#### Wisconsin Department of Transportation (WisDOT)

# Stand-alone Signals and ITS Program FY16 Project Application Form GENERAL INSTRUCTIONS

#### APPLICATIONS DUE TO DAVID KARNES, BUREAU OF TRAFFIC OPERATIONS, BY JANUARY 5, 2015

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 FY16 Project Application Forms (one for each project	request)
☐ Any supporting materials deemed necessary by the Region	

FY16 Project Application Form: Each FY16 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.

Support 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).
- Traffic Operations Infrastructure Plan (TOIP) insert.
- 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:
Don Schell	David Karnes
donald.schell@dot.wi.gov	david.karnes@dot.wi.gov
Bureau of Traffic Operations	Bureau of Traffic Operations
433 W. St. Paul Ave, Suite 300, Milwaukee, WI 53203	433 W. St. Paul Ave, Suite 300, Milwaukee, WI 53203
(414) 227-2148	(414) 220-6804
	Or upload to the Stand-alone Signals and ITS Program
	SharePoint site.

#### *Wisconsin Department of Transportation (WisDOT)*

## Stand-alone Signals and ITS Program FY16 Project Application Form

1. Project Description

PROJECT NAME				
USH 53 Eau Claire Freeway TOIP Implementation South				
FILE NAME (AA_BBBB_FY16 Standalone Program App_CCC.docx)* 02_USH53 TOIP South_FY16 Standalone Program App_20141218.Docx				
*File should be named consistently with the following nomenclature: AA=Project Regional Rank; BBBB=Project Name; CCC=Date.				
NAME OF ROAD/INTERSECTION HWY NO.				
CTH AA/Golf Road to STH 93 USH 53				
COUNTY	CITY/TOWN	REGIO	N	
Eau Claire	Eau Claire	Norti	hwest	

#### 2. Identification of Needs

Identify which area for improvement the need 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 FY16 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				

Lighting projects are currently not included in the Stand-alone Signals and ITS Program. However, a request has been made to include lighting and increase the Program funding appropriation. The request is not expected to be considered until the new calendar year. Therefore, lighting project applications are being solicited now in hopes of their inclusion in the Program. If the lighting requested is not granted, then the projects will be omitted.

11. Lighting Install Freeway lighting, install arterial lighting, upgrade lighting (where electrical conduits/connections exist)

#### 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.

This project includes installation of two CCTV surveillance cameras, five ramp gates, and one overhead dynamic message sign as proposed in the TOIP Implementation plan, Northwest Region ITS Benefit/Cost Analysis Final Report update (see attached map) and as described in this application. The project will also include fiber connections along the corridor to connect the ITS devices. The equipment will be installed at two locations along the USH 53 Eau Claire Freeway, the CTH AA/Golf Rd interchange and the STH 93 interchange. This project can help improve monitoring, observation and increased coordination with law enforcement, emergency services, towing and county maintenance operations. This project would extend TOIP installations south of the USH 12 – STH 312 segment which was approved for FY 15 and currently being deployed.

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 two interchanges within the project limits, both of which have signalized intersections at the
ramp terminals. Currently there are no state fiber connections between the Golf Rd and STH 93
interchanges. There is a PCMS located along this corridor in place of DMS.

#### **3c.** Mobility Improvements

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

The installation of the ITS devices as well as the fiber will lead to better monitoring, observation, and increased coordination with law enforcement, emergency services, towing and county maintenance operations leading to increased mobility.

#### **3d.** Operations and Maintenance Impacts

In some detail, describe the anticipated impacts to operations and maintenance by the proposed project.

It is anticipated that operations and maintenance will be improved with the enhanced monitoring features. Likewise, operations will benefit from the more efficient maintenance efforts.

This project will allow efficient use of Operations and Maintenance funding.

#### 3e. Energy and Environmental Impacts

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

The installation of the ITS devices with the fiber has the potential to improve 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.

Overall, implementation of the project is not anticipated to have any negative environmental or energy impacts. No real estate will be purchased and no utility moves are anticipated.

#### **3f. Safety Improvements**

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

The installation of the ITS devices with the fiber has the potential to improve monitoring, observation, and increased coordination with law enforcement, emergency services, towing and county maintenance operations which will increase safety along the corridor.

#### 3g. Additional Justification

Provide additional detail that should be considered during the evaluation of this project.

All of the ITS devices installed with this project are proposed in the Northwest Region ITS Benefit/Cost Analysis Final Report. The Medium ITS Deployment Intensity map proposes all of the ramp gates and cameras. The DMS was added from the High ITS Deployment Intensity map.

The proposed fiber build was identified in the TOIP implementation plan. The Chippewa Valley Internetnetworking Consortium (CINC) supports the fiber build.

Attached are letters of support from local law enforcement.

This project will benefit the public. The public will see the gates and DMS in action when an incident occurs.

4. Project Cost

Estimate project costs in today's dollars:	FY16	FY17	FY18	FY19
Design:	\$100,000	N/A		
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	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 Let construction	N/A	\$600,000		
Installation via procurement contracts	N/A	N/A		
State furnished materials	N/A	N/A		
Other Costs:	N/A	N/A		
**TOTAL COST =	\$100,000	\$600,000		

<sup>\*\*</sup> 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	Pro	ject	Infor	mation

5. Additional Project Information							
Is this specific project addressed through PDS within the next 6 years?				☐ YES [	⊠ NO		
			Select all t	hat apply:			
			⊠ Mobili	ty			
r			☐ Accour	ntability			
and cost-effective way.  - Preservation: Protecting, mai system efficiently by making				☐ Preserv	vation		
life of our infrastructure, while - Safety: Moving toward minim	le protecting our natural e	environment.					
on our roadways.	_	-		Service	<b>:</b>		
<ul> <li>Service: High quality and acc fashion by a professional and</li> </ul>		es delivered	m a uniciy				
Is this project listed as a strategi				⊠ YES [			
Program Plan (STOPP)? Refer t minutes\bto\stopp\	o <u>\\MadUUtph\n4public\B</u>	sHU\meeting	<u> </u>		at section of the STOPP?  ent of traffic operations infrastructure is		
				improvem	ent #19 in the Statewide Traffic Operations Plan Proposed Improvements		
Is this need identified in the TO	IP? http://www.topslab.w	visc.edu/its/to	oip/	⊠ YES [			
				If yes, promaterials.	vide specific information in the support		
					ed map from the Northwest Region ITS ost Analysis Final Report		
Timeline							
Steps in process	Steps in process Months Resources to accomplish (MM/YY – MM/YY) (Reg PDS, Reg OPS (eng, electricians), consultant contract, electrical contractors, etc.)				onsultant contract, electrical contractors, etc.)		
1. Design	12 (07/15 – 06/16)	Consultant	t contract				
2. Real Estate Acquisition							
3. Procurement	2 (07/16 – 09/16)	Region OF	PS Traffic Eng	gineers			
4. Construction	10 (09/16 – 06/17)	LET contra	act				
5. Other							
		•			1.000		
6. Contact Information PRIMARY CONTACT NAME	n and Signature		TITLE		•		
Jennifer Berg CE Trans Seni				enior, Traffic	c Engineer		
REGION Northwest							
EMAIL ADDRESS TELEPHONE				E (715) 836-2	853		
JenniferL.Berg@dot.wi.gov SIGNATURE OF OPERATIONS S	UPERVISOR		<u> </u>		DATE		
Robert Mucleson					12-18-14		
SIGNATURE OF OPERATIONS CHIEF					DATE 12-19-14		
Day . July	V/						

**Project Location USH 53 TOIP South** CTH AA/Golf Rd to STH 93 BAYFIELD DOUGLAS IRON ASHLAND VASHBURN BURNETT SAWYER PRICE POLK RUSK BARRON TAYL OR CHIPPEWA ST. CROIX DUNN PIERCE EAU CLAIRE CLARK PEPIN BUFFALC WOO TREMPEALEAU JACKSON JUNEA MONROE

## **Estimated Cost for TOIP Implementation**

## **USH 53 TOIP South - CTH AA/Golf Rd to STH 93**

FY 16 = Design

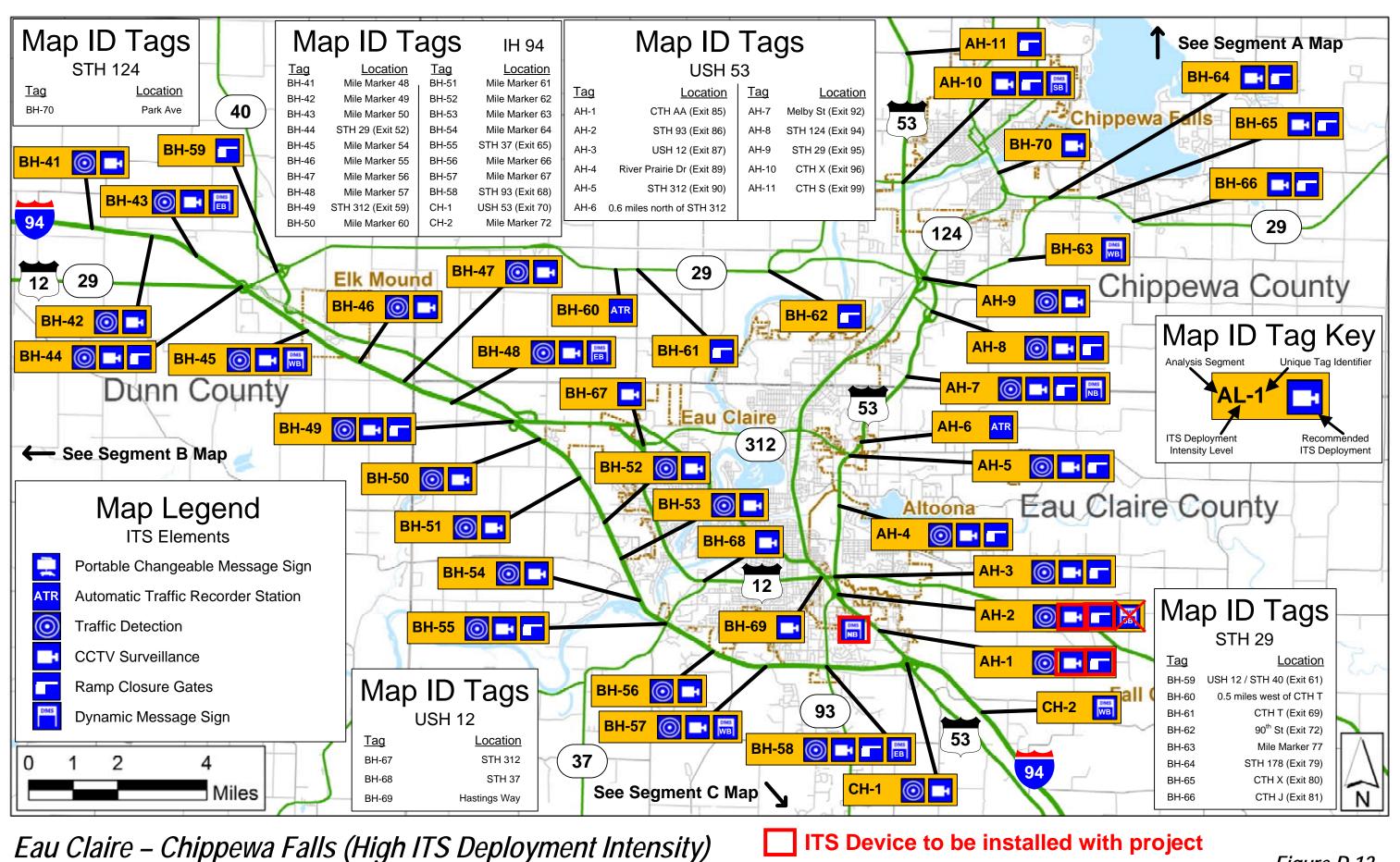
Project Design Total = \$100,000.00

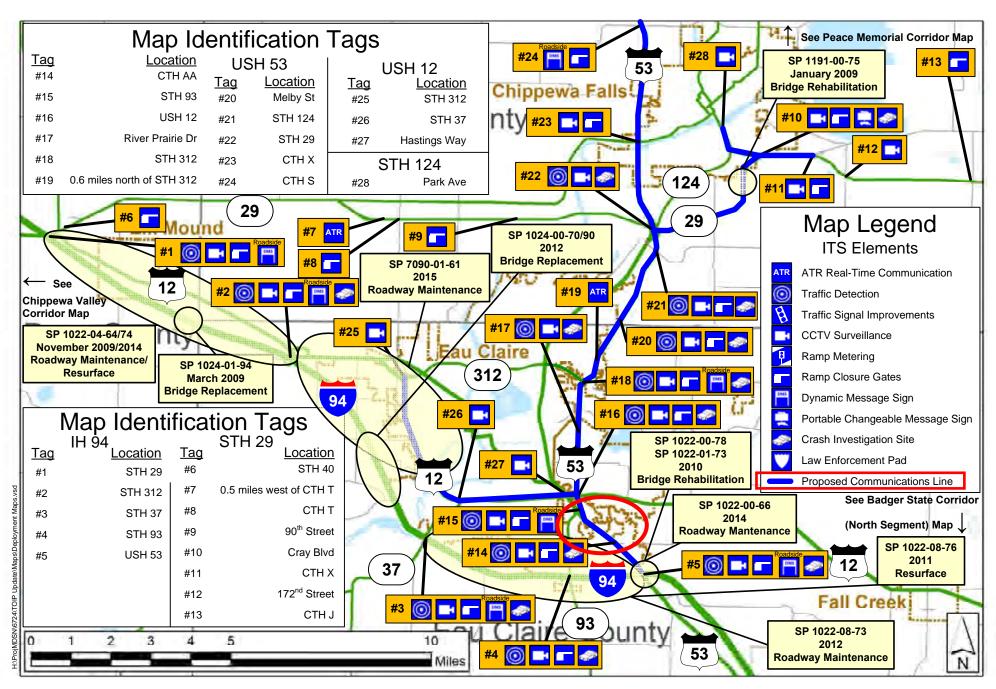
## **FY 17 = LET Construction**

Item	Unit	Quantity	Unit Cost	Total Cost
CCTV Camera	Each	2	\$50,000.00	\$100,000.00
Ramp Gates	Each	5	\$20,000.00	\$100,000.00
DMS - Overhead	Each	1	\$120,000.00	\$120,000.00
Fiber Connection	LS	1	\$280,000.00	\$280,000.00

Let Project Total = \$600,000.00

**Application Total = \$700,000** 





Eau Claire/Chippewa Falls – TOIP Based ITS Deployment

## **Previous Traffic Operations Plans**

#### State Traffic Operations Plan

This Statewide Traffic Operations Business Plan was commissioned by the Bureau of Highway Operations (BHO) in 2005 in recognition of the need for a comprehensive plan and planning process that clearly describes the mission, goals, and objectives of the traffic operations business of the Department. While the plan was developed by BHO, it impacts traffic operations personnel at both Central Office and at the Division of Transportation Districts (DTD). This plan identifies the strengths and weaknesses of the existing traffic operations functions and defines goals and objectives that address the needs of Traffic Operations, while supporting the overall organizational objectives of the Department. The plan revealed that resources must be focused on those activities that provide the most benefit to the Department and its' customers.

Six distinct goals were established for the final Statewide Traffic Operations Business Plan:

- 1. To develop a clear understanding of the current situation
- 2. To establish goals and objectives for what must be done, what should be done and what can be done
- 3. To establish and prioritize the actions and solutions necessary to achieve the goals and objectives
- 4. To establish timelines for accomplishment
- 5. To develop the methodology to measure effectiveness
- 6. To develop a guiding document for three levels of effort—strategic, project and programmatic

Twenty-two improvements were proposed in the State Traffic Operations business plan and updates are provided below.

Table 2 – Statewide Traffic Operations Business Plan Proposed Improvements

1_	Implement statewide intersection crash mitigation.
	COMPLETE. Developed WisTransportal system via UW TOPS Lab and proposed updates to MV4000 to collect
	additional crash information
	Develop WisDOT requirements for operations data storage, collection, maintenance, & sharing to support
2	goals & objectives.
	COMPLETE, although looking at NextGen system(s). Continued to support legacy asset management systems
	(CarteGraph products).
3	Define traffic operations role within the context of corridor management.
	BTO is coordinating with BPD and BPED on roles relating to corridor management decisions.
	Develop a multi-tiered communication management plan to support mobility management & safety
4 _	initiatives.
	COMPLETE. Done through ETO and TIME programs (Emergency Incident & Scene Management Guidelines
	and RIMC/RDO procedures).
5	Establish a Traffic Operations business plan support team.
3	BTO keeps the Regions informed via Managers and Directors.
	Develop a statewide operations infrastructure strategic plan.
6	Similar to #22, but Regional improvement projects dictate other operations aspects (signing, marking,
	signals), BTO has some control of ITS via TOIP.
7	Establish Traffic Operations "Technical Services" committee
	BTO keeps the Regions informed via Managers and Directors.
8	Establish Quality Work Force Group

	BTO keeps the Regions informed via Managers and Directors.
	Develop and/or formalize statewide traffic operations maintenance management program.
9	Policies set forth in Traffic Guidelines Manual and Highway Maintenance Manual (as related to Routine Maintenance Agreements). Proposing change in statutory language for more control and funding for traffic
	operations maintenance.
10	Improve statewide traffic signal timing.
10	Addressing in budget requests. Ideal maintenance set forth in policies, but lack of funding prohibits adequate retiming.
11	Develop or update statewide special events management plan for WisDOT.
	COMPLETE. Process has been in place for at least five years now. Utilize BTO special event policies and Lane Closure System.
12	Represent & integrate Traffic Operations data needs into new & existing data collection efforts.
	Proposing funding in current budget requests. WisTransportal can provide some of this information, but
	continuous data collection is needed for Department needs.
13	Establish Traffic Operations information improvement program
14	Enhance web access to information.
	ONGOING. Continually trying to improve access of information via web.
15	Statewide Traffic Operations performance measurement & monitoring system.
	ONGOING. Currently being done via MAPSS and DTSD Operations goals.
16	Integrate operations infrastructure plan into the state long-range transportation plan.
	ONGOING. Done using the TOIP.
17	Statewide traffic incident management initiative.
	ONGOING. Done via TIME Program and Wisconsin TIME Coalition.
18	Improved process for input to work zone management planning & operations.
_	COMPLETE. Lane Closure System was developed to address work zone operations along with traffic
$\sqrt{}$	management plans (TMPs) which was mandatory based on Federal Work Zone Mobility Rule.
19	Design & development of Traffic Operations' infrastructure.
_	ONGOING. Done through TOIP and design manuals (ITS Design & Operations Guide and Facilities
<u> </u>	Development Manual and Traffic Guidelines Manual)
20	Clarify Traffic Operations' role in transportation security and emergency preparedness.
<u> </u>	COMPLETE. Done through ETO and TIME programs (Emergency Incident & Scene Management Guidelines).
21	Determine level of compliance with access management standards
22	Develop ITS Strategic Program plan
<b>~</b>	COMPLETE. Done through TOIP

#### Work Zone Management & Traffic Operations Program Integration Review

The Work Zone Management/Traffic Operations Program Integration Review came at a critical stage in the evolution of WisDOT's Traffic Operations and ITS Program. Important activities in the few years preceding the plan included the expansion of the Southeast Region Traffic Operations Center to one that serves in a statewide capacity, the development of the Traffic Operations Infrastructure Plan (TOIP) in 2008, and the creation of the Bureau of Traffic Operations within WisDOT. With the shift toward more of a "system management" focus, the timing of the Integration Review was key in charting the course for:

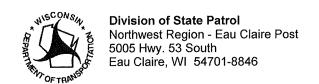
- How the Operations program can better support WisDOT transportation system management objectives;
- Beneficially align with other program areas within WisDOT to leverage data and technology investments; and

Develop Design standard and guidance for rolling slowdown/Roadblock for mega freeway/expressway projects	High	Short Term	
Develop standards and guidance for traffic control on roundabout maintenance work	Low	Long Term	
Enhance guidance on work zone capacity and user delay analysis as part of smart work zones (WP)	Medium	Short Term	

## **Electrical & Communication Systems**

PRIORITY	(Short Term: Current – 2 years, Long Term: 2-5 years)	BIG TICKET LINE
Medium	Short Term	Line 31
High	Short Term	Line 32
High	Short Term	Line 35
Medium	Short Term	Line 26
High	Long Term	Line 26
High	Short Term	Line 25, 35
High	Short Term	Line 32
Medium	Short Term	Line 34
Medium	Short Term	Line 34
Maintenance		
High	Short Term	Line 15, 73
Budgets Allow	,	
High	Short Term	
High	Short Term	
Medium	Short Term	
High	Short Term	Line 14
ts		
Medium	Short Term	Line 72
Medium	Short Term	Line 14
5	High High Medium High High High Medium Medium Maintenance High High High High High High High High	Medium Short Term High Short Term Medium Short Term High Long Term High Short Term High Short Term  Medium Short Term  Maintenance  High Short Term  High Short Term  Medium Short Term  Medium Short Term  High Short Term  High Short Term  Medium Short Term  Medium Short Term  Medium Short Term  Medium Short Term  High Short Term  Medium Short Term  Medium Short Term  Medium Short Term  Medium Short Term

Actions:			
Develop ongoing research and evaluation process for new			
technologies.	Medium	Short Term	Line 33, 30
Modernize Traffic Signal System Technologies (which may			
nclude replacing and updating traffic signals electronic			
controllers, and linking traffic signals into the statewide	High	Short Term	Line 33, 72
WisDOT's traffic management and public safety			
communications network). (2030)			
Ensure New Pedestrian Signal Systems Meet Federal	Low	Long Torm	Lina 2F
Regulations and Bring Existing Signals into Compliance. (2030)	Low	Long Term	Line 35
Address signal system performance measure improvements in	High	Short Term	Line 71, 72
the areas of signal systems communications and retiming.	riigii		Lille 71, 72
Provide communications to all traffic signal systems statewide.	(High)	Short Term	Line 71, 72
Develop guidance for the evaluation and implementation of	High	Short Term	Line 72
advanced signal system operations.	6	<b>5</b>	
mplement statewide central signal systems management	Medium	Short Term	Line 72
oftware.		a =	
Develop and update policies related to traffic signal systems.	Medium	Short Term	Line 35
(7) Develop and Maintain Effective Lighting Planning an	d Policy		
Actions:			
Complete TGM Chapter 11 Lighting Policy Revisions.	High	Short Term	Line 35
Study national policies in relation to lighting safety and			
evaluate the correlation of lighting systems and crash rates in	High	Short Term	Line 37
Wisconsin.			
Develop policy to implement lighting curfews by time of day.	Medium	Short Term	Line 35, 39
Develop set of lighting warrants for implementation of new	Medium	Long Term	Line 35
systems.		20116 101111	
(8) Develop Lighting Asset Management and Lifecycle Re	eplacement Prod	cess	
Actions:			
Schedule Lighting Meetings/Workshop with PDS for Lighting	High	Short Term	Line 35
Policy Information Exchange.	riigii	SHOLL TELLI	Lille 33
Complete inventory and assessment of existing lighting	High	Short Term	Line 26, 35
ystems.	111611	Short renn	Line 20, 33
Develop implementation options and cost benefit analysis for	High	Short Term	Line 35
ED lighting upgrades in SE Region.	6	Short ferm	Line 33
Develop implementation options and lifecycle cost plan for	Medium	Long Term	Line 14, 35
statewide LED lighting systems.		8	
Support the development of NextGen asset management	High	Short Term	Line 14
system.			
(9) Improve Energy Efficiencies of Lighting System			
Actions:			
expand implementation of LED lighting for freeway systems.	High	Short Term	
Collect data and evaluate the efficiencies of LED lighting since	High	Short Term	Line 35
irst deployment.	111811	JIIOIT IEIIII	Lille 33
Maintain Mitchell Interchange Tunnel lighting	High	Short Term	Line 38



Scott Walker, Governor Mark Gottlieb, P.E., Secretary Internet: www.dot.wisconsin.gov

Telephone: 715-839-3800

Facsimile (FAX): Admin. Office 715-839-3873

Comm. Center 715-839-3841

**December 10, 2014** 

JENNIFER BERG WISCONSIN DOT NWR 718 W. CLAIREMONT AVE. EAU CLAIRE, WI 54701

Dear Ms. Berg:

The Northwest Region State Patrol supports implementation of the Traffic Operations Infrastructure Plan (TOIPS) for key interchanges along the USH 53 corridor.

Installation of system monitoring cameras, ramp gates and other traffic management equipment will allow local law enforcement, EMS and fire services opportunities to operate in a safer environment while being more effective and efficient in their respective roles of enhancing overall public safety.

In addition, the Northwest Region State Patrol would request this grant cover corresponding system peripherals that allow our dispatch personnel timely viewing and operational control of video shots, tours, and messaging. This may include camera monitors, brackets, and video feeds to our designated in-house Emergency Traffic Operations (ETO) rooms.

Sincerely,

Captain Jeffrey J. Frenette Commander, Northwest Region Wisconsin State Patrol

gep

c: Lieutenant Petznick LEDS Grangaard Region file



## RON D. CRAMER, SHERIFF

Dan Bresina, Undersheriff
721 Oxford Avenue Suite 1400
Eau Claire WI 54703
715-839-4709 or 800-839-4713
FAX 715-839-4854

December 9, 2014

OFFICE

Jennifer Berg Traffic Engineer Wisconsin DOT, NW Region 718 W. Clairemont Ave., Eau Claire, WI 54701

Ms. Berg:

The Eau Claire County Sheriff's Office in cooperation with members of the Department of Transportation for the past few years have been trying to implement strategies on the Highway 53 Bypass from I-94 to the Highway 29 interchange to reduce traffic safety matters. The Sheriff's Office is the primary response agency in Eau Claire Co. on this section of roadway and have experienced many difficulties with maintain safety while investigating traffic issues such as crashes on the Bypass. In the past year we have met and agree that the below items would greatly help reduce secondary crashes for example on the Bypass. We support funding for the below projects that are much needed for this section of roadway.

Project 1: USH 53, CTH AA/Golf Rd to STH 93, Eau Claire County

- 1 Camera at the CTH AA/Golf Rd Interchange
- 1 Camera at the STH 93 Interchange
- Ramp gates at both interchanges
- 1 Overhead Dynamic Message Sign
- Possible Alt Route Signing

Project 2: USH 53, Melby St to CTH X, Chippewa County

- 1 Camera at the Melby St Interchange
- 1 Camera at the STH 124 Interchange
- 1 Camera at the STH 29 Interchange
- 1 Camera at the CTH X Interchange
- Ramp gates at the Melby St Interchange
- Ramp gates at the STH 124 Interchange
- Ramp gates at the CTH X Interchange
- 2 Side mounted Dynamic Message Signs (1 northbound, 1 southbound)
- Possible Alt Route Signing

Respectfully - Undersheriff Dan Bresina