

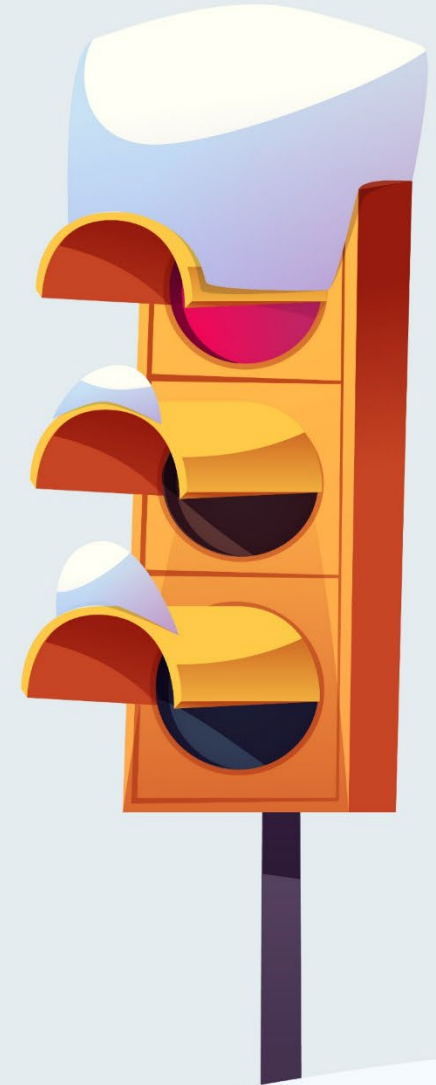
ITS Texas Fall 2025

WHEN THE SKY FALLS:

ENHANCING TRANSPORTATION RESPONSE WITH INCLEMENT WEATHER TABLETOP EXERCISES

Kate Reichard, P.E.
Representing Kimley-Horn

Allyson Richey, P.E.
Representing City of Austin



HOW DID WE GET HERE?

WINTER STORM URI

- February 11th – February 21st, 2021
- Single costliest natural disaster in the history of Texas (\$195B)
- Spurred series of after-actions by department, aimed at increased preparedness due to devastating, widespread storm impacts...



6.4" INCHES
OF SNOW



144 CONSECUTIVE
HOURS BELOW
FREEZING



40% CITY
WITHOUT POWER



740 CRASHES



212 SIGNALS
IN FLASH



HOW DID WE GET HERE?

Primary focus: Need to practice procedures and increase awareness of resources



**WINTER
TABLETOP**



DEFINITION AND PURPOSE

- A winter tabletop exercise is a discussion-based session in which team members and partner agencies walk through a simulated winter emergency scenario.
- The goal is to evaluate plans and procedures for responding to winter-specific incidents.
- Participants discuss their roles, responses, and strategies in a guided scenario to identify strengths, weaknesses, and areas for improvement in their emergency response plans.



CRITICAL COMPONENTS

- Establish base conditions to simulate
- Mix of staff with different of roles and experience levels
- Format and day-of logistics
- Involve all types of resources
 - Hardware (snowplows, battery back-ups, salt, generators, temporary stop signs, etc.)
 - Communication channels
 - Food and water
- Injects with challenges to put policies and standard operating procedures to the test
- Follow-up deliverables



EXAMPLE

Phase	Scenario Timeline	Scenario/Inject	Objectives/Questions to Discuss	Category	Group
Phase 1	2:00 PM	<p>It is 2:00PM on a Friday. There have been warnings of upcoming freezing rain overnight, expected to start around 11:00pm. Temperatures have been at or below freezing for the last 72 hours and ERCOT has announced a power shortage and the need to conserve power. Rolling blackouts have just gone into effect and it is unclear how long they will last and how widespread they will be.</p> <p>118 signals have lost communications.</p>	<p>Here we are looking for a plan to check the signals (by priority) and distribute generators (by priority); how do we organize this with field staff? Is there a way to monitor 311 or police radio to learn more without deploying people? If the distribution of signals is uneven across the City how do we balance? What is the plan for taking vehicles home in preparation for deploying into the field the next morning after the storm?</p>	Resource & Communication	Both



EXAMPLE

Phase	Scenario Timeline	Scenario/Inject	Objectives/Questions to Discuss	Category	Group
Phase 1	2:00 PM	It is 2:00PM on a Friday. There have been warnings of upcoming freezing rain overnight, expected to start around 11:00pm. Temperatures have been at or below freezing for the last 72 hours and ERCOT has announced a power shortage and the need to conserve power. Rolling blackouts have just gone into effect and it is unclear how long they will last and how widespread they will be. 118 signals have lost communications.	Here we are looking for a plan to check the signals (by priority) and distribute generators (by priority); how do we organize this with field staff? Is there a way to monitor 311 or police radio to learn more without deploying people? If the distribution of signals is uneven across the City how do we balance? What is the plan for taking vehicles home in preparation for deploying into the field the next morning after the storm?	Resource & Communication	Both
	2:10 PM	80% of staff anticipated for this shift have made it in.	Practice rebalancing the teams on the fly.	Resource	Both
	2:50 PM	Need to give Executive an update.	Work on communications - explain how prioritization is done; explain how we deploy limited resources. Explain difference between dark signals and communications down.	Communication	Both



EXAMPLE

Storm Event



AUSTIN
TRANSPORTATION



MOBILITY
MANAGEMENT
CENTER

Kimley»Horn

Date & Time of Last Refresh:

11/10/2025 9:36:48 AM

Current Status:

Flashing	Dark	Knock Downs
4	0	0

Temporary Traffic Control:

BBU	Generators	Stop Sign Assemblies
0	0	0

Cumulative Stats:

Total Flash Events	Total Confirmed Dark	Total Knock Downs
14	0	0

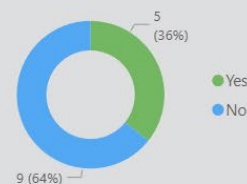
Cumulative Temporary Traffic Control Stats:

Total BBUs Activated	Total Generators Deployed	Total Stop Sign Assemblies
0	0	0

Total Events:

Total Signals Impacted	Total Dispatched	Total Reset Remotely
14	9	5

% Reset Remotely



Field Crew

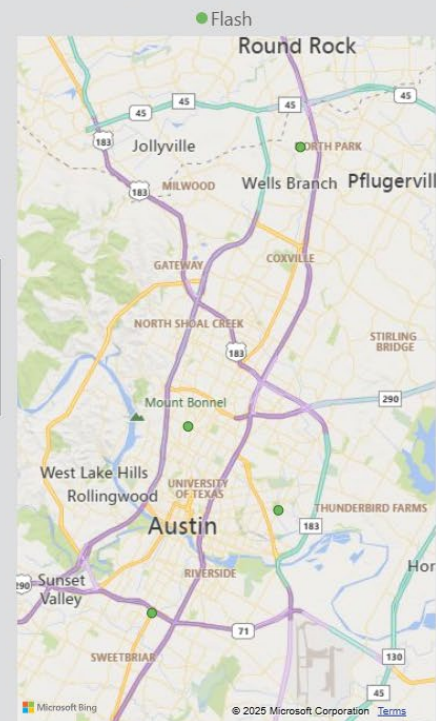
Abraham

N/a

Rolando

Rubio

Current Signal Outages



Signal Name	Tier	Priority Rank	Status	Treatment
N Mopac/Parmer	1	17	Dark	Generator
Ben White/Brodie	1	7	Dark	Generator
Metric/Parmer	2	78	Dark	Stop Sign
Tech Ridge/Yager	2	83	Flash	
183/Manor	2	62	Dark	Generator
Tech Ridge/Canyon Ridge	2	104	Flash	
Parmer/Dallas	2	27	Comm Loss	
360/Westlake	2	70	Comm Loss	
Loop 360/Stonelake	2	123	Comm Loss	
360/Research	2	92	Dark	Generator
2222/360	2	56	Dark	Stop Sign
Amherst/Parmer	2	74	Flash	
William Cannon/Brush Cou	3	222	Dark	Stop Sign
Yager/Lamar	3	204	Comm Loss	
Ben White/Menchaca	3	190	Dark	Generator
183/Duval	3	179	Dark	Generator
Howard/Wells Branch	3	219	Dark	Stop Sign

This report is set to refresh every 30 mins from 6am-8pm each day.



Kimley»Horn

Austin

EXAMPLE

Phase	Scenario Timeline	Scenario/Inject	Objectives/Questions to Discuss	Category	Group
Phase 1	2:00 PM	It is 2:00PM on a Friday. There have been warnings of upcoming freezing rain overnight, expected to start around 11:00pm. Temperatures have been at or below freezing for the last 72 hours and ERCOT has announced a power shortage and the need to conserve power. Rolling blackouts have just gone into effect and it is unclear how long they will last and how widespread they will be. 118 signals have lost communications.	Here we are looking for a plan to check the signals (by priority) and distribute generators (by priority); how do we organize this with field staff? Is there a way to monitor 311 or police radio to learn more without deploying people? If the distribution of signals is uneven across the City how do we balance? What is the plan for taking vehicles home in preparation for deploying into the field the next morning after the storm?	Resource & Communication	Both
	2:10 PM	80% of staff anticipated for this shift have made it in.	Practice rebalancing the teams on the fly.	Resource	Both
	2:50 PM	Need to give Executive an update.	Work on communications - explain how prioritization is done; explain how we deploy limited resources. Explain difference between dark signals and communications down.	Communication	Both
3:00 PM All resources are deployed			Now we will see how we operate when resources		



EXAMPLE

Phase	Scenario Timeline	Scenario/Inject	Objectives/Questions to Discuss	Category	Group
3:00 PM All resources are deployed			Now we will see how we operate when resources are limited		
Phase 2	1	<p>The freezing rain has started much earlier than expected. Schools have announced an early release. People are have begun to leave work early.</p> <p>A 311 call reports that the Northland & Shoal Creek light is out but we have a generator there.</p>		Resource	Both
	2	<p>You lose contact with a team in the field. They aren't responding to texts or phone calls. You last heard from them 2 hours ago when you dispatched them to Northland & Shoal Creek.</p> <p><u>Follow-up</u></p> <p>Group A: Their geotab location shows them at Northland & Shoal Creek, but it hasn't moved in 90 minutes so you aren't able to confirm if they have completed any work or see them there due to lack of comms.</p> <p>Group B: Their vehicle was a rental so you cannot see their geotab location. They were dispatched to Northland & Shoal Creek, Burnet & Koenig, and Lamar & 24th.</p>	Practice using radios. Do we send someone to check on them?	Safety	Both
	3A	<p>Congress & Oltorf, 2222 & Mesa, Burnet & Braker have generators but are now offline.</p> <p>Follow up: Generator at 2222 & Mesa has died and won't start.</p>	Prioritize distribution of working generators. Are the vehicles carrying generators also carrying stop signs? How long does a team in the field troubleshoot before moving on to the next signal?	Resource	Group A
	3B	Vehicles ran over the temporary stop signs at Lamar & Braker and Brodie & Davis . We don't have any more available.	Prioritize distribution of stop signs and SMD staff.	Resource	Group B



EXAMPLE



CONCLUSION
OF SCENARIO

WE SURVIVED!



EXAMPLE



CONCLUSION
OF SCENARIO

WE SURVIVED!



GROUPS
RECONVENE



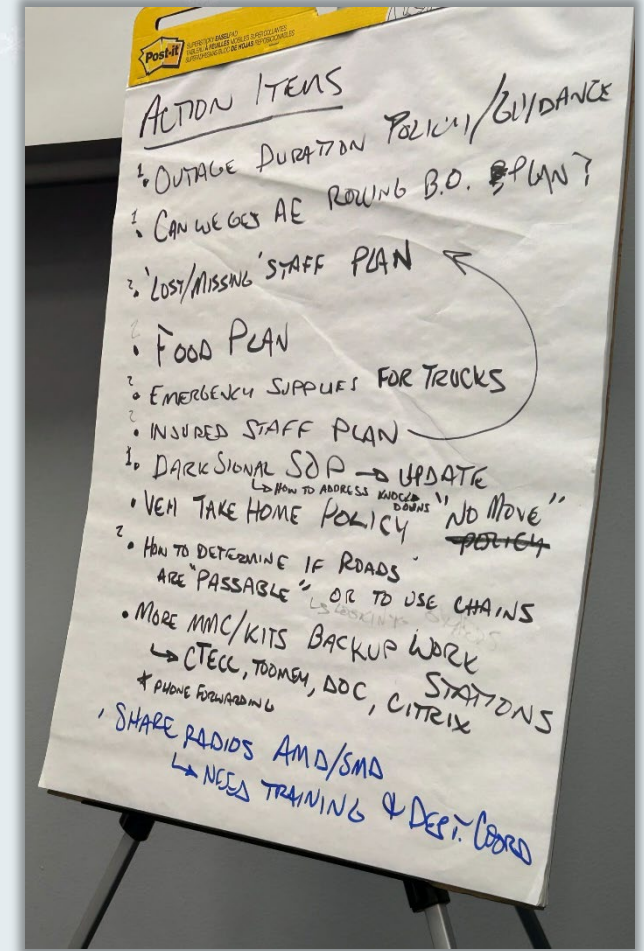
DISCUSS
CHALLENGES



IDENTIFY
ACTION ITEMS

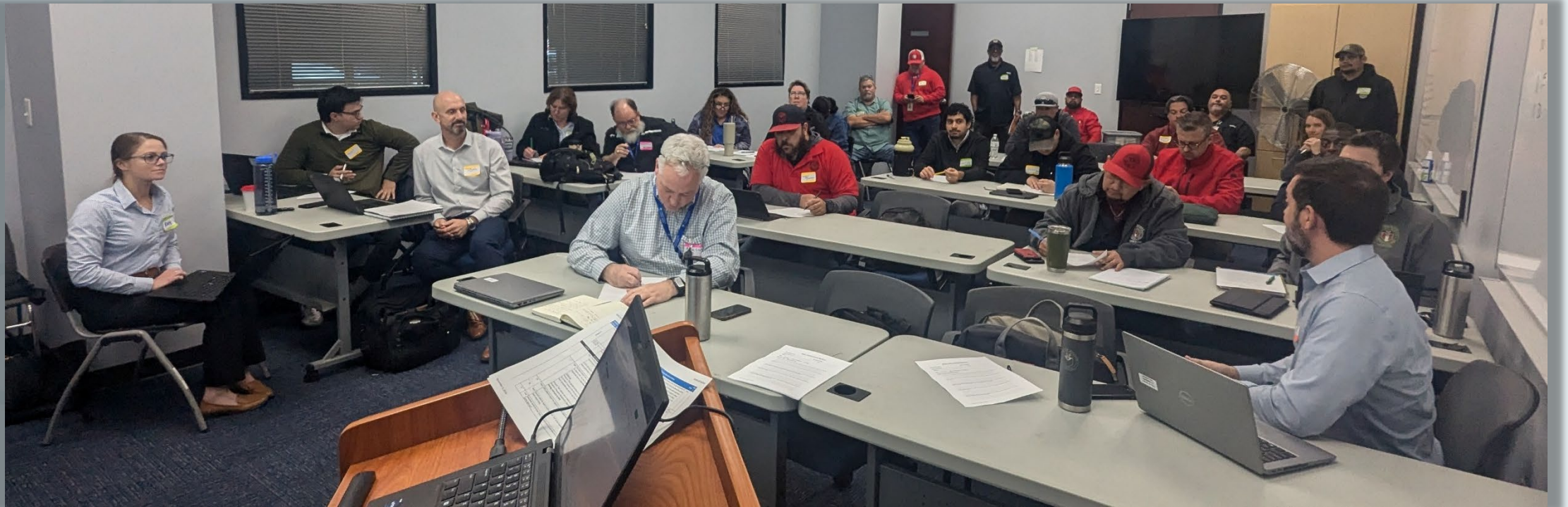


PROVIDE
FEEDBACK



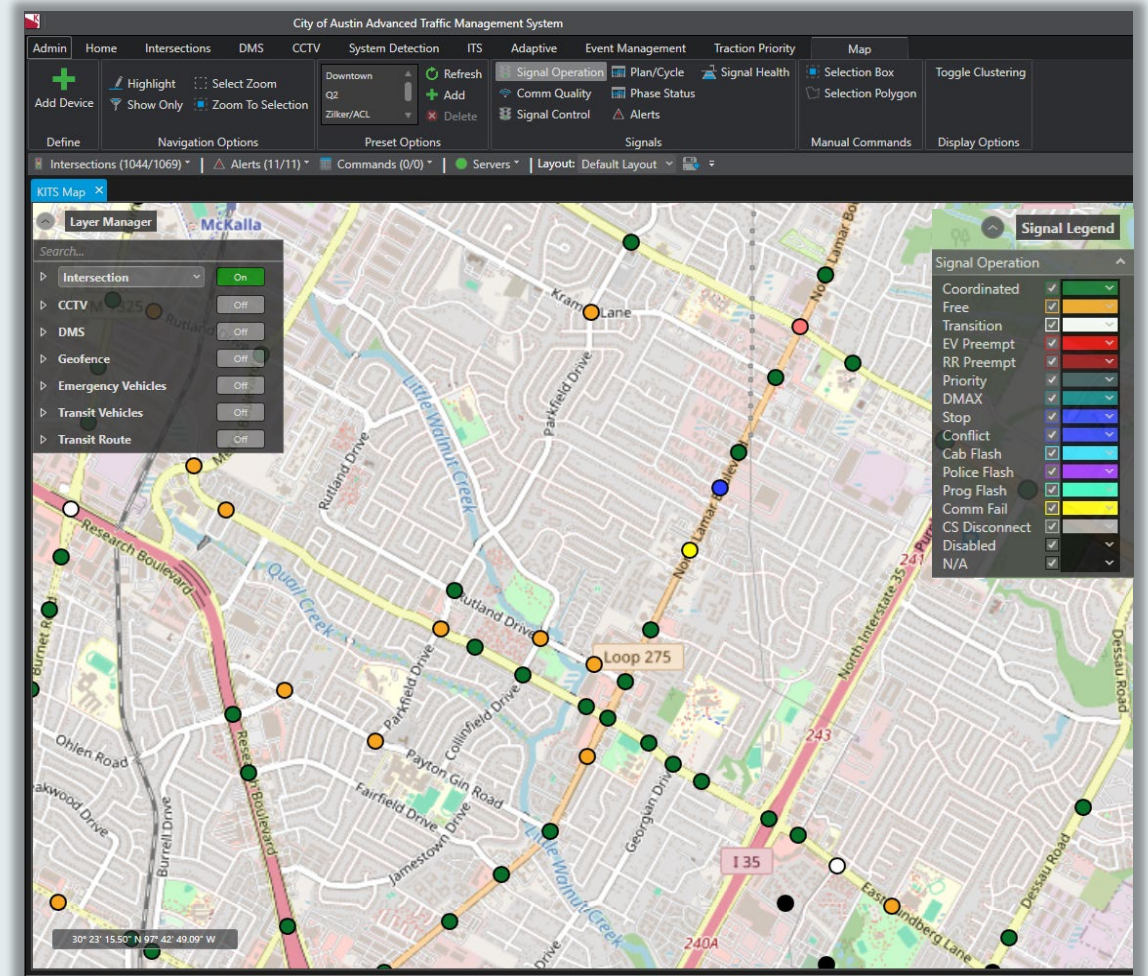
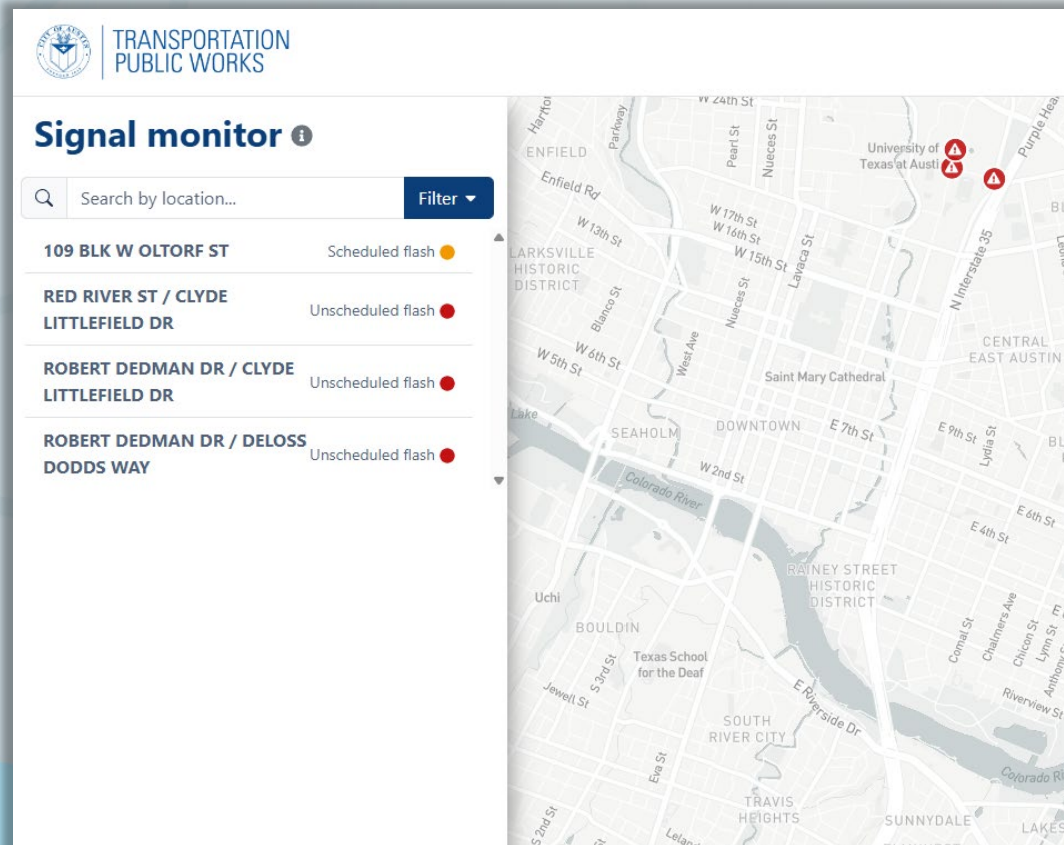
LESSONS LEARNED

- Physical engagement



LESSONS LEARNED

- Physical engagement
- Maps to track simulated resource deployments



LESSONS LEARNED

- Physical engagement
- Maps to track simulated resource deployments
- Ownership of action items and follow through



MMC Winter Tabletop Summary and Action Items - Dec 2024.docx
41 KB

Below are the action items from the AMD/SMD Tabletop exercise. Please provide an update as able to these items.

1. **Update Dark Signal SOP** – Lance Ballard, Brian Craig - **COMPLETE**
2. Staff Support
 - a. **Lost or Missing Staff Plan** – Chris Williams, Billy Bolander, Brian Craig, Lauren Seyda
 - b. **Vehicle Take-Home Policy** – Chris Williams, Billy Bolander, Brian Craig, Lauren Seyda
 - c. **Food Plan** – Billy Bolander, Chris Williams, Lauren Seyda, Brian Craig
 - d. **Emergency Supplies for Trucks** – Billy Bolander, Lauren Seyda
 - e. **Road Conditions Guidance** – Lewis Leff
3. Equipment
 - a. **Add additional backup workstations for MMC** – Henry Zuniga, Lance Ballard - **In Progress**
 - i. MMC staff are investigating additional [work station](#) locations at Toomey Rd and potential SBO DOC in coming weeks
 - b. **Handheld Radio Communications** – Billy Bolander, Lauren Seyda
4. **Communications Coordination with TPW SBO** – Lewis Leff, Kimmi McMinn
 - a. How can SBO field crews provide MMC team updates on signal status

Thanks,



Lance Ballard P.E.
Mobility Management Center (MMC) Manager
Transportation and Public Works
lance.ballard@austintexas.gov

QUESTIONS?

KATE REICHARD

KATE.REICHARD@KIMLEY-HORN.COM

ALLYSON RICHEY

ALLYSON.RICHEY@KIMLEY-HORN.COM

