



# City of Orem Drill 2018

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After-Action Report/Improvement Plan  
Thursday, September 13, 2018

## EXERCISE OVERVIEW

<b>Exercise Name</b>	City of Orem Drill 2018
<b>Exercise Dates</b>	Thursday, September 13, 2018 1800-2015
<b>Scope</b>	This exercise is a communication drill, planned for two and a half hours, at locations around the City of Orem. These locations are at the block, neighborhood and area command locations throughout the city and at the Orem City Emergency Operations Center. Information is sent from the residents to the Orem Emergency Operations Center via both Runners and HAM Radio operators throughout the City.
<b>Mission Area(s)</b>	Mitigation, Response
<b>Core Capabilities</b>	Community Resilience, Operational Communications, Situational Awareness
<b>Objectives</b>	Exercise objectives include: 1. Increase Orem's resilience and participation from the 2017 drill.; 2. To test established formal and standardized communications procedures, with the addition of the Utah County SCAT team and the Utah County MACC; 3. Provide injects to multiple areas (3) in the City and see if those injects reach the City EOC; and 4. To activate the Orem EOC, send a community-wide Everbridge Message, and receive and process intelligence reports.
<b>Threat or Hazard</b>	The Orem City Drill utilized an "All Hazards" approach to testing specific functions and goals. No specific hazard or threat was tested.
<b>Scenario</b>	A disaster scenario hit the City of Orem at 1800 and has affected the City as a whole.
<b>Sponsor</b>	The City of Orem Office of Emergency Management sponsored the drill. No grant money was used to pay for any part of the Orem City Drill 2018.
<b>Participating Organizations</b>	The participating organizations are: The City of Orem (Police Department, Fire Department, and Office of Emergency Management), The Utah County Sheriff's Office, SCAT, Amateur Radio Emergency Services (ARES), City of Orem CERT, Provo City CERT, participating Faith-based Areas, Neighborhood organizations, and citizen volunteers.
<b>Point of Contact</b>	Primary exercise POC: Heath Stevenson, Emergency Manager, City of Orem 95 East Center Street, Orem, UT 84057 801-229-7146 hmstevenson@orem.org

1. The title of this document is the City of Orem Drill 2018.
2. The information gathered in this AAR/IP is unclassified and should be handled as public information to be disclosed to any person with an interest in the contents herein. This document is intended to provide a snapshot of the Orem City Drill 2018 including points of success and gaps in the city's plans and practices. This document should be presented in its entirety and not used to distort, or amplify gaps found during the exercise. Reproductions of this document, in whole or in part, must maintain the integrity of the overall intent of the document.
3. The attached materials will be disseminated to exercise participants, city officials, and community leaders and made available to the general public.
4. Point of Contact:  
Exercise Director: Heath Stevenson  
Title: Emergency Manager  
Agency: City of Orem  
Address: 95 East Center Street Orem, Utah 84057  
Contact information: Office Number: 801-229-7146 Email: hmstevenson@orem.org

## EXECUTIVE SUMMARY

The City of Orem sponsored their annual city-wide drill named the "City of Orem Drill 2018" (hereafter called "the exercise"). The exercise was conducted on Thursday, September 13, 2018 and included the following participants: The City of Orem (Police Department, Fire Department, and Office of Emergency Management), The Utah County Sheriff's Office, SCAT, Amateur Radio Emergency Services (ARES), City of Orem CERT, Provo City CERT, participating Faith-based Areas, Neighborhood organizations, citizen volunteers, and the following Neighborhoods; Aspen, Geneva Heights, Orem North, Sharon Park, Suncrest, Timpview, ~~Cherry Hill~~, ~~Lakeview~~, Orem Park, Sunset Heights East, Sunset Heights West, Canyon View, Cascade, Heatheridge, Northridge, Orchard, Windsor, Hillcrest, ~~Lakeridge~~, Orem, Sharon, and Stonewood Areas.

The City of Orem's communication drill scenario was that a disaster hit at approximately 1800, which caused the city communication protocols to be enacted. The exercise was a drill as it tested two particular functions; communications and accounting for citizens, and was developed by the Orem Office of Emergency Management with representation from participating Areas. The drill was developed to exercise chapter 7 (City-Stake Integration) in the City of Orem's Comprehensive Emergency Management Plan (August 2016) along with testing the following FEMA C: Capability 1- Community Resilience, Capability 2- Situational Awareness, and Capability 3- Operational Communications.

The exercise planning team was composed of representatives from each of the participating areas, Amateur Radio Emergency Services (ARES) Liaisons, Orem and Provo City CERT members, and the City of Orem Emergency Manager. It was decided to keep the drill sufficiently simple for Areas/neighborhoods that were participating for the first time while increasing the complexity for those that participated in 2017 or felt ready to add more complex communications into the exercise.

The results of the drill were:

- Approximately, 32,833 people accounted for, from 18 "Areas" (An "Area" is defined by Orem's Neighborhood in Action Neighborhood which also matches the LDS Church "Stake" Boundaries).
- Reports arrived at the City EOC (Emergency Operations Center) by runner and by ham radio transmission in two hours and fifteen minutes.

Based on the exercise planning team's deliberations, the following objectives were developed for the City of Orem Drill 2018:

**Objective 1:** Increase Orem's resilience and participation from the 2017 drill.

**Objective 2:** To test established formal and standardized communications procedures, with the addition of the Utah County SCAT team and the Utah County MACC.

**Objective 3:** Provide injects to multiple areas (3) in the City and see if those injects reach the City EOC.

**Objective 4:** To activate the Orem EOC, send a community-wide Everbridge Message, and receive and process intelligence reports.

**Note:** An intention of Emergency Management in developing the drill is to lay the foundation for future exercises and real-world events for the citizens of Orem to be able to conduct a rapid assessment and work with Emergency Management to build a common operating picture, from which to make critical life-saving decisions.

The purpose of this report is to analyze exercise results, identify strengths to be maintained and built upon, identify potential areas for further improvement, and support development of corrective actions.

## MAJOR STRENGTHS

The City of Orem Drill 2018 had some major improvements resulting in major strengths from the 2017 drill. Most notably was the ability for the staff members in the City of Orem to adapt to the situation. Half of the people who were scheduled to help run the communications and volunteer sign ins at the EOC had to cancel at the last minute to provide aid to the Pole Creek Fire that exploded into a disaster that night. This left a lot of things to have to operate at a backup level, and many of the volunteers at the EOC had to wear multiple hats. Adapting to the situation was a great practice for a situation that may occur. A second strength was the integration between the Orem City HAM radio operators and the Utah County SCAT team. A third strength included speaking with Robin, UVU Emergency Manager, and discussing how the communication process would work between the City, the School, and all of the students in a disaster scenario.

### Independent Evaluation Findings

- StartEx and EndEx on time
  - Start of Exercise: 1800 and End of Exercise: 2015
- Standard and consistent use of forms. Documentation was consistent and standardized, much easier to collate due to making all the reporting on one sheet.
- Regular organized briefings were scheduled, announced, and held
  - 1730 briefing
  - 1800 briefing
  - 1830 briefing
  - 1900 briefing
  - 1930 briefing
  - 2000 briefing
  - 2015 briefing
- Ham radio adapted well to the situation. The Southwest quadrant wasn't working, but a relay, in Saratoga Springs, was found to help. The Utah County MACC had to respond to the Pole Creek Fire and our HAM radio operation found a way to adapt and make it work.
- Despite some drop in our Community participation, it was good again this year.
  - 32,833 people accounted for 2018
  - 36,900 people accounted for 2017
- Lots of pre-event signage throughout Orem
- Spoke with Robin, UVU Emergency Manager, and discussed how the communication process would work between the City, the School, and all of the students.
- Re-arranged the setup of the EOC to make it easier to understand and more efficient.

## PRIMARY AREAS FOR IMPROVEMENT

Throughout the exercise, several opportunities for improvement in the City of Orem's ability to respond to the incident were identified. The primary areas for improvement, including recommendations, are as follows:

- Publicize to the community the need for cell phone users to opt in to Everbridge
- Safety first– use buddy system for runners, especially if Children are being used.
- Keep working toward participation by all areas
- Still need to emphasize it is a community exercise inclusive of all residents and make sure publicity gets to residents not of the dominant faith
  - Consider using Facebook and other media options
  - Consider using schools and senior centers for publicity
- Safety was an issue. There were multiple reporting parties that didn't come with a buddy. From block captain, to runners, to neighborhoods, to areas, the buddy system lacked.
- How to improve the lack of participation among Orem City members.
- Communication to Orem residents needs to be on a City level, not Church level. Block Captains need to let people know they are assigned by the City.
- HAM Radio setup for the Southwest quadrant didn't work – had to use a HAM operator from Saratoga Springs to relay messages.

## EXERCISE SUMMARY AND OBSERVATIONS

Exercise Efficiency and Start Time

- Consistent and thorough check in of players.
- StartEx on time at 1800. Sirens and horns throughout community 18:00 – 18:05.

Safety Issues – ongoing issue

- Some block captains went door to door to check on neighbors – should be in pairs.
- Many runners to districts and Stake Centers were alone. Children were used as runners – responsible buddy needed. **Safety First/Buddy System**

Emergency Operations Center

- Command was established at 1800 and scaled to fit the incident.
- Logical system set up using four quadrants to organize city response and reporting.
- Good use of maps, charts, and whiteboards to organize data.
- Check in at the EOC was not as organized as in the past, due to staff members being called out to the Pole Creek fire and others wearing multiple hats.
- Good collaboration in the EOC.

Communications/ Speed and Accuracy

- Faith based terminology was confusing to some and not appreciated by some – use terminology that is neutral and familiar to all.
- Excellent use of a call center to disseminate information to the public.
- Good phone etiquette on phone bank.
- Good use of redundant communications systems.
- The Utah County MACC was used. There were multiple issues with communication. However it was worked through and turned out okay.
- Ham radio channels were designated ahead of time and used successfully.

Publicity

- Church flyers got a lot of church members involved.
- Signs were visible and widespread.
- Invitations in brochures, bulletins, emails, flyers on doors.
- Make sure neighbors not of the dominant faith are fully informed.
  - Sensitive use of church terminology.
  - Emphasize the community wide nature of the exercise more than church activity side.

Documentation

- Forms were more standardized and organized.
- City forms were used.
- Documents were clear and orderly.

Real-Life Event – Pole Creek Fire

- Staff was cut short due to multiple people responding to the Pole Creek Fire that started.
- Due to the fire the Utah County MACC had to respond and our HAM radio operations were run out cars, on mobile radios.

The City of Orem Drill 2018 built on the established baseline from the 2017 drill. Our 2018 drill tested the City of Orem’s ability to account for and communicate with residents through established protocols. Additionally Orem citizens practiced conducting a rapid assessment of their neighborhoods and communicated information gained through Neighborhood/Area leadership to the City EOC (Emergency Operations Center). To build upon the 2017 drill, as mentioned above, the City of Orem provided written injects to members of the city to see if the injects could make it back to the City’s EOC. This process worked fairly well and all three injects were received at the EOC, with one message being incomplete. Overall, the City of Orem Drill 2018 showed improvements to the 2017 drill, but, as expected from such a massive endeavor, gaps remain that need to be addressed. Though gaps were found, it is believed that the City of Orem is much more prepared to deal with a large-scale disaster having planned, trained, and exercised with the residents of the city.

The City of Orem Drill is planned to be a yearly activity, building on previous drills to address gaps in the system, improving on speed and accuracy of information, adding complexity slowly as gaps are identified in order to bolster the readiness and resilience of the city as a whole with the goal to save lives, stabilize events, alleviate suffering of our citizens and return to “normal” or a “new normal” as quickly as possible. Going forward, the following areas of focus will become important in creating a more resilient city: adding two-way communication for better coordination among all sectors of leadership in the city, developing the ability to use redundant communication, adding in layers of accountability in order to address span of control issues, involving schools and the business sector in planning and exercises, addressing the planning for residents with functional and access needs and including all Faith-based organizations in the planning for and exercising of emergency plans.

### ANALYSIS OF CORE CAPABILITIES

Aligning exercise objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team.

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Increase Orem's resilience and participation from the 2017 drill.	Community Resilience		S		
To test established formal and standardized communications procedures, with the addition of the Utah County SCAT team and the Utah County MACC.	Operational Communications		S		
Provide injects to multiple areas in the City and see if those injects reach the City EOC.	Operational Communications		S		
To activate the Orem EOC, send a community-wide Everbridge Message, and receive and process intelligence reports.	Situational Assessment	P			
<p><b>Ratings Definitions:</b></p> <ul style="list-style-type: none"> <li>• Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.</li> <li>• Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.</li> <li>• Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws.</li> <li>• Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).</li> </ul>					

## TABLE 1: SUMMARY OF CORE CAPABILITY PERFORMANCE

The following sections provide an overview of the performance related to each exercise objective and associated core capability, highlighting strengths and areas for improvement.

### OBJECTIVE 1: INCREASE OREM'S RESILIENCE AND PARTICIPATION FROM THE 2017 DRILL.

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

#### CORE CAPABILITY: COMMUNITY RESILIENCE STRENGTHS

The partial capability level can be attributed to the following strengths:

**STRENGTH 1:** The number of participants and people accounted for decreased by approximately 3,000. I believe this was in part to the Pole Creek Fire and poor planning on our City's part. A second activity was planned for the same night, at the same time.

**STRENGTH 2:** Community Resilience of Orem was strengthened because of the number of participants as they are the eyes and ears on the ground that, through their reports and observations, identify needs and issues that add to the common operating picture in Orem.

#### AREAS FOR IMPROVEMENT

The following areas require improvement to achieve the full capability level:

**AREA FOR IMPROVEMENT:** Though the community resilience of Orem has been strengthened through multiple years of practicing for a disaster in the city of Orem, there is still a significant number of people who have not participated and do not know where they fit in the overall response to a disaster in Orem. The recommendation of this report is to continue to strengthen outreach efforts and educational opportunities during the preparation for the 2019 City of Orem Drill.

### OBJECTIVE 2: TO TEST ESTABLISHED FORMAL AND STANDARDIZED COMMUNICATIONS PROCEDURES, WITH THE ADDITION OF THE UTAH COUNTY SCAT TEAM AND THE UTAH COUNTY MACC.

#### CORE CAPABILITY: OPERATIONAL COMMUNICATIONS STRENGTHS

The partial capability level can be attributed to the following strengths:

**STRENGTH 1:** The integration between the Orem City HAM radio operators and the Utah County SCAT team was a success. There were some issues along the way, but both teams adapted and overcame the situation.

**STRENGTH 2:** Consistent and standardized forms decreased the confusion around the city in accounting for the residents. A standardized command structure was adopted and used throughout the city.

## AREAS FOR IMPROVEMENT

The following areas require improvement to achieve the full capability level:

**AREA FOR IMPROVEMENT:** Improvement needs to be made in the number of people accounted for after a disaster. This will improve as future drills are performed and more residents are reached, trained and participate.

### OBJECTIVE 3: PROVIDE INJECTS TO MULTIPLE AREAS IN THE CITY AND SEE IF THOSE INJECTS REACH THE CITY EOC.

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

#### CORE CAPABILITY: OPERATIONAL COMMUNICATIONS STRENGTHS

The partial capability level can be attributed to the following strengths:

**STRENGTH 1:** Two of the three injects came back word for word as they were sent out to the residents. The third inject came back to the City's EOC, but the wording was mixed up coming through the communication chain.

## AREAS FOR IMPROVEMENT

The following areas require improvement to achieve the full capability level:

**AREA FOR IMPROVEMENT:** Forms and chains of communication will be reviewed again before plans for the 2018 drill are formalized in order to tweak any minor issues that are needed. Additional training will be done on procedures and forms to make sure injects are received properly before the 2019 drill.

### OBJECTIVE 4: TO ACTIVATE THE OREM EOC, SEND A COMMUNITY-WIDE EVERBRIDGE MESSAGE, AND RECEIVE AND PROCESS INTELLIGENCE REPORTS.

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

#### CORE CAPABILITY: SITUATIONAL ASSESSMENT STRENGTHS

The partial capability level can be attributed to the following strengths:

**STRENGTH 1:** The Orem Emergency Operations Center (EOC) was activated using a simplified ICS structure of command. Clear communication was established and practiced by the incident commander with regular, scheduled and organized briefings.

**STRENGTH 2:** Amateur radio quadrants were well established and followed. Amateur radio transmissions were clear and standardized. A phone bank was established with publicized numbers for any residents who wanted to check in and didn't know where to check in or could not leave their homes.

**STRENGTH 3:** A message was sent to the community members who have signed up on Everbridge.

## **AREAS FOR IMPROVEMENT**

The following areas require improvement to achieve the full capability level:

**AREA FOR IMPROVEMENT:** Additional practice in an EOC setting will have a positive effect on making slight improvements in working in an Emergency Operations Center setting. The EOC positions will have staffing assignments made prior to the 2019 City of Orem Drill. Additionally providing more training and outreach to the community will improve participants' understanding of appropriate check-in procedures and locations, allowing more home-bound and functional & access needs individuals access to available phone lines, and receive communications through Everbridge.

## **IMPROVEMENT PLAN**

**THIS IP HAS BEEN DEVELOPED SPECIFICALLY FOR THE CITY OF OREM AS A RESULT OF THE CITY OF OREM DRILL 2018 CONDUCTED ON SEPTEMBER 13, 2018.**

This IP has been developed specifically for the city of Orem as a result of the City of Orem Drill 2018 conducted on September 13, 2018.

Area for Improvement	Corrective Action	Capability Element* (Planning, Organization, Equipment, Training, or Exercise)	Primary Responsible Organization	Point of Contact	Start Date	Date Completed	
Core Capability 1: COMMUNITY RESILIENCE	Though the community resilience of Orem has been strengthened through multiple years of practicing for a disaster in the city of Orem, there is still a significant number of people who have not participated and do not know where they fit in the overall response to a disaster in Orem. The recommendation of this report is to continue to strengthen outreach efforts and educational opportunities during the preparation for the 2019 City of Orem Drill.	Plan more ways to get the alerts.oremi.org sign up page out to the public.	Orem Emergency Management	Health Stevenson	October 2018	September 2019	
	Provide more trainings on the drill, as well as, the block captain process.	Training	Orem Emergency Management	Health Stevenson	October 2018	September 2019	
Core Capability 2: OPERATIONAL COMMUNICATIONS	Improvement needs to be made in the number of people accounted for after a disaster. This will improve as future drills are performed and more residents are reached, trained and participate.	Follow up with Southwest Quadrant and make sure we find a place to set up that gets reception to and from the City's EOC.	ARES Orem HAM Radio Operators	Najfi Razlatf	August 2019	September 2019	
Core Capability 3: OPERATIONAL COMMUNICATIONS	Forms and chains of communication will be reviewed again before plans for the 2019 drill are formalized in order to tweak any minor issues that are needed. Additional training will be done on procedures and forms to make sure injects are received properly before the 2019 drill.	Provide more trainings on the drill, as well as, the block captain process.	Training	Orem Emergency Management	Health Stevenson	May 2019	September 2019
Core Capability 4: SITUATIONAL ASSESSMENT	Additional practice in an EOC setting will have a positive effect on making slight improvements in working in an Emergency Operations Center setting. The EOC positions will have staffing assignments made prior to the 2019 City of Orem Drill. Additionally providing more training and outreach to the community will improve participants' understanding of appropriate check-in procedures and locations, allowing more home-bound and functional & access needs individuals access to available phone lines, and receive communications through Everbridge.	The EOC positions will have staffing assignments made prior to the 2019 City of Orem Drill.  Orem Emergency Management is currently working on an EOC plan, which this objective will be added to.	Planning  Orem Emergency Management	Health Stevenson	October 2018	September 2019	