Signals and ITS Standalone Program

January 2025

General

In 2013, the Wisconsin State Legislature provided the ability for the State to appropriate funds for installation, replacement or rehabilitation of traffic signals and intelligent transportation systems (ITS) not incidental to another highway improvement in **Wisconsin Statute 84.06(13)**.

The Signals and ITS Standalone Program was established in 2013 to manage the appropriated funds for the purpose of addressing signals and ITS needs not incidental to another highway improvement project. The following sections describe the program and how projects are developed, evaluated, prioritized, and awarded.

Applicability

The SISP funds are available for projects with greater than fifty percent cost associated with traffic signal or ITS hardware and construction. All state (including Interstate) and connecting highways are eligible for program funds. Statewide or State maintained facility projects are eligible for full program funds. Maximum project award is limited to a total of $1,250,000 per application.

Those projects on connecting highways are eligible for 90% program funds with a 10% cost sharing component from the maintaining agency. All funds are required to be encumbered within the fiscal year of award. Multi-year projects are eligible for program funds, however, must be released and encumbered within each designated fiscal year.

Project Identification & Development Resources

The SISP is focused on the installation, replacement or rehabilitation of traffic signals and ITS projects. Projects are developed by local, regional, or statewide Bureau of Traffic Operations (BTO) staff.

Project identification and development resources are available through the Transportation Systems Management and Operations Traffic Infrastructure Process (TSMO–TIP) which is an annual process to consider operational needs and potential solutions throughout the state. Needs identification and project benefit tools assist with project development. Although the process is primarily focused on ITS project types, the information can be used to assist with several project types.

Projects required to be vetted through the TSMO – TIP must be supported by the sponsoring WisDOT region prior to applying for funding within the SISP. SISP program funds cannot be used to fund lighting, enhanced signs, decorative signal poles, decorative cabinets, or decorative signal infrastructure. The following project types are identified within the program application and defined as follows:

1. New Signal Installation – Procurement and installation of controllers, bases, signals, and detection.
2. Signal Replacement – Replacement of signals including geometric improvements and upgrades for construction.

3. Signal Rehabilitation – Upgrade, install or replace detection, controllers, battery backup, etc.
4. Signal Retrofit – Procure and install monotubes, procure and install flashing yellow arrows, safety improvements not requiring major construction, and adaptive signal systems.
5. Signal and Ramp Meter Retiming – Data collection, evaluation, prepare signal timing plans, and develop and implement corridor coordination plans to support three- and five-year timing schedule.
6. LED Signal Replacement – Procure and install all materials for annual LED signal 7-year replacement cycle.
7. Intersection Communication (TSMO-TIP required) – Design, build and integrate fiber optic links between existing fiber infrastructure and signal systems, or procure and install cellular Ethernet modems.
8. ITS Device Installation (TSMO-TIP required) – Installation of new detection, controllers, battery backup, dynamic message signs (DMS), closed circuit television (CCTV), ramp meters, fiber, communications end equipment, etc.
9. ITS Device Lifecycle Replacement – Upgrade or replace detection, controllers, battery backup, dynamic message signs (DMS), closed circuit television (CCTV), ramp meters, fiber, communications end equipment, etc.
10. Software and Data – Develop, upgrade, install or replace software including ongoing licensing fees and data subscriptions.
11. Crosswalk Technology Improvements – Rectangular rapid flashing beacons (RRFB), accessible pedestrian signals (APS), and pedestrian hybrid beacons.
12. Other – Examples Include performance measures applications, research and development projects, connected and autonomous vehicle deployments and applications, Traffic Management Center control room updates, studies, plans, and evaluations.

Project Application Process & Requirements

Application Cycle

The SISP applications are evaluated and awarded on a semi-annual cycle. Project applications are considered in the spring and fall prior to the disbursement of funds at the beginning of the following fiscal year which begins July 1st.

Application Submittal

The SISP application consists of general project information; explanation of anticipated benefits that will be provided by the proposed project; project cost and schedule information; project contact; and managerial support. Any other relevant information, such as maps, support documentation, etc., is requested to be attached to the application. Those projects that are required to complete a TSMO-TIP package should attach the supported documentation with the application as well.

Completed regional and connecting highway application forms are submitted to the Regional SISP Liaison. The Region considers all the applications for the upcoming funding cycle and ranks the projects according to regional priority. It is critical that municipalities work with Regional SISP Liaisons to communicate the need for a particular project so that it is ranked accurately within the Region. Regions submit applications and regional rankings for consideration in each application cycle. Municipalities may only submit two applications per calendar year (i.e.-2 applications in Spring, 1 application in Spring and 1 application in Fall, or 2 applications in Fall).

Project Evaluation and Prioritization Process

The SISP evaluation and prioritization methodology creates consistent and objective assignment of funds. Projects are evaluated, scored, and prioritized by an evaluation committee. The SISP Evaluation Committee is created each programming cycle with one representative from each Region as well as statewide representation from BTO, safety, and signals.

The Evaluation Committee reviews project applications and uses a prioritization matrix to score projects. The scoring criteria includes:

- Regional Status – Regional Ranking
- Mobility – Facility Operations
- Operations and Maintenance – Ease of Operations and Maintenance
- Preservation
    - Lifecycle Replacement
    - Energy and Environment
- Safety
    - Safety Impacts - Level of Service of Safety (LOSS)
    - Safety Impacts – Potential for Safety Improvement (PSI)

The Evaluation Committee scores are compiled, reviewed, and discussed during a Prioritization Workshop. The Evaluation Committee prioritizes the applications and considers any multi-year project commitments for the forthcoming fiscal year. The Evaluation Committee then recommends projects for award based on available program funding and the committee prioritization. Regional representatives are notified of project awards.

Project contacts are asked to prepare project work plans for those awarded projects in advance of funding disbursement to ensure funds are encumbered as soon as possible.

Project Funding

Approved statewide and regional SISP projects are funded with 100% Program funds. Sponsored projects on connecting highways are funded with 90% Program funds and a 10% match from local sources. Maximum project award is limited to a total of $1,250,000 per application. In general, the municipal agency sponsoring the project application (the signee of the SISP Project Application Form) is responsible for paying the 10% match. The municipal agency responsible for the 10% match is also responsible for any costs over the project funding cap. Applicants have the flexibility to explore partnerships with other government agencies to share the responsibility of the required 10% match and any overages exceeding a project funding cap. It is important that the terms of any negotiated shared responsibility of a 10% match and any overages exceeding a project funding cap between the State and a municipality be codified appropriately in a State Municipal Agreement (SMA).