

OM-11: Traffic Control Infrastructure Maintenance

1-15 points

Goal: Increase safety and operational efficiency by maintaining roadway traffic controls.

Sustainability Linkage

Infrastructure preservation and maintenance activities supports all of the triple bottom line principles by better leveraging funds, improving system quality and customer satisfaction, and more effectively maintaining assets, which reduces cost and the environmental impacts of construction and raw material use.



Background and Scoring Requirements

Background

This criterion covers the preservation and maintenance of permanent traffic control, Intelligent Transportation System (ITS), and safety devices. Two related criteria include OM-14: Work Zone Traffic Control, which includes temporary traffic control, ITS, and safety devices, and OM-13: Transportation Management and Operations, which covers the operation of permanent traffic control and ITS systems.

Preservation and maintenance activities for traffic control infrastructure should be generated in conjunction with a Maintenance Management System (OM-09), if one exists within an organization.

Scoring Requirements

The organization and operation of preservation and maintenance functions within different agencies are unique. As a result, the Traffic Control Maintenance Plan (TCMP) may actually be multiple documents that cover different assets, functions, or geographies. For the purposes of this tool, the user should score the TCMP including all relevant documents necessary to cover the assets and functions discussed in each criterion.

If an agency is evaluating only a specific geography then that entire geography must be covered in order to take credit for the following scoring requirements. If evaluating agency-wide, all geographies must be covered by a combination of plans in order to take credit.

Requirement OM-11.1

1 or 2 points. Develop a Traffic Control Maintenance Plan

The agency shall have and implement a comprehensive TCMP. This plan must address, at a minimum, responsible parties/organizations, standards, schedule, methods to be used, and funding sources for the following items:

- Pavement marking maintenance and repair: Restriping activities;
- Sign maintenance and repair: Reflectivity assessment, sign replacement, signpost repair;
- Safety device (e.g., guardrail, traffic attenuators, delineators, etc.) maintenance and repair;
- Traffic signal maintenance and repair;
- Roadway lighting maintenance and repair: Electrical service, bulb replacement; and
- Intelligent transportation system (ITS) maintenance and repair.

One of the following scores applies:

- **0 points.** The agency does not have a TCMP that covers the items listed above.
- **1 point.** The agency has a TCMP consisting of multiple documents that covers all of the relevant items listed above or the agency has a consolidated TCMP that covers at least four of the six items listed above.
- **2 points.** The agency has a consolidated TCMP that covers all of the relevant items listed above.

Requirement OM-11.2

2 or 4 points. Establish Metrics and Measure Performance

To earn credit for this scoring requirement, the agency must have a Road Weather Management Plan as described in scoring requirement OM-12.1. Scoring is based on the following, cumulative requirements. The first requirement must be accomplished to earn the second.

- **Requirement OM-11.2a**

2 points. Establish Quantifiable Metrics

Establish quantifiable performance metrics for the TCMP. These can be based on evaluation of individual roadways or the aggregated network, and should be based on level-of-service, readability of signage, adequacy of lighting, presence of deficient traffic control devices, timeliness of maintenance activities, and other relevant parameters.

- **Requirement OM-11.2b**

2 additional points. Use Metrics to Evaluate Performance

Use these to evaluate the overall performance of the TCMP.

Requirement OM-11.3

1 or 3 points. Set Goals and Monitor Progress

To earn credit for this scoring requirement, the agency must have a Traffic Control Maintenance Plan as described in scoring requirement OM-11.1. Scoring is based on the following, cumulative requirements. The first requirement must be accomplished to earn the second.

- **Requirement OM-11.3a**

1 point. Set Quantifiable Goals

Set quantifiable goals relating to the metrics above for agency traffic control devices, including when these goals are to be achieved. For example, an agency might set a goal that all painted centerline stripes are to be repainted bi-annually.

- **Requirement OM-11.3b**

2 additional points. Monitor Progress and Demonstrate Sustainable Outcomes

Monitor progress towards goals for at least one year after goal establishment and show measurable advancement towards stated goals.

Requirement OM-11.4

3 or 6 points. Sustainable Maintenance and Operations

Scoring is based on the following, cumulative requirements:

- **Requirement OM-11.4a**

3 points. TCMP Highlights Activities that Contribute to Sustainability during Maintenance & Operations

The TCMP specifically addresses sustainability and highlights procedures, specifications, and activities that contribute to sustainability during preservation and maintenance activities. For example, standard operating procedures for maintenance crews could include non-idling procedures for noise and air quality control, sustainable waste management, sustainable materials procurement and use, or pollution prevention procedures.

- **Requirement OM-11.4b**

3 points. TCMP Includes Activities that Contribute to Sustainability of Infrastructure Assets

The TCMP specifically addresses sustainability and includes procedures, specifications, or measures that contribute to the sustainability of infrastructure assets. For example, a standard operating procedure could require that HPS luminaires to be replaced shall be upgraded to more efficient lamps (e.g., LED).

Resources

None referenced.

Scoring Sources

The program is considered to have met this criterion if the requirements above can be reasonably substantiated through the existence of one or more of the following documentation sources (or equal where not available):

1. A list of each item that addresses responsible parties, schedule, methods, and funding sources.
2. If performance is measured, a chart, table, or spreadsheet that summarizes system performance.
3. Documentation of the goals of the maintenance plan, including quantifiable objectives and timeframes.
4. If progress is monitored, a chart, table, or spreadsheet progression towards the above goal over time.