

PD-03: Context Sensitive Project Development

1-10 points

Goal: Deliver projects that harmonize transportation requirements and community values through effective decision-making and thoughtful design.

Sustainability Linkage

Implementing Context Sensitive Solutions supports all of the triple bottom line sustainability principles by ensuring that environmental resources, community values, and economic context of a project are all considered during project development.



Background and Scoring Requirements

Background

Context Sensitive Solutions (CSS) is incorporated in both a project development and public involvement process and the outcomes of using that process in design (per FHWA's [Context Sensitive Solutions website](#)¹). The outcomes are referred to as Context Sensitive Design (CSD) in this document.

Definitions

For the purposes of this criterion, the key terms are defined as follows:

- **“Context Sensitive Solutions (CSS)”** is defined as a collaborative, interdisciplinary approach that involves all stakeholders to provide a transportation facility that fits its setting. It is an approach that leads to preserving and enhancing scenic, aesthetic, historic, community, and environmental resources, while improving or maintaining safety, mobility, and infrastructure conditions. Some of the key principles of a CSS process are that it:
 - Engages stakeholders (not just involves them),
 - Embraces a multimodal approach (this is not mentioned anywhere in the article and is key to CSS/CSD),
 - Serves and respects the environmental and social context of the transportation network, and
 - Applies to all of the activities of the transportation agency.

The FHWA office of Office of Project Development & Environmental Review develops and implements programs and activities that advance environmental stewardship and streamlining for FHWA-funded projects, through the application of National Environmental Policy Act (NEPA) principles and the NEPA process. CSS/D is a part of those principles and processes.

- **Context Sensitive Design (CSD)”** is a model for transportation project development. Proposed transportation projects must be planned not only for its physical aspects as a facility serving specific transportation objectives, but also for their effects on the aesthetic, social, economic and environmental values, needs, constraints and opportunities in a larger community setting. Projects designed using this model:
 - Are in harmony with the community and preserve the environmental, scenic, aesthetic, historic, and natural resource values of the area.
 - Are safe for all users.
 - Solve problems that are agreed upon by a full range of stakeholders.

- Meet or exceed the expectations of both designers and stakeholders, thereby adding lasting value to the community, the environment, and the transportation system.
- Demonstrate effective and efficient use of resources (people, time, budget,) among all parties.
- **“Context Sensitive Project Development”** in this document, refers to the development of a project, from planning through design using the process of CSS and resulting in CSD outcomes. The FHWA NEPA project development process is an approach to balanced transportation decision-making that takes into account the potential impacts on the human and natural environment and the public’s need for safe and efficient transportation. The use of CSS with a CSD outcome can be an integral part of this process.
- **“Objectionable views”** are defined as views from the project that are unpleasant or offensive and that arouse distaste or opposition from the community. These views should be defined through a CSS process by community stakeholders.

Relationship with Other Criteria

Several key outcomes of a CSD process are covered in other criteria and are not repeated here. Please refer to the following criteria in addition to PD-03:

- PD-07: Habitat Restoration
- PD-09: Ecological Connectivity
- PD-10: Pedestrian Facilities
- PD-11: Bicycle Facilities
- PD-12: Transit and HOV Facilities
- PD- 15: Historic, Archeological, and Cultural Preservation
- PD-16: Scenic, Natural, or Recreational Qualities
- PD-18: Site Vegetation, Maintenance and Irrigation
- PD-32: Light Pollution
- PD-33: Noise Abatement

Scoring Requirements

Requirement PD-03.1

2 points. Six Step Process for CSS-based Project Development

Evidence exists that the following principles of CSS were applied in the project development process through a formal CSS program or equivalent process that accomplishes the same principles. A public involvement process does not necessarily meet this criterion unless the public and other stakeholders are engaged in two-way communications that ultimately influence the vision and design of the project. For smaller projects that typically do not require involvement of many people, the six-step process defined below should be scaled accordingly.

A NEPA-based project development process generally follows the six-step CSS framework described in National Cooperative Highway Research Program (NCHRP) *Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions*² and *NCHRP Report 642: Quantifying the Benefits of Context Sensitive Solutions*³, or an equivalent process. *NCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions*² describes a general six-step process for incorporating CSS at a project level:

1. Develop a decision-making process and management structure;
2. Define the problem;
3. Develop the project and the evaluation framework for the project;
4. Determine alternatives;
5. Screen the alternatives; and
6. Evaluate and select an alternative.

Requirement PD-03.2

1 point. Deploy a Multi-disciplinary Team

Project Development features a “cradle-to-grave,” project team that includes planners, traffic engineers, public involvement specialists, design engineers, environmental experts, safety specialists, landscape architects, right-of-way staff, freight experts, construction engineers, and others to work on projects throughout project development and who work together to achieve the desired CSS-based vision for the project.

Requirement PD-03.3

1 point. Create Public “Champions”

As a result of CSS performed during the project development process, external “champions” for the project are created in the affected community who are engaged and proactive in supporting the project and who advocate for the project.

Requirement PD-03.4

1 point. Leverage Visualization Tools

Visualization techniques, ranging from project alternative renderings to photo-simulations, are used to assist in the decision regarding design choices.

Requirement PD-03.5

1 point. Design to the Scale of the Project

The appropriate scale of the project is considered and features that adjust the scale of the roadway to the context are incorporated, such as median islands, pedestrian refuge islands, curb bump-outs, bus pull-outs, or other similar features.

Requirement PD-03.6

1-2 points. Obstruct Objectionable or Distracting Views

Points are achieved by removing or obstructing objectionable or distracting views. This may be accomplished through the use of construction screening, vegetative screens, fences, or other similar means. Points shall be achieved per the Table PD-03.6.A. Points are **not** cumulative; rather the highest point value should be used.

TABLE PD-03.6.A. AVAILABLE POINTS FOR OBSTRUCTING OBJECTIONABLE OR DISTRACTING VIEWS

Requirement	No. Points	Requirement Description
PD-03.6a	1	Enhance Features. Obstruct objectionable views during construction.
PD-03.6b	2	Enhance Features. Obstruct objectionable views permanently.

Requirement PD-03.7

1 point. Incorporate Appropriate Context Design Features

Credit is achieved by integrating context sensitive aesthetic treatments, as determined by participating stakeholders, into the design of transportation facilities. Examples may include street furniture, signage, community identifiers, lighting, or appurtenances. Community murals identified as part of a roadway project by the local community that are incorporated into the project would also qualify.

Requirement PD-03.8

1 point. Bridge and Structural Element Aesthetics

Points are achieved if aesthetics for these structural items are incorporated into the design. Structural elements include bridges, sound walls, box culverts, large headwalls, guard rails, and retaining walls. Elements that should be considered when evaluating the structure's aesthetics include Visual Design Elements and Aesthetic Design Qualities. Visual Design Elements include: line, shape, form, color, and texture. Aesthetic Design Qualities include: order, proportion, rhythm, harmony, balance, contrast, scale, illusion, and unity.

Resources

Above-Referenced Resources

The following resources are referenced in this criterion and consolidated here:

1. FHWA, Context Sensitive Solutions website, <http://contextsensitivesolutions.org/>
2. NCHRP, Report 480: *A Guide to Best Practices for Achieving Context Sensitive Solutions* (2002), http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_480a.pdf
3. NCHRP, Report 642: *Quantifying the Benefits of Context Sensitive Solutions* (2009), http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_642.pdf

Additional Resources

The following resources provide information on this criterion topic in addition to the sources directly referenced:

4. FHWA, Environmental Review Toolkit website, <https://www.environment.fhwa.dot.gov/index.asp>

Scoring Sources

The project is considered to have met this criterion if the requirements above can be reasonably substantiated through the existence of one or more of the following documentation sources (or equal where not available):

1. Documentation of the CSS or equivalent process applied on the project.
2. Contract Documents.
3. Technical Memoranda and Reports.