Principles of CSS

Context Sensitive Solutions Workshop

Charleen A. Zimmer, Zan Associates

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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

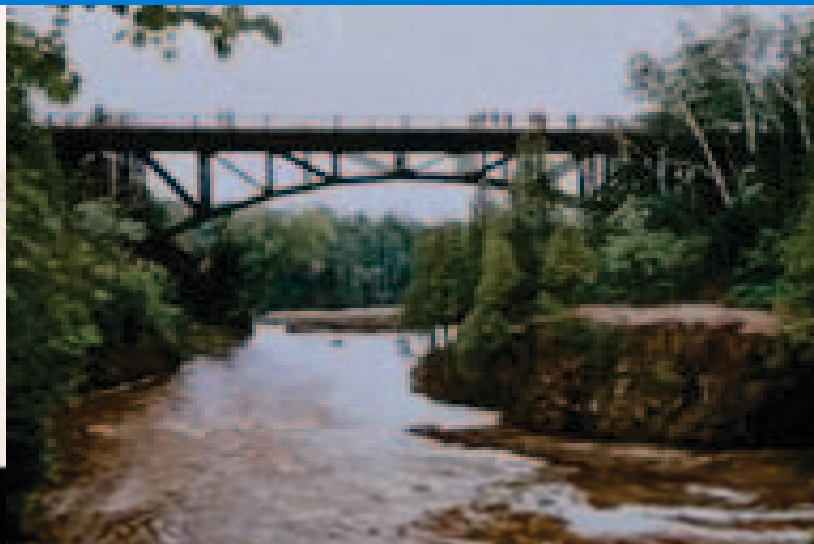- Try to design from building front IN, not centerline OUT

Environmental Context
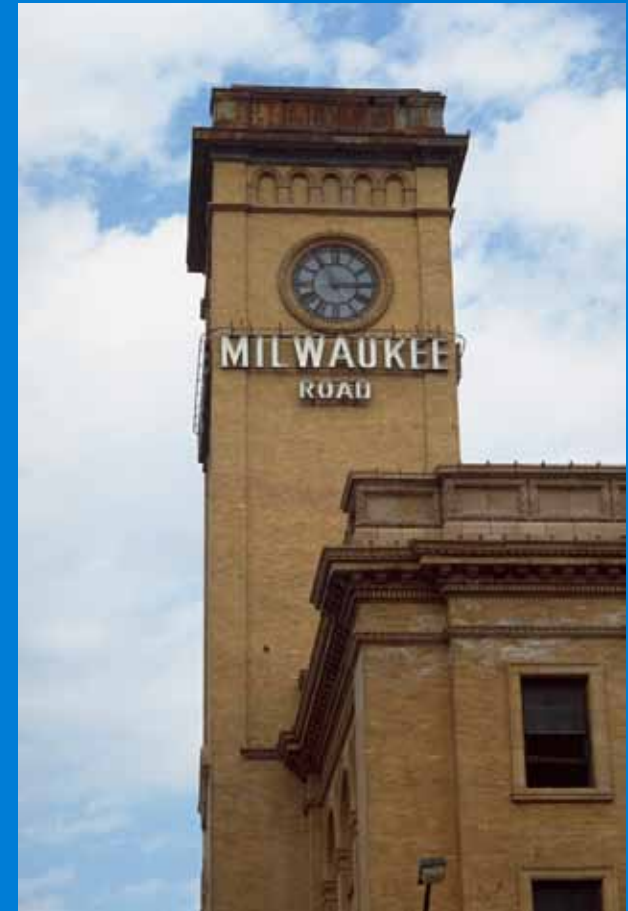
Yellowstone National Park - WY

Historic Context

Paris Pike - Kentucky

Architectural Context

Social Context

Little Fork River Bridge – Hwy 65
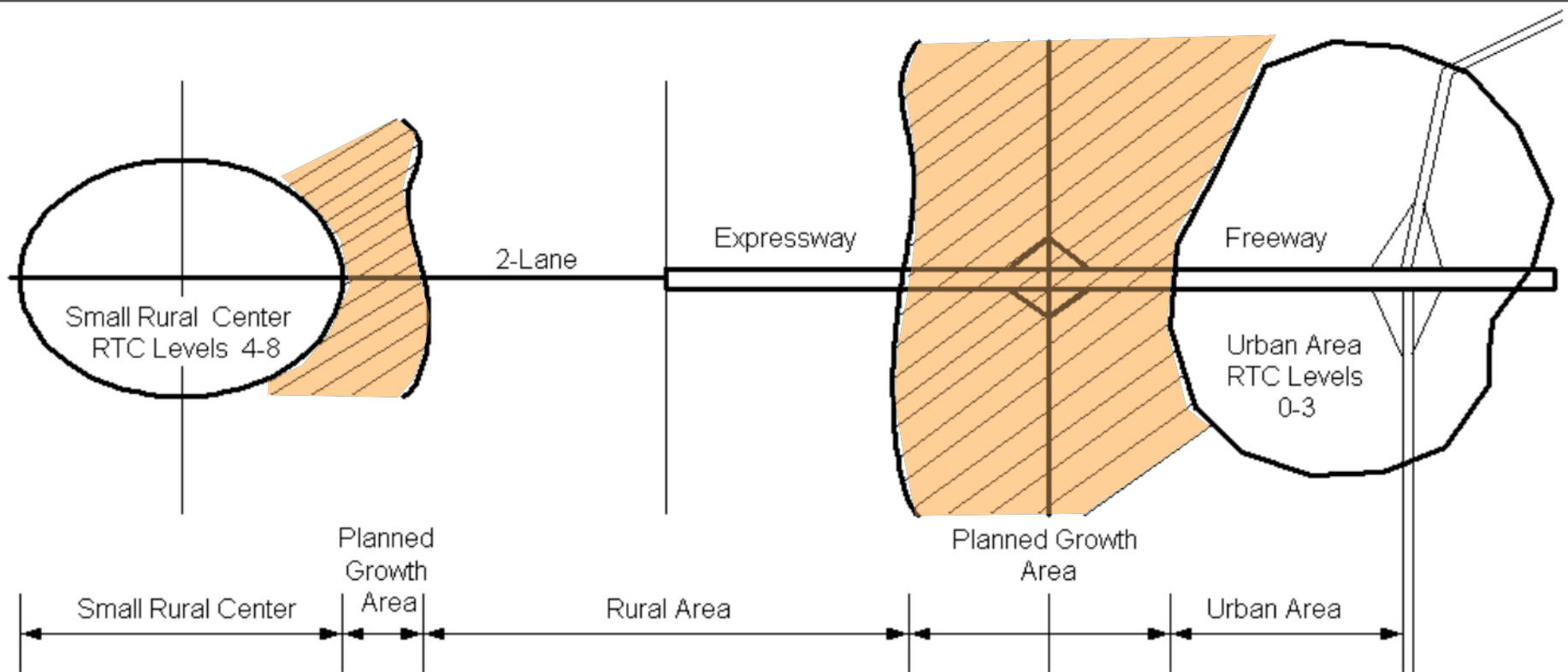
Business Context

Transportation Context

Mn/DOT

"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!

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.
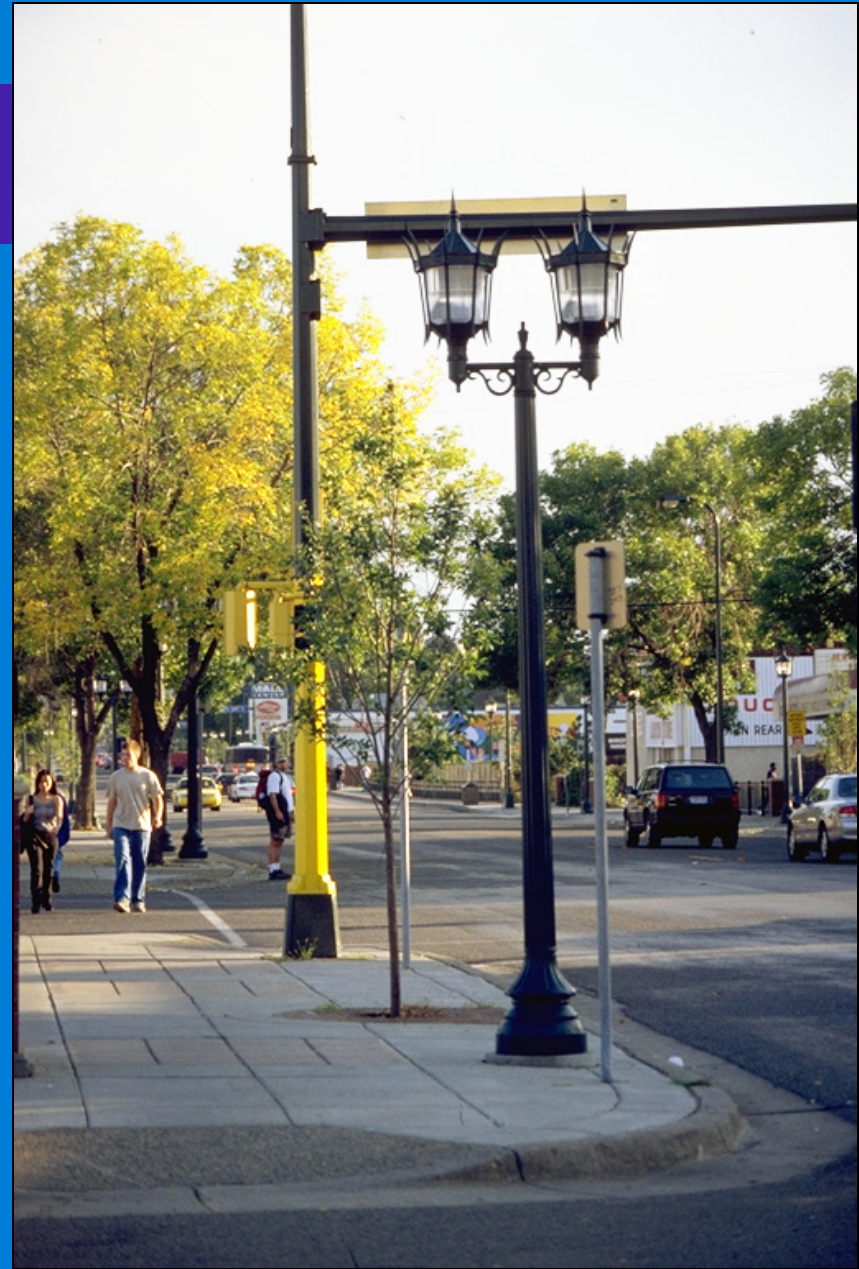
It Reflects Community Values

Star Tribune

" …a duty that challenges not only [Mn/DOT's] engineering, but its citizenship."
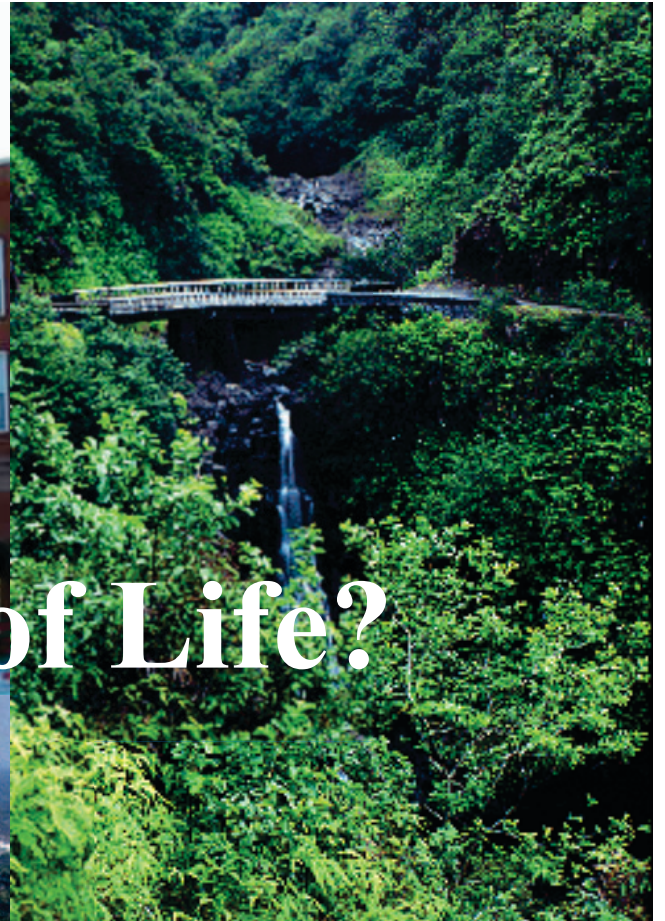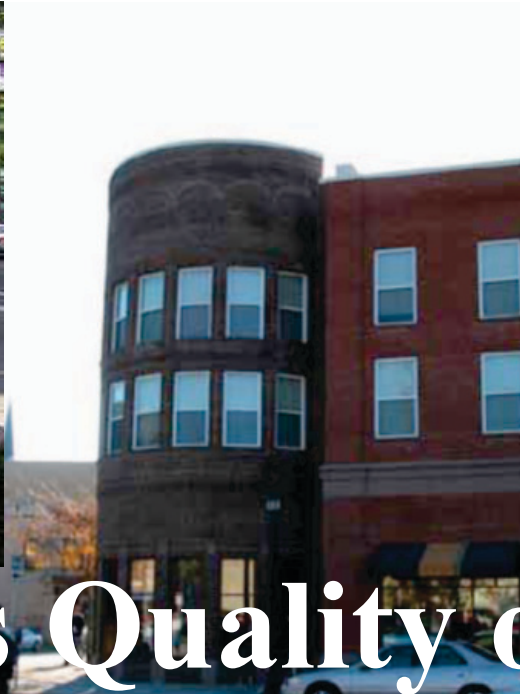
Why?

TransportationI s
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

Balance

Interdisciplinary Team

All Modes

Public Involvement

Aesthetics
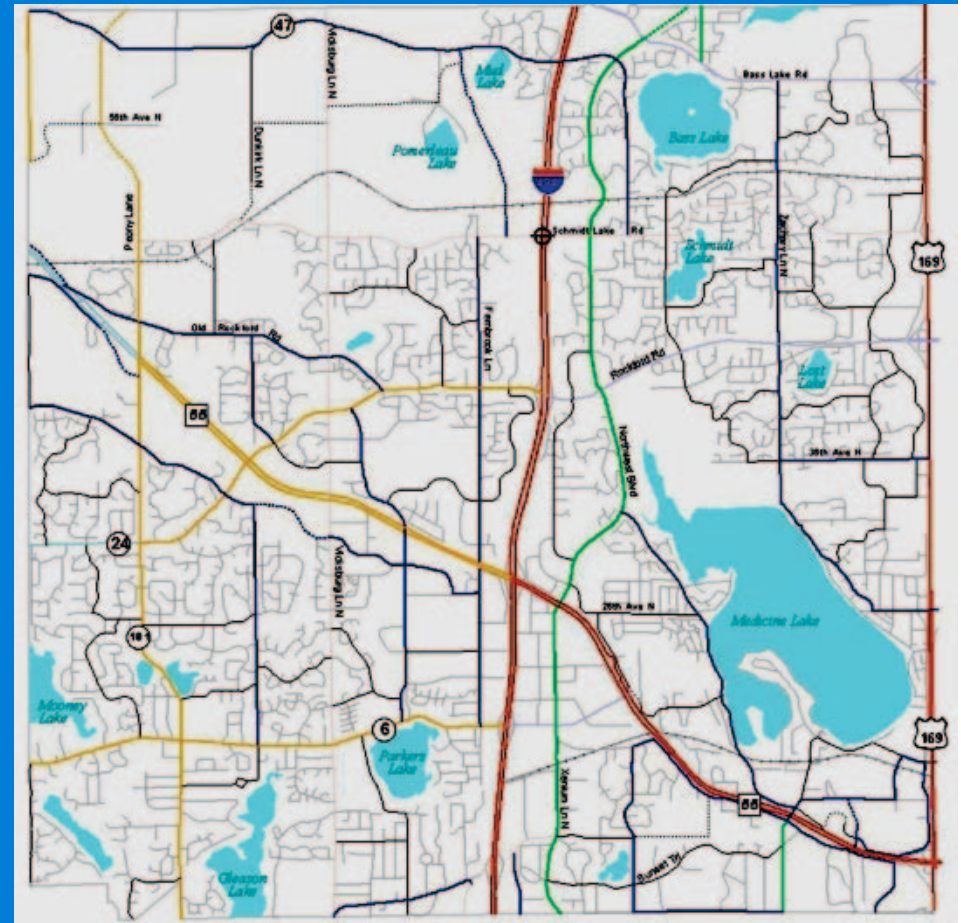
Design Flexibility

Principles of CSS

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

LISTEN

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

BE HONEST

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."

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3. Use an interdisciplinary team tailored to project needs.
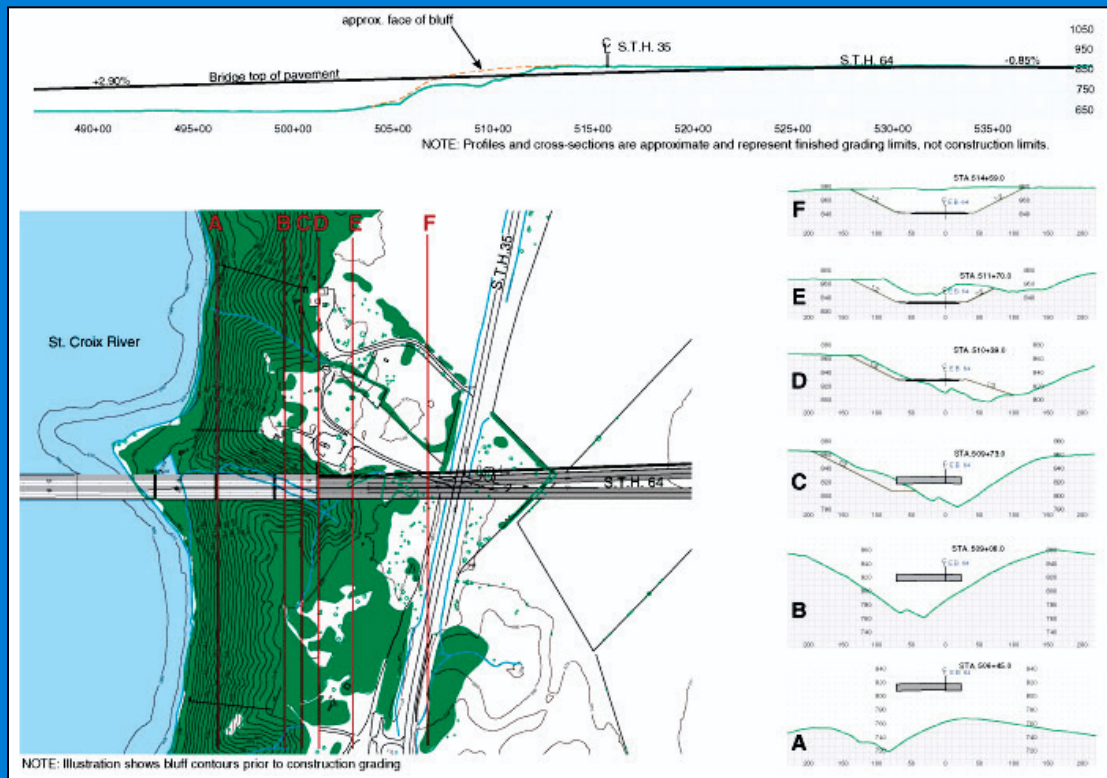
TH 61 - Gooseberry Falls

TH 61 - Gooseberry Falls

EXISTING

Principles of CSS

4. Apply flexibility inherent in design standards.

CSS is firmly rooted in good design

(Values change by minute degrees)

CREATE	→	DESIGN	←	ENGINEER

CREATE	DESIGN	ENGINEER
Produce through imaginative skill; to design something new	Conceive and plan out; create for a specific function or end	Apply science and mathematics; to plan out with skill and craft
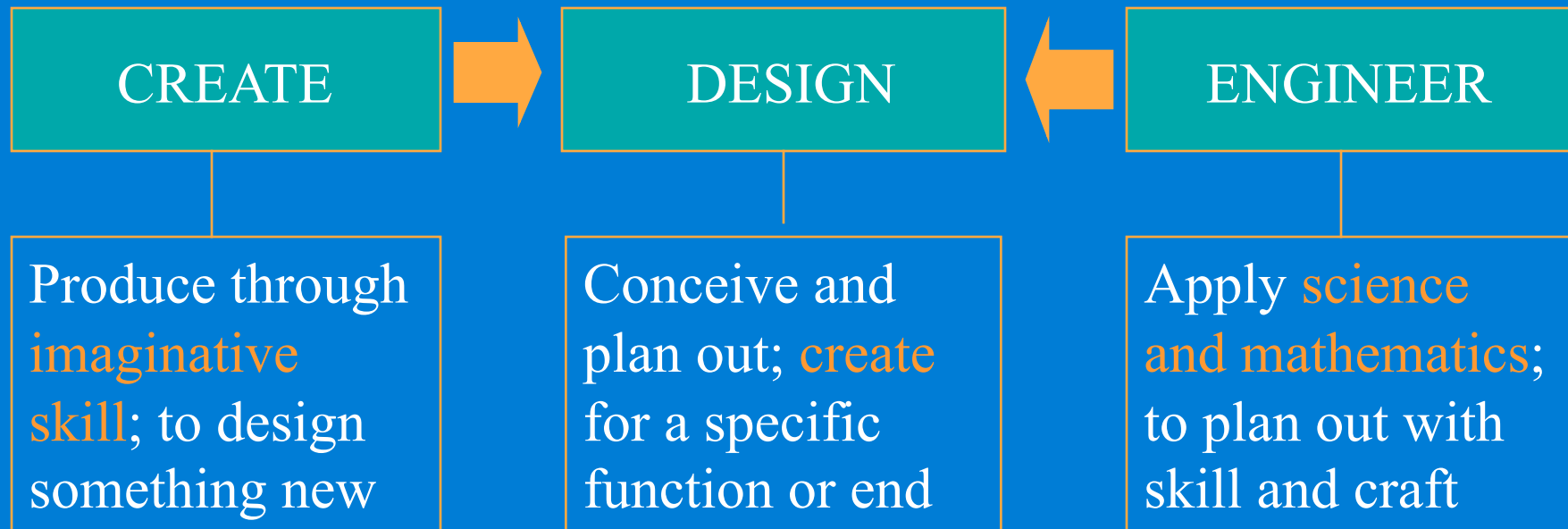
Source: Webster's Dictionary

PENNDOT: Smart Transportation

Land Use Based Design *Guidance* in lieu of Functional Classifications.

PENNDOT: Smart Transportation

Figure 5.1 Roads in Context

City of Minneapolis

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

Principles of CSS

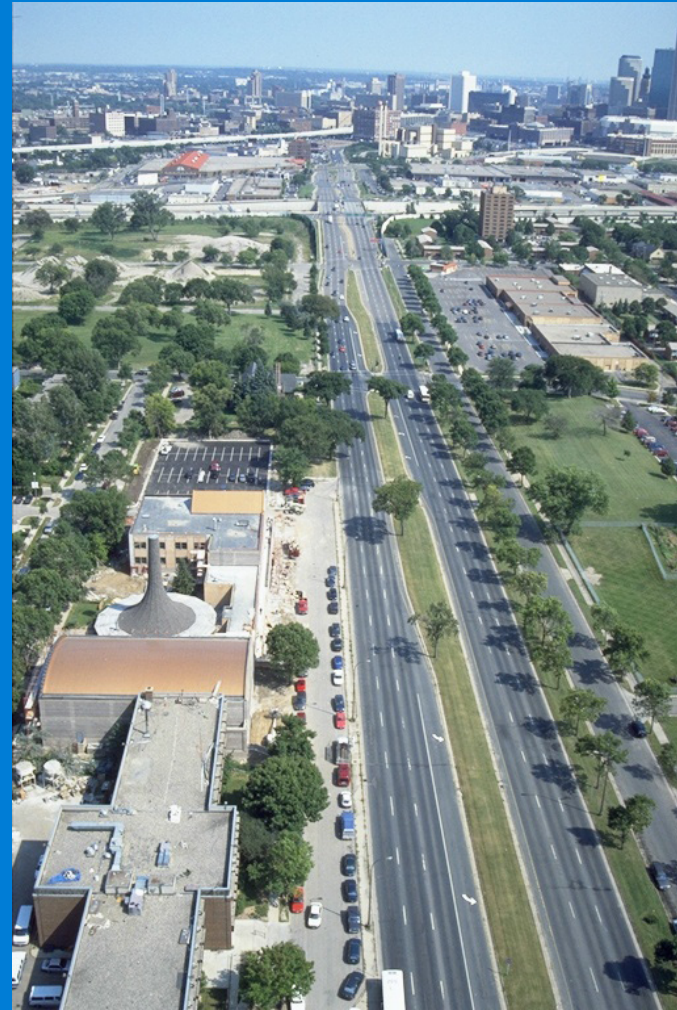**6. Incorporate aesthetics as an integral part of good design.**

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:

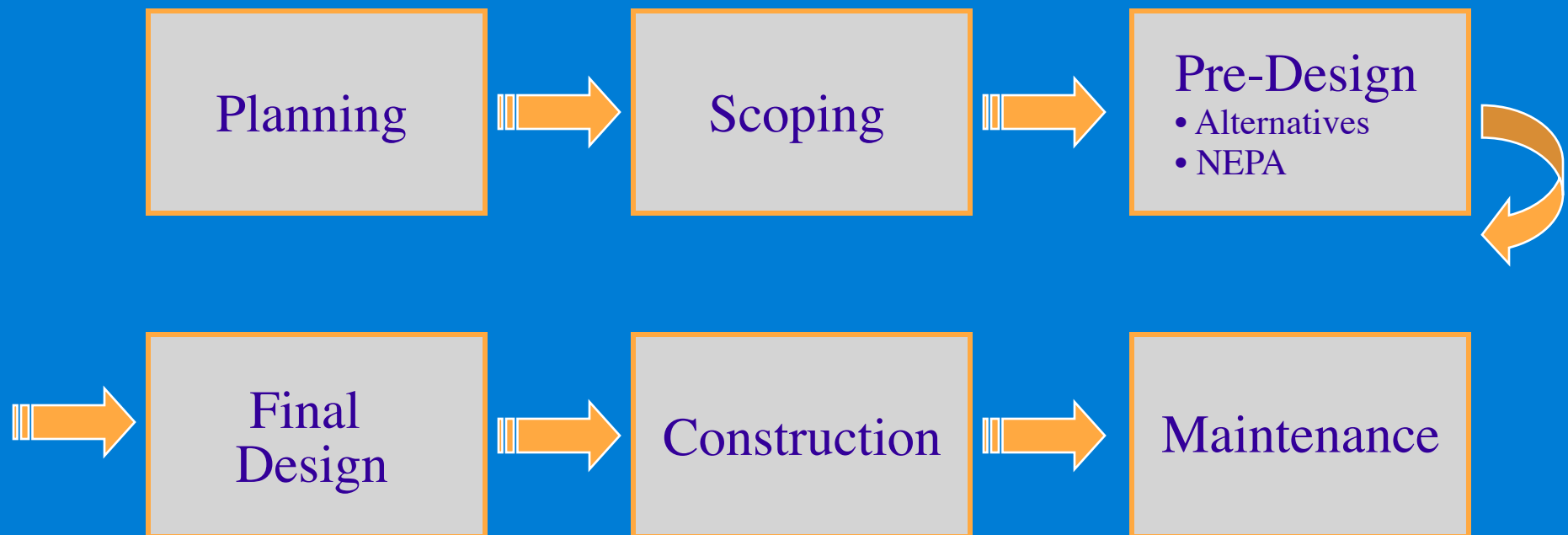Success is achieved with a collaborative process that continually involves multiple agencies and stakeholders.

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.
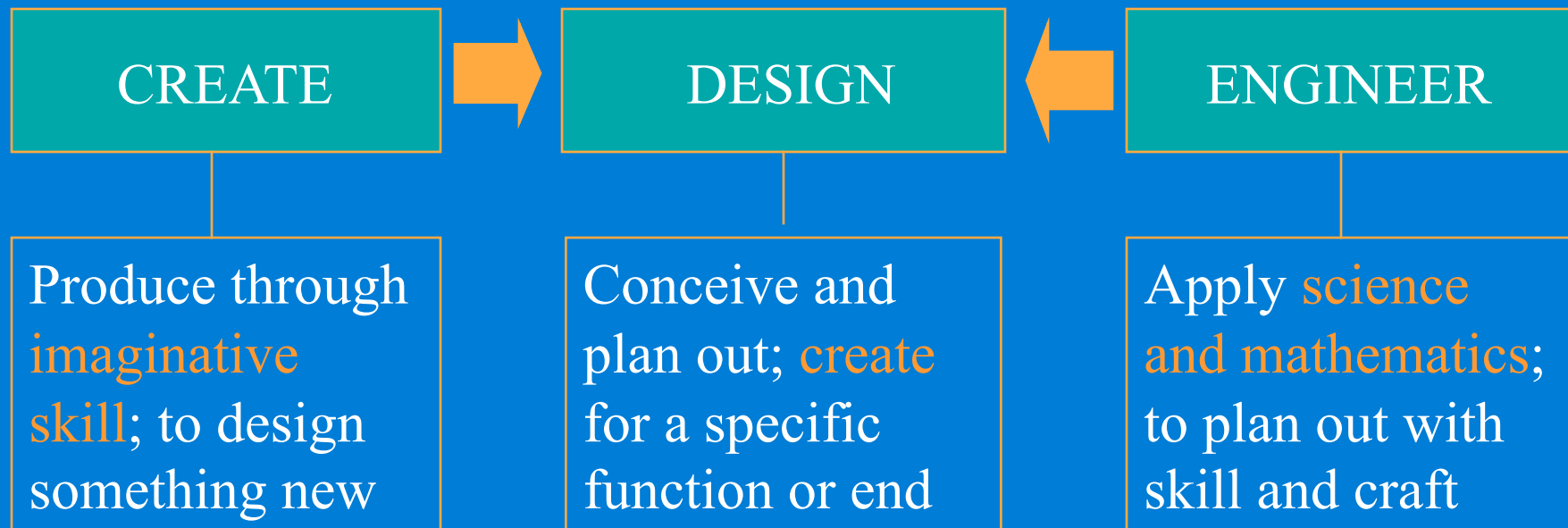
CSS Affects All Steps
in Project Development Process

Planning	→	Scoping	→	Pre-Design • Alternatives • NEPA

Final Design	→	Construction	→	Maintenance

CSS is firmly rooted in good design

(Values change by minute degrees)

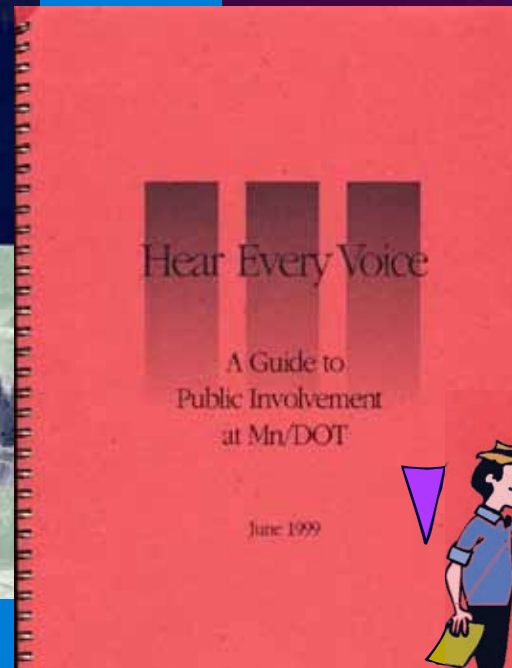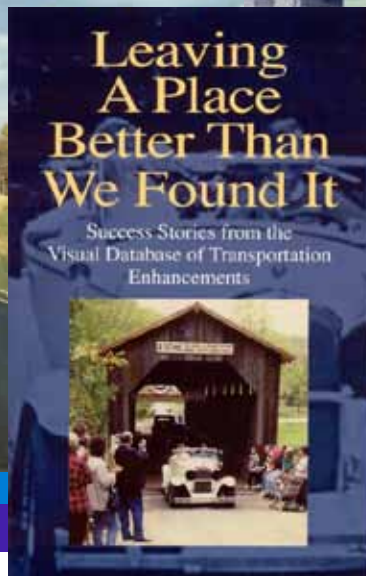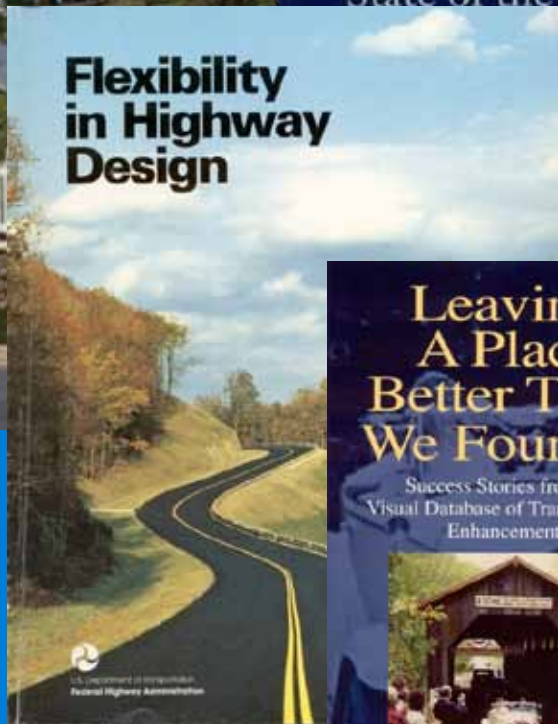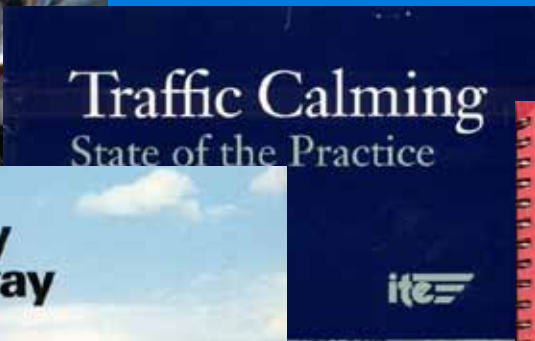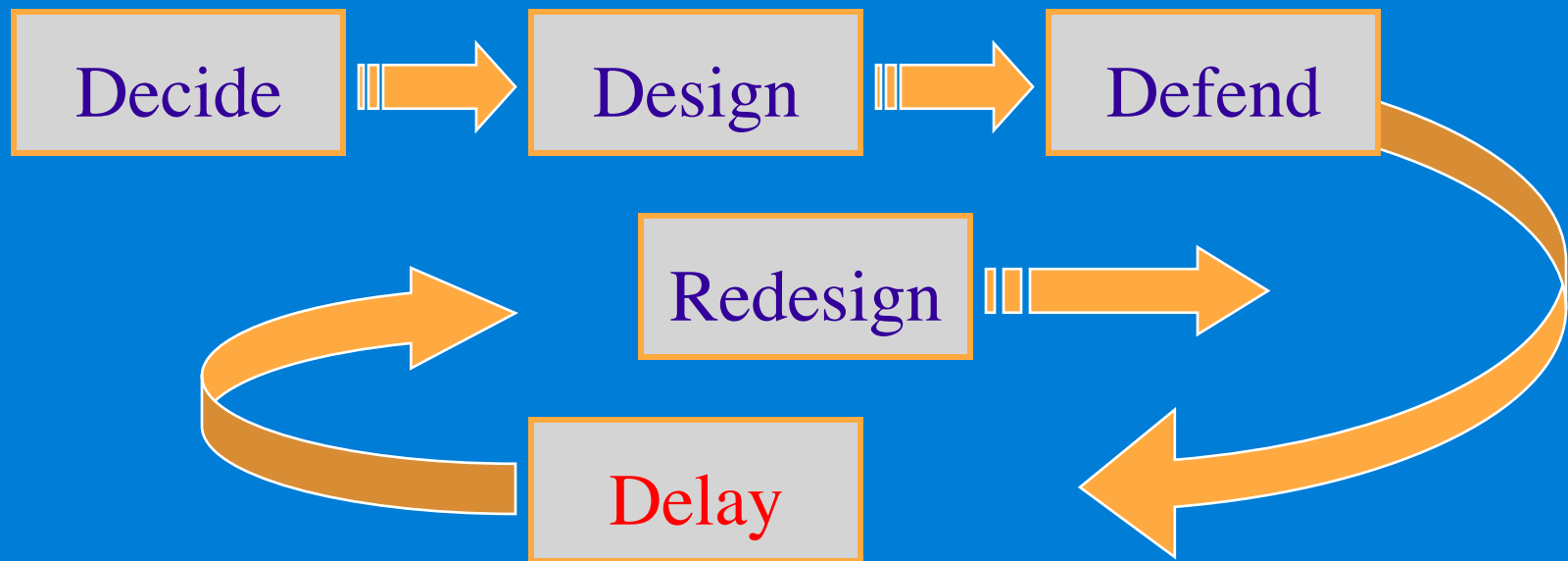| CREATE	→	DESIGN	←	ENGINEER
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Source: Webster's Dictionary

There Are a Lot of Resources

CSS Avoids the Rework Cycle

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.**

Coming Next

- BREAK
- Achieving Community Objectives through Design (design flexibility)
- Design Workshops