Thomas Fire

12/04/2017 – 12/22/2017

City of Ventura

Emergency Operations Center
After Action Review

INTRODUCTION

On December 4, 2017, the Thomas Fire started north of the City of Santa Paula. Driven by intense Santa Ana winds, the fire reached the City of Ventura within hours and damaged or destroyed 686 structures. At the time of final containment, the Thomas Fire would be classified as the largest fire in recorded California history.

To assist with response efforts, the City proclaimed a local state of emergency and activated its Emergency Operations Center (EOC). Per the City's Emergency Plan, the primary objective during the emergency was to provide for effective life safety measures, reduce property loss and protect the environment.

As part of the EOC process, an After Action Review (AAR) began informally during activation and then formally commenced in June, 2018. During the Thomas Fire, over 140 persons served in the City of Ventura EOC.

AARs focus on nationally established core capabilities (currently there are 32 core capabilities spanning 5 mission areas: Prevention, Protection, Mitigation, Response and Recovery). After a disaster, jurisdictions in California are required by statute (California Code of Regulations, section 2900[q]) to prepare an AAR to identify areas of improvement and corrective actions for each identified deficiency. As a compliance document focusing on improvement, the AAR does not focus on the successes but rather those areas that need to be improved upon. While interviewing staff from each EOC section, many successes were identified and discussed. The AAR captures some of these successes as strengths, but does not go into detail about the many successes that were experienced during this fire. In all, the AAR identifies 20 areas of strength, and eighteen areas for improvement.

In no way should the lack of detailed explanation of the many successes minimize the efforts of all who responded to the Thomas Fire. Based on the extreme fire conditions encountered during this incident, responders (including EOC staff) should be commended for protecting thousands of lives and should take solace in the knowledge that without their efforts, many more structures would have been lost.

This after action review focuses on the following core capabilities[1]:
- *Operational Coordination*
- *Public Information & Warning*
- *Logistics & Supply Chain Management*
- *Operational Communications*

A subsequent AAR will focus on the areas of improvement during the recovery process.

In spite of all efforts, two lives were lost to the Thomas Fire in areas outside of the City of Ventura. In solemn dedication, we all move forward.

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[1] U. S. Department of Homeland Security, *National Preparedness Goal,* September 2015

IN MEMORY OF

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CONTENTS

INCIDENT OVERVIEW

Incident Name	Thomas Fire
Incident Dates	December 4, 2017 – December 22, 2017
Summary	At 1824 hours on 12/04/2017, the Thomas Fire ignited in an unincorporated area north of the City of Santa Paula. At that time, Ventura County was experiencing a Santa Ana wind event with gusts between 50 and 70 mph. Fire Incident Command requested 375 fire engines within the first two hours due to unprecedented fire growth. Evacuations of Ventura City neighborhoods began at approximately 2215 hours. Ultimately 686 structures were damaged or destroyed within the City jurisdiction. Local firefighting resources supplemented by the mutual aid system ultimately brought approximately 8500 emergency response personnel, 968 fire engines and 35 aircraft. Firefighting resources were managed using local, state and federal agencies under Unified Command.
Mission Area(s)	Response and Recovery
Core Capabilities	Operational Coordination, Public Information & Warning, Logistics & Supply Chain Management, Operational Communications.
Threat or Hazard	Wildland Fire
Agency	City of Ventura
Participating Organizations	City of Ventura EOC personnel
Point of Contact	David Endaya, Fire Chief City of Ventura Fire Department 1425 Dowell Dr. Ventura, CA 93003

ANALYSIS OF CORE CAPABILITIES

Table 1 includes the incident objectives, aligned core capabilities, and performance ratings for each core capability as observed during the incident and determined by the evaluation team.

Table 1. Summary of Core Capability Performance

Objectives[2]	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Provide effective life safety measures, reduce property loss and protect the environment.

Provide for the rapid resumption of impacted businesses and community services.

Provide accurate documentation and records required for cost recovery efforts. | Operational Coordination | | S | | |
	Public Information & Warning		S		
	Logistics & Supply Chain Management		S		
	Operational Communications		S		

Ratings Definitions:

- Performed without Challenges (P): The 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 was conducted in accordance with applicable plans, policies, procedures, regulations, and laws.

- Performed with Some Challenges (S): The 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 was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified.

- Performed with Major Challenges (M): The 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.

- Unable to be Performed (U): The critical tasks associated with the core capability were not performed in a manner that achieved the objective(s).

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

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[2] City of Ventura, Emergency Operations Plan 2013, Introduction - 4

Objectives:
- Provide effective life safety measures, reduce property loss and protect the environment.
- Provide for the rapid resumption of impacted businesses and community services.
- Provide accurate documentation and records required for cost recovery efforts.

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

CORE CAPABILITY: OPERATIONAL COORDINATION

Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.[3]

Strengths

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

Strength 1: Sections understand the basics of their role and responsibilities

Strength 2: EOC staff was flexible in their assignments

Strength 3: City staff was focused on disaster operations and recovery

Strength 4: Excellent response to fire operations support needs

Strength 5: Increased knowledge of the EOC structure and process

Strength 6: Improved EOC documentation, i.e. Activity Logs, and EOC Action Plans

Strength 7: Early initiation of the incident recovery process

Strength 8: Early implementation of recovery efforts during EOC activation

Strength 9: Good coordination with Operational Area partners

Areas for Improvement

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

Area for Improvement 1: More clarification of roles and responsibilities between Sections, Branches and Units is needed.

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[3] U.S. Department of Homeland Security, *National Preparedness Goal*, September 2015, page 14.

Reference: City of Ventura, Emergency Operations Plan, 2013 - EOC Position Checklists.

Analysis: EOC staff possess basic understanding of their roles and responsibilities, however, a more in-depth understanding of roles, responsibilities, processes and procedures is needed to build on this foundation of knowledge. It is recommended that the City consider offering Section specific training focusing on Section specific tasks and the various Branches and Units within each Section. This training should focus on the EOC Action Planning process and include setting specific, measurable, action-oriented, realistic, and time-based objectives. The City should consider offering EOC Essentials training covering essential tasks for <u>all</u> EOC staff.

Create an ongoing plan to maintain EOC staffing with personnel who have prerequisite training (SEMS/NIMS, ICS 100, ICS 200, ICS 300, ICS 400, IS 700, and IS 800).

Area for Improvement 2: Increase understanding of the resource management process.

Reference: City of Ventura, Emergency Operations Plan, 2013 - EOC Position Checklists, Logistics Section

Analysis: The EOC supports all City sites and facilities during a disaster by providing needed resources to accomplish essential tasks. Resource requests may come in from emergency incident sites, the Sanjon Yard, and/or from work crews throughout the City. No matter how the resource request comes into the EOC, the process of identifying what is needed, ordering and acquiring, mobilizing, tracking and reporting, demobilizing, and restocking a resource needs to be understood so resource requests don't go unfilled, aren't duplicated and are properly documented.   EOC staff need to use the Resource Request Form to ensure proper documentation of all resource requests.

Area for Improvement 3: EOC staffing needs to be evaluated closely for correct assignment of personnel and monitoring to prevent staff fatigue.

Reference: Observed and City of Ventura, Emergency Operations Plan, 2013, EOC Assignments

Analysis: The City's 2013 EOP contains preassigned responsibilities during an EOC activation. Some positions in the EOC Assignment list were left blank while others list individuals no longer with the City.   This list in the EOP needs to be maintained at least twice a year to ensure the most up-to-date listing is available when needed. (Note: the EOP is currently in revision and will include an updated EOC staffing list).

Some other issues having to do with assignments were observed:

- No pre-assigned Operations Section Coordinator. This position is filled by either Fire, Police or Public Works depending on the type of hazard the City is responding to. Even though these departments provide excellent leadership, the City may want to consider pre-assigning this position in order to build the Operations Section team, provide cohesiveness and continuity in EOC operations.

- Some positions were assigned with people from departments that may not be the best fit, i.e. Human Resources was assigned as the Logistics Coordinator

- Scribes are needed for many positions (See Area of Improvement 5 below).

During the incident, some staff were reassigned to ensure that essential positions were filled. When the EOC is activated some Sections may not have the staff needed to operate efficiently, i.e. many Sections were missing key positions during the incident. As part of this AAR, staff reported concerns about fatigue due to lengthy EOC assignments.

Staff may need to be reassigned periodically during EOC activation to ensure critical positions are filled. All EOC staff need to have a general understanding of the various positions within the EOC to offer the flexibility to properly staff the City's EOC.

It is recommended with the current update of the EOP that the City consider pre-assigning an Operations Section Coordinator, ensure that positions are filled with the most qualified person for the position, assign 3 persons to each EOC position to create depth, and ensure that all identified EOC staff receive EOC Essentials and Section training along with the pre-requisite training mentioned in Area for Improvement 1.

For long duration EOC activations, the City should consider accessing mutual aid resources to augment staff and provide staff with some respite. It is also recommended that the City develop a process to ensure the EOC staff list is updated at least twice a year.

Area for Improvement 4: EOC Set-up and equipment can be improved.

Reference: Observed

Analysis: EOC staff was able to set-up the EOC to be operational in approximately 45 minutes of the activation decision. This was due in part to key staff being in attendance and available at an evening City Council meeting.

When the power outage occurred on the first night, the back-up generator automatically started as designed resulting in limited power interruption to the facility. However,

support technology including phones, internet access and television signals did not automatically reset and required IT staff to conduct a series of actions to bring the systems back online. EOC staff reported that personal cellphones and computers were used to conduct City business during the activation. EOC station carts often had outdated materials and supplies that were dated enough that didn't function: pens, markers, rubber bands, tape, etc.

It is recommended that the City consider a series of short-term and long-term improvements to the EOC infrastructure:

1. Redesign access into the EOC storage area to provide for quicker deployment of equipment.

2. Relocate the Public Information function closer to the main EOC.

3. Continue efforts to maximize wireless communications in the EOC, and install permanent wiring where wireless connection is not feasible. Temporary wiring is subject to damage and creates trip hazards.

4. Evaluate phones and computers in the EOC. Increase and update as needed and conduct system tests and upgrades regularly to improve reliability. (Ensure specific EOC positions, i.e. GIS mapping and the Infrastructure Branch have access to necessary programs and applications from EOC computers and that computers have the necessary power and speed to run them).

5. Augment systems to avoid disruption of critical information sharing including digital, audio and visual tools. Examples are: enhanced battery backup for digital systems, internet connection backup systems, satellite receiver(s) to provide redundancy for cable television and phone signals, and maintenance of backup computer servers for all City programs/data in the EOC for continuity of operations.

6. Initiate a Capital Improvement Plan for redesign of the building that would include a permanent set-up of the EOC.

7. Annually assess each EOC station cart for necessary updated materials and forms; check for functionality and replace pens, markers, tape and other items.

Area for Improvement 5: Augment EOC staff where appropriate with scribes and assistants to help keep up with documentation and communications.

Reference: Observed

Analysis: The EOC Director designated a scribe to assist with communications and documentation in the Management Section. Consider establishing a pool of personnel that may serve as assistants or scribes to certain EOC positions: Public Information Officer, Section Coordinators and others, as needed.

Area for Improvement 6: Improve situation status information flow to the Planning/Intelligence Section and to the County Operational Area.

Reference: Observed.

Analysis: The Planning/Intelligence Section should be the location where the most up-to-date information can be found. The PIO should be using the Planning/Intelligence Section as the source of information for developing talking points and media releases and decision makers need up-to-date information to make critical decisions, however, during the EOC activation, the Planning/Intelligence Section was not regularly receiving information from other Sections and the County Operational Area.

Sections need to ensure that all information is forwarded to the Planning/Intelligence Section as soon as possible.

"The Ventura County OA (Operational Area) utilizes a web-based platform for providing a common operational picture for incident management. When the Thomas Fire occurred, the County EOC was transitioning to the newly acquired platform. Stakeholders (cities) who had not yet migrated to the new program experienced limited access to interactive information."[4]

It is recommended to fully deploy the new web-based common operational platform, with a detailed training program for appropriate EOC staff, scribes and assistants, and to embed a Planning/Intelligence person into the Operations Section to improve the flow of information into the Planning/Intelligence Section.

Area for Improvement 7: Improve coordination between the EOC and the Infrastructure Branch's Department Operations Center

Reference: Observed

Analysis: The Infrastructure Branch of the EOC operates a Department Operations Center (DOC) located at the Sanjon Yard. This DOC coordinates the response of Public Works, Water, Waste Water and Parks. During the Thomas Fire, coordination of situation status,

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[4] County of Ventura, *The Thomas Fire Emergency Response After-Action Review*, December 2018, Page 7,

objectives and priorities was challenged by the remote location of the DOC. Information flow between the two locations needs to be improved. The DOC was communicating directly with the Operational Area EOC rather than going through the Infrastructure Branch in the EOC to reach out to the Operational Area EOC. Public Information was also being released from the DOC regarding Boil Water Orders that were not coordinated with the lead PIO in the City EOC. By not following established chain of command procedures information and resource requests may get lost. Options to consider for improvement of coordination include:

1. Colocation of the DOC with the EOC, or

2. Increased staffing and resource support to the DOC.

3. Better understanding of EOC and DOC staff of chain of command and communication procedures.

If a DOC is remotely located, it is recommended that a revised DOC plan be integrated with the City Emergency Plan providing clear methods to coordinate situation status, incident objectives, operational priorities and documentation. Further it is recommended that specific training in DOC/EOC coordination and communication be provided to all participating employees.

Area for Improvement 8: Increase coordination of recovery efforts with State and Federal partners.

Reference: Observed

Analysis: Coordination of damage assessment between the state and local teams should be improved. During this incident, CalFire conducted initial damage estimates that were confused with the damage assessments conducted by staff reporting to the local Building Official. Consideration should be given to conducting joint field assessments with teams consisting of representatives from state and local agencies. Coordinated operations could avoid duplication of effort and delays in damage assessment.

The Cal Recycle debris removal effort was used in the City of Ventura for the first time after the Thomas Fire. It is recommended that City staff increase training in program awareness to assist in outreach, reduce confusion and reduce duplication for future implementation.

Area for Improvement 9: Increase pre-disaster planning for recovery efforts.

Reference: Observed

Analysis: Several management staff members were serving roles in the EOC as part of response efforts while also working on recovery efforts. A recovery unit should be established within the Plans Section to coordinate these efforts and to document agreements made at management levels.

Consider development of a Recovery Plan as an annex to the Emergency Plan to assist in recovery efforts.

Area for Improvement 10: Augment City staffing dedicated to disaster planning and response management.

Reference: Observed, San Buenaventura Municipal Code, Chapter 2.370

Analysis: Currently, Ventura does not have a dedicated, disaster manager to coordinate ongoing efforts with City departments and Operational Area agencies. The City's municipal code identifies the City Manager as the Director of Disaster Services and the Fire Chief as the Assistant Director. Both of these senior management positions are able to provide strategic direction but do not have the capacity to provide day-to-day tactical emergency management. Citywide emergency management is currently assigned to the City's Fire Marshal as a collateral duty. Although, the Fire Marshal has been able to provide some oversight and contracts with emergency management professionals have resulted in completion of some essential emergency management tasks, it is recommended that the City consider appointing a full-time emergency management professional.

Compliance verification pertaining to State and Federal statutes and regulations is lacking. A full-time emergency manager would be the lead person to keep department heads informed of emergency management compliance issues and work with them to ensure their departmental plans and training is consistent with the overall emergency management program for the City. The emergency manager would be responsible for coordinating with the County, non-governmental agencies and businesses to ensure the City has a robust emergency management program. The emergency manager would oversee all aspects of mitigation, preparedness, response and recovery

During the Thomas Fire, contract services were utilized to assist in response and recovery efforts. However, decision-making delays were observed when contractors did not have full authority to act on behalf of the City.

It is recommended that the City dedicate a minimum of one full-time equivalent manager with professional experience in disaster preparedness, mitigation, response and recovery activities to coordinate City-wide disaster management efforts.

CORE CAPABILITY: PUBLIC INFORMATION AND WARNING

Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken and the assistance being made available.[5]

Strengths

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

Strength 10: Coordination of messaging with the Operational Area EOC and Fire Incident Command Teams

Strength 11: Use of multi-skilled team for message development and distribution

Strength 12: Focus on Ventura's specific message needs

Strength 13: Early implementation of outreach efforts.

Strength 14: Good coordination with Operational Area partners resulting in successful evacuation of several thousand residents.

Areas for Improvement

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

Area for Improvement 11: Public information outreach should be expanded

 Reference: Observed.

 Analysis: Generally, City websites and social media referred users to centralized Operational Area information platforms for incident updates. While this was a good example of message coordination, PIO staff received feedback from the community that indicates a need for direct outreach and assurance from the City of Ventura to its citizens during a disaster. It is recommended that the City consider publishing more coordinated disaster information directly on the City website and social media.

 All City staff act in a public information capacity during disasters and should be briefed during shift changes by a PIO to ensure accurate information is being shared with the public, to reiterate dissemination of information policies and procedures, and emphasize the lead role of the PIO as the central point of all communication to and from the City.

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[5] U.S. Department of Homeland Security, *National Preparedness Goal*, September 2015, page 13.

City dispatch needs to be included as part of the staff briefings to ensure all dispatchers have the most current information.

It is recommended that PIO tactics be documented in a PIO Annex as part of future Emergency Plan updates.

Community members expressed concern for additional translation services in Spanish during the response phase.

Further distribution and publication of the City's Disaster Hotline should be initiated.

Area for Improvement 12: Provide multi-lingual information regarding initial recovery efforts.

Reference: Observed

Analysis: Ventura relied heavily on well-attended town hall style meetings to distribute initial recovery information. These meetings had interpreters available for Spanish and American Sign Language. The City should consider additional direct outreach methods by working with established community groups and non-governmental agencies at the neighborhood level to increase awareness and to obtain feedback.

Area for Improvement 13: Improve coordination between the City and the Operational Area related to initial alert and warning.

Reference: Observed

Analysis: While the successful evacuation of thousands of residents during the Thomas Fire is indisputable, early coordination of the alert and warning system should be studied further to minimize potential miscommunication.

The Ventura County Sheriff's Office of Emergency Services coordinates the use of VCAlert and the Emergency Alert System (EAS) and other emergency alerting platforms during disasters. This provides good coordination of alerts during disasters that cross jurisdictions' geographic borders. Initial alerting using VCAlert for the City of Ventura commenced at 2245 hours on 12/4/2017. (See - http://thomasfire.venturacountyrecovers.org/county-sheriffs-office-emergency-services-interactive-map/).

To provide for best practices in evacuation routing using updated knowledge of unique local areas, each jurisdiction's law enforcement agency provides field notification of evacuation alerts. In the City of Ventura, door-to-door evacuation notification commenced at 2218 hours.

CORE CAPABILITY: LOGISTICS AND SUPPLY CHAIN MANAGEMENT

Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains.[6]

Strengths

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

Strength 15: Prioritization of critical City services

Strength 16: Early capture of significant incident costs

Strength 17: Response to EOC resource needs

Strength 18: Staff quickly engaged consultants with experience in disaster recovery to maximize cost recovery

Areas for Improvement

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

Area for Improvement 14: Increase capabilities to continue critical logistics functions during disasters

Reference: Observed.

Analysis: City Hall was closed for several days during the Thomas Fire due to smoke infiltration and location within the evacuation area. Staff was able to complete several key activities at the EOC including the process of payroll for the affected time period. However, the City should consider adopting a Continuity of Operations Plan as an annex to the Emergency Plan. This annex should identify critical functions and establish redundant methods to maintain services.

Area for Improvement 15: Improve disaster cost accounting and disaster contract services

Reference: Observed.

Analysis: Communication issues related to contractors were experienced. Prior to future disasters, the City should consider establishing stand-by contracts for critical activities (ex: debris removal). These contracts need to identify contractor performance minimums,

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[6] U.S. Department of Homeland Security, *National Preparedness Goal*, September 2015, page 15.

including but not limited to response parameters, documentation and billing requirements.

Area for Improvement 16: Establish a multi-disciplined recovery team representing affected City departments.

Reference: Observed

Analysis: Damages and costs continued to be identified several months after the response phase of the Thomas Fire. To be eligible for reimbursement, there are deadlines at the state and federal levels. A financial recovery team should be established with representatives from each of the impacted departments to ensure all costs are properly identified, documented and forwarded to the Finance lead. These department point persons should also make sure that appropriate staff accompany FEMA inspectors while identifying and quantifying eligible damages. It is recommended that these department representatives be identified pre-disaster so the recovery team can be activated as soon as possible during disasters.

NOTE: More lessons learned specifically related to financial disaster recovery (Emergency purchasing forms, cost-plus contracts, receiving costs after established deadlines, lack of proper documentation, contracting invoicing, mutual aid, overtime for managers, contractor oversight, overuse of emergency contracting), will be addressed in the Recovery After Action Review.

CORE CAPABILITY: OPERATIONAL COMMUNICATIONS

Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.[7]

Strengths

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

Strength 19: Use of the Incident Command System

Strength 20: Improved development of EOC Action Plans

Areas for Improvement

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

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[7] U.S. Department of Homeland Security, *National Preparedness Goal*, September 2015, page 16

Area for Improvement 17: Increase use of briefings for EOC staff

Reference: Observed.

Analysis: Staff reported issues with EOC objectives not being communicated at the time of shift changes. Consider assigning shifts with one hour of overlap time to provide the outgoing staff opportunity to brief the relief staff directly.

Area for Improvement 18: Improve communication with field units associated with the EOC

Reference: Observed.

Analysis: Staff reported issues with lack of communication with field units (ex: Disaster Assessment Teams). Consider assigning radios to field units with a frequency dedicated for use by the EOC. It is also recommended that the City look at existing technology that may assist with maintaining the information flow between field crews and the EOC or DOC. For example, some tools (mobile applications or programs) could assist crews in the field to document their locations and findings. It is recommended that the current Lucidity program used by Ventura Water to create work orders be adapted for use during the emergency to document crew dates and times, resources used and location of task when they are dispatched to a site and differentiate these tasks from non-emergency related tasks.

Additional Comments from Participants

Participants identified the following strengths:

- Setting up the EOC and working as a team.
- Staff jumped in and did their job and had the foresight to look and plan ahead.
- Staff worked collaboratively with other agencies.
- Breaking down Departmental silos.
- All members were open to suggestions to make the process run smoothly.
- Team members were flexible to do anything necessary.
- Communication across functions improved during the run of the EOC.
- EOC location is established and supplied to operate in this capacity.
- Sign-in sheets became more organized and effective.
- Increased knowledge of the EOC structure and process.
- Increased knowledge of my EOC role.
- Confirming an Emergency CEQA Exemption.
- Strategizing best practices to create permit history archival packets for property owners who lost structures or sustained significant damage.
- The use of mobile GIS based technology shows great potential. With it we were able to share data and feeds from Cal Fire, weather sources, etc.
- Connected theory with practice.
- Lots of people were able to settle in and be effective.
- Operations worked well together as a group and had positive interaction with other groups.
- Understanding of department roles.
- Roles were well defined in our group.
- Documentation (filling out the Activity Log and preparing the EOC Action Plan) was better than in prior incidents.
- Confidence in handling the calls coming in, prioritizing requests of incoming calls from life threatening to non-essential, and good teamwork among our section.
- Practice will get us more comfortable in the environment.
- Strengthening of team relationships within EOC staff.
- Everyone can see the value of a well-trained team.
- Everyone wants to be successful.
- Awareness of additional resources needed.
- Rapid deployment of evaluators.
- Windshield surveys of 20,000 parcels.
- Tagging of 1,800+ structures.
- Flexibility of staff.
- Resourcefulness.
- Responsiveness.
- It felt GREAT to know that my efforts were directly helping the fire victims.
- No loss of life.

Participants identified the following areas of improvement:

- Additional staff needed.
- Clarification of duties and responsibilities between the different branches and more practice with paperwork.
- Understanding our individual roles.
- Improve display boards.
- More copies of forms, and lists (ex: critical facilities) available in the EOC.
- Need focused training groups.
- Each Team needs a scribe.
- Cordless headsets needed for the landlines.
- Designate a person to communicate between all groups.
- Ability to prioritize and follow up on important information.
- Updates need to be shared to all individuals in a more efficient manner.
- Information needs to be shared between sections more effectively.
- Teamwork and communication among all sections.
- Better display or way to communicate critical situations and needs to the entire EOC staff.
- Would like even more clarification on specific roles within teams.
- Greater Joint Information Center implementation with Op Area.

Participants identified the following equipment, training, policies, plans and/or procedures that should be improved (e.g., revised, developed or acquired):

- Additional phones and training for additional staff.
- More staff or backup staff for long duration emergencies.
- More than one printer might help.
- A plan for checking the supply drawers with inventory sheets and "last checked" dates.
- Electrical cords.
- More locations where cell phones could be easily charged.
- Possible radios if cell system goes down.
- Individualized position training to better understand ones role.
- Larger items such as more phones and radios, as well as the infrastructure to support them.
- Consider wellness recovery issues for staff after the response phase.
- Routine briefing needed from PIO to Police Dispatch Center at shift change needed.
- Logistics request forms should be reviewed and simplified as part of the EOP update.

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for the City of Ventura as a follow-up to the Thomas Fire of 12/04/2017.

Core Capability	Area for Improvement	Corrective Action	Capability Element[8]	Primary Responsible Organization	Start Date	Completion Date
Operational Coordination	1. More clarification of roles and responsibilities between Sections and Branches and Units within the Sections is needed.	1.1. Provide Section Specific training that incorporates positional training (Units and Branches) and EOC Essentials training	Training	Fire	April 2019	
		1.2. Create Plan to staff EOC with personnel with prerequisite training.	Training	Fire	April 2019	
		1.3. Provide exercise opportunities to practice training received.	Exercising	Fire	April 2019	
	2. Increase understanding of the resource management process.	2.1. See above training corrective action for 1.1.	Training	Fire	June 2019	
		2.2. EOC staff utilization of Resource Request forms.	Training/ Exercise	Fire	June 2019	
		2.3. Update Resource Request form to be more user-friendly.	Planning	Fire	June 2019	
	3. EOC staffing needs to be evaluated closely for correct assignment of personnel and monitoring to prevent staff fatigue.	3.1. Review current staffing assignments and incorporate changes into revised EOP.	Planning	Fire	July 2019	
	4. EOC Set-up and equipment can be improved.	4.1. Identify an EOC Set-Up team.	Planning	Fire		Complete

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[8] Capability Elements are: Planning, Organization, Equipment, Training, or Exercise.

Core Capability	Area for Improvement	Corrective Action	Capability Element[8]	Primary Responsible Organization	Start Date	Completion Date
		4.2. Identify an EOC technology working group to address technology and communication issues in the EOC.	Planning	Finance and Technology	March 2019	
		4.3. Identify needed equipment in the EOC and strategize how to acquire essential equipment.	Equipment	Finance and Technology	March 2019	
	5. Augment EOC staff where appropriate with scribes and assistants to help keep up with documentation and communications.	5.1. Identify a pool of people that could be used as scribes and assistants when needed.	Planning	Fire	July 2019	
	6. Improve situation status information flow to the Planning/Intelligence Section and to the County Operational Area.	6.1. See above training corrective action for 1.1.	Training	Fire	July 2019	
		6.2. Deploy the new web-based common operational platform (DLAN).	Training	Fire/ Finance and Technology	August 2019	
		6.3. Embed Plans/Intel staff into the Operations Section.	Planning/ Training	Community Development	August 2019	
	7. Improve coordination between the EOC and the Infrastructure Branch's Department Operations Center	7.1. Evaluate need for DOC.	Planning	Public Works	February 2019	
		7.2. Improve EOC/DOC chain of command.	Training	Public Works	February 2019	
		7.3. Include DOC processes: coordination, communication and resource management operations as an Annex to EOP.	Planning	Public Works	February 2019	
	8. Increase coordination of recovery efforts with State and Federal partners.	8.1. Form joint damage assessment teams.	Planning	Community Development	July 2020	
		8.2. Cal Recycle program coordination.	Training	Community Development	July 2020	

Core Capability	Area for Improvement	Corrective Action	Capability Element[8]	Primary Responsible Organization	Start Date	Completion Date
	9. Increase pre-disaster planning for recovery efforts.	9.1. Utilize Recovery Unit in Plans Section.	Training	Community Development	September 2019	
		9.2. Draft Recovery Plan	Planning	City Manager's Office/ City Attorney	October 2019	
	10. Augment City staffing dedicated to disaster planning and response management.	10.1. Appoint an Emergency Manager to coordinate mitigation, preparedness, response and recovery.	Planning	City Manager's Office		
Public Information and Warning	11. Public information outreach should be expanded.	11.1. Publish more coordinated disaster information directly on the City website and social media.	Planning	City Manager's Office		Complete
		11.2. PIO briefing to City Staff at beginning of shifts (include dispatchers)	Planning	City Manager's Office	September 2019	
		11.3. PIO Annex as part of future Emergency Plan updates.	Planning	City Manager's Office	January 2020	
		11.4. Additional Spanish translation during response.	Planning	City Manager's Office	February 2019	
		11.5. Initiate further public distribution of disaster hotline number as information source.	Planning	City Manager's Office	February 2019	
	12. Provide multi-lingual information regarding initial recovery efforts.	12.1. Additional direct outreach to community groups and NGOs at neighborhood levels.	Planning	City Manager's Office	February 2019	
	13. Improve coordination between the City and the Operational Area related to initial alert and warning.	13.1. Utilize existing work groups at Op Area level to improve early alert and warning system.	Planning	Police Department	February 2019	

Core Capability	Area for Improvement	Corrective Action	Capability Element[8]	Primary Responsible Organization	Start Date	Completion Date
Logistics & Supply Chain Management	14. Increase capabilities to continue critical logistics functions during disasters.	14.1. Continuity of Operations Plan as an annex to the Emergency Plan.	Planning	Human Resources	October 2019	
	15. Improve disaster cost accounting and disaster contract services	15.1. Identify disaster cost accounting team and train them in disaster accounting procedures. Establish stand-by contracts for critical activities.	Training	Finance and Technology	January 2020	Complete
	16. Establish a multi-disciplined recovery team representing affected City departments.	16.1. Pre-incident designation for recovery team staffing.	Planning	City Manager's Office		
Operational Communications	17. Increase use of briefings for EOC staff.	17.1. Assign shifts with one hour of overlap.	Planning/ Training	Fire		Complete
	18. Improve communication with field units.	18.1. Evaluate existing technology for communications a data management.	Planning	Finance and Technology and Fire	April 2020	
		18.2. Consider use of radios for EOC field staff communications.	Planning/ Training	Public Works/ Police/ Fire	February 2019	

APPENDIX B: STATEMENT REGARDING THE CITY'S WATER SYSTEM

In December 2017, Ventura experienced the largest wildfire in California history at the time. The devastating Thomas Fire began near Thomas Aquinas College and traveled quickly through unincorporated County of Ventura lands to the City of Ventura. Approximately three hours after the fire was first reported, it had breached the city limits, causing immediate damage and destruction along its path.

An Unprecedented Disaster

The Thomas Fire and the factors that contributed to its remarkable scale were unprecedented in California. The abundant, dry vegetation in the County hillsides and open spaces provided fast fuel right up to the City limits. The Santa Ana winds pushed the fire at record speeds, causing it to burn nearly an acre per second. This combination enabled the Thomas Fire to cause extreme damage and required an enormous response from the City, the region, and beyond.

Fighting the Fire Required a Tremendous Response and Demand on Resources

Fighting the Thomas Fire required a vast response effort, including one of the largest deployment of firefighters in state history – more than 8,500. In Ventura, firefighters and public safety personnel immediately initiated extensive evacuation procedures of 27,000 people and an aggressive attack on the fire. When the wind-fanned flames blazed to the City at approximately 9:30 p.m., the water system was in normal operations. In the early morning on December 5, 2017, low water pressures were reported at several fire hydrant locations in the hillsides. The system lost pressure because water was being drained at a tremendous rate due to the extent of the firefighting response and leaks at residential properties damaged by the fire. Ventura Water crews immediately set to investigate the issue: backup generators were utilized on water facilities impacted by region-wide power outages, leaks were addressed by emergency responders and City staff, and the system was fully re-pressurized thereafter.

During the Thomas Fire, the City's water system operated as designed. No urban water system is designed to operate under or protect against a massive, unstoppable wildfire. The system, as all urban water systems, is designed to support firefighting within its service boundary. To that end, the City is capturing important lessons learned from other municipalities, counties, and states that have experienced recent wildfires that include, but are not limited to, the Thomas Fire.

Preparing and Increasing Resiliency

Ventura Water constantly evaluates its system as part of regular operations and maintenance, and to identify necessary capital improvements. The City's current efforts to expand disaster resilience include obtaining and positioning additional generators to ensure that all water facilities have sufficient backup power during a prolonged, citywide power shutoff, and programs that increase water supply reliability to respond to natural and man-made hazards. Ventura, like many other cities faced with the reality of a changing climate, is making improvements and investments to prepare for and increase resiliency before, during, and after disasters.