

February 2023 summary update for ATSSA Convention in Phoenix



WZDx Device Feed  
Multiple DOT/Vendor  
(Summer 2023)



Over the last year, Iowa DOT coordinated with the Work Zone Data Exchange (WZDx) working group to develop an object for temporary traffic control devices as part of the WZDx Device Feed. Iowa DOT is intending to use the WZDx Device Feed for future development because the open development gains feedback from a variety of stakeholders across the nation. The benefit of using the WZDx is a more comprehensive specification for additional work zone devices and possible wider scale adoption for additional states.

As part of the deployment, Iowa DOT will begin requiring manufacturers to provide a WZDx Device Feed Version 4.1 or greater that includes a **Traffic Signal Object** for each temporary traffic control device deployed in Iowa. The Traffic Signal Object describes a temporary traffic signal deployed on a roadway.

Some highlights of the deployment include:

- Manufacturers will need to provide a WZDx Device Feed Version 4.1+ which includes the [Traffic Signal Object](#)
- The Traffic Signal Object describes a temporary traffic signal deployed on a roadway. Each temporary traffic signal in Iowa will have a Traffic Signal Object within the manufacturers WZDx Device Feed
- The Traffic Signal Object includes the following properties:
  - [Core Details](#) – This includes core details about the devices such as configuration and state which are common for a variety of devices beyond traffic signals
  - [Mode](#) – This includes a basic description of the current operating mode of the traffic signal.

Additional details on the WZDx Device Feed – Traffic Signal Object can be found here:

<https://github.com/usdot-jpo-ode/wzdx/blob/main/spec-content/objects/TrafficSignal.md>

Any comments on Iowa DOT approach, contact Skylar Knickerbocker ([sknick@iastate.edu](mailto:sknick@iastate.edu)), Willy Sorenson ([Willy.Sorenson@iowadot.us](mailto:Willy.Sorenson@iowadot.us)) or Dan Sprengeler ([Dan.Sprengeler@iowadot.us](mailto:Dan.Sprengeler@iowadot.us))

Additional information is available on Iowa DOT's [Work Zone Reference Library](#).

## Proposed Connected Temporary Traffic Signal Project Schedule

Year		2023												2024											
Month		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
1	ATSSA Chapter	Activity	Completion												Completion										
2	Midwest Roundtable	Activity		Activity	Activity	Completion	Activity	Activity	Activity	Activity	Activity	Activity	Activity												
3	ATSSA Convention and EXPO	Activity	Completion												Completion										
4	Manufacturers			Activity	Activity	Completion																			
5	Manufacturers Comments					Activity	Activity	Completion																	
6	Invitation for Evaluation			Activity	Activity	Completion																			
7	Select Manufacturers					Activity	Completion																		
8	Evaluation						Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Completion	Final	
9	CTTS Specifications		Activity	Activity	Completion	Completion	Activity	Activity	Activity	Activity	Final														
10	Construction Specifications											Activity	Activity	Activity	Activity	Completion	Activity	Activity	Activity	Activity	Activity	Activity	Final		
11	Supplemental Specifications																Activity	Completion							
12	Establish MAPLE						Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Activity	Completion	Final	
13	Two Lane Deployment																		Activity	Activity	Activity	Activity	Activity	Activity	Activity

Key for color code on schedule:

Activity Period	Planned Completion	Final Submittal
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1. Present plan to the Iowa ATSSA Chapter members.
2. Iowa DOT presentation at Midwest Work Zone Roundtable.
3. Develop a white paper for use during the ATSSA Convention in February 2023 to inform manufacturers.
4. Conduct interviews with manufacturers related to Iowa DOT protocols to determine their needs prior to making final recommendations.
5. Review manufacturers comments and revise standards and protocols.
6. Develop and send an invitation to provide portable traffic signals, at no cost to the DOT, for evaluation and approval.
7. Select manufacturer(s) for evaluation. Based on response to invitation in task 6.
8. Conduct field evaluation for system approval.
9. Develop CTTS specifications for the MAPLE list. Becomes official in the October Specification update.
10. Develop CTTS specifications for construction contracts and present to the Iowa DOT Specification Committee.
11. Work with Specification Committee to have Supplemental Specifications approved and published (as necessary).
12. Establish temporary and portable traffic signal MAPLE list.
13. Allows contractors and traffic control providers to begin conversion of their inventory to real-time CTTS and begin deployment. This deployment will be mandatory on two lane projects in 2025. The RCE should determine the need for a change order on previously let projects with consultation with Traffic Safety Engineer in Construction and Materials.