Principles of CSS

Context Sensitive Solutions Workshop
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What Is the Context?  Who Are Stakeholders?
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Another Exercise??
First Step Is Understanding Context

- Identify physical, environmental, social, cultural, aesthetic and transportation elements early
- Understand community values before beginning design – talk to the people
- Try to design from building front IN, not centerline OUT
Environmental Context
Historic Context
Paris Pike - Kentucky
Architectural Context
Social Context
Little Fork River Bridge – Hwy 65
Business Context
Transportation Context
“CSS” is called a lot of things

- ITE calls it “Harmonization”
- Maryland DOT calls it “Thinking Beyond the Pavement”
- Massachusetts DOT calls it “Smart Transportation”
- NJ DOT calls it “Common Sense Design”
- Missouri DOT calls it “Practical Solutions”
CSS Includes:

- Complete Streets
- ADA Transition Plan
- Value Engineering
- Hear Every Voice
- Design Flexibility
- Return on Investment

CSS is a way of thinking, not a particular type of project
IT FITS: Lies Gently on the Land
It Looks Good!

• Maintained pedestrian connection from downtown area to high school
• Multiple retaining walls create a grade-separated pedestrian area
• Project is seen as an amenity by the community
IT WORKS:
For ALL modes (including ADA)
It Pays (Return on Investment)

• Increased investment up front may decrease costs later.

• Lower benefits over a longer period of time may be greater than delayed higher benefits.
It Reflects Community Values
“…a duty that challenges not only [Mn/DOT’s] engineering, but its citizenship.”
Why?

Transportation is a Tool for Building Communities ("Place making" and Quality of Life)
What Is Quality of Life?
Signs of Successful Community

- Active, vital, special uses and activities
- Safe, historic, attractive, environmentally sensitive
- Walkable, accessible, connected
- Neighborliness, socializing

Source: Project for Public Spaces
To Build Quality of Life, You Must:

- Understand the character of the **PLACE** you are working in and the **PEOPLE** you are working with.
- Understand the type of **COMMUNITY** these people want to live in.
- Understand the community’s **VALUES**.
- Then design to accomplish those values.
Mn/DOT's SIX PRINCIPLES

- All Modes
- Public Involvement
- Balance
- Aesthetics
- Interdisciplinary Team
- Design Flexibility
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1. Balance safety, mobility, community and environmental goals in all projects.

Cost is important too
Balance Through Network Changes

- Gaps in Network
- Road Use Budget
- Mobility Goals
- Access Management
Balance Through Alignment Changes
Balance through Design
Balance Through Cross-Section Design
Balance with Aesthetic Design/Landscaping
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2. Involve the public and affected agencies early and continuously.
Public participation is two-way communication.
Understand Different Points of View

“This is an arterial highway with some houses and businesses alongside.” – Transportation Professional

“This is a big busy street that runs through our neighborhood where people drive too fast.” – Resident

“This is the lifeblood of my business – your project will kill my business.” – Business Owner
Public participation without integrity is worse than no public participation at all.
Public Participation

ATTITUDE IS EVERYTHING

Believe in involving the public and treat everyone with respect - no matter what.
Public Participation

BUILD OWNERSHIP

“I became a team player because I was on the team.”
3. Use an interdisciplinary team tailored to project needs.
TH 61 - Gooseberry Falls
TH 61 - Gooseberry Falls
4. Apply flexibility inherent in design standards.
CSS is firmly rooted in good design

(Values change by minute degrees)

CREATE

Produce through imaginative skill; to design something new

DESIGN

Conceive and plan out; create for a specific function or end

ENGINEER

Apply science and mathematics; to plan out with skill and craft

Source: Webster’s Dictionary
Land Use Based Design *Guidance* in lieu of Functional Classifications.
Figure 5.1 Roads in Context

The photos enclosed in a yellow box indicate the Town Center and Core City streets that also operate as a local or regional Main Street.
Questions to Ask:

• Does the design speed fit the context?

• Does the functional class fit the context?

• Have I talked to the right people?

• How can I reflect community values while meeting transportation need?

• Have I defined the problem properly?
Have I Considered All Opportunities?

- Network
- Alignment
- Roadway Cross Section
- Intersections and Interchanges
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5. Address all modes of travel.
Walk In Their Shoes
Ride the Bus
Ride a Bicycle
Try Out a Wheelchair
Consider Intermodal Connections
Place Characteristics: Land Uses
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6. Incorporate aesthetics as an integral part of good design.
Sometimes Landmarks Appropriate
A Little Green Can Make a Big Difference
Some Things to Remember

CSS Is About Building Better Communities
Project Objectives

MUST Reflect Community Values
Remember:

Success is achieved with a collaborative process that continually involves multiple agencies and stakeholders.
P2 & CSS Are Intertwined

You can’t do context sensitive solutions without good public participation.

You can’t do good public participation without the tools and approach of context sensitive solutions.
CSS Affects All Steps in Project Development Process

Planning ! Scoping ! Pre-Design • Alternatives • NEPA

Final Design ! Construction ! Maintenance
CSS is firmly rooted in good design

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Source: Webster’s Dictionary
There Are a Lot of Resources
CSS Avoids the Rework Cycle

1. Decide
2. Design
3. Defend
4. Redesign
5. Delay

The cycle avoids rework by linking these stages in a continuous process.
We Do CSS Because:

- It enhances livability and sustainability of communities – creates asset for community.

- It builds community support.

- People will accept no less - nor should they.

- It is simply good design practice.
• BREAK
• Achieving Community Objectives through Design (design flexibility)
• Design Workshops