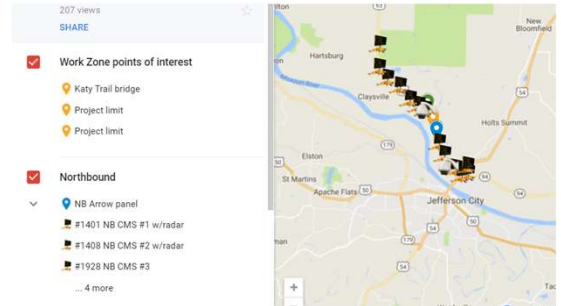


SWZ: INTEGRATOR SERVICES

Design

SWZ Integrator will have the experience and expertise to evaluate projects for potential traffic issues (before and after they have started), and make product recommendations based on the issues. SWZ are not a one-size-fits-all and should be designed Per Project. The SWZ Integrator and the project owner should discuss the appropriate software and hardware to solve issues (i.e. what type of sensor should be used, what should the messaging say, etc.)



What type of Sensor?
What type of messaging?
What type of Software?

PCMS	SB US-65 PCMS 03 (1808)			1808	US-65
		DEFAULT	SLOW	STOP	PTS Sensors (Worst Condition, Queue)
		ROAD WORK AHEAD	SLOW TRAFFIC SB 65	STOPPED TRAFFIC SB 65	SB US-65 PTS 02 (3530)
		WATCH FOR BACKUPS	TIME TO EVANS RD XX MINS	FROM 60 TO EVANS RD	SB US-65 PTS 03 (3526)
Route	Route PCMS 03		FF*2.5		Travel Time Route
			7.5		Route PCMS 03
					Route sensors
					SB US-65 PTS 02 (3530)
					SB US-65 PTS 03 (3526)
					NB US-65 PTS 01 (3531)

Installation

Deploying and installing SWZ devices requires a different “skill-set” than your normal traffic control devices. For this reason, it should be expected that an SWZ Integrator have appropriately trained staff for device installation. Appropriate and safe deployment of field devices takes the following into consideration: horizontal and vertical curves, permanent device locations (which can be incorporated within the system), queuing distances, slow moving construction vehicles (can impact sensor data). Customize software and sensors to meet specific project conditions. Coordination with construction contractors for staging, project start and end dates. Proper device location in and out of the clear-zone.



Require that installer has prior SWZ experience and proper training

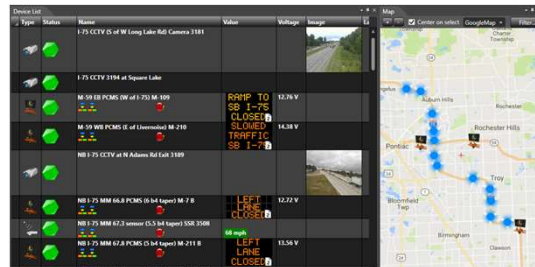
SWZ: INTEGRATOR SERVICES

Maintenance

Maintenance is a critical part of providing a good Smart Work Zone. Public acceptance is highest priority; when PCMS signs stop working, or are miscommunicating you can lose the public acceptance quickly. **SWZ Integrators need to have both preventative maintenance software, as well as a deep inventory of spare equipment.**

The preventative maintenance software (s) should be sophisticated enough to get the following information:

- speed alert issues (sensor malfunctioning)
- low batteries
- loss communications
- LED pixel issue
- low/ bad signal
- camera malfunction.



Since most of the devices used for SWZ are not easily available, and some manufacturers can be several weeks out, **its important when selecting Systems Integrator to use product inventory and availability as a pre-qualification.**

Management

Following the FHWA final rule for Work Zone Safety and Mobility, Active Work Zone Management (AWZM) and Performance Monitoring has become extremely important. SWZ Integrators should use AWZM to provide daily/ weekly/ monthly reports (incidents, queues, travel times, etc.) and make suggestions to change Traffic Control Plans (if necessary). Some of this information can also be aggregated from the state ATMS system or other publicly available sources.

Use Reporting tools for Active Work Zone Management

