework for transportation planning and project development. They also provide a snapshot of current practice, and point out topics for continued education, technical assistance, outreach, and research to support even more widespread application of the CSS principles. Further, although the current regional workshop series is complete, the National Dialog provides an ongoing resource to practitioners, managers, and researchers, as well as those who will fill those roles in the future. The case study submissions and workshop discussions have been documented and archived online at the CSS Clearinghouse (www.contextsensitivesolutions.org) and the CSS National Dialog website (www.cssnationaldialog.org).

5 CONTINUING THE CONVERSATION

The workshop discussions, case studies, and participant evaluations from the recent activities of the CSS National Dialog provide guidance on practitioner needs that can inform future CSS Program initiatives.

There was consistently positive feedback on the regional workshop model, which delivered tailored regional content and supported local and regional networking. The practitioners who attended the workshops expressed appreciation for the opportunity to hear from leaders in the field about new approaches to transportation plans and projects. Additionally, the workshops provided a venue for discussions of different approaches taken by states within a region as well as discussions across agency levels—federal, state, regional, and local. Having FHWA Division and state DOT management staff in attendance was of value to attendees. Participants also reacted positively to the case studies presented, and recognized the high quality of the work described in the case study presentations.

Participants suggested additional topics that should be covered in future CSS events:

- Costs and benefits of applying CSS principles
- Evaluating the implementation, benefits, and costs of CSS through performance measures
- CSS and transportation funding, especially identifying and securing funding for local projects or initiatives
- Stakeholder engagement techniques and consensus-building skills
- Education in the meaning of design guidelines in practice
- Refinement of existing guidelines to reflect current research on safety, human behavior, environmental impacts, community preferences and effects, and the relationship between transportation and sustainability and livability
- CSS and multi-modal projects and plans

Feedback on the format and delivery of the workshops and other CSS-related activities was also collected formally (evaluation form) and informally. A summary table of participant evaluations, by workshop, is provided on the following page. In addition to the evaluation scores, written comments included:

- Offer more hands-on, skill-building activities
- Continue the peer-to-peer format but add a site visit component, perhaps walking projects with the people who built them
- Include break-out sessions or small group discussions in the program
- Continue to highlight exemplary case studies, but be willing to discuss their problems, challenges, or shortcomings, and not focus only on discussions of ‘pretty’ projects
- Expand participation to include new constituencies such as business groups, resource agencies, ecology professionals, and local advocacy and citizen groups
- Continue to provide workshop content via the web and archive presentation materials as long-term resource

Summary of Workshop and Webcast Participant Evaluations
(Responses on a scale of 1 to 5, where 5 is “Strongly Agree” and 1 is “Strongly Disagree.”)

	Austin (N = 27)	Portland (N = 22)	Charlotte (N = 12)	Piscataway (N = 31)	St. Paul (N = 44)	National Webcast (N = 8)	Mean
The workshop gave me new ideas about CSS and transportation	4.63	3.95	4.67	4.29	4.34	4.50	4.42
The workshop panel and discussions were timely, engaging and valuable	4.38	4.41	4.33	4.25	4.25	4.75	4.36
I intend to follow up and access on-line workshop materials and Clearinghouse resources	4.60	4.31	4.58	4.30	4.32	4.63	4.45
I intend to participate in the on-line CSS discussion forums and community of practice	3.85	3.56	3.40	3.46	3.61	3.88	3.59
Case study presentations were excellent examples of the application of CSS principles	4.52	4.04	4.75	4.38	4.61	4.63	4.57
The case studies demonstrated best practices applicable to my work	4.25	3.85	4.27	4.20	4.24	4.63	4.25
There were adequate opportunities for informal networking	4.32	4.20	3.70	3.80	3.98	4.63	4.09
The workshop helped me identify individuals and agencies I can work with in the future	4.38	3.71	4.33	4.10	4.13	4.38	4.23
Overall, this workshop was worth attending	4.75	4.41	4.83	4.63	4.63	4.88	4.69

It is noteworthy that while approximately 80% of participants who submitted workshop or webcast evaluations reported they were 'somewhat' or 'very' familiar with CSS, 13% stated that CSS was 'new to me'. This indicates that there is an ongoing need to provide basic information on CSS and to continue to reach out within the transportation industry and to allied disciplines to promote a common understanding and disseminate best practices.

Based on the positive response to the solicitation, the workshop and webcast attendance, and the positive feedback from participants, it is clear that outreach and education activities related to CSS should continue.

"If you think about it as a principle-based and performance- and benefit-driven, it's reasonable to aspire to and expect that this approach-- collaborative, more broadly informed, alliance- and relationship building--will balance more of the competing objectives. Yeah, we've got constraints on resources, but we can balance more of the competing objectives and pay more attention to higher benefit-to-cost ratios. That's the return on investment."

--Scott Bradley, Minnesota DOT, panelist, St Paul workshop

Successful activities will include information tailored to the target audience, and offer the opportunity for 'real-time' interaction as well as archive information as a future resource. Content should reflect the evolution of CSS-driven practice, and the complete transportation decision-making cycle while retaining enough focus on specific ideas and principles so that participants can use the information in their daily work. The low participation in the on-line CSS discussion forums following the workshops indicates that growing an on-line community of practice will require on-going marketing, support, and participation from key staff to generate meaningful interaction over time. Assessing the just-completed effort, several specific recommendations for the next phases of the CSS Program are suggested:

- Continue the series of regional workshops
- Offer a similar series targeted specifically to the academic communities with connections to transportation planning, policy, design, and construction
- Focus on national initiatives that relate to CSS principles, such as Every Day Counts, sustainability, and climate change mitigation and adaptation
- Solicit additional case studies to be examined and presented regionally and to a national audience
- Continue deliver of timely research and best practices via webcasts and/or webinars
- Host a National CSS Summit to draw on the best of the case studies, perhaps scheduled during the summer to engage the academic community
- Create a CSS Student Internship program that will spawn the next generation of transportation professional in the US

The CSS National Dialog represents an effective outreach and education initiative of the FHWA. The flexibility of activities and content as well as hands-on staff support resulted in a project that delivered high quality, timely, and meaningful content to audiences across the country. The activities conducted for the National Dialog from November, 2008, through August, 2010, represent a significant effort to build awareness and support a growing community of practice with a broad and interdisciplinary constituency. The approach used in this phase of the overall National Dialog initiative provides an outstanding point of departure to continue the CSS conversation.

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Appendix A: Case Study Evaluation Criteria

Process

How transportation decisions were made and implemented.

- Demonstrates a proactive approach rather than crisis-driven reaction
- Modified or improved the project delivery, planning or program development process to reflect CSS principles
- Demonstrates institutionalization of CSS through improved or refined agency procedures or processes
- Established a process for incorporating CSS into design manuals, methods or other internal processes and tools
- Allowed management and stakeholders to reliably predict the project delivery schedule, costs, scope and general design outcomes, demonstrating the successful up-front application of CSS principles to activities such as early scoping work.
- Created a sound process for accurate project scoping, budgeting and execution based on CSS principles that can be repeated for other projects and programs
- Promotes and strengthens sound long-term planning decisions and investments
 - Multi-modal planning
 - Community and neighborhood planning
 - Coordination with related environmental goals
 - Inter-agency coordination, including between jurisdictions or transportation modes
 - Green infrastructure planning
 - Other
- Integrated infrastructure lifecycle issues to establish and implement appropriate maintenance and operational strategies
- Demonstrates that CSS can help manage legal risk and provide liability protection
 - Rigorous documentation of design choices
 - Meaningful involvement of stakeholders to address potential conflicts early
- Used resources efficiently (e.g., shared mitigation costs, shared analysis staff, partnerships for outreach activities)
- Improved stakeholder participation, ownership, responsibility and trust
- Created new or expanded partnering opportunities
- Used a multi-disciplinary, collaborative project team

Outcomes

What was done; tangible and intangible outcomes that benefit the sponsoring agency and stakeholders.

- Outcomes reflect stakeholder input
- Demonstrates an appropriate balance between mobility and access to destinations
- Improved walkability
- Improved bikeability
- Improved safety
 - Vehicles
 - Pedestrians
 - Cyclists
 - Others (e.g., maintenance workers, wildlife)
- Improved freight movement and inter-modal freight operations
- Expanded options for multi-modal travel and improved physical and operational connections between modes
- Demonstrates creativity in using design manuals and fundamental design controls to achieve Context Sensitive Solutions
 - Actively took advantage of flexibility in design guidelines
 - Addressed any conflicts related to choice of functional classification, design speed and design vehicle
- Responded to non-mobility local needs and opportunities
- Improved quality of life for community
 - Scenic enhancement/preservation
 - Aesthetic enhancement
 - Cultural enhancement/preservation
 - Historic preservation
 - Archeological preservation
 - Real estate value enhancement
 - Placemaking and quality public space
 - Community cohesion
 - Recreational opportunities
 - Economic development
 - Physical health and activity
 - Other
- Compatible with Natural Environment
 - Environmental conservation/restoration

- Ecosystem function
 - Connectivity of natural habitats
 - Other
- Supports integrated land use and development with the transportation network (e.g., demonstrates 'Smart Growth' outcomes or natural lands conservation)
- For transportation planning (long-range, corridor, etc.), demonstrates how CSS principles were applied in developing the plan
 - Collaborative approach to defining transportation problems and community vision
 - Planning "products" feed directly into project development process (environmental screening, stakeholder contacts, agency partnerships, analyses)
 - CSS principles applied to establish funding priorities (the Transportation Improvement Program or TIP)
 - Other
- Minimized construction-related disruption
- Improves the efficiency and effectiveness of maintenance and operations activities
- Documentation of process and decisions available and understandable to stakeholders
- Promotes sound long-term design decisions and investments
 - Efficient operations
 - Minimal and/or efficient use of materials including recycled materials
 - Support for sustainable development patterns
 - Sustainable stormwater management
 - Best environmental practices in operations and maintenance
 - Green infrastructure design elements
 - Other
- Built staff capacity and expertise for CSS in future projects or programs
- Built partner and stakeholder capacity and expertise for CSS in future projects or programs
- Demonstrates application of improved design elements, methods or guidelines that can be transferred to other projects or programs
- Included CSS components that can serve as benchmarks to measure progress in fully integrating CSS into routine practice

Appendix B: Case Study Submission Forms

Implementation of CSS in Transportation Project Design and Construction

Examples in this category could include:

- >Exemplary public outreach efforts for project scoping and delivery
- >Innovative design solutions to balance safety, multi-modal operations and other community goals
- >Successful use of inter-disciplinary teams to foster a shared stakeholder vision
- >Preservation or enhancement of environmental, scenic, aesthetic, historic, or natural resource values

Questions? Technical issues? Contact CTE Technical Support at ctetechsupport@ncsu.edu or 919-515-8657.

Part 1. Background

Project Name: _____

Location: _____

Project Web Site (if applicable): _____

Agencies or Organizations Sponsoring Project: _____

Director of the Effort/Project Manager: _____

Contact for National Dialog Submission (name and contact information):

Project Implementation Date (or ongoing): _____

Milestones (check all achieved):

☐ Problem definition, visioning and goal development

☐ Alternatives development/evaluation

☐ Location and design decisions complete (e.g., record of decision)

☐ Final design

☐ Construction

☐ Evaluation of project performance

Other _____

List any awards or recognition this project has received:

If this project has been featured as a case study in an official publication, please provide reference:

Part 2. Overview

A. Provide a brief abstract describing how the design and development of this project reflects the principles of CSS.

What is the transportation problem that initiated this project? (check all that apply)

- | | | |
|---|--|---|
| <input type="checkbox"/> Access and mobility | <input type="checkbox"/> Speeding | <input type="checkbox"/> Capacity/congestion |
| <input type="checkbox"/> Vehicle safety/accidents | <input type="checkbox"/> Pedestrian safety or mobility | <input type="checkbox"/> Bicycle safety or mobility |

Other _____

B. Describe the issue(s) that initiated the project. Aside from transportation problems, if there were any other community or environmental issues that initiated the project, include them.

C. Describe any unique challenges faced and how they were overcome.

Part 3. CSS Qualities: Process

Select applicable process attributes (check all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Established inter-disciplinary team | <input type="checkbox"/> Understood the context before developing engineering solutions |
| <input type="checkbox"/> Communicated early and continuously with all stakeholders | <input type="checkbox"/> Tailored public involvement to the context and phase |
| <input type="checkbox"/> Utilized a clearly defined decision-making process | <input type="checkbox"/> Tracked and honored commitments |
| <input type="checkbox"/> Clearly defined the purpose, and sought consensus on the shared stakeholder vision and scope | <input type="checkbox"/> Secured commitments to the process from local leaders and top agency officials |
| <input type="checkbox"/> Tailored project development process to the circumstances | <input type="checkbox"/> Examined multiple alternatives, including all appropriate modes of transportation |
| <input type="checkbox"/> Monitored how well the agreed-upon process is working | <input type="checkbox"/> Encouraged mutually supportive and coordinated multimodal transportation and land-use decisions |
| <input type="checkbox"/> Drew upon a full range of communication and visualization tools | <input type="checkbox"/> Utilized flexibility and creativity to shape effective transportation solutions |
| <input type="checkbox"/> Used resources effectively (time and budget) | |

Other _____

A. Describe how the process of developing the project reflected the CSS principles. Include, as applicable, information on the tools, methods and techniques related to stakeholder involvement, inter- or intra-agency collaborative work, documentation, etc.

Partners in development, funding and delivery of the project (check all that apply):

- ☐ Multiple departments within agency ☐ Resource managing agencies ☐ Local government
- ☐ Other transportation agencies ☐ Community groups

Other _____

B. Describe the nature of any partnerships, including information on cost-sharing, shared staff resources, etc.

Part 4. CSS Qualities: Outcomes

Benefits for stakeholders (check all that apply):

Environmental Preservation/Enhancement

- | | |
|--|---|
| <input type="checkbox"/> Scenic/Aesthetic | <input type="checkbox"/> Historic/archaeological |
| <input type="checkbox"/> Socio-cultural | <input type="checkbox"/> Economic activity/development |
| <input type="checkbox"/> Recreational opportunities | <input type="checkbox"/> Real estate value |
| <input type="checkbox"/> Rivers/coasts | <input type="checkbox"/> Wetlands |
| <input type="checkbox"/> Water quality | <input type="checkbox"/> Hazardous materials |
| <input type="checkbox"/> Minimized construction-related disruption | <input type="checkbox"/> Reduced greenhouse gas emissions |
| <input type="checkbox"/> Air quality | <input type="checkbox"/> Farmland |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Floodplains |
| <input type="checkbox"/> Wildlife/T&E species | |

Mobility for Users

- | | |
|----------------------------------|-------------------------------------|
| <input type="checkbox"/> Bike | <input type="checkbox"/> Pedestrian |
| <input type="checkbox"/> Vehicle | <input type="checkbox"/> Transit |
| <input type="checkbox"/> Freight | |

Safety for Users

- | | |
|----------------------------------|-------------------------------------|
| <input type="checkbox"/> Bike | <input type="checkbox"/> Pedestrian |
| <input type="checkbox"/> Vehicle | <input type="checkbox"/> Transit |
| <input type="checkbox"/> Freight | |

Supports Broad, Integrated Planning and Community Objectives

- | | |
|---|---|
| <input type="checkbox"/> Green infrastructure planning | <input type="checkbox"/> Health/Active Living by Design |
| <input type="checkbox"/> Green Streets/Green Highways | <input type="checkbox"/> Placemaking |
| <input type="checkbox"/> Smart Growth/integrated land use plans | <input type="checkbox"/> New Urbanism |
| <input type="checkbox"/> Livable communities | <input type="checkbox"/> Complete Streets |
| <input type="checkbox"/> Sustainable design and construction (e.g. recycled pavement, permeable pavement) | |

Other _____

A. Describe major benefits for stakeholders from the project. Include information on the outcomes that benefit transportation system users, the community, project partners, or others.

Benefits for the project sponsors (check all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Improved predictability of project delivery | <input type="checkbox"/> Improved project scoping and budgeting |
| <input type="checkbox"/> Improved long-term decisions and investments | <input type="checkbox"/> Decreased costs for overall project delivery |
| <input type="checkbox"/> Decreased time for overall project delivery | <input type="checkbox"/> Optimized maintenance and operations |
| <input type="checkbox"/> Increased risk management and liability protection | <input type="checkbox"/> Improved stakeholder feedback and participation |
| <input type="checkbox"/> Increased stakeholder ownership, trust, and satisfaction | <input type="checkbox"/> Increased partnering opportunities |
| <input type="checkbox"/> Improved multi-modal options (including transit) | <input type="checkbox"/> Compatible with local and regional plans |
| <input type="checkbox"/> Supports integrated transportation and land use planning | <input type="checkbox"/> Design features appropriate to context |

Other _____

B. Describe major benefits for the project sponsors. Include information on outcomes such as efficiencies gained, issues resolved in a timely manner, improved customer satisfaction, etc.

Part 5. Additional Details and Supporting Documentation

Any additional information you wish to provide.

List any attachments you will be including for supporting documentation:

Complete your submission by using the submit button at the top of the form. Thank you for your participation!

CSS in Transportation Planning

Examples in this category could include:

- >Exemplary public outreach efforts for long-range planning efforts
- >Integrating planning with project development and environmental review processes
- >Innovative approaches to connecting planning-level decisions with the community context and natural environment
- >Promoting partnerships for multi-modal or cross-jurisdictional planning

Questions? Technical issues? Contact CTE Technical Support at ctetechsupport@ncsu.edu or 919-515-8657.

Part 1. Background

Plan Name: _____

Geography Covered (state, metro region, town, corridor, etc.): _____

Plan Web Site (if applicable): _____

Responsible Agency or Organization: _____

Director of this Planning Effort: _____

Contact for National Dialog Submission (name and contact information):

Plan Adoption Date (or ongoing): _____

Milestones (check all achieved):

☐ Visioning and goal development

☐ Draft plan

☐ Regulatory compliance

☐ Final plan

☐ Adopted by implementing body

☐ Implementation

Other _____

List any awards or recognition this plan has received:

If this plan has been featured as a case study in an official publication, please provide reference:

Part 2. Overview

A. Provide a brief abstract of the plan. Include information on the relevant regulatory, transportation, and community context.

What initiated this plan? (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Required plan or plan update | <input type="checkbox"/> Changing community or transportation needs |
| <input type="checkbox"/> Improving multi-modal or cross-jurisdictional planning | <input type="checkbox"/> Improving integrated planning or partnerships |

Other _____

B. Describe the issue(s) that initiated the planning effort. Include the goals and objectives for the effort.

C. Describe any unique challenges faced and how they were overcome.

Part 3. CSS Qualities: Process

A. Describe how the process employed in developing and implementing your plan demonstrates the application of CSS. Include, as applicable, information on the tools, methods and techniques related to stakeholder involvement, planning partnerships and collaborative work, developing planning products to feed into the project delivery process, documentation, promoting flexible design, and what CSS principles you used to develop and deliver the plan.

Partners in development, funding and delivery of the plan (check all that apply):

- | | | |
|---|---|---|
| <input type="checkbox"/> Federal agency | <input type="checkbox"/> State department of transportation | <input type="checkbox"/> Planning agency (MPO, RPO, etc.) |
| <input type="checkbox"/> Local government or municipality | <input type="checkbox"/> Community groups | |

Other _____

B. Describe the nature of any partnerships, including information on cost-sharing, shared staff resources, etc.

Part 4. CSS Qualities: Outcomes

Benefits for stakeholders (check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> Better transportation system operation | <input type="checkbox"/> Improved transportation choices including multi-modal options |
| <input type="checkbox"/> Improved safety | <input type="checkbox"/> Promoted more meaningful stakeholder engagement |
| <input type="checkbox"/> Promoted/supported economic development | <input type="checkbox"/> Preserved or enhanced cultural, aesthetic, historic, recreational archeological or scenic assets |
| <input type="checkbox"/> Improved environmental quality/environmental conservation | <input type="checkbox"/> Improved planning, design and delivery of transportation projects that fit community vision |
| <input type="checkbox"/> Improved opportunities for physical activity/promoted active living | <input type="checkbox"/> Promoted integrated planning to better meet stakeholder objectives |

Other _____

A. Describe major benefits for stakeholders from the plan. Include information on the outcomes that benefit transportation system users, the community, project/program partners, or others.

Benefits for the planning agency or organization (check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> Improved technical analysis/modeling | <input type="checkbox"/> Cost savings/cost sharing |
| <input type="checkbox"/> Improved regulatory compliance including air quality conformity | <input type="checkbox"/> Planning partnerships and greater stakeholder engagement |
| <input type="checkbox"/> Improved documentation processes | <input type="checkbox"/> Improved connection between planning and project development |

Other _____

B. Describe major benefits for the planning agency or organization. Include information on outcomes such as improved processes, methods, design manuals, benchmarking or performance measures including benchmarking the institutionalization of CSS into the agency, ongoing partnerships, increased capacity for CSS within the agency, efficiency in system preservation and operations, etc.

Part 5. Additional Details and Supporting Documentation

Any additional information you wish to provide.

List any attachments you will be including for supporting documentation:

Complete your submission by using the submit button at the top of the form. Thank you for your participation!

Context-Sensitive Programs for Project Delivery

Programs are agency-wide efforts rather than work on a specific project. Examples could include:

- >Programmatic approaches to design that promote flexibility to fit the context, such as design manuals
- >Programs that meaningfully engage stakeholders on an on-going basis
- >Programs that promote inter-disciplinary, cross-jurisdictional or multi-modal transportation agency collaboration
- >Public information programs, such as wayfinding or visitor interpretive programs

Questions? Technical issues? Contact CTE Technical Support at ctetechsupport@ncsu.edu or 919-515-8657.

Part 1. Background

Program Name: _____

Location Covered and Geographic Scale (state-wide, region, etc.): _____

Program Web Site (if applicable): _____

Sponsoring Agency or Organization: _____

Program Manager: _____

Contact for National Dialog Submission (name and contact information):

Program Cost: _____

Delivery Date (or ongoing): _____

Milestones (check all achieved):

- | | | |
|--|--|--|
| <input type="checkbox"/> Draft program documents and plans | <input type="checkbox"/> Final program documents | <input type="checkbox"/> Formal adoption |
| <input type="checkbox"/> Implementation | <input type="checkbox"/> Program evaluation | |

Other _____

List any awards or recognition this program has received:

If this program has been featured as a case study in an official publication, please provide reference:

Part 2. Overview

A. Provide a brief abstract of the program. Include information on the relevant regulatory, transportation, and community context.

What initiated this program? (check all that apply)

- | | | |
|---|---|---|
| <input type="checkbox"/> Improving the regulatory/approvals process | <input type="checkbox"/> Improving or expanding the use of inter-disciplinary teams | <input type="checkbox"/> Improving partnering (costs, public outreach, multi-modal or cross-jurisdictional, etc.) |
| <input type="checkbox"/> Engaging stakeholders | <input type="checkbox"/> Improving the project delivery process | |

Other _____

B. Describe the issue that initiated the program. Include the goals and objectives.

C. Describe any unique challenges faced by this program and how they were overcome.

Part 3. CSS Qualities: Process

A. Describe how the process employed in developing and delivering your program demonstrates the application of CSS. Include, as applicable, information on the tools, methods and techniques related to stakeholder involvement, partnerships and collaborative work, project delivery processes, and documentation, integrated planning, flexible design, and what CSS principles you used to develop and deliver the program.

Partners in development, funding and delivery of the program (check all that apply):

- | | | |
|---|---|---|
| <input type="checkbox"/> Federal agency | <input type="checkbox"/> State department of transportation | <input type="checkbox"/> State agencies |
| <input type="checkbox"/> Planning agency (MPO, RPO, etc.) | <input type="checkbox"/> Local government or municipality | <input type="checkbox"/> Community groups |
| <input type="checkbox"/> Private entities | | |

Other _____

B. Describe the nature of any partnerships, including information on cost-sharing, shared staff resources, public-private partnerships, etc.

Part 4. CSS Outcomes

Benefits for stakeholders (check all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Improved regulatory/permitting processes | <input type="checkbox"/> Better transportation system operation |
| <input type="checkbox"/> Improved safety | <input type="checkbox"/> Promoted/supported economic development |
| <input type="checkbox"/> Preserved or enhanced cultural, aesthetic, historic, recreational archeological or scenic assets | <input type="checkbox"/> Improved environmental quality/environmental conservation |
| <input type="checkbox"/> Improved the planning, design and delivery of transportation projects that fit community needs and objectives (describe) | <input type="checkbox"/> Improved opportunities for physical activity/promoted active living |

Other _____

A. Describe major benefits for stakeholders from the program. Include information on the outcomes that benefit transportation system or facility users, the community, project/program partners, or others.

Benefits for the sponsoring agency or organization (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Shorter project delivery time | <input type="checkbox"/> Cost savings/cost sharing |
| <input type="checkbox"/> Ease of maintenance and operations | <input type="checkbox"/> Improved documentation processes |

Other _____

Describe major benefits for the program sponsor(s) from the program. Include information on outcomes such as improved processes, methods, design manuals, benchmarking or performance measures including benchmarking the institutionalization of CSS into the agency, ongoing partnerships, increased capacity for CSS within the agency, efficiency in maintenance and operations, etc.

Part 5. Additional Details and Supporting Documentation

Any additional information you wish to provide.

List any attachments you will be including for supporting documentation:

Complete your submission by using the submit button at the top of the form. Thank you for your participation!

Organizational and Institutional Advancements for Systematic Implementation of CSS

Examples in this category could include:

- >Using CSS principles as evaluation criteria for agency performance
- >Exemplary documentation systems for internal and/or external communication
- >CSS training programs for the current or future transportation workforce

Questions? Technical issues? Contact CTE Technical Support at ctetechsupport@ncsu.edu or 919-515-8657.

Part 1. Background

Program Name: _____

Location Covered (state name, region, etc.): _____

Program Web Site (if applicable): _____

Responsible Agency or Organization: _____

Director of this Effort (name, title): _____

Contact for National Dialog Submission (name and contact information):

Program Implementation Date (or ongoing): _____

Milestones (check all achieved):

☐ Visioning and goal development

☐ Draft program developed

☐ Final program developed

☐ Implementation

☐ Evaluation of program

Other _____

List any awards or recognition this program has received:

If this program has been featured as a case study in an official publication, please provide reference:

Part 2. Overview

A. Provide a brief abstract describing the advancements for systematic implementation of CSS. Include information on the relevant regulatory, transportation, customer and agency context and whether and through what mechanism CSS principles have been formally adopted by your agency or organization.

What initiated this program? (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Integrating processes (streamlining) | <input type="checkbox"/> Improving project delivery, planning or other process |
| <input type="checkbox"/> Benchmarking and agency self-assessment | <input type="checkbox"/> Staff training or professional development |
| <input type="checkbox"/> Integrating multi-modal options in project delivery, planning or other processes | <input type="checkbox"/> Changing stakeholder or agency objectives |

Other _____

B. Describe the issue(s) that initiated the program. Include the goals and objectives for the effort.

C. Describe any unique challenges faced and how they were overcome.

Part 3. CSS Qualities: Process

A. Describe how the program will promote the application of CSS principles in your agency or organization's work. Include, as applicable, information on the tools, methods and techniques related to stakeholder involvement, inter- or intra-agency collaborative work, documentation, flexible design, guidelines, and what CSS principles you used to develop the program within your agency.

Partners in development, funding and delivery of the program (check all that apply):

- | | |
|---|--|
| <input type="checkbox"/> Multiple departments within agency or organization | <input type="checkbox"/> External stakeholders (resource agencies, etc.) |
| <input type="checkbox"/> Other transportation agencies | <input type="checkbox"/> Community groups |

Other _____

B. Describe the nature of any partnerships, including information on cost-sharing, shared staff resources, etc.

Part 4. CSS Qualities: Outcomes

Benefits for stakeholders (check all that apply):

- | | |
|--|--|
| <input type="checkbox"/> Better delivery of transportation projects and programs | <input type="checkbox"/> More meaningful stakeholder engagement |
| <input type="checkbox"/> Improved planning, design and delivery of transportation projects that fit community vision | <input type="checkbox"/> Improved environmental quality/environmental conservation |
| <input type="checkbox"/> Promoted integrated planning to better meet stakeholder objectives | |

Other _____

A. Describe major benefits for stakeholders from the program. Include information on the outcomes that benefit transportation system users, the community, project/program partners, or others.

Benefits for the agency or organization (check all that apply):

- | | |
|---|---|
| <input type="checkbox"/> Improved transportation project delivery process | <input type="checkbox"/> Design guidelines that promote flexible design approaches |
| <input type="checkbox"/> Improved inter-agency or inter-departmental partnerships and collaboration | <input type="checkbox"/> Improved employee satisfaction and retention |
| <input type="checkbox"/> Cost and/or time savings attributable to CSS | <input type="checkbox"/> On-going data collection and monitoring to support benchmarking programs |
| <input type="checkbox"/> Improved documentation processes | |

Other _____

Describe major benefits for the agency or organization. Include information on outcomes such as improved processes, methods, design manuals, benchmarking or performance measures including progress of the institutionalization of CSS into the agency, increased capacity for CSS within the agency, etc.

Part 5. Additional Details and Supporting Documentation

Any additional information you wish to provide.

List any attachments you will be including for supporting documents:

Complete your submission by using the submit button at the top of the form. Thank you for your participation!

Appendix C: Complete List of Submitted Case Studies

COMPLETE LIST OF CASE STUDY SUBMISSIONS			
STATE	TITLE	SUBMITTER	CATEGORY
AZ	SR-179, Sedona	Jennifer Bixby	Planning
AZ	SR-179, Sedona	Jennifer Bixby	Design
AZ	Gonzales Pass	Steve Blair	Design
CA	Skyway Corridor	Brian Lasanga	Design
CA	Route 85 - 101	Stuart Bussian	Design
CA	South Coast 101	Scott Eades	Design
CA	Big Bear Bridge	Matt Hall	Design
CA	Coachella Valley Vista Point	Matt Hall	Design
CA	Indian Vista Point	Matt Hall	Design
CA	Valley Wells Rest Area	Matt Hall	Design
CA	Doyle Drive, San Francisco	Robert Malone	Design
CO	Mountain Corridor, I-70	Mary Jo Vobejda	Planning
CO	US 24 W	Mary Jo Vobejda	Planning
CO	New Pueblo I-25	Mary Jo Vobejda	Design
CO	Glenwood I70	Ralph Trapani	Design
FL	Royal Park Bridge	Elisabeth Hassett	Design
FL	Livable Communities - CSS GIS Database	Larry Hymowitz	Planning
FL	SR 408 Widening	Willson McBurney	Design
FL	Skycrest Traffic Calming	Ken Sides	Design
GA	Connect Atlanta	Heather Alhadeff	Planning
GA	Ball Ground	Michael Chapman	Planning
HI	Keeau-Pahoe Road Improvements	Dina Lau	Planning
ID	Transportation Land Use Integration Plan, Ada County	Justin Lucas	Program
IL	Cunningham Ave	Joann Green	Design
IL	Elgin O'Hare - West Bypass	Peter Harmet	Design
IL	East Side Highway Corridor Study	Jerry Payonk	Planning
IL	US-51 EIS	Jerry Payonk	Planning
IN	I-465	Jim Frye	Design
KY	Legacy Trail	Joann Green	Design
KY	Paris-Lexington Rd	Charlie Scott	Design
MA	Revere Beach	John Burckardt	Design
MA	MassHighway Project Development and Design Guide	Thomas DiPaolo	Program
MD	Bel Air Community Safety	Dennis German	Design
MD	Frederick MARC Station	Lydia Kimball	Design
ME	Gateway 1	Kat Fuller	Organizational
MI	Trail Tunnel	Vince Bevins	Design
MI	Farm Lane Underpasses	Neal Billetdeaux	Design
MI	M-21 Bridge, Grand River	Erick Kind	Design
MI	Pere Marquette Tunnel	Chuck Occhiuto	Design
MI	Michigan Guidelines for Stakeholder Engagement	Brad Peterson	Planning
MN	Hastings Bridge	Douglas Abere	Design
MN	I-35 Bridge Replacement	Scott Bradley	Design
MN	Organizational Advancements	Scott Bradley	Organizational
MN	Visual Quality Management	Scott Bradley	Program
MN	Aesthetic Initiative Measurement	David Larson	Planning
MS	Natchez Trace Trail	Treff Alexander	Design
MT	US 93	Charlie Scott	Design

COMPLETE LIST OF CASE STUDY SUBMISSIONS			
STATE	TITLE	SUBMITTER	CATEGORY
NC	Huntersville Corridor	William Cox	Planning
NC	Jacksonville Collector - Green Streets Plan	Donald Kostelec	Planning
NC	Station Parking Deck - LYNX Blue Line Light Rail Project	E. David McDonald	Design
NC	Charlotte Urban Street Design Guidelines	Tracy Newsome	Program
NJ	Route 18	John McCleerey	Design
NV	Nevada Landscape-Aesthetics Plan	Stephanie Grigsby	Planning
NV	I-15 Blue Diamond Interchange	Lucy Joyce	Design
NV	Henderson Interchange	Lucy Joyce	Design
NY	New York Street Design Manual	Mike Flynn	Design
NY	World Trade Center Ped Study	Michael Monteleone	Program
OR	Slopes IV	Frannie Brindle	Planning
OR	I 84 Corridor	Ray Mabey	Program
OR	A New Vision for West Eugene	Tim McCabe	Planning
OR	Sellwood Bridge	Marcy Schwartz	Planning
OR	Sandy River Connections	Kristen Stallman	Design
PA	Smart Transportation	Brian Hare	Organizational
PA	DVRPC Region: Taming Traffic	Gregory Heller	Program
PA	Lewistown Narrows	Karen Michael	Design
PA	Monfayette Exprwy	Lisa Olszak	Design
TN	Self Guided Tour Routes	Treff Alexander	Design
TN	Tennessee Environmental Streamlining Agreement	Doug Delaney	Program
TN	TDOT CSS Training	Julie Lamb	Organizational
TN	Houston Levee Rd	Darren Sanders	Design
TN	Mack Hatcher Pkwy	Jerry Stump	Design
TX	I-30 / I-35 Reconstruction Fort Worth	Brian Bochner	Planning
TX	IH-30 East Gateway	Jim Frye	Design
TX	NW Highway at White Rock State Park	Jim Frye	Design
TX	Hwy 161 Grand Prairie	Patrick Haigh	Design
TX	Austin Accessibility Improvement	Sheila Holbrook-White	Planning
TX	Village at Leander Station	Jolinda Marshall	Planning
TX	Central Texas Greenprint	Sean Moran and Sally Campbell	Planning
TX	Main Street Duncanville	Scott Polikov	Design
VA, MD, PA	Journey Through Hallowed Ground	Jim Klein	Program
WA	Mercer Corridor Improvements	Jeanne Acutanza	Design
WA	Aurora Bridge	Tim Bevan	Design
WA	I-405 MasterPlan	Jim Frye	Design
WA	High Point Ave Redevelopment	Peg Staeheli & Brice Maryman	Design
WA	Main Street Streetscape	Bill Whitcomb	Design
Wash DC	11th Street Bridges	James Bednar	Planning
Wash DC	Union Station Bicycle Transit Center	Jim Sebastian	Design
WI	Marquette Interchange	Mike Paddock	Design
WV	Carter Memorial Bridge	Anthony Carovillano	Design
WV	Pennsylvania Tunnel	Anthony Carovillano	Design
National	ITE Recommended Practice : "Designing Walkable Urban Throughfares"	Jim Daisa	Program
National	PB In-House CSS Training	Hal Kassoff	Organizational

Appendix D: Fact Sheets for Case Studies Presented at Workshops

Austin Accessibility Assessment Improvement (AAAIM)

Objective: Funded by the Federal Transit Administration and facilitated by Texas Citizen Fund, AAAIM sought to resolve the long-standing challenge of barriers to access between/around fixed-route stops and their interface with the overall transportation environment for persons with disabilities. AAAIM addressed both physical and jurisdictional barriers. Physical challenges included broken sidewalks, nonexistent curb ramps, outdated bus schedules, and missing landing pads. Jurisdictional challenges were also addressed. In an arrangement common to many communities, transit agencies, such as Capital Metro, have control at the stop, while municipal governments have responsibility for the transportation environment to and from the stop. Bridging these distinct areas of jurisdiction, particularly when each entity has its own planning, programming, funding, and implementation processes often makes joint collaborations to remedy access challenges difficult.

A partnership of the Capital Metropolitan Transportation Authority, the City of Austin, Easter Seals Project ACTION, and fixed-route passengers with disabilities, AAAIM's collaborative approach, process, and outcomes are rooted in context-sensitive principles, as they address both the decision-making process and project outcomes.

Persons with disabilities were meaningfully engaged throughout the project

- **Identifying challenges:** AAAIM used a telephone survey to contact 10% of CapMetro Disability Fare Card customers, passengers with medically-verified disabilities who use fixed-route services, to understand and document their accessibility, design, and service needs. Survey participants were specifically asked to identify locations where travel to, from, and at the stop was complicated or prevented by barriers. This initial list of stops was distilled to 40 priority stops based on ridership volumes and location along transit corridors.
- **Assessing bus stops/travel paths:** Having recruited a cadre of trained persons who represented a wide range of disabilities; AAAIM trained, deployed and paid fifteen Assessment Team Members, or ATMs. Working in pairs with a systematic tool used to gather their input, ATMs identified challenges at, to, and from each stop.
- **Recommending improvements that considered the total context within the transportation project exists:** ATMs recommended improvements that often required action by and coordination between Capital Metro and the City of Austin with an emphasis on increasing pedestrian and transit users' safe access.

AAAIM's input informs the planning, programming, implementation, and policy development of CapMetro, the City's Transportation Department, and the City of Austin's long-term mobility planning

- **CapMetro:** Serving 3200 bus stops within a 500 square mile area, the assessment process was strategically used by CapMetro as a filter to identify those short-term solutions, such as ensuring current schedule information was available at every stop, that could be implemented as part of regular maintenance and those that would require careful review and analysis by CapMetro's technical staff. By identifying priority stops and improvements, AAAIM provided on-the-ground input that supports both access and excellent customer service. CapMetro is beginning an inter-agency discussion on standardizing the location of route poles, seeking to strike a balance between competing demands.
- **City of Austin:** With more than 3500 linear miles of missing sidewalk segments, AAAIM's work provides a check on the prioritization of the recently adopted Sidewalk Master Plan and a focus for action. The City's Transportation Department is currently sorting issues raised by AAAIM into maintenance challenges, identifying missing accessibility pieces, and developing long-term infrastructure improvements with improvements proceeding toward resolution.
- **Long-term Mobility Planning:** As the City moves forward on its Strategic Mobility Plan, the access barriers and gaps that AAAIM identified will be included in this multi-modal, bottoms-up analytical process. Similarly, these concerns will be forwarded as the Capital Area Metropolitan Planning Organization moves forward on the adoption of its 2035 Long-Range Plan in June 2010.

For further information, contact:

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512 294 7446

Gadbois@mindspring.com

corridor plans: create a vision for the future

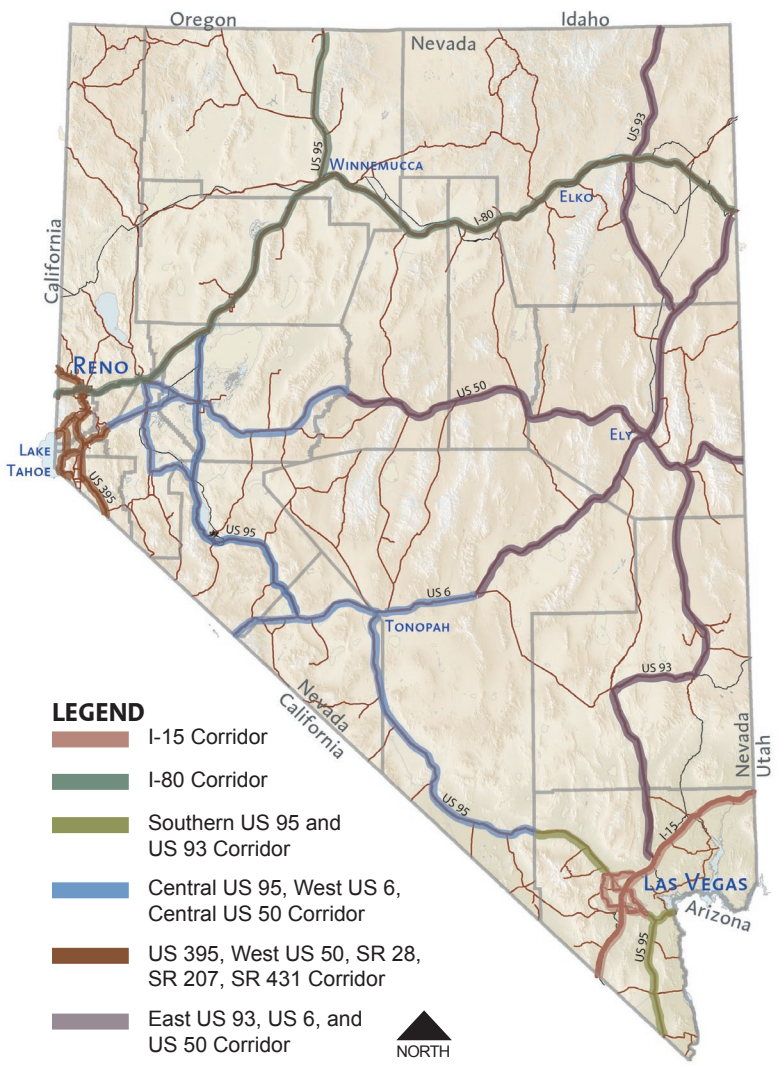
What is Included in the Landscape & Aesthetic Corridor Plans?

"Landscape and highway aesthetics" is the collective visual impression of a highway as interpreted by both motorists and citizens within communities along the state's highways. The individual plans contained the following recommendations:

- ▶ Guidelines for the design of highway facilities including themes, levels of treatment, cost goals, and priorities for further development, design, and construction.
- ▶ Right-of-way design and planning guidelines.
- ▶ Recommendations for cooperative planning in association with local governments along each corridor.
- ▶ Recommendations for continuing community involvement.
- ▶ Recommendations for long-range cost-effective solutions to solve operation and maintenance issues.
- ▶ Supporting programs including the Nevada Place Name Sign program, Road Services improvements, Scenic Highway designation, and Anti-Littering Campaign.

Careful planning, design and implementation of these highway elements will result in improved highway corridors that enhance Nevada's citizens' quality of life as well as tourism and travel within the state.

With the contributions and input from citizens, NDOT will fulfill the vision for an improved highway system within urban areas, communities, and within the vast natural landscape.



Roadways Included in the Statewide Corridor Planning



Potential Streetscape Level Aesthetic Enhancements Along the US 50 in Lake Tahoe

blue diamond interchange project integrates aesthetic principles

Project Specific Design Exemplified at Blue Diamond Interchange

In response to current and projected growth in southwestern Las Vegas Valley, NDOT developed a project to widen Blue Diamond from a 2-lane road to 8-lanes and reconstruct the I-15 interchange. The design provides a harmonious connection between the freeway and the natural beauty of the Red Rock Canyon National Conservation Area and surrounding desert. A gateway to the Conservation Area and Las Vegas Valley was established with continuous murals designed to run the entire length of the bridge abutments. Sculptural art panels depict Nevada's native wildlife, plants, and geologic formations. Layers of aluminum panels portray a mountainscape with multiple desert colors.

Major project steps and accomplishments include the following:

- ▶ Coordinating engineering work with aesthetic treatments.
- ▶ Receiving stakeholder input.
- ▶ Developing a design concept that met the public and stakeholder goals and was in alignment with the Corridor Plans currently under development.
- ▶ Obtaining stakeholder and public buy-in.
- ▶ Showcasing NDOT's new policy on landscape and aesthetics.
- ▶ Garnering staff buy-in and understanding of new design techniques that could be employed with context-sensitive solutions.

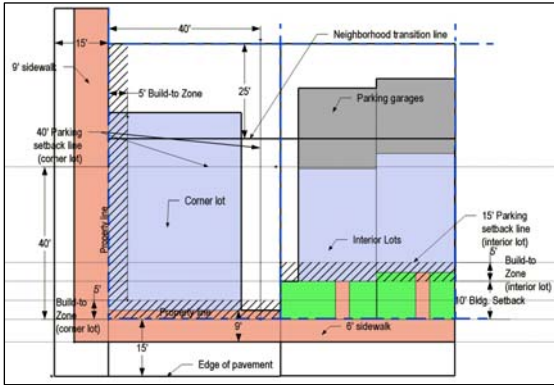


I-15 / Blue Diamond Interchange Aesthetic Treatments

- ▶ Developing solutions for contractibility issues associated with concrete form liners and relief elements.
- ▶ Protecting aesthetic treatments from graffiti prior to paint and anti-graffiti applications.
- ▶ Developing an aesthetic, low-maintenance and low-water user design.
- ▶ Minimizing water use.
- ▶ Hosting a post-construction/lessons learned evaluation meeting to review the entire project in detail with everyone involved in design and construction.

The project received overwhelming acceptance by the public and has helped promote NDOT's new landscape and aesthetics policy. Seeing the project built and winning an award gave staff pride and ownership that they were part of a creative project previously thought impossible.

Gateway



Located just south of

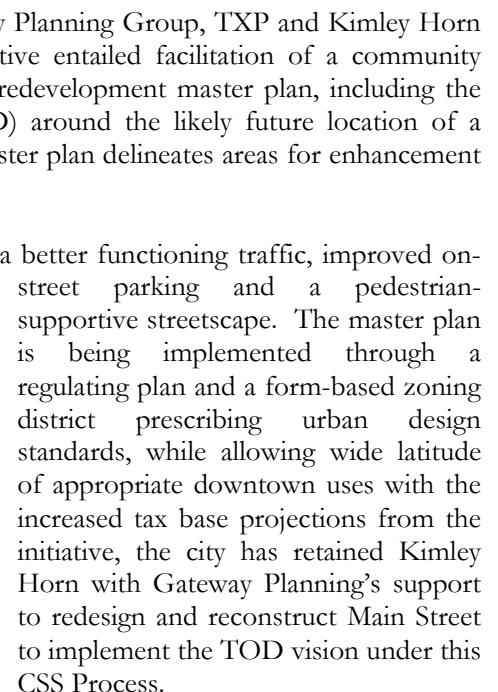
BOTH PLAN AND SECTIONS FOR ILLUSTRATIVE PURPOSES ONLY

"EXHIBIT A"
Downtown Duncanville
Main Street Master Plan

DUNCANVILLE
City of Duncanville

Adopted June 11, 2008

The master plan includes a redesign of Main Street, with a better functioning traffic, improved on-





The Central Texas Greenprint for Growth: *A Regional Action Plan for Conservation and Economic Opportunity*



A Green Vision for Central Texas

Central Texas is one of the fastest growing regions in the country. In fact, experts estimate that in twenty years, the population will increase by another

million. **A big part of what makes the region so attractive is its natural amenities:** lakes and rivers, farms and ranches, nature preserves, parks and hike and bike trails. The unique heritage and natural beauty of the area contribute directly to its lauded economic vitality, fostering the kind of livable communities that attract the very best businesses and jobs.

Working with the region's citizens from 2002-2004, Envision Central Texas (ECT) created a vision for how we would like our region to grow in the future. Overwhelmingly, citizens expressed a desire to protect and preserve the environment, natural resources, water and air quality, recreational areas and other important elements that will ensure future generations enjoy the quality of life we have today. Rather than simply reacting to growth and sprawl or settling for what land is left after development occurs, **this vision advocates proactively planning for a green infrastructure** that is as important to our future as power lines, wastewater treatment facilities and roads.



What is Greenprinting?

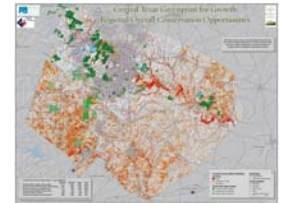
To help identify this valuable *green infrastructure* for Central Texas, ECT formed a partnership with the Capital Area Council of Governments (CAPCOG) and the Trust for Public Land (TPL), to complete a *Greenprint*

for Growth for the region. **This proactive planning tool uses a sophisticated computer model** that takes multiple Geographic Information Systems (GIS) layers of information about a specific area and integrates this data with local conservation goals to help communities make strategic, objective decisions about land conservation and development priorities. Greenprinting has been used successfully around the country, helping preserve an area's natural environment and character, identifying lands whose protection could meet **multiple conservation priorities**, and helping diverse community members **reach common ground** on conservation priorities as well as development and infrastructure goals.

How Does

Greenprinting Work?

The Greenprinting process engages community leaders in a collaborative effort to define conservation priorities and establish criteria that reflect locally distinctive resources and objectives. Then, using state-of-the-art GIS models, the Greenprint analyzes this community-based data and **generates maps and reports that provide unique insights for formulating conservation acquisition strategies or development goals**. The maps show color-coded areas that best meet the priorities defined by the community and makes the determination of conservation targets a much more scientific process. The "living" computer models may be updated for changing priorities and needs. .



Why Create a Central Texas Greenprint?

In October 2009, the Greenprinting process was completed in Bastrop, Caldwell, Hays and Travis Counties.

These **integrated, interactive green infrastructure maps are invaluable tools** to identify and preserve critical open space for trails, parks, habitats as well as understand which land is most appropriate for development. The regional nature of this Greenprint helps to identify synergies between jurisdictions and develop strategies to support collective and individual county land protection plans.



The interactive Greenprint maps will be available on November 11, 2009 on the Information Clearinghouse section of www.capcog.org. Other materials that will be available include a 46-page printed report or pdf of the Central Texas Greenprint for Growth, a 46-page report or pdf of the Travis County Greenprint for Growth, and 12-page summary Greenprint brochures for Bastrop County, Caldwell County and Hays County. The Central Texas Greenprint for Growth initiative was made possible by contributions and grants from the Federal Highway Administration, the Lower Colorado River Foundation, the Shield Ayres Foundation, and Bastrop, Caldwell and Hays Counties. To download materials, visit the Resources Section of www.envisioncentraltexas.org or, for if you have questions, email Diane Miller at dmiller@envisioncentraltexas.org.

Central Texas Greenprint for Growth Regional Overall Conservation Opportunities

This map shows areas of overlap between goals from the Central Texas Greenprint for Growth. Areas in dark red have a high conservation priority and areas in orange have a moderate conservation priority.

Overall Conservation Opportunities - Goal Weighting

	Bastrop	Calwell	Hays	Travis
Protect Water Quality and Quantity	27%	33%	35%	25%
Enhance Park and Recreation Opportunities	17%	18%	12%	25%
Protect Sensitive Ecological Areas	17%	14%	25%	25%
Protect Cultural/Historic Resources	9%	4%	4%	25%
Protect Scenic Corridors	13%	12%	9%	NA
Conserve Farmland and Ranchland	19%	19%	15%	NA

Note: The goal names for Travis County are slightly different. Refer to the Travis County Greenprint report for specifics.

Overall Conservation Priorities

- High
- Moderate to High
- Moderate
- Parks and Open Space
- Conservation Easement
- Water Quality Protection

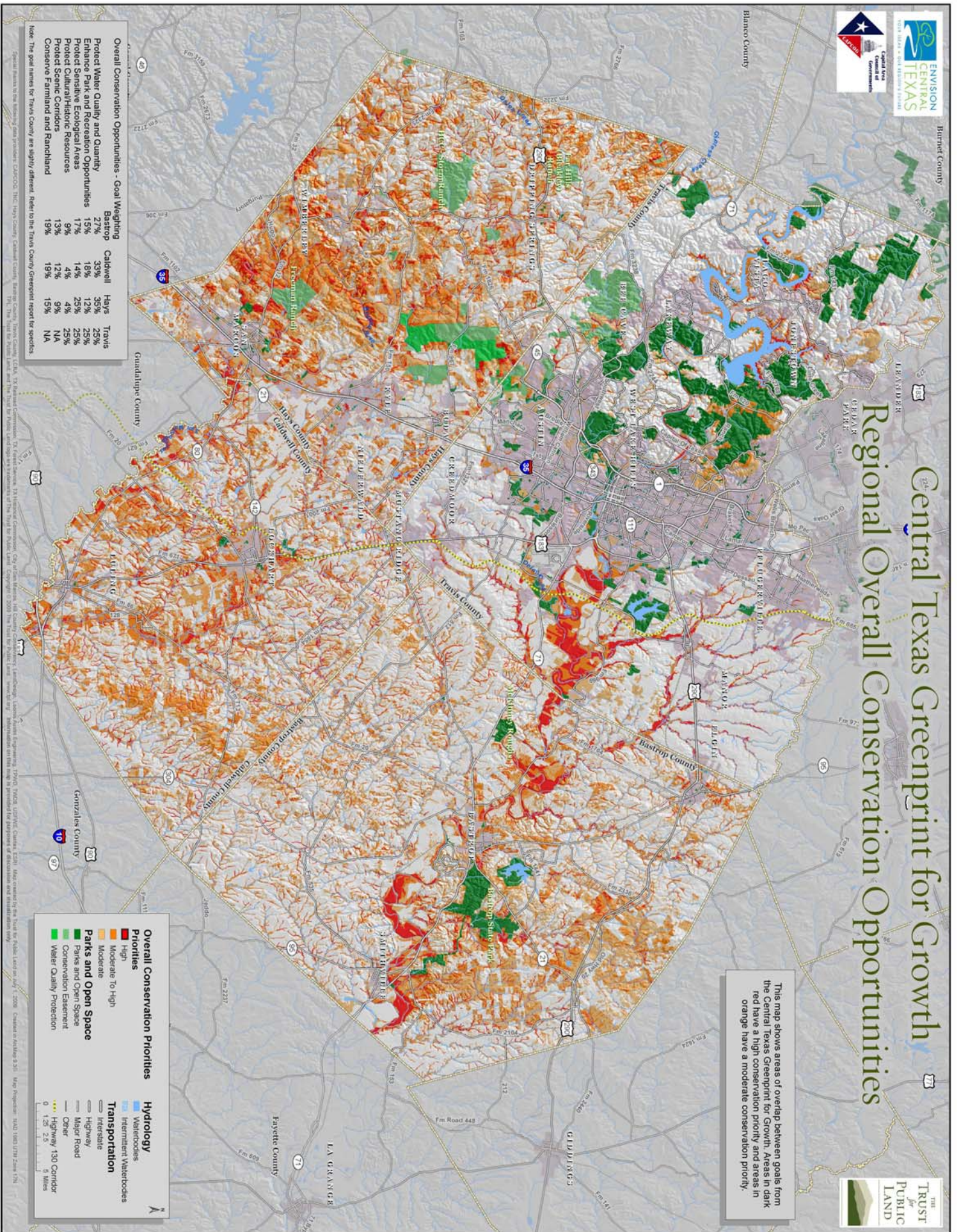
Hydrology

- Waterbodies
- Intermittent Waterbodies

Transportation

- Interstate
- Highway
- Major Road
- Other
- Highway 130 Corridor

0 1 2.5 5 Miles



Fact Sheet – CSS SLOPES Handbook

The nomination for this Context Sensitive Solution is for a program that supports project delivery that provides a programmatic approach for transportation projects ***that promotes natural resource protection, engages stakeholders, and promotes an interdisciplinary approach within the Oregon Department of Transportation.*** ODOT, the National Marine Fisheries Service (NMFS) Portland Office, and the Oregon State Fish and Wildlife (ODFW) partnered on an agency-wide training program to provide guidance on the application of a programmatic approach for compliance with the Endangered Species Act for transportation actions with stream impacts.

The ***Standard Local Operating Procedures for Endangered Species*** (SLOPES IV) contains a programmatic biological opinion (BiOp) and incidental take statement for transportation actions that are permitted through the Army Corps of Engineers 404 Permit. The SLOPES BiOp between the U.S. Army Corps of Engineers (Corps) and NMFS, when used appropriately, allows projects to be permitted without going through individual ESA Section 7 consultation. Although the terms and conditions of the SLOPES IV BiOp provides a focus for permit decisions between NMFS and the Corps, ODOT was invited to provide extensive feedback to NMFS on ways to reduce or remove the adverse effects of regulated actions while facilitating transportation project development, design and construction.

Many bridge and culvert replacements and bank stabilization projects are suited to utilize the SLOPES IV programmatic providing efficiencies to ODOT and other local transportation agencies that require ESA consultation. The ESA Section 7 consultation process can take six months putting it on the critical path for project development timeline as it must be completed in order for federal funding to be released. Cost savings are realized with the SLOPES programmatic as agency costs of producing and processing a Section 7 consultation ranges from \$10,000 to \$50,000 per project. In addition, when culverts and bridges are designed to maintain the functional floodplain and avoid interference with channel-forming fluvial processes, the agency can realize improved life cycle costs of the structure from reduced maintenance.

In order for ODOT to fully utilize the benefits afforded by the SLOPES IV programmatic, a handbook that translated the terms and conditions of the programmatic into language that could be used to scope, design and permit projects was created for ODOT environmental and engineering staff. The ODOT SLOPES IV Handbook was developed by Paul Wirfs, the ODOT Geo-Hydro Manager who oversees the Hydraulic Program and the Geology and Geo-Tech program for ODOT. A cross-discipline, cross-agency team provided input that helped to craft the Handbook and provided the training. The ODOT SLOPES IV Handbook provides guidance to engineers about how to maintain or restore the floodplain function when designing stream crossings. The Handbook does not replace or supersede any engineering requirements of the ODOT Hydraulic Design Manual.

For more information on the Slopes IV programmatic or the Handbook, please contact:
Paul Wirfs, ODOT Geo-Hydro Unit Manager at Paul.Wirfs@odot.state.or.us or
Frannie Brindle, ODOT Natural Resource Unit Manager at Frances.Brindle@odot.state.or.us
Documents may be found on the ODOT Geo-Environmental Website:
<http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/Biology/manuals>

Town of Paradise (California) Skyway Corridor Plan



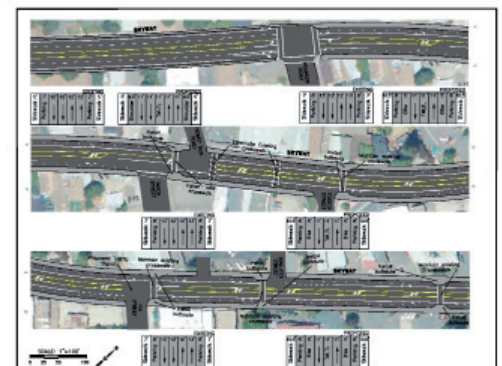
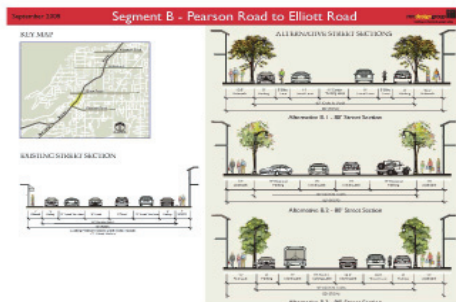
The “Skyway” serves as the Town of Paradise’s “Main Street” and primary connection to jobs and shopping in the County of Butte’s largest community, Chico, CA. Traffic volumes, speed and the roadway’s existing geometrics have forced Skyway to be less of a “Main Street” and more of an expressway, limiting the ability for the downtown area to flourish. The completed Skyway Corridor Plan developed measures intended to reduce vehicle speeds and attract pedestrian circulation while balancing traffic demands.

The Butte County Association of Governments (BCAG) retained Whitlock & Weinberger Transportation, Inc. (W-Trans) and RRM Design Group to prepare the study for the corridor. The purpose of the study was to collaborate with staff from the Town of Paradise and area residents, established community-based organizations (CBOs), and other stakeholders to develop a community supported plan that addressed traffic safety, circulation, pedestrian, and aesthetic deficiencies within the existing corridor. Given the constraints in the corridor, various users of the Skyway and volume of traffic, it was critical that the team demonstrate that the adopted plan alternative would function from a traffic operations standpoint.

The adopted plan which was developed based on extensive traffic analysis, public workshops, and stakeholder meetings, includes reducing the four-lane roadway to three lanes in the downtown area, adding bicycle lanes, enhancing pedestrian crossing facilities, wider sidewalks, and maintaining traffic flow through targeted intersection improvements and coordination of traffic signals. Following a large wildfire near the community which occurred during the process, the plan was modified to eliminate any landscaped medians in

the three-lane section, and to include decorative pavement in the center lane to be used as a second evacuation lane in the event of future fires. The plan also includes a new parking lot and public gathering space near the core of downtown to further support the economic revitalization of the downtown area. Subsequent to this effort, the Town embarked on

a Downtown Capital Improvements Master Plan for other streets in the downtown area. Following adoption of this Plan, the Town intends to seek funding to implement the downtown portion of the Skyway Corridor Plan.



W-Trans
Steve Weinberger, 707-542-9500
www.w-trans.com

Butte County Association of Governments
Brian Lasagna, 530-879-2468
www.bcag.org

INTERSTATE 405 CONTEXT SENSITIVE SOLUTIONS

THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

A STATE'S VISION

Most people agree, the Puget Sound Region of western Washington State is among the most vibrant, progressive, and beautiful locations in the United States. Characterized by towering evergreens, splendid terrain, endless recreation opportunities, a rich history and culture, and exemplary industries in technology, information, and transportation, the citizens and leaders of this area and state as a whole, expect excellence and stewardship in all aspects of life. Recognizing that the public highway infrastructure was no exception to this vision, the Washington State Department of Transportation (WSDOT) implemented policy requiring Context Sensitive Solutions (CSS), an innovative design process, on all projects.

This policy put Washington State at the forefront of a national movement to improve the way transportation facilities are planned and designed--integrating community input, agency involvement and expertise from a host of disciplines, with landscape architects being one of the principal representatives. State leaders recognized the value of landscape architects early on. WSDOT's Building Projects that Build Communities: Recommended Best Practices, states: "These professionals can often suggest innovations that the group may not think up on its own...the energy and experiences of an outside design professional can help set the broader framework for project success." The opportunity was now in place for us, as landscape architects, to fully utilize our broad palette of tools and skills to improve communities through context-sensitive landscape architecture and urban design integrated into transportation facilities.

A GUIDE FOR THE FUTURE

In the spring of 2003, legislators in Washington State earmarked nearly \$500 million over 10 years in funds to improve Interstate 405 in King County. A plan was developed that identified over \$11 billion in total funds needed for projects to improve this 40-mile corridor over the next several decades. A CSS Team, led by landscape architects, was soon formed, and the decision was made that a document to guide and tie together the far-reaching CSS aspects of the Corridor throughout the years would be needed. This led to the conception of the Interstate 405 Context Sensitive Solutions Master Plan. This publication would communicate to an expansive audience: project planners, engineers, architects, and landscape



architects alike; agency design, administration, and maintenance staff; public officials, politicians, and city staff involved or interested in transportation projects.

DESIGN INSPIRED BY NATURE

True to the region, the resounding, collective belief of the committees was that the remarkable natural environment of the Puget Sound should be celebrated. Interstate 405, in addition to traversing vital urban cores and suburban zones, features memorable views of Lake Washington and the Cascade Mountains, including



"DESIGN INSPIRED BY NATURE"

Mount Rainier, stream and river crossings, proximity to park land and recreational trails, and the dense green vegetative canopy so distinct to that area. It was also deemed important to respect the history, culture, and progress of the region, but with the strongest emphasis always on nature. As landscape architects, we were more than willing to accommodate this desire and the new slogan for the CSS Process, and the Master Plan effort became, "Design Inspired by Nature". A strong emphasis was thus placed on natural plants, landforms, materials, and colors for use in the roadway, structures, pedestrian facilities, and interchanges of Interstate 405.

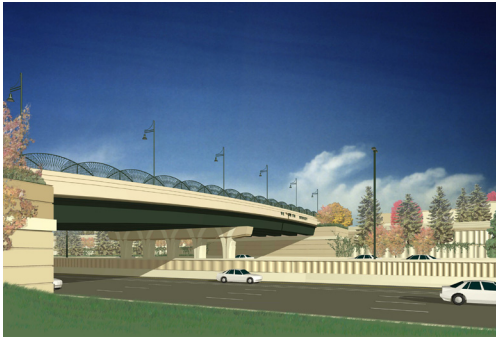
At each stage of the CSS Process, we solicited as much input as possible from the committees and then synthesized it into landscape and urban design proposals, of varying scales and ever increasing detail. This would ensure a superior, feasible, comprehensive, and durable result. The CSS Master Plan outlines the course by which this input was gathered, and how the designs were presented and accepted or modified. After initial, introductory and background pages explaining the I-405 project and CSS principles, chronological summaries of the individual committee meeting were depicted. These contained examples of the presentation boards and slides of drawings, models, charts, and other technical data used to convey the context sensitive solutions to the committee members.

INTERSTATE 405 CONTEXT SENSITIVE SOLUTIONS

THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Some of the specific issues addressed in the Master Plan include:

- The plant palette that would be used to mitigate roadsides and interchange areas, as well as highlight important gateways and zones throughout the corridor.
- The preservation and enhancement of lake views, mountain views, and important views and sightlines into surrounding communities.
- The interaction of vehicles, bicycles, and pedestrians, and making facilities that respected all equally and safely.
- The mix of various modes of transportation through commuter lanes, bus direct access ramps, rail stations, etc.
- The use of stepped and planted retaining walls to reduce large flat expanses of wall and highlight important pedestrian experiences.
- Pedestrian scale lighting that adheres to the established “waterfront” theme found in the local communities and is cohesive with the natural theme.
- Structural elements such as columns, bents, walls, fencing, and barriers inspired by natural forms and textures.
- The mitigation of sound and unpleasant views both to and from the Interstate.
- A color palette more pleasing to the eye and conducive to the natural theme.
- Inter-local agreements between the Department and local municipalities regarding cost-sharing and maintenance responsibilities.
- Special architectural gateway features or signage for community enhancement / identification.



THE RESULT

Near the end of the process, all of the committees gathered together for a final CSS presentation. While the various committees had been periodically updated as to the progress of the others, this was the opportunity to see the culmination of months of hard work in an all-inclusive format. The client, business owners, public officials, and concerned citizens of the I-405 Corridor were overjoyed with the result. The State’s vision for a fully integrated method of context-sensitive project development was paying off and was, as then WSDOT I-405 Project Director, Craig Stone, P.E. stated, “...the highlight of this whole project.”



High Point Neighborhood Transportation Case Study

Considerable effort was made to design appropriate width residential streets. The typically 25 foot wide streets with parking on both sides was approved by the Fire department after much discussion. To assist in their concerns fire hydrants were strategically placed to provide mid block pull over space. The retained mature trees assist in traffic calming and the perpendicular alleys allow options for emergency vehicle movement.

The filtration swales create buffers between pedestrians and traffic, providing additional safety. Traffic calming was achieved by designing streets which follow the traditional dimensions of older neighborhoods in Seattle. Depth of swales was considered, putting the shallower, grassy swales along the more pedestrian friendly streets and planting the deeper vegetated swales along the busier streets to prevent pedestrians stepping off the curb into traffic and/or along streets with less pedestrian traffic crossing the planter strip.



Facts and Figures	
4,000	residents
1,250	children under 19
450	seniors over 62
34	blocks (120 acres)
25'	street width
470' x 260'	block lengths
10,000,000	gallons of water saved by drought tolerant landscaping
107	mature trees saved
3,000	new trees planted
13,000	lineal feet of pervious pavement sidewalk
10	traffic calming islands
600' x 25' x 8"	porous street statistics

top to bottom:
 32nd Ave SW porous pavement street
 street widths still allow emergency vehicle access
 great walking environment
 residential scale intersection treatment



Morgan/Sylvan Corridor, Seattle, WA

SvR redesigned five blocks of SW Morgan/Sylvan corridor in 2004. This is a major arterial that is a primary east west corridor used by transit, police and fire, delivery trucks, and school buses. The arterial configuration had divided a residential neighborhood and provided a barrier for families and senior citizens accessing the school, neighborhood center, and regional athletic fields. The corridor had vehicle trips ranging upwards of 6,000 per day at speeds over 40 mph (posted speed was advisory at 25 mph). The City was reluctant to allow a signal until we demonstrated that the multiple users and road geometry met the need for signalization.

Adding to the complexity was Seattle Public Utilities' request to incorporate natural drainage systems along the corridor to handle water quality storm events. SvR managed to work with many stakeholders to design a street that met the neighborhood's vision for connectivity and addressed the functional issues of sight distance. Most importantly, the design addressed the speed issue allowing users to understand that they are driving through a neighborhood. Vehicle speeds are now within the posted 25 mph.

Flowering trees were selected for this corridor to replace the old flowering cherries that announced the start of spring every year for the West Seattle community. Morgan/Sylvan with installed low impact development treatments, center planted median, sidewalks, art, transit stops and bicycle sharrows is one of the country's early green, complete streets.



Morgan/Sylvan Before and After

Urban Street Design Guidelines

City of Charlotte

The Urban Street Design Guidelines (USDG) are used for planning and designing Charlotte's streets and for providing viable transportation choices for all Charlotteans. The USDG are creating "complete" streets--streets that provide capacity, safety, and mobility for motorists, pedestrians, cyclists, and transit riders, and enhance the quality of life for neighborhood residents.

The USDG include 1) policy statements adopted by Charlotte's City Council (in 2007), 2) innovative technical methodologies, 3) design and tradeoff recommendations for different street types and cross-sections, and 4) a planning and design process for applying the USDG to transportation projects.

One of the most important tools within the USDG is the "Six-Step" process that describes how to plan and design street, intersection, and sidewalk projects. The Six-Step process was devised to ensure that a broad array of perspectives would be included in design decisions, with the public's opinions sought at strategic milestones. Engineers, planners, and urban designers now work together to create more context-sensitive streets that integrate land use and transportation goals. The Six-Step process also ensures that design decisions and tradeoffs are made and understood in a transparent way, which is why various organizations and agencies have expressed interest in this process.

Since 2005, the City has been applying the USDG planning and design process to capital projects. To date, the following projects have been built, based on the USDG:

- 8 new thoroughfares,
- 10 streetscape projects,
- 9 road conversions,
- 11 rebuilt intersections, and
- 15 sidewalk projects.

These projects reflect Charlotte's new approach of designing and building streets that improve safety and neighborhood livability, promote transportation choices, and create long-lasting value.



We can't keep widening our roads, so we have to broaden our thinking.



The USDG are also being incorporated into Charlotte's plans. The award-winning South Corridor Station Area Plans were among the first area plans to include USDG street classifications, street intervals, and street cross-sections, based on planned land uses. Thus far, the USDG have been included in 12 area plans.

The USDG philosophy and methodology continue to enable planners and engineers, as well as other stakeholders, to match street designs to the surrounding (existing and planned) land uses, thereby "right-sizing" the street network, and creating "complete" streets to improve the mobility, safety, and comfort of pedestrians, cyclists, transit riders, and motorists.





The Tennessee Department of Transportation (TDOT) began utilizing the Context Sensitive Solutions (CSS) approach on several transportation projects in 2004 and quickly followed with a comprehensive approach to implementation. Building on the experience gained during the development of these initial projects, a TDOT CSS Leadership Group was formed and developed a TDOT CSS Statement of Commitment that outlined the Department's CSS philosophy. The TDOT CSS Leadership Group also oversaw the development and implementation of a two-day basic CSS training course.

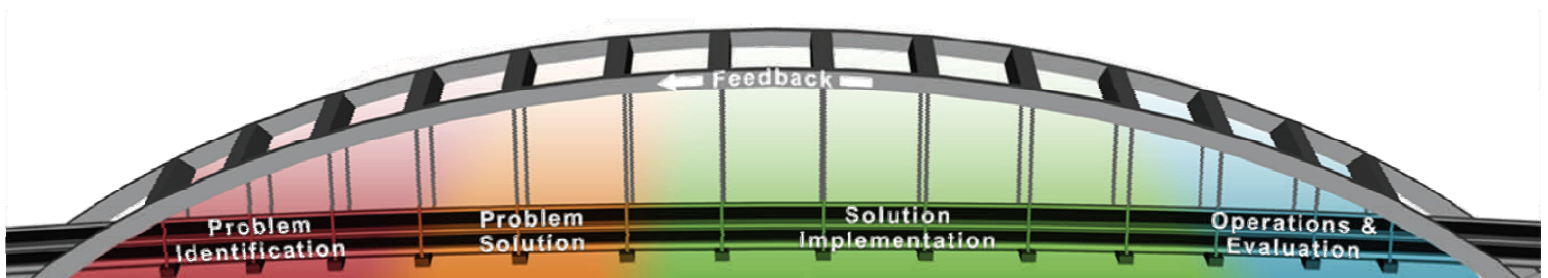
This course on Context Sensitive Solutions was developed by an interdisciplinary team of TDOT professionals. Because many comparable CSS courses were consulted in the development of the material, this course offers you the "best of the best" with a Tennessee perspective. It not only offers an understanding of the principles and concepts of CSS taught by Department employees, but also how CSS fits within the project development process at TDOT. New processes, tools and procedures that support the principles are interwoven throughout the course.

The following six modules make up the course content:

1. Introduction to CSS
2. Defining Context, Understanding a Place and Identifying Problems
3. Respectful Communications, Consensus Building and Public Involvement
4. CSS Decision-making and the Project Delivery Process
5. Design Flexibility
6. Putting It All Together



Learning within this course is facilitated through lecture, examples, case studies and other interactive opportunities. However, the greatest benefit comes through the interactive discussion between the interdisciplinary participants within TDOT and with external partners.



COMMUNITY SAFETY & ENHANCEMENTS FACT SHEET

MD ROUTE 924 (MAIN STREET) FROM MD 22 TO GORDON STREET BEL AIR ~ HARFORD COUNTY

PROJECT DESCRIPTION:

The Community Safety & Enhancement project along 0.5 miles of MD 924 (Main Street) is located in the historic heart of the Town of Bel Air in Harford County, MD. This is not only a historic area but a large commercial area which brings in high volumes of traffic during peak hours and on weekends. High traffic speeds of vehicles made it difficult for pedestrians to cross Main Street and the poor condition of the sidewalks made it hard for them to access the businesses of the Town. The area had a high rate of pedestrian related accidents which was almost four times greater than the average statewide rate for similar State highways.

The project was initiated at the request of the Town of Bel Air to upgrade and revitalize Main Street through the Town. Funding was allocated by the State Highway Administration (SHA), and an initial public meeting was held in April 2000 with local citizens, business owners, and local elected officials to present the downtown revitalization concept conceived by the Town of Bel Air, to solicit input, and to begin the formation of the local Task Force. This task force was charged with developing project goals and a concept plan for improvements to Main Street. In June 2000, the Task Force was formed consisting of numerous local business owners, citizens, Town officials, utility owners, and SHA engineers, planners and landscape architects. This group met numerous times over the next year to develop goals and how to apply these to the concept plan. The goals developed included improving vehicular and pedestrian accessibility to Town services and businesses, calming traffic flow and improving safety through the downtown district, correcting drainage problems, promoting amenities to maintain and enhance the historical look of Bel Air, and upgrading the existing 100-year old water main. Of particular concern to the task force was the very narrow and numerous bifurcated sidewalks which did not promote a walkable atmosphere in the commercial area. The project goals and concept plan were completed and presented at a public meeting in April 2001. The Town of Bel Air adopted a resolution approving the concept plan after the public meeting.

The project began design in July 2002; however, funding for the program was delayed in January 2003 due to budgetary constraints facing the State of Maryland at that time. Funding to complete the design and construction was finally allocated in January 2005. To expedite the completion of design and construction while ensuring the improvements envisioned during the concept development phase were met SHA decided this project would be delivered using the Design-Build method. The SHA, Town of Bel Air, and the local Task Force met numerous times over the next few months to update the concept based on changes in the Town. The project was advertised to contractors in November 2005 and awarded in September 2006 after both a technical evaluation of the Design-Build teams and a price proposal was submitted. The Design-Build Team of Corman Construction and Johnson, Mirmiran, & Thompson (JMT) began final design of the project after award and initiated construction in January 2007.

The project was divided into three separate construction phases for which final design and construction was completed. This Design-Build approach limited the duration of the project by allowing both design and construction to occur concurrently and it reduced construction impacts to the local business community. The Design-Build Team along with the SHA held monthly partnering meetings which included the Design-Build Team, the SHA, Town of Bel Air Officials, Baltimore Gas and Electric (BGE) and Maryland American Water Utility Companies, and representatives from the local downtown business alliance. At these meetings, issues with both the final design and construction were discussed to develop the best solution to meet the needs of all the stakeholders involved. Regular public meetings were also held to update the public on the project and to answer questions. These meetings allow residents and merchants to become familiar with the construction supervisors and SHA inspectors to quickly resolve concerns regarding construction activities in front of their store.

The final design and construction of the project accomplished the original goals established by the Town of Bel Air and Task Force from 2001. The 100-year old water main owned by Maryland American Water was upgraded and replaced by the Design-Build Team. BGE also replaced their gas facilities throughout

the Town with close coordination and assistance from the Design-Builder. The existing drainage system in the Town was upgraded with new pipes, new inlets, and curb and gutter. The existing drain spouts from the buildings were also connected into the new system to eliminate water draining onto the sidewalk.

The roadway was narrowed with bump-outs at various locations to both reduce the crossing distance for pedestrians and to calm traffic. A new median was also constructed in front of the historic courthouse to further calm traffic. The existing sidewalks consisted of a hodgepodge of brick and concrete and were not compliant with the Americans with Disabilities Act (ADA). New concrete sidewalks with a one foot brick accent were constructed throughout Town with all brick sidewalks constructed at the locations of special significance such as the courthouse. The brick sidewalks along with the median at the courthouse now serve as the focal point for the historic Town center. The new sidewalks are fully ADA-compliant including curb ramps with brick paver detectable warning surfaces and provide access to the Town business for all persons. The four traffic signals in the Town of Bel Air were also reconstructed to provide visual and audible countdowns for crossings. The signalized crossings included the installation of synthetic red brick asphalt crosswalks to accent the pedestrian crossings. The signals were also interconnected to improve the flow of traffic through the area. The existing continuous cobra-head lighting in Bel Air was replaced with new scale pedestrian lighting. The lighting was chosen by the Town to reflect the historical character of the Town. The new traffic signal poles and mast arms along with the intersection lighting installed with the project were also painted black to match the color of pedestrian light poles selected by the Town. The roadway was reconstructed and resurfaced, the signing and marking upgraded, landscape planting areas were provided to beautify the area and enhance the urban environment.

One of the most challenging features of the project was the removal of the existing bifurcated sidewalks in the Town. The removal of these sidewalks was needed to provide additional sidewalk width for the high volume of pedestrians and to meet ADA requirements. Due to the constraints of the area to meet the existing building fronts, provide ADA accessibility, and to maintain positive drainage patterns, non-traditional roadway designs needed to be evaluated. The Design-Build team was able to remove these sidewalks by modifying the cross slope of the roadway from a crown to a one-directional slope. The proposed design also utilized a valley gutter between the parking area and the roadway where the parking lane was sloped away from the curb to reduce runoff across travel lanes.

Construction of the MD 924 Main Street Community Safety & Enhancement project was completed in September 2008. A dedication ceremony was organized jointly with the Town of Bel Air, local elected officials, local business alliance, SHA, and the Design-Build Team on September 27, 2008. The project met the goals of the original Task Force by improving vehicular and pedestrian accessibility to Town, improving the roadway infrastructure, and promoting amenities to maintain and enhance the historic look of Bel Air. The partnering team developed a slogan for the project, "Smile, it's all worthwhile." When the citizens and business owners walk down Main Street today and in the years to come, they will agree that this project was worthwhile.

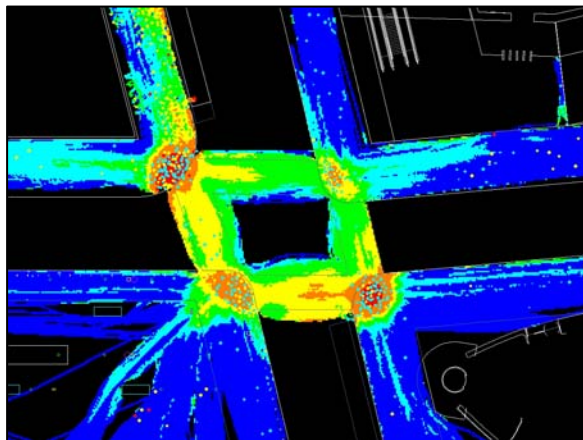
COMMUNITY INVOLVEMENT:

The community of the Town of Bel Air and local government were very instrumental in the development of the concept for this project. The Town's Department of Planning and Community Development assembled a Task Force of local citizens and business owners and in conjunction with both the Town and State Highway representatives formulated a concept plan for proposed improvements. To promote public participation in the project, maximize community involvement in the process and encourage local citizens and business owners to view or offer comments on the plan, a public open house was held by the Task Force along with State Highway representatives. The concept plan was refined based on the comments from this open house. It was then taken to the Board of Town Commissioners and a resolution of a "Good Faith" Partnership was approved unanimously by the Commissioners in May 2001, to implement the proposed concept plan.

World Trade Center Memorial Pedestrian Modeling

New York, New York

The development of the World Trade Center (WTC) Memorial site is one of the most important design projects in our country's history. Since the WTC Memorial site is so sacred, the experience of individuals visiting the site has been an extremely important issue to the designers and planners. As a result, it was essential that the site provide a peaceful, non-stressful environment to the thousands of visitors that are expected to visit this site on a daily basis. As a means to evaluate the complex pedestrian environment, analyze the site to 'scale' in two-dimensions, model real time pedestrian movements, accurately depict pedestrian movements on the site, model pedestrian behavior, and to determine whether the design could adequately accommodate the projected number of visitors to the site, the Lower Manhattan Development Corporation (LMDC) and the National September 11 Memorial & Museum collaborated to develop a pedestrian simulation model of the proposed WTC Memorial site. To complete this challenging assignment, The Louis Berger Group Inc. was hired to model this complex pedestrian environment using the Legion software.



PEDESTRIAN DENSITIES AT CROSSWALKS NEAR THE MEMORIAL

The model was comprised of several areas in and around the WTC Memorial site including the plaza, the building on the site, and the surrounding streetscape. Individual site elements were modeled including queuing, security screening, vertical pedestrian circulation (elevators, escalators, and stairs), sidewalks, crosswalks, site attractions/viewing areas, signs, benches, and curb bus operations.



The model results were used to inform planners and designers how to best utilize the available open space, reduce crowding, place directional and informational signs, locate queues, and to create a pedestrian-friendly layout for the WTC Memorial site. The output also provided crucial data that allowed planners and designers the opportunity to adjust the design to better meet the needs of the site visitors. Since these crucial decisions were based upon actual data, the guess work was eliminated from the design process. In addition, the number of design iterations and the overall cost to construct the WTC Memorial site could be reduced by some of the proposed design modifications. By modeling important public pedestrian spaces like the WTC Memorial site, a new and unprecedented level of pedestrian planning has been brought to the design process.

This project has been selected as the 2007 recipient of the Institute of Transportation Engineers' Transportation Achievement Award for Pedestrians and the 2008 Diamond Award for New York State from the American Council of Engineering Companies (ACEC).



THE Louis Berger Group, INC.

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CSS NATIONAL DIALOG – PISCATAWAY, N.J. WORKSHOP

Route 18 Section 2F, 7E, and 11H - New Brunswick, N.J.

Project Overview

The Route 18 Section 2F, 7E, and 11H project was a large-scale, \$200 million corridor safety improvement project set in the urbanized area of New Brunswick, N.J. The planning, design, and construction processes were conducted, and all deliverables associated with the project were developed, through an intensive context sensitive solution (CSS) approach that included extensive public outreach efforts. As a result, a plan of action was developed for implementation of stakeholder-approved elements that were to be included in the final design documents and, ultimately, in the construction of the project.

Project Scope

The project was a multi-interchange project involving the total reconstruction and widening of 2.1 miles of Route 18 within the city. It consisted of four new grade-separated interchanges with expressway lanes incorporated to complement collector-distributor (CD) roadways. The overall project also included four highway bridges, two pedestrian bridges, one pedestrian tunnel, noise walls, sign structures, retaining walls, significant improvements and expansion to the city's Boyd Park, major bulkhead rehabilitation along the Raritan River, traffic signals, an extensive intelligent transportation system, and substantial utility relocations.

Unique Challenges:

- Managing the large-scale nature of the project
- Minimizing traffic, bus, and pedestrian disruptions
- Keeping the public informed throughout the process
- Performing extensive archeological, social, and environmental studies
- Incorporating community-desired design features.

CSS Principles

The Route 18 improvement project CSS approach included regular community partnering meetings with a team of crucial project area stakeholders, as well as information centers open to the general public. An experienced multi-party facilitator was used to implement the partnering strategies.

A CPT Handbook was developed to provide clear and consistent information for each member to share with their constituents. Later in the process a Route 18 project Web site provided the means and easy access to the documentation for enhanced information exchange with the community and general public.

The goals and objectives of the CPT were:

- To identify the interests and concerns of local residents, organizations, municipal agencies, and businesses in the project area
- To actively participate in developing transportation improvements that maximize safety and traffic efficiency while minimizing detrimental environmental, historic, and community impacts



CSS NATIONAL DIALOG – PISCATAWAY, N.J. WORKSHOP

Route 18 Section 2F, 7E, and 11H - New Brunswick, N.J.

- To provide input and recommendations in a collaborative fashion utilizing consensus to reach agreement
- To communicate with constituents and enhance understanding of the project in the community and region
- To maximize broad-based public participation in the transportation planning process.

CPT recommendations were:

- To mitigate impacts of the proposed highway improvements by interpreting and incorporating cultural elements and environmental factors.
- To develop guidelines to create aesthetically pleasing roadway features and sense of entry and welcoming into New Brunswick
- To maintain and enhance existing linkages, both pedestrian and vehicular, throughout the city, as well as views to and from the riverfront.

The recommendations derived from the CSS process in the planning phase were brought to the table during the early preliminary design discussions. A plan of action was developed for implementation of the elements that were to be included in the final design documents and, ultimately, in the construction of the project. The action plan included the preparation of architectural renderings of the major structures and other important features. These graphic representations enabled all the members of the CPT to better visualize the intended form and appearance of the proposed treatments. During construction, mock-ups of important features enable final decisions to be made by the design team, the city, and the community stakeholders.



Community Benefits as a Result of the CPT:

- New outer roadways built to separate local traffic from the expressway traffic, improving access to the city
- Wide multi-use paths along the entire lengths of the outer roadways and at each bridge crossing to connect the city to its institutions, residential, and recreational areas
- Safe pedestrian crossings with pedestrian bridges and traffic signal-controlled intersections
- Boyd Park expanded into the former City Docks area with a new public boat ramp and picnic pavilion
- Ramped promenade area providing a scenic vista of the Raritan River and a grand pedestrian entranceway into Boyd Park
- New amphitheater adjacent to the Boyd Park Pavilion
- Improved lighting throughout the corridor
- Noise walls to buffer several residential locations
- Architectural treatments corridor-wide.



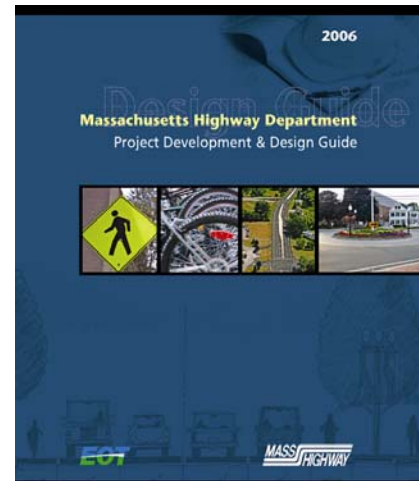
The Community Partnering Team (CPT)

- City of New Brunswick
- New Brunswick Development Corporation
- Middlesex County
- Rutgers University
- Residential Community Groups
- Business Community
- New Jersey Department of Transportation
- New Jersey Department of Environmental Protection
- New Jersey Turnpike Authority

Massachusetts Highway Department

Project Development & Design Guide

In January 2006, the Massachusetts Highway Department issued a new Project Development & Design Guide that dramatically reshaped the way transportation projects are advanced in Massachusetts. The Guide was developed through a unique, collaborative process with a diverse group of constituents who represent a broad array of viewpoints. The group that developed the Guide (the Taskforce) was created in direct response to disputes with communities over various project elements including lane and shoulder widths, designs perceived to be inappropriate for community surroundings, designs perceived to have negative impacts on historic, downtown and environmentally sensitive areas, project delays, high project costs and other similar elements. The Taskforce was a 28-member group that included representatives from MassHighway, municipalities, Regional Planning Agencies, the Massachusetts Historical Commission, the Massachusetts Executive Office of Environmental Affairs, WalkBoston, MassBike, the Massachusetts Office on Disability, the American Council of Engineering Companies, the Massachusetts State Legislature, the Federal Highway Administration and others. To address all of the identified problems, Taskforce members worked together to develop a new design guide that fully incorporates the principles of context sensitive design and flexible design into the project development and design process.



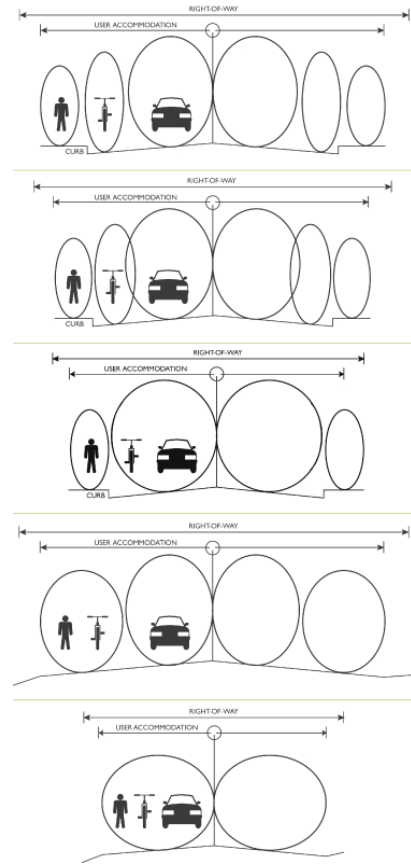
The MassHighway Project Development & Design Guide changed the way that transportation projects are advanced in Massachusetts in four major areas: Project Development Process, Context Sensitive Solutions/Design, Flexible Design, and Multi-Modal Solutions/Design. CSS principles are incorporated throughout the Guide in three

Incorporation of CSS into the Guide

- *Project Development Process*
- *Basic Design Controls*
- *Flexibility*

main ways. First, the project development and design processes were re-written to encourage better problem identification, more public outreach and more early coordination. Next, the basic design controls were revised to allow for consideration of CSS elements. The Guide shifts away from traditional AASHTO design controls for functional classification, design speed and level of service, and more towards design controls that better-reflect the context of the project users and project area. Finally, CSS was incorporated throughout the Guide by providing more flexibility in the design criteria. This is generally accomplished by providing ranges of acceptable choices and options for intersection treatments, including roundabouts.

The Guide is responsive to the unique character of roadways and communities in Massachusetts, reflecting the rich historic, cultural and environmental qualities that are deeply important to residents and visitors alike. The greatest challenge of the Taskforce was to create a guidebook that is appropriate for Massachusetts, but that also retains significant safety standards and other national guidance, and could possibly be a model for other states to follow.



With all the significant changes and refinements contained in the Guidebook, it still reflects the basic AASHTO Green Book philosophy of producing transportation facilities that “are safe and efficient for users, acceptable to non-users, and in harmony with the environment.”

Massachusetts Highway Department *Project Development & Design Guide*

Adopted for Use: January 30, 2006

Consultant Development Team:

VHB/Vanasse Hangen Brustlin, Watertown, MA

In association with:

Glatting Jackson Kercher Anglin Lopez Rinehart, Inc.

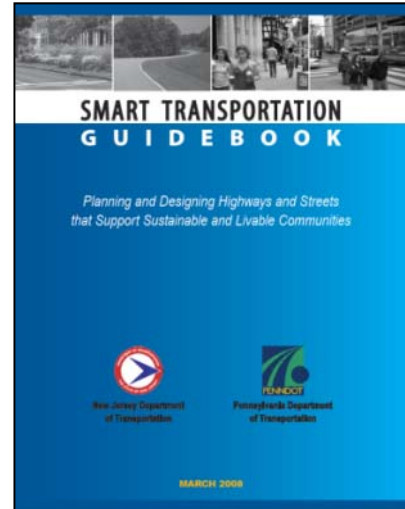
Texas Transportation Institute

Kessler McGuinness & Associates, LLC

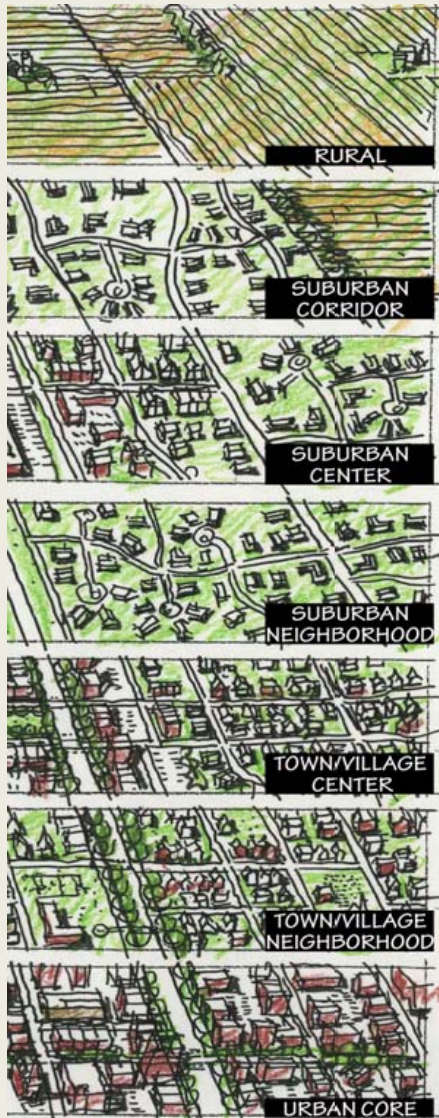
Community Resources Group

Smart Transportation Guidebook

The Smart Transportation Guidebook was published in March 2008. The goal of the Guidebook is to integrate the planning and design of our transportation system in a manner that fosters development of sustainable and livable communities. A key element of the Guidebook is the creation of a connection between a project's context and geometric design criteria. The Guidebook has equal applicability to rural, suburban and urban areas.



Defining context based on Land Use:



This publication is an important step towards integrating the principles of Smart Transportation into PennDOT's everyday business. It has information that is useful for all of the people involved in building communities, including transportation planners, traffic and design engineers, local governments, and community residents. PennDOT is currently using the Guidebook as our guide for updating our design manuals.

The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) have given the Smart Transportation Guidebook the 2008 Transportation Planning Excellence Award.

Guidebook Objectives:

- Link existing and future land use contexts and roadway design values
- Tailor solutions to the Context
- Use flexible design on all projects
- Increase coordination with local municipalities
- Design to a desired operating speed

Smart Transportation Themes:

1. Money counts
2. Leverage and preserve existing investments
3. Choose projects with high value/price ratio
4. Safety always and maybe safety only
5. Look beyond level-of-service
6. Accommodate all modes of travel
7. Enhance local network
8. Build towns not sprawl
9. Understand the context; plan and design within the context
10. Develop local governments as strong land use partners

All Smart Transportation solutions emphasize the tenets of Context Sensitive Solutions (CSS) and one of the 10 themes of Smart Transportation is to “Understand the Context; Plan and Design within the Context.” CSS is an antidote to the “one size fits all” approach. It requires that all transportation projects be planned and designed with careful consideration of the local land use, economic, environmental, and social contexts.

As such, CSS emphasizes a collaborative and multi-disciplinary approach, early and continuous engagement of stakeholders, flexibility in design, and minimizing the impacts of projects to the community. The Guidebook provides overall guidance for CSS for the Commonwealth. The guidebook emphasizes Flexibility in Design, a major tenet of CSS.





MDOT and Context Sensitive Solutions (CSS)

The Michigan Department of Transportation (MDOT) has embraced CSS as a way of delivering on its mission of ***“providing the highest quality integrated transportation services for economic benefit and improved quality of life.”***

MDOT has a decentralized structure comprised of 7 Region offices and 26 Transportation Service Centers (TSC) throughout Michigan to encourage collaborative relationships between stakeholders and staff. This structure supports a CSS approach to program delivery by providing local access to MDOT staff throughout project development, construction and maintenance activities, and helps facilitate integrated transportation solutions.



Guidelines For Stakeholder Engagement

Michigan Department of Transportation



MDOT's CSS policy consists of three fundamentals: ***Stakeholder Engagement, Flexibility, and Effective Decision-Making.***

MDOT has incorporated CSS fundamentals in staff training since 2005. As a companion to the formal training, MDOT is currently working on tools to assist our region office staff in addressing local community needs and to help in building partnerships.

MDOT staff, at the TSC and Region offices, asked for assistance in how to conduct stakeholder engagement activities for their projects.

The major issues facing MDOT project managers are:

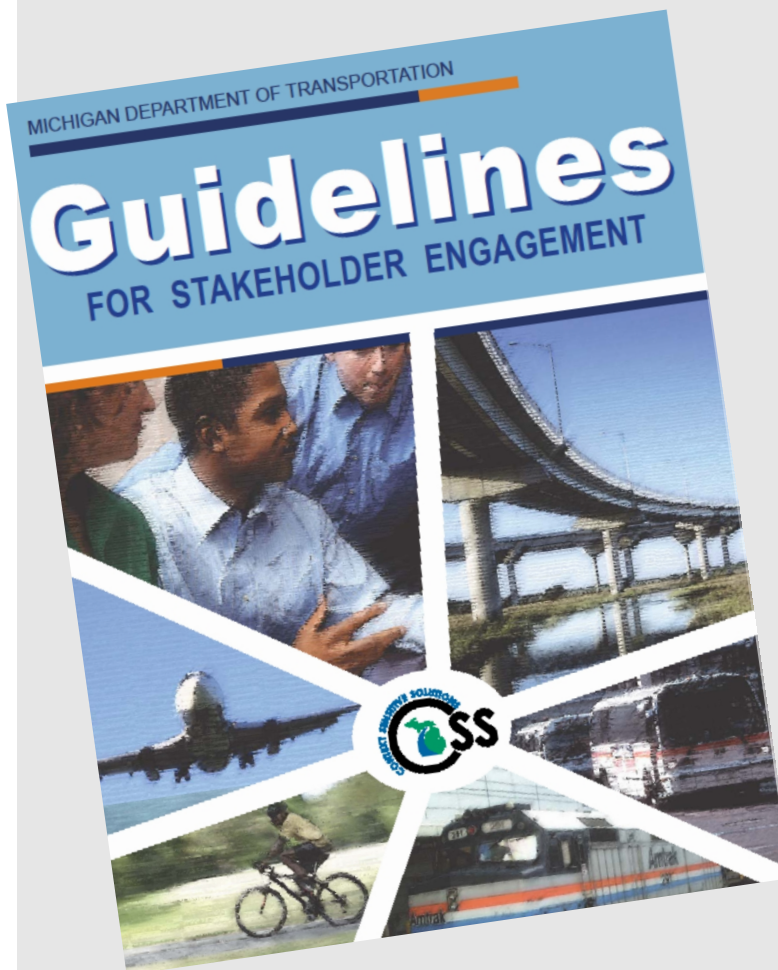
- When should I start the engagement process?
- How do I identify all stakeholders?
- What professional expertise do I need?
Special skill sets?
- What kind of engagement is needed on my project and how do I make this determination?
- How do we maintain a consistent stakeholder engagement process statewide, while remaining flexible enough to respect local context and concerns?





Guidelines For Stakeholder Engagement

Michigan Department of Transportation



To address these issues, MDOT released *“The Guidelines For Stakeholder Engagement”* in February 2009. An internal interdisciplinary team assembled the guidance and presented it to the CSS Steering Committee, which is comprised of representatives from MDOT, and 19 local, state, and federal organizations. The Steering Committee provided valuable input while learning about MDOT's commitment to CSS and how it is used in our decision-making processes.

The resulting document provides MDOT staff with suggestions and techniques to engage local stakeholders early and often during project development. The document is structured to allow flexibility in engagement approaches to best suit diverse Region, TSC and customer needs, while maintaining a consistent process for implementation statewide.

Guidelines For Stakeholder Engagement addresses:

- Why outreach to stakeholders is an important part of MDOT's CSS policy.
- Key concepts of how to implement stakeholder engagement.
- How to determine the level of effort appropriate to the scope and scale of the project.
- When and how often engagement should take place.
- Identifying stakeholders and types of engagement techniques.
- How to follow-up and evaluate stakeholder satisfaction.



Guidelines For Stakeholder Engagement is posted on the CSS page of the MDOT public Web site as well as MDOT's internal intranet for easy staff accessibility. The document is formatted so it can be easily updated and kept current with FHWA and MDOT policies, strategic goals, and feedback from staff and stakeholders. The success of the Guidelines For Stakeholder Engagement document has initiated an effort by MDOT and local agencies to create a companion document focused on how to help local stakeholders engage MDOT on transportation issues. This effort is currently underway and is anticipated to be completed in 2010.



For information and document downloading, please visit: <http://www.michigan.gov/mdot>



ACCELERATE 465, INDIANAPOLIS, INDIANA



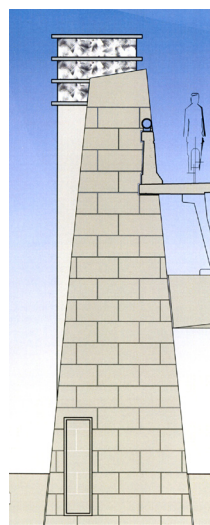
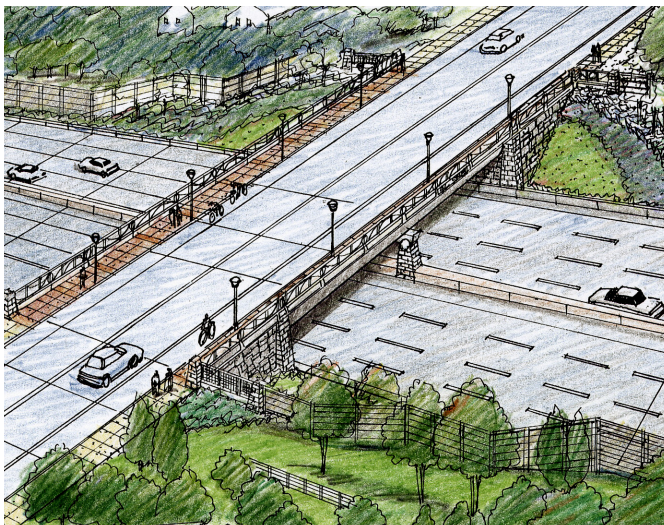
HNTB led the corridor consultant team for the I-465 West Leg reconstruction project, known as Accelerate 465. The 12-mile segment involved upgrades of mainline capacities, improved geometrics, eight interchange ramps and access to major destinations such as the Indianapolis Motor Speedway, International Airport, Eagle Creek Park, and downtown Indianapolis.

Overall project objectives were to:

- improve safety and reduce congestion by improving capacity and related traffic operations,
- maintain or improve access and update bridge and other geometric design elements to current standards, and
- reconstruct the pavement on a vital 11-mile stretch from SR-67 to 56th Street.

The complex project required an interface between multiple consultants and design disciplines. HNTB ensured that elements such as geometrics, drainage, final grades, bridge aesthetic details, signage and plantings were consistent among the various roadway sections.

(continued)



REFERENCES

Gary Mroczka,
Project Manager
Indiana Department of
Transportation (INDOT)
100 N. Senate Avenue,
Room N642
Indianapolis, IN 46204
317-232-5226

PROJECT FEATURES

Role & Responsibility

Prime Consultant

Lead for Context Sensitive
Solutions

Design Guidelines

Construction Documents

Corridor Planting Design

Years Designed

2003 - 2005

Years Constructed

2006 - 2011

Design Fee for CSS Tasks

\$ 1.2 million

Construction Cost

\$ 350 million



ACCELERATE 465, INDIANAPOLIS, INDIANA (continued)

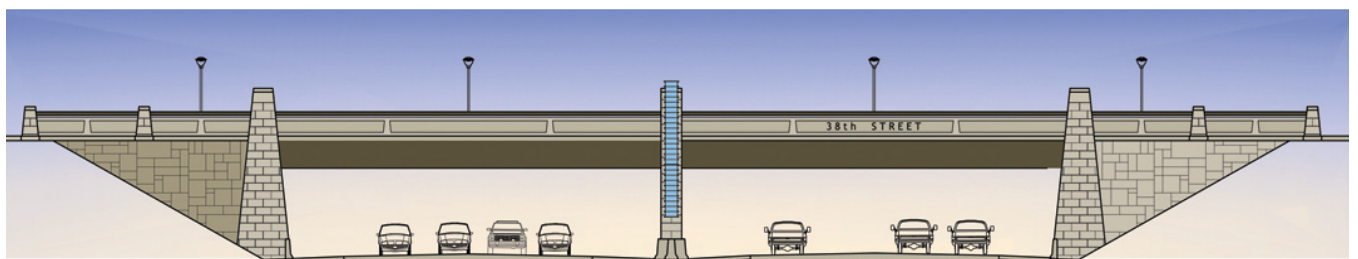
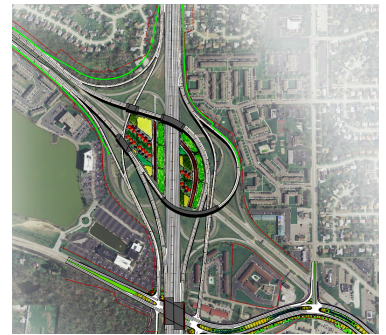
Using the Context Sensitive Solutions (CSS) approach, HNTB addressed the project from social, economic and environmental perspectives. The HNTB team of urban designers, engineers and landscape architects worked closely with Indiana Department of Transportation leaders to focus on three main objectives:

- mitigating adverse impacts caused by reconstruction,
- enhancing the livability of adjacent communities, and
- improving the environmental quality of surrounding area.

The CSS approach involves close cooperation between design disciplines along with the significant involvement of stakeholders. The Community Advisory Group, including representatives from local businesses, neighborhoods, citizen groups, government agencies and municipalities, provided critical guidance to INDOT and HNTB designers from the early stages of project development.

The product of this interactive public process, the Accelerate 465 CSS Design Guidelines, is a detailed and prescriptive manual providing comprehensive design direction for corridor-wide aesthetic and architectural enhancements.

The Guidelines address all project improvements, including bridges, retaining walls, noise walls, traffic barriers, lighting, signage, grading, fencing, landscaping and public art opportunities. The Guidelines formed the basis for the proposals prepared by five finalists for the freeway's design-build contract.





The new I-35W Bridge at dawn.



New I-35W Bridge Minneapolis, Minnesota

Owner: Minnesota Department
of Transportation (Mn/DOT)

Design/On-site Quality Assurance: FIGG

Contractor: Flatiron•Manson JV



Aesthetic LED lighting highlights the sculptural 70' tall piers.

The new I-35W Bridge is an emergency replacement structure for the crossing that tragically collapsed on August 1, 2007. The new bridge over the Mississippi River in Minneapolis, Minnesota made front-page news across the world as it was designed and built with record speed. The new bridge was completed just 13 months after the collapse of the original structure, more than three months ahead of schedule, and within budget. In spite of the challenges surrounding the project and fast-track schedule, the CSS philosophy and principles were applied to create a new, safe and innovative bridge that is embraced by its community. The project incorporates all of the 15 original Principles that guide CSS in transportation.

Within days after the bridge collapse, the Minnesota Department of Transportation (Mn/DOT) began the process of rebuilding this vital area and interstate transportation link across the Mississippi River in downtown Minneapolis and began scheduling and facilitating public open house meetings. To expedite project delivery, Mn/DOT chose the design-build approach, but still structured the proposal documents and scoring to emphasize the importance for a CSS approach with particular emphasis on public involvement and visual quality management. Mn/DOT assembled a Visual Quality Advisory Team (VQAT) to meet as needed to address visual quality and CSS items throughout the project. Together, the selected design-build team and VQAT planned a full-day public involvement meeting called a FIGG Bridge Design Charette™. Eighty-eight local community members met, using a systematic, highly visual and interactive process, to develop consensus and provide their preferences for a variety of aesthetic elements. The charette participants chose the pier shape for the bridge, open railing, bridge color (white), aesthetic lighting options, and local stone retaining walls and abutments. Aesthetic choices were guided by a theme of Arches-Water-Reflection to create a bridge that is in harmony with its site along the river with a mixture of historic and modern architecture.



Curved gateway sculptures at each end of the bridge were developed with the VQAT. 30' tall precast panels representing the symbol for water are made of eco-friendly concrete with a nano-technology that cleans the air.



1800 students created glass mosaic concrete tiles with recycled glass that were installed as part of the bridge overpass at 2nd Street. Part of an education program on design, construction and sustainability.

The new bridge carries ten lanes of interstate traffic across the Mississippi River on twin structures. New ramps were constructed at the interchanges to correct geometric deficiencies and create a safer structure. Engineers developed creative solutions to minimize impacts to the project site, accounting for constraints such as sensitive removal and investigation operations, industrial site contamination, presence of historic properties and National Park Service Land, existing railroad tracks and utilities, and limited right of way adjacent to the bridge and approaches. More than 320 sensors were embedded in the bridge to monitor the behavior of the structure in real time, and to alert officials to any changes in behavior before a problem develops. The FHWA and University of Minnesota will monitor this data over the life of the bridge to provide important information for the future of bridges.

The new I-35W Bridge embraced sustainable design through its materials, design and construction methods. The high-strength, high-performance concrete contained admixtures, waste materials from other industries, to increase durability. This concrete saved about six to seven hundred pounds of cement per cubic yard of concrete, which is about three and a half tons per truckload of CO₂ that doesn't have to be put into the environment. Low-energy, low-maintenance LED lights are being used for the first time on an interstate bridge, and on the aesthetic lighting. Mn/DOT is working with the US Department of Energy on this initiative to set an example for reducing outdoor lighting costs. In addition, curved gateway sculptures at each end of the bridge were cast using a



Sidewalk Talks on Saturday mornings from the sidewalk of a parallel bridge kept the community involved and informed during construction.



Opened to traffic September 18, 2008. Designed and built with community involvement and CSS in 11 months.

new concrete that removes pollutants from the air and is self-cleaning. Additional recycled materials, methods for improving water quality and energy saving techniques were also used.

The community involvement program also included extensive communication, outreach and education efforts to help restore confidence. Each Saturday morning, a member of the project team led "Sidewalk Talks" to share information with the community about construction progress and to provide a birds' eye view of construction. Eighteen hundred students participated in "Casting the Future," an educational program designed to teach students about construction and the importance of sustainability. Students also created a glass mosaic tile with recycled glass that was installed as part of the bridge project.

Looking forward, the new I-35W Bridge was designed to be flexible to accommodate the changing transportation demands over its 100 year life. The bridge is transit ready with expansion space for light rail, bus or HOV lanes. It is also designed for the load of a future pedestrian bridge to be suspended from the underside of the new bridge connecting future and existing trails on either side of the river.

For more information:

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Illinois Department of Transportation
Elgin O'Hare – West Bypass
Cook and DuPage Counties, Illinois

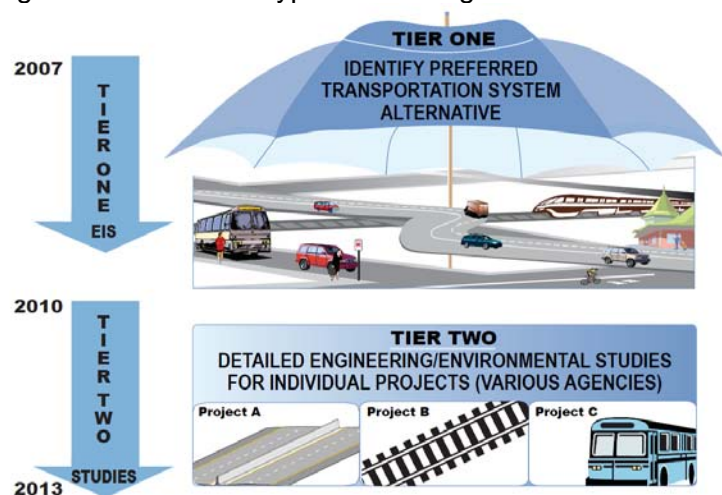
The EO-WB study began with a blank canvas and concluded with stakeholder consensus of a multi-modal transportation plan. The urban study area is immediately west of O'Hare International Airport, covers 27 communities, two counties, and 127 square miles. It is an environment of numerous planning, community, and engineering challenges where no single mode of transportation by itself was going to be the complete solution. What ultimately emerged from the process over 30 miles of freeway type facilities, over 30 miles of arterial improvements, transit elements that range from bus to rail, and completing missing links of bicycle and pedestrian facilities. Although good basic transportation planning principals were established at the onset to guide this process, it was quickly apparent that the study team would be challenged by many changing conditions, requiring swift and flexible management of the process. Among the challenges were:

- An area with a tremendous travel demand – 18 percent of all trips in the region
- An area with dense land use – second largest employment center in the state
- Community tensions attributed to airport expansion at O'Hare Airport
- No identifiable solution at the beginning of the study process
- Multiple transportation providers that could possibly have a stake in the final solution
- Design solutions complicated by major rail facilities, O'Hare Airport, and commercial and industrial development

Ultimately, the project team succeeded in working through these many challenges with an innovative planning process that addressed complex issues, using a context sensitive solutions based public involvement process, and using performance metrics that resonated with stakeholders.

Innovation The type of planning process applied to this study was central to its success. A tiered EIS process (first for a highway project in Illinois) was used for the study with the goal of developing a transportation planning decision for the area that could be supported by the stakeholders in Tier One. This process was well suited to an area anxious for solutions to their problems. Once the type and location of improvements were defined in Tier One, the process could then focus on the details of the Preferred Alternative in Tier Two (see Exhibit 1).

EXHIBIT 1
Elgin O'Hare - West Bypass Planning Process



Context Sensitive Solutions

Consensus was built one block at a time. A variety of forums and techniques were used to gain stakeholder input and consensus. Over the course of Tier One over 130 meetings were held with project stakeholders involving them in every aspect of the process from identifying travel issues and

problems, sensitive community resources that should be avoided, community values, project purpose and need, identification of alternatives, measures to evaluate alternatives, and input to the Preferred Alternative. A disciplined engagement of numerous stakeholder interests is hard work and exemplifies the full intent of Context Sensitive Solutions, because with stakeholder involvement the final solution provided the transportation service and performance that they were seeking while preserving those community values and resources that they prized most. The process worked so well, that one community took on the task of making their opinions known with over 900 people attending Public Meeting #3, and submitting more than 30,000 comments stating a preference for a particular alternative.

Complexity The study area is rich with complex engineering issues including its proximity to O'Hare Airport, major railroad facilities, and regional flood control reservoirs. Extensive coordination was conducted to avoid air space violations at O'Hare, short-term and long-term operational issues for the freight and commuter rail service, and maintenance and operational issues for the flood control reservoirs. Further coordination with O'Hare Airport was also conducted to make certain that the EO-WB project would be compatible with the advancing construction of the O'Hare Modernization Program.

Performance The Preferred Alternative emerging from the process achieves marked increases in travel performance. A measure of regional travel efficiency showed an improvement of 10% where more cars are managed more efficiently on the system. The Preferred Alternative also reduces congestion on the system during peak travel periods by 15% achieving notable reduction in congestion on secondary roads and maintaining longer trips on major roads. The average speed of travel will improve with an overall gain in speed of 8% on principal arterials and travel time improvements from the west to O'Hare of up to 49%. Improvements in accessibility were also measured and more trips (>50%) will be closer to a freeway connection. Lastly, the proposed transit improvements would increase the number of transit trips by 37% or almost 30,000 trips a day. Of equal importance is another measure of performance – job creation. Using an econometric model, the project team estimates that over 20,000 short term jobs will be created by the construction of the project and 60,000 long term jobs will be created by the improved access to the study area.

In summer of 2010, the ROD for Tier One will be complete and preparations are now underway to begin Tier Two. In keeping with the theme of the EO-WB planning process, Tier Two will address the issues that are now ripe for consideration, which include the detailed engineering layout, environmental mitigation requirements, construction sequencing, and financing strategies. Tier Two will be largely completed by the end of 2012 and will set the stage for the preparation of the final design and construction documents. The actual implementation of the project, like the planning process, will likely bring together diverse funding organizations that may further brand the uniqueness of this project.

Appendix E: Regional Workshop Agendas

Sign in		8:30 – 9:00 AM
Welcome, Introductions, Orientation	Ann Hartell & James Martin, Center for Transportation and the Environment Jan Weingart Brown, FHWA Texas Division	9:00 AM
CSS Update	David Carlson, Federal Highway Administration	
Case Study #1: Main Street, Duncanville, TX	Scott Polikov, Gateway Planning Group Andrew Howard, Kimley-Horn Associates Kent Cagle, City of Duncanville	
Break		10:15 AM
Case Study #2: Central Texas Greenprint for Growth	Sean Moran, Capital Area Council of Governments Sally Campbell, Envision Central Texas	10:30 AM
Case Study #3: I-15 Blue Diamond Interchange and Nevada's Landscape and Aesthetics Plan	Lucy Joyce, Nevada Dept. of Transportation Steve Noll, Design Workshop	
Lunch (on your own)		Noon
Case Study #4: Austin Accessibility Assessment Improvement (AAAIM)	Sheila Holbrook-White, Texas Citizen Fund Lee Austin, City of Austin Transportation Department Roberto Gonzalez, Metropolitan Transportation Authority Glenn Gadbois, Gadbois Consulting	1:00 PM
Next Steps in Our Region	Kirk Fauver, FHWA, Texas Division Jonathan Bean, TxDOT San Antonio District Peter Marsh, Austin Transportation Department Moderator: Brian Bochner, University Transportation Center for Mobility, Texas Transportation Institute	
Interactive Discussion	All	
Break		2:45 PM
Interactive Discussion	All	3:00 PM
Workshop Wrap Up	David Carlson, Federal Highway Administration James Martin, Center for Transportation and the Environment	
End		4:30 PM

Thanks to today's sponsors!

Facilities provided by: Texas Department of Transportation

On-site coordination provided by: Brian Bochner, University Transportation Center for Mobility, TTI

Staff support and funding provided by: Federal Highway Administration & Center for Transportation and the Environment @ North Carolina State University



Visit: www.cssnationaldialog.org

Sign in

8:30 – 9:00 AM

Session A:

9:00 AM

Welcome, Introductions, Orientation

Ann Hartell & James Martin, Center for Transportation and the Environment
 Phil Ditzler, FHWA Oregon Division

CSS Update

David Carlson, Federal Highway Administration

Case Study #1:

Slopes IV: Streamlined Permitting
 State of Oregon

Hal Gard, Oregon Department of Transportation
 Paul Wirfs, Oregon Department of Transportation

Break

10:15 AM

Session B:

Case Study #2:
 Skyway Corridor Study
 Paradise, California

Steve Weinberger, Whitlock & Weinberger Transportation, Inc.

10:30 AM

Case Study #3:

I-405 Master Plan
 Seattle Region, Washington

Brian Elrod, HNTB
 Stacy Trussler, Washington Department of Transportation

Lunch

Noon

Session C:

Case Study #4:
 High Point Avenue Redevelopment
 West Seattle, Washington

Peg Staeheli, SvR Design

1:00 PM

What's Next in Our Region?

Lamar Smith, FHWA Resource Center, Lakewood, CO
 Gail Achterman, Oregon State University and Oregon Transportation Commission
 Lynn Peterson, Clackamas County Board of Commissioners
 Tom Kloster, Metro
 Moderator: Jim Daisa, Kimley-Horn

What's Next for Transportation Agencies?

All

Break

2:45 PM

Session D:

What's Next for Transportation Practitioners
 and Policy Makers?

All

3:00 PM

What's Next for the National Dialog?

David Carlson, Federal Highway Administration
 James Martin, Center for Transportation and the Environment

End

4:30 PM

Thanks to today's sponsors!

Facilities provided by: Portland State University & Oregon Transportation Research and Education Consortium

On-site coordination provided by: Jon Makler, Portland State University

Staff support by the Federal Highway Administration & Center for Transportation and the Environment @ North Carolina State University. This workshop has been funded by the Federal Highway Administration's Office of Planning, Environment and Realty's Surface Transportation Environment and Planning Cooperative Research Program (STEP).



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Sign in		8:30 – 9:00 AM
Session A: Welcome, Introductions, Orientation	Ann Hartell & James Martin, Center for Transportation and the Environment	9:00 AM
CSS Update	David Carlson, Sustainable Transport and Climate Change Team, Federal Highway Administration	
Case Study #1: Tennessee Department of Transportation CSS Training Program State of Tennessee	Julie Lamb, CSS Coordinator, Division of Environment and Planning, Tennessee Department of Transportation Doug Delaney, Assistant Chief of Environment and Planning, Tennessee Department of Transportation	
Break		10:15 AM
Session B: Case Study #2: Skycrest Traffic Calming Project Clearwater, Florida	Ken Sides, Senior Professional Engineer, City of Clearwater	10:30 AM
Case Study #3: MD 924 in Bel Air Bel Air, Maryland	Dennis German, Chief, Community Design, Maryland State Highway Administration	
Lunch		Noon
Session C: Case Study #4: Urban Street Design Guidelines Charlotte, North Carolina	Norm Steinman, Planning and Design Division Manager, Charlotte Department of Transportation	1:00 PM
What's Next in Our Region?	Karen Brunelle, Acting Assistant Division Administrator, Tennessee Division, Federal Highway Administration Jim Westmoreland, Deputy Secretary for Transit, North Carolina Department of Transportation Scott Lane, Director of Planning, Louis Berger Group Moderator: Gabe Rousseau, Bicycle and Pedestrian Program Manager, Federal Highway Administration	
What's Next for Transportation Agencies?	All	
Break		2:45 PM
Session D: What's Next for Transportation Practitioners and Policy Makers?	All	3:00 PM
What's Next for the National Dialog?	David Carlson James Martin	
End		4:00 PM

Thanks to today's sponsors!

Facilities provided by: City of Charlotte

Staff support by the Federal Highway Administration & Center for Transportation and the Environment @ North Carolina State University. This workshop has been funded by the Federal Highway Administration's Office of Planning, Environment and Realty's Surface Transportation Environment and Planning Cooperative Research Program (STEP).



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Sign in

8:30 – 9:00 AM

Session A:		9:00 AM
Welcome, Introductions, Orientation	Ann Hartell & James Martin, Center for Transportation and the Environment	
CSS Update	David Carlson, Federal Highway Administration	
Case Study #1: MassDOT Project Development and Design Guide Commonwealth of Massachusetts	Thomas A. DiPaolo, Assistant Chief Engineer, MassDOT – Highway Division	
Break		10:15 AM
Session B:		10:30 AM
Case Study #2: Route 18 New Brunswick, NJ	Pamela Garrett, Environmental Project Manager, Division of Environmental Resources, NJDOT	
Case Study #3: World Trade Center Memorial Pedestrian Simulation Modeling Study New York City, NY	Michael F. Monteleone, Manager of Transportation Planning, The Louis Berger Group, Inc.	
Lunch		Noon
Session C:		1:00 PM
Case Study #4: Smart Transportation Commonwealth of Pennsylvania	Brian Hare, Chief, Design Services Division, PennDOT	
What's Next in Our Region?	Tony Davis, Manager, Project Development Support Division of Project Development, NJDOT Barry Seymour, Executive Director, Delaware Valley Regional Planning Commission (PA) Andrew Wiley-Schwartz, Office of Long Term Planning and Sustainability, New York City DOT Louise Wilson, Committeewoman, Montgomery Township, NJ Moderator: Robert Noland, Director, Alan M Voorhees Transportation Center, Rutgers University	
What's Next for Transportation Agencies?	All	
Break		3:00 PM
Session D:		3:15 PM
What's Next for Transportation Practitioners and Policy Makers?	All	
What's Next for the National Dialog?	David Carlson, Federal Highway Administration James Martin, Center for Transportation and the Environment	
End		4:00 PM

Thanks to today's sponsors!

Facilities provided by: the NJ Local Technical Assistance Program (NJLTAP), the Center for Advanced Infrastructure and Transportation (CAIT) and Rutgers University
 On-site support from Janet Leli

Staff support by the Federal Highway Administration & Center for Transportation and the Environment @ North Carolina State University. This workshop has been funded by the Federal Highway Administration's Office of Planning, Environment and Realty's Surface Transportation Environment and Planning Cooperative Research Program (STEP).



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Sign in		8:30 – 9:00 AM
Session A: Welcome, Introductions, Orientation	Ann Hartell & James Martin, Center for Transportation and the Environment	9:00 AM
CSS Update	David Carlson, Office of Natural and Human Environment, Sustainable Transport & Climate Change Team, Federal Highway Administration	
Case Study #1: Elgin O'Hare-West Bypass Elgin-Chicago Region, IL	Peter E. Harmet, Bureau Chief of Programming, Illinois DOT	
Break		
Session B: Case Study #2: Accelerate I-465 Indianapolis, IN	Mark Salzman, Transportation Landscape Architect, HNTB Corp. Craig Churchward, Transportation Landscape Architect, HNTB Corp.	10:30 AM
Case Study #3: Guidelines for Stakeholder Engagement State of Michigan	Bradley P. Peterson, Landscape Architect/CSS Coordinator, Roadside Development, Michigan DOT	
Lunch		Noon
Session C: Case Study #4: I-35W St Anthony Bridge Reconstruction Minneapolis, MN	Jon Chiglo, Director, Office of Technical Support, State Design Engineer, Minnesota DOT Linda Figg, President/CEO, FIGG	1:00 PM
What's Next in Our Region?	Scott Bradley, Director of CSS, Minnesota DOT Ethan Fawley, Transportation Connections Coordinator, Fresh Energy David Leopold, Project Manager, Streetscape and Sustainable Design Program, Chicago Department of Transportation David J. Scott, Assistant Division Administrator, FHWA - Minnesota Division Moderator: Clark Wilson, Senior Urban Designer, US EPA Smart Growth Program	
What's Next for Transportation Agencies?	All	
Break		
Session D: What's Next for Transportation Practitioners and Policy Makers?	All	3:15 PM
What's Next for the National Dialog?	David Carlson, Federal Highway Administration James Martin, Center for Transportation and the Environment	
End		4:00 PM

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Facilities provided by: University of Minnesota. On-site support from Minnesota Department of Transportation.
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Appendix F: National Webcast Agenda

**CTE**

The Center for Transportation and the Environment
North Carolina State University

WEBCAST PROGRAM AGENDA

The Context Sensitive Solutions National Dialog: Continuing the Conversation
Wednesday, August 11, 2010, 1:00 PM – 3:00 PM Eastern Time

Login at: www.cssnationaldialog.org/webcast/login.asp

TIME	SEGMENT	PRESENTER
12:30 PM ET	Webcast Test Period for Participant Login	
1:00 – 1:05	Welcome and Introduction of Panelists	Fran Wescott, NCAPT Shari Schaftlein, FHWA
1:05 – 1:15	Overview of CSS National Dialog	Shari Schaftlein
1:15 – 1:30	Urban Street Design Guidelines Charlotte, NC	Norm Steinman, City of Charlotte
1:30 – 1:45	High Point Redevelopment West Seattle, WA	Robert Parish, SvR Design Co.
1:45 – 1:55	Q&A Discussion with Webcast Participants	All Panelists
1:55 – 2:05	Break	
2:05 – 2:10	Welcome and Re-Introduction of Panelists	Shari Schaftlein
2:10 – 2:25	MassDOT Project Development and Design Guide Commonwealth of Massachusetts	Thomas DiPaolo, MassDOT
2:25 – 2:50	Q&A Discussion with Webcast Participants	Shari Schaftlein, Norm Steinman, Robert Parish, Thomas DiPaolo, Andrew Wiley-Schwartz, NYC DOT Rod Vaughn, FHWA
2:50 – 2:55	Upcoming Events, Reference Materials, and Opportunities to Participate in the CSS National Dialog	Shari Schaftlein
2:55 – 3:00	Closing Remarks, Thanks and Program Credits	Shari Schaftlein Fran Wescott
3:00 PM ET	Webcast Adjourns	

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