Context Sensitive Solutions
The Business Case for CSS

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What's This Fuss About CSS ?

Why did a 2003 GAO Report to Congress, *Perceptions of Stakeholders on Approaches to Reduce Highway Project Completion Time*, recommend CSS as one of the most promising approaches?

Why does Commissioner Sorel talk about CSS and its importance so often?

Why do FHWA & AASHTO advocate CSS as a business model to be mainstreamed by transportation agencies?

What is Context ?

- **The interrelated condition in which something exists** (everything about the people and place)
- **The weaving of parts into a whole** (quality of life concerns)

Why is Context Important ?

Public Expectations = More, Better, Quicker, within Budget … and also with their Approval

Achieving consensus in response to context is critical for timely delivery of projects and getting them built

Why is Context Important?

Federal authoritative basis for context sensitivity in transportation:

- 1965 Highway Beautification Act
- 1966 Historic Preservation Act
- 1968 Federal-Aid Highway Act [Section 4(f)]
- 1969 National Environmental Policy Act
- 1991 Intermodal Surface Transportation Efficiency Act
- 1995 National Highway System Designation Act
- 1999 Transportation Equity Act for the 21st Century
- 2005 SAFETEA-LU Federal Reauthorization Act
- 2009 HUD, DOT and EPA Partnership: Sustainable Communities
- 2010 Federal Reauthorization Anticipated

Federal Partnership of DOT-EPA-HUD

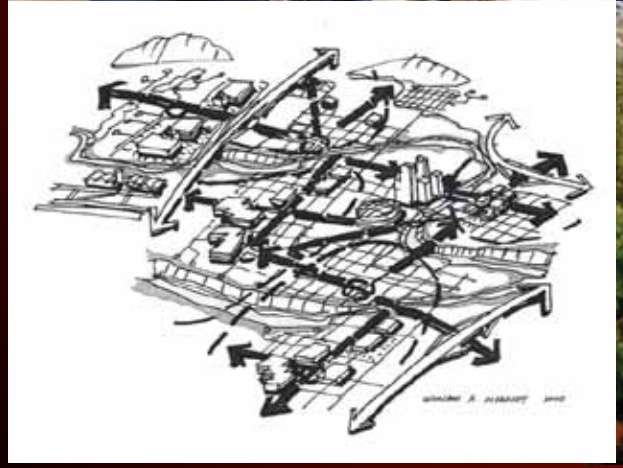
- Emerging goals will focus on the effect of transportation projects on the livability of communities and the Quality of Life of the citizens of the state.
- Future funding criteria will require projects to be more multi-modal and provide integration with local land use.

Context Sensitive Solutions

Whatever you call it (CSD, CSD&S or CSS) - it's about preserving, enhancing and balancing historic, aesthetic, scenic, environmental, and community objectives along with safety and mobility objectives in transportation

Context Sensitive Solutions

Applies to transportation planning, programs, project development, construction, operations & maintenance



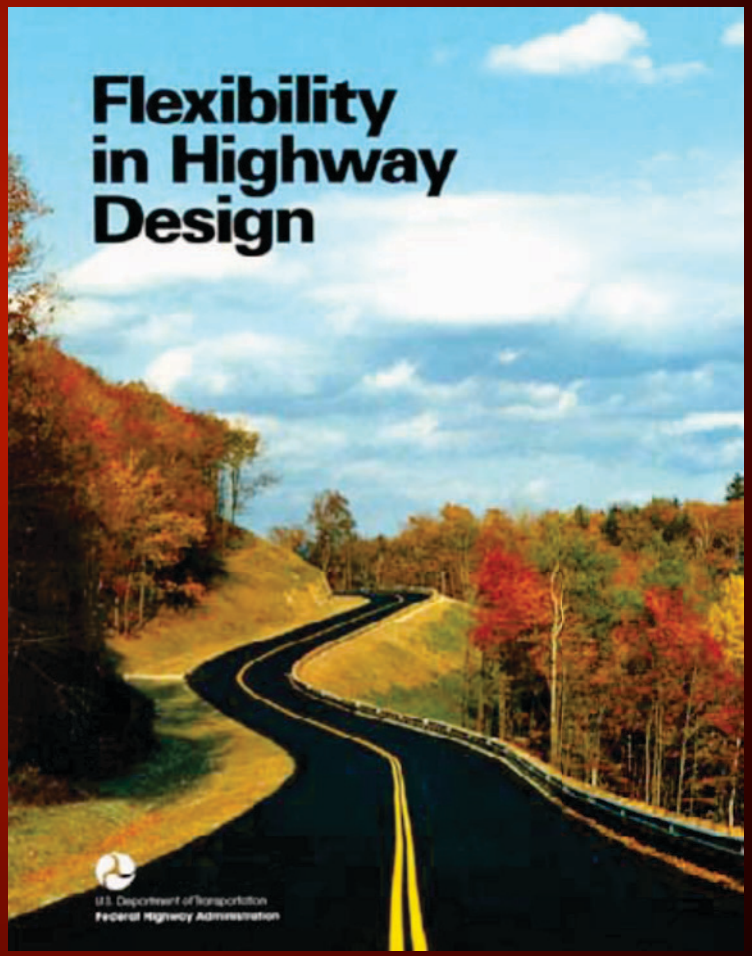
Public Measures of Success

1. Community acceptance
2. Environmental compatibility
3. Financial feasibility & value
4. Timeliness of delivery
5. Performance functions
6. Preservation of investments

FHWA Focus on Context Sensitivity

Provocation To Think & Act Differently

Growing out of ISTEA 1991 and NHSDA 1995, this 1997 FHWA Guide explored and illustrated flexibilities and opportunities that already exist to balance community, environmental, safety, and mobility objectives in the development of our projects

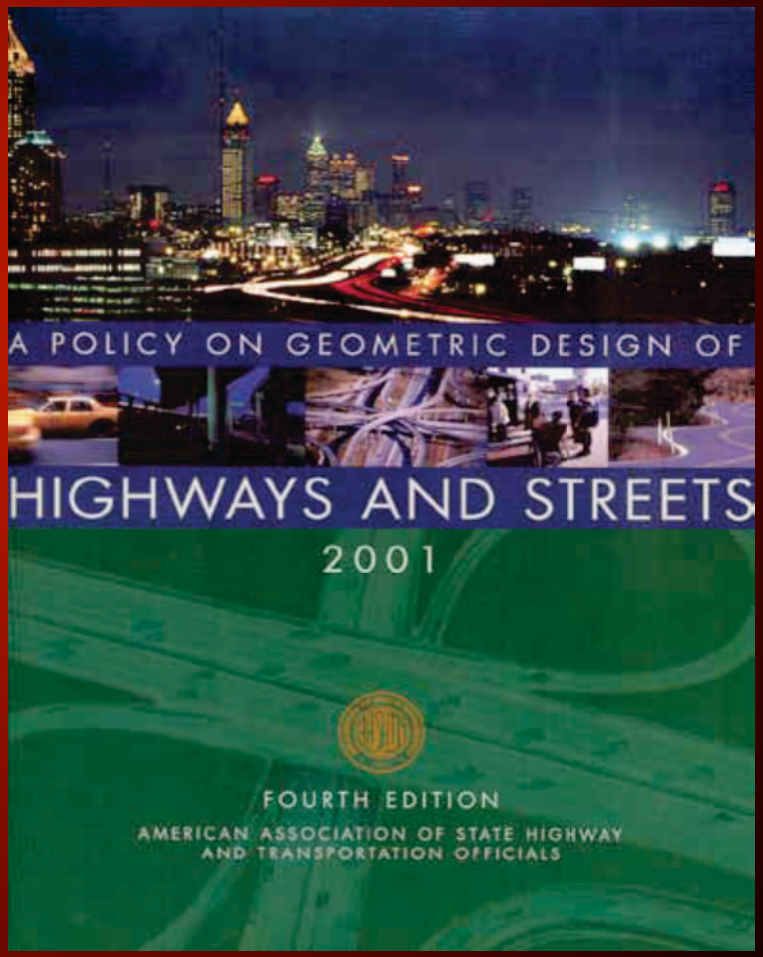


AASHTO Focus On Context

Design Flexibility vs. Design Standards

A primary highway design tool (the AASHTO "Green Book") is not intended to be a set of national standards ...

it is intended to be used as guidelines, geometric design concepts, and criteria with flexible ranges of values.

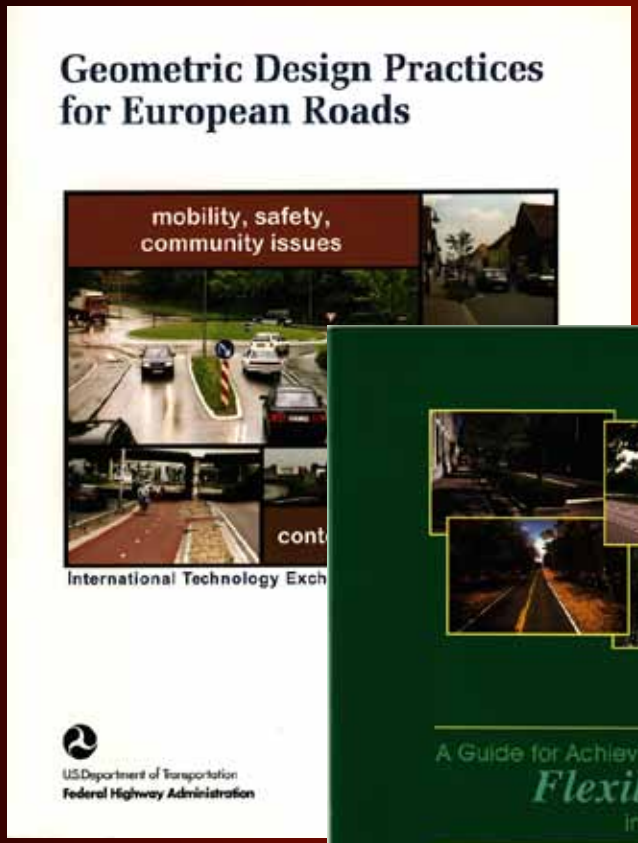


The CSD "Pilot States"

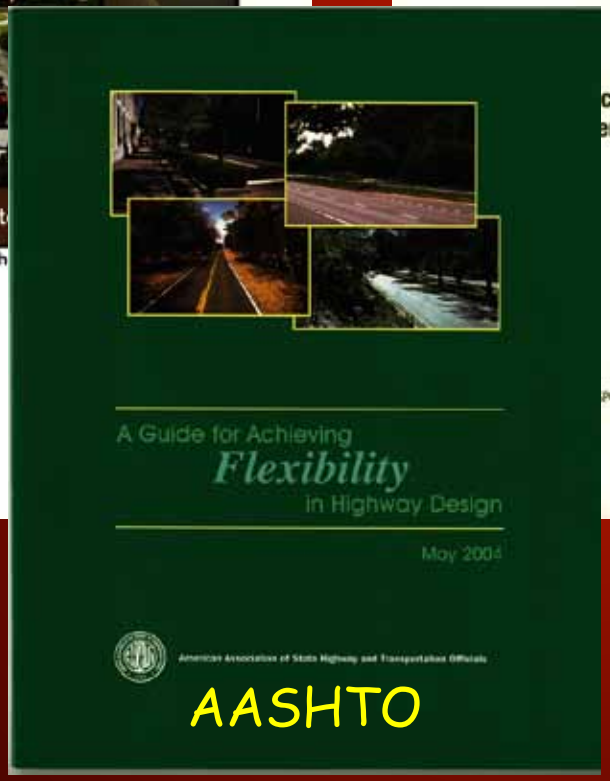
In 1999, the DOTs of Minnesota, Maryland, Connecticut, Kentucky and Utah were selected as CSD "pilot states" to further implementation and mainstreaming of CSD across the nation

In 2000, MnDOT deploys a pilot CSD training class and articulates CSD Policy (Tech Memo) and 6 Core MnDOT CSD Principles

CSD&S Research & Guidance

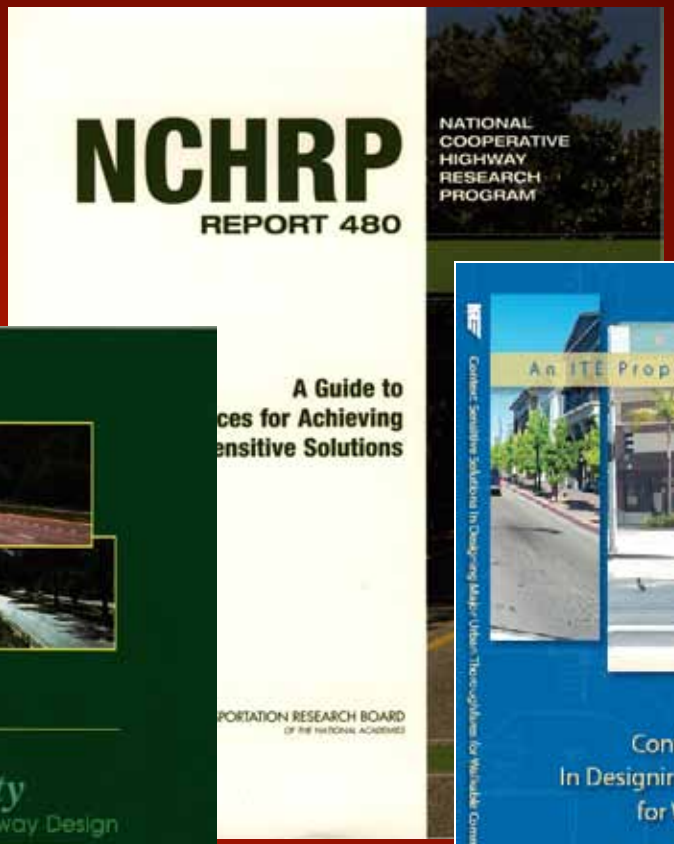


2001

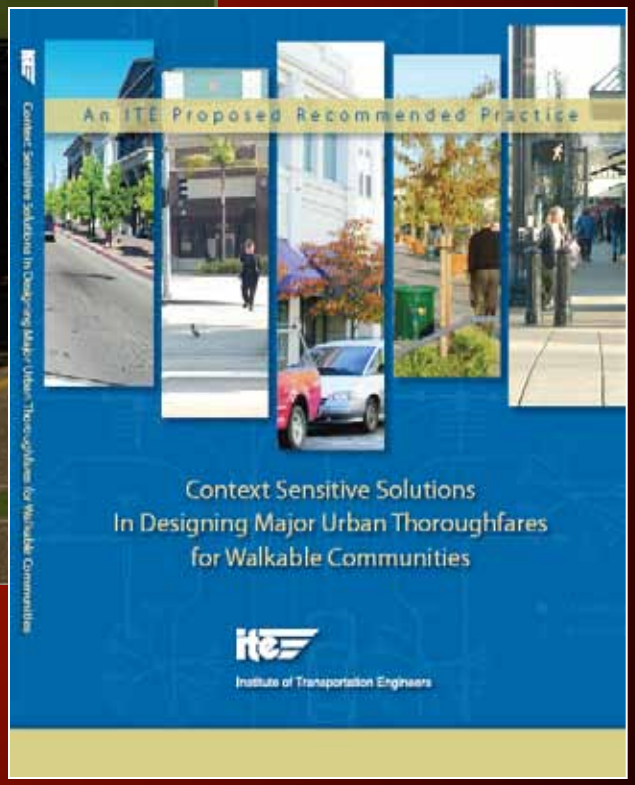


AASHTO

2004 "Bridging Document"



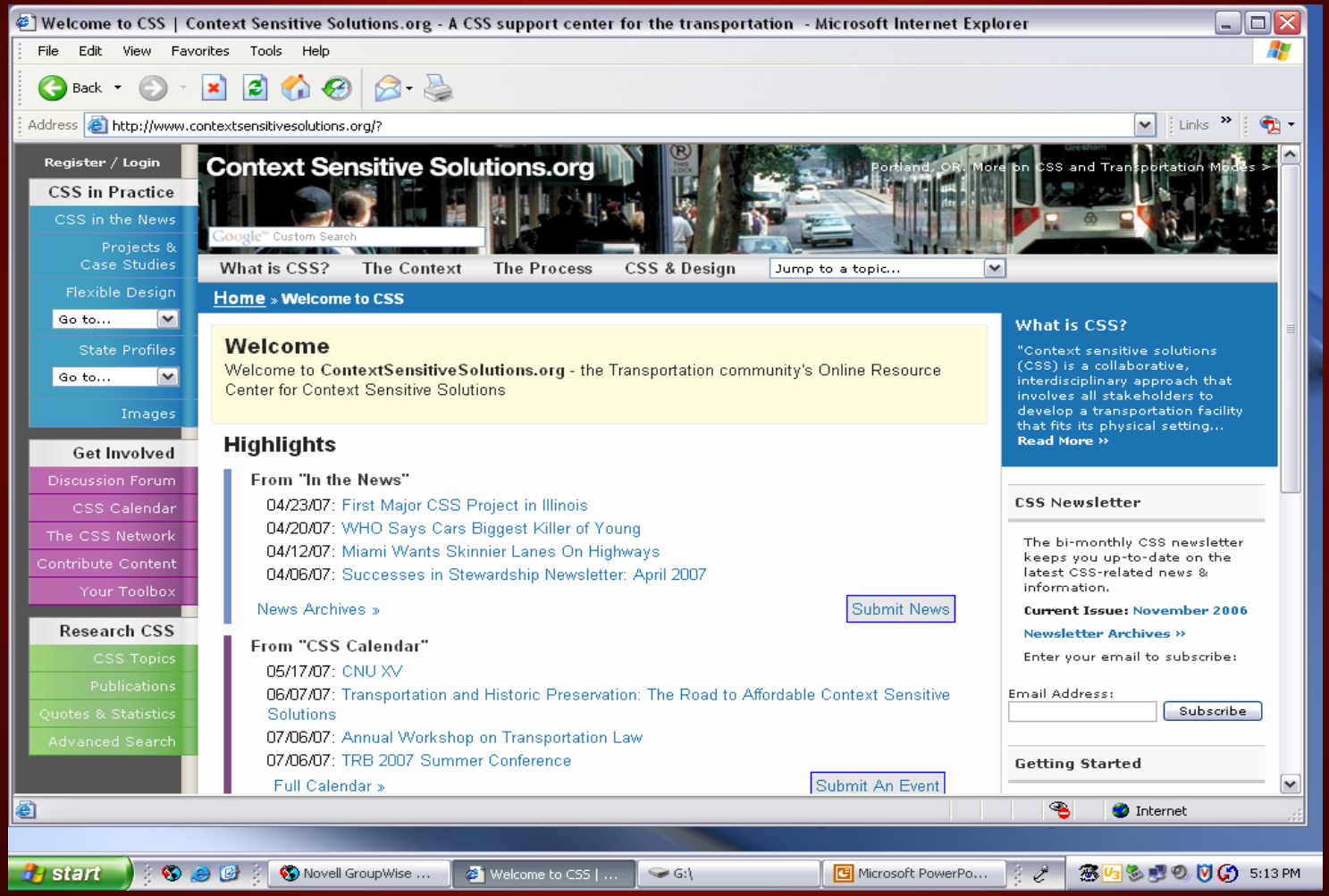
2002



ITE 2006

FHWA & AASHTO CSS Emphasis

www.ContextSensitiveSolutions.org



CSS Online Resource Center Launched in 2004

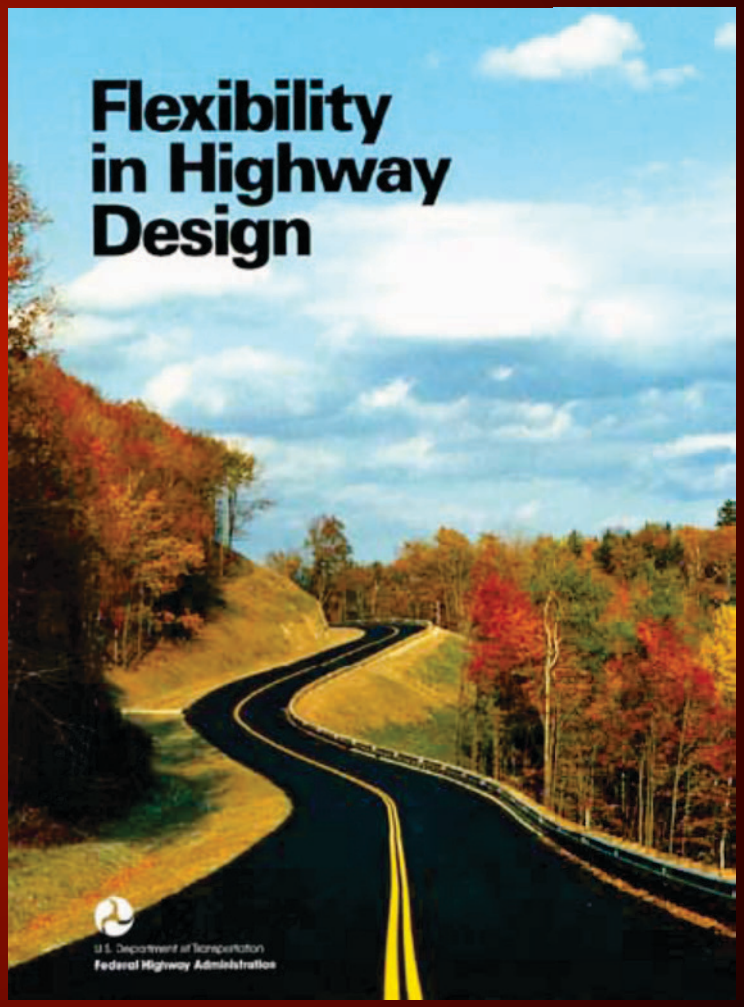
FHWA & AASHTO CSS Emphasis

SAFETEA-LU referenced into U.S. Code FHWA's 1997 *Flexibility in Highway Design* publication and the original Principles of CSD (15) …

heightened the requirements for public involvement … and

directed the US DOT to do a study of the benefits of well designed transportation projects for communities …

($2 million study grant to the AIA and subcontracted to the U of MN Center for Transportation Studies)



So How Was It Going With CSS ?

FHWA & AASHTO CSS Emphasis

2005 AASHTO CSS Survey of DOTs

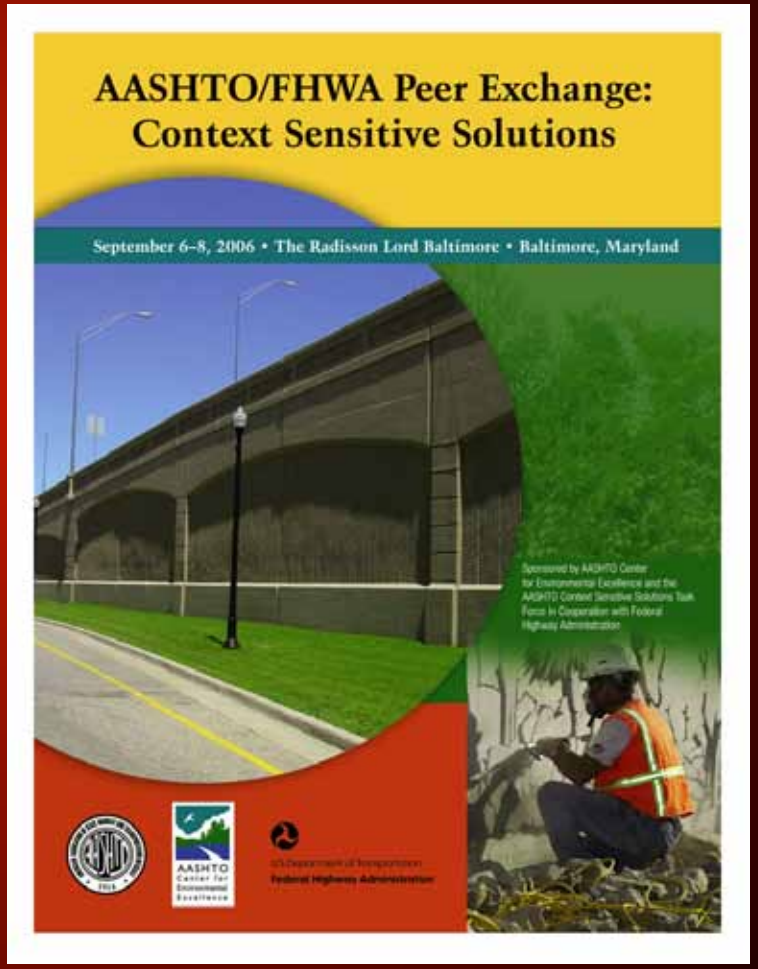
47 States have done CSS training
45 States encountered barriers to implementing CSS principles
35 States have issued formal CSS policies
34 States indicated a desire to improve CSS implementation
25 States have taken steps to integrate CSS into agency culture
6 States have included CSS in their agency's strategic plans

Topic areas of most interest to the States

- Successful training tools & guides (*design flexibility/maintenance)
- CSS performance measures (11 states have most think important)
- Effective public involvement processes
- How to deal with perceptions of higher costs and liability concerns

FHWA & AASHTO CSS Emphasis

On September 6 - 8, 2006 in Baltimore, MD, 262 participants from 46 states participated in a National CSS Peer Exchange Conference sponsored jointly by FHWA and AASHTO



FHWA & AASHTO CSS Emphasis
2006 National CSS Peer Exchange

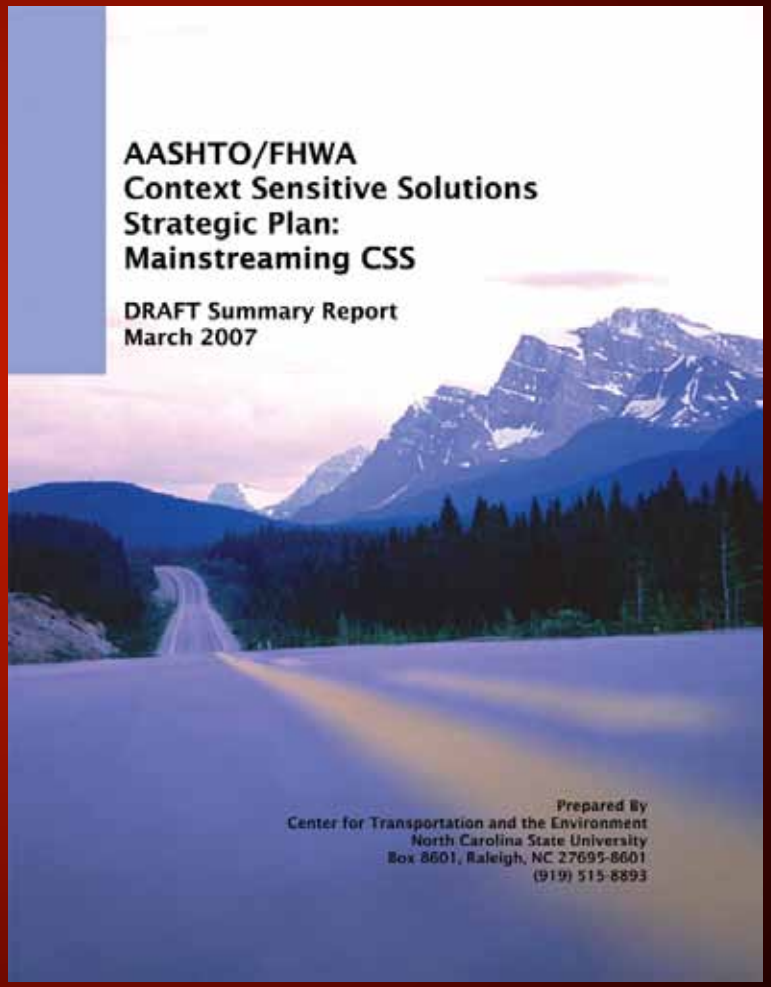
Top Challenges for Integrating CSS:

- Perception & reality of barriers (tort liability, design manuals, etc.)
- Perception & reality of "prescriptive" agency policies
- Long term state & DOT "culture" barriers
- Perception of CSS as more about environment than mobility & safety
- Funding processes to support CSS & better pre-planning and scoping
- Missing disciplines to compliment DOT staff with needed skill sets
- Development of new skills for managing collaborative approaches
- DOT fears of losing control in the project development process
- The shortcomings of DOT scoping processes
- CSS integrations from pre-project planning processes through post-project maintenance activities
- Performance measurement
- CSS action planning or updating of action plans by DOTs

FHWA & AASHTO CSS Emphasis
National Action Planning

Following the National CSS Peer Exchange … AASHTO and FHWA jointly conducted a National CSS Strategic Action Planning initiative

A draft Summary Report recommended a Vision, Definition, refinement of Principles, and Strategic Goals & Action Plans for Mainstreaming of CSS



FHWA & AASHTO CSS Emphasis

National Action Planning

The Summary Report recommended adoption of 4 Core CSS Principles applying to transportation processes, outcomes, and decision-making and tied to key underlying and desired Qualities of Process (12) and Outcomes (5)

1. Strive towards a shared stakeholder vision to provide a basis for decisions.
2. Demonstrate a comprehensive understanding of contexts.
3. Foster continuing communication and collaboration to achieve consensus.
4. Exercise flexibility and creativity to shape effective transportation solutions while preserving and enhancing community and natural environments.

FHWA & AASHTO CSS Emphasis

National Action Planning

The draft Summary Report focused on 4 Strategic Goals for Mainstreaming CSS and inclusion of detailed implementation plans to support each Goal:

1) Making the Case for CSS

2) Building CSS Knowledge & Skills

3) Promoting Flexibility in Application of Standards

4) Supporting Leadership & Coalition Building

FHWA & AASHTO CSS Emphasis

The Business Case

DRIVING TO SUCCESS WITH CSS

CONTEXT SENSITIVE SOLUTIONS

A PROVEN WAY OF DOING BUSINESS THAT HELPS AGENCIES PERFORM BETTER AND MORE EFFICIENTLY

PROJECTS GET DONE FASTER

Integrating Context Sensitive Solutions (CSS) into your agency as the way of doing business can help you accomplish your goals by substantially improving the performance of your project delivery process. CSS can create significant cost and time savings in completing projects while improving the credibility of and public trust in your agency.

- CSS can help your agency move away from the DAD (Decide, Announce, and Defend) approach toward the POP approach (Publicly Owned/Optimized Projects), an approach that increases public acceptance and trust. The CSS approach helps build political acceptance and the "will" to leverage added support and resources for funding our programs.
- CSS can define public measures of success such as: 1) community acceptance, 2) environmental compatibility, 3) functionality, 4) financial feasibility, 5) timeliness of delivery, and 6) sustainable decision and investment.
- CSS can help designers "mine" the flexibility in design manuals to create safe facilities that fit into the community and environmental context. CSS can also create more flexibility by fostering careful consideration of appropriate design speeds and levels of service standards and yet preserve roadway safety for transportation agency projects and the communities in which they are proposed.
- CSS can provide a framework for integrating the competing needs of the Transportation, Community, Environmental, Financial and Political Contexts in your agency mission and strategic plan.

"Our highway and bridge and public transit systems are critical to the economic well-being and success of our businesses and communities. PennDOT is committed to "right sizing" projects. These solutions provide a sound transportation system that will not only benefit the economy of the commonwealth, but will also enhance the quality of life for all our residents. That is what CSS is all about."
—Al Biehler, Secretary, Pennsylvania DOT

- CSS can minimize costly process and project delays, and rework cycles. CSS advocates collaboration with a full range of stakeholders, not only on project design, but in the early stages of project planning. This will engender consensus, thereby saving your agency money and time.
- CSS can assist your agency in selecting balanced investments that meet transportation and economic needs with sensitivity to communities and the environment. This can be done by providing a guiding philosophy for working together early and collaboratively with MPOs, regional planning organizations, communities and resource agencies.

AASHTO

AASHTO Center for Environmental Excellence

DRIVING TO SUCCESS WITH CSS

WHY IMPLEMENT AND INTEGRATE CSS INTO YOUR AGENCY?

- CSS can save your agency time and money by shortening the project delivery process and dealing [illegible] upfront.
- CSS facilitates and streamlines the NEPA process.
- CSS solutions add lasting value to the community, environment and transportation system; CSS solves transportation problems while improving communities and the environment.

KEYS TO SUCCESS IN CSS:

- State transportation leaders and CSS practitioners during recent national CSS meetings identified the following principles as key elements of successful CSS projects and integration efforts:
- Strive towards a shared stakeholder vision to provide a basis for decisions.

"For CSS to be successful, we as DOTs need to develop strong meaningful partnerships with stakeholders and establish clear and frequent communications to minimize misinformation and knowledge gaps. Meaningful public involvement doesn't mean that we will always agree, only that we commit to work together to achieve solutions that serve the greatest public good."
—Victor Mendez, Director, Arizona DOT

- Demonstrate a comprehensive understanding of contexts.
- Foster continuing communication and collaboration to achieve consensus.
- Exercise flexibility and creativity to shape effective transportation solutions, while preserving and enhancing community and natural environments and highway safety.

CSS IS NOT:

- Compromising safety or standards due to community pressure. CSS is a collaborative process amongst stakeholders with the DOT stressing safety and operational concerns.
- Spending a lot more money. Collaborating with parties interested in the project can also bring other sources of funding to the effort and produce a more comprehensive solution within shorter time frames and

"CSS is committed to advancing CSS as a way of doing business. It will help us ensure a safe and efficient transportation system while keeping communities and the environment strong. CSS is, simply put, doing the right thing for the right reasons."
—J. Richard Capka, Administrator, Federal Highway Administration

CAN YOU GET INFORMATION OR ICAL ASSISTANCE TO INTEGRATE THE LY OF DOING BUSINESS INTO YOUR Y?

The Engineering Division, at 202-624-3800.

U.S. Department of Transportation
Federal Highway Administration

A Business Case For CSS

- CSS can improve an agency's customer & stakeholder relationships (building confidence and trust)
- CSS can reduce an agency's cost of doing business (in delivering services, programs and projects)
- CSS can improve an agency's performance and efficiency (by reducing costly process and project delays and rework cycles)
- CSS can improve an agency's ability to balance competing objectives (while optimizing return on investments)
- CSS can result in more than 20 measurable agency and user benefits (correlated by ongoing research)

A New MnDOT Strategic Vision

How Does CSS Relate?

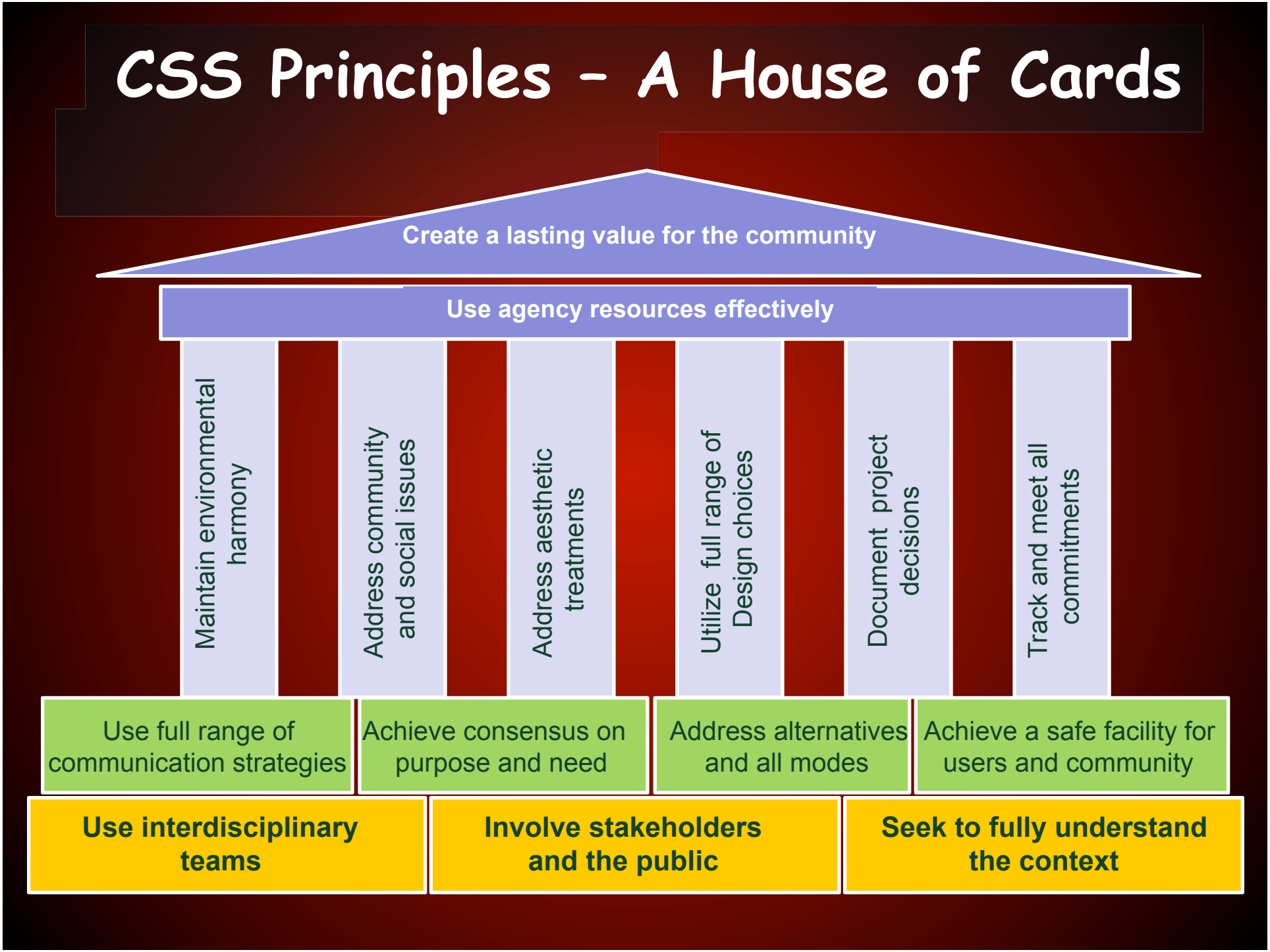
New Strategic Plan

- 5 Goals
  - Safety, Mobility, Innovation, Leadership and Transparency
- Innovation- Promote a culture of innovation in the organization
  - Integrate **CSS** within Mn/DOT as a business model
  - Innovative Finance
  - Sustainability Initiative

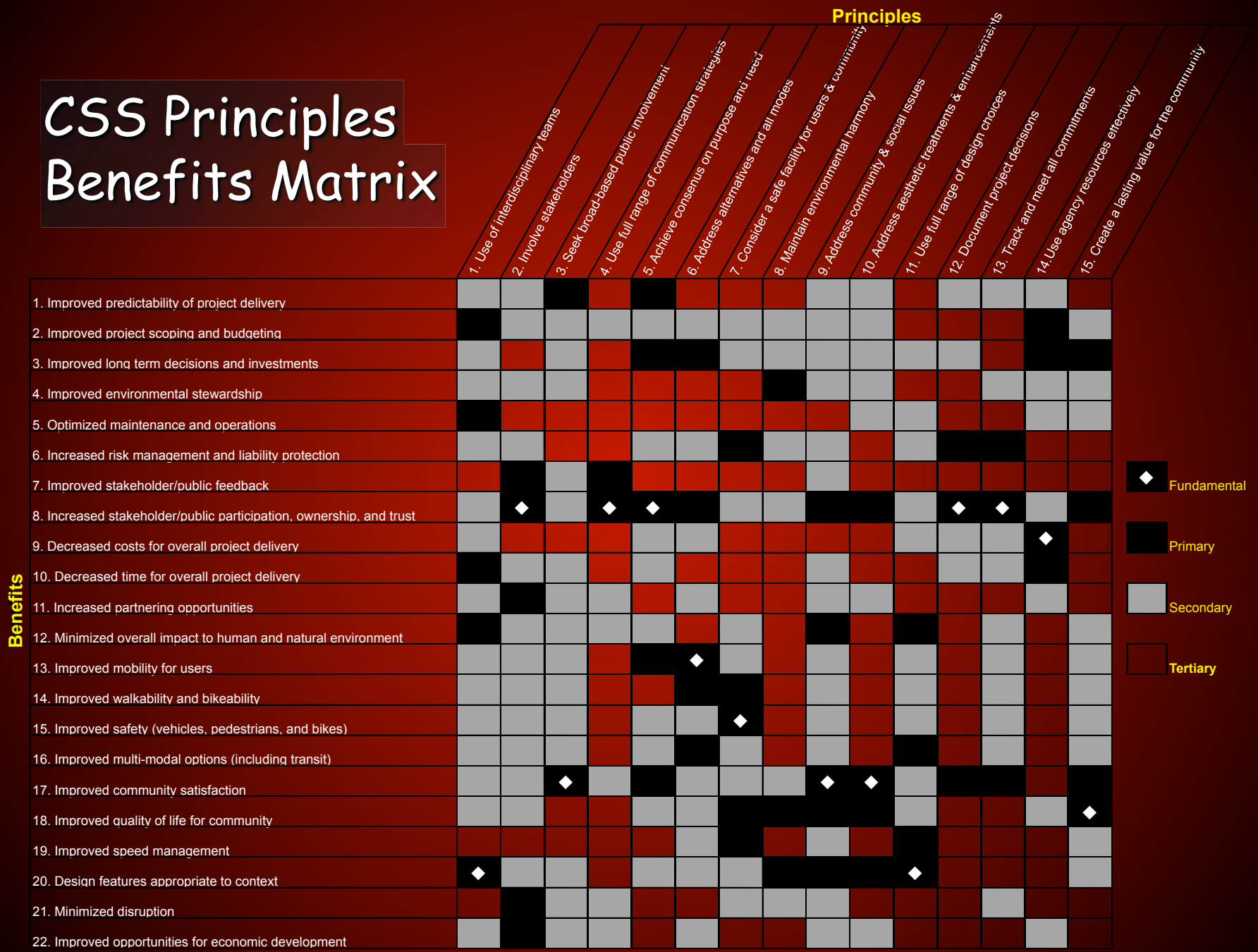
Collaborative, Interdisciplinary Approach

- Accountability
- Responsiveness
- Building relationships & trust with stakeholders
- Collaborative alliances
- Partnering with resources and responsibilities
- Accomplishing more with less

CSS Principles – A House of Cards



CSS Principles Benefits Matrix



CSS Benefits - Agency

1. Improved predictability of project delivery
2. Improved project scoping and budgeting
3. Improved long term decisions and investments
4. Improved environmental stewardship
5. Optimized maintenance and operations
6. Increased risk management and liability protection
7. Improved stakeholder/public feedback
8. Increased stakeholder/public participation, ownership, and trust
9. Decreased costs for overall project delivery
10. Decreased time for overall project delivery
11. Increased partnering opportunities

CSS Benefits - User

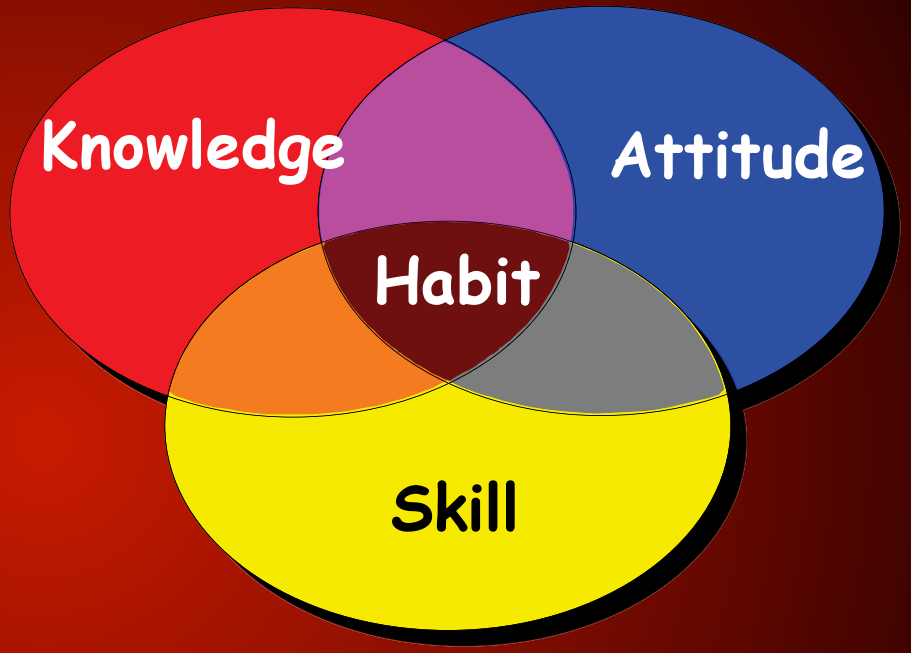
12. Minimized impact to human and natural environment
13. Improved mobility for users
14. Improved walkability and bikeability
15. Improved safety (vehicles, pedestrians, and bikes)
16. Improved multi-modal options (including transit)
17. Improved community satisfaction
18. Improved quality of life for community
19. Improved speed management
20. Design features appropriate to context
21. Minimized construction related disruption
22. Improved opportunities for economic development

CSS Challenges

CSS is about new **Habits**

Resistance to Change seems driven by Habits

Today's challenges require new Habits shaped by new skills, new knowledge, and new attitudes



(S. Covey)

"We are what we repeatedly do ... excellence is not an act but a habit"

(Aristotle)

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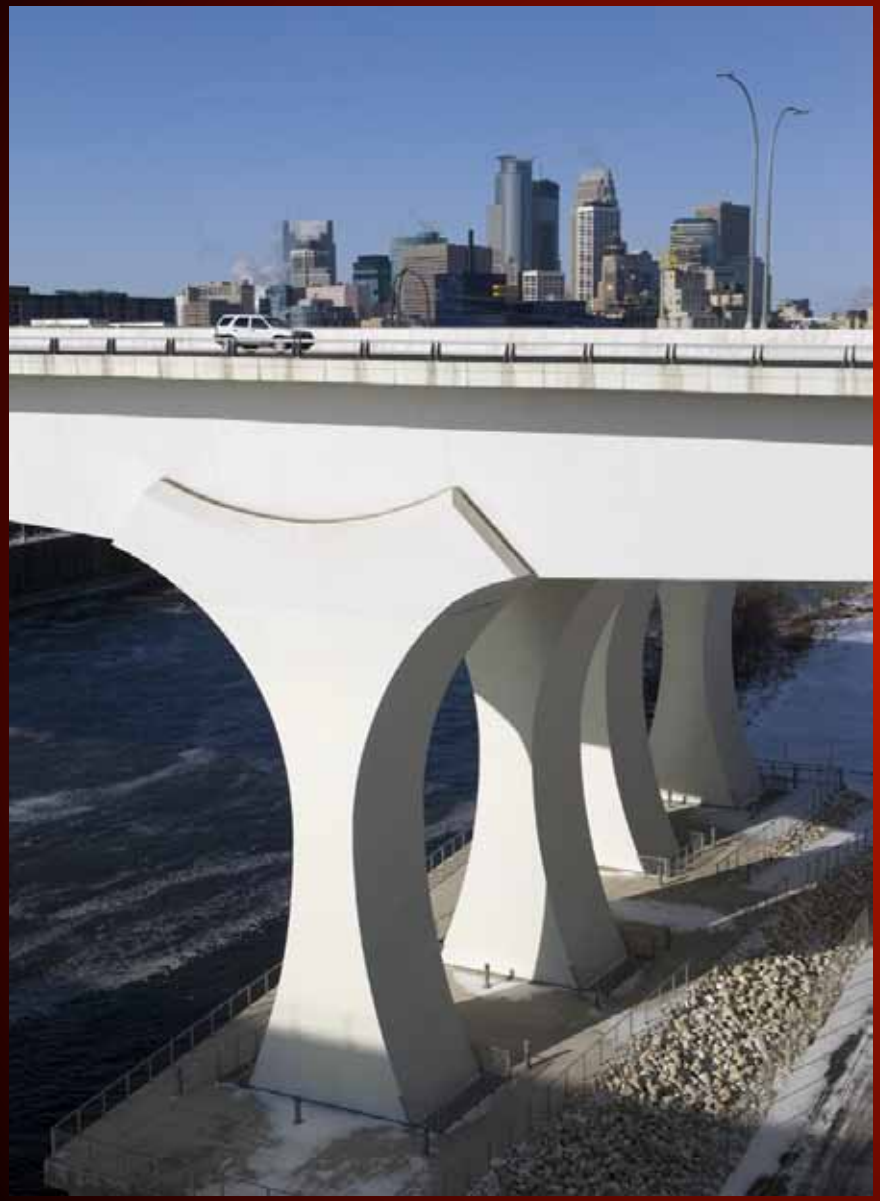

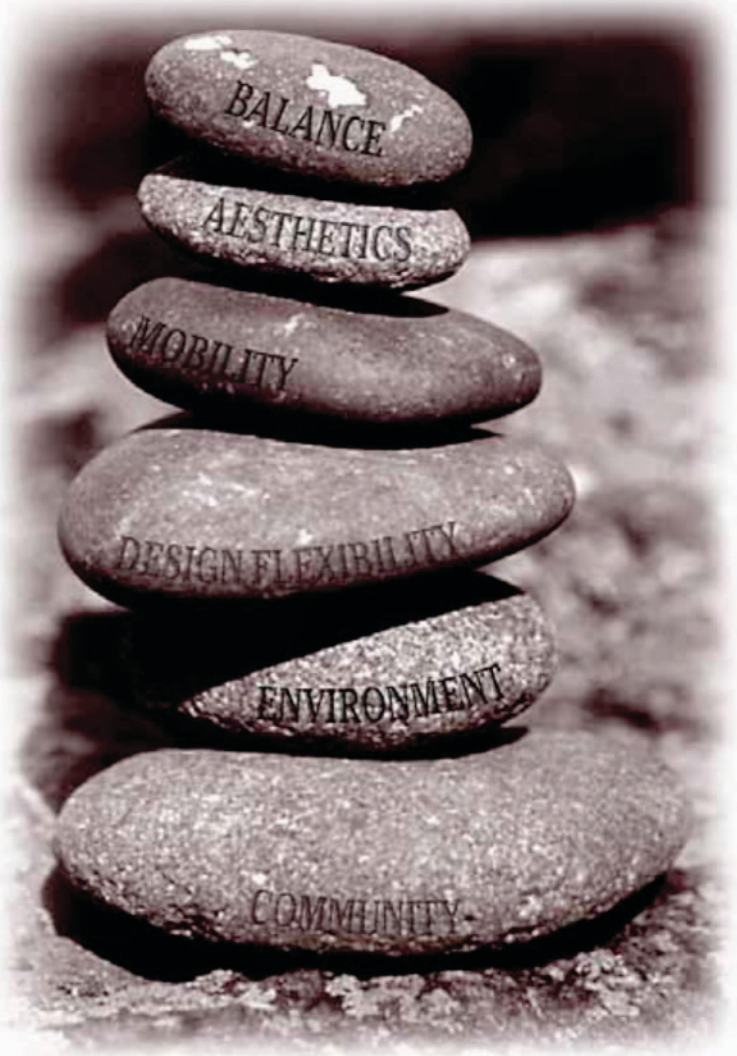

CSS- The Road Best Traveled