



Traffic Guidelines Manual

ORIGINATOR Director, Bureau of Traffic Operations		11-1-1
CHAPTER 11	Lighting/Electrical/Electronic Systems	
SECTION 1	Lighting System Approval	
SUBJECT 1	Initial System Approval	

PURPOSE

This policy describes the requirements for approval of Lighting on the Wisconsin State Highway System.

POLICY

All lighting on the state trunk highway system **shall** require approval in accordance with this policy.

WisDOT Maintained Systems

The State Lighting Systems Engineer in the Bureau of Traffic Operations **shall** approve all proposed new lighting system installations on state trunk highways except as described below. When there is a possibility a project *may* include the installation of lighting, the DOT project manager for design **shall** work with the region lighting engineer in the traffic section to submit a DT1198 Roadway Lighting System Approval Request, supported by an investigation report, to the State Lighting Systems Engineer. These documents **shall** be submitted before any commitments are made concerning the installation of lighting systems.

The following lighting needs are required by the department and are exempt from the formal approval process. However, in these cases the project manager **shall** work with the region lighting engineer to accommodate coordination and oversight of the design:

- signalized intersections
- roundabouts
- metered ramps
- tunnels
- special facilities
 - Weigh stations
 - Park-rides
 - Crash investigation sites
 - Rest areas
 - Waysides

Improvement projects on roads where lighting presently exists are also exempt from the formal approval process.

The investigation report provides an objective description and analysis of the roadway/project for the State Lighting Systems Engineer to use in recommending installing and maintaining a lighting system.

The report **shall** include:

- DT1198 Roadway Lighting System Approval Request.
- Description/discussion of the project and plan drawing of the roadway project under consideration
- Data pertinent to determine the need for lighting that includes, but not limited to:
 - traffic volumes minimally broken down into day vs. night, but more specific time periods when pertinent to the investigation
 - crash history on the existing road including type of crash and if darkness was a pertinent factor
 - evaluation of other crash avoidance measures (geometric, signing, striping, etc.) being considered and/or implemented and how lighting relates to this overall safety evaluation
 - analysis based on the minimum warranting conditions as minimum thresholds for further consideration of lighting as described in the current AASHTO Roadway Lighting Design Guide
- Installation cost, maintenance cost, and what agency is funding/maintaining the system
- Discussion, correspondence, and recommendations from local jurisdictions, and any written agreements relating to lighting on the project
- A recommendation with supporting discussion based on the above evaluation

The State Lighting Systems Engineer will evaluate the proposal based on the information in the investigation report along with consideration of any additional items pertinent to the specific project and provide approval for acceptable projects.

Regardless of the need for approval, all WisDOT maintained lighting systems shall follow the design process described in other TGM sections.

Permitted Lighting Systems

All Locally-owned and maintained Lighting systems on the Wisconsin State Highway system shall require a permit in accordance with TGM 11-3-1.

Aesthetic Lighting on Structures

Aesthetic lighting shall require approval in accordance with TGM 11-3-2.

Connecting Highways

Lighting on connecting highways and permitted lighting maintained by local municipalities on state trunk highways are exempt from submitting a request for approval. However, in these cases the project manager **shall** work with the region lighting engineer to accommodate coordination and oversight of the design.