

Chapter 9: Conclusion and Recommendations

The idea of Context Sensitive Design has become more common since *Design Alternatives for Rural Roads* was originally published in 1994. In fact, since that time the Federal Highway Administration has designated five (5) pilot states to explore and implement highway design standards and/or procedures to assist project development that combines transportation improvements with aesthetic considerations. One of the pilot states is Massachusetts' neighbor, Connecticut.

Former MassHighway Commissioner Amorello's Task Force on Roads in Rural and Historic Areas has evolved to a Design Issues Working Group (DIWG). DIWG invited the Connecticut Department of Transportation (DOT) to give a presentation on how Context Sensitive Design is being applied in their state. Interestingly, the numerous case examples offered by the Connecticut DOT as success stories in Context Sensitive Design revealed that their success was due to strengthened communication between the various stakeholders rather than a change in design standards. Connecticut DOT officials have put additional emphasis on the importance of early participation by local residents, and have focused attention on ways to fully use the flexibility already built into their highway design manual to meet local needs and desires.

Massachusetts design standards are similar to Connecticut's in that each, like most states, has based their design manual on the AASHTO Greenbook. It is a common remark by State highway officials that the AASHTO Green Book offers sufficient flexibility to achieve Context Sensitive Design that is amenable to most constituents. Therefore, changing the standards is often seen as unnecessary. Certainly the work of former Commissioner Amorello's Task Force on Roads in Rural and Historic areas supports the idea that improved communication between stakeholders early in the process is important and can lead to quality projects that are Context Sensitive. This approach gives additional responsibility to both state and local participants to seek out communication between one another, and to place a high priority on it. However, at the same time, given the very different needs of the urban, suburban, and rural areas in the Commonwealth, there are many who believe that even with improved communication it is inappropriate and difficult to apply one set of standards across the board. At the same time, there is concern about the time and expense required to prepare, submit, and receive approval for design exception requests. Therefore, the DIWG began discussing ways to implement Context Sensitive Design in Massachusetts without design exceptions, and development of a Community Roads Program began.

The Community Roads Program, still under development by the DIWG, acknowledges that "design criteria for projects on existing roads must often be viewed from a different perspective than design criteria for new roadway construction projects"¹⁴. It further acknowledges that "many projects on existing roads are initiated for reasons other than geometric design deficiencies, and that many proposed projects are located within limited rights of way, on main streets in village, urban, or town centers, or are adjacent

¹⁴ From the draft Community Roads Program guidelines prepared by the Design Issues Working Group, dated 10/24/02.

to natural resources, public lands, or historic resources.”¹⁵ In addition, “projects on existing roadways are initiated in communities where land use and cultural characteristics are often already well established. The Community Roads Program allows project proponents to extend the service life of the existing facility, enhance safety for all users, reduce maintenance costs, protect the environment, and preserve and enhance historic and community character. Work under this program should consist primarily of roadway improvements that follow the existing horizontal and vertical alignments of the project roadway, generally within the existing physical ‘footprint’ of the project roadway. Additional work may also include elements such as drainage improvements, signing, pavement markings, roadside improvements, guardrail installation or improvements, pedestrian and bicycle improvements, edging installation or adjustment, ADA/AAB elements, and other incidental improvements. The Community Roads Program is not intended as a replacement or expansion of the local Aid (Chapter 90) program or as a replacement program for state highway resurfacing and maintenance projects.”¹⁶ It is intended to make improvements to roadways in sensitive areas that have specific concerns or important resources. Further information about project eligibility and program guidelines for using the Community Roads Program will be forthcoming. It is expected that the DIWG will have program guidelines completed by the end of the calendar year 2002, and that implementation on a pilot basis will begin immediately.

While waiting for the Community Roads Program to kick off, there are several additional areas to be considered that could help communities achieve context sensitive design within the current guidelines and system. There are outlined below.

Recommendations

1. Expand the use of the Low Speed – Low Volume design standards. The LS/LV standards were developed specifically to give special consideration to lesser-traveled roads, primarily found in rural areas. However, their use is sometimes limited unnecessarily. One of the criteria for applying LS/LV standards is that the road be functionally classified as a Rural Major Collector, Rural Minor Collector, or Local Road. This leaves LS/LV arterials incapable of applying the reduced standards even if the roads’ speed and volume meet the other criteria. Eliminating or expanding the eligible functional classification criteria could address situations often familiar to rural areas and help to achieve context sensitive projects within the current system. This could be further justified in rural areas since the determination of a road’s functional classification was based both on its function as a roadway, as well as a requirement to have a certain percentage of roadway miles in each classification. Therefore, certain roadways that may have been classified in a lower category according to their use, were bumped up to meet the percentage requirement.

¹⁵ From the draft Community Road Program guidelines prepared by the Design Issues Working Group, dated 10/24/02.

¹⁶ Ibid.

2. Remember the importance of Communication, Compromise, and Commitment. Communication between all of the stakeholders is essential to producing projects that meet everyone's need. While MassHighway should pay special attention to initiating and facilitating communication with towns, particularly small towns without professional staff, local municipalities also share the responsibility to organize themselves and participate. The design process needs to be a partnership.

All successful partnerships require compromise. The old adage "pick your battles" can apply here. While it is important to work cooperatively, each project is bound to have elements that are more important or less important to the various stakeholders. Be sure that you advocate for those of most importance, and consider flexing on those that are least important.

Stay committed to the project and be prepared for the long haul. It is simply a fact that transportation projects take a long time to complete. This is not unique to Massachusetts. All across New England and the nation, transportation projects can take years to implement. While there is room to improve turnaround times in the planning and design of projects in Massachusetts, it is highly unlikely that any given project will proceed quickly and seamlessly from start to finish. There are numerous stakeholders, environmental considerations, design phases, and funding constraints. It takes work to stay focused and insist on progress, but patience is important as well. For best results, insist on staying involved *through* construction.

3. Use your Regional Planning Agency. Regional Planning Agencies work closely with their MassHighway Districts and planning staff in Boston. RPAs often serve as liaisons between towns and state departments, and are happy to help facilitate communication between groups.
4. Advocate for the more routine use of aesthetic materials in road and bridge design. There are numerous case examples of MassHighway projects incorporating context sensitive materials into projects, but it is usually the result of heavy lobbying by the community. Local and regional constituents should take opportunities to support and advocate for the use of context sensitive materials. Let MassHighway know that features or actions they've incorporated into other projects are welcome in your area. These could include aesthetic retaining walls, less obtrusive guardrails, rehabilitation verses replacement of rural bridges, or pedestrian level lights. Positive feedback on projects you like can help get those kinds of elements duplicated elsewhere.
5. Support efforts to clarify MassHighway's timetable in road and bridge design and construction, and to establish turnaround times for actions like Design Exceptions. Even with a better explanation of the Highway Design Process, it may still be unclear to a layperson how that process plays out in terms of MassHighway personnel and timeline. MassHighway has indicated that it would like to take its Highway Design Process description to the next level and, for example, identify exactly where plans go when they are submitted for 25% review and what that review entails. Taking the

mystery out of the design and construction process can give local interests a greater role in the process. It is then possible to monitor what is happening and when, and eliminate the inevitable frustration that comes with the unknown.

6. Remember that this is an on-going process. It is encouraging that context sensitive design has achieved national recognition, and that MassHighway is studying ways to incorporate its use in a more routine way. However, significant change takes time. Stay involved and keep context sensitive design a “must achieve” goal.