

What is Context Sensitive Solutions?

Context sensitive solutions (CSS) is 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. CSS is an approach that considers the total context within which a transportation improvement project will exist.





The PRODUCT of Excellent Transportation Design:

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

The PRODUCT:

- The project exceeds the expectations of both designers and stakeholders, and achieves a level of excellence in people's minds.
- The project involves efficient and effective use of resources (time, budget, community) of all involved parties.
- The project is designed and built with minimal disruption to the community.
- The project is seen as having added lasting value to the community.

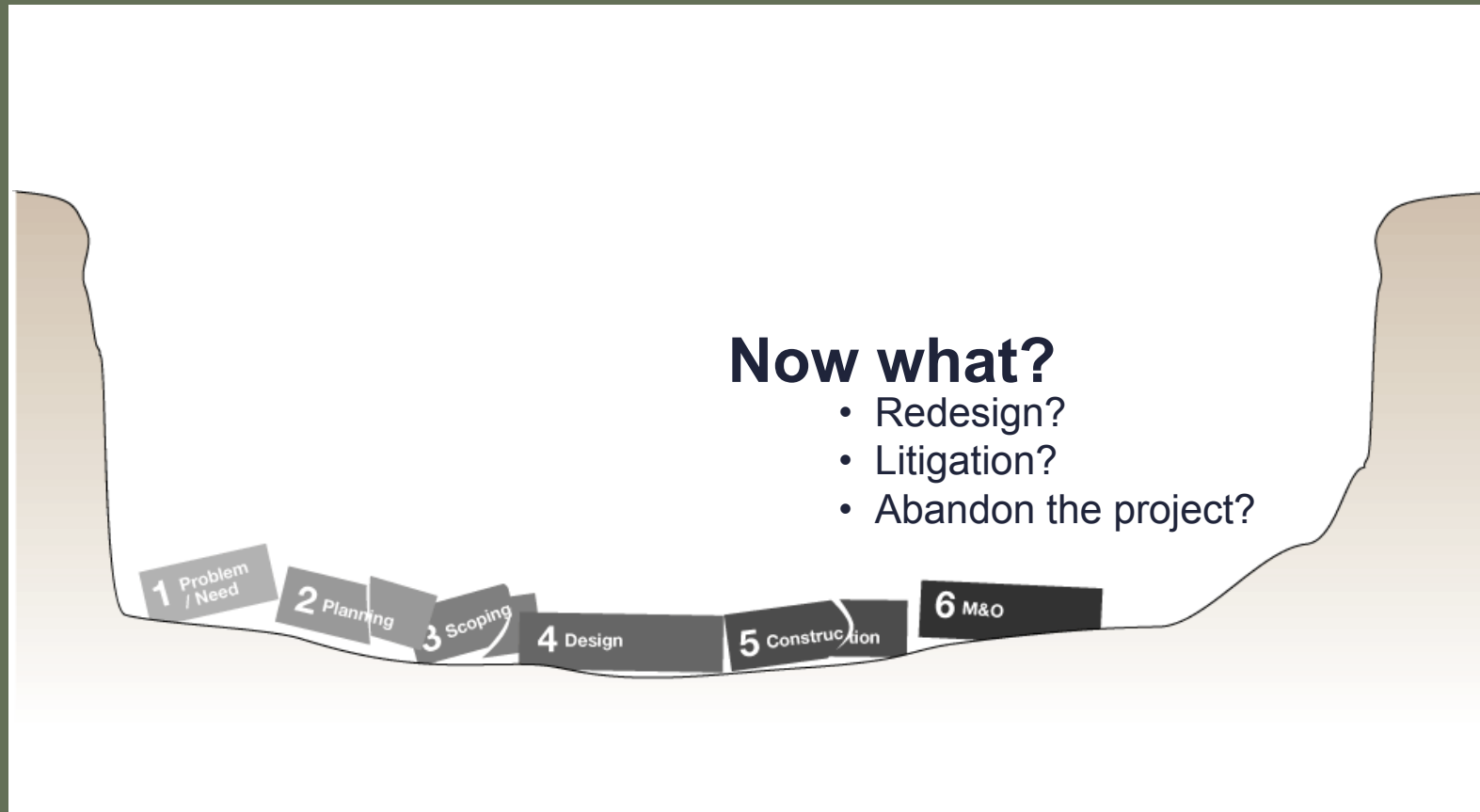
The PROCESS that Produces Excellence:

- Seek to understand the landscape, the community, and valued resources before beginning engineering design.
- Involve a full range of stakeholders with transportation officials in the scoping phase. Clearly define the purpose of the project and forge consensus on the scope before proceeding.
- Tailor the highway development process to the circumstances.
- Employ a process that examines multiple alternatives and that will result in consensus on approaches.

The PROCESS that Produces Excellence

- Secure commitment to the process from top agency officials and local leaders.
- Communication with all stakeholders is open and honest, early and continuous.
- Establish a multi-disciplinary team early with disciplines based on the needs of the specific project and include the public.
- Use a full range of tools for communication about project alternatives (e.g. visualization).

The Traditional Project Delivery Process



So...use a CSS Process

STEP 1: PROBLEM / NEED

- Identify transportation issue *
- Identify stakeholders
- Outreach & preliminary partnership-building



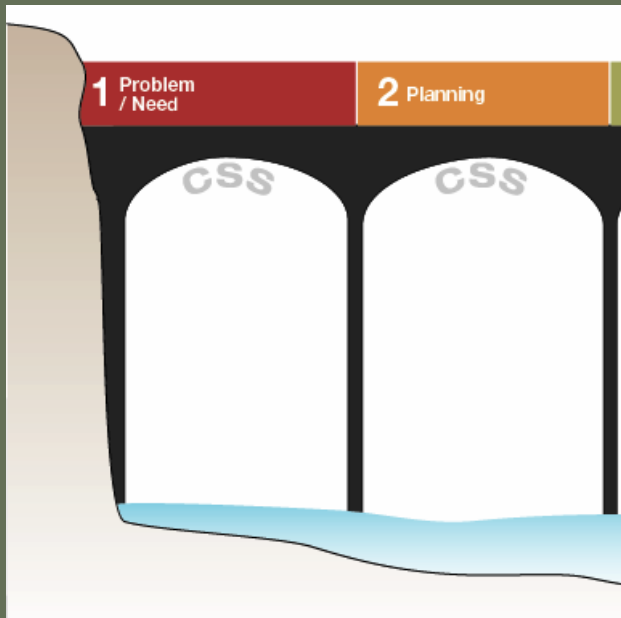
Products:

- * *stakeholder lists*
- * *preliminary lists of transportation issues*

Where Projects come from:

- RPC Long-range Plan
- DOT LRSTP
- Corridor Study
- Local Government Request
- Special Program
- Citizen Feedback through M & O

STEP 2: PLANNING

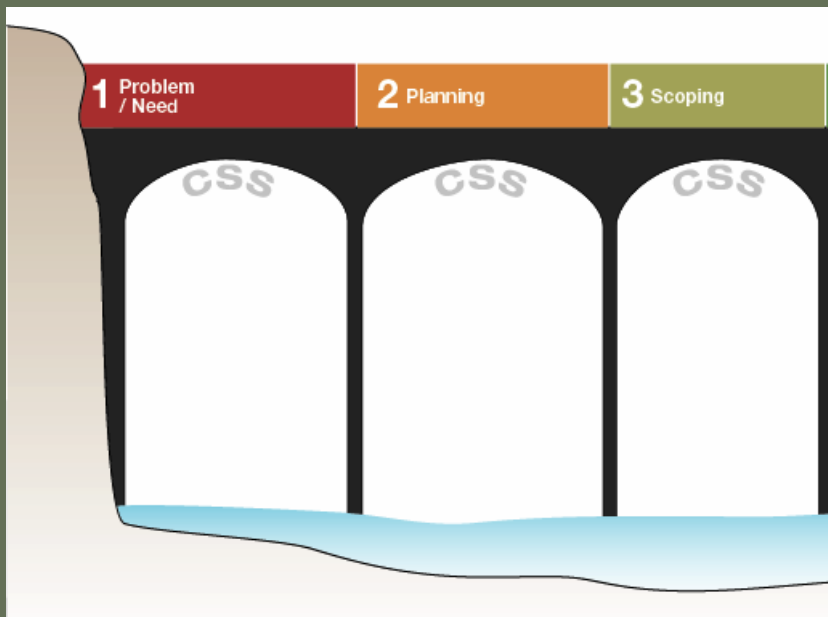


- * Identify the context
- Bring in resource agencies as stakeholders
- Establish a multi-disciplinary team
- Discuss and develop consensus on a decisionmaking process, including plans for public involvement
- Develop and create consensus around a problem statement that includes community and environmental components
- Develop consensus on a project vision
- Agree on project limits

Products:

- * *Process Contract*
- * *Problem Statement*
- * *Vision Statement*

STEP 3: SCOPING

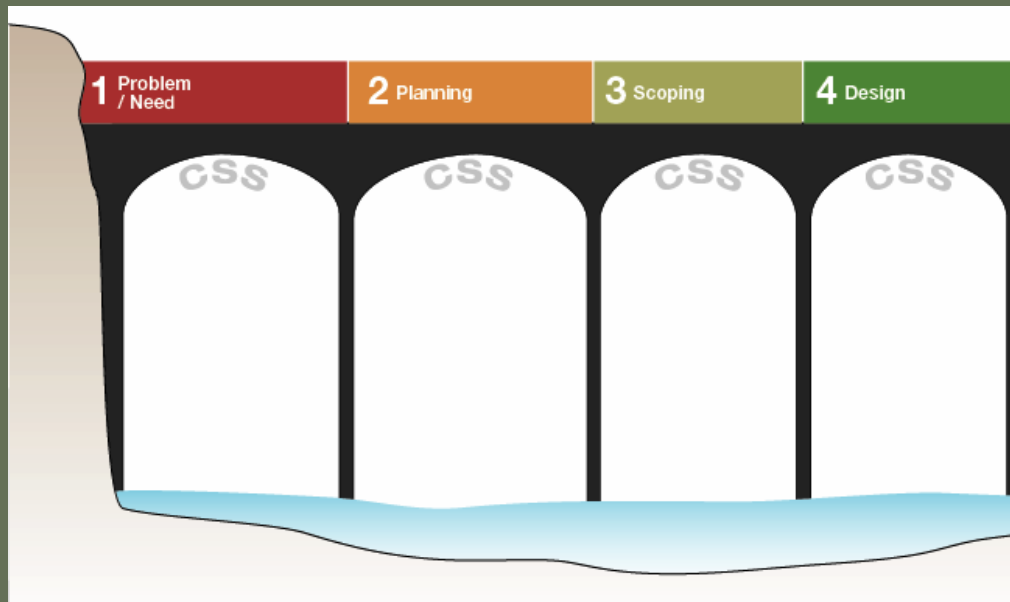


- Study the context
- Use the problem and vision statement to establish criteria for evaluating alternatives
- Establish a wide range of preliminary alternatives; narrow to a range of reasonable alternatives
- Document environmental effects on the reasonable range of alternatives
- Apply evaluation criteria to alternatives
- * Select the preferred alternative
- Spin off related community development projects

Products:

- * *Evaluation criteria*
- * *Reasonable range of alternatives*
- * *Preferred alternative*

STEP 4: DESIGN



- Create conceptual design(s)
- Experiment
- Secure official local approval
- Preliminary engineering of the preferred alternative
- Final design of selected solution
- Purchase ROW
- Negotiate community maintenance agreements
- Include in construction documents all agreements made during Planning, Scoping and Design
- Prepare bid package

Products:

- * *Approved conceptual design*
- * *Final Design*
- * *Bid Package*

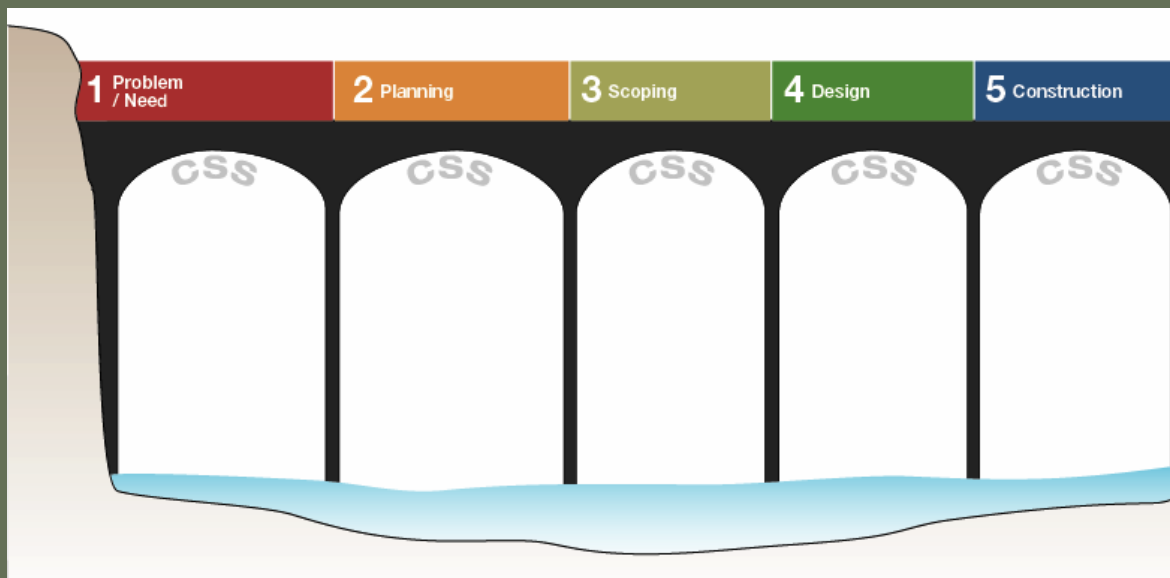
STEP 5: CONSTRUCTION

- Advertise & bid project
- Award contract
- MTP plan & schedule to minimize disruption to residents & businesses

- Perform construction
- Coordinate, communicate on change orders and design details
- Open project

Products:

** A completed project that addresses the problem and fulfills the vision*

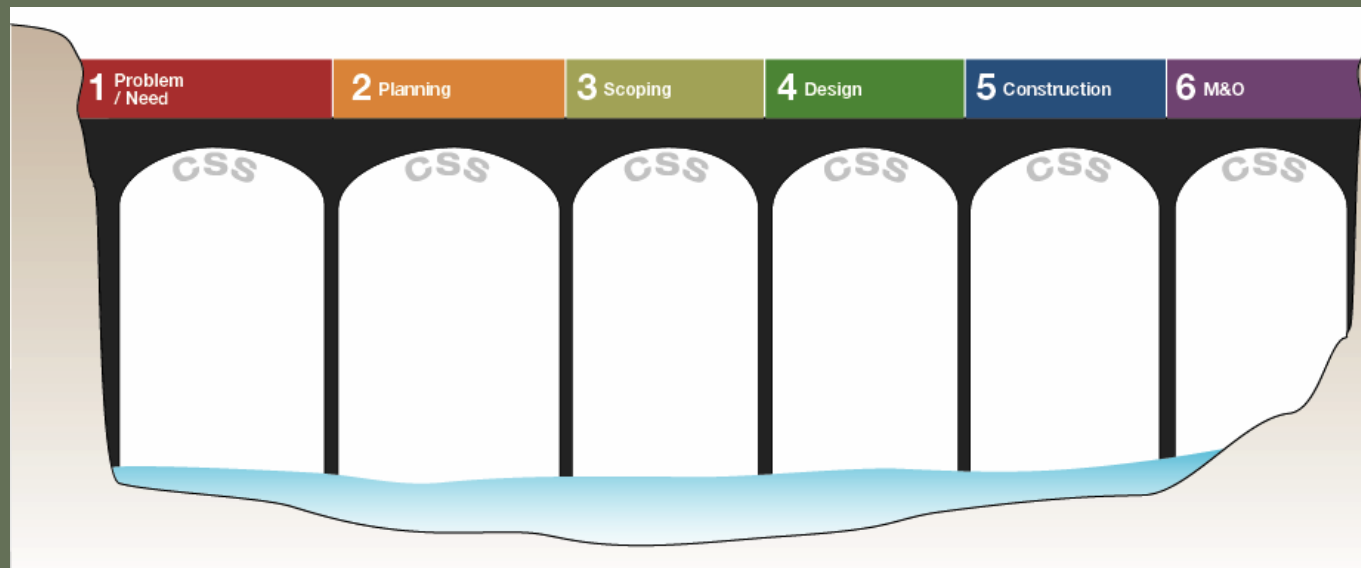


STEP 6: MAINTENANCE & OPERATIONS

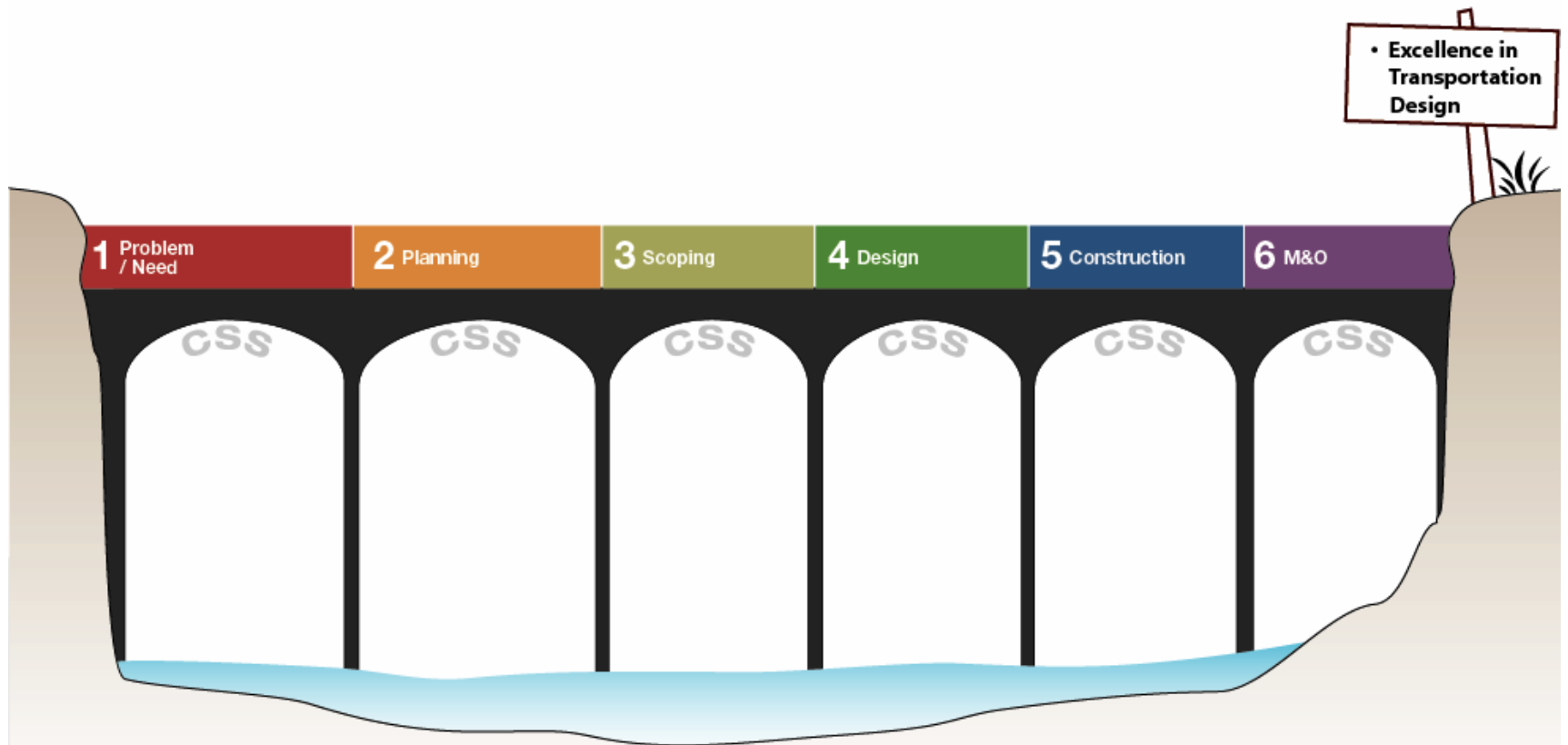
- Provide feedback
 - Make traffic adjustments
 - Maintain community partnerships
 - Monitor Negotiated maintenance agreements
 - Routine M & O activities
 - * Evaluate the project in terms of how well it solves the identified problem(s) and achieves the vision
- Capture lessons learned to improve the process
 - Provide input to new problems and needs identification

Products:

- * *Adjusted facility*
- * *Captured lessons*



Excellence in Transportation Design



NH DOT Public Involvement

“NHDOT’s goal is to foster a collaborative approach to our work which brings the public and other stakeholders into the planning and full project development process; which provides information, is responsive, and develops public support and confidence.”

*Carol Murray
NHDOT Commissioner*



The Value of Communications

- Working within a project team
- Working with consultants
- Working with members of the community
- Working with resource agencies

Respectful Communications



- Reaching out
- Working Together
- Anticipating needs and avoiding trouble

NHDOT Public Involvement Guidelines

1. Develop a PI Plan for all projects.
2. Tailor plan to the project and the community.
3. Address PI activities from project inception through maintenance.
4. Address plan to project team and the public.
5. Recognize public's roles, identify DOT decision points.
6. Solicit public involvement early; make stakeholder identification inclusive.
7. Go where the people are. Plan for informal meetings.
8. Maintain up to date mailing lists.
9. Use innovative tools and media to communicate.
10. Use incentives to encourage participation and interaction.

Listening

- Stop talking.
- Give full attention; wait to prepare response.
- Listen for emotional content.
- Ask clarifying questions.
- Focus on the main points.
- Summarize the speaker's main points in your own words to make sure you heard correctly.
- Make no assumptions.
- Recognize your own feelings, then put them aside.
- React to ideas, not to the person presenting them.
- Be aware of the speaker's body language.

Consensus

Consensus does not mean that everyone agrees, but that principal groups and individuals can live with a proposal.

What are the Problems & Needs?

- Seek input from project team, public officials, Advisory Planning Group, others.
- Seek consensus on problems and needs



What does a good problem statement look like?

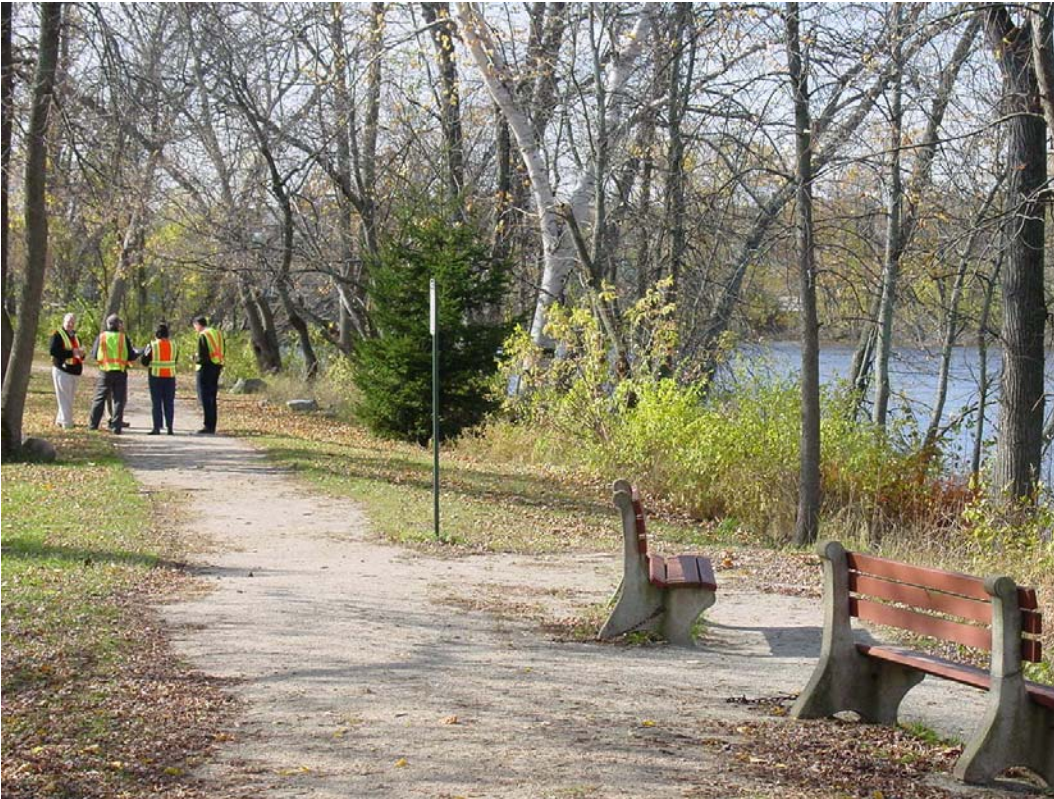
- It is stated in terms of underlying causes.
- It is linked to travel markets.
- It relates the transportation, community, and environmental components to one another.
- It reflects a customer focus.
- It does not include or pre-figure solutions.
- It is not mode specific.

Place Audit Sites - Identifying Problems and Needs





Context Sensitive Solutions: A Training Course for NHDOT Professionals & Their Partners



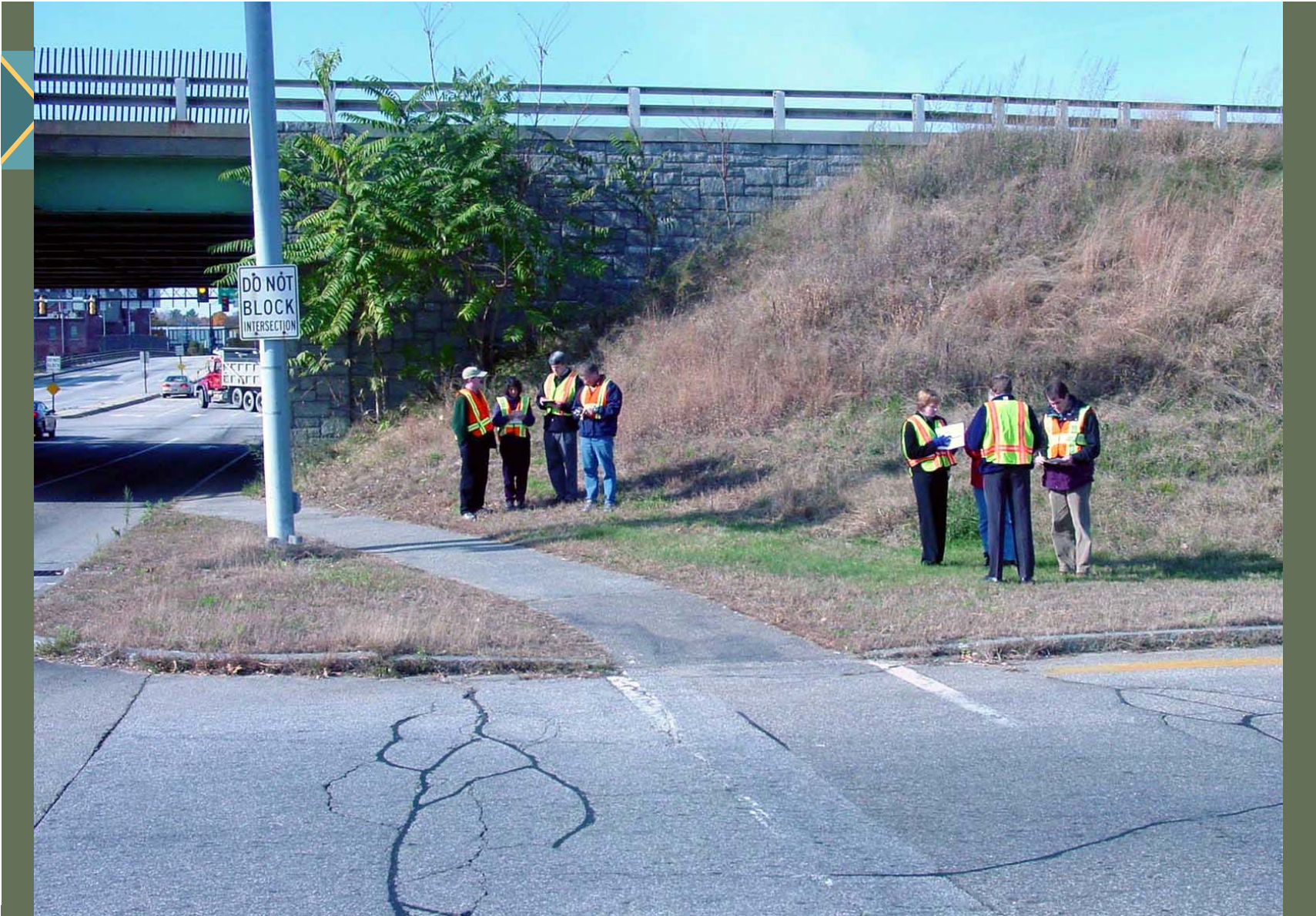
Context Sensitive Solutions: A Training Course for NHDOT Professionals & Their Partners



Context Sensitive Solutions: A Training Course for NHDOT Professionals & Their Partners



Context Sensitive Solutions: A Training Course for NHDOT Professionals & Their Partners



Context Sensitive Solutions: A Training Course for NHDOT Professionals & Their Partners



Context Sensitive Solutions: A Training Course for NHDOT Professionals & Their Partners

Site 1 Problem Statement

Transportation and land use are not well connected within the place and it is not a clearly established destination. The transportation system does not support alternative modes of travel. Land use does not reach its potential as a gateway to the river and city as a retail and recreation center

Site 2 Problem Statement

Constrained transportation system is restricted by land use decisions that limit the ability to improve intermodal transportation to various destinations.

Site 3 Problem Statement

The intersection of Main/Loudon/Center is not a welcoming gateway to the capitol city. Its design appears to be directed at accommodating vehicular traffic, with very little emphasis on pedestrian safety and aesthetics. Given the unique historic/visitor attractions, the lack of pedestrian accommodation and aesthetic appeal discourages varied uses (non-motorized uses, shopping, tourism, etc). An underlying cause was the fact that the west side of the river developed early; the intersection has been designed to accommodate traffic from the east side.

The CSS Project Delivery Process

Excellence in Transportation Design

• Excellence in Transportation Design

1 Problem / Need

CSS

- Identify transportation problem or need
- Identify stakeholders
- Outreach & preliminary partnership-building

Products:

- Stakeholder lists
- Preliminary lists of transportation issues

2 Planning

CSS

- Bring in resource agencies; identify context
- Establish a multi-discipline team
- Discuss and develop consensus on a decisionmaking process, including plans for public involvement
- Develop and create consensus around a problem and need statement that includes community and environmental components
- Develop consensus on a project vision
- Agree on project limits

Products:

- Process Contract
- Problem Statement
- Vision Statement

3 Scoping

CSS

- Study the context
- Confirm the problem statement
- Develop criteria to evaluate alternatives
- Establish a wide range of preliminary alternatives; narrow to a range of reasonable alternatives
- Document environmental effects on the reasonable range of alternatives
- Apply evaluation criteria to alternatives
- Secure consensus on the best alternative
- Spin off related community development projects

Products:

- Evaluation criteria
- Reasonable range of alternatives
- Preferred alternative

4 Design

CSS

- Create a conceptual design
- Experiment
- Secure consensus on the conceptual design
- Secure official local approval
- Preliminary engineering of the selected alternative
- Experiment
- Final design of the selected solution
- Purchase ROW
- Negotiate community maintenance agreements
- Include in construction documents all agreements made during Planning, Scoping, and Design
- Prepare bid package

Products:

- Approved conceptual design
- Final Design
- Bid Package

5 Construction

CSS

- Advertise & bid project
- Award contract
- MPT plan & schedule to minimize disruption to residents & businesses
- Perform construction
- Coordinate, communicate on change orders and design details
- Open project

Products:

- A completed project that addresses the problem and fulfills the vision

6 M&O

CSS

- Make traffic adjustments
- Maintain community partnerships
- Monitor negotiated maintenance agreements
- Routine M & O activities
- Evaluate the project using the criteria
- Capture lessons learned to improve the process
- Provide feedback
- Provide input to new problems & needs identification

Products:

- Adjusted facility
- Captured lessons

Develop a Vision for the Project

A statement of desired characteristics of a place at a specified future time, often 10 to 15 years. This statement should address transportation goals and may include other community and environmental goals related to the transportation corridor as well.

- Include Transportation needs
- Include Community Values or Aspirations
- Include Scenic, Aesthetic, Historic and Environmental Values and Goals

Project Vision

A statement of desired characteristics of a place at a specified future time, often 10-15 years. This statement should address transportation goals and may include other community and environmental goals related to the transportation corridor as well.



Loudon Road - Draft Project Vision

Loudon Road will be an attractive, safe corridor that visually and physically connects at a human scale destinations east and west of the turnpike. It will be a uniquely Concord place that functions well for all modes of transportation and integrates Concord history, aesthetics and environment.

