Wisconsin Department of Transportation (WisDOT) Stand-alone Signals and ITS Program FY17 Project Application Form GENERAL INSTRUCTIONS

APPLICATIONS DUE: FEBRUARY 16, 2016

Please upload applications to the SharePoint site under your Region (https://wisdot.sharepoint.com/sites/dtsd/bto/its-sig/2017/SitePages/Home.aspx).

Each Region requesting funds from the Stand-alone Signals and ITS Program must submit the following information:

- Stand-alone Signals and ITS Program Region Ranking Spreadsheet (one per Region)
- Completed Stand-alone Signals and ITS Program FY17 Project Application Forms (one for each project request)
- Any supporting materials deemed necessary by the Region

FY17 Project Application Form: Each FY17 Project Application Form shall be completed entirely to be considered:

- **Box 1** Fill in those areas that are applicable to your project. Provide a project name to be used consistently when referring to the proposed project. For 'Name of Road/Intersection,' use From-To (South-North or West-East) format for a road segment such as "6th St.-9th St." A proposed project may involve multiple improvement locations; if this is the case, indicate the corridor or the general area of the proposed project. More specific information should be provided in the project description.
- **Box 2** Identify and describe area of improvement needed.
- **Box 3** Describe the project in as much detail as possible. A good, detailed, description explaining how the project will address the identified need(s) is essential for application review and evaluation.
- **Box 4** If your project will be constructed in phases throughout multiple years, then provide the project costs in the appropriate year and describe each in your proposed improvement statement. List major construction items and associated estimates such as new traffic signal installation, intersection channelization. Project expense is considered during the evaluation of the projects. Therefore, **ALL COSTS** (including design, utilities and R/E) should be provided regardless of whether Program funds will be used for all elements of the project.
- **Box 5** Complete the various questions as they relate to the proposed project. This information will help determine need and may help with ranking of projects among regions.
- **Box 6** Provide contact information for application sponsor's primary contact person. Application must be signed by the regional operations chief to commit funds and certify as to the answers provided in the application.

Supporting Materials: Each completed application shall include the following, *if applicable*:

- Map of location
- General Sketch of Project Proposal or site photo(s). An adequate sketch is the minimum requirement. Preliminary plan layout sheets or study reports should be provided if available.
- Warrant Documentation, required **only** for proposals to install new traffic signals (example worksheet available upon request. Ref: Manual on Uniform Traffic Control Devices [MUTCD], Part IV, Sec C).
- Completed Traffic Control Signal Approval Request form DT1199 (Required for all proposals to install new traffic signals on the State Trunk Highway System, including Connecting Highways and ramp terminals).
- Systems Engineering Analysis. A SEA may need to be completed for certain types of projects funded by this Program.

Submittal Instructions & General Questions:

Questions on application process and Program contact:	Submit the application and materials to:
David Karnes	
David.Karnes@dot.wi.gov	Upload all application materials to the SharePoint site
Bureau of Traffic Operations	under your Region
433 W. St. Paul Ave, Suite 300, Milwaukee, WI 53203	(https://wisdot.sharepoint.com/sites/dtsd/bto/its-
(414) 220-6804	sig/2017/SitePages/Home.aspx).

Wisconsin Department of Transportation (WisDOT) Stand-alone Signals and ITS Program FY17 Project Application Form

1. Project Description

PROJECT NAME					
Northeast Region CCTV's					
FILE NAME (AA_BBBB_FY17 Standalone	Program App_CCC.docx)*	03 Northea	st R	egion CCTV FY17 Standalo	ne Pro
03_Northeast_Region_CCTV_FY17 Standalone Program App 20160209.Docx		gram_App_20160209.docx			_
*File should be named consistently with the	following nomenclature: AA=Projec	et Regional Rank; BE	BBB=Pi	roject Name; CCC=Date.	
NAME OF ROAD/INTERSECTION				HWY NO.	
I-41, I-43, WIS 54/57				I-41, I-43, WIS 54/57	
COUNTY	CITY/TOWN REGIO		REGION	EGION	
Various	Various Nor		Northeast		

2. Identification of Needs

Identify which area for improvement the n	eed falls under:	
1. New Signal Installation	Procurement and installation of controllers, bases and signals	
2. Signal Replacement	Replacement of signals including geometric improvements and upgrades for FY17 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 Retiming	Data collection, evaluation, prepare signal timing plan, develop and implement corridor coordination plan to support 3 and 5 year timing schedule	
☐ 6. LED Signal Replacement*	Procure and install all materials for annual LED signal 7 year replacement cycle	
7. Intersection Communication	Design-build and integrate fiber optic links between existing fiber infrastructure and signal systems, or procure and install cellular Ethernet modems	
8. ITS Device Lifecycle Replacement	Upgrade, install or replace detection, controllers, battery backup, etc.	
9. Software	Upgrade, install or replace software	
10. ITS Device Installation	Upgrade backbone fiber network equipment and switches, replace ramp meter LED's, update non-standard CCTV's	
Other		

*Anticipated improvements are understood for LED Signal Replacement projects. Therefore, it is only necessary to respond to the Project Description (3a) and Existing Conditions (3b) questions in section 3.

3. Proposed Improvements

3a. Project Description

In some detail, describe the proposed project and how it will address the identified need. If the project includes multiple proposed improvement locations, identify the locations.

Freeway cameras & detection would be deployed at various interchanges within the Northeast Region. The deployment at these locations would help fill the various gaps of camera coverage that exists in critical areas of the Northeast Region.

<u>CCTV & Detection</u> I-41 & WIS 96 – Outagamie I-43 & CTH MM – Brown WIS 172 & CTH GV – Brown WIS 54/57 & Nicolet - Brown I-41 & CTH N – Fond du Lac I-41 & CTH OO – Fond du Lac

3b. Existing Conditions

Describe the existing conditions of the existing infrastructure. For example, type and age of current infrastructure; what is its current condition?

There are not any existing ITS facilities in most of these areas except for traffic signals at a couple of the interchanges. We will be able to tap into the existing power and also communicate with the traffic signals after the wireless system is expanded to these newly installed cameras. A couple of interchanges do have a fiber going through the interchange that the cameras will be able to tie into.

3c. Project Performance Goals and Objectives

Describe the proposed project performance goals and objectives. How will project success be determined?

With the deployment of these cameras and detection stations, the STOC and Wisconsin State Patrol Dispatch Centers will be able to quickly assess a situation and deploy the appropriate emergency responders. Law enforcement will have a better understanding of what situation they may be responding to based on the detailed information that the Dispatchers are able to give them.

3d. Mobility Improvements

In some detail, describe the anticipated mobility improvements of the proposed project and how they will be measured (i.e. detection will be used to determine before and after peak hour delay).

The cameras and detection will be able to identify an issue on the highway and then the STOC can utilize the PCMS and DMS nearby to notify motorists of the condition ahead on the roadway.

3e. Operations and Maintenance Impacts

In some detail, describe how this project will efficiently use or reduce operations and maintenance funds.

As with most infrastructure projects, there will be some additional operation and maintenance responsibilities. This proposed system would include fiber and power be installed up one of the bridge piers and into the bridge arch would could be a little more difficult to maintain should something happen to the fiber. Potential issues and troubleshooting will be handled under the existing statewide ITS maintenance contract.

3f. Energy and Environmental Impacts

In some detail, describe the anticipated energy and environmental impacts of the proposed project.

There will very minimal environmental impacts with this project. The contractor will have to core for the concrete bases and install minimal conduit.

It is not expected that the proposed project will improve the natural environment at this time. However, as previous mentioned, this project has the potential to lead to better monitoring, observation and increased coordination with law enforcement, emergency services, towing and county maintenance operations which can lead to enhanced mobility and improved energy and environmental impacts.

3g. Safety Improvements

In some detail, describe the anticipated safety improvements of the proposed project.

The proposed camera and detection project will help WisDOT monitor the highway system for incidents, congestions, etc... WisDOT will share the video with emergency responders so they can deploy the appropriate emergency responders to the scene quicker and safer.

3h. Additional Justification

Provide additional detail that should be considered during the evaluation of this project. This may include the consequences of what would happen should the project not be implemented.

4. Project Cost

Estimate project easts in today's dellars	FV17	EV18	FV10	EV20*
Estimate project costs in today's dollars:	1°11/	1.110	1 1 1 9	1.120.
Design:	\$20,000			
Real Estate: (Note: real estate acquisition funds are NOT included in this appropriation, other funding sources need to be identified in the space below)	N/A			
Construction Items (Include Construction Engineering and Contingencies): (Note: up to 50% of the geometric improvements needed can be funded by this appropriation)				
Let construction	N/A			
Installation via procurement contracts	\$250,000			
State furnished materials	\$70,000			
Other Costs:				
**TOTAL COST =	\$340,000			

* The program does not extend passed FY18, however for planning purposes please include potential projects for FY20 which could be funded through a reauthorization of this program or an alternate funding source.

^{**} The project sponsors will be responsible for any project costs in excess of the approved appropriation funding amount. Appropriation funds must be encumbered during the FY identified.

5. Additional Project Information

Is this specific project addressed through PDS within the next 6 years?			□ YES ⊠ NO		
Performance measures: does this project help with achieving WisDOT's performance goals? Refer to http://dotnet/mapss/index.htm			Select all that apply:		
- <i>Mobility</i> : Delivering transportation choices that result in efficient trips and no unexpected delays			Mobility		
 Accountability: The continuous effort to use public dollars in the most efficient 			Accountability		
 and cost-effective way. <i>Preservation</i>: Protecting, maintaining and operating Wisconsin's transportation system efficiently by making sound investments that preserve and extend the 			Preservation		
life of our infrastructure, while protecting our natural environment. – <i>Safety</i> : Moving toward minimizing the number of deaths, injuries and crashes			⊠ Safety		
 on our roadways. Service: High quality and accurate products and services delivered in a timely fashion by a professional and proactive workforce. 			Service		
Is this project listed as a strategic objective in the State Traffic Operations Program Plan (STOPP)? Refer to <u>\\Mad00fph\n4public\BHO\meeting-</u> minutes\bto\stopp\		☐ YES ⊠ NO If yes, what section of the STOPP?			
Timeline					
Steps in process	Months (MM/YY – MM/YY)	Anticipated Quarter of Encumbrance	Anticipated Required Resources (Reg PDS, Reg OPS (eng, lectricians), consultant contract, electrical contractors, etc.)		
1. Design	07/1 6- 09/16	1 st	BTO Engineer and existing on-site consultant contract.		
2. Real Estate Acquisition	N/A				
3. Procurement	07/16 – 09/16	lst	xisting procurement contract with vendor.		
4. Construction	10/16	2nd	Existing procurement contract with vendor.		
5. Other	N/A				

6. Contact Information and Signature

PRIMARY CONTACT NAME	TITLE		
Randy Asman	NE Region Traffic Engineer		
REGION	·		
Northeast			
EMAIL ADDRESS	TELEPHONE		
randy.asman@dot.wi.gov	920-492-7719		
SIGNATURE OF OPERATIONS SUPERVISOR	DATE		
Christian G. Blazek	February 16, 2016		
SIGNATURE OF OPERATIONS CHIEF	DATE		

REVISED DRAFT 10/31/2015