Wisconsin Traffic Operations and Safety (TOPS) Laboratory

Wisconsin TMP System Overview and Demo

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TOPS / BTO Webinar September 10, 2014



Wisconsin Traffic Operations and Safety Laboratory



Presentation Outline

- Overview and Objectives
- Key Automation Features
- Status and Timeline
- WisTMP System Run Through





TMP Background

- Coordinated strategies to manage the work zone impacts of a road project, such as:
 - Temporary traffic control measures and devices
 - Public information and outreach
 - Transportation operations and incident management strategies
- FHWA Final Rule on Work Zone Safety and Mobility (2004)
- WisDOT Facilities Development Manual (FDM 11-50)
- TMPs are Required for All Projects





TMP Background

- TMP development is generally a collaborative process.
- The preparation and approval workflow varies based on the particular TMP:
 - BTO review is required on all Type III and IV projects
 - Local Program projects have different routing and approval
 - FHWA review and approval is also required on federal oversight projects.
- Different levels of analysis and review based on TMP type.
- TMPs are living documents that are typically reviewed and updated throughout the project lifecycle.





TMP Request for Approval Form

FDM 11-50 Attachment 5.7 TMP Documentation and Request for Approval		
MP DOCUMENTATION & REQUEST FOR APPROVAL		
We are requesting approval of the Transportation Management Plan (TMP) for the project detailed		
elow. This project is categorized as TMP type. Impacts resulting from project activities meet		
te current work zone policies of the Wisconsin Department of Transportation.		
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TMP/Project Type Action	nonem 5.7 TMT Documentation and Requess for Approvid	-
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2 or 3. attachments to BPD project services liaison.	be maintained us shoulder width to accommodate OSOW.	
B. Project that requires a DSR and is TMP Type 4. Complete this document as the TMP Executive	than typically available)	5.7 TMP Documentation and Request for Approval
Summary and submit along with separate TMP	than typically available)	
report to BPD project services liaison.		s 🗆
C. Project does not require DSR and is TMP Type Complete and submit this document and any] Yes 🗌 No	ic
1. 2 or 3. attachments to BPD project services liaison.		
For Federal Oversight projects, coordinate early in TMP development with BPD & FHWA project	Ir, travel times, improvements required for signal timing, surface and pacity, etc.	
liaisons.	ight restrictions on the detour? Yes No	
Projuct Information	olidays, and how traffic disruptions will be minimized:	es planned (coordinate this activity with your Regional
Design ID: DS&E Date: Project Title: Let Date:		
Project Limits: Project Longth Miles	F, Quadro, FDM 11-50-30, etc.) used to estimate motorist delays or	itogies planned;
Highway: Project Duration Days	r freeways, expressways, and signalized corridors).	nagios platifica:
Vionth to Month	defense de sela en esta de served en esta de la defensión de desta de desta de la defensión de serve	e mitigated:
'ounty: AADT	delay during peak travel periods (also indicate frequency, e.g. daily	
roject type (reest., recondition, SHRM, etc.):	lumes per lane with the work zone capacity criteria in 11-50-30. If it	
ngineer's Estimate: S1 Million S1M-3M S3M-10M S10M	delay calculation is required. If the delay is more than 15 minutes,	
the project a National Highway System (NHS) route?	s than 15 minutes, it generally will be a type 2. The Regional Work	
sthe project Federal Oversight? [] Yes [] No SOW Route? [] Yes [] No	letermining your delay.	
Brief description of work activities:	pated, and any alternate route improvements or signing planned.	Title/Company:
•		(initials)
	ntrol changes proposed such as temporary signals, temporary	
Briefly describe the staging planned for maintaining traffic:	na or onangee proposed such as temporary signals, temporary	ite: Telephone:
MANI Ale and the manifestion of manifestion/himsels and and		Mgmt. Consultant) Date
Will there be restrictions on pedestrian/bicycle access? Yes:	pacts from the proposed project on other roads/routes in the	(initials)
 a) Will sidewalk multiuse path be closed? □ Yes □ No 	ects in the corridor (only if delay anticipated on this project)	
 b) Describe how pedestrian and bicyclists will be accommodated 	egions/states? 🗌 Yes 🗌 No	
c) Will crosswalks be provided? What is the spacing of crosswalks?	egions/states? U Yes I No mitigation strategies:	al Program Manager Date
 d) Are the strategies in compliance with ADA? 	maganon on any 160.	<u>(initials)</u>
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 Briefly describe how access to traffic generators, businesses, school buses, garbage trucks, postal services, and transit impacts will be mitigated (alternate routes, etc.); 	nned	
and transit impacts will be mitigated (alternate routes, etc.): a) Are the strategies in compliance with ADA?	COMMENTS	
a) Are the strategies in compliance with ADA? b) is access to bus stops affected? Yes No	COMMENTS	Date
		<u>(initials)</u>
Will the project have lane closures? 🗌 Yes 📄 No		
If Yes:	raffic lanes	Dalc
a. Are there restrictions on when lane closures are allowed? 🔲 Yes 🔲 No	IS)	(initials)
b. What hours days are lane closures permitted?		
c. How were traffic counts used in determining permitted lane closure times? (For multi-lane road, indicate typical peak how volume per direction of (ravel. For two-lane, two-way road indicate (ADT))	s 🗌	
non-are typical point from volume per uncerton of travel, nor two-are, two-way tong indicate A. (1)()		
	al, A+B, etc)	
4, 2008 Attachment 5.7 Page 1	Wet	
	Wet	
reflective pavement marking, t		
barrier, etc)		
August 14, 2008	Attachment 5.7 Page 2	2
	3	





TMP Automation: Shortcomings to Current Process

- No centralized workflow
- Multiple versions on different computers
- No common repository of TMP documents
- Data cannot be used for other applications
- Re-entry and inconsistency with FIIPS source data







TMP Automation: Overview and Objectives

- Streamline the TMP preparation and approval process
- Enhance document sharing and collaboration
- Improve data quality and consistency across TMPs
- Provide an online repository of historical TMPs
- Leverage TMP information for additional work zone planning and operations applications







TMP Automation Components

- Electronic Workflow
 - Form Submission, Email Routing, Sign Off, Version History, Etc.
- Document Repository
 - Document Management, Search Capabilities
- Performance Measures/GIS Mapping
 - Possible: Hot Work Zone Maps











TMP Automation Key Features

- Online Forms and Attachments
- Searchable Document Repository
- Role Based Authorization Levels
- TMP Based Team Editing
- Automated Work Flow
- Electronic Signing
- Email Notifications
- History Tracking
- Leverages Existing Source Data (FIIPS, STN)





Key Features: Search and Retrieval

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View	1119	Type 2	1009-10-19	1009-10-69	C MADISON SOUT BELTLINE	TH MADISON	DANE	US 12 EB	bbadger	12-27-2013 06:56						





Key Features: View and Edit

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	WisTransPortal Ap	plications WisTM	2				Welcome, sparker Manage Account
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Section 1A - Project Information							
Section 18 - Project Impacts		Add •	12 12	100	52	2.2	127 22
Section 1C - Location		Action Remove Edit	User ID LakesideTony	Name Tony Bublitz	Phone	Email tony.bubiltz@lakesideengineers.com	Team Role Project Manager (PM)
Section 2 - Project Description		Remove Edit	dotemq	Chris Quesnell	4142253727	chris quesnell@lakesideengineers.com	PM Designee
2.Brief description of work activities:		Remove Edit	Scpaulus	Susan Paulus	4144603409	Susan.paulus@lakesideengineers.com	Preparer
The section of WIS 241 covered in this TMP is located in southerm Milwaukee County within the communities of Greenfield, Franktin, Oak Creek, and Milwaukee. The comfor starts just south of Drexel Avenue at STA 1200+00 and continues 2.4 miles north to College Avenue, STA 1325+00. A project location map is shown in Appendix A.		Remove Edit	awgreco	Allen Greco		allen greco@lakesideengineers.com	Reviewer
	sparker entered Wis WisTMP Version: 0.0						1071
Section 3 - Staging Plan	Wisconsin Traffic Op						2
3.Briefly describe the staging planned for maintaining traffic:							
Traffic control plans are shown in Appendix B. For all stages, a reduced speed limit is being considered.	1						
Stage 1A This stage prepares the southbound roadway for vehicle travel in stage 18.							
Stage 1A involves paving the median and the right shoulder of the southbound lanes to allow for four travel lanes on these lanes in stage 1B. In addition, crossovers will be constructed at both ends of the project to be used in all stages. The north crossover will be constructed north of College Avenue near Mangold Avenue (STA1324+00). The south crossover will be constructed south of Drexel Avenue near							
Avenue near W. Villa Drive (STA 1200+00).							

TMP Document Preparation Form

TMP Team Setup Page



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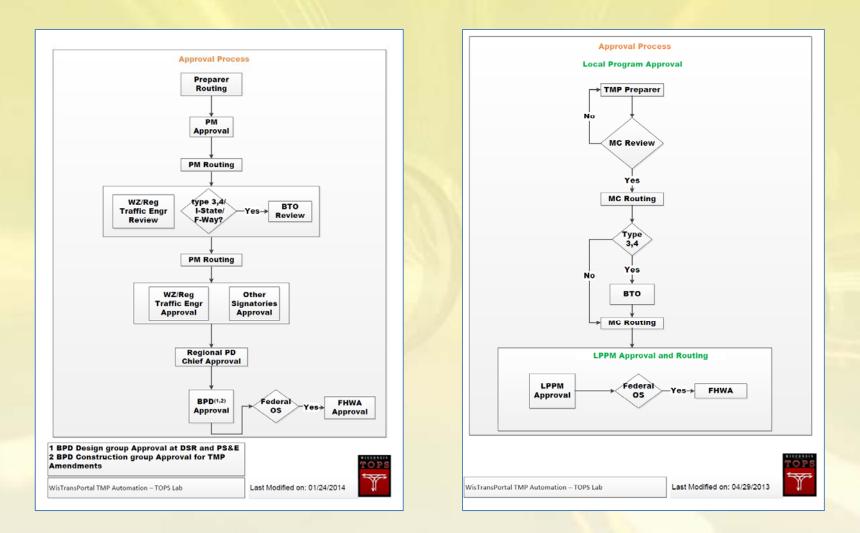
Key Features: File Upload

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Key Features: Routing and Approval







Key Features: Routing and Approval

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Modified By	Modified Date	Status	Comments
LakesideTony	02-12-2014 05:40	Submitted for Amendment	LakesideTony signed TMP towards Amendment.
LakesideTony	02-12-2014 05:40	Submitted for Amendment	LakesideTony routed TMP for Amendment Signature
LakesideTony	02-12-2014 05:40	Approved (90%)	WisTMP System has automatically routed this TMP to the PM to start the Amendment 1
LakesideTony	02-12-2014 05:38	Submitted for Approval (90%	LakesideTony signed TMP towards 90% approval.
LakesideTony	02-12-2014 05:36	Submitted for Approval (90%	(i) WisTMP System has automatically routed this TMP to BPD for 90% Approval
LakesideTony	02-12-2014 05:36	Submitted for Approval (90%	%) LakesideTony signed TMP towards 90% approval.
LakesideTony	02-12-2014 05:36	Submitted for Approval (90%	%) WisTMP System has automatically routed this TMP to RPDC for 90% Approval
LakesideTony	02-12-2014 05:36	Submitted for Approval (90%	LakesideTony signed TMP towards 90% approval.
LakesideTony	02-12-2014 05:36	Submitted for Approval (90%	%) LakesideTony routed TMP for Approval (90%)
LakesideTony	02-12-2014 05:32	Submitted for Review (90%)) LakesideTony marked this TMP as reviewed at 90%.
LakesideTony	02-12-2014 05:32	Submitted for Review (90%)) LakesideTony routed TMP for Review (90%)
LakesideTony	02-12-2014 05:30	PM Approved (90%)	LakesideTony, the PM of this TMP signed after 60% Approved status.
LakesideTony	02-12-2014 05:27	Approved (60%)	WisTMP System has automatically routed this TMP to the PM to start the 90% Approval
LakesideTony	02-12-2014 05:27	Submitted for Approval (60%	%) LakesideTony signed TMP towards 60% approval.
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LakesideTony	02-12-2014 05:27	Submitted for Approval (60%	 LakesideTony signed TMP towards 60% approval.
LakesideTony	02-12-2014 05:27	Submitted for Approval (60%	%) WisTMP System has automatically routed this TMP to RPDC for 60% Approval
LakesideTony	02-12-2014 05:27	Submitted for Approval (60%	%) LakesideTony signed TMP towards 60% approval.

TMP Approval Page

TMP History Page



Wisconsin Traffic Operations and Safety Laboratory



Automated TMP Status and Timeline

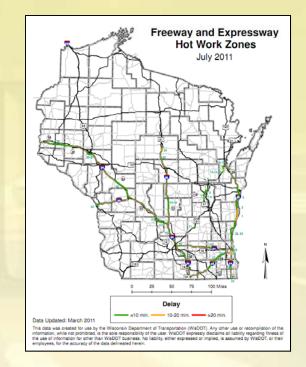
- Automated TMP Concept and Work Flow: 2011 2012
- Functional Requirements: January March 2013
- Design and Implementation: March December 2013
- Testing and Rollout: January February 2014
- Regional Training: March April, 2014
- Go Live: July 2014
- Additional Webinars: Fall 2014





Automated TMP: Future

- Focus on Rollout and Support
- Per Section Comments, Attachments
- GIS Mapping Applications
- LCS / TMP Connections
- Research and Analysis







WisTMP System Walkthrough

http://transportal.cee.wisc.edu/tmp/



Contact: wistmp@topslab.wisc.edu





Wisconsin Traffic Operations and Safety Laboratory

Questions?

WisDOT BTO

Andy Heidtke Andrew.Heidtke@dot.wi.gov

Peter Amakobe Peter.AmakobeAtepe@dot.wi.gov **UW TOPS Lab**

Chris Mills cmills4@wisc.edu

Steven Parker sparker@engr.wisc.edu

Contact: wistmp@topslab.wisc.edu





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