The "New" Wisconsin Traffic Management Center Kirk Danielson Sergeant

2018 Wisconsin ITS Conference Madison, WI October 23, 2018







What's Changing?

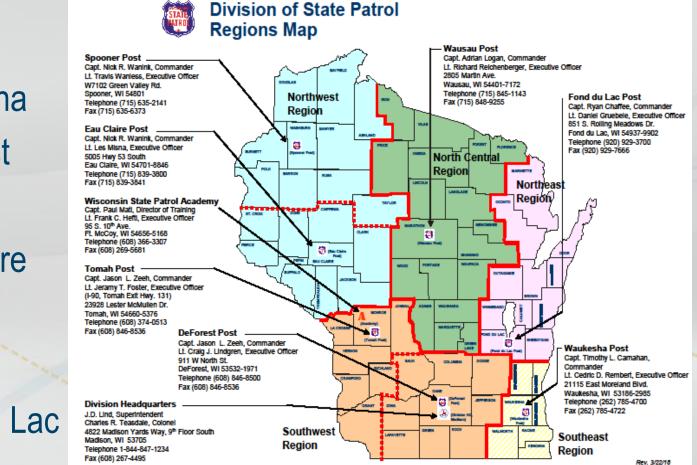






- **Mission:** To provide exceptional public safety and traffic management services for the benefit of our partners, the traveling public and the freight community
- Vision: Strive for excellence in all we do to be the premier public safety and traffic management facility
- Values: Diversity, honor & integrity, leadership & partnerships, professionalism & accountability, character, versatility & innovation, proactivity, quality, and compassion

Consolidation of WSP Dispatch Centers



- Waukesha
- DeForest
- Tomah
- Eau Claire
- Spooner
- Wausau
- Fond Du Lac

Colocation within the STOC Control Room

- Efficient transfer of information
- Improved communication between law enforcement dispatchers and control room operators
 - Camera access and manipulation
 - Incident location and confirmation
 - Immediate notification of incidents cleared, closures, etc.
 - DMS board use for alert notifications

Timeline

- December 2017 Transfer of SER dispatch operations to the TMC
- January 2018 AECOM Contract
- February 2018 DSP assumes management of TMC Control Room
- March 2018 Next Gen ATMS Transition
- April 2018 Regional LED Work Unit Transition to Bureau of Support Services

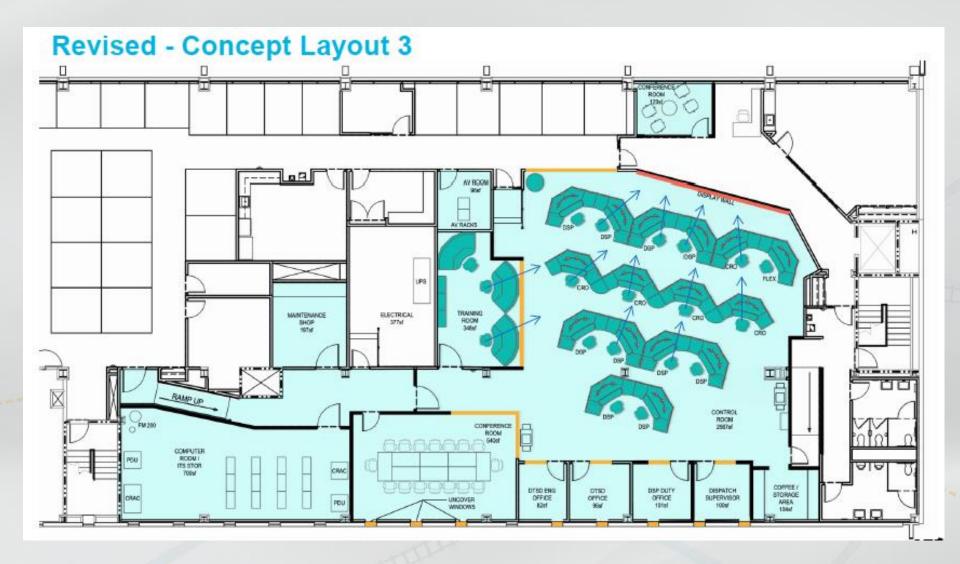
Timeline Continued

- April 2018 TMC Concept of Operations
 Development
- May 2018 Schedule Anywhere Transition
- May 2018 Remoting of Regional Dispatch
 Operations
- June 2018 Addition of TMC Section Duty Sergeant

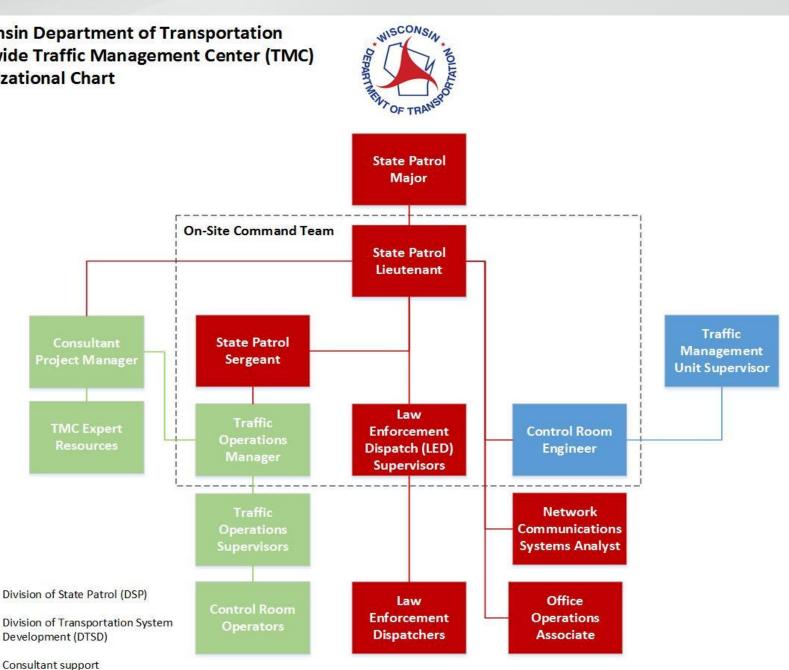
Timeline Continued

- July 2018 Go Live with NGATMS
- August 2018 NGATMS Burn In
- September 2018 Begin Continuous Recruitment for DSP LED positions
- October 2018 Begin of Remodeling for the Control Room
- March 2019 Equipment Masterlease Expiration

Proposed Control Room Design



Wisconsin Department of Transportation Statewide Traffic Management Center (TMC) **Organizational Chart**



WSP Dispatch at TMC – Milwaukee

- 7 Dispatch Workstations
- 5 CR Operator Workstations
- 11 Law Enforcement Dispatchers (LEDs)
 3 LEDs currently in training
- 6 New LEDs starting September 4th
- 1 TMC Section Executive Officer
- 1 Law Enforcement Dispatch Supervisor (LEDS)

WSP Dispatch at TMC Continued

- 1 LEDS Training Coordinator (LEDS)
- 2 WSP Duty Sergeant (Statewide)
- 1 Office Associate (O/A)
- Future 16-19 Workstations

CAD Data – WSP/MACH



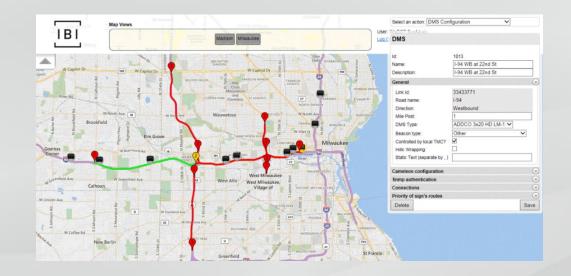
Next Generation Advanced Traffic Management System (Next Gen ATMS)



1996



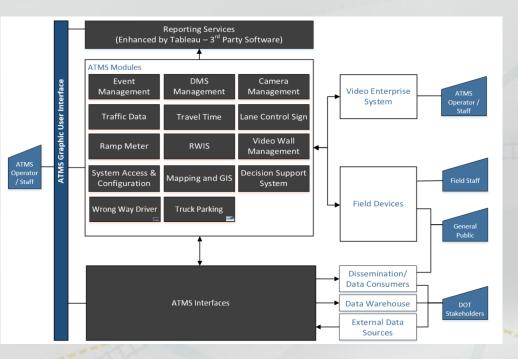
2018



 Goal is to provide a foundation that is extensible to new technologies, rather than purchasing multiple IT systems to run new technologies

 IBI's Next Gen ATMS is business rules based
 Benefit – System can use rules to recommend an operator action given a situation (i.e. – recommend and one-button touch implement a new ramp meter scheme based on an incident in a certain location on a certain day of week at a certain time).

- ATMS automatically calculates traffic data
- Used to control ITS field devices;
 Portable and Static
 DMS, Ramp Meters, etc.
- Almost all real-time info. seen on 511 phone, web, or app starts in ATMS
- Used by operators in Control Room

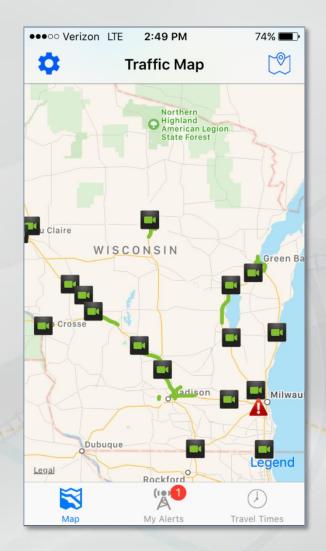


- Simulation mode
- NG ATMS Go Live (July 9th)
 - Enabling devices in the NG ATMS live mode for approximately 4 hours am/pm
 - Verify errors
- ATMS Burn-in (45 days)
 - Actively monitor performance of system
- Final Acceptance after successful end of burn-in period

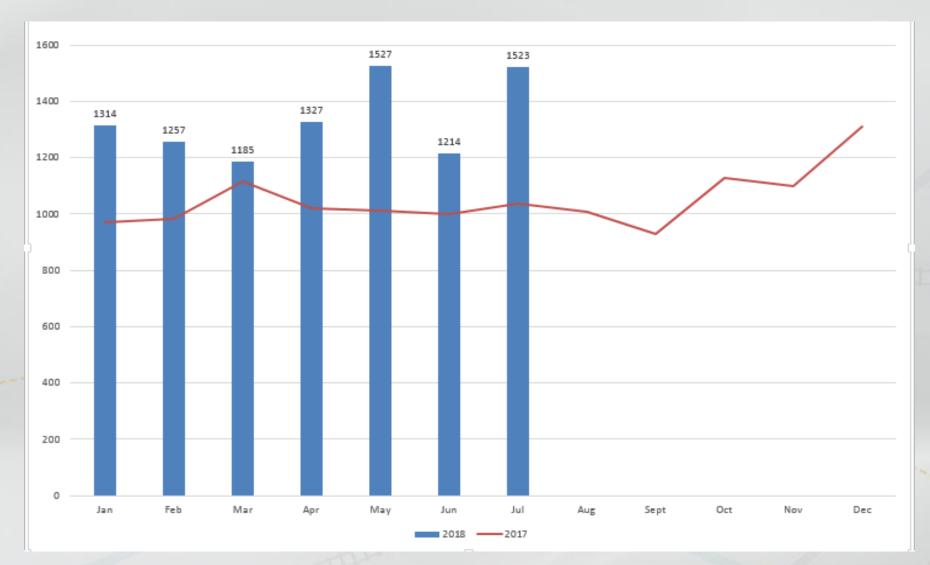


511WI.Gov APP

- Over 70,000
 downloads since
 launch
- Information from TMC / ATMS populates app
- Configurable push alerts
- Available for Apple and Android devices



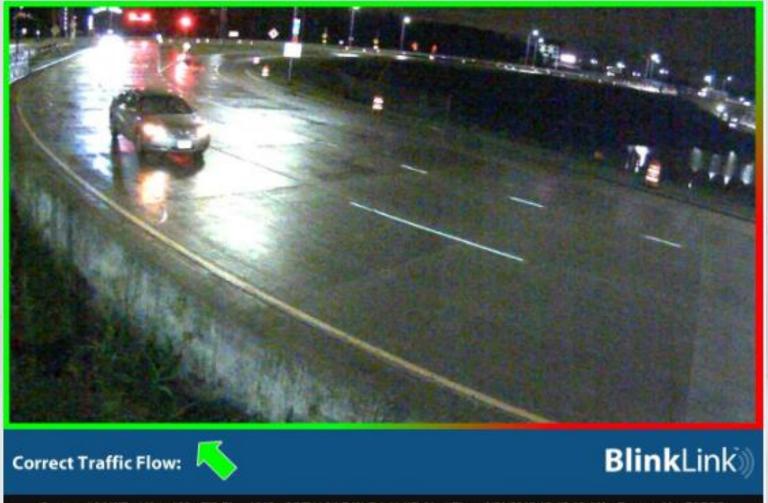
Control Room Incidents



Wrong Way Driver Event Reporting 1/1/18-7/31/18

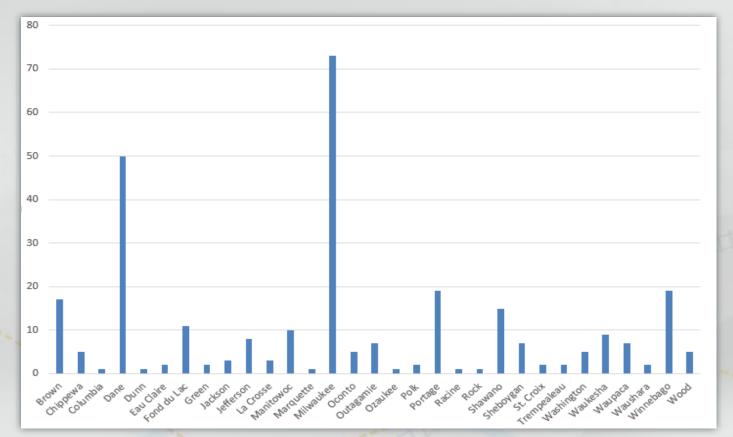
WisDOT Region	YTD Reported WWDs	
Southeast	89	
Northeast	76	
Southwest	65	
North Central	49	
Northwest	17	
Total	296	

BlinkLink Wrong Way Driver Detection



System: I-94 WB at Hwy 100 - TIS Plan 1018 - CCTV I-94 E-W @ I-41 HD Alert Time: 8/21/2018 12:17:16 AM Powered by TAPCO

Wrong Way Driver By County 2018 through July 31



FTP Video Request Protocol

- TMC video requests available via digital distribution / download
- TMC will archive video, fill out request and upload video to WisDOT FTP server
- Email will be sent with a unique link and password to download the video



FTP Video Request Protocol Continued

Video player application files will also be provided
Video still saved for 72 hours / 120 days once requested



FTP Video Request Protocol

- To receive your video request over the internet:
 - Please let the operator know when requesting that you would like FTP distribution and provide a valid email address to accompany the request



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Rename - F2 Refresh - F5 Change Directory New Directory - F7 Delete - F	=8
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① ▲ https://ftp.dot.wi.gov/action/cwd



Waze – Crowd-Sourced Data

- The TMC and DSP completed a Waze pilot project that started in November 2017 and concluded February 28, 2018
- Objectives
 - Receive Waze alerts into the control room on WSP CAD system
 - Document and determine confidence level of the alerts
 - Develop a partnership with DSP to further the value of Waze alerts
 - Incorporate Waze alerts as a credible source of new data

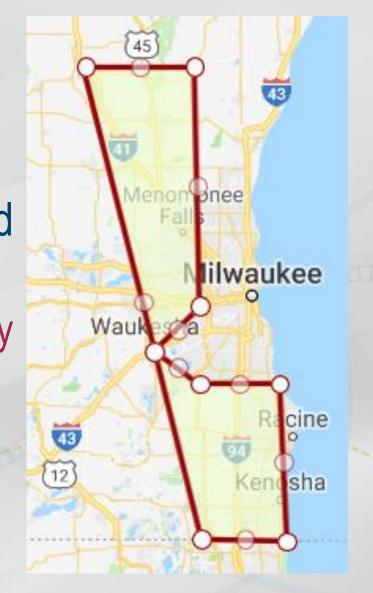
Waze – Crowd-Sourced Data Continued

- Alert Types: crashes, vehicles on shoulder of road, debris on road, weather hazards (ice, fog), potholes and animals on shoulder of road
- Alerts were received, Monday -Thursday
 7:30am 1:30pm

Waze Alert - Locations

- Alerts have coordinates and any falling within this polygon that are on a freeway would be received
 WSP included:

 I-41 in Washington County
 - I-94 in Waukesha County
 - I-41/94 in Racine and Kenosha Counties



Waze Alert Data - Overview

- The data is currently under review. During a two week period in January 2018 a sample of 303 alerts were categorized.
 - Traffic Crash: 5 alerts 60% confirmed
 - Traffic Hazard (debris on road, pothole, fog, ice)
 - 17 alerts 6% confirmed
 - Disabled vehicle on shoulder
 - 293 alerts 42% confirmed

 Moving forward – in order to improve confidence in Waze Alerts WSP anticipates to associate traffic jams (queues) and crashes to make the data source actionable

Future TMC Phases

- Consolidation of Region Operations to TMC Milwaukee
- Development of Intel/Information Fusion Center
 - Addition of Intel Analysts (Chief Wormet)
- TIME / ETO Program Management
 - Addition of Consultant Resources
- Integration of MACH/CAD and NGATMS