You don't have to be an internationally renowned expert in CSD to do this, you just need to have a desire to do things differently. The NJDOT was inspired to create and implement a community oriented culture, by the examples set by states like Maryland, Florida and Kentucky. To achieve this, a culture change was required since NJDOT's ingrained beliefs in 1990 centered on the safety and mobility of the motoring public where the community needs were secondary to the greater good. Even though they didn't know how they had reached these conclusions, they had become an important part of the organization's belief system and could be explained by a paradigm shift over the last few decades. The role of the DOT in the 70s was to build the highway system, the safest and the fastest highways in the world. That was the focus and that was the paradigm. This paradigm shifted in the 80?s and the 90s when the national scope of projects was replaced by a more local scope. Thus, even though the nature of projects and the associated paradigm shifted, the DOT's thinking did not. The DOT still waited till the last minute to get the public involved which created a lot of controversies and problems. But the DOT thought that the people just didn't get it; they had to get the public around and keep them safe. But as communities started to strongly oppose and stop projects, there was a realization that unless partnerships were formed, the projects would not get built.

To tackle this problem, the DOT started by getting inspiration from other states. Maryland and Florida were gracious enough to come to NJ for a two-day seminar. The NJDOT decided to follow the Florida model for CSD and one of the first things they did was to form a CSD Implementation Team that cross cut the whole department. They said that CSD wasn't just the responsibility of advocacy groups or the community; it is the responsibility of the whole agency. The NJDOT CSD Implementation Team was divided into six groups: culture change and public education, standards and practices, policies and procedures, community outreach and analysis, training, and organization. The organization also outlined tangible steps to be undertaken in different areas: policies and procedures, community outreach, training and education, and flexible design.

Firstly, in the policy arena, the NJDOT committed to consider the needs of "all" road users, not only moving cars. "At the end of the day, the reason we went to work at the NJDOT is to actually improve the quality of life of the people of out state and if we simply thought about mobility and safety of the motorists, then we were missing a lot."

In terms of procedures, there was a need to consider the context before designing. Before the procedures could be modified, "we needed to train ourselves to meticulously define context even before the scoping or designing of the project was started." The main components of the context could be political, financial, transportation, community and environmental. Before the NJDOT started using CSD principles, the transportation context considered safety as the paramount factor. However, on scrutiny it was realized that none of the projects had safety issues that were so compelling that they warranted doing everything at the expense of the community and the environment. Also, it was realized that different kind of roads had different requirements which had to balance equally. While dealing with main streets or urban arterials, that weren't of statewide significance, the community was given veto power over the issue. Of the community was happy with
the congestion/speed in their area, then the DOT decided not to go in and force them to accept road widening and other measures.

The environmental context was recognized to be defined by a variety of components: wetlands, cultural resources, noise receptors, farmland, parks and scenic resources. To adequately recognize the community context, it was necessary to revise scope development procedures so that a Public Involvement Action Plan (PIAP) was developed at the start of a project. It was realized that talking to the community may help define the context. All the initial definitions of context need to be merged into one to come up with a scope and design that is sensitive to the context.

Community outreach was another dimension that needed change. The main principles for change included involving the community in all phases, change the traditional community involvement process and take a more proactive approach, and develop a shared decision making process by changing the nature of the interactions. It was necessary to realize that "what we may think as improved may not be what the public thinks as improved."

The final area of change is training. The NJDOT has gone through three years of training in CSD so far, which was supplied by a whole consortium of organizations and individuals, like the Transportation Policy Institute (Rutgers), Project for Public Spaces, and Sally Oldham (Oldham historic properties). The training was not limited to only DOT engineers but also community advocacy groups, non-profit organizations, members of the public, county and municipal staff, elected officials, consultants and others. One of the components of the training that NJDOT is particularly proud of is that one whole day, out of the five training days spread over a couple of months, was used to educate the trainees on the concept of placemaking. "If DOT designers were not sensitive to good and viable places, then they would be insensitive in their design as to how they were harming those places." Also, since September 2003, the NJDOT has introduced design training into the curriculum, since the more the engineers know about design, the less likely they are to open books and follow them blindly, the more likely they are to be flexible.

There are some ingrained beliefs on design that prevent flexibility. Engineers traditionally perceive CSD as unsafe design and equate wider and straighter with safe, neither of which is accurate. The AASHTO Green Book itself states that its intent is to "provide guidance to the designer" and that it permits sufficient flexibility "to encourage independent designs tailored to particular solutions." Thus, right within the existing design manuals, there is scope for flexibility, even though engineers have been "hiding behind them" for years. However, maybe there was a lack of awareness that this flexibility existed. The Green Book is a big, comprehensive and not too easy to read document and perhaps lots of designers didn’t read it all.

Consequently, the NJDOT came up with a two-page proactive roadway design policy which urged for design that trained people to “drive on our freeways as freeways and on local roads to behave as if on local roads.” It made a commitment that "if compelling needs exist (pedestrian safety, downtown vitality), the designer may consider introducing physical elements below 35MPH."

Another issue that arises in CSD is liability. Would the DOT be liable if they don’t design to maximize their desirable targets? The answer would be 'yes' if the "decisions are not reasonable and we arbitrarily cast aside sound engineering principles without good reason." The answer would be 'maybe' if the "reasonable decisions" are not documented in a permanent file. The answer would be 'unlikely' "if reasonable decisions were made by
reasonable people who gave consideration to social, economic and environmental impacts together with safe and efficient traffic problems."

The first illustrative example of CSD concentrates on aesthetic enhancement on Route 21 and Route 46 (Clifton and Passaic, NJ). This $150 million freeway was designed to incorporate the existing architecture into the structural and design vocabulary. Even though the freeway was nevertheless an impact on the community, it did not stick out like a sore thumb. In the next example; Route 35, Navesink River Bridge, the NJDOT hired the same architect who was doing the downtown design for the community to design the bridge. CSD is not just landscape architecture, just aesthetics, just dressing up the project, but it is fundamentally changing the project from the beginning. It's much more than aesthetics.

Another example is that of the Borough of Avon, a town along the NJ shore. A four lane cross section there formed a barricade between the town and the shore and the services. The town asked the section to be reduced to 2 lanes so that it could function more like a boulevard. So, far, after this change, there have been no complaints from the public.

In closing, why is it necessary to pursue CSD? Besides improvement in quality in life and sustainable design achieved through CSD, it is important to remember that we too live in these communities. Why are we trashing them? Why are we minimizing the value of our own towns? This is the main valuable reason to pursue CSD.