Bernardo Fire
May 2014

After Action Report
City of San Diego Response
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PREFACE

Wildfire knows no boundaries and it is likely every citizen in San Diego County was impacted in some way by the firestorms of 2003 & 2007. On May 13, 2014, the San Diego region once again experienced strong Santa Ana winds blowing from the east for an extended number of days, with the conditions being just right to produce a wildland fire that threatened a repeat of what was experienced during these earlier firestorms.

Normally, when firestorms occur in San Diego, there are usually multiple fires burning throughout the southern California region, stretching the state’s well developed mutual aid system to the limit. Fortunately, this was not the case on May 13, 2014 when the Bernardo Fire began. While the potential for large fast growing Santa Ana wind-driven fires existed in the counties immediately north of San Diego, it was only the San Diego region that experienced significant firestorm activity. As a result, local and state resources were readily available to assist the San Diego Fire-Rescue Department (SDFD) in controlling this wildfire before it resulted in loss of life or damage to homes or businesses.

Since the 2003 & 2007 firestorms, agencies, businesses and community members in the San Diego region have taken steps to better prepare themselves for catastrophic wildfire events. Collectively, they have identified measures needed to reduce the potential wildfire threat, better prepare homes and businesses to be as fire safe as possible, and secure sufficient ground and aerial resources to respond strategically and effectively to combat large wildfires in the potential absence of mutual aid assistance.

Following the 2007 firestorms, the City of San Diego’s Wildfire After Action Report (AAR) outlined a number of recommendations to improve preparedness. Many were implemented and included the establishment of an apparatus replacement program to replace frontline engines and increase the number of reserve engines to provide a “surge” capacity to mitigate a larger fire with little or no outside assistance; the purchase of a second firefighting helicopter to increase the likelihood that at least one firefighting helicopter would be available within the City at all times; the hiring of additional brush management inspectors to ensure compliance with brush management regulations; and enhanced training of all firefighters in wildland fighting tactics.

Like the City of San Diego, many other jurisdictions critically reviewed their performance and took measures to improve their preparedness. The region’s collective performance in combating the Bernardo Fire and the additional 11 fires that occurred in San Diego County over the next few days clearly demonstrated that the working relationships and coordination between fire service, law enforcement, emergency management, military, and civilian support entities serving the region have never been better. The benefits of this significantly improved collaboration were certainly evident in minimizing loss of life and property loss during this firestorm event.

The intent of this After Action Report is to take an honest, straight forward and critical look at the City’s preparedness and response effort, and make recommendations to improve service delivery to the citizens and visitors of the City of San Diego.
EXECUTIVE SUMMARY

This After Action Report provides an analysis of the planning, preparedness, response, and recovery efforts of the City of San Diego to the Bernardo Fire that began on May 13, 2014 and was fully controlled on May 17, 2014. It focuses on the City’s efforts and purposely does not fully address the additional actions taken in the support of the City by other cooperators as these will be detailed in after action reports from these entities.

While the fact that no lives were lost and no structures were damaged in the City of San Diego are indicative of a successful outcome, the response itself and the elements of planning and preparedness that are the foundation of response did experience deficiencies that should be corrected in future efforts. The complex system of resourcing, planning, training, exercising, outreach and coordination within the City and extending to local governments and non-governmental organizations, tribal, and State and Federal cooperators must continue to be updated, maintained, refined and practiced.

The San Diego Fire-Rescue Department (SDFD), San Diego Police Department (SDPD) and Office of Homeland Security (OHS) undertook in-depth analyses of their actions and activities from pre-planning events through post-recovery. By assessing each phase of the disaster and actions taken by first responders and City officials, as well as the responses to those actions by other City departments, emergency managers, other responders, citizens, and the general public, we are able to learn what went well and what corrective actions can and should be taken in order to improve such responses in the future.

This May 2014 Bernardo Fire After Action Review (AAR) follows the format of the 2003 & 2007 Firestorm AAR’s and adds the elements of law enforcement, emergency operations and other City of San Diego departments’ input to make it a more comprehensive assessment of the overall response. Areas identified in this AAR as lessons learned and recommendations for change include:

- Fire Apparatus/Equipment & Logistics
- Mass Notification Systems for Evacuation
- Air Operations
- Prevention
- Incident Management
- Operations
- Public Information & Media Management
- Communications

- EOC & DOC Operations
- Technology
- Corporate Giving & Donations
- Citizen Preparedness & Outreach
- Incident Emergency Medical Services
- Training & Exercise
- Safety
INCIDENT OVERVIEW

The Fire-Rescue Department began the day of May 13, 2014 aware that high temperatures, low relative humidity and strong Santa Ana winds were predicted for San Diego County. Santa Ana winds are characterized by warm temperatures, low relative humidity, and increased wind speeds. As the Santa Ana winds are channeled through the mountain passes they can approach hurricane force. The combination of wind, heat and dryness turns the native vegetation into explosive fuel.

While Santa Ana winds are common in California, this weather event was unusual because strong east winds are not normally experienced during the month of May. The entire San Diego region has been under drought conditions, with 2013 & 2014 rainfall totaling less than one-half of normal. The combination of live fuel moistures on the decline caused by the drought, an abundance of dead fuels, and the prediction of strong Santa Ana winds presented a potential for large, rapidly moving wildland fires.

The Bernardo Fire began at 10:44 a.m. on May 13, 2014 when a survey crew using a backhoe to excavate potential artifact sites ignited a grass fire on the border of the City of San Diego and Rancho Santa Fe. The wind-driven fire was burning in light, flashy fuels towards the Lusardi Creek drainage of the San Dieguito River and threatened residential communities. By 12:30 p.m., the fire had spread to 286 acres and by 2 p.m. to 622 acres. By 3:30 p.m. the fire had consumed 1,035 acres and by 5 p.m. stood at an estimated 1,400 acres.

The fire was managed in Unified Command between the San Diego Fire-Rescue Department, Rancho Santa Fe Fire Protection District, CAL FIRE, San Diego Police Department and the San Diego Sheriff’s Department. The Mayor and Chief Operating Officer were kept apprised of events through direct contact with the Fire Chief and Police Chief.

Decisions to evacuate neighborhoods potentially impacted by the Bernardo Fire were made soon after the fire’s ignition. Messages were developed and map parameters identified for the use of a mass notification system in order to call residents in the fire’s predicted path and notify them of required evacuations. Police officers and law enforcement cooperators staged in neighborhoods in order to conduct these evacuations as well as notify residents and ensure compliance with the order. Torrey Pines High School was established as temporary evacuation site.

As in any disaster, a variety of methods were used to notify the public of the need for action. The notification tools used in combination by the City of San Diego to alert and evacuate citizens in the path of the Bernardo Fire included:

  o Alert San Diego mass notification system
  o Door-to-door knocking by first responders and neighbors
  o Police and Fire-Rescue vehicle sirens and lights
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- Monitoring and information flow to media outlets for dissemination to the public
- SDPD & SDFD Twitter messages
- 2-1-1 Information Line
- San Diego County OES Emergency Website

The ease of use of web-based mass notification systems has greatly enhanced their value for emergency management. The City is now utilizing that technology by adopting Alert San Diego as its primary mass notification system. This allows for a new generation, internet accessed and intuitive system to quickly and effectively alert our citizens in times of crisis.

Aggressive firefighting efforts by many agencies and excellent community planning prevented the loss of life, homes and infrastructure in 4S Ranch and Rancho Santa Fe. Throughout its advance, the fire also threatened homes, infrastructure and watershed in Santa Luz, Black Mountain Ranch, Rancho Santa Fe and Fairbanks Ranch.

The logistical and financial support needs of the fire crews and engines coupled with the complexity analysis of the required firefighting operations prompted the need for a Type 3 Incident Management Team (IMT) to coordinate all operations. The CAL FIRE San Diego Unit accessed members of its Type 3 team and resource list to build a team comprised largely of responders from the host agencies. IMT members not already at the fire reported to the Command Post established at the Rancho Bernardo Community Park by 8 p.m. to build a plan for the next morning. Command was retained by the initial attack organization through the night. At 7 a.m. on May 14, the Type 3 IMT assumed command of the fire which was then estimated to have consumed approximately 1,540 acres of grass/brush lands.

The fire was declared fully controlled on May 17, 2014 and the command of the fire was transitioned back to the local units at 7 p.m. Approximately 84% of the total burned acreage was within the City of San Diego.

Fire Service Agencies supporting the Bernardo Fire

- CAL FIRE
- California Conservation Corps.
- Barona Reservation Fire Department
- Lakeside Fire Protection District
- San Pasqual Volunteer Fire Department
- Lemon Grove Fire Department
- United States Forest Service
- Chula Vista Fire Department
- North County Fire Protection District
- Escondido Fire Department
- San Diego County Fire Authority
- Encinitas Fire Department
- Carlsbad Fire Department

- Orange County Fire Authority
- Sycuan Reservation Fire Department
- Alpine Fire Protection District
- Santee Fire Department
- El Cajon Fire Department
- La Mesa Fire Department
- San Marcos Fire Department
- CalOES
- Rancho Santa Fe Fire Protection District
- Oceanside Fire Department
- Vista Fire Department
- Del Mar Fire Department
- Solana Beach Fire Department
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Pala Reservation Fire Department  Poway Fire Department
Elfin Forest Harmony Grove Fire Department  Riverside City Fire Department
Corona Fire Department  Hemet Fire Department
Morongo Reservation Fire Department  Pechanga Reservation Fire Department
Ontario Fire Department  Redlands Fire Department
San Bernardino City Fire Department  Fort Irwin Fire Department
San Bernardino County Fire Department  Big Bear Fire Authority
Federal Fire Department  Miramar Fire Department

Law Enforcement Agencies Supporting the Bernardo Fire

San Diego Police Department  San Diego County Sheriff’s Department

Significant Events

1. Extensive use of mutual aid resources;
2. Mayoral Proclamation of a Local Emergency, ratified by City Council;
3. Public Information provided via the dissemination of news releases and/or media advisories and City webpage;
4. Evacuation orders communicated via Alert San Diego Mass Notification System and local media;
5. Establishment of Torrey Pines High School as an evacuation center;
6. Delivery of resources to the field including medical supplies, heavy equipment, food and water, communications equipment and personnel;
7. Site visits by the Mayor and City Council Members;
8. Establishment of an Incident Command Post at the Rancho Bernardo Recreation Center.
KEY FINDINGS

Lessons learned from the 2003 Cedar and 2007 Guejito/Witch Fires were applied to pre-planning and engagement efforts and resulted in SDFD, SDPD and supporting City departments being better prepared for this large-scale response.

Incident Management

1. San Diego Urban Area Incident Management Team (SDUA IMT) members were involved in supporting the initial and extended attack suppression effort. However, when it became apparent that the fire was not going to be controlled during the first operational period (24 hours), the Unified Incident Commanders determined the need to activate a full Type 3 Local Area Incident Management Team in order to fill key IMT positions not currently staffed.

The Local Type 3 IMT is made up of primarily CAL FIRE and USFS firefighters that meet National Wildland Coordinating Group (NWCG) or State of California qualification standards for the Incident Command System (ICS) positions necessary to manage a wildfire. Members of the All-Hazard San Diego Urban Area IMT were integrated into the Local Type 3 IMT organization and both IMT’s merged to collectively manage the incident.

2. The Department’s ability to staff the Department Operations Center (DOC) with experienced personnel presented a challenge during the Bernardo Fire. Due to personnel turnover (retirements), subsequent promotions and no other significant wildland fire incidents occurring since the 2007 firestorms, staff assigned to critical command positions at the DOC had not received sufficient training or had the opportunity to participate in exercises focused on DOC core competencies in advance of the Bernardo Fire.

Combined with inconsistent communications with commanders at the incident, some decisions made at the DOC were not consistent with the expectations of the Operations Division staff at the incident. In addition, completion of the Fire Management Assistance Grant (FMAG) request for partial federal reimbursement of firefighting and other costs was delayed and was submitted to CAL OES at a point that caused the Federal Emergency Management Agency (FEMA) to deny the FMAG application. These challenges reinforced the need to train additional personnel to fill the DOC positions to enhance command and control and complete administrative activities during large-scale incidents.

In the days immediately following the May 2014 wildfires, Governor Brown ultimately proclaimed the County of San Diego a disaster area. As a result and under the authority...
of the California Disaster Assistance Act (CDAA), the City is eligible and will be reimbursed for 75% of the total cost for all activities related to suppression of the fire.

3. Setting a maximum number of fire apparatus that would be made available for responses outside the City and restricting the types of missions that Copter 1 and Copter 2 would accept outside the City ensured the Department could appropriately participate in supporting the resource needs of other jurisdictions while concurrently ensuring that as many resources as possible remained in the City of San Diego to address the severe fire threat. These measures provided for adequate resource availability for initial attack.

4. Safe and effective radio communications between the firefighting units on the ground and the Unified Incident Command Post (ICP) was a challenge during the initial and extended attack phases of the Bernardo Fire. As a result, multiple resource requests (San Diego City Engine Strike Teams) were made directly to the San Diego Fire Communications Center (FCC) outside of the established single ordering point system because City residential structures were in imminent danger of being damaged or destroyed within an estimated 10-20 minutes.

While normally not an acceptable practice, this out-of-protocol ordering was deemed necessary due to the radio communication challenges taking place on the incident and the need to defend structures that were immediately threatened by the fire. The Fire Communications Center (FCC) was directed to contact and notify the Monte Vista Emergency Command Center (ECC) of these actions and the Unified Incident Commanders were also informed.

By working around the radio challenges and going directly to San Diego’s Fire Communication Center with the resource order, three San Diego City engine strike teams were quickly assigned and are credited with arriving in time to prevent damage of the structures they were assigned to defend. However, once the threat to the structures had passed, the 15 total engines assigned to the three engine strike teams could have been released back to the City so that staffing levels would return to near normal given the heavy resource demand the incident had placed on the Fire-Rescue Department. Failure to do so delayed returning the rest of the City to more adequate staffing levels.

5. Lack of a pre-determined maximum number of fire apparatus that would be assigned to this large fire (draw down level) resulted in concerns by some that too few units were left to handle all other incidents that might occur in the City during the height of the fire. At one point during the first few hours of the fire, 30 of the total 60 fire apparatus normally deployed daily remained within the City to respond all other incidents that might occur. This represented a 50% drawdown level. This has been deemed an acceptable drawdown level provided that emergency recall of personnel to staff reserve apparatus is underway. Careful consideration to more quickly release non-essential apparatus from the incident would also be a means to increase staffing to a more acceptable level.
6. Early deployment of firefighters assigned as field observers (FOBS) to track the fire provided the Unified Incident Commanders and the Fire Chief with valuable situational awareness about the fire’s location and rate of advancement within the City of San Diego.

7. Trained and qualified Safety Officers were assigned in order to closely monitor incident activities beginning May 14 and throughout containment of the incident. No firefighters were killed or seriously injured at this fire.

8. GIS support proved to be invaluable for map production throughout the incident. However, because the SDUA IMT has only one GIS technician assigned to the team, at times the position was over-tasked and resulted in delays in fire map development. In addition, due to the lack of a replacement, this technician was required to work without relief for the duration of the incident on limited rest. An additional GIS technician must be added to the SDUA IMT to ensure future availability, increase capacity and provide for appropriate work/rest cycles during major incidents.

9. The development companies responsible for the planning and construction of the communities whose homes were most directly threatened and the residents that maintained their landscapes in a manner that provided excellent “defensible space” for structural protection firefighting operations are to be commended. Firefighters and Police Officers aggressively worked to save all of the threatened property, but had it not been for the efforts of the developers and the residents, the outcome may have been different. Due to the pre-fire measures taken by developers/residents, there were several homes that did not require fire engine company protection as a result of the defensible space that had been provided.

**SDFD Staffing and Recall**

1. The decision to selectively recall personnel through the use of SDFD’s Staffing Desk rather than initiate a more wide-spread recall via media broadcasts provided for an efficient and manageable means of quickly deploying additional personnel.

2. Ineffective communication between the Operations Division staff at the Bernardo Fire and the DOC staff negatively affected crew rotation, standby, next operational period incident staffing and demobilization. Although the crew rotation plan was discussed at the incident and had proven successful at past incidents in the City that extended beyond one 24-hour operational period, this plan was not clearly communicated to the DOC staff. Further, this plan had not been memorialized in writing and available for DOC review. Development of a written functional plan will ensure more efficient operations and accountability in the future.

3. Once the recalled firefighters arrived at the Logistics Division Repair Facility, they were assigned to reserve apparatus. The priority was for these apparatus and crews were to fill the largest geographic emergency response coverage gaps within the City. With few exceptions, these reserve apparatus and crews were quickly assigned and emergency
services returned to near normal levels given the large resource commitment to the Bernardo Fire.

Firefighting Operations

1. The benefits of the Department’s investment in training such as the Fire Service Leadership training program (L-380) and Structure Triage were evident. Firefighters in the field indicated the fire attack was organized and aggressive as a result of these trainings.

2. Both “bump and run” and “anchor and hold” firefighting tactics were effective when executed appropriately and when applied during the correct environmental conditions.

3. No structures were destroyed or damaged as a result of having enough fire engines available to defend the structures in the path of the fire. Patrol of the areas that were impacted occurred with the priority placed on extinguishing any smoldering fire that may rekindle.

4. Copters 1 & 2 flew water drop missions throughout the incident. The aircrews also gathered and relayed vital intelligence to the IMT and were available to conduct rescue or medical evacuation missions of injured civilians and firefighters, if needed. The Copter 1 & 2 aircrews battled strong winds throughout the incident.

5. Having two firefighting helicopter immediately available during the entire incident was instrumental to successful firefighting operations and was credited with saving many structures. Had Copter 1 or Copter 2 been out-of-service prior to the Bernardo Fire due to planned maintenance, or had one or both helicopters experienced a mechanical or unscheduled maintenance problem during firefighting operations, aerial firefighting operations would have been significantly compromised.

Consequently, the acquisition of a third fire-rescue helicopter is essential if two City firefighting helicopters are to be available at all times. Having three (3) City firefighting helicopters available would also increase aerial firefighting capabilities if more than one wildland fire is burning within the City of San Diego.

6. The utilization of the SDFD helicopters with qualified and experienced Air Operations Division aircrews proved to be an effective tool in guiding fire companies to areas that needed the most attention.

7. Agencies also providing successful aerial firefighting support included CAL FIRE (fixed wing tankers and a control plane) and the San Diego Sheriff’s Department (two fire rescue helicopters). Fortunately, no other wildland fires were burning in San Diego County on May 13 that may have drawn non-City of San Diego aerial resources away from the Bernardo Fire.
Apparatus

1. The experiences of the 2003 and 2007 Firestorms confirmed that during periods of high fire activity in southern California, the State fire mutual aid system’s ability to fulfill all resource requests during the critical first 24-72 hours of a major fire will be severely challenged. Consequently, in addition to SDFD carefully managing its firefighting resources to ensure their availability during this period of high fire danger, the SDFD had also developed a “surge” capacity to mitigate a large fire with little or no outside assistance. Fortunately, these measures enhanced the fire attack since the Bernardo Fire was the only significant wildland fire incident burning in Southern California on May 13 and mutual aid resources were plentiful.

2. SDFD has designed, procured, implemented, and now operates Utility pickup trucks designed to perform fire patrol missions. Utility pickup trucks are significantly less expensive than the more common Type 1 structure or Type 3 brush engines currently in use by SDFD. Although they lack the pumping capacity of the larger engines, they still have sufficient capabilities to meet the fire patrol requirement after the main body of fire has passed through a neighborhood. These vehicles are off road capable, have some fire extinguishment capabilities and are available to support normal vegetation fire operations throughout the fire season.

3. Public Works Fleet Division was highly effective in supporting SDFD needs by quickly repairing eight apparatus in addition to the eight that were already in reserve status so they could be placed into service to meet the need for surge capacity. A clear benefit of the business process reengineering of fleet services was the more seamless incorporation of Fleet Division resources into the emergency logistics team.

Training

1. The Department’s ability to concurrently staff the Incident Management Team, Department Operations Center, Emergency Operations Center and critical command positions in the field was hampered by a lack of trained and qualified personnel to fill all positions. This challenge is a result of the retirements of staff that had in the past been responsible for filling these positions. Additional personnel must be trained to fill these positions to a minimum three-deep roster to enhance command and control during large-scale incidents.

2. The Department’s investments in Leadership and Wildland Firefighting training played an important role in improving its overall performance during this fire. Continued investment in this training is critical for the growth and constancy of high level performance in areas of leadership and operational readiness.

3. With the advent of the California Incident Command Certification System (CICCS), there is a growing expectation and requirement that qualified SDFD Division/Group Supervisors be provided to incidents inside the City of San Diego. A lack of qualified
SDPD Division/Group Supervisors resulted in SDFD’s inability to provide relief for personnel staffing these key positions. Instead, other cooperating agencies were assigned to fill these positions after the first operational period and through official containment of the fire. Efforts must be undertaken to train additional personnel.

SDPD Operations

1. The patrol response to the Bernardo Fire and the availability of police officers to facilitate evacuations and road closures was a positive. In general, officers were put in teams of 10 to facilitate evacuations from a designated area. This method of grouping officers and assigning areas of responsibility proved to be efficient and effective in carrying out the police mission.

2. The CIMU Logistics Trailers proved to be an efficient and effective method for distributing logistics to field personnel. Officers were able to check out fire jackets, particulate masks, gloves and goggles, water, tables, chairs and lighting equipment from one central location.

3. The coordination and communication from the DOC to the EOC went well. The DOC was able to gather information from the field and pass it along to the EOC in a timely manner.

4. Staffing projections were assigned to the department Associate Management Analyst in the DOC. The projections were important in preparing for future operational periods.

5. Media Relations was able to put out timely and accurate information via social media to the community. This was a result of having an officer sit with SDPD dispatchers.

6. CIMU was able to utilize Operational Support staff and prior assigned officers to CIMU to assist with moving equipment. This allowed CIMU to provide services to the field as well as provide support in the DOC.

Conclusion

Experience has demonstrated that when the Santa Ana winds blow, large fires will erupt throughout the Southern California landscape. Typically, the winds begin to cause problems in the counties to the north of San Diego, as the winds often reach these areas first. Once the winds begin blowing in San Diego, a fire starting anywhere within the county has the potential to quickly grow out of control.

The San Diego region has a history of producing some of the state’s most devastating fires due to its arid climate, large expanses of open space, canyon topography and seasonal Santa Ana winds. All of these unalterable factors contributed to the Laguna Fire of 1970, Normal Heights Fire of 1985, Harmony Grove Fire of 1996, and the firestorms of 2003 and 2007. The May 2014
Bernardo Fire, while driven by less forceful Santa Ana winds than were experienced in 2003 and 2007, was just another example that large wildland fires are a natural part of this region’s normal ecology and that they will continue to occur with alarming frequency.

The Bernardo Fire was unique in that it was the only fire burning in Southern California at the time it began and through much of its active burning period and that the San Diego region was experiencing Santa Ana wind conditions during the month of May; not a typical time of year for Santa Ana winds to surface.

While the City of San Diego’s firefighters, police officers and other City employees rose to the occasion to combat the threats this wildfire posed for our community, and were very capably supported by their counterparts ordered through mutual aid, it is important that the lessons learned and recommendations for change detailed in this report be carefully considered to ensure deficiencies are corrected and opportunities for improvement are pursued.
FIRE APPARATUS/EQUIPMENT INVENTORY AND LOGISTICS

On May 13, 2014, shortly after the start of the Bernardo Fire, the Logistics Deputy Chief was notified by the Assistant Chief of Operations that the Department Operations Center (DOC) was to be opened and that the Logistic Chiefs was to serve as the DOC Director. The Logistics Division Battalion Chief was assigned by Deputy Chief of Logistics to assume command of the Logistics Division. The areas of responsibility included fleet, equipment, facilities, and incident support.

Due to the rapid assignment of engine crews to the Bernardo Fire, the relatively short incident duration, the deployment of an Incident Management Team (IMT), and the establishment of a base camp within the city limits, the impact on the Logistics Division was limited primarily to preparation/deployment of reserve engines to backfill empty fire stations and direct incident support.

On the first day of the fire, and over a period of less than three hours, the Logistics Division coordinated the preparation of 10 reserve engines to backfill empty fire stations. On the second day, an additional four reserve engines were put into service.

With Public Works Fleet Services Division assistance and with three outfitting staff already working that day, the ready reserve engines (RRE) were identified, moved to the front of the shop, and readied for staffing. As the Staffing Desk was making call back phone calls, Fleet mechanics were performing pre-trip inspections and outfitters were performing equipment inventories so the apparatus were truly “ready” when crews arrived. The use of volunteer Fire Cadet Program staff was also instrumental in getting logistical needs accomplished.

The use of Logistics Division outfitting personnel, who were already working at the Repair Facility, was instrumental in being able to prepare these RRE’s for immediate service. They already knew where equipment was located and how to get what they needed, thus requiring little supervision. Without this, the crews that returned from off-duty status to staff these engines would have had to perform this work themselves, further delaying engine company backfilling of the vacant fire stations.

Off-duty personnel responding to Fire Station 28 (FS28) with all of their Personal Protective Equipment (PPE) worked well. The firefighters did not know which fire station they would be assigned to or the crew they would be assigned until they arrived at FS28. A priority list of unstaffed fire stations to fill was established and when crews arrived, they were assigned to a station in priority order. The crews were assigned an apparatus and provided radios, pagers, Mobile Data Computers (MDC), medical aid equipment and narcotics.

The initial response to the incident scene from the Logistics Division was well coordinated. Having an incident of this area in size, it worked well to have two Logistics personnel assigned to the fire to handle crew logistics needs more quickly.
Logistics Division staff assigned to the incident provided over $22,000 in P-Card purchases for the IMT and $1,000 in P-Card purchase direct support, such as meals. Staff knew where to go and how to get whatever was needed.

Lessons Learned and Recommendations for Change

1. The RRE fleet is not truly “ready”. Reserve apparatus stored at FS28 are not secure and are accessible to firefighters 24 hours a day with no security or personnel to monitor the check-out or check-in procedure of apparatus. Because the Equipment Center is not a 24-hour operation, on-duty crews sometimes take equipment from Ready Reserve (RR) apparatus as a necessity to make their front-line apparatus inventory complete. The removal of equipment from RR apparatus is not always reported to Logistics Division personnel, thus leading to unreliable RR inventories. Unauthorized reassignment of equipment is a genuine concern that affects the rapid deployment of reserve Fire-Rescue Department apparatus.

Recommendation: Restrict access to ready reserve apparatus by storing them in a secure facility or fire stations. This will begin once Fleet Services heavy apparatus repair moves from the Kearny Villa facility.

2. The use of Logistics Division outfitting personnel, who were already working at the Repair Facility, was instrumental in being able to prepare these RRE’s for immediate service. They already knew where equipment was and how to get what they needed, thus requiring little supervision. Without this, the crews that returned from off-duty status would have had to perform this work themselves, further delaying engine company backfilling of the vacant fire stations.

Recommendation: Outfit five Type I engines for immediate deployment during high risk wildland fire days. The engines would have all radios, pagers, MDC, EMS equipment (short narcotics) on board. Storage could possibly be within the Repair Facility. After hour’s access could either be through LOGS callback or the Emergency Response Officer (ERO) assigned to the Fire Communication Center.

3. Logistics Division personnel remained assigned to the incident long after the ‘emergent’ issues had been addressed. Three staff members remained on the incident through the second day of the fire, performing duties such as handing out sack lunches and running P-Card purchase errands for the IMT. A determination needs to be made when normal operations should be resumed by staff to support the normal department operations.

Recommendation: Direct the assigned IMT Logistics Section to manage all incident logistics needs and have all SDFD Logistics Division staff return to provide normal Fire Operations Division support. The City Incident Commander in coordination with the City DOC Director will have the authority to make this decision.

4. Some confusion existed as to level of logistical support needed for the incident. For instance, requests were received from the IMT for large numbers of meals for incident
personnel, even though early information indicated that the fire was under a Unified Command and may not be a City of San Diego incident. With the increased cohesiveness of the Metro Zone, the level of our commitment to support outside agency incidents has increased. The need to pre-determine the level of logistical support to outside agencies is necessary to ensure that City of San Diego fire operations are not negatively affected.

**Recommendation:** Ensure that during the first operational period of a City of San Diego incident, the SDFD is responsible for providing basic logistics support (meals, water, fuel, etc.). After the first operational period of the incident, the assigned IMT Logistics Sections will manage all incident logistics needs and all SD FD Logistics Division staff will return to provide normal Fire Operations Division support. The SDFD will clearly identify the level of logistics support provided to other agencies and at no time will the SDFD logistic support fall below a level to adequately support the City of San Diego Fire Operations Division.

5. There was no cache of portable radio equipment available for the RRE’s. An outfitter was assigned to exclusively retrieve radios, pagers, and MDC’s from the Fire Communications Center (FCC) as the apparatus were prepped for service. It was only possible to provide one or two 800 MHz portable radios to each crew. FCC was able to provide a total of only five 800 MHz portable radio batteries, resulting in most crews being issued portable radios without batteries. This was a short term safety issue and as a result, they had to be provided radios from various Battalion Headquarters to ensure that safe communications would be maintained.

**Recommendation:** Purchase and make available additional radios and to meet the needs of a large-scale incident.

6. On the second day of the fire, there was not enough medical equipment to support the additional four RRE’s requested. Duty Medical Services (DMS) staff was able over time to secure the equipment, but had to pull the additional heart monitors from EMS staff vehicles to support the firefighter’s backfilling the vacant fire stations.

**Recommendation:** Purchase and make available additional medical equipment to meet the needs of a large-scale incident.

7. Many Captains and Battalion Chiefs did not complete and/or did not properly complete the required ICS-214 operational period log and related paperwork.

**Recommendation:** Provide training to SDFD staff to ensure that incident related paperwork is completed on time and correctly.

8. Engine crews assigned to the fire requested water and food over the course of the extended fire suppression effort, but drop points on the fireline had not been identified during the first day. For example, Logistics Division staff were directed by the IC to ‘deliver water and/or food to the Alpha Division’ rather than a pre-determined drop point on the Division. This resulted in Logistics Division personnel using incident radio communications to determine crew work assignments to locate the crews in need.
Recommendation: Direct Division/Group Supervisors to identify supply Drop Points and Staging Areas within their geographic divisions and/or functional groups.

9. Some crews disposed of burned hose. The couplings from the hose must be retained in order to be reimbursed for the loss.

Recommendation: Develop a SDFD communiqué providing direction on the disposition of destroyed hose is to be disseminated and reviewed by all firefighters. Captains will be held accountable for ensuring that damaged hose or other equipment is retained per Department direction.

10. When assigning the Operations Division recalled personnel to a RRE apparatus and placing them in service, Logistics Division personnel instructed crews to assume the 900-series numeric identity of the apparatus. This was incorrect and caused some confusion.

Recommendation: Direct engine crews to assume the 100-series identity of the vacant fire stations they backfill. The 900-series ID numbers are to be utilized only during surge capacity events, where they would not be providing the backfill of a vacant fire station.

11. Staffing is critical. Without the support of overtime (OT), civilian and volunteer staff, Logistics would not have been able to provide the high service level provided to support this incident.

Recommendation: Consider the callback and usage of the Community Emergency Response Team (CERT) volunteers early into a large scale incident. During the 2007 Guejito/Witch Fire, this proved to be a substantial benefit to the provision of logistical services. CERT volunteers can be available to serve as runners, drivers, and many other support functions.
MASS NOTIFICATION SYSTEM & EVACUATIONS

The City’s primary mass notification system to alert residents of impending danger and provide requisite instructions is Alert San Diego; a next generation web-based callback system. Alert San Diego provides a 15,000 line capacity for land line as well as cell phone calling, as well as email and text messaging. This system is designed to augment other mass notification processes used by the City such as:

- Door-to-door knocking by first responders and neighbors
- Police and Fire-Rescue vehicle sirens
- Police and Fire-Rescue vehicle and helicopter lights
- Monitoring and information flow to media outlets for dissemination to the public
- Emergency Alert System via television and radio media
- Community Access Phone System
- 2-1-1 Information Line
- Individual and community preparedness

The San Diego County Sheriff’s Department utilized Alert San Diego to notify residents of the need to evacuate. The City’s Office of Homeland Security provided the following Alert San Diego evacuation data for May 13, 2014:

- 16,716 contacts were selected in the Rancho Bernardo and Rancho Penasquitos zip codes
- 15,749 phone messages were sent out
  - 11,463 were successful (73% success ratio)
    - 6,334 were answered by a living person
    - 5,129 went to voicemail
- 6,118 e-mails were sent out (100% success ratio)
- 6,946 text messages went out
  - 6,219 were successful (90% success ratio).

Lessons Learned and Recommendations for Change

1. The discrepancy in the total contacts versus the phone/text/e-mail messages counts is a result of some contacts having more than one phone number. For example, some citizens may have received a phone call, text and email from the system while others may have only received a phone call.

Recommendation: Identify a way to track how many citizens actually evacuate with or without an Alert San Diego notification.
2. The Alert San Diego system is an excellent way of notifying residents of emergencies; however, the public needs to be continually educated that the system is only one of many tools and a call should be not be depended upon as the only notification.

Recommendation: Continue emergency training to maximize performance of the Alert San Diego notification systems and public outreach. The Office of Homeland Security will work with the Mayor’s Office and Council Districts to provide outreach on testing to the public which should be accomplished quarterly to ensure the effectiveness and accuracy of the mass notification system and the information contained in the database. Continue public outreach efforts to notify the residents of the City of San Diego they currently need to self-register their cell phones and e-mail addresses on both the City’s and the County’s self-registration page if they desire to be contacted via that medium.

3. During the Bernardo Fire, an Alert San Diego broadcast call was made to evacuate certain sections of San Diego. The Rancho Penasquitos Branch Library was inside the evacuation zone, but the wrong telephone number was associated with it. The Alert San Diego system called the Central Library which is a PBX phone tree. As a result, the Rancho Penasquitos Library never received the call.

Recommendation: Review the Alert San Diego system telephone database to ensure that all City Libraries and City facility phone numbers are correctly entered into the alert system.

4. The use of Alert San Diego in this instance resulted in SDPD having questions relative to the scope of the evacuations. For example, who initiates the Alert San Diego System and who should be notified in the event the activation affects City residents or City operations.

Recommendations: Train SDPD officers and supervisors on the procedures relating to the use of Alert San Diego. Revisit Alert San Diego protocols and the scale/scope of evacuations. Coordinate with SDFD at the Unified ICP to discuss and plan large scale evacuations.

Evacuation Operations

At 12:23 p.m., the San Diego Police Department command staff assembled at the intersection of Del Sur Court and Camino Del Sur to coordinate evacuation efforts. This became the SDPD Staging Area for the evacuations. A Police Captain was assigned as a SDPD Incident Commander at the Unified Incident Command Post (ICP).

At 1:15 p.m., the San Diego Sheriffs Department (SDSD) had begun Alert San Diego calls into the affected County areas and directed those residents to evacuate to Torrey Pines High School. This was reconfirmed over the SDPD CAD at 2:36 p.m. At 2:54 p.m., the Alert San Diego calls were 100% complete to the landlines in zip codes 92127 and 92129. At 2:58 p.m., evacuees were redirected to Rancho Bernardo High School. Evacuees at Torrey Pines High School were
allowed to remain there. At 7:13 p.m., the event de-escalated and citizens were allowed back into their homes.

**Lessons Learned and Recommendations for Change**

1. SDPD was not entirely familiar with the evacuation plans of local schools.

   **Recommendation:** Request a San Diego City School Police Liaison to come to the Unified Command to provide intelligence regarding school evacuation plans.

2. Moving the originally identified evacuation site (Westview High School) created confusion among allied agencies. This caused a delay in getting resources (Red Cross) to the Torrey Pines High School evacuation site.

   **Recommendation:** Ensure that the Unified Commanders designate the evacuation site to avoid confusion. This information can then be disseminated through the various branches (law enforcement, fire, etc.) and through the DOC’s, EOC’s and JIC/PIOs.
AIR OPERATIONS

Lessons Learned and Recommendations for Change

SDFD Copters 1 & 2 flew over 240 water drop missions throughout the incident. The aircrews also gathered and relayed vital intelligence to the incident command staff and were available to conduct rescue or medical evacuation missions of injured civilians and firefighters, if needed. The Copter 1 & 2 aircrews battled strong gusty winds throughout the incident.

1. Having both firefighting helicopters immediately available during the entire first day of the Bernardo Fire was instrumental to successful firefighting operations and was credited with saving many structures. This was accomplished not just by way of its direct aerial fire suppression efforts, but also due to the aircrews’ ability to direct ground resources to areas of the community that needed the most attention. Unlike other regional fire resources, SDFD helicopters provide night aerial firefighting and rescue to the incident placing additional demands on the aircraft.

Recommendation: Increase the number of City fire/rescue medium-lift helicopters to three (3) to ensure SDFD’s ability to provide aerial fire suppression and rescue. Had either helicopter experienced a mechanical or unscheduled maintenance problem, there would have been limited aerial fire suppression assets available. Having three (3) City firefighting helicopters available would also increase aerial firefighting capabilities if more than one wildland fire is burning within the City of San Diego.

2. The utilization of a SDPD helicopter with a qualified and experienced Air Operations wildland fire officer would be an effective tool in guiding fire companies to areas that need attention and to provide aerial reconnaissance. It would also serve the role of Helicopter Coordinator (HLCO) coordinating helicopter operations on an incident.

Recommendation: Establish a training program between SDPD and SDFD that address the assignment of a Helicopter Coordinator (HLCO) on a fire incident. Schedule periodic training between the departments and incorporate HLCO training into regular air operations training.

Agencies also providing aerial firefighting support included CAL FIRE (fixed wing tankers, helicopters and control plane), the San Diego Sheriff’s Department (two fire/rescue helicopters) and a U.S. Forest Service (helitanker). Fortunately, no other wildland fires were burning in San Diego County on May 13 that may have drawn non-City of San Diego aerial resources from the Bernardo Fire.
Prevention

Brush Management

There are a number of wildland urban interface (WUI) areas within the City of San Diego. Many of these areas are considered to be very high fire hazard severity zones because they possess all the ingredients necessary to support large, intense, and uncontrollable wildfires. Within this hazardous environment, there are individual houses, subdivisions, and entire communities.

The ability to live more safely in this fire environment greatly depends upon the use of “pre-fire activities.” Pre-fire activities are actions taken before a wildfire occurs which improve the survivability of people and homes. They include proper vegetation management around the home, known as defensible space, use of fire resistant building materials and appropriate subdivision design. How a house is designed, where it is built, material used in its construction, landscaping and access all influence survivability during a wildfire.

Accomplishments since the 2007 Witch/Guejito Fire were the development of an inspection tracking and mapping system. This program pre-identifies all private and public parcels within the city requiring brush management inspections. There are 19 inspections areas in this program with approximately 42,505 private parcels. The inspection status of each parcel is accurately tracked and mapped simultaneously using color status displays. This assures each parcel is inspected and eliminates the potential for duplicate inspections. Reports track the total number of inspections needing to be conducted, the number of inspections conducted, the number of inspections where no violation was found, the number of inspections where a violation notice was issued and the number of violations corrected. The system also tracks parcels inspected that are found to be in violation, but are prohibited from conducting brush management during breeding season.

Additionally the Brush Management section created a Brush Flyer. This flyer is sent out to property owners 4-6 weeks prior to their inspection. The flyer informs the property owner of why their property is being inspected, directs them to the Fire-Rescue’s website information on brush management and provides 11 bullet points on the inspection process. As a result of the distribution of this flyer, the brush inspection staff has seen a dramatic increase in voluntary compliance by property owner and a noticeable positive interaction with the homeowner during the inspection.

Lessons Learned and Recommendations for Change

1. Community education is essential to ensuring the public is aware of requirements and opportunities to prepare their homes, businesses and serves to better withstand the threats posed by a wildfire.

   Recommendation: Develop a comprehensive community outreach and education program to raise public awareness of wildfire and promote fire safety and prevention to
create Fire Adapted Communities (FAC). Consider the development of Community Wildfire Protection Plans (CWPP).

2. A number of City departments are responsible for brush management compliance on City-owned lands.

**Recommendation:** Consolidate and coordinate brush management efforts of appropriate City departments.

3. Maps used to identify and manage brush management parcel inspections are dated and compromise inspection efforts.

**Recommendation:** Update current mapping data to ensure accuracy of high hazard/risk areas. This should be conducted on an annual and regional basis.

4. Parcels subject to Brush Management regulation can only be inspected every three years due to understaffing of code enforcement officers. A more frequent inspection cycle would improve compliance and increase defensible space protection.

**Recommendation:** Request funding to hire additional brush management inspectors. A total of 22 positions are required to conduct annual inspections of the 42,505 private parcels in the wildland/urban interface within the City of San Diego. The Department currently has 6 positions dedicated to these inspections. To meet the annual inspection requirement, 16 additional positions would need to be budgeted. If the inspection frequency was increased to a two-year cycle, the staffing level could be cut by 50%. Supervisory and support staff would also be necessary and are not reflected in this staffing figure.
INCIDENT MANAGEMENT

Formal Command Structure

Unified Command (UC) between the San Diego Fire-Rescue Department, Rancho Santa Fe Fire Protection District, CAL FIRE, San Diego Police Department and the San Diego Sheriff’s Department was established quickly upon arrival of the first emergency units. It was initially unclear as to the fire’s precise point-of-origin and the subsequent relationship of the land with the responsible agency. As a result, all three of the responding three fire agencies recognized the fire as a threat to each of their Direct Protection Areas (DPA). As such, all five agencies shared mutual responsibility for initial management of the fire.

Command Transitions

After it became clear that the fire would not be controlled with the initial and extended attack resources at scene and that management of the incident would extend beyond one operational period (24 hours), the decision was made by the Unified Incident Commanders to order a Local Area Type 3 Incident Management Team.

The Local Area Type 3 IMT members consisted of CAL FIRE and other cooperating agency firefighters that meet National Wildland Coordinating Group (NWCG) or State of California qualification standards for the Incident Command System (ICS) positions necessary to manage a wildfire.

The Local Area Type 3 IMT members reported to the Rancho Bernardo Community Park at 8 p.m. to build an operational plan for the next morning. Command was retained by the initial attack Unified Incident Command organization through the night. At 7 a.m. on May 14, the Local Area Type 3 IMT assumed command of the fire which was now approximately 1,500 acres in size.

City of San Diego members of the San Diego Urban Area All-Hazards Incident Management Team (SDUA IMT) were already involved in supporting the initial and extended attack fire suppression effort. These SDUA IMT members were integrated into the Local Area Type 3 IMT organization and both IMT’s merged to collectively manage the incident.

From May 13-15, the following Incident Action Plan (IAP) Management Objectives were listed:

- Provide for firefighter, aviation, and public safety at all times.
- Provide timely and joint information to the public and media.
- Keep elected officials and agency representatives informed.
- Ensure strategic plans and decisions are supported by all Unified Commanders.
- Keep costs commensurate with values at risk.
From May 13-15, the following IAP Fire Control Objectives were listed:

- Keep fire East of Via De La Valle
- Keep fire West of Dove Canyon Road
- Keep fire North of Carmel Valley Road
- Keep fire South of Camino Del Sur

From May 16-17, the following IAP Fire Control Objectives were listed:

- Keep the fire within the current perimeter.

Once the main fire burned through the involved areas of the City, control objectives were to:

- Keep the fire within the existing perimeter already involved
- Patrol and attack fires developing within the existing perimeter
- Monitor the progression of the fire and assist in suppression efforts as it advanced west through the adjacent jurisdictions of Rancho Santa Fe and CAL FIRE
- Employ direct attack tactics to the City of San Diego fire perimeter, including areas outside the City of San Diego, to reduce lateral spread
- Re-deploy resources as necessary
- Identify and mitigate, to extent possible, other hazards consequential to the fire (natural gas leaks, water leaks, tree snags, etc.).

Transition Back to the Authority Having Jurisdiction

City of San Diego, Rancho Santa Fe and CAL FIRE Agency Administrators identified that that 100% containment was the threshold for transition back to their jurisdictions. This standard was achieved on May 17, 2014 and the fire was transitioned back to the local units at 7 p.m. The fire burned 1,548 total acres with 84% of the acreage in the City of San Diego.

Lessons Learned and Recommendations for Change

1. The Bernardo Fire started in a Mutual Threat Zone (MTZ) area of the region. As a result, three separate fire agencies (SDFD, RSF & CAL FIRE) on three separate radio systems (City, RCS & VHF) dispatched first alarm units to the fire.

The first unit on scene was from Rancho Santa Fe and determined the fire started in the Rancho Santa Fe Protection District DPA. As a result, all other responding fire agency resources were directed to communicate on the RCS 800 MHz radio channels used in Rancho Santa Fe. However, soon after the direction for all incoming resources to communicate on the RCS 800 MHz channels, the order from the initial attack Incident Commander (IC) was to have all incoming resources switch again over to VHF-FM radio channels. Consequently, the responding SDFD units had to switch from the initial dispatch radio channels (City 800 MHz system) twice while en route to the incident. This
caused considerable communication and coordination challenges during the onset and throughout the first day of the fire.

**Recommendation:** Clearly identify on a map and include as a “layer” on the Mobile Data Computers (MDC) the Mutual Threat Zone areas around the City and pre-determine the radio system to be used in these areas.

2. The VHF-FM radio system was used during the initial and extended attack phase of the fire. One Command and one tactical channel were assigned. There were significant communication challenges on both of the assigned VHF radio channels. It was later reported that the challenges with communicating on the command channel had to do with a radio repeater atop Black Mountain not functioning properly. As a result, inconsistent communications between the incident command staff and the Division Supervisors and Strike Team Leaders on the VHF command channel was experienced throughout the first day of the fire.

In addition, the availability of only one tactical radio channel caused this channel to be overwhelmed with radio traffic with safe communications between units not possible. This was a significant safety concern. As a result, some of the Division Supervisors, Strike Team Leaders and individual units were forced to communicate on their own radio system radio channels to ensure the safety of their crews.

**Recommendation:** Ensure that mountain top repeater systems are fully operational if the VHF-FM radio system is to be used within a MTZ. Multiple tactical channels need to be immediately available, if the VHF-FM radio system is to be used within a MTZ in order to allow a safe and effective radio span-of-control.

3. Safe and effective radio communications between the firefighting units on the ground and the Unified Incident Command Post (ICP) was a challenge during the initial and extended attack phases of the Bernardo Fire. As a result, multiple resource requests (San Diego City Engine Strike Teams) were made directly to the San Diego Fire Communications Center (FCC) outside of the established single ordering point system. City resident structures were in imminent danger of being destroyed or damaged within an estimated 10-20 minutes.

While normally not an acceptable practice, this was deemed necessary due to the radio communication challenges taking place on the incident and the need to defend structures that were immediately threatened by the fire. FCC was directed to contact and notify the Monte Vista Emergency Command Center (ECC) of these actions and the Unified Incident Commanders were also informed. Ultimately, three San Diego City engine strike teams were assigned and have been credited with arriving in time to save all of the structures they were assigned to defend.

**Recommendation:** Consider the release of resources back to the City if a situation develops that causes the ordering of City resources outside the established single ordering
point, on a City of San Diego fire, once the threat has passed so staffing levels will improve and accountability for incident resources is not compromised.

4. Most of the initial attack and extended attack resources ordered by the single ordering point and outside the single ordering point were ordered under the Local Master Mutual Aid Agreement (LMMA). The LMMA does not provide for reimbursable of agencies providing resources. However, due to incident resource needs exceeding what the LMAA could provide, some resources were ordered and responded from outside San Diego County under the California Fire Assistance Agreement (CFAA). The CFAA provides reimbursement to responding agencies. After the first operational period, many of the resources originally ordered under the LMMA were reassigned to new incidents under the California Fire Assistance Agreement (CFAA) creating resource tracking and accountability challenges.

Recommendation: Ensure that resources reassigned to new incidents from the initial incident know that they have been ordered under the CFAA. Contact their home units so that they are made aware and so that reimbursement is possible.

5. The identification of land ownership was an issue from the onset. The RSF Battalion Chief (BC) was the first chief officer at scene and assumed command of the incident. The RSF BC believed that the fire point-of-origin was within the RSF DPA. As such and as a result of all vegetation fires occurring within the RSF DPA requiring a response from CAL FIRE, Monte Vista ECC became the single ordering point. However, it was later determined that the point-of-origin was actually within the City of San Diego’s DPA. Had this been evident to the RSF and SDFD BC upon arrival, the SDFD Fire Communications Center (FCC) would have been the single ordering point.

Recommendation: Provide mapping technology outside of what is provided by the MDC so that all regional fire agencies DPA’s are clearly depicted using the address and/or GPS location of the fire start.

6. A limited pool of GIS trained technicians, map printing plotters and computer equipment caused delays in the production of incident critical mapping products.

Recommendation: Identify additional City GIS trained technicians and specialists and put together joint training opportunities, a roster and notification process to support future incident operations. Purchase additional plotters and computer equipment to support GIS map production.

7. The Department’s ability to concurrently staff the Incident Management Team (IMT), Department Operations Center (DOC), the City’s Emergency Operations Center (EOC) and critical command positions in the field was hampered by a lack of trained and qualified (certified) high-level personnel to fill all positions.
Recommendation: Train additional Department personnel to fill all IMT, DOC, and EOC positions to a minimum three-deep roster. Consideration should be given to using non-uniformed staff for incident support positions to free uniformed staff for key skills or fire line assignments.

8. Lack of a comprehensive and publicized extended attack crew rotation and work/rest cycle plan for incidents in the City prevented the expected crew exchanges the second day of the fire.

Recommendation: Publish and exercise the extended attack crew rotation and work/rest cycle plan for incidents in the City. This will enhance efficiency, provide for crew rest, and facilitate resource tracking for accountability and financial documentation.

9. On multiple alarm and large scale incidents, the alarm matrix identifies one operations support staff member to respond to the Incident Command Post. Recent experience and the Bernardo Fire demonstrated a need for additional operations support personnel to respond and assist with incident management.

Recommendation: Consider having a minimum of two (2) operations support staff members respond to all future multiple alarm and large scale incidents to provide operations support.

10. While the Fire (SND, RSF & CAL FIRE) Incident Commanders recognized that the San Diego Police and San Diego Sheriff Departments were in Unified Command from the very beginning of the fire, this was not clearly communicated to the law enforcement agencies supporting the incident. As a result, a separate Incident Command Post was set up by SDPD at their evacuation coordination/staging area. This was not known during the initial stages of the fire and led to a lack of coordination between the fire and law enforcement agencies assigned to the fire.

It wasn’t until the ICP was moved to the Rancho Bernardo Recreation Center that SDPD believed that they were in Unified Command. The May 14 Incident Action Plan (IAP) further exasperated the problem as the SDPD Captain in Unified Command was mistakenly listed as an Agency Representative on the IAP ICS-203 and not as one of the Unified Incident Commanders.

Members in the UC have decision-making authority for the response. To be considered for inclusion as a UC representative, the representative’s organization must:

- Have jurisdictional authority or functional responsibility under a law or ordinance for the incident;
- Have an area of responsibility that is affected by the incident or response operations;
- Be specifically charged with commanding, coordinating, or managing a major aspect of the response; and
- Have the resources to support participation in the response organization.
UC members bring their authorities to the UC, as well as the resources to carry out their responsibilities. Members in a UC have a responsibility to the UC, and also to their agency or organization. These individuals in the response management system do not relinquish agency authority, responsibility, or accountability. The addition of a UC to the ICS enables responders to carry out their own responsibilities while working cooperatively within one response management system.

**Recommendation:** Ensure that the participating members of the Unified Command respond to and co-locate at one ICP at the start of the incident and clearly understand their roles within UC. Ensure that IAP’s are reviewed by all Unified Incident Commanders in advance of being finalized in order to avoid any errors being published.

11. There was congestion in the area of the SDPD Staging Area. This was due to the location of the Evacuation Coordination Center being co-located at the Staging Area.

**Recommendation:** Utilize large staging areas close to, but separate from the Unified Incident Command Post whenever possible. Capacity to handle large numbers police vehicles and personnel must be considered. Consider identifying large open locations for use as Evacuation Coordination Centers or Staging Areas in advance of future major incidents.

12. There was difficulty mapping resources and incident progress at the SDPD ICP and Staging Area.

**Recommendation:** Ensure that only one ICP is being utilized. One of the benefits may be that angled drafting tables, large-scale maps, and overlays would be made available by one of the other agencies in UC. Purchase and make available the drafting tables, large scale maps, printers and plotters and install in the CIMU vehicles. Stock map books in the CIMU vehicles for supervisors and field operators.

13. Access to logistical support for SDPD field personnel was delayed. CIMU is responsible for providing logistical support to the field in addition to providing support for DOC operations. CIMU was never requested for this incident. At approximately 1415 hours, CIMU self-dispatched to the incident to provide logistical support.

**Recommendation:** Train command staff and field supervisors on the availability of different CIMU resources (i.e., fire personal protective equipment (PPE), command vehicles and trailers). Provide for early notification or requests for logistical support during large-scale incidents to avoid unnecessary delays.

14. There were no phone chargers in the SDPD DOC or the logistics trailers for some of the newer department mobile phones. This created an issue when cell phones at the ICP and in the field began to run out of power.

**Recommendation:** Stock phone charging cords and power converters/power sources in the logistics trailers for SDPD officer check-out.
15. Portable radio batteries for SDPD officers needed to be replenished in large numbers.

**Recommendation:** Purchase additional portable radio batteries and chargers so that the number available in the CIMU logistics vehicles has been increased.
OPERATIONS

Preplanning Phase

SDFD began its preparations for the heightened risk of a wind-driven fire the day before the winds predicted arrival. It was determined that if the winds surfaced early the morning (5 a.m. – 6 a.m.) on May 13 and were blowing strongly within the City of San Diego, the Operations Division would recommend to the Fire Chief the staffing of one Type 3 engine strike team (5 brush engines & strike team leader). Upon review of data from multiple weather stations located throughout the City and based on feedback from on-duty personnel early the morning of May 13, it was determined that although the relative humidity was extremely low, the winds were either non-existent or blowing lightly within the City; thus no recommendation to staff a Type 3 Strike Team was made.

Operational changes made as a result of the predicted winds included the staffing of the second fire rescue helicopter to be effective at 8 a.m.; helicopter missions outside the City would be limited; all reported vegetation fires within the City would be upgraded to full 1st alarm assignments; all non-essential outside activities were cancelled beginning at 8 a.m. so that all fire companies were in station and prepared to respond quickly to any reported vegetation fires; and the Department Operations Center (DOC) at the Fire Communications Center (FCC) was to be placed in service (Level 1) at noon, but unstaffed unless local fire activity dictated otherwise.

There were no restrictions placed on the number of Metro Zone Type 1 and Type 3 engine strike teams that would be allowed to respond out of the Metro Zone and County. However, if fire activity locally or in Southern California was to increase to a level that could compromise the City’s ability to provide an acceptable level of service to its citizens, limitations on strike team participation would be considered.

No restrictions on deployments of staff assigned to the FEMA Urban Search & Rescue Task Force, Federal Incident Management Team (IMT) or Single Resource personnel were considered at the time and would be re-evaluated based on fire activity locally and within California.

The availability of key City personnel assigned to the San Diego Urban Area Incident Management Team (IMT) was confirmed to ensure elements of the IMT could be rapidly deployed should a significant wildfire begin within or threaten the City. The Logistics Division was to communicate with the General Services Fleet Division the possible need to place reserve apparatus into service to augment the normal on-duty complement of front line response apparatus.

What Worked Well - SDFD

1. Lessons learned from the 2003 & 2007 Firestorms were applied to pre-planning and engagement efforts and resulted in SDFD being well prepared for this large-scale response.
2. The monitoring and rapid dissemination of impending weather events to the SDFD Senior Staff and the use of weather forecast data for disaster intelligence were key to enhancing situational awareness and recognition of the potential for large fires at the command level of the Department.

3. Restricting the types of missions Copter 1 and Copter 2 would accept outside the City ensured that the department could appropriately participate in supporting the resource needs of other jurisdictions while concurrently ensuring that sufficient resources remained in the City of San Diego to address the severe fire threat.

4. Early activation of elements of the San Diego Urban Area (SDUA) All-Hazards Incident Management Team (AHIMT) reduced reflex time in setting up for the multi-operational period management of the Bernardo Fire.

Lessons Learned and Recommendations for Change

1. Field Observers (FOBS) deployed and operated within the scope that is expected for this position. They provided ongoing and accurate intelligence to the Unified Incident Commanders and Operations Section Chiefs. The San Diego Sheriff’s Department provided two of their light category observation helicopters (ASTREA) for incident command staff and agency administrator aerial reconnaissance.

   Recommendation: Continue to utilize FOBS on incidents in the future and continue to utilize Sheriff’s Department ASTREA and San Diego Police Department ABLE light-category helicopters when aerial reconnaissance is needed.

2. The SDPD was involved in extensive management and resource allocation for scene security, crowd control, traffic control and evacuations in several communities. One of the major strengths of this City department was the commitment of its officers to getting the job done. Exposed to flames driven by high winds, toxic ash, smoke and working long hours they managed to evacuate and save the lives and property of thousands of citizens.

   Recommendation: Continue to train and exercise emergency procedures with SDFD, SDPD, EOC and others.

3. Engines with redlines and a foam pro system were quicker and more efficient in overhaul operations.

   Recommendation: Continue to include redlines and a foam pro system equipment in future fire engine specifications.

4. Both “bump and run” and “anchor and hold” tactics were effective when executed appropriately and when applied during the correct environmental conditions.

   Recommendation: Continue to train all firefighters in both “bump and run” and “anchor and hold” tactics. Consider assigning water tenders to each strike team and task force.
5. Police officers have not been issued their own vegetation fire PPE. They must rely on this safety equipment being requested and then transported out to the fire(s). The delay in this equipment being provided unduly exposes police officers to the risk of being burned during wildland fire evacuation operations. CIMU currently has vegetation fire PPE (Nomex fire shirts, masks, gloves and goggles) for approximately 225 officers “pooled” in a central City location. Once the PPE arrives, it is a challenge providing to the officers as they are scattered throughout multiple areas with many engaged in life saving operations and unable to disengage and travel to the area where the PPE will be provided.

**Recommendation:** Issue each individual SDPD officer their own vegetation fire PPE so that they are equipped with the necessary safety equipment upon arrival at a vegetation fire. The estimated cost for the PPE is $450,000 (Patrol only).

6. A relief plan for SDPD motor units was not developed. This would have been a significant issue had the incident extended into multiple operational periods.

**Recommendation:** The designated Law Branch Director, SDPD Operations Officer or Traffic Coordinator should consider coordinating with a motors sergeant or lieutenant for appropriate relief.

7. Not all of the road closure information reached all affected law enforcement units.

**Recommendation:** Designate an SDPD Traffic Coordinator to the Unified Command to track all road closures. This will provide a central point of coordination for all city wide road closures. This coordinator would relay information to the DOC and PIO to maintain situational awareness. If the Joint Information Center (JIC) were open, the SDPD PIO could add relevant City updates to the county media updates.

8. Police Department fiscal related issues surfaced during and after the incident. Information relating to proper internal order numbers was in question and the direct tracking of personnel costs was a challenge.

**Recommendation:** SDPD Fiscal Management should create a form for personnel who are assigned to large scale critical incidents. This document should gather the appropriate tasks, hours and resources used for that incident. This would assist the incident management team and fiscal team with tracking costs and reimbursement if the incident qualifies for disaster relief. Assign fiscal personnel to the ICP to coordinate the gathering of the information and/or assign fiscal analyst to the DOC and each Incident Command would designate someone responsible for tracking information and for coordinating with the Analyst at the DOC.
PUBLIC INFORMATION AND MEDIA MANAGEMENT

City of San Diego

Public information and timely evacuation warnings are critical to maintaining public safety during major emergencies such as the wildfire. Television and radio media were primarily utilized for the delivery of incident information and critical public evacuation warning messages and were augmented by limited use of social media platforms such as Twitter and Facebook.

Public and media expectations for timely and accurate information are extremely high and the time and staff requirements to constantly assemble, validate and disseminate this information can sometimes conflict with the many operational priorities incident commanders must juggle to ensure the successful mitigation of an emergency incident.

Public Information Officers from SDFD, SDPD, Rancho Santa Fe FPD, and CAL FIRE were present at the Incident Command Post and deployed to the field to provide updates to media representatives. In addition, regularly scheduled media briefings were conducted from the Operational Area (OA) EOC and Incident Command Post and included elected officials from the City and County, emergency managers, and law enforcement and fire officials.

Information was also provided from the Incident Command Post and PIOs to both the City and the County EOCs and their respective web pages were updated with critical information on evacuations, shelters, road closures, repopulation, and health issues.

Despite the best efforts of all involved, timeliness and accuracy were negatively impacted due to the multiple flow paths for dissemination of the information.

Lessons Learned and Recommendations for Change

1. The coordination of City/County/CAL FIRE news briefs at the County EOC and Incident Command Post improved as the incident moved from initial attack and provided for improved information accuracy, flow and timeliness. This ensured a clear and unified message was provided routinely to the public from City and other involved officials. Through discussions with the OA, it was determined that the OA EOC establishes a Joint Information Center (JIC) automatically every time it activates and it would be beneficial for a City PIO to be assigned to the JIC.

Recommendation: Ensure that a trained City PIO reports to the JIC and coordinates with the City EOC whenever a large incident occurs. Training and exercising the use of the JIC with City PIOs and Emergency Operations Center leaders should obviate this shortfall in the future. The OA and the City should coordinate so information on the establishment of a Joint Information Center is shared and representation is provided.
2. It was difficult at times to meet the intense demand for information generated by this incident with the limited SDFD PIO staff available. The magnitude, duration and newsworthiness of the incident justified the assignment of additional PIOs to handle the volume and frequency of requests. PIOs were needed at the Joint Information Center, the Rancho Bernardo Incident Command Post and Base Camp, County EOC and in the field. These needs could have been partially filled by requesting three of the PIOs assigned to the San Diego Urban Area All-Hazards Incident Management Team. The use of firefighters with public information training to augment the two-person Public Information Office’s efforts would have resulted in greater access for the media and improved responsiveness to media, public and political inquiries.

Recommendation: Ensure that the City’s Director of Communications serves as the lead PIO and coordinates all PIO needs, assignments and activities with the PIOs assigned to the IMT (including JIC liaison) to maintain adequate coverage and consistent messages are provided. Ensure that all of the information disseminated over social media is accurate. Train additional personnel as PIOs to be assigned for use during large-scale incidents where a greater PIO force is needed.

3. Availability of information needs to be constant, current, and easily obtained by the citizens, evacuees and volunteers. Information must be simple and reliable, preferably coming in from the original source.

Recommendation: Provide additional information that would improve service level at shelter and evacuation sites include:

- A general map of the site including information is provided
- List of repopulation of evacuated neighborhoods as they occur
- A list of Frequently Asked Questions
- Announcements and Updates
- Incident Maps

SDFD Media Management

The SDFD Media Services Manager operated from the Incident Command Post fielding phone calls, answering questions, giving interviews, arranging media interviews with SDFD chief officers and coordinating with PIOs from CAL FIRE, Rancho Santa Fe Fire and SDPD.

The following methods and modes of communication were utilized:

- Fire updates via phone, e-mail, text and Twitter
- Phone calls to media and political stakeholders with updated information
- Media interviews provided at designated times daily and on an as-needed basis
What Worked Well

1. Coordination between the Media Services Manager and the PIOs for Rancho Santa Fe Fire, CAL FIRE, SDSD and SDPD went smoothly and cooperatively.

2. SDFD chief officers were available and willing to engage media questions both at organized briefings and in impromptu interviews. This was an important and valuable resource in releasing information to the public and in demonstrating SDFD’s visibility at the incident.

Lessons Learned and Recommendations for Change

1. It was challenging to meet the intense demand for information generated by this incident with no Public Information Office staff. PIOs were needed at the Rancho Bernardo ICP, County EOC, Fire Communications Center (DOC), and in the field. With no PIO presence at the DOC or in the field away from the ICP, it was difficult at times to share information and to identify who was to disseminate information to the media, public and elected officials. As a result of these challenges, responsibility for these activities was ceded to other agencies, primarily SDPD and CAL FIRE.

**Recommendation:** Ensure that the Department’s Media Services Manager serves as the lead Public Information Officer for the IMT and coordinates all PIO assignments and activities with the PIOs assigned to the IMT to ensure adequate coverage and a consistent message. Train additional personnel as PIOs to be assigned for use during large-scale incidents where a greater PIO force is needed.

2. Information was released to the media at the ICP upon approval of the Unified Incident Commanders per Incident Command System (ICS). However, this public information release was not coordinated with the City or County EOC’s. As a result, the media had the most current incident information, but both EOC’s did not. When the media would ask City and County leaders’ questions about information they received from the ICP, the information provided by the EOC’s was not always consistent with what the media had been provided by the ICP.

**Recommendation:** Ensure that prior to the ICP releasing incident information to the media, this information is shared with the EOC’s in advance so that any questions the EOC’s may have will have been addressed before making public.

3. The release of public information via social media was effective. However, multiple social media platforms were utilized and in some cases the information provided was in direct conflict.

**Recommendation:** Task the City’s new Communications Department with determining which social media platforms will serve as the City’s primary paths for communicating critical information during a disaster.
4. The 24 hour news cycle increases the demand for information at all hours of the day and night.

**Recommendation:** Schedule personnel trained as PIOs to take into account the round the clock demand.

5. The Media Services Office is ill-equipped technologically speaking to deal with an incident of this magnitude. A Smartphone is not adequate to manage the flow of or the demand for information to be posted to social media.

**Recommendation:** Assign at least two laptop computers to the Media Services Office, with Wi-Fi and 3G/4G connectivity, Citrix card and VPN accounts. A portable printer will allow for distribution of materials at media briefings.

6. Information from the field was not consistently communicated to SDFD Headquarters or 2-1-1. Consequently, SDFD Headquarters front counter staff was unable to adequately answer questions from citizens.

**Recommendation:** Ensure that Fire-Rescue Headquarters staff and 2-1-1 receive PIO updates and fact sheets during large-scale incidents. Establish an email distribution list incorporating 2-1-1 and any Headquarters personnel who may be assigned to answer phone calls from the public.

### 2-1-1 San Diego

2-1-1 San Diego operates the region’s “2-1-1”-dialing code that provides free, 24-hour access to community, health and disaster information through highly trained customer service representatives and the 2-1-1 website ([www.211sandiego.org](http://www.211sandiego.org)). Information is confidential and available in more than 200 languages.

Like 9-1-1 for emergency service, 2-1-1 has been set aside by the Federal Communications Commission for the public to easily access community information. During a disaster, 2-1-1 works with the County of San Diego’s Office of Emergency Services, CalFire, American Red Cross and other public safety entities, jurisdictions and response organizations to provide non-emergency public information to the community. This includes providing rumor control and trend analysis to community officials, report community needs that are not being met, and act as the central communications point for other community agencies and non-governmental organizations.

According to the 2-1-1 San Diego May Wildfire After-Action-Report, 2-1-1 answered more than 33,000 fire-related calls by utilizing more than 100 staff and 800 volunteers between Tuesday, May 13 when the Bernardo Fire started and Sunday, May 18, with only a 1 minute and 41 second wait time to access a live representative.

Tuesday, May 13, the Bernardo Fire prompted 2-1-1 San Diego to activate for disaster response and serve as the region’s trusted resource for incident-related information. Working swiftly, 2-1-
San Diego notified its Disaster Response Team, sent out communications for additional volunteers and assembled additional work stations in its contact center to handle the influx of calls. In addition, the City of San Diego dispatched a City of San Diego Police Information Liaison to 2-1-1 San Diego’s headquarters to support 2-1-1 leadership, staff and the agency’s incident management team on Tuesday night to help secure and disseminate verified information about the incident. Close partnership with the City of San Diego officials and responding agencies, coupled with support from elected officials and hundreds of volunteers, meant those affected by the fires could rely on 2-1-1 when seeking answers during a turbulent time.

Topics of questions asked by callers included:

- Evacuation orders and areas
- Confirmation of information received in text or calls about evacuations
- Inside or outside evacuation areas
- Road closures
- Fire updates
- Reports of smoke
- School closures and re-openings
- Heavy traffic 5 Freeway and 15 Freeway closures

**Lessons Learned and Recommendations for Change**

1. During the 2007 Firestorm, the CAPS line and 2-1-1 attempted to share information regarding the disaster; however, as the magnitude of the event increased, 2-1-1 and the City’s CAPS info line focused on their respective missions which clearly overlapped. This is the first incident in which the CAPS line was not activated and rather City of San Diego public officials promoted the 2-1-1-dialing code for non-emergency, fire-related information for the Bernardo Fire.

   **Recommendation:** Add a procedure to the EOC PIO checklist to ensure information flows to 2-1-1. Information needs to be consistently shared with the Police Department, Fire Dispatch, and 2-1-1 to ensure accurate and timely information is provided to the public.

   Assign an information liaison to the 2-1-1 headquarters to serve as support to the leadership, staff and the agency’s incident management team to ensure a seamless flow of critical and verified information.

   Communicate with the public (i.e. Alert SD, Press Releases and other communications), ahead of time to 2-1-1 to ensure they are ready for the related call volume created by such messaging.

   Provide 2-1-1 access to all City “official” information (websites, etc.) to ensure that information given out by 2-1-1 is verified.
Include 2-1-1 staff in City drills and exercises.

Develop an MOU between the City and 2-1-1 to ensure that protocols and a funding mechanism is established.
COMMUNICATIONS

Communications equipment employed in this incident include telephones (landline and cellular), 800MHz radios (mobile and portable), VHF radios (mobile and portable), Mobile Data Computers (MDCs), pagers, Personal Digital Assistants (PDAs), 3Cs video conferencing equipment and the Next Generations Incident Command System (NICS).

Fire Communications Center

At approximately 10:46 a.m., dispatchers began receiving calls of a vegetation fire in the area of Del Norte High School, which is on the border of the City of San Diego and Rancho Santa Fe (RSF). Since many of the initial calls placed the fire in RSF, NorthComm dispatch was called and immediately started a 1st alarm vegetation fire response. Subsequently, the San Diego Fire Communications Center (FCC) received calls from addresses within the City, so a Vegetation Initial Attack response was dispatched and immediately upgraded to a Vegetation 1st Alarm on 800 MHz radio channels 9G/9H.

The North Zone and SDFD units were responding on separate 800 MHz radio systems, but all units were aware of each other’s responses via radio announcement and mobile data computer (MDC) comments. Once the first RSF units were on scene and command was established, SDFD units were directed to switch over to NorthComm Channels 1E/1F. CAL FIRE had also dispatched a 1st alarm response due to the State Responsibility Area (SRA) lands that were threatened. As a result, all radio traffic was ultimately switched over to the VHF radio system, as CAL FIRE does not utilize the 800 MHz radio system.

Lessons Learned and Recommendations for Change

1. The concurrent use of both VHF and 800MHz radios by some Strike Team Leaders for communications with assigned units was found necessary by some personnel, especially during the firestorm conditions. This practice can lead to missed communications. However, during this incident and since units were operating under the direction of the City of San Diego commanders as part of the Unified Command during the first operational period of the fire, the use of 800 MHz radios was appropriate as it provided a greater margin of safety. All SDFD firefighters are equipped with 800 MHz radios and effectively communicating with each other on the one assigned VHF tactical was not possible.

Recommendation: Ensure all fireline supervisors are closely monitoring and communicating on the assigned VHF radio command and tactical channels on incidents where units are operating on the VHF radio system. However, it is appropriate and safe to communicate with units assigned within a strike team or structure protection group on a discreet 800 MHz radio channel. It is imperative that fireline supervisors have communications with the firefighters assigned to them. Units’ not having effective communications among each other is a significant safety concern.
2. The Mobile Communications Unit was assigned to the Rancho Bernardo ICP and Base Camp. Although this vehicle is viewed as a very valuable resource for command activities, much of the technology installed in the Unit is obsolete and not functional.

**Recommendation:** Identify and fund the technology (ICP Display Processing) necessary to assist in the management of a large incident.
EOC AND DOC OPERATIONS

The management of large incidents impacts daily operations, involves multiple City departments and often multiple political jurisdictions. Coordination and support activities are conducted by activating Department Operations Centers (DOC) and Emergency Operations Centers (EOC). SDFD, SDPD and Public Utilities staffed their DOCs. In addition, the City’s EOC was staffed as was the County’s Operational Area (OA) EOC.

City Emergency Operations Center (EOC)

The City of San Diego’s EOC was activated in response to the Bernardo Fire from 2:30 pm to 8:00 p.m. on May 13, 2014. Following is a summary of events related to the EOC activation.

At approximately 1:30 p.m., Office of Homeland Security (OHS) staff activated selected EOC equipment, monitored local news reports and informed the Fire Chief of this ‘forward leaning’ EOC posture. Minutes later, Mayor’s Office staff informed OHS of the Mayor’s intent to visit the EOC. The Mayor’s group was met and briefed on EOC activation protocols, capabilities, and procedures en route to the EOC.

The Fire Chief contacted OHS staff at approximately 2:30 p.m. and directed that the EOC be activated to Level 1 (lowest staffing level) based on the expanding scope of the Bernardo Fire. The Alert San Diego (ASD) system was used by the OHS Duty Officer for automated recall of Shift 1/Level 1 staff to the EOC. The Mayor, COO, and their staff were informed. The Police Chief, a Deputy Fire Chief and other senior public safety officials enter the EOC and provide additional situational awareness to the Mayor, COO, and their staff members.

Once the EOC was fully staffed at Level 1, the Incident Brief was provided at approximately 3:00 p.m. and routine Situation Reports by the EOC Director and Section Chiefs was initiated. To facilitate communications and coordination, the County OA EOC and the City EOC exchanged staff representatives/liaisons. Both liaisons were frequently used to share and clarify situational awareness throughout this activation.

A Deputy City Attorney was present in the EOC and a Proclamation of Local Emergency was drafted for the Mayor. The proclamation was signed at 4:20 p.m., and the San Diego County Office of Emergency Services (OES) was informed. The Mayor and Police Chief departed the EOC with senior staff members, en route to the Bernardo Fire Incident Command Post and a subsequent press briefing.

At approximately 5:30 p.m., Fire Chief Mainar directed that that EOC be deactivated at 8:00 p.m. EOC staff informed their scheduled reliefs that there was no need for a second shift. A final EOC Situation Report was conducted at 7:00 p.m.; the EOC was deactivated at 8 p.m.

During its brief activation period, the City of San Diego Emergency Operations Center (EOC) experienced generally effective communication and coordination with the Operational Area (i.e.
Lessons Learned and Recommendations for Change

1. City EOC workstation computers appeared to be operating slowly and/or not updated, perhaps related to the currency of software updates and patches.

   **Recommendation:** Consider updating software and patches on all EOC workstation computers on a more frequent basis. OHS regularly coordinates with the Department of Information Technology to obtain scheduled updates to EOC computers. OHS will examine if greater frequency of computer updates is required.

2. As of May 13, 2014, the EOC roster was only approximately 80% to 85% filled (of approximately 140 individual assignments among three separate shifts).

   **Recommendation:** Continue to update the EOC roster on a regular basis. Per a City memo dated January 24, 2014 from the OHS Program Manager to Mayoral Department Directors, OHS will conduct routine EOC roster updates at least quarterly. As of May 27, 2014 (the last quarterly update), the EOC roster was approximately 92% filled.

3. The liaison concept proved especially helpful in clarifying information received from the field Incident Command Post and from the respective EOCs. This information included amplifying information on evacuation status and routes, sheltering locations, shelter status and support required, and confirmation and clarification of sometimes conflicting shelter operations reports to the City EOC. The positive contribution of both liaisons was confirmed by the City and Operational Area EOC staffs, as well as senior San Diego Police Department staff within the City’s EOC.

   **Recommendation:** Continue to support and utilize EOC liaison positions in actual EOC activations and during all relevant EOC training events and exercises. EOC liaison practices should also be formalized in appropriate written procedures and guides (e.g. EOC Manuals, WebEOC templates, and EOC position checklists).

4. Region-wide status of evacuation operations and care and shelter operations was not readily available/apparent in WebEOC.

   **Recommendation:** Coordinate with County Office of Emergency Services (OES) and other appropriate stakeholders to obtain more timely, accurate, and comprehensive information regarding region-wide evacuation operations and care and shelter operations. Potential supporting systems and capabilities include WebEOC status boards, Geographic Information System products, and Common Operating Picture applications.
5. Information and situational awareness within the EOC and among EOC positions was occasionally inconsistent with and/or lagged behind information from field response elements. The EOC’s existing communications methods and means were unable to obtain or provide real-time or near real-time information from the field response elements, and lagged behind the information provided directly to senior elected and appointed officials via voice communications from the Incident Command Post and other field sources. The San Diego region currently lacks a single, standard Common Operating Picture application, though the Next Generation Incident Command System (NICS) application during wildland fire incidents is currently used by multiple public safety departments and agencies in the region.

Recommendation: Examine methods and applications to increase situational awareness within the EOC. OHS staff will examine the utilization of NICS during wildland fire incidents in the EOC, and assess if NICS could provide increased situational awareness to the EOC staff. If improperly used, though, the NICS solution could potentially compromise the EOC’s traditional role as a Multi-Agency Coordination System in support of the Incident Command Posts through the Department Operations Centers. Routine and proper EOC training will help ensure that NICS or a similar EOC solution does not displace the City’s Department Operations Centers by creating inappropriate and direct coordination between the EOC and the Incident Command Posts.

6. Certain characteristics/configurations of EOC computers provided operating challenges to EOC staff, e.g. the practice of utilizing an EOC computer logon and WebEOC email vice personal AD logon and Outlook email; the lack of a website link to the CityNet page; and the lack of a website link to Outlook remote access.

Recommendation: Conduct a comprehensive assessment of necessary EOC computer characteristics and configurations, and consider modifications as appropriate to increase utility and ease of use for EOC staff. OHS staff will assess the feasibility and advisability of modifying various EOC computer configurations. In instances where regional or Citywide standardization requirements may prevent certain modifications, OHS will increase EOC staff training and/or develop improved operating guides.

7. The EOC activation level was not posted or provided to EOC staff other than in the initial automated recall notice.

Recommendation: Routinely inform EOC staff and other staff as appropriate on the EOC’s current activation level, including the description of that level. This information should be routinely noted/briefed in the Incident Brief and in all subsequent EOC Situation Reports, and prominently posted in the EOC for all staff and observers to see.

**SDFD Department Operations Center (DOC)**

Due to the weather and wind conditions that were present, the Department Operations Center (DOC) had been prepped in the Fire Communications Center (FCC) conference room also known as the “fishbowl”. Shortly after the start of the Bernardo Fire, the Level 1 DOC was
activated. The DOC Director was the main liaison to the SDFD Unified Command IC at the fire. Due to numerous fire starts being reported in other areas of the county, FCC was receiving resource requests from the OES Operational Area Coordinator (Monte Vista Emergency Command Center). These requests were being closely monitored by the DOC Director to ensure that enough resources remained in the City of San Diego and the Metro Zone.

As a result of high resource commitment levels, the “emergency dispatch protocol” was put into effect. This relieved fire engines from responding to emergency medical incidents along with ambulances and freed firefighters for immediate assignment to suppression activities except in the case of “E Level” medical incidents (i.e. cardiac arrests). Engines were also not dispatched to non-urgent calls such as Ringing Alarms and reduced response assignments were sent on multi-unit incidents such as Structure Fires. These response modification decisions were made at approximately 2:30 p.m., when SDFD reached its “draw down” level of 30 first responder units remaining in the City and prior to our reserve engines being backfilled by off-duty staff members and assigned to vacant fire stations.

Lessons Learned and Recommendations for Change

1. Though it was clear the DOC had been activated, it was unclear as to who was trained/assigned to perform specific tasks. This challenge greatly impacted the timely development of a Fire Management Assistance Grant request for partial federal reimbursement of fire mitigation and other incident expenses.

   Recommendation: Identify and train staff assigned a role in the SDFD DOC and conduct regular drills to ensure vital tasks are completed and staff members are well informed. Position checklists will also be developed to ensure assigned personnel are familiar with their roles and expectations.

2. Clear direction that the DOC was to manage both the logistical and support needs of the Bernardo Fire and also ensure adequate coverage and response continued within the rest of the City was lacking. This resulted in some confusion, delays, and over tasking of assigned personnel.

   Recommendation: Develop guidance documents and conduct training exercises to ensure DOC roles and responsibilities are known by all assigned DOC staff.

3. Regular incident briefings with the DOC and Metro Zone partners were lacking. This caused multiple phone calls or duplication of efforts on the part of FCC staff who were attempting to keep Metro Zone agencies informed about the Zone’s plan for resource deployment as the week progressed.

   Recommendation: Coordinate at least one and preferably two briefings per day via conference call for all the Metro Zone Fire Departments. This will help to facilitate planning for resource deployment and keep the Metro Zone Fire Chiefs informed on the progress of the incident.
4. The Level 1 DOC located in the “fishbowl” at FCC has been used during large incidents on multiple occasions. While functional for large incident management preparation, experience has demonstrated that once an incident becomes large in size or complexity, it is not practical or possible to appropriately manage from the “fishbowl”. In addition, real-time information transfer to the EOC is less than adequate.

**Recommendation:** Manage all future SDFD DOC activations at the downtown (Fire Station 1) DOC location. The FCC “fishbowl” will no longer be utilized in the future for DOC activities.

5. Computer and display systems in the downtown DOC are not adequate to support large incident management activities due to outdated hardware and software.

**Recommendation:** Fund the purchase of new hardware, software and display systems to ensure the SDFD DOC can adequately serve the needs of the Department.

**Public Utilities Department Operations Center (DOC)**

At 8 p.m., the Public Utilities Department (PUD) began staffing their DOC with two staff members. This ensured that the communication of current utility operations and emergency management was conducted swiftly. However, it was initially challenging to ascertain what was exactly expected of the PUD DOC as the term “EOC activating at level 1, 2, or 3” was not clearly understood and did not translate into expectations at the PUD DOC level.

**Lessons Learned and Recommendations for Change**

1. The PUD maintains numerous resources located on County lands that are City property. For example, pump stations for both water and wastewater might be considered critical resources during a fire. In addition, City reservoirs may be used as firefighting helicopter sources and may need to be evacuated. The ability to communicate concerns effectively with the County EOC was problematic as a result of the City EOC being deactivated the evening of May 13. WebEOC was helpful to a point, but the live interaction normally associated with the activation of the City EOC was not possible do to it being deactivated.

**Recommendation:** Develop a plan so that the PUD DOC smoothly transitions under the County’s EOC when the City EOC is deactivated.

2. Perimeter maps were not available to the PUD DOC which compromised the department’s ability to maintain critical utility services.

**Recommendation:** Ensure that the Public Utilities Department and City OHS have opened communications to streamline the process of transitioning under the County EOC in the event the City EOC is deactivated, but the PUD DOC remains activated.
Technology

Technology has come to play a key role in the management of field and support activities at most emergency incidents. The challenge is ensuring the right technology is applied at the right time and for the right purpose. This requires the availability of staff thoroughly familiar with the capabilities of the technology and how it can positively impact management of the emergency.

Lessons Learned and Recommendations for Change

Geographical Information Systems (GIS)

1. While no power outages were experienced during the Bernardo Fire, during any incident, it is possible that GIS technicians would be temporarily unable to access the ArcGIS application due to a SanGIS power outage and a slowdown of the City network caused by too many users accessing live data streams of new updates.

   **Recommendation:** Develop a Standard Operating Procedure (SOP) to train and instruct GIS technicians regarding potential computer network conditions to ensure continual mapping support. Ensure that any GIS technician is provided the necessary software tools/applications to work in a disconnected environment (no Internet access). Consider the issue of large format USB drives with all necessary geospatial data/shape files to provide GIS support.

2. Several key geospatial elements are collected by forward observers (FOBS) and operations support personnel during a major event. These technicians are utilizing a variety of software applications that are geospatial aware from GPS (Garmin) collection of GPX tracks, GeoPDF applications on tablets (Avenza Maps) and the Next Generation Incident Command System (NICS). These geospatial elements include fire perimeter data, fire spotting, threatened communities, recommendations for evacuation and other key points of interest. The collection of this data needs to be quickly forwarded to GIS support elements to support the overall operation.

   **Recommendation:** Coordinate with GIS and operations support personnel regarding software and the communications of geospatial information to downstream consumers is needed. Adoption of NICS as a geospatial communications and collaborations tool should be discussed at a regional level.

3. Incident management staff must be continually aware of fire progression to actively manage an incident. On an extended attack often the direct visual awareness of an incident can be hampered due to scale, terrain, and geography. Maps, and other tools are used at the incident command post (ICP) are used to provide the incident commander, operations section chief and other staff this awareness.

   Paper maps (Thomas Brothers) were used at the initial attack ICP. These proved to be ineffective tools, and should be the last line of support for mapping. Whiteboards at the backs of command vehicles were filled with organizational drawings, and there was little
other room to sketch or describe for graphical communications. When staff was gathered and a map was needed to communicate, large groups needed to hover around a small paper map or a dim laptop computer.

**Recommendation:** Provide display processing equipment at the ICP to include hardware and tools necessary to provide a large format, bright, clear picture for collaboration should be determined and purchased. Provide command vehicles both paper backup large format topographical or satellite maps and a digital map display solution. Ideally, a “Google Earth-like” solution on a large format touch screen monitor should be run. NICS provides the basis for this type of map display collaboration and markup. Properly paired with the correct hardware either in command vehicles or support vehicles will allow incident managers better awareness.

**Command Control and Communications (3Cs)**

1. The use of the 3C conferencing features remains to be a vital component in coordination of an emergency across stakeholders. The lack of usage in day to day operations, drills, etc. and general unfamiliarity with the system resulted in the use of typical methods of communications (phone, emails, etc.) during the Bernardo Fire.

   **Recommendation:** Provide for regular conferences and drills over the 3C videoconferencing system. Offer participation to other agencies and systems outside of 3C’s. The capability exists to dial in to a 3C’s conference via Cisco Telepresence. Software, training and drills should be extended to all users.

**Automated Vehicle Location (AVL)**

1. The ability to determine the location of units at the scene of a widespread incident is vital for situational awareness, resource assignment and confirmation/allocation. Currently, not all agencies are unified in ensuring that all emergency units are equipped with AVL. Type III engines are typically lesser equipped due to their specialized capability and low daily utilization.

   **Recommendation:** Adopt a regional standard on AVL capabilities to include Type III units and support vehicles (water tenders). Consider extending capability to track additional support vehicles (and staff) utilizing existing GPS technology tracking hardware/services.
During large emergency incidents, an outpouring of support is often expressed by the public and business community. Such was the case with the Bernardo Fire and the subsequent fires in the region. Many wish to donate goods, services or time to assist those impacted by the incident or working to mitigate it. Management of these donation offers is critical to ensure efficient use of resource and proper appreciation for donors.

Lessons Learned and Recommendations for Change

1. Soon after the Bernardo Fire started, SDFD received multiple calls from citizens and businesses offering to donate food, drinks and supplies. This generated several phone calls and emails between the SDFD Logistics Chief, the Citywide Volunteer Coordinator in Human Resources, the Citywide Grants and Donations Program Manager in Corporate Partnerships and Development and the San Diego Fire Rescue Foundation regarding accepting/rejecting donations, how to accept donations, where to store them, staff and volunteer roles, etc.

Recommendation: Develop Standard Operating Procedures for the following scenarios: 1) the City of San Diego as the lead agency; 2) the City of San Diego as a supporting agency; or 3) Qualcomm is designated as a mega-shelter. In addition, the dissemination of information of a regional plan/coordination between the County, City and local non-profit organizations in order to direct callers/donations to the appropriate entities needs to be developed. Post this information on Facebook, Twitter, and the City’s internal and external websites with donation information and phone numbers/website links to other nonprofits (including Foundations that support Fire and Police).

2. City departments do not have a plan in place to coordinate with each other and the San Diego Fire-Rescue Foundation and/or the San Diego Police Foundation. The City has volunteers and the Foundations have volunteers. No notification and request process exists. No list of needs for the first responders exists. Supplies such as travel size Gold Bond powder, travel size deodorant, Q-tips, saline nasal spray, gallon zip lock bags (to assemble the products per person), travel toothbrush / toothpaste, baby wipes, bottles of water, heavy socks could be provided. No location has been identified to store these items.

Recommendation: Schedule a meeting between the Citywide Grants and Donations Program Manager, Corporate Partnerships & Development Director, San Diego Fire-Rescue Foundation Executive Director and the San Diego Police Foundation Executive Director with SDFD and SDPD management to discuss and develop a plan to be better prepared in advance of the next large scale emergency.
Citizen Preparedness and Outreach

Lessons Learned and Recommendations for Change

1. Preparedness of the community allowed first responders to assist those in the most dire need of services or resources first. Brush management practices, building material selection familiarity, fire awareness, the ability to stay informed and be prepared to quickly evacuate with essential items are all elements of individual preparedness.

Recommendation: Continue to provide comprehensive community outreach and education programs to raise public awareness of the importance of personal and family preparedness, thereby affording first responders the opportunity to focus on assisting those in dire need first. The Ready, Set, Go Program is a comprehensive community outreach and preparedness program designed to raise public awareness of what steps should be taken in advance and during a wildfire that may threaten their lives, homes and businesses.
INCIDENT EMERGENCY MEDICAL SERVICES

Incident Emergency Medical Services and the various levels of coverage were initially provided through medical resources assigned on the first alarm, and later by additional ambulances that were placed in close proximity to active fire suppression activities. The paramedic unit assigned on the 1st alarm vegetation fire response remained mobile and provided coverage in strategic locations throughout the first few hours of the fire. Eventually additional ambulances were assigned including Basic Life Support units to staff the Medical Unit and mobile aid stations. The management of the Medical Unit was subsequently transferred to the incoming Incident Management Team (IMT) which developed a basic Medical Plan.

What Worked Well

1. An Advanced Life Support (ALS) transport unit was initially assigned with the first alarm and remained available throughout the Initial Attack (IA) phase. The unit was mobile and moved to strategic locations for proximity to where fire suppression activities were more prevalent.

2. Basic Life Support (BLS) units were subsequently dispatched for static medical coverage at strategic locations and at base camp for Medical Unit staffing. BLS units were utilized in order to maintain ALS coverage during high call volume periods in the city and for preparation of draw down levels that would prevent first responder units from being sent to routine medical emergencies.

3. A Medical Unit Leader from the IMT developed the Medical Plan and coordinated the necessary logistical needs.

4. The positive relationship between Rural/Metro and San Diego Fire-Rescue was central to the coordination of medical supply, EMS personnel staffing and fleet (ambulance) deployment.

5. Good communication with Evacuation Centers to anticipate any medical needs at those sites.

Lessons Learned and Recommendations for Change

1. There was no immediate need for personal care and hygiene supplies (hygiene, moleskin, eyewash, aspirin, etc.) during the first operational period of the incident. However, based on experience from the 2003 & 2007 firestorms, these materials will always be required on any incident lasting more than one operational period.

   Recommendation: Develop a list of personal care and hygiene supplies. Stock sufficient non-perishable items and ensure that perishables can be ordered and delivered in a more rapid fashion.
2. Dedicated medical teams including additional ambulances would have been needed in several of the geographic divisions had there been firefighter injuries or evacuees requiring medical attention.

Recommendation: Prepare and plan for numerous medical teams and transport units being available and strategically placed to better respond if needed for incidents spread out over large geographic areas.

3. A more comprehensive Medical Plan could have been developed and utilizing EMS staff members within the Medical Unit would have provided training and experience for future responses.

Recommendation: Provide Medical Unit Leader training to EMS Staff. Few members on the Department have Medical Unit Leader training, and will most likely be committed in other roles. Consider training select staff to assume this role. Implement a standard concerning earlier rehabilitation of firefighters on extended incidents.
TRAINING AND EXERCISE

Lessons Learned and Recommendations for Change

1. The SDFD’s ability to concurrently staff some positions on the Incident Management Team, Department Operations Center, Emergency Operations Center and critical command positions in the field, as well as the City’s difficulty in staffing the EOC, is hampered by a lack of trained and qualified (certified) personnel to fill all positions.

   **Recommendation:** Train additional personnel to fill positions on the Incident Management Team, Department Operations Center, Emergency Operations Center and critical command positions in the field to a minimum three-deep roster to enhance command and control during large-scale incidents.

2. The SDFD’s investments in Leadership and Wildland Firefighting training played an important role in improving its overall performance during this fire as compared to the 2003 Cedar Fire.

   **Recommendation:** Continue investing in Leadership and Wildland Firefighting training as this is critical for the growth and consistency of high level performance in areas of leadership and operational readiness.

3. With the advent of the California Incident Command Certification System (CICCS), there is a growing expectation and requirement that qualified SDFD Division/Group Supervisors be provided to incidents inside the City of San Diego. A lack of qualified SDFD Division/Group Supervisors resulted in SDFD’s inability to provide relief for personnel staffing these key positions. Instead, other cooperating agencies were assigned to fill these positions after the first operational period and through official containment of the fire.

   **Recommendation:** Train additional uniformed personnel at the ranks of battalion chief and captain as Division/Group Supervisors. Consider the completion of required coursework as a minimum qualification for promotion to the rank of Battalion Chief. Provide this training periodically as needed. The Department should periodically provide for this training.

4. Large complex multi-operational period emergency incidents are not routine and do not occur on a regular basis. Due to multiple promotions and retirements over even short periods of time, a lack of institutional knowledge and experience can occur affecting the successful outcome of an emergency incident. Some of the Fire-Rescue Department command staff now responsible for the management of large complex incidents may lack the skills necessary to manage large complex emergency incidents.

   **Recommendation:** Provide table top and full scale exercises focusing on large complex multi-operational period emergency incidents to ensure that skill levels are maintained.
and have not eroded and/or have been developed in advance of future emergency incidents.
SAFETY

No fatalities or significant injuries occurred during this fast-moving wind driven fire. This is a testament to the professionalism and dedication of the First Responders. The Bernardo Fire had the potential of heavy property loss, as well as, injury or death. Safety was a priority for the leadership of this fire and was executed very well.

Safety Officer Staffing

A qualified Line Safety Officer from CAL FIRE was assigned to the Bernardo Fire on May 13, 2014 at 5 p.m. A San Diego Fire-Rescue Captain with Safety Officer callback responsibilities was assigned as a Line Safety Officer Trainee to receive mentorship and assist in the span of control.

A completed ICS-215A was completed for each operational period as well as a Safety Message placed in the IAP and Safety Briefings conducted during the start of each operational period.

Injuries / Accidents

During the first operational period of the fire, there were only three (3) minor firefighter injuries. Dehydration adversely affected two firefighters while engaged in initial attack operations and one bulldozer operator reported a foot injury. None of the firefighters were transported and all returned to work.

Lessons Learned and Recommendations for Change

1. A fire of this size and complexity requires the assignment of multiple, fully trained and qualified safety officers to effectively monitor activities, identify safety issues and correct deficiencies.

   Recommendation: Provide and make a priority the assignment of California Incident Command Certification System (CICCS) or National Wildfire Coordinating Group (NWCG) qualified Safety Officers on future large scale wildland fires. Qualified Safety Officers would be able to determine and recommend to the Incident Commander(s) the number of safety officers required to manage the entire incident safety program. Qualified Safety Officers would be responsible for coordinating the activities of all Department safety officers assigned to the incident and coordinating with the Unified Command Safety Officer, if one has been assigned.

2. The Department lacks a sufficient number of fully trained and qualified safety officers to handle anything more that routine day-to-day operations. This deficiency compromises the safety of personnel engaged in large-scale incidents by resulting in the need to assign lesser qualified, or in some cases unqualified personnel, to the safety officer function.
Recommendation: Develop a plan and provide funding to increase the number of fully trained and qualified safety officers to ensure adequate numbers are available to provide this critical focus on safety concerns at large-scale incidents.

3. During the initial attack phase of the fire, heavy construction traffic was encountered as fire crews responded to the incident. Throughout the incident, fast moving construction areas had to be pointed out as locations of concern for apparatus traveling to their assignments. Also, within hours of the incident, there was competing traffic with non-safety personnel and residences affecting ingress and egress of the fire area. Many were evacuated residents that wanted a better vantage point of the fire, but put themselves in harm’s way and delayed crews responding to the fire. Many were in golf carts and POV (Privately Owned Vehicles).

Recommendation: Improve the coordination between the fire and law enforcement Unified Incident Command concerning traffic control throughout future incidents to ensure the safety of both civilian and safety personnel.
ACKNOWLEDGEMENTS

We wish to thank and acknowledge all of the dedicated employees of the San Diego Fire-Rescue Department, San Diego Police Department, Office of Homeland Security, and the City departments who worked tirelessly to provide exceptional service throughout the fire disaster to citizens of San Diego.
## ATTACHMENT A

### SUMMARY OF RECOMMENDATIONS

<table>
<thead>
<tr>
<th>FIRE APPARATUS/EQUIPMENT INVENTORY AND LOGISTICS</th>
<th>COMPLETED</th>
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<tbody>
<tr>
<td>1. Restrict access to ready reserve apparatus by storing them in a secure facility or fire stations. This will be started once Fleet Services heavy apparatus repair moves from the Kearny Villa facility.</td>
<td>✓</td>
</tr>
<tr>
<td>2. Outfit five Type I engines for immediate deployment during high risk wildland fire days. The engines would have all radios, pagers, MDC, EMS equipment (short narcotics) on board. Storage could possibly be within the Repair Facility. After hour’s access could either be LOGS callback or ERO.</td>
<td>✓</td>
</tr>
<tr>
<td>3. Direct the assigned IMT Logistics Sections to manage all incident logistics needs and have all SDFD Logistics Division staff return to provide normal Fire Operations Division support. The City Incident Commander in coordination with the City DOC Director will have the authority to make this decision.</td>
<td>✓</td>
</tr>
<tr>
<td>4. Ensure that during the first operational period of a City of San Diego incident, the SDFD is responsible for providing basic logistics support (meals, water, fuel, etc.). After the first operational period of the incident, the assigned IMT Logistics Sections will manage all incident logistics needs and all SDFD Logistics Division staff return to provide normal Fire Operations Division support. The SDFD will clearly identify the level of logistics support provided to other agencies and at no time will the SDFD logistic support fall below a level to adequately support the City of San Diego Fire Operations Division.</td>
<td>✓</td>
</tr>
<tr>
<td>5. Purchase and make available additional radios and batteries to meet the needs of large-scale incidents.</td>
<td>✓</td>
</tr>
<tr>
<td>6. Purchase and make available additional medical equipment to meet the needs of a large-scale incident.</td>
<td>✓</td>
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<tr>
<td>7. Provide training to SDFD staff to ensure that incident related paperwork is completed on time and correctly.</td>
<td>✓</td>
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<tr>
<td>8. Direct Division/Group Supervisors to identify supply Drop Points and Staging Areas within their geographic divisions and/or functional groups.</td>
<td>✓</td>
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<tr>
<td>9. Develop a SDFD communiqué providing direction on the disposition of destroyed hose is to be disseminated and reviewed by all firefighters. Captains will be held accountable for ensuring that damaged hose or other equipment is retained per Department</td>
<td>✓</td>
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<tr>
<td>SUMMARY OF RECOMMENDATIONS</td>
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<td>direction.</td>
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<tr>
<td>10. Direct engine crews to assume the 100-series identity of the vacant fire stations they backfill. The 900-series ID numbers are to be utilized only during surge capacity events, where they would not be providing the backfill of a vacant fire station.</td>
<td>✓</td>
</tr>
<tr>
<td>11. Consider the callback and usage of the Community Emergency Response Team (CERT) volunteers early into a large scale incident. During the 2007 Guejito/Witch Fire, this proved to be a substantial benefit to the provision of logistical services. CERT volunteers can be available to serve as runners, drivers, and many other support functions.</td>
<td>✓</td>
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<tr>
<th>MASS NOTIFICATION SYSTEMS FOR EVACUATIONS</th>
<th>YES</th>
<th>NO</th>
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<tr>
<td>12. Identify a way to track how many citizens actually evacuate with or without an AlertSanDiego notification.</td>
<td>✓</td>
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<tr>
<td>13. Continue emergency training to maximize performance of the AlertSanDiego notification systems and public outreach. The Mayor’s Office and Council Districts should work together to provide outreach on testing to the public which should be accomplished quarterly to ensure the effectiveness and accuracy of the mass notification system and the information contained in the database. Continue public outreach efforts to notify the residents of the City of San Diego they currently need to self-register their cell phones and emails on both the City’s and the County’s self-registration page if they desire to be contacted via that medium.</td>
<td>✓</td>
<td></td>
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<tr>
<td>14. Review the AlertSanDiego system telephone database to ensure that all City Libraries and City facility phone numbers are correctly entered into the alert system.</td>
<td>✓</td>
<td></td>
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<tr>
<td>15. Train SDPD officers and supervisors on the procedures relating to the use of Alert San Diego. Revisit Alert San Diego protocols and the scale/scope of evacuations. Coordinate with SDFD at the Unified ICP to discuss and plan large scale evacuations.</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>16. Request a San Diego City School Police Liaison to come to the Unified Command to provide intelligence regarding school evacuation plans.</td>
<td>✓</td>
<td></td>
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<tr>
<td>17. Ensure that the Unified Commanders designate the evacuation site to avoid confusion. This information can then be disseminated through the various branches (law enforcement, fire, etc.) and through the DOC’s,EOC’s and JIC/PIOs.</td>
<td>✓</td>
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<table>
<thead>
<tr>
<th>AIR OPERATIONS</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>18. Increase the number of City fire/rescue medium-lift helicopters to three (3) to insure SDFD’s ability to provide aerial fire suppression and rescue. Had either helicopter experienced a mechanical or</td>
<td>✓</td>
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### SUMMARY OF RECOMMENDATIONS

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<tr>
<td>unscheduled maintenance problem, there would have been limited aerial fire suppression assets available. Having three (3) City firefighting helicopters available would also increase aerial firefighting capabilities if more than one wildland fire is burning within the City of San Diego.</td>
<td></td>
</tr>
<tr>
<td>19. Establish a training program between SDPD and SDFD that address the assignment of a Helicopter Coordinator (HLCO) on a fire incident. Schedule periodic training between the departments and incorporate HLCO training into regular air operations training.</td>
<td>✓</td>
</tr>
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</table>

#### PREVENTION

| 20. Develop a comprehensive community outreach and education program to raise public awareness of wildfire and promote fire safety and prevention to create Fire Adapted Communities (FAC). Consider the development of Community Wildfire Protection Plans (CWPP). | ✓         |
| 21. Consolidate and coordinate brush management efforts of appropriate City departments. | ✓         |
| 22. Update current mapping data to ensure accuracy of high hazard/risk areas. This should be conducted on an annual and regional basis. | ✓         |
| 23. Request funding to hire additional brush management inspectors. A total of 22 positions are required to conduct annual inspections of the 42,505 private parcels in the wildland/urban interface within the City of San Diego. The Department currently has 6 positions dedicated to these inspections. To meet the annual inspection requirement, 16 additional positions would need to be budgeted. If the inspection frequency was increased to a two-year cycle, the staffing level could be cut by 50%. Supervisory and support staff would also be necessary and are not reflected in this staffing figure. | ✓         |

#### INCIDENT MANAGEMENT

<p>| 24. Clearly identify on a map and include as a “layer” on the MDC the Mutual Threat Zone areas around the City and pre-determine the radio system to be used in these areas. | ✓         |
| 25. Ensure that mountain top repeater systems are fully operational if the VHF-FM radio system is to be used within a MTZ. Multiple tactical channels need to be immediately available, if the VHF-FM radio system is to be used within a MTZ in order to allow a safe and effective radio span-of-control. | ✓         |
| 26. Consider the release of resources back to the City if in the future a situation develops that causes the ordering of City resources outside the established single ordering point necessary, on a City of San Diego fire, once the threat has passed so that staffing levels will improve and so that accountability for incident resources is not | ✓         |</p>
<table>
<thead>
<tr>
<th>SUMMARY OF RECOMMENDATIONS</th>
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<tr>
<td>compromised.</td>
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<tr>
<td>27. Ensure that resources reassigned to new incidents from the initial incident know that they have been ordered under the CFAA. Contact their home units so that they are made aware and so that reimbursement is possible.</td>
<td>✓</td>
</tr>
<tr>
<td>28. Provide mapping technology outside of what is provided by the MDC so that all regional fire agency DPA’s are clearly depicted using the address and/or GPS location of the fire start.</td>
<td>✓</td>
</tr>
<tr>
<td>29. Identify City GIS trained technicians and specialists and put together joint training opportunities, a roster and notification process to support future incident operations. Purchase additional plotters and computer equipment to support GIS map production.</td>
<td>✓</td>
</tr>
<tr>
<td>30. Train additional Department personnel to fill all IMT, DOC, and EOC positions to a minimum three-deep roster. Consideration should be given to using non-uniformed staff for incident support positions to free uniformed staff for key skills or fire line assignments.</td>
<td>✓</td>
</tr>
<tr>
<td>31. Publish and exercise the extended attack crew rotation and work/rest cycle plan for incidents in the City. This will enhance efficiency, provide for crew rest, and facilitate resource tracking for accountability and financial documentation.</td>
<td>✓</td>
</tr>
<tr>
<td>32. Consider having two (2) operations support staff members respond to all future multiple alarm and large scale incidents to provide operations support.</td>
<td>✓</td>
</tr>
<tr>
<td>33. Ensure that the participating members of the Unified Command respond to and co-locate at one ICP at the start of the incident and clearly understand their roles within UC. Ensure that IAP’s are reviewed by all Unified Incident Commanders in advance of being finalized in order to avoid any errors being published.</td>
<td>✓</td>
</tr>
<tr>
<td>34. Utilize large staging areas close to, but separate from the Unified Incident Command Post whenever possible. Capacity to handle large numbers police vehicles and personnel must be considered. Consider identifying large open locations for use as Evacuation Coordination Centers or Staging Areas in advance of future major incidents.</td>
<td>✓</td>
</tr>
<tr>
<td>35. Ensure that only one ICP is being utilized. One of the benefits may be that angled drafting tables, large-scale maps, and overlays would be made available by one of the other agencies in UC. Purchase and make available the drafting tables, large scale maps, printers and plotters and install in the CIMU vehicles. Stock map books in the CIMU vehicles for supervisors and field operators.</td>
<td>✓</td>
</tr>
<tr>
<td>36. Train command staff and field supervisors on the availability of different CIMU resources (i.e., fire personal protective equipment</td>
<td>✓</td>
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</table>
## SUMMARY OF RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Recommendation</th>
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<tbody>
<tr>
<td>(PPE), command vehicles and trailers. Provide for early notification or requests for logistical support during large-scale incidents to avoid unnecessary delays.</td>
<td></td>
</tr>
<tr>
<td>37. Stock phone charging cords and power converters/power sources in the logistics trailers for SDPD officer check-out.</td>
<td>✓</td>
</tr>
<tr>
<td>38. Purchase additional portable radio batteries and chargers so that the number available in the CIMU logistics vehicles has been increased.</td>
<td>✓</td>
</tr>
<tr>
<td><strong>OPERATIONS</strong></td>
<td><strong>YES</strong></td>
</tr>
<tr>
<td>39. Continue to utilize FOBS on incidents in the future and continue to utilize Sheriff’s Department ASTREA and San Diego Police Department ABLE helicopters when aerial reconnaissance is needed.</td>
<td>✓</td>
</tr>
<tr>
<td>40. Continue to train and exercise emergency procedures with SDFD, SDPD, EOC and others.</td>
<td>✓</td>
</tr>
<tr>
<td>41. Consider including redlines and foam pro systems in future fire engine specifications.</td>
<td>✓</td>
</tr>
<tr>
<td>42. Continue to train all firefighters in both “bump and run” and “anchor and hold” tactics. Consider assigning water tenders to each strike team and task force.</td>
<td>✓</td>
</tr>
<tr>
<td>43. Issue each individual SDPD officer their own vegetation fire PPE so that they are equipped with the necessary safety equipment upon arrival at a vegetation fire. The estimated cost for the PPE is $450,000 (Patrol only).</td>
<td>✓</td>
</tr>
<tr>
<td>44. The designated Law Branch Director, SDPD Operations Officer or Traffic Coordinator should consider coordinating with a motors sergeant or lieutenant for appropriate relief.</td>
<td>✓</td>
</tr>
<tr>
<td>45. Designate an SDPD Traffic Coordinator to the Unified Command to track all road closures. This will provide a central point of coordination for all city wide road closures. This coordinator would relay information to the DOC and PIO to maintain situational awareness. If the JIC were open, the SDPD PIO could add relevant City updates to the county media updates.</td>
<td>✓</td>
</tr>
<tr>
<td>46. SDPD Fiscal Management should create a form for personnel who are assigned to large scale critical incidents. This document should gather the appropriate tasks, hours and resources used for that incident. This would assist the incident management team and fiscal team with tracking costs and reimbursement if the incident qualifies for disaster relief. Assign fiscal personnel to the ICP to coordinate the gathering of the information and/or assign fiscal analyst to the DOC and each Incident Command would designate someone responsible for tracking information and for coordinating</td>
<td>✓</td>
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## Summary of Recommendations

<table>
<thead>
<tr>
<th>Public Information and Media Management</th>
<th>Completed</th>
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<td>with the Analyst at the DOC.</td>
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### 47. Ensure that a trained City PIO reports to the JIC and coordinates with the City EOC whenever a large incident occurs. Training and exercising the use of the JIC with City PIOs and Emergency Operations Center leaders should obviate this shortfall in the future. The QA and the City should coordinate so information on the establishment of a Joint Information Center is shared and representation is provided.  

### 48. Ensure that the City’s Director of Communications serves as the lead PIO and coordinates all PIO needs, assignments and activities with the PIOs assigned to the IMT (including JIC liaison) to maintain adequate coverage and consistent messages are provided. Train additional personnel as PIOs to be assigned for use during large-scale incidents where a greater PIO force is needed.

### 49. Provide additional information that would improve service level at shelter and evacuation sites include:  
- A general map of the site including information is provided  
- List of repatriations as they occur  
- A list of Frequently Asked Questions  
- Announcements and Updates  
- Maps

### 50. Ensure that the Department’s Media Services Manager serves as the lead Public Information Officer for the IMT and coordinates all PIO assignments and activities with the PIOs assigned to the IMT to ensure adequate coverage and a consistent message. Train additional personnel as PIOs to be assigned for use during large-scale incidents where a greater PIO force is needed.

### 51. Ensure that prior to the ICP releasing incident information to the media, this information is shared with the EOC’s in advance so that any questions the EOC’s may have will have been addressed before making public.

### 52. Meet with all stakeholders so that consensus is reached on the social media platform to be utilized during future emergency incidents. Information provided for this platform must be accurate and not in conflict with what is being released through other sources.

### 53. Schedule personnel trained as PIOs to take into account the round the clock demand.

### 54. Assign at least two laptop computers to the Media Services Office, with Wi-Fi and 3G/4G connectivity, Cintrix card and VPN accounts. A portable printer will allow for distribution of materials.
### SUMMARY OF RECOMMENDATIONS

<table>
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<th>Recommendation</th>
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<tr>
<td>55. Ensure that Fire-Rescue Headquarters staff and 2-1-1 receive PIO updates and fact sheets during large-scale incidents. Establish an email distribution list incorporating 2-1-1 and any Headquarters personnel who may be assigned to answer phone calls from the public.</td>
<td>✓</td>
</tr>
<tr>
<td>56. Add a procedure EOC PIO checklist to ensure information flows to 2-1-1. Information needs to be consistently shared with the Police Department, Fire Dispatch, and 2-1-1 to ensure accurate and timely information is provided to the public. Assign an information liaison to the 2-1-1 headquarters to serve as support to the leadership, staff and the agency’s incident management team to ensure a seamless flow of critical and verified information. Communicate with the public (i.e. Alert SD, Press Releases and other communications), ahead of time to 2-1-1 to ensure they are ready for the related call volume created by such messaging. Provide 2-1-1 access to all City “official” information (websites, etc.) to ensure that information given out by 2-1-1 is verified. Include 2-1-1 staff in City drills and exercises. Develop an MOU between the City and 2-1-1 to ensure that protocols and a funding mechanism is established.</td>
<td>✓</td>
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#### COMMUNICATIONS

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<tr>
<th>Recommendation</th>
<th>YES</th>
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<tbody>
<tr>
<td>57. Ensure that all fire line supervisors are closely monitoring and communicating on the assigned VHF radio command and tactical channels on incidents where units are operating on the VHF radio system. However, it is appropriate and safe to communicate with units assigned within a strike team or structure protection group on a discreet 800 MHz radio channel. It is imperative that fireline supervisors have communications with the firefighters assigned to them. Units’ not having effective communications among each other is a significant safety concern.</td>
<td>✓</td>
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#### DOC AND EOC OPERATIONS

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<tr>
<th>Recommendation</th>
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<tr>
<td>58. Identify and fund the technology (ICP Display Processing) necessary to assist in the management of a large incident.</td>
<td>✓</td>
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</tr>
<tr>
<td>59. Consider updating software and patches on all EOC workstation computers on a more frequent basis. OHS regularly coordinates with the Department of Information Technology to obtain scheduled updates to EOC computers. OHS will examine if greater</td>
<td>✓</td>
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### SUMMARY OF RECOMMENDATIONS

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<tr>
<td>60. Continue to update the EOC roster on a regular basis. Per a City memo dated January 24, 2014 from the OHS Program Manager to Mayoral Department Directors, OHS will conduct routine EOC roster updates at least quarterly. As of May 27, 2014 (the last quarterly update), the EOC roster was approximately 92% filled.</td>
<td>✓</td>
</tr>
<tr>
<td>61. Continue to support and utilize EOC liaison positions in actual EOC activations and during all relevant EOC training events and exercises. EOC liaison practices should also be formalized in appropriate written procedures and guides (e.g. EOC Manuals, WebEOC templates, and EOC position checklists).</td>
<td>✓</td>
</tr>
<tr>
<td>62. Coordinate with County Office of Emergency Services (OES) and other appropriate stakeholders to obtain timelier, accurate, and comprehensive information regarding region-wide evacuation operations and care and shelter operations. Potential supporting systems and capabilities include WebEOC status boards, Geographic Information System products, and Common Operating Picture applications.</td>
<td>✓</td>
</tr>
<tr>
<td>63. Examine methods and applications to increase situational awareness within the EOC. OHS staff will examine the utilization of NICS during wildland fire incidents in the EOC, and assess if NICS could provide increased situational awareness to the EOC staff. If improperly used, though, the NICS solution could potentially compromise the EOC’s traditional role as a Multi-Agency Coordination System in support of the Incident Command Posts through the Department Operations Centers. Routine and proper EOC training will help ensure that NICS or a similar EOC solution does not displace the City’s Department Operations Centers by creating inappropriate and direct coordination between the EOC and the Incident Command Posts.</td>
<td>✓</td>
</tr>
<tr>
<td>64. Conduct a comprehensive assessment of necessary EOC computer characteristics and configurations, and consider modifications as appropriate to increase utility and ease of use for EOC staff. OHS staff will assess the feasibility and advisability of modifying various EOC computer configurations. In instances where regional or Citywide standardization requirements may prevent certain modifications, OHS will increase EOC staff training and/or develop improved operating guides.</td>
<td>✓</td>
</tr>
<tr>
<td>65. Routinely inform EOC staff and other staff as appropriate on the EOC’s current activation level, including the description of that level. This information should be routinely noted/briefed in the Incident Brief and in all subsequent EOC Situation Reports, and prominently posted in the EOC for all staff and observers to see.</td>
<td>✓</td>
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</table>
### SUMMARY OF RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Number</th>
<th>Recommendation</th>
<th>Completed</th>
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<tbody>
<tr>
<td>66.</td>
<td>Identify and train everyone filling a role in the SDFD DOC and conduct regular drills to ensure vital tasks are completed and staff members are well informed. Position checklists will also be developed to ensure assigned personnel are familiar with their roles and expectations.</td>
<td>✔️</td>
</tr>
<tr>
<td>67.</td>
<td>Develop guidance documents and conduct training exercises to ensure DOC roles and responsibilities are known by all assigned DOC staff.</td>
<td>✔️</td>
</tr>
<tr>
<td>68.</td>
<td>Coordinate at least one and preferably two briefings per day via conference call for all the Metro Zone Fire Departments. This will help to facilitate planning for resource deployment and keep the Metro Zone Fire Chiefs informed on the progress of the incident.</td>
<td>✔️</td>
</tr>
<tr>
<td>69.</td>
<td>Manage all future SDFD DOC activations at the downtown (Fire Station 1) DOC location. The FCC “fishbowl” will no longer be utilized in the future for DOC activities.</td>
<td>✔️</td>
</tr>
<tr>
<td>70.</td>
<td>Fund the purchase of new hardware, software and display systems to ensure the SDFD DOC can adequately serve the needs of the Department.</td>
<td>✔️</td>
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<tr>
<td>71.</td>
<td>Develop a plan so that the PUD DOC smoothly transitions under the County’s EOC when the City EOC is deactivated.</td>
<td>✔️</td>
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<tr>
<td>72.</td>
<td>Ensure that the Public Utilities Department and City OHS have opened communications to streamline the process of transitioning under the County EOC in the event the City EOC is deactivated, but the PUD DOC remains activated.</td>
<td>✔️</td>
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### TECHNOLOGY

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<thead>
<tr>
<th>Recommendation</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>73. Develop a Standard Operating Procedure (SOP) to train and instruct GIS technicians regarding potential computer network conditions to ensure continual mapping support. Ensure that any GIS technician is provided the necessary software tools/applications to work in a disconnected environment (no Internet access). Consider the issue of large format USB drives with all necessary geospatial data/shape files to provide GIS support.</td>
<td>✔️</td>
<td></td>
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<tr>
<td>74. Coordinate with GIS and operations support personnel regarding software and the communications of geospatial information to downstream consumers is needed. Adoption of NICS as a geospatial communications and collaborations tool should be discussed at a regional level.</td>
<td>✔️</td>
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<tr>
<td>75. Provide display processing equipment at the ICP to include hardware and tools necessary to provide a large format, bright, clear picture for collaboration should be determined and purchased. Provide command vehicles both paper backup large format</td>
<td>✔️</td>
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<tr>
<td>SUMMARY OF RECOMMENDATIONS</td>
<td>COMPLETED</td>
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<tr>
<td>Topographical or satellite maps and a digital map display solution. Ideally, a “Google Earth-like” solution on a large format touch screen monitor should be run. NICS provides the basis for this type of map display collaboration and markup. Properly paired with the correct hardware either in command vehicles or support vehicles will allow incident managers better awareness.</td>
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<td>76. Provide for regular conferences and drills over the 3C videoconferencing system. Offer participation to other agencies and systems outside of 3C’s. The capability exists to dial in to a 3C’s conference via Cisco Telepresence. Software, training and drills should be extended to all users.</td>
<td>✓</td>
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<tr>
<td>77. Adopt a regional standard on AVL capabilities to include Type III units and support vehicles (water tenders). Consider extending capability to track additional support vehicles (and staff) utilizing existing GPS technology tracking hardware/services.</td>
<td>✓</td>
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<tr>
<td>78. Develop Standard Operating Procedures for the following scenarios: 1) the City of San Diego as the lead agency, 2) the City of San Diego as a supporting agency; or 3) Qualcomm is designated as a mega-shelter. In addition, the dissemination of information of a regional plan/coordination between the County, City and local non-profit organizations in order to direct callers/donations to the appropriate entities needs to be developed. Post this information on Facebook, Twitter, and the City’s internal and external websites with donation information and phone numbers/website links to other nonprofits (including Foundations that support Fire and Police).</td>
<td>✓</td>
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<tr>
<td>79. Schedule a meeting between the Citywide Grants and Donations Program Manager, Corporate Partnerships &amp; Development Director, San Diego Fire-Rescue Foundation Executive Director and the San Diego Police Foundation Executive Director with SDFD and SDPD management to discuss and develop a plan to be better prepared in advance of the next large scale emergency.</td>
<td>✓</td>
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<tr>
<td>80. Continue to provide comprehensive community outreach and education programs to raise public awareness of the importance of personal and family preparedness, thereby affording first responders the opportunity to focus on assisting those in dire need first. The Ready, Set, Go Program is a comprehensive community outreach and preparedness program designed to raise public awareness of what steps should be taken in advance and during a wildfire that may threaten their lives, homes and businesses.</td>
<td>✓</td>
<td></td>
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### Summary of Recommendations

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Completed</th>
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<tbody>
<tr>
<td><strong>Incident Emergency Medical Services</strong></td>
<td></td>
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<tr>
<td>81. Develop a list of personal care and hygiene supplies for use by emergency responders. Stock sufficient non-perishable items and ensure that perishables can be ordered and delivered in a more rapid fashion.</td>
<td>✓</td>
</tr>
<tr>
<td>82. Prepare and plan for numerous medical teams and transport units being available and strategically placed to better respond if needed for incidents spread out over large geographic areas.</td>
<td>✓</td>
</tr>
<tr>
<td>83. Provide Medical Unit Leader training to EMS Staff. Few members on the Department have Medical Unit Leader training, and will most likely be committed in other roles. Consider training select staff to assume this role. Implement a standard concerning earlier rehabilitation of firefighters on extended incidents.</td>
<td>✓</td>
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<tr>
<td><strong>Training and Exercise</strong></td>
<td></td>
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<tr>
<td>84. Train additional personnel to fill positions on the Incident Management Team, Department Operations Center, Emergency Operations Center and critical command positions in the field to a minimum three-deep roster to enhance command and control during large-scale incidents.</td>
<td>✓</td>
</tr>
<tr>
<td>85. Continue investing in Leadership and Wildland Firefighting training as this is critical for the growth and consistency of high level performance in areas of leadership and operational readiness.</td>
<td>✓</td>
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<tr>
<td>86. Train additional uniformed personnel at the ranks of battalion chief and captain as Division/Group Supervisors. Consider the completion of required coursework as a minimum qualification for promotion to the rank of Battalion Chief. Provide this training periodically as needed. The Department should periodically provide for this training.</td>
<td>✓</td>
</tr>
<tr>
<td>87. Provide table top and full scale exercises focusing on large complex multi-operational period emergency incidents to ensure that skill levels are maintained and have not eroded and/or have been developed in advance of future emergency incidents.</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td></td>
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<tr>
<td>88. Provide and make a priority the assignment of California Incident Command Certification System (CICCS) or National Wildfire Coordinating Group (NWCG) qualified Safety Officers on future large scale wildland fires. Qualified Safety Officers would be able to determine and recommend to the Incident Commander(s) the number of safety officers required to manage the entire incident safety program. Qualified Safety Officers would be responsible for coordinating the activities of all Department safety officers assigned to the incident and coordinating with the Unified Command.</td>
<td>✓</td>
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</table>
### SUMMARY OF RECOMMENDATIONS

<table>
<thead>
<tr>
<th>Command Safety Officer, if one has been assigned.</th>
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<tbody>
<tr>
<td>89. Develop a plan and provide funding to increase the number of fully trained and qualified safety officers to ensure adequate numbers are available to provide this critical focus on safety concerns at large-scale incidents.</td>
<td>✓</td>
</tr>
<tr>
<td>90. Improve the coordination between the fire and law enforcement Unified Incident Command concerning traffic control throughout future incidents to ensure the safety of both civilian and safety personnel.</td>
<td>✓</td>
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</table>
ATTACHMENT C

LIST OF ACRONYMS USED

AAR – After Action Report
AHIMT – All-Hazards Incident Management Team
CAL FIRE (formerly CDF) – California Department of Forestry and Fire Protection
CERT – Community Emergency Response Team
CFAA – California Fire Assistance Agreement
CICCS – California Incident Command Certification System
CAPS – Community Access Phone System
DOC – Department Operations Center
DPA – Direct Protection Area
EAS – Emergency Alert System
EMS – Emergency Medical Service
EOC – Emergency Operations Center
ERO – Emergency Response Officer
FCC – Fire Communications Center
FOBS – Field Observers
GIS – Geographical Information Systems
HLCO – Helicopter Coordinator
HQ - Headquarters
JIC – Joint Information Center
IAP – Incident Action Plan
ICP – Incident Command Post
ICS – Incident Command System
IMT – Incident Management Team
LMMA – Local Mutual Aid Agreement
MDC – Mobile Data Computer
MTZ – Mutual Threat Zone

NICS - Next Generation Incident Command System

NIMS – National Incident Management System

NWCG – National Wildfire Coordinating Group

OA – Operational Area

OCA – Out-of-Class Assignment

OHS – Office of Homeland Security

OT - Overtime

“P” Card – Procurement Card

PIO – Public Information Officer

PPE - Personal Protective Equipment

RCS – Regional Communications System

RRE – Ready Reserve Engine

RR – Ready Reserve

RSF – Rancho Santa Fe Fire Protection District

SDFD – San Diego Fire-Rescue Department

SDPD – San Diego Police Department

SDSD – San Diego Sheriff’s Department

SDUA – San Diego Urban Area

SOP – Standard Operating Procedure

USFS – US Forest Service

WUI – Wildland Urban Interface