

AGENCY CHALLENGES TO INTEGRATING CONTEXT SENSITIVE SOLUTIONS

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Context Sensitive Solutions (CSS) is a new way of approaching transportation planning and implementation. Non-CSS transportation agencies view their mission as being responsible for building safe, efficient and effective transportation systems. These agencies recognize that under NEPA and environmental permitting regulations they must consider community goals and environmental impacts as a part of their transportation decision-making process. "Consideration," however, does not mean that transportation goals take a back seat. In most cases the facilities that are built under a traditional approach meet all of the transportation goals and engineering standards that transportation agencies establish. CSS, however, goes beyond consideration. CSS implementation means that transportation, community and environmental goals are all on an equal footing. It means that it is possible that transportation goals and traditional engineering approaches may not be the primary driver for all of the final project decisions.

This subtle shift—from transportation is number 1 to transportation is 1 of 3 equals—is at the core of the challenge of integrating CSS into transportation agencies and transportation decision-making. It raises implications that are difficult to understand let alone address. Yet transportation agencies across the country are moving to implement and integrate CSS. In some cases this is being done on individual projects as a project delivery risk management approach. In other DOTs CSS implementation is organization-wide and represents an overall shift in the fundamental culture of the state department of transportation (DOT). For these agencies there is a comprehensive examination and revision of policies, processes, procedures and standards to assure that they are "CSS friendly."

Wherever transportation agencies fall in the CSS implementation spectrum they face challenges. In preparation for a peer exchange the American Association of State Highway and Transportation Officials (AASHTO) recently surveyed its members to establish a baseline for CSS implementation. Forty-five state DOTs responded to a question about barriers to the implementation of CSS. A significant number of the respondents identified resistance to change (56%), perceived higher cost (42%), clear understanding of CSS (40%), and liability concerns (16%) as challenges to CSS implementation.¹ Each of these barriers raises interesting questions. A few of these questions are:

Resistance to change

1. Is CSS implementation different than other significant changes that DOTs have implemented in the past?

2. If not, then what lessons have we learned that can help us in implementing CSS? If yes, then how is CSS different and what do we need to do to help us establish an effective change management strategy?

Perceived higher cost

1. Is there actual data that shows that CSS project costs are higher?
2. How is “cost” being defined? Is this simply the project itself or does this cost “calculation” include the inflationary costs of project delays?
3. Are higher project costs acceptable if it means that transportation projects are contributing to community or environmental goals? If yes, then how do we determine what project characteristics or attributes can be included as “acceptable” costs?
4. What partnerships can transportation agencies form to help pay for improvements that go beyond acceptable transportation project costs?

Clear understanding of CSS

1. What defines a CSS project, its aesthetic characteristics (how pretty it is)? the process used to design and implement it? Both? Neither?
2. Are transportation professionals aware of the 1998 CSS Thinking Beyond the Pavement principles for project and process excellence? If yes, then what else is needed to help people understand what CSS is?
3. What categories or types of measures should we be developing to determine how to define and evaluate CSS success?

Liability concerns

1. Can a state with limited protection from liability lawsuits implement CSS? What do they need to do differently than a state where DOTs have sovereign immunity from lawsuits?
2. Are CSS projects inherently more at risk for lawsuits? Why?
3. How can that risk be evaluated and managed (as opposed to choosing to avoid using CSS principles because of potential liability concerns)?

Transportation agencies may not be the only ones that impacted by a shift to CSS. Local communities and permitting agencies have a role in the transportation decision-making process. Moving from traditional decision-making to CSS-based decision-making is likely to shift their roles and responsibilities as well. These shifts may be external (in the relationship to the DOT and other partners) and/or internal their individual operations. If this is the case, then implementing CSS has an additional set of barriers and challenges that must be considered. Some of the questions related to this issue are:

Partnering

1. Does CSS implementation impact the interagency partnerships that are a part of transportation decision-making? If yes, how?
2. Does CSS implementation impact the internal operations of interagency partnerships? If yes, how?

3. What is the appropriate role(s) (advisory, information provision, or decision-making) for the state DOT in CSS implementation? For community elected officials? For their staff? For permitting agencies? For FHWA? For the public? Are these roles different than in traditional transportation project development and implementation? If the roles are different, how are they different and what can DOTs do to help the partners understand their new role?

CSS is not the first major change that transportation agencies have implemented. In the past 100 years the transportation industry, both public and private, has found innovative ways to plan, build, operate and maintain transportation infrastructure and services. The challenges of integrating CSS may be more complex than many of these past innovations, but these challenges can and are being addressed by the Federal Highway Administration, AASHTO, and many state DOTs and their private and public partners. Identifying these challenges and sharing ideas on how to address them will help accelerate CSS implementation throughout the country.

References

¹Preliminary findings from the AASHTO CSS Task Force Survey on Context Sensitive Solutions Practices in State DOTs. Statistics quoted are used with permission from the AASHTO Center for Environmental Excellence.

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