

Improving Traffic Sign Management Process

All highway agencies have a process in place for installing and maintaining traffic signs on the streets and roads under their jurisdiction. These processes take many forms ranging from very simple to complex depending upon the type and size of the agencies, and the number of signs that need to be managed. These processes devote varying degrees of attention to night visibility aspects. Addressing the needs for improved night visibility of traffic signs will require that agencies integrate one or more of these methods into their sign management processes. This also opens the opportunity to make more extensive upgrades in their overall sign management processes and potentially realize other benefits in doing so.

Some have argued that a sign management system could be considered as one of the methods. However, a sign management system is a tool that could support one or more of the methods. In itself, a sign management system does not provide a means for evaluating nighttime sign visibility, but it does provide a means of managing information that can be used to predict when a sign should be replaced without requiring field evaluations. It can be a useful way to track the history of each sign to help plan for future replacements. It would be particularly useful in tracking potential sign problems if enough detail is captured in the database. For example, if sheeting lot numbers were included in the database, it would be possible to identify exactly which signs were affected by inferior material in the preparation of warranty claims. It has been noted that insurance carriers for some agencies will reduce the premiums if an agency uses a sign management system.

The first step for an agency will be to determine how they will improve their current processes to incorporate the improved methods. This will require consideration of the options that are available. Some of these options are:

- Developing a comprehensive sign inventory
- Acquiring sign management system software
- Altering the sign fabrication practices
- Adding codes to each sign
- Changing the sign material procurement process
- Using contract forces for some or all of the sign field work (inspection and replacement).
- Linking to other asset management practices.

These options and others need to be considered in the context of existing processes. Further, it will be necessary to consider various strategies and tactics aimed at effectively making the transition. It is considered important that FHWA provide guidance to agencies on the strategies and tactics that may be used to implement improved methods and procedures given current practices, available resources, and the will of the community. This guidance is considered necessary under the assumption that most agencies do not use rigorous sign management processes.

In dialogue between FHWA and AASHTO, it has become clear that the states need flexibility in determining the approach and methods they will use to assure that in-place signs meet any new requirements. The FHWA supports the need for flexibility, but is also interested in facilitating the implementation of the minimum levels by 1) describing each method in detail, 2) developing the basic procedures for each method, and 3) providing guidance on the strategies and tactics that agencies can use to integrate these methods into their sign management processes or improved versions of them. Agencies must be able to make effective decisions on the timing, logistics, scope, and priority of actions that may be necessary to integrate the minimum levels into their sign management process. In some cases, the decisions may lead to substantial changes in practices, and in other cases, relatively minor alterations in the process may be needed. To assist agencies in making these decisions, efforts are needed to identify the realm of strategies and tactics that might be used.