
Executive Summary

There are many ways to apply context in the transportation world, and many agencies have focused on context-sensitive solutions (CSSs) for a few decades. The most recent version of the American Association of State Highway and Transportation Officials “A Policy on Geometric Design of Highways and Streets” (AASHTO Green Book, 2018) outlined context-based classifications. Introducing a new set of land-use context classifications (i.e., rural, rural town, suburban, urban, and urban core) creates a change in guidance for state transportation officials. The need for the contexts comes from our changing environment and ensuring that the transportation system accommodates all users to enhance mobility and accessibility, meet the needs of the communities, and improve our overall quality of life. While necessary, this paradigm shift of meeting the expectations of all users and matching the surrounding context may be challenging for many agencies.

Scan 21-02, “Leading Approaches to Implementing Context-Based Classification of Roadways in Planning and Design” describes the experiences gained in states implementing the context classifications. The scan’s focus was to identify best practices and lessons learned that may be valuable to others working on implementation or have not yet implemented context-based classification. This scan included a spectrum of knowledge, from those just initiating the effort to those implementing it throughout their agency.

This scan was conducted in two phases. In the first phase, a desk scan was undertaken to identify national agencies that have experienced or are currently working on implementing the classifications. This phase also included having the scan team prepare a set of questions for invited agencies to provide a structured response. The second phase of this scan invited agencies to participate and present during a four-day virtual scan tour. Ten agencies gave information during the scan, with opportunities for roundtable discussions. The participants of the scan identified best practices at the end of each day and compiled a summary of thoughts on the last day.

The presentations were valuable and provided a range of actions that agencies have undertaken to incorporate context classifications. Many different approaches have been used to meet the context within agencies and states. A “one size fits all” approach was not identified during this scan. However, many similar foundational elements were recognized. Each of the states were implementing various efforts, which are highlighted in the summary of information. The intent was to highlight high-level actions that each presenting agency has under way. This information was then compiled into overall key findings and recommendations. The key findings and recommendations fall within three categories:

- Determining Context
- Developing a Context Framework
- Implementing Context Classifications

Overall, the key takeaway for this effort is to encourage engineering judgment and documentation to design for how people use roads and not force people to use them as designed. Table ES-1 provides a summary of this information.

	Key Findings	Recommendations
Determining Context	<ul style="list-style-type: none"> ● Strong leadership and direction set the tone for the success. ● Multidisciplined teams are necessary to ensure goals and outcomes are met. ● Inclusive collaboration assists in defining policies and projects that meet the needs of all users. ● AASHTO Green Book provides a starting point for classifying contexts. 	<ul style="list-style-type: none"> ● Define context classifications to meet state context and easily connect to AASHTO and meet the needs of the area. ● Work with leadership to gain high-level support. ● Gather data that assists with defining the context. ● Collaborate with internal and external stakeholders.
Developing a Context Framework	<ul style="list-style-type: none"> ● Context classifications is a paradigm shift requiring effort and direction. ● Context classifications are best incorporated with an easily communicated process. ● Setting flexible design criteria for all users assists in the achieving desired outcomes. ● Flexibility needs to be encouraged for design and definition of standards. 	<ul style="list-style-type: none"> ● Develop a new process or improve a current process. <ul style="list-style-type: none"> ■ Change current processes to make change easier. ■ Create a bridging document. ■ Develop a new process with a multidisciplined team. ■ Outline information to be documented in a consistent form. ● Support viewing standards in a flexible way.
Implementing Context Classifications	<ul style="list-style-type: none"> ● Developing a consistent planning/design documentation process is better than using set standards. ● Training and easy-to-use tools are needed to address major changes and improve implementation. 	<ul style="list-style-type: none"> ● Focus on documenting decisions. ● Develop training programs that will: ● Outline the contexts ● Support engineering judgment ● Set expectations ● Document trade-offs and decisions ● Encourage collaboration. ● Create tools to support change.

Table ES-1. Context classification key findings and recommendations