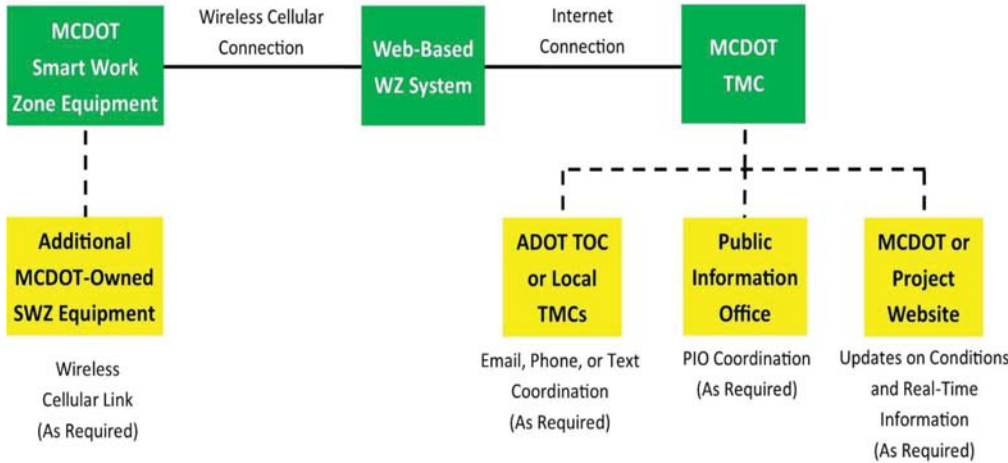




MC-85 SWZ: Lane Closure Management

As part of AZTech and the Federal Highway Administration's Every Day Counts (EDC) initiative, the Maricopa County Department of Transportation (MCDOT) developed a concept for deployment for Smarter Work Zone (SWZ) technology at work zone sites. The purpose of this project is to support the design of a SWZ system that will be implemented during the construction of MCDOT's MC-85 project from 107th Avenue to 75th Avenue. While the concept will be piloted during the MC-85 project, it is intended that this concept would be adaptable to all MCDOT and AZTech partner work zones. Nationally, there are a limited number of examples of arterial SWZ applications. AZTech is leading the way in SWZ innovation for arterials.

SWZ Concept of Operations



SWZ Stakeholders

Operations

- MCDOT Resident Engineer
- MCDOT Construction Mgr
- MCDOT TMC
- Prime Contractor
- RoadSafe (SWZ Field Locations)
- Ver-Mac (SWZ Software)

CVISN Operations

- ADOT
- University of Arizona

External Partners

- MCDOT PIO
- Kimley-Horn



Role of TMC

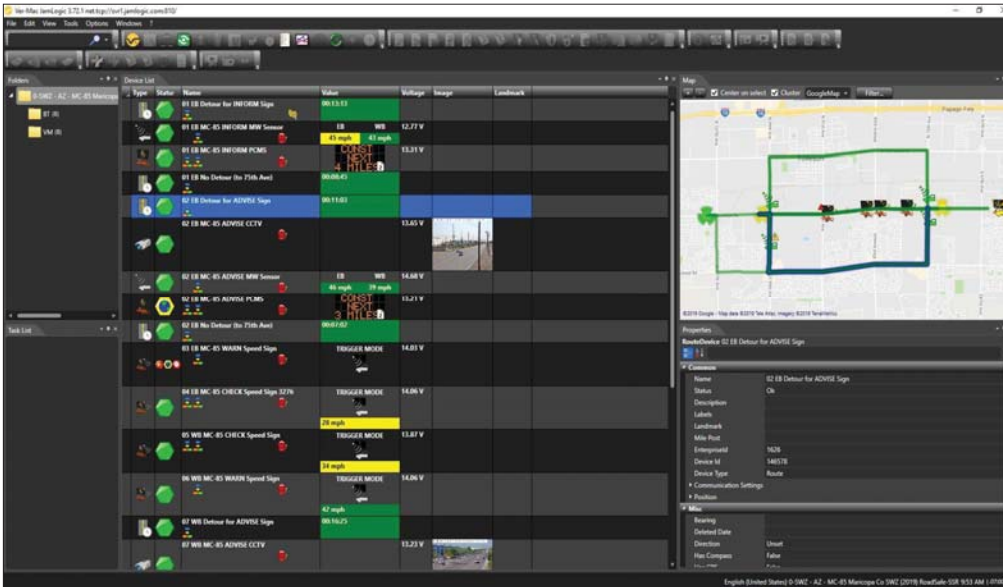
- System configuration and acceptance testing
- Monitoring of all system operations including:
 - Variable Message Sign System
 - Speed Feedback Sign System
 - CCTV Camera System
 - ARID Detector System
- Monitoring of data and alerts:
 - Side fire—speed, volume, classification
 - ARID—travel times
 - VMS—messaging for public
- Monitoring and override of VMS messages
- Monitoring and changing of traffic signal operations to support lane closures and shifts
- Respond to alerts received from system
- Uptime of existing equipment related to communications
- CVISN to JamLogic API
- Coordinate directly with external partners
- Document incidents in work zone and on I-10 that may impact travel





MC-85 SWZ: Lane Closure Management

JamLogic Software



Support with Regional Data Integration

This information for this project is feeding into the regional construction data which was integrated into the Regional Archived Data Server (RADS) from MCDOT, Avondale, Chandler, Gilbert, Glendale, Goodyear, Peoria, Phoenix, Mesa, Scottsdale, Surprise, and Tempe in 2017. RADS enables these agencies through the integration of construction data to provide detailed road closure data for display on AZ511 to increase awareness of events that may impact roadway users. Events which reduce arterial capacity by 50% or more, or which completely close an arterial or collector street, are now updated several times per day on AZ511 to ensure the data is as accurate as possible. Cities have begun updating their street closures webpages directing users instead to AZ511 for the latest road closure information. The RADS event data is an important source of information to keep the traffic managers aware of the condition of the transportation network.

JamLogic User & Alert List

NAME	WORK EMAIL	JamLogic USER TYPE				DELIVERY Email, SMS (text) or Both	SMS Number (10 Digits)	Alerts				Traffic	
		VIEWER	ACTIVATOR (can activate messages and override messages based on priority or blank)	OPERATOR	DOT Approved			Equipment	Low Power	SENSOR NO DATA > 15 MIN	TT Alt Route > Mainline	Traffic Condition Change - default, minor, major	If trailers in WZ are moved
Adam Carreon	ACarreon@azdot.gov	X				Email		X	X	X	X	X	
Alberto Valdez	AlbertoValdez@mail.maricopa.gov	X				Email					X	X	
April Wire	AprilWire@mail.maricopa.gov	X				Email						X	
Anthony Johnson	AnthonyJohnson@mail.maricopa.gov		X			Email					X	X	
Barbara Hauser	BarbaraHauser@mail.maricopa.gov		X			Email		X	X	X	X	X	
Christine Smith	ChristineSmith@mail.maricopa.gov		X			Email							
David Haines	David.Haines@kimley-horn.com					Email		X	X	X	X	X	X
Faisal Saleem	faisalsaleem@mail.maricopa.gov	X				Email							
Grady Hutchins	Grady.Hutchins@hdrinc.com	X				Email		X	X	X			X
Jordan Jimenez	Jordan@combsaz.com	X				Email					X		
Keith Christian	Keith.Christian@kimley-horn.com					Email		X	X	X	X	X	X
Kevin Christensen	Kevin.Christensen@hdrinc.com		X			Email		X	X	X	X	X	X
Leshawn Charlton	leshawncharlton@mail.maricopa.gov					Email		X	X	X			X
Matt Parks	MattParks@mail.maricopa.gov		X			Email							
Matthew Walkowiak	Matthew.Walkowiak@hdrinc.com					Email							X
Mark Brown	MarkBrown2@mail.maricopa.gov		X			Email					X	X	
Mike Gillen	Mgillen@roadsafetraffic.com			X		Text	602-694-8620	X	X	X	X	X	X
Ray Galavis	Rgalaviz@roadsafetraffic.com			X		Text	602-920-6151	X	X	X	X	X	X
Robert Barbere	RobBarbere@mail.maricopa.gov	X				Email		X	X	X		X	

For more information contact: Faisal Saleem | 602.506.1241 | faisalsaleem@mail.maricopa.gov

Weekly Coordination Meeting

This is a weekly meeting to coordinate the MCDOT MC-85 SWZ pre-deployment & deployment technical details. Below is the agenda for the next meeting:

- **Field Equipment Update**
- **Status Update on Other Items:**
 - DSRC mounting and integration (RedHawk & Tim Jackson of SSR):
 - User Training—Contractors and TMC
 - JamLogic User Accounts & Alerts
 - RADS interface to Jamlogic API
 - System Logic
 - Mode of Operation Schedule & Data to be Evaluated
 - SWZ System Weekly Report Submittals
 - Lessons Learned
 - Other Discussion Items

Traveler Advisories

- Traveler information messages for work zone ahead and travel delays



- Connected vehicle infrastructure to **help** with freight merging advisories

