CSS has been implemented in every setting from the most rural to the most urban environments. As the following case examples highlight, CSS can deliver successful outcomes at the project, program, and policy levels.

**RURAL**
New Mexico DOT used CSS to fully involve the community in ensuring that NM 14, Turquoise Trail, a 2-lane major collector that provides access to several developing communities, minimized visual impacts, and maintained the rural nature of the area while meeting transportation needs.

[http://www.transportationrural.org/page/energy/sustainability](http://www.transportationrural.org/page/energy/sustainability)

Montana DOT is applying CSS concepts in Missoula, Montana to retrofit an auto-oriented, high-speed roadway to a Main Street that supports livability and downtown commerce.


**SUBURBAN**
An effort led by the Washington State Transportation Improvement Board, with support from FHWA, worked to convert Bridgeport Way in University Place, Washington from a suburban arterial to a corridor sensitive to local and multimodal contexts.


In Montgomery and Bucks Counties, Pennsylvania DOT converted Route 202, a four-lane, high-speed roadway to a two-lane parkway blended into its context with design speeds of 35 mph.

[https://www.fhwa.dot.gov/planning/case/studies/bridgeport](https://www.fhwa.dot.gov/planning/case/studies/bridgeport)

**URBAN**
New Jersey DOT revamped the Route 42/College Drive interchange from a major high-speed freeway to a low-impact, low-level design that created the setting for multimodal transportation and smart growth.


Maryland Transit Administration used extensive, creative engagement strategies to collaborate with communities to develop improvements to the West Baltimore MARC station, including station upgrades, enhanced parking, neighborhood pedestrian and bicycle connections, community gardens, and interactive public art projects.

[http://www.wbmarcproject.com](http://www.wbmarcproject.com)

**ORGANIZATIONAL**
Pennsylvania and New Jersey DOTs partnered to develop the Smart Transportation Guide, applying CSS principles to the planning, design, and engagement of projects to achieve broad measures well beyond traditional transportation performance metrics.

Using CSS and Smart Transportation principles as a foundation since 2013, California DOT and Caltrans, has been reinventing itself via the Caltrans Improvement Project. This remarkable change was described at a public forum by its Director of Design:

“We have to begin building communities through transportation, instead of transportation through communities.”


**WHAT IS CSS?**
Context Sensitive Solutions (CSS) is a dynamic and effective approach to deliver transportation systems and facilities that enhance community, environmental, and economic resources. CSS allows agencies to proactively address today’s transportation challenges, respond to evolving progress needs, and mobilize informed future needs.

A CSS approach leverages collaborative decision-making and partnerships; enhances creativity, flexibility, and innovation; increases transparency and inclusiveness; promotes interdisciplinary team work; and supports accountability in addressing transportation needs in a manner that recognizes each community’s unique natural and human settings. A multi-disciplinary team of professionals works collaboratively with community members, elected officials, social, environmental and economic resource agencies, and other stakeholders to develop solutions to address the transportation need.

The foundation of CSS, as represented in the term “context,” is understanding all aspects of the place in which a transportation need exists and their developing solutions to address the problem through involvement of a full range of stakeholders. Using the CSS process, agencies are able to deliver place-based solutions that help solve transportation problems, support community quality-of-life goals, and optimize use of transportation agency resources.

**BEENEFITS OF CSS**

**FOR TRANSPORTATION AGENCIES**
Solves transportation problems effectively and efficiently

- Increases stakeholder participation and satisfaction
- Improves safety and mobility for all users
- Addresses full transportation life cycle

**FOR ALL STAKEHOLDERS**
- Shares responsibility for solutions and funding
- Expands multimodal options (including transit)
- Enhances decision-making
- Demonstrates due diligence
- Builds projects that sustain communities and resources

**CSS TODAY**
CSS emerged in the 1990s as an approach to getting transportation projects built in a responsive, timely, cost-effective, contextually-based, and environmentally sound manner. Today CSS continues to serve as an effective tool as agencies work to plan, build, and retrofit transportation projects. The Federal Highway Administration (FHWA) is working to leverage successful programs and projects and assist states and local agencies in incorporating CSS as a core program delivery tool to meet today’s transportation challenges and to integrate a host of federal, state, and local programs and initiatives. The timeline above and below on the bottom pages throughout this brochure highlights many of the key milestones and resources in the history of CSS.
A host of transportation programs and activities are related to CSS and can benefit from its application. CSS can be integrated within all phases of multimodal project development and delivery including planning, environmental review, design, construction, evaluation, maintenance, and operations. Several strategic programs and activities that are supported by the CSS process are shown below. Links to FHWA program pages are provided to learn more about each topic area.

**NEPA**
The National Environmental Policy Act (NEPA) requires agencies to examine and address social, economic, and environmental impacts and integrate public input into decision-making for federal actions. The CSS process inherently complements and enhances the delivery of the NEPA process in various ways. Implementing CSS during NEPA helps project teams better understand area communities and the affected environment, identify community needs and concerns, and develop solutions appropriate for the areas affected by an action. Enhancing stakeholder input throughout the NEPA process has helped to significantly improve the quality of draft NEPA documents and enable more informed decisions on projects.

**LIVABILITY**
Livability is defined within the context of transportation as linking transportation facilities and services to quality of life. These environments include job access, housing availability and affordability, schools, mobility options, and transportation safety. Under the livability initiative, USDOT provides technical tools and resources and works with other federal agencies through the HUD DOT-EPA and EPA Partnership for Sustainable Communities to coordinate housing, transportation, water, and other infrastructure programs. The FHWA Livability Initiative works with state and local transportation agencies to help them develop and leverage flexibilities in planning and design to enhance the development and delivery of project solutions, from alternatives and avoidance strategies to mitigation and enhancement.


**DESIGN FLEXIBILITY**
A CSS approach engages those with an interest, that is stakeholders, in defining transportation needs and implementing solutions. Stakeholders can include agencies, organizations, and individuals. The collective support among these stakeholders is paramount for design solutions to move forward. CSS engages stakeholders in a collaborative and continuous process from identifying planning or project needs and issues through setting goals and objectives to developing alternative project concepts or project alternatives. This collaboration helps identify issues and generate solutions early in the process. Improvements in available mapping, visualization, multimedia, and other tools (such as FHWA’s Flashlights to support stakeholder collaboration), along with social media technologies, allow agencies to make engineering concepts and the planning process accessible and leverage resources to facilitate input from busy stakeholders. By providing feedback on stakeholder input and decision-making, a CSS program builds ongoing relationships between the agency and the public.

http://contextualdesignsolutions.org/content/topics/process/involving-stakeholders

**PERFORMANCE-BASED PRACTICAL DESIGN**
Performance-Based Practical Design (PBPD) is an approach to transportation design that focuses closely on core project purpose and need, while balancing project objectives with system-wide performance. PBPD involves an approach to define in a performance management framework. PBPD projects respond to community and environmental goals, while supporting safety and mobility objectives. Under PBPD, designers utilize objective data analysis to support and validate flexible design decisions. Agencies use this flexibility in design to develop projects based on existing conditions and project needs, achieving cost savings that can be then applied to other projects. Factors such as contextual sensitivity, livability, and sustainability are internalized through performance management metrics. Solutions are cost effective yet sensitive to all contexts yielding a high return on investment.

https://www.fhwa.dot.gov/design/pbpd

**SUSTAINABILITY**
Sustainable transportation projects satisfy fundamental transportation requirements from conception to completion, through maintenance and operation, as well as improving the natural, built, and social environments. These projects support human and economic needs, grow local economies, and provide access to all users, are affordable, efficient and equitable, and limit the use of available resources. CSS provides a process by which transportation professionals and stakeholders can develop and deliver sustainable outcomes. The CSS process focuses on defining context, incorporating community goals and needs, preserving environmental features, achieving efficient use of resources, and adding value to the built and social fabric. The CSS process is an approach to solving transportation challenges by using a collaborative process where sensitivity to the context of a project and fulfillment of needed transportation functions are both required to achieve excellence in transportation planning, project development, design, and delivery. The process helps fulfill the environmental justice principles by considering the needs of all stakeholders, meaningfully engaging all stakeholders, addressing the unique context of each community, and delivering projects that strengthen communities.

http://www.fhwa.dot.gov/environment/environmental_justice

**ENVIRONMENTAL JUSTICE**
Executive Order 13898 on Environmental Justice outlines three main principles for agencies taking federal actions including: avoiding, avoiding, and minimising or mitigating disproportionately high and adverse human health and environmental effects (including social and economic effects), ensuring full and fair participation by all potentially affected communities in decision-making; and preventing the denial of, reduction in, or delay in the receipt of benefits for minority and low-income communities, where sensitivity to the context of a project and fulfillment of needed transportation functions are both required to achieve excellence in transportation planning, project development, design, and delivery. The process helps fulfill the environmental justice principles by considering the needs of all stakeholders, meaningfully engaging all stakeholders, addressing the unique context of each community, and delivering projects that strengthen communities.

https://www.environment.fhwa.dot.gov/justice

**ENVIRONMENTAL MEASURES**
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