

# APPENDIX M

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Fire Services Technical Report

**Fire Services Technical Report**  
**CITY OF HUNTINGTON BEACH, CALIFORNIA**

**DRAFT FINAL REPORT**



**February 2017**

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# **1. INTRODUCTION AND EXECUTIVE SUMMARY**

In December 2013, the Matrix Consulting Group began a study of the Huntington Beach Fire Department (HBFD) to provide recommendations for operations and staffing decisions. Introductory meetings, interviews, data collection, analysis, and review of interim deliverables occurred between December 2013 and November 2014. This project is part of the City's General Plan update, and the report is focused on evaluating the current service level, determining whether the current resources in the HBFD are sufficient to provide an effective level of service to the community, and projecting the resources that will be needed in the future. This report provides information regarding the HBFD's current organization, workload, staffing, and resources to effectively provide fire services to the community.

The Huntington Beach Fire Department provides a wide range of services for approximately 194,708 residents (2012 US Census), covering 28 square miles. The population of Huntington Beach has remained relatively stable over the last 10 years. To provide fire, marine safety and emergency medical services in Huntington Beach, the Fire Chief is assisted by a management team consisting of three Division Chiefs who are directly supervised by the Fire Chief. The managers have responsibility for major work units of the Emergency Operations Division, Fire Prevention Division, and Marine Safety Division.

This report is not a traditional fire department review project in the sense of examining the effectiveness, efficiency, or issues regarding the organizational structure, pay, and benefits or management of the department. The report includes several recommendations in regards to areas where the project team believes additional staffing is needed to effectively provide fire, marine safety and emergency medical services to the community. Recommendations are also made suggesting the establishment of performance measures or goals adhering to current best practices for fire agencies that the department can use to measure performance and assist in determining whether the HBFD is meeting reasonable service goals. A survey to compare the HBFD with other fire departments in the region and the state was completed to provide the project team with information regarding fire department workload, staffing, and operations in agencies similar to Huntington Beach (see Appendix B for details).

Currently, the Fire Department has two growth management policies listed in the General Plan: 1) Provide a five minute response time for emergency fire services at least 80% of the time, and 2) provide a five minute response time for paramedic services at least 80% of the time.

This report is divided into the following chapters:

1. Executive Summary
2. Emergency Operations Division
3. Fire Prevention Division
4. Administrative Operations Division
5. Marine Safety Division

Each chapter includes information, evaluation, analysis, and appropriate recommendations for the different work units of the department. In this analysis, the project team evaluated the current level of service provided to the community and the resources allocated to provide the service. In this report, recommendations are only made when the project team has identified an area where a change should be made to ensure the service is provided efficiently. Listed below are all of the recommendations that are made in the various chapters and sections of this report.

<b>Table E-1, Proposed Recommendations</b>
<b>Chapter 2 – Emergency Operations Division</b>
The City of Huntington Beach should adopt locally defined performance objectives for emergency response to fire and EMS calls. <b>Page 15</b>
The Huntington Beach Fire Department should track their compliance with adopted performance goals quarterly and report the information annually to the City. <b>Page 15</b>
Continually monitor the performance related to call response for stations 5 and 8 to determine when thresholds are met to add additional resources in the City. <b>Page 23</b>
The Department should focus on establishing and meeting turnout times for both fire and emergency medical calls. This response time element is within the control of the Department and can immediately improve overall response times. <b>Page 25</b>
The Department should regularly audit response time data captured by the computer aided dispatch (CAD) and records management system (RMS) system to ensure that critical response time data – dispatch processing times, turnout times, travel times, and clear times are being accurately captured and personnel are aware of their performance compared to established standards. <b>Page 25</b>
The Department should consider a peak-hour Emergency Transport Unit to provide additional coverage to the busiest areas of the city. <b>Page 30</b>
The Department and the City should continually monitor the response time and workload of the Emergency Transport Units to ensure performance standards are met. <b>Page 30</b>
<b>Chapter 3 – Fire Prevention Division</b>
Continue to utilize emergency response personnel during available time to conduct general business inspections and monitor annual inspection workload to ensure that adequate inspections services are provided and appropriate staffing resources are maintained. <b>Page 32</b>
Continue to monitor the workload of Fire Prevention Analysts as it relates to plan reviews submitted to

<b>Table E-1, Proposed Recommendations</b>
the City and consider implementing best practices such as continuing to use on-call contract plan check services during years of increased construction activity to ensure standard turn-around times for plan checks are being met. <b>Page 33</b>
The City should consider employing a variety of methods to ensure an effective public education program is implemented. In addition to fire prevention activities/events, the City can utilize other resources (e.g. – social media, City websites, etc.) to reach a broader portion of the City and expand public education opportunities. The City should evaluate opportunities for use of non-sworn staff, including the need for dedicated program personnel, to coordinate a comprehensive Fire or combined Safety (i.e. – Police and Fire) education program. <b>Page 34</b>
The City and Fire Department should work to maintain their current Insurance Services Office (ISO) rating. <b>Page 35</b>
<b>Chapter 4 – Administrative Operations</b>
Continue to monitor the effectiveness of the emergency management division and EOC operations and periodically evaluate the provision of funding the Battalion Chief position or additional staffing resources as needed. <b>Page 37</b>
Continue to implement the use of community volunteers to provide clerical support and continue to monitor and evaluate options for the availability of staffing resources to ensure that a high level of consistent customer service is maintained. <b>Page 37</b>
<b>Chapter 5 – Marine Safety Division</b>
Continue to monitor building development and beach visitation trends for impacts on marine safety service delivery and periodically evaluate the provision of additional staffing resources as needed. <b>Page 38</b>

## **2. EMERGENCY RESPONSE DIVISION**

This chapter discusses the project team's analysis and findings related to emergency operations within the Huntington Beach Fire Department. Key questions addressed in this chapter include the following:

- Have the City and the Fire Department adopted service level objectives that target effective and efficient service levels?
- Is the Fire Department capable of meeting adopted or recommended service level objectives? Where are there gaps and/or areas of duplication?
- Does the Fire Department have the resources needed to provide targeted service levels?
- Overall, how can the Fire Department improve current and future emergency operations services?

Each of these questions is addressed in the following sections.

### **THE HUNTINGTON BEACH FIRE DEPARTMENT HAS ADOPTED SERVICE LEVEL STANDARDS**

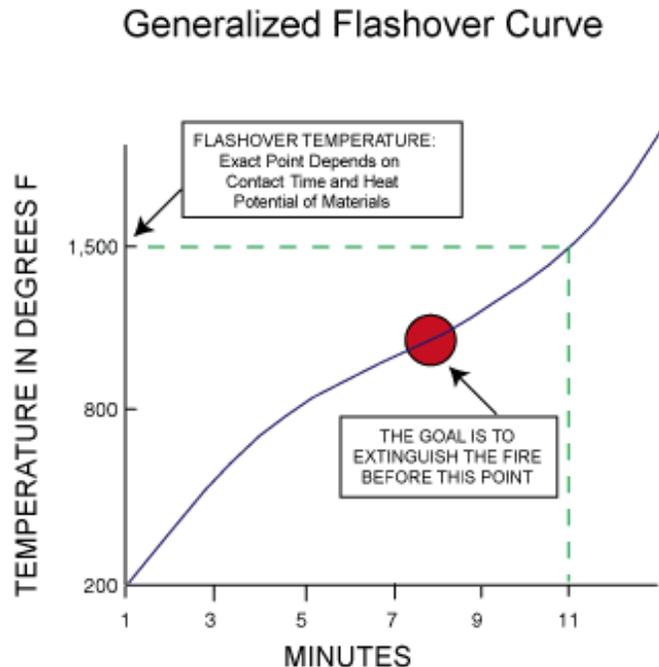
The adoption of performance standards for fire and emergency medical services (EMS) response is a critical first step in the evaluation of service levels and staffing alternatives. While there are national standards that can be employed to evaluate fire and EMS service delivery, each community must identify the key risks and necessary level of protection it needs based on its own unique circumstances. Once these performance standards are established, a community can assess its performance and determine if current resources support the desired level of service.

### **Efforts to “Standardize” Service Level Objectives Are Based on Fire Growth Behavior and Research on Cardiac Arrest.**

Nationwide, a great deal of effort and research has been put into developing performance objectives for the delivery of fire and EMS services. This effort is critical for agencies making decisions about deployment and location of emergency resources. The objectives promoted for fire/rescue and EMS have their basis in research conducted on two critical issues:

- What is the critical point in a fire's “life” for gaining control of the blaze while minimizing the impact on the structure of origin and on those structures around it?
- What is the impact of the passage of time on survivability for victims of cardiac arrest?

The following chart shows a typical “flashover” curve for interior structure fires. The point in time represented by the occurrence of “flashover” is critical because it defines when all of the contents of a room become involved in the fire. This is also the point at which a fire typically shifts from a “room and contents” fire to a “structure” fire – involving a wider area of the building and posing a potential risk to the structures surrounding the original location of the fire.



Note that this graphic depicts a fire from the moment of inception – not from the moment that a fire is detected or reported. This demonstrates the critical importance of early detection and fast reporting, as well as the significance of rapid dispatch of responding units. This also shows the critical need for a rapid (and sufficiently staffed) initial response – by quickly initiating the attack on a fire, “flashover” can be averted. The points below describe the major changes that occur at a fire when “flashover” occurs:

- It is the end of time for effective search and rescue in a room involved in the fire. It means likely death of any person trapped in the room – either civilian or firefighter.
- After this point in a fire is reached, portable extinguishers can no longer have a successful impact on controlling the blaze. Only hand-lines will have enough water supply to affect a fire after this point.
- The fire has reached the end of the “growth” phase and has entered the fully developed phase. During this phase, every combustible object is subject to the full impact of the fire.
- This also signals the changeover from “contents” to “structure” fire. This is also the beginning of collapse danger for the structure. Structural collapse begins to become a major risk at this point, mounting to highest risk during the decay stage of the fire (after the fire has been extinguished).

It should be noted that not every fire will reach flashover – and that not every fire will “wait” for the eight-minute mark to reach flashover. A quickly responding fire crew can do things to prevent or delay the occurrence of flashover. These options include:

- Applying a portable extinguisher, hand-line or other “fast attack” methodology.
- Venting the room to allow hot gases to escape before the temperature rises to the point where it causes the ignition of all combustible materials in the room.
- Not venting a room – under some circumstances, not ventilating a room may prevent flashover from occurring due to limiting the amount of oxygen present for combustion.

Each of these techniques requires the rapid response of appropriately trained fire suppression individuals that can safely initiate these actions. In the absence of automatic fire suppression systems, access to interior fires can again be limited by a safety requirement related to staffing levels. Industry standards and Occupational Safety and Health Administration (OSHA) regulations require the presence of at least two (2) firefighters on the exterior of a building before entry can be made to a structure in which the environment has been contaminated by a fire. In the absence of a threat to life demanding immediate rescue, interior fire suppression operations are limited to the extent a fire service delivery system can staff to assure a minimum of four people actively involved in firefighting operations.

The second issue to consider is the delivery of emergency medical services. One of the primary factors in the design of emergency medical systems is the ability to deliver basic Cardiac Pulmonary Resuscitation (CPR) and defibrillation to the victims of cardiac arrest. The graphic on the following page demonstrates the survivability of cardiac patients as related to time from onset:



This graph illustrates that the chances of survival of cardiac arrest diminish approximately 10% for each minute that passes before the initiation of CPR and/or defibrillation. These dynamics are the result of extensive studies of the survivability of patients suffering from cardiac arrest. While the demand for services in EMS is wide ranging, the survival rates for full arrests are often used as benchmarks for response time standards, as they are more readily evaluated because of the ease in defining patient outcomes (a patient either survives or does not).

This research results in the recommended objective of provision of basic life support (BLS) within four minutes of notification, and the provision of advanced life support (ALS) within eight minutes of notification and may be the basis for national standards such as NFPA 1710: Standard for the Organization and Deployment of Suppression Operations, Emergency Operations, and Special Operations to the Public by Career Fire Departments. The goal is to provide BLS within six minutes of the onset of the incident (including detection, dispatch and travel time) and ALS within ten minutes. This is often used as the foundation for a two-tier system where fire resources function as first responders with additional (ALS) assistance provided by responding ambulance units and personnel. Huntington Beach utilizes a different two-tier approach as they currently staff the emergency transport units with BLS personnel and use the engine companies to provide ALS response. This allows for ALS personnel to arrive on scene and initiate life saving interventions in a shorter amount of time than outlined in NFPA 1710. If ALS is needed during transport, a paramedic from the responding engine company assists with patient care to the hospital.

Additional recent research is beginning to demonstrate the impact and efficacy of rapid deployment of automated external defibrillators (AED) to cardiac arrests. This research – conducted in King County (WA), Houston (TX), and as part of the OPALS (Ontario Pre-Hospital ALS) study in Ontario, Canada – shows that the AED can be the largest single contributor to the successful outcome of a cardiac arrest – particularly when accompanied by early delivery of CPR. It is also important to note that these medical research efforts have been focused on a small fraction of the emergency responses

handled by typical EMS systems – non-cardiac events make up the large majority of EMS and total system responses, and this research does not attempt to address or analyze the need for rapid intervention on these events.

Communities and first responders have used the results of these research efforts, often on their own to develop local response time and other performance objectives. However, there are now three major sources of information to which responders and local policy makers can refer when determining the most appropriate response objectives for their community:

- The Insurance Services Office (ISO) provides basic information regarding distances between fire stations.
- The National Fire Protection Association (NFPA) promulgated a document entitled: “NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.” This current NFPA 1710 document published in 2010.
- The Center for Public Safety Excellence (CPSE) in its “Standards of Cover” manual, places the responsibility for identifying “appropriate” response objectives on the locality. These objectives should be developed following a comprehensive exercise in which the risks and hazards in the community are compared to the likelihood of their occurrence.

While each of these efforts provides a reference point for communities to follow, only NFPA 1710 and CPSE offers any specificity. It is important to note that the performance objectives (in terms of response times) provided in the NFPA 1710 document are derived from the basic research previously described above, while the CFAI standards allow the agency to establish performance objectives based on local population and risk factors. CPSE also allows for a range from baseline (acceptable) to benchmark (best practice) in their performance objectives, which provides flexibility to communities as they strive to achieve performance objectives. A comparison of these performance objectives is described in table 1.

It is important to note the “and/or” found in the initial response objective statement for NFPA 1710. This indicates that a system would meet the intent of the standard if it can reasonably plan to deliver either the single unit, four minute travel time standard, the first alarm, eight minute travel time standard, or both. It should also be noted that it is implied that the total time allotted is additive with each successive event in NFPA 1710, but each event is evaluated individually in the CPSE model. For example, in NFPA 1710 a system that arrived on-scene in six minutes or less, 90% of the time (from time of call) would be in compliance – even if the dispatch or turnout time was longer than a minute (though that should clearly be improved).

<b>Table 1, Comparison of Performance Objectives</b>		
<b>Performance Objective</b>	<b>NFPA 1710 – 2010 (90%)</b>	<b>CPSE (90%)</b>
Call processing (dispatch) time/ call answered to units dispatched	<ul style="list-style-type: none"> <li>• 60 seconds</li> </ul>	<ul style="list-style-type: none"> <li>• 60 seconds (Benchmark)</li> <li>• 90 seconds (Baseline)</li> </ul>
Turnout Time (units en-route)/ unit dispatched to time en-route to the emergency.	<ul style="list-style-type: none"> <li>• 80 seconds</li> </ul>	<ul style="list-style-type: none"> <li>• 80 seconds (Benchmark) Fire</li> <li>• 60 seconds (Benchmark) EMS</li> <li>• 90 seconds (Baseline) Fire &amp; EMS</li> </ul>
Travel time/time en-route until arrival at emergency scene.	<ul style="list-style-type: none"> <li>• Four (4) minutes for first unit/ Fire</li> <li>• Eight (8) minutes for first alarm/fire assignment.</li> <li>• Four (4) minutes first responder/EMS</li> <li>• Eight (8) minutes ALS unit/EMS</li> </ul>	<p><b>Urban (2,000+ per square mile)</b></p> <ul style="list-style-type: none"> <li>• Four (4) minutes for first unit (Benchmark)</li> <li>• Eight (8) minutes for second unit/first alarm assignment</li> <li>• 5:12 for first unit (Baseline)</li> <li>• 10:24 for second unit/first alarm assignment (Baseline)</li> </ul> <p><b>Suburban (1,000 – 2,000 per square mile)</b></p> <ul style="list-style-type: none"> <li>• Five (5) minutes for first unit (Benchmark)</li> <li>• Eight (8) minutes second unit (Benchmark)</li> <li>• Ten (10) minutes first alarm assignment (Benchmark)</li> <li>• 6:30 first unit (Baseline)</li> <li>• 10:24 second unit (Baseline)</li> <li>• 13 minutes first alarm assignment (Baseline)</li> </ul> <p><b>Rural (Less than 1,000 per square mile)</b></p> <ul style="list-style-type: none"> <li>• Ten (10) minutes for first unit (Benchmark)</li> <li>• 14 minutes for second unit/first alarm assignment (Benchmark)</li> <li>• 13 minutes for first unit (Baseline)</li> <li>• 18:12 for second unit/first alarm assignment (Baseline)</li> </ul> <p><b>Wilderness (no public/private road access)</b></p> <ul style="list-style-type: none"> <li>• No performance standards established</li> </ul>

It is also critical to note that these time objectives apply to emergency calls for service – there is nothing in NFPA 1710 or CPSE that suggests that communities cannot establish a differential response to calls for service determined to be non-emergency in nature. A second element of the NFPA 1710 performance objectives addresses unit and total response staffing. These objectives are described in NFPA 1710 as follows:

- Engine and truck companies should be staffed with a minimum of four personnel (Sections 5.2.3.1.1 and 5.2.3.2.1). The standard also states engine or truck companies should be staffed with five or six personnel in jurisdictions with tactical hazards, high-hazard occupancies, high incident frequencies, geographical restrictions, or other pertinent factors as identified by the authority having jurisdiction (Sections 5.2.3.1.2 and 5.2.3.2.2).
- Section A.3.3.13 defines a company as either a single unit or multiple units, which operate together once they arrive on the fire ground.
- The initial full alarm assignment to a structure fire in a typical 2,000 square foot, two-story single-family dwelling without a basement and with no exposures (nearby structures or combustibles) is defined (in Section 5.2.4.2.2). This section as having a total of 15 people (if an aerial is utilized) for 90% of calls. This is broken down as follows:
  - One (1) incident commander.
  - One (1) on the primary supply line and hydrant.
  - Four (4) to handle the primary and backup attack lines.
  - Two (2) operating in support of the attack lines, performing forcible entry.
  - Two (2) assigned to victim search and rescue.
  - Two (2) assigned to ventilation.
  - One (1) assigned to operate the aerial device.
  - Two (2) to establish an initial rapid intervention team.
- If an incident is determined to require additional resources, the fire department should have as an objective the ability to respond with:
  - Additional units as needed (through its own resources or via automatic and mutual aid).
  - Assignment of two (2) additional personnel to the rapid intervention team.
  - Assignment of one (1) as an incident safety officer.
  - Assignment of additional personnel to protect exposures. In urban/suburban communities, exposure protection is likely to be required.
  - Fire Departments that respond to fires in high, medium or low-hazard occupancies that present additional hazards shall deploy additional resources.

It is interesting to note that the four person companies discussed in some areas of NFPA 1710 are not maintained in the description of primary tasks to be accomplished on the fire ground – recognition that the requirements of the response in the field are dynamic and do not fit neatly into size and shape of any particular response configuration. These objectives apply to the initial and follow-up response for reported structure fires. The document does not suggest that this response be mounted for all incidents.

CPSE also recognizes the importance of deploying an effective response force, but does not require the four-person staffing of engine and truck companies; rather they base staffing on the number of personnel needed to be effective on the fire ground. They base this on the types of risk to which the agency is responding and the number of personnel required to perform the critical fire ground tasks. Table 2 shows the effective response force by risk type.

**Table 2, Effective Response Force by Risk Category**

<b>Critical Task</b>	<b>Maximum Risk</b>	<b>High Risk</b>	<b>Moderate Risk</b>	<b>Low Risk</b>
Attack Line	4	4	4	2
Search and Rescue	4	2	2	0
Ventilation	4	2	2	0
Backup Line	2	2	2	2
Rapid Intervention	2	2	0	0
Pump Operator	1	1	1	1
Water Supply	1*	1*	1*	1*
Support (Utilities)	1*	1*	1*	1*
Command	1	1	1	1
Safety Officer	1	1	1	1
Salvage/Overhaul	2	0	0**	0
Command Aid	1	1	0	0
Operations Chief	1	1	0	0
Logistics	1	0	0	0
Planning	1	0	0	0
Staging Officer	1	1	0	0
Rehabilitation	1	1	0	0
Division Supervisors	2	1	0	0
High-rise Evacuation	10	0	0	0
Stairwell Support	10	0	0	0
<b>Total Personnel</b>	<b>50-51</b>	<b>21-22</b>	<b>14-15</b>	<b>8-9</b>

\* Can be completed by personnel as an additional task

\*\* Can be completed by suppression personnel

It is essential for a response plan to be in place in order to be able to deliver a sufficient number of personnel to the scene to accomplish the critical tasks. Structure fires are the most labor-intensive incidents and, depending on weather conditions, can require additional personnel to maintain an effective operation. The majority of risks for the City will fall into the high and moderate categories, as these risk categories describe risks from a typical single family home to unprotected multi-family housing and high concentration areas as in the downtown and developing midtown areas. It is important to note that Huntington Beach also has a considerable number of occupancies that fall into the special risk category, such as those storing large quantities of hazardous materials, hospitals, and government buildings. Table 3 provides a brief description of risk categories by occupancy type:

**Table 3, Risk Categories by Occupancy Type**

<p><b>Moderate</b></p> <ul style="list-style-type: none"> <li>• Detached single family dwellings</li> <li>• Older multi-family dwellings easily reached with pre-connected attack lines</li> <li>• Railroad facilities</li> <li>• Mobile homes</li> <li>• Industrial or commercial occupancies under 10,000 sq. ft. without high fire load</li> <li>• Aircraft on airport property</li> <li>• Loss of life or property limited to occupancy</li> </ul>	<p><b>High</b></p> <ul style="list-style-type: none"> <li>• Concentrations of older multi-family dwellings</li> <li>• Multi-family dwellings that are more than two stories tall and require major hose deployment</li> <li>• Buildings with low occupant load, but with high concentrations of fuel load or hazardous materials</li> <li>• Aircraft off airport property</li> <li>• Mercantile facilities</li> <li>• Built-up areas with high concentrations of property with substantial risk of life loss, severe financial impact upon the community or the potential for unusual damage to the property or the environment</li> </ul>
<p><b>Low</b></p> <ul style="list-style-type: none"> <li>• Automobile fires</li> <li>• Carbon monoxide calls</li> <li>• Grass and low fuel type fires</li> <li>• Single patient EMS calls</li> <li>• Automobile accidents or industrial accidents</li> <li>• Tractor trailer fires</li> <li>• Storage sheds</li> <li>• Out buildings</li> <li>• Detached garages</li> </ul>	<p><b>Special Risk</b></p> <ul style="list-style-type: none"> <li>• Apartment complexes over 25,000 sq. ft.</li> <li>• Government or infrastructure risks</li> <li>• Hospitals</li> <li>• Nursing Homes</li> <li>• Industrial complexes with fire flows of more than 3,500 GPM</li> <li>• Refineries and warehouses</li> <li>• Vacant/abandoned structures</li> <li>• All building where available water supply is less than projected fire flow</li> </ul>

As the size of structure, complexity of the incident or life safety risks increases, so does the risk category. For this reason, high occupancy and unprotected structures fall into the high-risk category. This will include assemblies, schools, and high-rise and mid-rise occupancies. The Huntington Beach Fire Department currently operates from eight (8) fire stations, each located within the City limits and shown in Table 4.

A total of 51 shift personnel are scheduled each day to respond to emergency calls for service in the City, which includes 41 safety personnel and 10 Ambulance Operators. The total minimum staffing is also 51, meaning that all scheduled and unscheduled vacancies are backfilled to ensure apparatus are fully staffed at all times. As part of the staffing plan a minimum of eight (8) engine companies are required to be staffed with a minimum of four (4) personnel each, two (2) truck companies are staffed with four (4) personnel each, five (5) emergency transports are staffed with two (2) personnel each and a battalion chief vehicle is staffed. As shown above, this staffing level will allow an effective response force to be deployed to the majority of risks in Huntington Beach (Moderate and High), but will require outside assistance for any maximum risk hazard in the City.

**Table 4, Huntington Beach Daily Apparatus Staffing**

Station #	Apparatus Name	Apparatus Type	Personnel Assigned
1	HB4	Battalion Chief	1
	HE41	Engine	4
	HET 41	Emergency Transport	2
2	HE42	Engine	4
	HT42	Truck	4
	HET42	Emergency Transport	2
	HUS&R42	Heavy Rescue	Cross Staffed
3	HE43	Engine	4
4	HE44	Engine	4
	HET44	Emergency Transport	2
5	HE45	Engine	4
	HT45	Truck	4
	HET45	Emergency Transport	2
6	HE46	Engine	4
	HHM46	Haz-Mat	Cross Staffed
	HET46	Emergency Transport	2
7	HE47	Engine	4
		OES Engine	Crossed Staffed
8	HE48	Engine	4

This underscores the importance of maintaining the strong automatic aid network available to assist Huntington Beach Fire Department during large-scale emergencies. Table 5 illustrates the response plan for major incidents occurring in Huntington Beach:

**Table 5, Major Incident Response Protocols**

RESPONSE PROTOCOL	
Type of Call	Response
Structure Fire	3 Engines, 1 Truck, 1 Battalion Chief
Oil Field Incident (fire)	3 Engines, 1 Truck, 1 Battalion Chief
Traffic Accident	1 Paramedic Engine, 1 Truck, 1 Emergency Transport
Traffic Accident – Heavy Rescue	1 Paramedic Engine, 1 Truck, 1 Emergency Transport, 1 Battalion Chief
Brush Fire	1 Engine
Brush Fire (Medium/High Risk)	3 Engines, 1 Battalion Chief
Vehicle Fire	1 Engine
Emergency Medical	1 Paramedic Engine, 1 Emergency Transport

## Huntington Beach Fire Department Station Network

Map 1 illustrates the current station network for the Huntington Beach Fire Department:

Map -1: Huntington Beach, CA Fire Stations



## **The City of Huntington Beach Should Formally Adopt Locally Defined Service Level Objectives That Meet Current National Standards**

The Huntington Beach Fire Department has the following performance standards:

- The Huntington Beach Fire Department currently has no standard for turnout times.
- Provide a five-minute response time for emergency fire calls 80% of the time.
- Provide a five-minute response time for emergency medical calls 80% of the time.

As shown above, the current response time goals for the Department do not meet the current national standards of measuring effectiveness at 90%<sup>1</sup>. There is also no percentage goal associated with turnout times. Measuring compliance with the goal is further complicated by the fact that in the annual report the performance standards are presented in averages rather than by percentile, which does not allow the City to know if the Department is able to meet the turnout and travel time performance standards.

Huntington Beach has a population of over 195,000 residents and an overall density of over 6,900 residents per square mile. This makes the City of Huntington Beach an urban environment from a fire services planning perspective.

The project team recommends the following goals based on the urban designation of the City. These recommendations fall within NFPA 1710 and CFAI guidelines while taking into account the unique service environment facing the HBFD:

**Table 6, Recommended Performance Targets**

<b>Performance Target</b>	<b>Time</b>	<b>Standard</b>
Fire Turnout Time	90 Seconds	90%
EMS Turnout Time	60 Seconds	90%
Fire Travel Time – First Unit	5 Minutes	90%
EMS Travel Time – First Unit	5 Minutes	90%
EMS Travel Time – Transport	8 Minutes	90%

### ***Recommendations:***

***The City of Huntington Beach should adopt locally defined performance objectives for emergency response to fire and EMS calls.***

***The Huntington Beach Fire Department should track their compliance with adopted performance goals quarterly and report the information annually to the City.***

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<sup>1</sup> Current National Standards are shown in Table 1 on page 10 of this report.

## **APPLICABILITY TO THE GENERAL PLAN**

The City of Huntington Beach General Plan currently includes the established performance standards as policies in the Growth Management Element. However, the City should consider adopting policies that allow for the adaptive management of performance standards over time. Incorporation of the recommendations listed herein as policies in the General Plan, or similar policy language, would provide flexibility in the development of performance objectives in the delivery of fire and EMS services based on the latest research and data within the industry and account for changing circumstances and community characteristics that are unique to Huntington Beach.

## **THE ABILITY OF HBFD TO MEET RESPONSE TIME TARGETS**

The project team used two methods to assess the Department's performance against the recommended response time objectives. The first uses a geographic information systems (GIS) model to evaluate the potential response capabilities given current station locations and unit deployment. The second uses actual call for service data to calculate the percentage of incidents responded to within the stated objectives. The two approaches are used to compare potential and actual response capabilities and to identify potential response impediments, such as concurrent calls for service, poor turnout times, workload, extended drive times, traffic, etc.

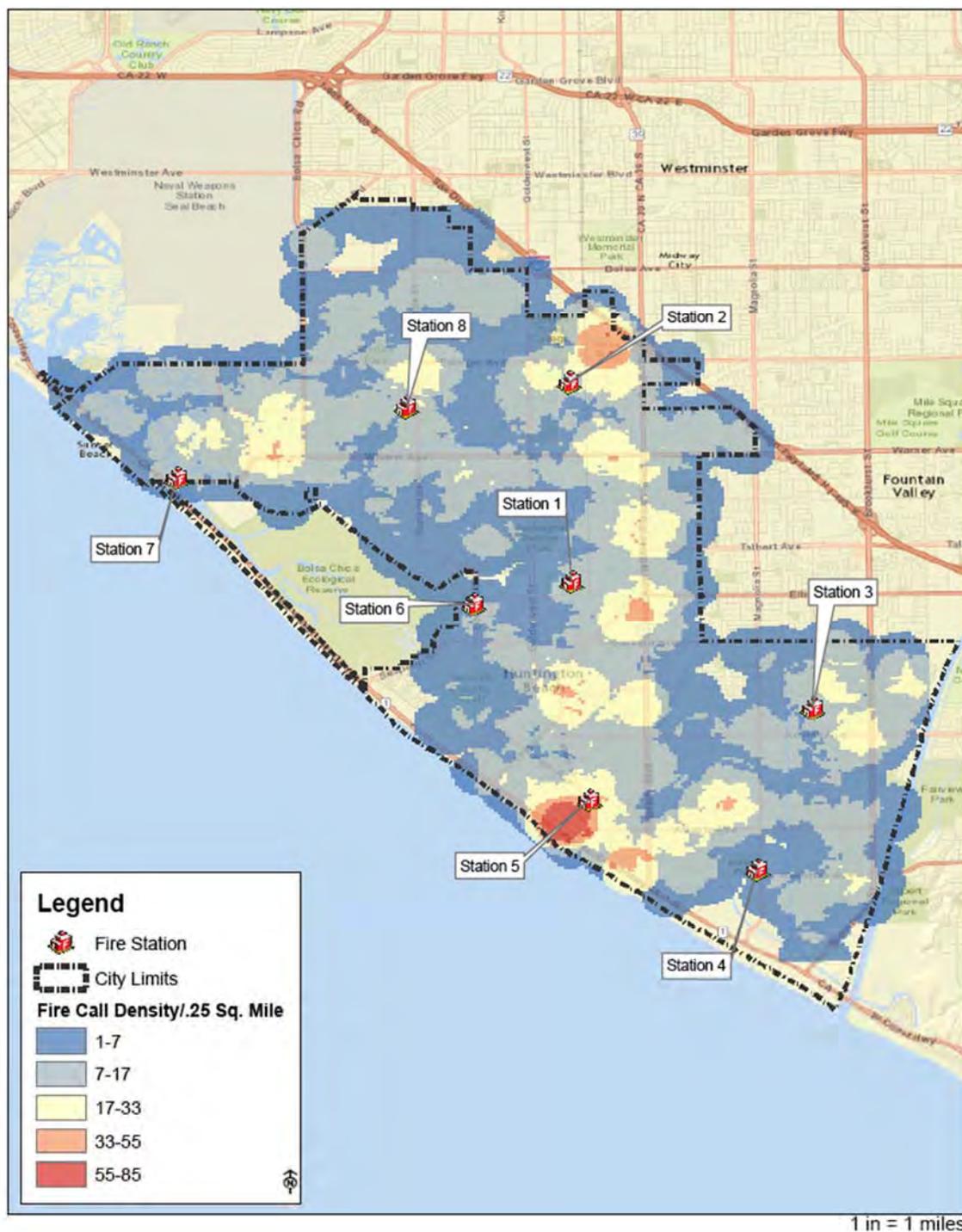
## **STATION NETWORK DEMAND AND PERFORMANCE**

The Matrix Consulting Group used GIS technology to evaluate unit deployment, station locations, and Huntington Beach Fire Department's ability to meet the response targets. The GIS analysis was based on a number of steps and assumptions including the following:

- An up to date street centerline file was obtained from the City, which contains detailed information on local roads, arterials, restrict access roads, speed limits, and address ranges. The project team used the following assumptions in developing travel times:
  - Station locations were matched to the street file and verified. Unit and personnel deployment information was attached to each station location.
  - The response time objectives discussed in the previous section were used to show predicted travel times for first due engine companies, truck companies and emergency transport response times. The project team used the four minute, 6 minute 30 second, and eight minute travel time standards to illustrate predicted engine and emergency transport travel times and eight minute travel time standards for truck companies.
  - Maps and statistics were generated which demonstrate the projected response capabilities of the current station network as well as the current call density for fire and emergency medical calls.

Map 2, shows the distribution of fire calls for service within the city. Calls are categorized by level of density, or calls per square mile, in order to identify those areas with the heaviest call volume. Evaluating call for service patterns is useful in assessing the location of the Department's fire stations:

Map -2: 2013 Fire Calls for Service Density – Huntington Beach, CA

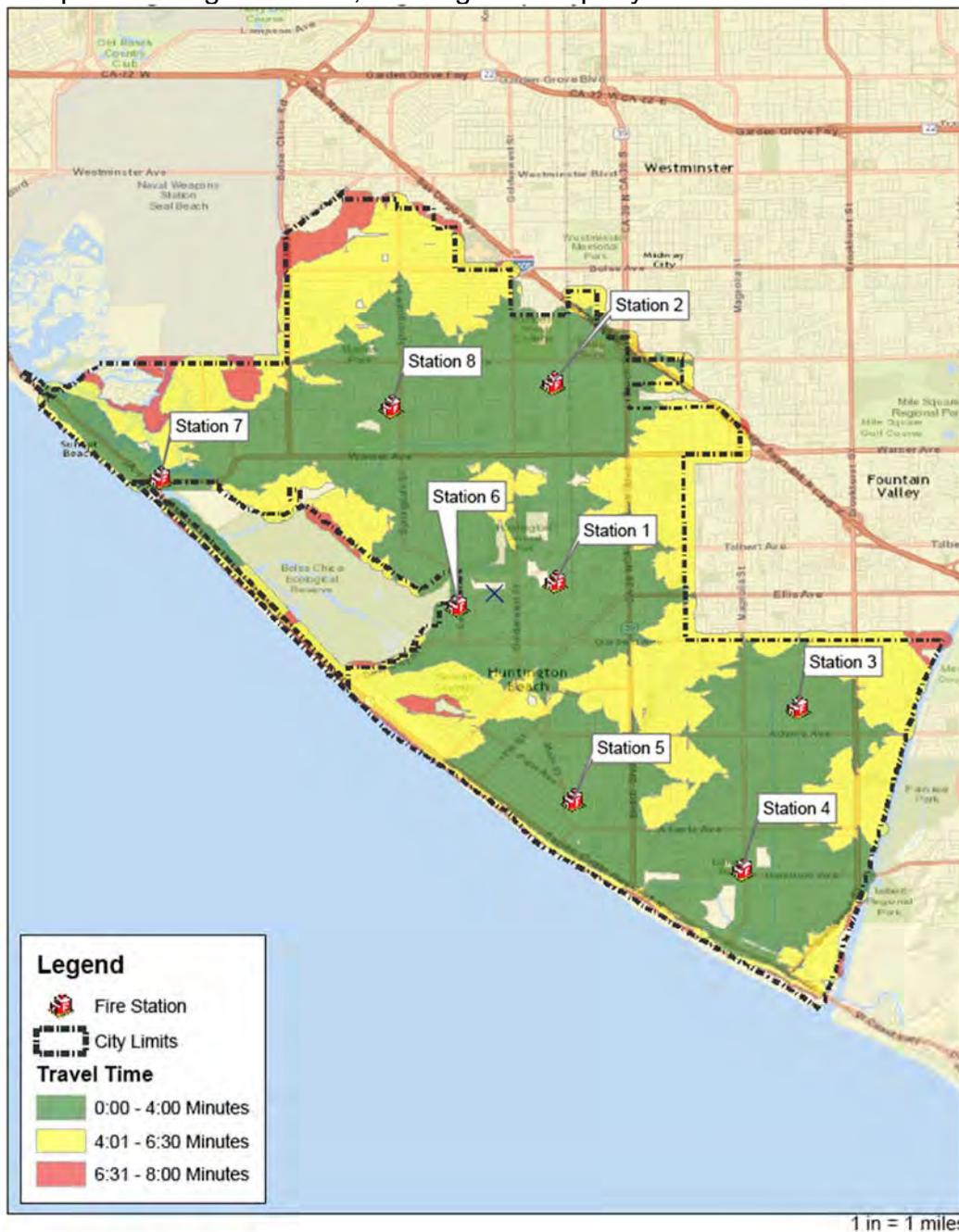


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As shown in map 2, the busiest areas of the City in terms of fire call demand are near station 5 and station 2. Having stations located in the area of high call volumes improves the ability of the HBFD to meet stated calls for service performance objective.

Map 3 illustrates the predicted engine response first unit arrival the various time standards:

Map 3: Huntington Beach, CA Engine Company Predicted Travel Times



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As shown in map 3, the Department is able to provide at least one (1) unit within four minutes of drive time to the areas experiencing the highest call volume and within six minutes 30 seconds to the majority of the City. There are however areas in northern and western portions of the City where response times could be as long as eight minutes.

Map 4 illustrates the predicted truck company response times at eight minutes travel time to support the engine companies.

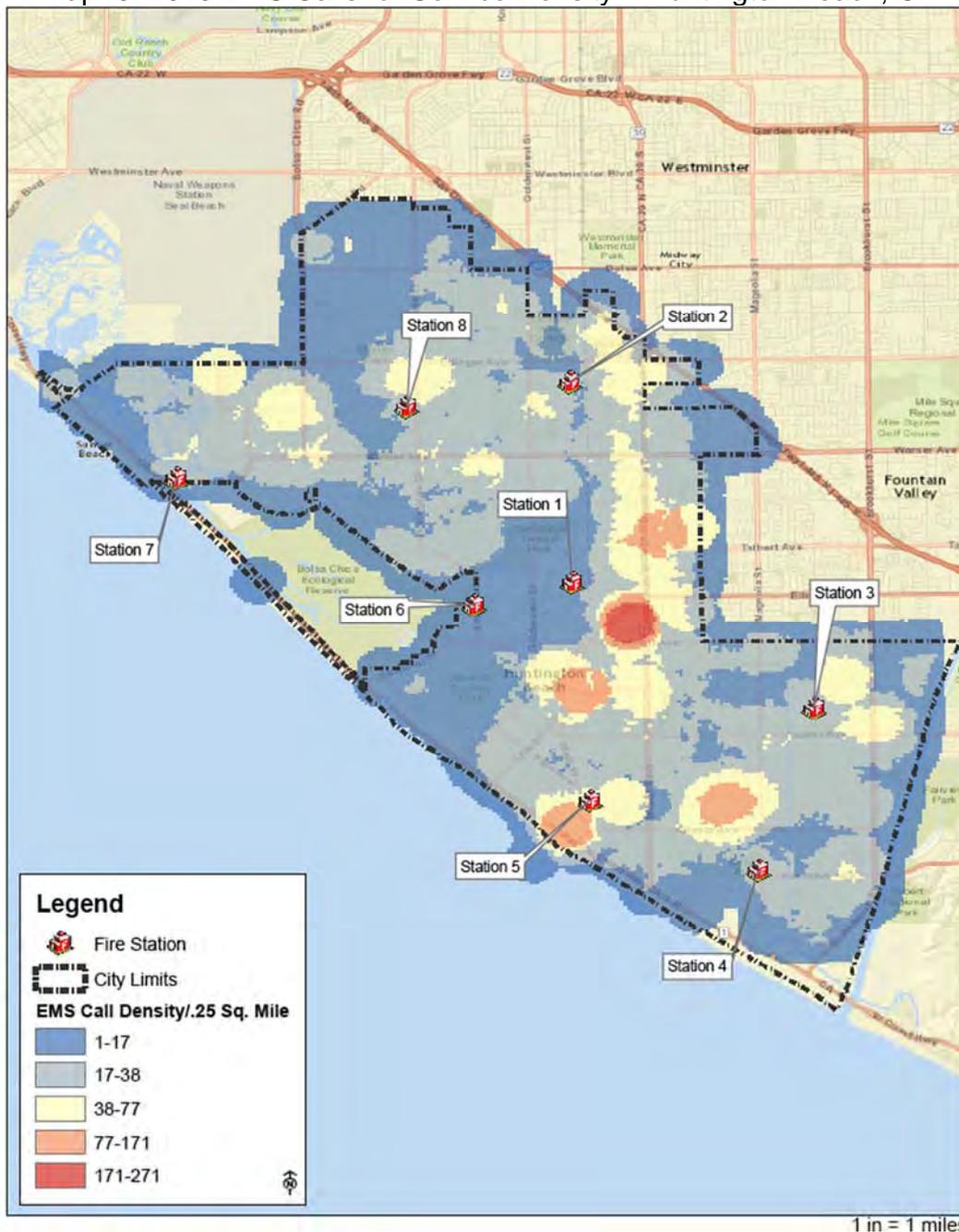
Map -4: Huntington Beach, CA Truck Company Predicted Travel Times



As shown in map 4, the truck companies can provide support within eight minutes to the majority of the City, but that as with the engine companies, there are areas where adequate coverage is not provided. This is especially true in the service areas of station 7 and station 3.

In addition to the previous maps, the GIS model examined the demand for emergency medical calls and the predicted travel times of the emergency transport units. Map 5 illustrates the call demand for EMS calls:

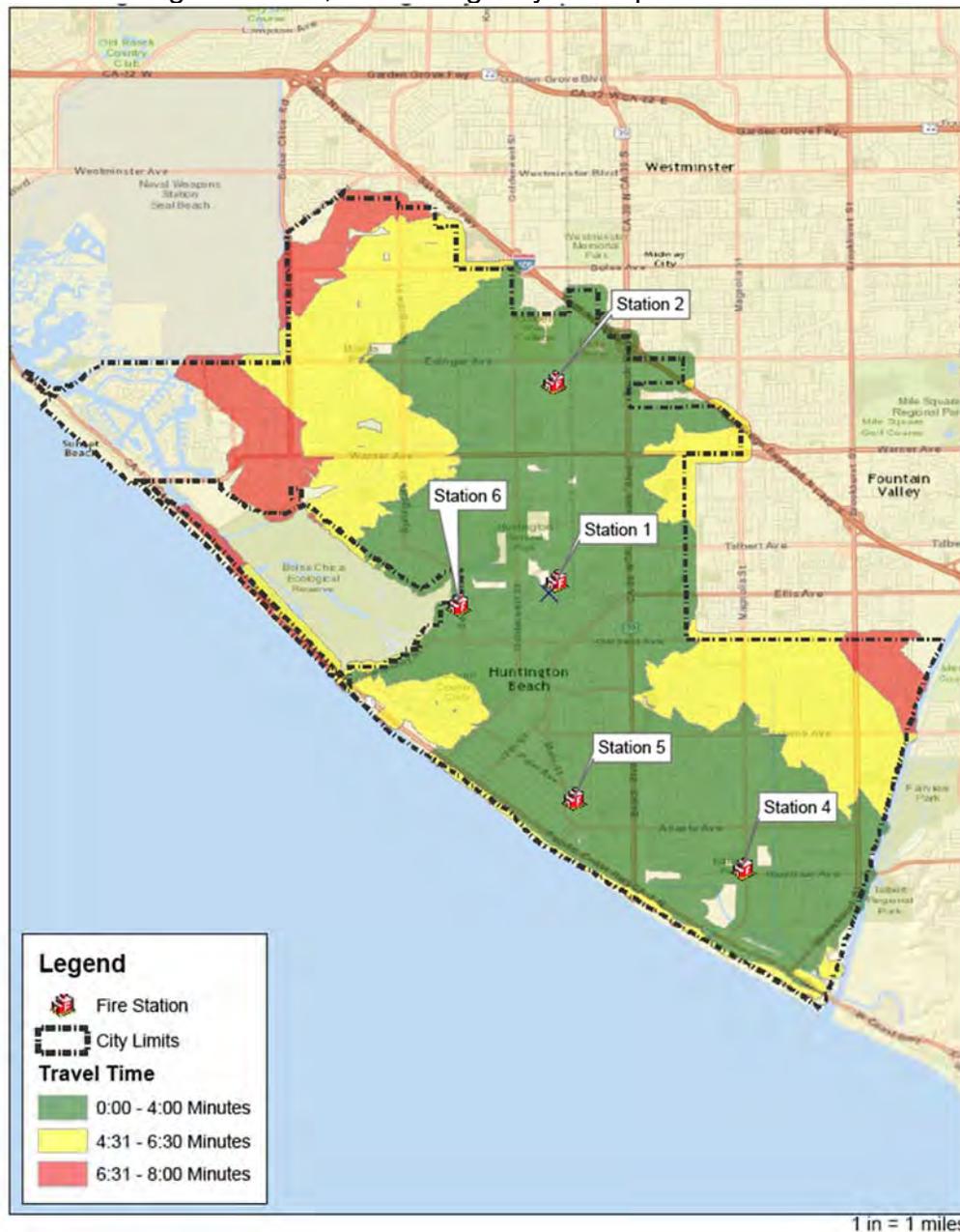
Map -5: 2013 EMS Calls for Service Density – Huntington Beach, CA



In map 5, the areas with the highest call volume for emergency medical incidents are located near stations 1, 4, and 5. It is important to note that each of these stations is staffed with an emergency transport unit.

Map 6 illustrates the predicted travel times of the emergency transport units:

Map – 6: Huntington Beach, CA Emergency Transports Predicted Travel Times



As shown in map 6, the emergency transport units are able to reach the high call demand areas within four minutes, but there is a large portion of the City not within a predicted four minute travel time and there are also areas in the northern portion of the City that fall outside an eight minute predicted travel time. According to the Huntington Beach Fire Department, often the emergency transport units respond code II, which affects predicted response times.

**TRIGGER POINTS FOR NEW APPARATUS OR STATIONS**

As Huntington Beach continues to develop, the City will need direction on the appropriate times and conditions which require additional fire and emergency medical apparatus or the construction of additional stations.

Table 7 quantifies the trigger points for opening a new fire station as a community grows. This serves as a good indicator of when to construct a new facility – whether or not calls for service increase as growth occurs in accordance with the Huntington Beach General Plan. Given the timeframe required to design and construct a new facility, it is important these decisions are properly anticipated with good planning:

**Table 7: Trigger Points for Adding Facilities**

<b>Action</b>	<b>Travel Distance</b>	<b>Response Time</b>	<b>Percent of Calls</b>	<b>Building/Risk Inventory</b>
Maintain Status Quo	All risks within locally adopted distance.	First due company is within locally adopted standards.	Low percentage of current out of district calls.	Low local building/risk inventory.
Temporary facilities and minimal staffing	Risks 1.5 to 3.0 miles from existing station.	First due company exceeds five minute travel time 10% of the time, but does not exceed eight minutes.	More than ten percent of calls are out of district.	New area has 25% of the same risk distribution as in initial area of coverage.
Permanent Station Needed	Risk locations exceeding four miles from the station.	First due company exceed five minute travel time 20 – 25% of the time. Some calls over eight minutes.	More than 20 – 25% of calls in outlying areas.	New area has 35% of same risk distribution as in initial area of coverage.
Permanent Station Essential	Outlying risk locations exceed five miles from station.	First due company exceeds five minute travel time 30% of the time. Some calls over ten minutes.	More than 30% of calls are in outlying area.	New area has 50% of same risk distribution as in initial area.

As shown in the earlier response maps, Huntington Beach has areas in the response zones of station 5 and station 8 that fall outside the recommended travel time targets and will need to be continually reviewed to determine when the above trigger points will

require an additional fire station to meet service expectations. While this is important in planning for the future, due to the lower call volume in these areas, Huntington Beach, has not yet reached the essential point of requiring station construction.

In particular, the deficient response time performance in Station 8's area is a result of long term growth of the industrial area in this part of the City. It was identified as a concern during the City's ISO evaluations and also as part of the City's Strategic Plan in past years. The City currently owns land at the intersection of Graham and Production, which for several decades has been identified in the existing 1996 General Plan as the site for relocation of Station 8. However, with the growth in other adjacent parts of the City and current call loads for adjacent stations, the City should complete further analysis to determine whether relocation of Station 8 will provide adequate coverage versus another location, or whether an additional station might be warranted.

***Recommendation: Continually monitor the performance related to call response for stations 5 and 8 to determine when thresholds are met to add additional resources in the City.***

## **ACTUAL SYSTEM PERFORMANCE**

The project team analyzed 15,301 unique in-jurisdiction calls. The table below provides information on the number of calls for service during 2013 and how many units responded to the call. This is important in evaluating the ability of the department to handle multiple calls for service at the same time or large-scale incidents. Table 8 depicts this information:

**Table 8, 2013 Unit Responses per Call**

<b>No. of Units</b>	<b>No. of Calls</b>	<b>Percentage</b>
1 Unit	2,351	15.4%
2 Units	9,735	63.6%
3 Units	2,262	14.8%
4 Units	641	4.2%
5 or more Units	312	2.0%
<b>Total</b>	<b>15,301</b>	<b>100%</b>

As shown above, 98% of the calls for service require four (4) or fewer units to respond to mitigate the emergency. The analysis indicates that the current station configuration and apparatus allocation is capable of providing effective response to the City the majority of the time.

As previously stated, the HBFD has adopted performance standards that do not meet the current national standards for an urban fire department. The project team next examined actual call for service response times for the primary response units from each station to high priority calls for service. These are designated as priority 1 – 4 calls in the CAD data provided, which are calls posing an immediate threat to life or property.

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The project team recommends that these calls should be the ones included in the reporting of how well the HBFD meets performance standards.

Table 9 provides the results of this analysis.

**Table 9, Performance by Station and Primary Response Units – 2013**

Station	Unit	Turnout Time 90%	Travel Time 90%
1	HE 41 (Fire)	2:03	5:46
	HE 41 (EMS)	2:08	4:43
	HET 41	1:51	11:21
2	HE 42 (Fire)	2:05	5:22
	HE 42 (EMS)	2:10	4:55
	HET 42	1:52	11:11
	HT 42	2:24	4:49
3	HE 43 (Fire)	1:57	5:57
	HE 43 (EMS)	2:12	4:46
4	HE 44 (Fire)	2:12	5:03
	HE 44 (EMS)	1:59	5:05
	HET 44	1:54	10:24
5	HE 45 (Fire)	2:16	5:32
	HE 45 (EMS)	2:12	5:15
	HET 45	1:55	10:27
	HT 45	2:12	5:29
6	HE 46 (Fire)	2:03	5:45
	HE 46 (EMS)	2:15	5:58
	HET 46	1:48	12:39
7	HE 47 (Fire)	2:11	6:44
	HE 47 (EMS)	2:13	6:33
8	HE 48 (Fire)	2:07	6:49
	HE 48 (EMS)	2:04	6:42

As shown in table 9, the Huntington Beach Fire Department is currently not meeting established performance standards at 90% for high priority calls. Turnout times for engine and truck companies all exceed the 90<sup>th</sup> percentile goal of 1 minute 30 seconds<sup>2</sup> and emergency transports exceed the 90<sup>th</sup> percentile turnout goal of 60 seconds<sup>2</sup>. The Huntington Beach Fire Department should establish a turnout time performance standard. The response time data also shows that the HBFD is not meeting the recommended travel time standards for first due unit response at the 90<sup>th</sup> percentile for fire and emergency medical calls. The truck company travel time standards do meet expectations for second due units at the 90<sup>th</sup> percentile.

Overall, while the current response network is well designed to provide consistent response coverage to the city, actual response times indicate that there may be impediments to response. The Department is not meeting national turnout time or travel time performance targets. This is likely due to the workload the Department currently handles and the number of concurrent calls requiring units to respond outside of their typical response area. However, the Department is meeting ALS travel time targets (based on the NFPA standard), as the ALS engine companies are typically the first unit on the scene. The issue with EMS calls is the time of arrival of the transport unit, which is longer than eight minutes when measured at the 90<sup>th</sup> percentile (as identified in Table 6).

***Recommendations:***

***The Department should focus on establishing and meeting turnout times for both fire and emergency medical calls. This response time element is within the control of the Department and can immediately improve overall response times.***

***The Department should regularly audit response time data captured by the CAD and RMS system to ensure that critical response time data – dispatch processing times, turnout times, travel times, and clear times are being accurately captured and personnel are aware of their performance compared to established standards.***

**WORKLOAD LEVELS BY STATION AND APPARATUS**

The project team considered some potential reasons for the extended response times. The first section discusses differences in projected and actual response times of the HBFD.

Recall from the previous sections that projected response capabilities are different from actual response times. One way to explain extended response times is the fact that units are responding from outside the response area where the call for service occurs. HBFD has implemented a procedure for closest unit response where if a unit is available for a call and closer than the unit designated for response in the area, the

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<sup>2</sup> Current National Response Standards are found in Table 1 on page 10 of this document.

closer unit is dispatched. This ensures the unit with the shortest expected travel time is dispatched to the call for service

However, it is likely that this level of response coverage is not enough to meet current workloads. The project team examined the call frequency by unit to determine if there was sufficient capacity in the current system to effectively respond to the call demand. According to industry best practices<sup>3</sup>, the following unit/station call loading can determine if increased capacity is needed in the system.

- Single-Unit Station: 3,500 calls per year
- Two-Unit Station: 8,760 calls per year
- Three-Unit Station: 14,000 calls per year

Table 10 shows the total number of calls for each station and the primary response units during 2013. The other units include responses by cross-staffed or reserve units and are included for the station total:

**Table 10: Responses by Station / Apparatus**

<b>Unit / Station</b>	<b>Number of Responses</b>
<b>Station 1</b>	<b>6,950</b>
HE 41	2,877
HET 41	3,662
Other	411
<b>Station 2</b>	<b>7,058</b>
HE 42	2,467
HET 42	3,266
HT 42	1,280
Other	45
<b>Station 3</b>	<b>1,963</b>
HE 43	1,963
<b>Station 4</b>	<b>2,543</b>
HE 44	1,888
HET 44	655
<b>Station 5</b>	<b>7,438</b>
HE 45	2,512
HET 45	3,596
HT 45	1,232
Other	98
<b>Station 6</b>	<b>4,029</b>
HE 46	1,137
HET 46	2,827
Other	65
<b>Station 7</b>	<b>1,634</b>
HE 47	1,634
<b>Station 8</b>	<b>2,128</b>
HE 48	2,128

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<sup>3</sup> Center for Public Safety Excellence, CFAI Standards of Cover, 5<sup>th</sup> Edition

As shown in table 10, the current station/unit call loads are primarily within thresholds for the number of responses occurring at each station, however there are several emergency transport units that are exceeding their capacity, specifically HET 41, HET 42 and HET 45. This may indicate that there are times at which the EMS system is beyond reliability thresholds and may need to be expanded. The need for additional ambulances will be explored more fully in the next section.

Calls per hour can also be used as a performance indicator, as there may be times during peak call loads that agency resources are stretched.

Table 11 illustrates the calls per hour for the HBFD in 2013:

**Table 11: Calls by Hour of Day**

<b>Hour</b>	<b>Total Calls</b>	<b>Avg./Hour</b>
0000	445	1.22
0100	404	1.11
0200	373	1.02
0300	306	0.84
0400	319	0.87
0500	302	0.83
0600	395	1.08
0700	584	1.60
0800	757	2.07
0900	804	2.20
1000	891	2.44
1100	938	2.57
1200	904	2.48
1300	907	2.49
1400	943	2.58
1500	947	2.59
1600	970	2.66
1700	919	2.52
1800	877	2.40
1900	799	2.19
2000	783	2.14
2100	686	1.88
2200	640	1.75
2300	537	1.47
<b>Total</b>	<b>16,430</b>	<b>1.88</b>

As shown in table 11, the Department responds to an average of approximately two (2) calls each hour per day. The hours between 11:00 a.m. and 6:00 p.m. are the busiest time for the Department; during which time they typically handle over 2.5 calls on average each hour. Each of these calls typically requires at least two (2) units to respond.

The following points highlight the information above:

- The Department made 33,743 apparatus runs during 2013 for an average of 92.4 unit responses per day. Based on a total of 16,430 calls in 2013, this results in an average of 2.1 units sent per call.
- Three of the five emergency transport units handle the bulk of the Department workload – HET 41, 42, and 45 handle the bulk of the emergency transport workload. These units handle approximately 75% of the emergency transport unit workload, and each make 3,200 or more runs annually.
- Engines 41, 42, and 45 are the busiest engine companies, averaging approximately 21.6 calls per day or an average of 7.2 calls for each of these engine companies daily.

Overall, emergency response workload is distributed unevenly throughout the Department, with stations 1, 2, and 5 bearing the largest workloads. The number of emergency responses varies considerably, especially for the three (3) busiest emergency transport units.

There are several options that the Department may explore in order to address the high workload levels, including:

- Use truck companies as first due companies for medical and other rescue calls. One approach would be to upgrade truck companies to have ALS units and split the first due area for busy multi- company stations (e.g. Station 2 and Station 5). This would create a medical response area for both engine units and truck units.
- Staffing additional peak-time emergency transport units to handle some of the workload experienced by HET 41, 42, and 45. These could be 12-hour units staffed between 8:00 a.m. and 8:00 p.m.

These options will be further addressed at the end of this section.

## **NUMBER OF EMERGENCY TRANSPORT UNITS REQUIRED**

The project team also examined the number of emergency transport units that are required, based on the system demand in 2013. This analysis incorporates a number of assumptions and data elements including the following:

- Average EMS calls demand by hour. Note that 2012 calls for service data were used.
- Average time needed to handle an EMS call by emergency transport units. The project team used an average handling time of one (1) hour and 10 minutes for each call for service. This figure is based on an average call handling time for ALS units of just over 48 minutes, plus an additional 20 minutes needed for decontamination, clean up, and re-supply of medical equipment and supplies.

- Variance in hourly emergency transport workload: The project team applied two standard deviations of hourly call demand to the average time needed to handle workload within a given hour. Applying this figure ensures that 95% of the variations in EMS workload can be handled.

As shown in the previous section, there are several emergency transport units that responded to over 3,200 calls for service last year.

These data and assumptions were used to evaluate ambulance workload demand within the city. Table 12 identifies the calculations for Emergency Transport Unit Demand Analysis:

**Table 12: Emergency Transport Unit Demand Analysis**

Hour	CFS	Avg./Hour	Handling	Units Req.
0000	369	1.01	1.18	2.37
0100	348	0.95	1.11	2.23
0200	320	0.88	1.02	2.05
0300	247	0.68	0.79	1.58
0400	258	0.71	0.82	1.65
0500	247	0.68	0.79	1.58
0600	317	0.87	1.01	2.03
0700	475	1.30	1.52	3.04
0800	635	1.74	2.03	4.07
0900	660	1.81	2.11	4.23
1000	737	2.02	2.36	4.72
1100	810	2.22	2.59	5.19
1200	755	2.07	2.41	4.83
1300	793	2.17	2.53	5.08
1400	775	2.12	2.48	4.96
1500	798	2.19	2.55	5.11
1600	791	2.17	2.53	5.07
1700	778	2.13	2.49	4.98
1800	741	2.03	2.37	4.74
1900	678	1.86	2.17	4.34
2000	664	1.82	2.12	4.25
2100	580	1.59	1.85	3.72
2200	549	1.50	1.75	3.51
2300	437	1.20	1.40	2.80
<b>Total</b>	<b>13,762</b>	<b>37.70</b>	<b>43.99</b>	<b>3.67</b>

The following points summarize the information in the table above:

- As shown in table 12, there are times when more than five (5) emergency transport units are needed, however approximately four (4) emergency transport

units are needed to handle the overall current EMS workload on an overall average..

- The number of emergency transport units needed per hour varies significantly – from 1.6 units needed during the hours between 3:00 a.m. and 6:00 a.m. to 5.2 units needed during the hour from 11:00 a.m. to 12:00 p.m.
- The average calls for service per 24 hour period for emergency transport units is approximately 38, with a handling time of approximately 44 hours.
- During the hours between 11:00 a.m. and 5:00 p.m., the demand for emergency transport units exceeds the current deployment of these units.

As shown above, ambulance unit deployment is generally in-line with workload demand. However, there are times during the day where demand exceeds capacity.

### **STAFFING EMERGENCY TRANSPORT UNITS**

The HBFD currently uses automatic vehicle locator (AVL) dispatching for closest unit response determination at the fire dispatch center for deciding which units to send to a call, regardless of the designated response area for a station or unit. This method utilizes technology to ensure the unit with the fastest predicted response time is dispatched. The agency also has designated response areas for each station. These areas were dedicated based on assumption that the respective station would have the fastest response time. These proactive approaches to the dispatch of units ensures that the most expedient response times are achieved, but the current frequency of calls during the peak call times results in the closest unit responding from outside their response area. An approach to fix this would be to staff a peak hour emergency transport unit that floats between stations during peak call times to ensure an emergency transport unit is available closer to calls in areas with high call volumes (specifically stations 1, 2, and 5).

The project team believes the department should pursue the option of staffing an additional emergency transport unit during peak call hours (8:00 a.m. and 8:00 p.m.). This will assist in balancing workload between units, and will improve availability of emergency transport units to improve travel times.

#### ***Recommendations:***

***The Department should consider a peak-hour emergency transport unit to provide additional coverage to the busiest areas of the city.***

***The Department and the City should continually monitor the response time and workload of the Emergency Transport Units to ensure performance standards are met.***

### **3. FIRE PREVENTION DIVISION**

This chapter of the report focuses on the workload and staffing needs of the Fire Prevention Division.

The Fire Prevention Division employs two (2) Fire Protection Analysts to conduct plan reviews of new construction and remodel projects in the City to ensure the building plans meet the requirements established by the City prior to projects being approved for construction. There are three (3) Fire Inspectors assigned to conduct inspections for: New Occupancies, Certificate of Occupancies, Temporary/Operational permits, State Mandated, Oil Well and citizen complaints related to adherence to established Fire Codes. Fire Inspectors also follow up on issues found during inspections conducted by the fire companies. There is one (1) Hazardous Materials Program Specialist who manages the Certified Unified Program Agency (CUPA) and conducts CUPA inspections. During interviews with fire prevention staff there was a concern that the current new construction growth in the City is limiting the ability of the current fire prevention staff to effectively handle the workload within the established performance standards set by the City.

#### **THE FIRE INSPECTIONS**

The following workload data was provided for 2013 by the Fire Department related to the inspection workload of fire prevention personnel. This information is shown in the Tables 13 and 14:

**Table 13: Ongoing Fire Safety Inspections**

<b>Inspection Type</b>	<b>Inspector</b>	<b>Number of Occupancies</b>	<b>Number Inspected</b>	<b>% Inspected</b>
Occupancy	Fire Companies	6,068	6,064	99%
Schools	Fire Prevention	57	57	100%
Oil Wells	Fire Prevention	207	207	100%
CUPA	Fire Prevention	429	249	58%
Fire Permit	Fire Prevention	661	385	58%

**Table 14: New/Tenant Improvement Inspections**

Inspection Type	Count
New construction and tenant improvement	474
System Inspections	1,528
Miscellaneous Inspections (Methane, state licensed, etc.)	1,705
Plan Checks	2,203
<b>Total</b>	<b>5,910</b>

As shown in table 14, there were a total of 11,129 inspections conducted in 2013 as well as 2,203 plan checks by the Huntington Beach Fire Department. The Department uses on-duty emergency response personnel to conduct annual general business inspections, which accounted for over 6,000 inspections in 2013. This is excellent use of the available time of emergency response personnel during normal business hours, and should continue. When the company inspections are removed from the calculation there were a total of 5,065 inspections and re-inspections in 2013 in Huntington Beach primarily assigned to three Fire Inspectors.

***Recommendation: Continue to utilize emergency response personnel during available time to conduct general business inspections and monitor annual inspection workload to ensure that adequate inspections services are provided and appropriate staffing resources are maintained.***

**PLAN REVIEW**

The Fire Prevention Analysts conduct the plan review for fire alarm systems, fire hydrants, fire sprinklers and building access, etc. for Huntington Beach. This includes reviewing the sprinkler plans for all new home construction in the city. The fire prevention analysts also currently assist the fire prevention inspectors with conducting inspections as time permits. While this served the agency well when construction slowed, there is currently no capacity for these two personnel to assist in conducting inspections in the field as they are required to provide timely review of plans submitted to the City for new construction and remodel projects. Third-party consultants are used for oil well abandonments, soil contamination and methane level mitigation evaluations.

Table 15, illustrates the workload for the fire prevention analysts in 2012 and 2013:

**Table 15: Fire Prevention Plan Checks**

2012	2013	Increase
1,456	2,203	51%

As shown in table 15, there was an increase of 51% in the workload of the fire prevention analysts from 2012 to 2013. The amount of time a plan review takes to complete varies by the size of the building and complexity of the fire protection systems, however a plan review professional can generally review on average approximately 500 plans per year. The amount of plan checks performed by the two on staff fire protection analysts in 2012 and 2013 exceed the average assumed in this report. Additionally, based on the previous two years information, construction activity and plan check volume in the City can vary greatly from year to year with many factors such as market trends, economic trends, political climate, etc. accounting for variation.

***Recommendation: Continue to monitor the workload of fire prevention analysts as it relates to plan reviews submitted to the City and consider implementing best practices such as continuing to use on-call contract plan check services during years of increased construction activity to ensure standard turn-around times for plan checks are being met.***

## **PUBLIC EDUCATION**

The Huntington Beach Fire Department is currently only conducting fire education activities when the public requests a tour or program. This is not a best or proactive practice for a modern fire department, and the public education activity should become more of a focus.

Table 16, illustrates the public education activity undertaken in 2013:

**Table 16: Public Education Activity**

<b>Activity</b>	<b>Count</b>
Fire Station Tour	49
School Programs	21
Community Events	21
<b>Total</b>	<b>91</b>

As shown in table 16, there were a total of 91 fire prevention education activities conducted by the HBFD in 2013. This is a very low number for a community the size of Huntington Beach.

Given the size of the service population, number of schools, and diversity of the City, having no dedicated personnel to coordinate public education programming is insufficient. The Department should have a civilian position authorized to coordinate and expand the public education programming within the Department. This position can be used to increase the number of presentations to high-risk groups (i.e. schools, nursing homes, daycares etc.) as well as to develop additional programming including:

- Educational programs aimed at areas that have a history of accidental fires and higher use of the emergency medical system use.
- Expanding the smoke detector maintenance awareness program in the city.
- Developing fire safety educational material in different languages.
- Developing partnerships with community groups and other public safety providers to identify high risk groups and develop programming.

While emergency operations personnel should continue to provide support, it is unrealistic to expect that a comprehensive public education program can be developed without additional staff resources. As the city continues to grow and emergency workload continues to increase, risk reduction strategies, such as public education, will become even more important.

***Recommendation: The City should consider employing a variety of methods to ensure an effective public education program is implemented. In addition to fire prevention activities/events, the City can utilize other resources (e.g. – social media, City websites, etc.) to reach a broader portion of the City and expand public education opportunities. The City should evaluate opportunities for use of non-sworn staff, including the need for dedicated program personnel, to coordinate a comprehensive Fire or combined Safety (i.e. – Police and Fire) education program.***

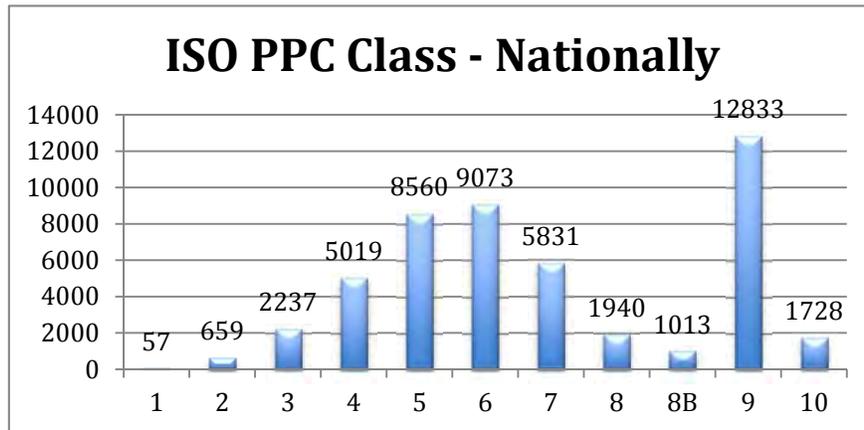
## **INSURANCE SERVICES ORGANIZATION (ISO) RATING.**

Huntington Beach currently has an ISO public protection classification of one (1), which is the highest classification for this rating agency. The discussion of a lowered ISO public protection classification (PPC) and its impact on insurance rates often varies. For the insurance agencies that use ISO in determining homeowner rates, it is only one tool in the process. The insurance companies establish the rates (premiums) they charge their policyholders, which depend upon many factors – including fire loss experience in an area, underwriting guidelines, and the marketing strategy for an area.

Insurance companies establish premium rates for commercial and industrial occupancies individually based on the type of business being conducted, presence of fire detection, and automatic fire suppression systems, etc.

Graph 17 depicts the current distribution of communities by Public Protection Classification (PPC) class nationally as reported by ISO. As shown with a current PPC of one (1), Huntington Beach is rated in the highest classification, with only 56 other communities in the nation having reached this classification:

**Figure 17: ISO National Classification**



***Recommendation: The City and Fire Department should work to maintain their current ISO rating.***

## **4. ADMINISTRATIVE OPERATIONS DIVISION**

This chapter focuses on the various support services provided from within the Administrative Operations Division of the Fire Department. The first section addresses the Departments approach to training.

### **TRAINING PROGRAM**

The Fire Department currently provides initial and on-going fire, rescue, and emergency medical training through the Central Net Operations Authority (CNET). Huntington Beach has a well developed training programming, with personnel receiving a total of 16,311 hours of training in 2013, as shown in the agency profile.

The Training Division provides initial academy training to new recruits as well as ongoing training for fire personnel. The Division is also responsible for developing curriculum for ongoing fire, rescue and EMS training. A Battalion Chief oversees the Training Division and is assisted by a Deputy Fire Marshal to ensure all personnel receive the required training.

The regional approach used by Huntington Beach for the delivery of fire training is a positive approach. This ensures a continual focus of training with the automatic aid partners that respond to emergencies with HBFD personnel on a daily basis. The current approach to providing training and staffing levels at the training facility should continue.

### **FIRE MEDICAL PROGRAM**

The HBFD has a voluntary subscription program called FireMed. Currently, approximately 21,000 city households are enrolled in the Program. Revenue from membership and billing for paramedic and emergency ambulances services funds 12 Firefighter Paramedics, personnel and supplies for the transport program, and the department's emergency medical service costs.

The HBFD also utilizes a full time nurse to oversee quality assurance and EMS training for HBFD emergency medical personnel. This is an excellent approach to ensuring consistent review of the quality of care provided by field personnel when treating patients as well as initial and continuing education for agency personnel.

### **EMERGENCY MANAGEMENT**

The City of Huntington Beach currently has a single Emergency Services Coordinator assigned to handle emergency management and homeland security issues for the City. This is due to having the Battalion Chief position assigned to this area frozen in the budget. This person is responsible for keeping the hazard mitigation plan up to date,

serving as a liaison with County, State and Federal agencies related to emergency preparedness and mitigation, managing the emergency operations center (EOC), serving as the lead safety officer for the City as well as overseeing the Radio Amateur Civil Emergency Service (RACES) and Community Emergency Response Team (CERT) volunteers and numerous grants.

Huntington Beach is unique in the fact that there are many risks related to natural and man-made disasters present in the community. There are also security risks due to the numerous high profile events that take place annually. The City should continue to ensure these risks are appropriately addressed and receive the proper focus and attention.

***Recommendation: Continue to monitor the effectiveness of the emergency management division and EOC operations and periodically evaluate the provision of funding the Battalion Chief position or additional staffing resources as needed.***

### **ADMINISTRATIVE SUPPORT**

The HBFD currently has adequate authorized administrative support personnel to provide services to the Department. A key to this has been the approval of additional funds to transition to a full-time position at the front counter to support the Fire Prevention Division. This additional funding was approved in the FY 2014/15 Budget.

The Department also currently uses volunteers, working on average 3 – 10 hours per week to provide additional clerical assistance as needed. This is a positive program for both the HBFD and the community and should continue.

***Recommendation: Continue to implement the use of community volunteers to provide clerical support and continue to monitor and evaluate options for the availability of staffing resources to ensure that a high level of consistent customer service is maintained.***

## **5. Marine Safety Division**

The Marine Safety Division provides lifeguard, emergency medical, wildlife, rescue, and law enforcement services on the City's Main Beach and Sunset Beach. Hours of operation vary according to the time of year from a minimum of ten hours per day (7:00 a.m. to 5:00 p.m.) during the winter months to 18 hours per day (6:00 a.m. to midnight) during the summer months. Daily staffing levels also fluctuate throughout the year. A minimum of one (1) Marine Safety Lieutenant, five (5) Marine Safety Officers and one (1) Ocean Lifeguard III supplemented by seasonal staff as necessary are scheduled to meet demands for service from October through April. The daily staffing levels during the summer months increases by an additional 53 seasonal lifeguard personnel for aquatic rescue and preventative action response. Additional personnel are assigned to special events and to supplement the operation during periods of unusually high rescue activity due to surf conditions or holidays. The Marine Safety Division has mutual aid agreements with a number of other regional agencies.

The Marine Safety Division conducted 4,157 rescue activities in 2013. Rescuing swimmers accounted for the majority of the incidents, accounting for 72% of the rescue activity. Rescues are defined as anyone physically assisted from the hazardous condition (e.g., rip current) by a lifeguard. In addition, the Marine Safety Division conducted 146,757 preventative actions in 2013. Preventative actions involve lifeguard staff contacting, warning, and advising swimmers, surfers, and others of hazardous conditions before the assistance of additional Marine Safety staff is needed. The division also responded to 1,711 medical aid calls in 2013. Open wounds were the most common minor medical aid request, accounting for 493 (71%) of the 694 incidents. Stingray encounters were the most common cause of major medical aid being required, accounting for 655 (64%) of the 1,017 major medical aid calls.

The Division also responded to other incidents and provided preventive services in 2013, such as lost and found (232 incidents), health advisory postings (1), wildlife calls (68), ocean hazards (64), and beach hazards (124).

The Marine Safety Division provides a number of enforcement activities. In 2013, warnings were the most common law enforcement action taken by Marine Safety staff. These include contacts seeking voluntary compliance for violations of the Huntington Beach Municipal Code for illegal fires, alcohol consumption, dogs outside of permitted areas, speeding bicycles on the beach service road, and fishing violations on the pier.

In 2013, the Marine Safety Division was merged into the Fire Department (formerly part of the Community Services Department) and they also assumed responsibility for providing lifeguard services in Sunset Beach. Between the years 2013 and 2014, beach attendance increased from approximately 10.5 million people to approximately 12 million people. Rescues increased by approximately 2,500 incidents and preventative actions increased over 100,000 incidents. The Fire Department should track marine

safety activities and operations for this relatively new division in the Department and monitor trends that could affect the availability of services.

***Recommendation: Continue to monitor building development and beach visitation trends for impacts on marine safety service delivery and periodically evaluate the provision of additional staffing resources as needed.***

## **APPENDIX A – DESCRIPTIVE PROFILE OF THE FIRE DEPARTMENT**

This descriptive profile provides summary information regarding the current organization and operation of the Huntington Beach Fire Department (HBFD), which serves as the context for the General Plan study. Various types of data were collected and developed through interviews with HBFD management and personnel, tours of the Fire Department's response area, review of available documents and records, as well as access to computerized records and data sets. This profile provides information that will be utilized by the project team to analyze workloads, organization, management and service levels provided by the HBFD. The organization of this profile is as follows:

- Organization and Staffing
- Department Budget
- Emergency Operations Daily Staffing
- Personnel Costs and Overtime Utilization
- Fire Department Roles and Responsibilities
- Fire Department Workloads and Response Times

The first section that follows provides the general overview of the Huntington Beach Fire Department, including its organization and authorized staffing.

### **ORGANIZATION OF THE HUNTINGTON BEACH FIRE DEPARTMENT**

The Huntington Beach Fire Department provides response to fires, medical emergencies, technical rescues, hazardous materials incidents, aquatic rescues and preventative actions, natural and man-made disasters, automatic and mutual aid assistance to neighboring departments and related emergencies in an effort to reduce life and property loss. In addition, the Fire Department inspects businesses and properties, assists with code enforcement, and conducts public education programs. The Fire Department also prepares revenue projections derived from fire department services and oil wells located on City property and a privately operated oil lease, which the City yields royalties from. The various Fire Department functions are performed with an authorized staffing of 196.5 full-time, one (1) part-time person and approximately 150 seasonal lifeguard employees. There are four (4) functional areas in the Fire Department: Operations Division, Prevention Division, Administration Division and Marine Safety Division.

Table A-1 shows the number of authorized positions, as well as the number of vacancies or frozen positions currently in the Fire Department:

**Table A-1,  
Huntington Beach Fire Department  
Authorized Positions FY 13-14**

<b>Position Title</b>	<b>#</b>	<b>Vacancies</b>
Accounting Technician II	3	0
Admin Analyst Senior	1	0
Administrative Aide	1	0
Administrative Assistant	1	0
Administrative Secretary	3.5	1.5
Ambulance Operator	30	0
Assistant Fire Marshal	1	0
Deputy Fire Marshal/Administrative Fire Captain	3	2 (Frozen)
EMS Coordinator	1	0
Emergency Services Coordinator	1	0
Fire Battalion Chief	5	1 (Frozen)
Fire Captain	30	0
Fire Chief	1	0
Fire Division Chief	2	0
Fire Engineer	30	1
Fire Medical Coordinator	1	0
Fire Prevention Inspector	3	0
Fire Protection Analyst	2	1
Fire Training Maintenance Tech	1	0
Firefighter	12	1
Firefighter Paramedic	48	1
Haz Mat Program Specialist	1	0
Office Assistant II	1	0
Marine Safety Division Chief	1	0
Marine Safety Lieutenant	3	0
Marine Safety Officer II	10	1 (Frozen)
<b>Total</b>	<b>196.5</b>	<b>9.5</b>

The following points highlight the information presented above:

- The current number of authorized positions is 196.5 and includes 196 full-time and positions and one part-time position.
- There are currently 9.5 vacancies in the Fire Department, including the four (4) frozen positions.

Table A-2 illustrates the turnover history for the past three years for the Fire Department. The numbers are separate of part-time personnel or Ambulance Operators who separated from the HBFD during these years:

**Table A-2, HBFD Turnover**

<b>Year</b>	<b>Turnover</b>
2011	7 employees
2012	10 employees
2013	5 employees
<b>Average</b>	<b>7.3 per year (3.7%)</b>

As shown above, the Department has an average annual turnover rate of 3.7% based on the previous three-year history. Ambulance Operators are limited to a three-year term of employment, which results in a high turnover rate for these positions. Overall the turnover rate is very low and indicates a stable workforce at HBFD.

## **DEPARTMENT BUDGET**

The City of Huntington Beach General Fund primarily funds the Huntington Beach Fire Department operations. Additionally, the Department generates revenue that supports two enterprise funds: Central Net Operations Authority (CNOA) and Certified Unified Program Agency (CUPA), and receives revenue from various grants. Table A-3 illustrates the FY 2013/14 budget as well as the previous four years:

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**Table A-3, HBFD Budget**

<b>Account</b>	<b>FY 09/10 Actual</b>	<b>FY 10/11 Actual</b>	<b>FY 11/12 Actual</b>	<b>FY 12/13 Adopted</b>	<b>FY 13/14 Adopted*</b>	<b>Percent Change</b>
Salaries, Permanent	16,872,859	17,165,734	17,590,866	18,039,522	19,328,611	7.15%
Salaries, Temporary	77,297	111,738	90,176	88,104	1,329,559	1409.08%
Salaries, Overtime	3,948,914	4,675,396	4,586,953	3,695,723	3,960,390	7.16%
Leave Pay Outs	377,904	365,409	365,824	-	-	-
Benefits	8,839,611	9,988,769	10,365,028	10,507,232	12,606,513	19.98%
<b>Personnel Services Total</b>	<b>30,116,585</b>	<b>32,307,046</b>	<b>32,998,848</b>	<b>32,330,581</b>	<b>37,225,072</b>	<b>15.14%</b>
Utilities	35,196	58,624	36,214	38,400	38,600	0.52%
Purchased Water	206	167	212	1,000	1,000	0.00%
Equipment & Supplies	1,050,163	746,472	904,957	714,800	930,682	30.2%
Repairs & Maintenance	246,677	250,476	202,578	229,107	292,715	27.76%
Conferences & Training	54,496	31,418	40,426	26,900	92,400	243.49%
Professional Services	48,581	419,848	398,396	378,350	392,990	3.87%
Other Contract Services	468,415	224,428	236,355	173,588	429,545	147.49%
Rental Expense	54,755	54,083	47,616	60,700	82,200	35.42%
Government Payments	1,146,537	984,584	789,005	925,317	919,968	-0.58%
Expense Allowance	27,828	30,836	23,156	22,302	27,552	23.54%
Other Expense	9,439	9,891	16,284	9,300	13,300	43.01%
<b>Operating Expenses</b>	<b>3,142,293</b>	<b>2,810,827</b>	<b>2,695,202</b>	<b>2,579,734</b>	<b>3,220,953</b>	<b>24.86%</b>
Improvements	344,060	169,474	230,906	279,514	124,603	-55.42%
Equipment	60,041	143,917	-	-	-	-
Vehicles	22,265	-	-	-	-	-
Software – Capital	14,697	-	-	-	-	-
<b>Capital Total</b>	<b>441,064</b>	<b>313,391</b>	<b>230,906</b>	<b>279,514</b>	<b>124,603</b>	<b>-55.42%</b>
Transfers	13,000	13,000	13,000	13,000	13,000	0.00%
<b>Total Non-operating</b>	<b>13,000</b>	<b>13,000</b>	<b>13,000</b>	<b>13,000</b>	<b>13,000</b>	<b>0.00%</b>
<b>Grand Total</b>	<b>33,712,942</b>	<b>35,444,264</b>	<b>35,937,956</b>	<b>35,202,830</b>	<b>40,583,628</b>	<b>15.29%</b>
General Fund	32,397,630	34,316,940	34,651,954	34,351,367	39,906,314	16.17%
Other Funds	1,315,312	1,127,324	1,286,002	851,462	677,314	-20.45%

As shown in table A-3, the FY 2013/14 adopted budget totals \$40.58 million when all funding mechanisms are included. This is approximately 15.3% above the adopted budget for FY 2012/13 and 12.9% above actual FY2011/12 actual expenditures. It is important to note that the FY2013/14 budget is the first budget to include Marine Safety as part of the Fire Department budget, which resulted in staffing and operating

increases. The increase attributed to Marine Safety being added to the Fire Department budget is \$4,685,650, which is 11.6% of the Fire Department budget. In total the adopted FY2013/14 budget is funded 98.3% from the General Fund and 1.7% from other funds.

**OPERATIONS DAILY STAFFING**

The Huntington Beach Fire Department Operations Division currently operates out of eight (8) fire stations, located within city limits. The Fire Administration offices are located in the City Hall complex at 2000 Main Street. The Marine Safety Division operates out of Lifeguard Headquarters, Junior Lifeguard Headquarters, Tower Zero on the City Pier and 30 Lifeguard Towers on the City Beach. Marine Safety Division activity is identified later in this report.

Table A-4 shows the locations of the Huntington Beach Fire Stations and the response units associated with each station:

**Table A-4, Station Locations and Apparatus**

<b>Station</b>	<b>Address</b>	<b>Equipment Staffed</b>
1	18311 Gothard St	HB4, HE41, HET41
2	16221 Gothard St	HE42, HT42, HET42, HUS&R42
3	19711 Bushard St	HE43
4	21441 Magnolia	HE44, HET44
5	530 Lake St	HE45, HT45, HET45
6	18591 Edwards St	HE46, HHM46, HMDU46, HET46
7	3831 Warner Ave	HE47, OES 303
8	5891 Heil Ave	HE48

Huntington Beach Fire Department has automatic aid agreements in place with Orange County Fire Authority, Fountain Valley Fire Department, Costa Mesa Fire Department, and Newport Beach Fire Department. These neighboring fire agencies provide automatic aid by the appropriate fire dispatch center(s) dispatching the closest unit(s) to emergencies. Although the automatic aid agreements provide for a broad resource base and a large number of fire stations from each agency, only the locations of the closest automatic aid fire stations are shown in the table table A-5.

**Table A-5, Automatic Aid Partners**

Agency	Station	Address	Apparatus	Auto Aid
Costa Mesa Fire	Royal Palm #1	2803 Royal Palm Costa Mesa	Paramedic Unit Engine	Yes
Costa Mesa Fire	Placentia #4	2300 Placentia Ave Costa Mesa	Engine	Yes
Costa Mesa Fire	Park #3	1865 Park Ave Costa Mesa	Paramedic Unit Truck	Yes
Fountain Valley Fire	1	17737 Bushard Fountain Valley	Engine Truck	Yes
Fountain Valley Fire	2	16767 Newhope Fountain Valley	Engine	Yes
Newport Beach Fire	Lido #2	475 32 <sup>nd</sup> St Newport Beach	Engine Truck	Yes
Orange County Fire	25	8171 Bolsa Ave Midway City	Engine	Yes
Orange County Fire	44	718 Central Ave. Seal Beach	Engine	Yes
Orange County Fire	48	3131 North Gate Rd Seal Beach	Engine	Yes
Orange County Fire	64	7351 Westminster Blvd Westminster	Engine Truck	Yes
Orange County Fire	65	6061 Hefley St Westminster	Engine	Yes
Orange County Fire	66	15061 Moran St Westminster	Engine	Yes

The current daily staffing of fire and EMS apparatus is illustrated in table A-6.

**Table A-6,  
City of Huntington Beach  
Shift Unit Assignments and Minimum Staffing**

Units	Scheduled Staffing	Minimum Staffing	Units	Daily Staffing
Battalion	1	1	1	1
Engines	4	4	8	32
Trucks	4	4	2	8
Emergency Transports	2	2	5	10
<b>Total</b>	<b>11</b>	<b>11</b>	<b>16</b>	<b>51</b>

As shown in table A-6, a total of 51 shift personnel are scheduled each day to staff units with minimum staffing also being 51. This includes 41 Safety personnel and 10 non-sworn Ambulance Operators. For all vacancies on emergency apparatus, overtime personnel are called in or held over to fill the vacancy, resulting in a constant daily staffing of 51 shift personnel. For the fire suppression force, the Battalion Chief, Engine Company, and Truck Company personnel are all sworn members of the Fire Department. The Ambulance Operators are all non-sworn, limited-term, contract personnel.

Shift personnel work a series of five 24-hour shifts on duty with 24 hours off duty between each shift. After each five-shift rotation shift personnel have 144 hours off. Shift personnel may work voluntarily or be held over/ordered involuntarily to fill mandatory staffing requirements on their scheduled off duty days. The scheduled rotation results in a 56-hour average Fair Labor Standards Act (FLSA) workweek for shift personnel. To illustrate the schedule worked by shift personnel, table A-7 shows the number of shifts worked during the month of December 2013, with each shift indicated by a different color:

**Table A-7,  
Huntington Beach Fire Department  
Shift Schedule for December 2013**

Sun	Mon	Tues	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

As shown above, the shift schedule utilized by the Huntington Beach Fire Department results in personnel working an approximate average of ten regularly scheduled shifts per month.

## **FIRE DEPARTMENT ROLES AND RESPONSIBILITIES**

Table A-8 describes the key roles and responsibilities of personnel within the Huntington Beach Fire Department:

**Table A-8, HBFD Roles and Responsibilities**

<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Fire Chief	<ul style="list-style-type: none"> <li>• Provides the executive management of the Fire Department, including policies and procedures development, leadership for future services, budget development, identifying service gaps, and working with the elected officials and City management to ensure that the HBFD interests are considered.</li> <li>• Reports to the City Manager.</li> <li>• Provides education regarding how the HBFD operates, provide services and resources.</li> <li>• Supervises the three Division Chiefs, Fire Medical Coordinator, Senior Administrative Analyst and Administrative Assistant.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Fire Medical Coordinator	<ul style="list-style-type: none"> <li>• Supervises and coordinates the FireMed program.</li> <li>• Reports to the Fire Chief.</li> <li>• Ensures complete and timely processing of client data and billing.</li> <li>• Prepares public information requests to ensure compliance with the Health Insurance Portability and Accountability Act (HIPAA).</li> <li>• Prepares responses to public records requests for EMS incidents.</li> <li>• Prepares and maintains budget for the FireMed Program.</li> <li>• Prepares forecasts for program revenue and expenditures.</li> <li>• Maintains membership and billing information.</li> <li>• Supervises FireMed support staff.</li> <li>• Responds to critical incidents as needed.</li> </ul>
Senior Administrative Analyst	<ul style="list-style-type: none"> <li>• Responsible for developing and monitoring the department budget.</li> <li>• Reports to the Fire Chief.</li> <li>• Assists in developing department policies and procedures.</li> <li>• Conducts research projects for the department.</li> <li>• Prepares and presents department reports.</li> <li>• Evaluates contracts and activities.</li> <li>• Supervises administrative and accounting support staff.</li> </ul>
Administrative Assistant	<ul style="list-style-type: none"> <li>• Serves as the assistant to the Fire Chief.</li> <li>• Receives calls and visitors to the Chief's office.</li> <li>• Provides assistance to the public and employees of Huntington Beach.</li> <li>• Maintains files and records of high confidentiality.</li> <li>• Assists with coordination of multiple projects and activities.</li> </ul>
Administrative Secretary	<ul style="list-style-type: none"> <li>• Provides secretarial and administrative support for the Division Chiefs and Hazardous Materials Program Specialist.</li> <li>• Takes minutes at meetings.</li> <li>• Provides information and assistance to the public and other employees of Huntington Beach.</li> </ul>
Administrative Aide	<ul style="list-style-type: none"> <li>• Provides administrative support for the department.</li> <li>• Reports to the Senior Administrative Analyst.</li> <li>• Collects, compiles and analyzes data in support of the department.</li> <li>• Assists the Administrative Assistant and Senior Administrative Analyst as required.</li> </ul>
Accounting Technician	<ul style="list-style-type: none"> <li>• Provides financial recording keeping and reporting.</li> <li>• Reports to the Senior Administrative Analyst or FireMed Coordinator.</li> <li>• Maintains accounts payable, accounts receivable, payroll and purchasing records.</li> <li>• Accepts payments from walk-in customers.</li> <li>• Enters financial information into the appropriate data systems.</li> <li>• Receives, posts and audits accounts to ensure accuracy.</li> <li>• Performs other routine clerical and accounting duties as assigned.</li> <li>• Assists with FireMed billing and collection efforts.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Division Chief Operations	<ul style="list-style-type: none"> <li>• Responsible for all sections of the Operations Division.</li> <li>• Reports to the Fire Chief.</li> <li>• Assumes command of the Fire Department in the absence of the Chief as assigned.</li> <li>• Is "on call" and responds to emergency incidents as required.</li> <li>• Directs the planning of programs and activities of the assigned division.</li> <li>• Determines the deployment of the necessary staff, equipment, apparatus and vehicles.</li> <li>• Coordinates the administration and investigation of personnel issues.</li> <li>• Administers the budget and approves expenditures.</li> <li>• Assists in preparation of the annual budget.</li> <li>• Participates in the strategic planning process for the Department.</li> <li>• Oversees and coordinates upgrades, repairs and maintenance of fire department infrastructure including stations, apparatus, and vehicles.</li> <li>• Supervises and coordinates with staff on the mandatory and routine training activities for the assigned division.</li> <li>• Oversees and assists in the career development of Chief Officers, Fire Captains, firefighting personnel, and administrative personnel.</li> <li>• Oversees the coordination and management of services for firefighting, EMS, Hazardous Materials and Urban Search and Rescue, as well as Emergency Management and Homeland Security.</li> <li>• Works with other fire agencies in the county to develop and deliver coordinated emergency response across jurisdictional boundaries.</li> <li>• Develops written and verbal communications for dissemination to fire department personnel.</li> <li>• Coordinates the development and revision of fire department policies and procedures.</li> <li>• Coordinates the use of technology to enhance fire service delivery and documentation.</li> </ul>
Battalion Chief Shift	<ul style="list-style-type: none"> <li>• Administers the daily operation of assigned shift.</li> <li>• Reports to the Division Chief/ Operations.</li> <li>• Provides general supervision and deployment of personnel for assigned stations, apparatus, and equipment.</li> <li>• Assists in planning, budgeting, organizing, and coordinating activities in their assigned area of responsibility.</li> <li>• Responds to and manages a multitude of emergency calls such as: building fires, wildland fires, hazardous materials incidents, multi- casualty incidents, and technical rescue incidents.</li> <li>• Administers the day to day operations of eight engine companies, two truck companies, five emergency transport units, the Hazardous Materials Response Team, the Urban/Search and Rescue Team, and the California Office of Emergency Services (OES) fire engines for a total of fifty personnel.</li> <li>• Ensures discipline is maintained and rules and regulations are followed.</li> <li>• Conducts inspections of their assigned areas, fire stations and fire apparatus to ensure cleanliness, good order and general upkeep is maintained.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Captain	<ul style="list-style-type: none"> <li>• Reports to assigned Shift Battalion Chief</li> <li>• Responds to emergency calls for service such as: building fires, wildland fires, hazardous materials incidents, medical emergencies, multi-casualty incidents and technical rescue incidents.</li> <li>• Supervises the activity of the assigned company or program.</li> <li>• Oversees day-to-day operations of assigned company or program.</li> <li>• Provides direction, control and supervision in the care, operation and maintenance of assigned station, apparatus and equipment.</li> <li>• Plans, supervises and conducts company training.</li> <li>• Conducts preliminary fire investigations to determine the origin and cause of a fire.</li> <li>• Conducts pre-fire planning and develops fire ground strategies.</li> </ul>
Engineer	<ul style="list-style-type: none"> <li>• Reports to assigned Shift Captain.</li> <li>• Drives apparatus to emergency scenes.</li> <li>• Ensures assigned apparatus is properly maintained.</li> <li>• Operates and controls the water supply and fire pumps at emergency scenes.</li> <li>• Conducts company fire prevention inspections as scheduled.</li> <li>• Conducts public education events as scheduled.</li> </ul>
Firefighter/ Paramedic  Firefighter	<ul style="list-style-type: none"> <li>• Reports to assigned Shift Captain.</li> <li>• Paramedics are assigned to engine companies and firefighters to truck companies.</li> <li>• Documents patient care of EMS incidents.</li> <li>• Responds to emergency calls for service.</li> <li>• Complies with training requirements.</li> <li>• Conducts company fire prevention inspections as scheduled.</li> <li>• Conducts public education events as scheduled.</li> </ul>
Ambulance Operator	<ul style="list-style-type: none"> <li>• Provides emergency medical transportation services for the City.</li> <li>• Reports to a Shift Captain.</li> <li>• Operates the emergency transport units.</li> <li>• Performs Basic Life Support patient treatment according to established Emergency Medical Technician (EMT) protocols.</li> <li>• Documents patient care of EMS incidents.</li> <li>• Maintains proper inventory levels on assigned emergency transport unit.</li> <li>• Ensures the station and emergency transport unit are clean and ready for response.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Battalion Chief Training	<ul style="list-style-type: none"> <li>• Manages the Central Net Training Center Facility and Budget.</li> <li>• Reports to Division Chief/Operations.</li> <li>• Manages the development and delivery of annual training programs for the fire department.</li> <li>• Manages Department of Motor Vehicles (DMV) licensing program.</li> <li>• Manages Emergency Medical Services (EMS) training and certification program.</li> <li>• Manages all promotional testing for sworn safety personnel.</li> <li>• Manages recruit training for Firefighter and Firefighter/Paramedics.</li> <li>• Manages recruit training for Ambulance Operators.</li> <li>• Assists with managing the recruitment process for hiring new Firefighters and Firefighter/Paramedics and Ambulance Operators.</li> <li>• Manages the Hazardous Materials response budget.</li> <li>• Manages the Fire Department Emergency Operations Center (FDOC).</li> <li>• Respond to emergency incidents as needed to support the incident commander.</li> </ul>
Deputy Fire Marshal/ Administrative Fire Captain Training	<ul style="list-style-type: none"> <li>• Manages the recruit training academies and probationary evaluations</li> <li>• Reports to the Battalion Chief/Training.</li> <li>• Prepares classroom training and manipulative drills for emergency response crews.</li> <li>• Responsible for creating, conducting and reviewing materials used in Fire Department promotional exams.</li> <li>• Serves as the HBFD representative for the Orange County Training Officers Committee.</li> <li>• Develops, refines, and implements policy/procedure with the intent of providing the foundation for progressive emergency operations through training.</li> <li>• Evaluates fire service tools and equipment for use of HBFD field emergency response personnel.</li> <li>• Analyze fire behavior, fire suppression techniques and situational awareness through live-burn exercises.</li> <li>• Manages training for Firefighter Endorsement DMV licensure.</li> <li>• Conducts testing required for the HBFD Engineer Certification program.</li> <li>• Assists with the planning, budget and implementation of Capital Improvement projects for the Central Net Training Center.</li> <li>• Responsible for deletions and insertions of the HBFD Fire Stations' library inventories.</li> <li>• Provide monthly training bulletins for fire suppression personnel.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
EMS Coordinator	<ul style="list-style-type: none"> <li>• Manages the fire departments continuous quality improvement program (CQI).</li> <li>• Reports to the Battalion Chief/Training.</li> <li>• Monitors and provides direction for patient care provided by firefighter paramedics.</li> <li>• Coordinates EMS educational activities and training.</li> <li>• Assist with developing EMS policies and procedure.</li> <li>• Serves as the City's EMS Liaison to hospitals and to the county and state EMS agencies.</li> <li>• Manages the infections control program for the Fire Department and serves as designated officer.</li> <li>• Manages the paramedic and EMT certification, recertification, and accreditation.</li> <li>• Coordinates the electronic pre-hospital care reports program.</li> <li>• Assists with coordinating EMS operational changes.</li> <li>• Coordinates the evaluation, elimination and ordering of EMS equipment.</li> <li>• Ensures compliance with all state and county regulatory mandates for EMS providers.</li> </ul>
Deputy Fire Marshal/ Administrative Fire Captain, Operations	<ul style="list-style-type: none"> <li>• Oversees the repairs and maintenance of fire station facilities.</li> <li>• Reports to the Division Chief/Operations.</li> <li>• Interacts with multiple City departments for the management of projects.</li> <li>• Interacts with contractors for services required by Fire Department, e.g. maintenance and repair of dispatch emergency alerting, emergency warning sirens, and personal protective equipment.</li> <li>• Provides support for the procurement of firefighter's personal protective equipment.</li> <li>• Researches, prepares specifications and facilitates procurement of response apparatus and vehicles.</li> <li>• Research and procurement of new and or mandated equipment.</li> <li>• Administrative duties include budget maintenance, report and policy writing, and planning for project completeness.</li> <li>• Attends meetings such as monthly Fire Operations and Strategic Planning.</li> <li>• Manages personnel on modified duty assignments.</li> <li>• Assists the Training Division with evaluated drills.</li> </ul>
Deputy Fire Marshal/ Administrative Fire Captain, Emergency Transport Program	<ul style="list-style-type: none"> <li>• Responsible for recruitment, hiring, training, and personnel documentation related to Ambulance Operators.</li> <li>• Reports to the Division Chief/Operations.</li> <li>• Prepares and maintains budget for the Emergency Transport Program.</li> <li>• Coordinates the acquisition and maintenance of emergency transport apparatus and equipment.</li> <li>• Liaison with state and county agencies for issues concerning emergency medical transport program.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Battalion Chief Emergency Management and Homeland Security	<ul style="list-style-type: none"> <li>• Manages the City’s Emergency Operations Center (EOC).</li> <li>• Reports to Division Chief/Operations.</li> <li>• Oversees readiness of EOC to ensure functionality of all systems in the event of an emergency activation or exercise.</li> <li>• Supervises the City’s Emergency Services Coordinator.</li> <li>• Assists with preparation of and manages the budget for the EOC.</li> <li>• Manages the City’s Emergency Management and Homeland Security grant program.</li> <li>• Responds to emergency incidents as needed to support the incident commander.</li> </ul>
Emergency Services Coordinator	<ul style="list-style-type: none"> <li>• Plans, organizes and coordinates the citywide Emergency Management and Homeland Security Program.</li> <li>• Currently reports to the Division Chief/Operations on the interim basis. Initially, reported to the Battalion Chief/Emergency Management and Homeland Security, a position that is currently frozen and unfilled.</li> <li>• Develops, prepares and maintains the City’s Emergency Operations Plan.</li> <li>• Prepares the Emergency Operations Center (EOC) for activation.</li> <li>• Ensures compliance with Federal and State and local laws and ordinances related to emergency preparedness.</li> <li>• Develops and conducts emergency preparedness exercises.</li> <li>• Prepares required Federal Emergency Management Agency (FEMA) and local agency after action reports.</li> <li>• Prepares and maintains budget for the Emergency Management and Homeland Security Program.</li> <li>• Recruits, trains and directs the work of volunteers: Community Emergency Response Team (CERT), Radio Amateur Civil Emergency Services (RACES), and Employee Safety Officers.</li> </ul>
Division Chief Fire Prevention	<ul style="list-style-type: none"> <li>• Administers overall operations of the Fire Prevention Division.</li> <li>• Reports to the Fire Chief.</li> <li>• Assumes command of the Fire Department in the absence of the Chief as assigned.</li> <li>• Is “on call” and responds to emergency incidents as required.</li> <li>• Determines the deployment of staff, vehicles and equipment.</li> <li>• Administers the budget and approves expenditures.</li> <li>• Participates in the strategic planning process for the fire department.</li> <li>• Coordinates the administration and investigation of personnel issues.</li> <li>• Responsible for management of the Certified Unified Program Agency (CUPA) Hazardous Materials Disclosure, Petroleum/Chemical, Public Education and Fire Investigation sections of the division.</li> <li>• Responsibility for all fire prevention development services, such as but not limited to: plan checks, fire inspections, and petroleum hazard mitigation.</li> <li>• Responsible for triennial California Fire Code adoption with local amendments.</li> <li>• Responsibility for state mandated fire inspection program.</li> <li>• Coordinates review of life-safety and fire department resource deployment requirements for large public events.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Assistant Fire Marshal	<ul style="list-style-type: none"> <li>• Responsible for assisting the Division Chiefs and Battalion Chiefs with planning, directing, managing, and coordinating the activities of the Fire Prevention Division.</li> <li>• Reports to the Division Chief/Fire Marshal.</li> <li>• Supervises the Fire Inspectors.</li> <li>• Assists in budget preparation, including revenue projections for the Fire Prevention Division.</li> <li>• Serves as custodian of fire inspection, emergency incident, and fire investigation records.</li> <li>• Manages the Fire Department staff and pool vehicle fleet.</li> <li>• Fire Department liaison for planning large events in the city.</li> <li>• Coordinates the Fire Company inspection program.</li> </ul>
Fire Prevention Inspector	<ul style="list-style-type: none"> <li>• Conducts a full range of fire prevention inspection activities for commercial, retail, institutional and residential occupancies.</li> <li>• Reports to the Assistant Fire Marshal.</li> <li>• Reviews plans and blueprints to ensure compliance with applicable standards.</li> <li>• Checks plans for correct installation of fire protection systems.</li> <li>• Issue safety notices, permits and correction letters as needed.</li> <li>• Inspects special events such as the U.S. Surfing Open, Surf City Marathon, volleyball tournaments, street fairs, etc.</li> </ul>
Fire Protection Analyst	<ul style="list-style-type: none"> <li>• Verifies appropriate fire and life safety methods prior to construction.</li> <li>• Reports to the Division Chief/Fire Marshal.</li> <li>• Conducts inspections after construction to ensure compliance with applicable codes and required specifications</li> <li>• Analyzes the design and installation of life safety systems in new construction and modification of existing structures</li> <li>• Interprets applicable codes and standards</li> <li>• Meets with developers and installers to assist in understanding code requirements and specifications</li> <li>• Makes recommendations to the Fire Marshal as needed related to alternative materials and methods for complying with applicable codes and standards</li> </ul>
Haz Mat (CUPA) Program Specialist	<ul style="list-style-type: none"> <li>• Oversees the administration of the Hazardous Materials Disclosure Program to ensure compliance with Certified Unified Program Agency (CUPA) regulations.</li> <li>• Identifies and inspects storage, usage, handling, and disposal of hazardous materials.</li> <li>• Reports to the Division Chief/Fire Marshal.</li> <li>• Consults with business owners regarding proper storage, handling, and disposal of hazardous materials.</li> <li>• Enforces compliance with filing chemical inventory and emergency response plans into the data records system.</li> <li>• Conducts inspections, issues violations and writes reports.</li> <li>• Prepares and maintains budget for the CUPA program.</li> <li>• Manages the used motor oil state grant program.</li> <li>• May manage city-owned oil wells and conduct citywide oil well inspections.</li> </ul>

<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Division Chief Marine Safety	<ul style="list-style-type: none"> <li>• Manages all services and activities of the Marine Safety Division; directs and participates in the planning, development, organization, supervision, and coordination of all division activities and programs.</li> <li>• Reports to the Fire Chief.</li> <li>• Oversees the administration of the Junior Lifeguard program.</li> <li>• Prepares division budget and monitors fund expenditures for the Marine Safety Division and Junior Lifeguard Program; ensures availability of required equipment, materials, and supplies within budget parameters.</li> <li>• Conducts a variety of staff projects, organizational studies and investigations; prepares and presents reports to the City Council, administration and outside agencies and community groups.</li> <li>• Investigates complaints and accidents and follows up as required.</li> <li>• Prepares and implements policies, procedures and training.</li> <li>• Coordinates division activities with other departments and outside agencies; serves as Marine Safety Division spokesperson on various City committees, study groups and task forces; represents Marine Safety at community events and other promotional activities.</li> <li>• Works with other safety department personnel in the city's Emergency Operation Center during disasters; functions as an incident commander for specific types of city emergencies.</li> <li>• Selects, trains, supervises, and evaluates assigned staff.</li> <li>• Reviews all incident and emergency reports and citations issued for beach infractions.</li> <li>• Prepares, reviews and/or analyzes statistical reports.</li> </ul>
Marine Safety Lieutenant	<ul style="list-style-type: none"> <li>• Supervises the Marine Safety Officers.</li> <li>• Reports to the Division Chief, Marine Safety.</li> <li>• Conducts training sessions for Marine Safety personnel.</li> <li>• Provides for the safety of the beaches through education, prevention and emergency response.</li> <li>• Establishes command and control of emergencies on City beaches.</li> <li>• Enforces beach ordinances and issues citations for violations.</li> <li>• Coordinates the recruiting, testing and hiring for the division.</li> <li>• Manages the payroll process for the division.</li> <li>• Serves as Public Information Officer (PIO) for the Marine Safety Division.</li> <li>• Coordinates and conducts public education programs.</li> </ul>
Marine Safety Officer II	<ul style="list-style-type: none"> <li>• Supervises the seasonal lifeguards.</li> <li>• Reports to the Marine Safety Lieutenant.</li> <li>• Provides oversight in the absence of the Marine Safety Lieutenant.</li> <li>• Conducts training sessions for Marine Safety personnel.</li> <li>• Provides for the safety of the beaches through education, prevention and emergency response.</li> <li>• Establishes command and control of emergencies on City beaches until relieved.</li> <li>• Enforces beach ordinances and issues citations for violations.</li> <li>• Patrols the beach and ocean areas from an assigned tower or vehicle.</li> <li>• Responds to aquatic and related emergencies in the beach and ocean areas.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Marine Safety Officer I	<ul style="list-style-type: none"> <li>• Supervises the seasonal lifeguards.</li> <li>• Reports to the Marine Safety Lieutenant.</li> <li>• Provides oversight in the absence of the Marine Safety Lieutenant.</li> <li>• Conducts training sessions for Marine Safety personnel.</li> <li>• Provides for the safety of the beaches through education, prevention and emergency response.</li> <li>• Establishes command and control of emergencies on City beaches until relieved.</li> <li>• Enforces beach ordinances and issues citations for violations.</li> <li>• Patrols the beach and ocean areas from an assigned tower or vehicle.</li> <li>• Responds to aquatic and related emergencies in the beach and ocean areas.</li> </ul>
Ocean Lifeguard III (Seasonal)	<ul style="list-style-type: none"> <li>• Reports to the Marine Safety Officer.</li> <li>• Lifeguards an assigned area from a tower or an emergency rescue vehicle.</li> <li>• Reports Performs ocean rescues, informs bathers and boaters of hazardous ocean conditions, and removes dangerous objects from the beach and ocean area.</li> <li>• Performs routine and preventative maintenance on towers, vehicles, vessels, equipment and other facilities within an assigned area.</li> <li>• Maintains daily records of activities and completes reports on same.</li> <li>• Interacts with the public on the beach; answers questions and assists patrons with problems and works in concert with the Police and Fire Departments as required.</li> <li>• Operates specialized lifesaving equipment and performs various first aid practices of a highly skilled nature.</li> <li>• Participates in and assumes control of all rescue, first aid and aquatic emergencies until relieved by a supervisor.</li> <li>• Assists in supervising the lifeguarding activities of subordinates as directed.</li> <li>• Assists with briefing subordinate personnel concerning conditions, assigning personnel to designated areas of beach, practical training of subordinates, and evaluating performances of subordinates.</li> <li>• Performs other related duties.</li> </ul>
Ocean Lifeguard II (Seasonal)	<ul style="list-style-type: none"> <li>• Reports to the Ocean Lifeguard II.</li> <li>• Lifeguards an assigned area from a tower, an emergency rescue vehicle or ocean rescue vessel.</li> <li>• Performs ocean rescues, informs bathers and boaters of hazardous ocean conditions, and removes dangerous objects from the beach and ocean area.</li> <li>• Performs routine and preventative maintenance on towers, vehicles, vessels, equipment and other facilities within an assigned area.</li> <li>• Maintains daily records of activities and completes reports.</li> <li>• Interacts with the public on the beach; answers questions and assists patrons with problems and advises of Municipal Ordinances.</li> <li>• Operates specialized lifesaving equipment and performs various fist aid practices of a highly skilled nature.</li> <li>• Participates in all rescue, first aid and aquatic emergencies until relieved by a supervisor.</li> <li>• Assists in supervising the lifeguarding activities of subordinates on a limited basis and as directed.</li> <li>• Performs other related duties.</li> </ul>

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<b>Position / Classification</b>	<b>Key Roles and Responsibilities</b>
Ocean Lifeguard I (Seasonal)	<ul style="list-style-type: none"> <li>• Reports to the Ocean Lifeguard II.</li> <li>• Lifeguards an assigned area from a tower or emergency rescue vehicle.</li> <li>• Performs ocean rescues, informs bathers and boaters of hazardous ocean conditions, and removes dangerous objects from the beach and ocean area.</li> <li>• Performs routine and preventative maintenance on towers, vehicle, equipment and other facilities within an assigned area.</li> <li>• Maintains daily records of activities and completes reports on same.</li> <li>• Interacts with the public on the beach; answers questions and assists patrons with problems and advises of Municipal Ordinances.</li> <li>• Operates specialized lifesaving equipment and performs various first aid practices of a highly skilled nature.</li> <li>• Participates in all rescue, first aid and aquatic emergencies until relieved by a supervisor.</li> <li>• Performs other related duties as assigned.</li> </ul>
Junior Lifeguard Program Coordinator II (Seasonal)	<ul style="list-style-type: none"> <li>• Reports to the Marine Safety Division Chief</li> <li>• Coordinates and supervises the activities of the Junior Lifeguard Program.</li> <li>• Supervises and evaluates the Junior Lifeguard personnel.</li> <li>• Supervises the activities of the Junior Lifeguard Program and oversees the safety of the Junior Lifeguard participants.</li> <li>• Prepares and assists in the preparation of the budget.</li> <li>• Gives lectures to various groups relating to the activities of the program.</li> <li>• Performs the principal duties of a Recurrent Ocean Lifeguard I.</li> </ul>
Junior Lifeguard Program Coordinator I (Seasonal)	<ul style="list-style-type: none"> <li>• Reports to the Junior Lifeguard Program Coordinator II.</li> <li>• Assists and relieves the Program Coordinator II as required.</li> <li>• Assists with the coordination and supervision the activities of the Junior Lifeguard Program.</li> <li>• Supervises and evaluates the Junior Lifeguard Instructor I and II personnel.</li> <li>• Supervises the activities of the Junior Lifeguard Program and oversees the safety of the Junior Lifeguard participants.</li> <li>• Gives lectures to various groups relating to the activities of the program.</li> <li>• Performs the principal duties of a Recurrent Ocean Lifeguard I.</li> </ul>
Junior Lifeguard Instructor II (Seasonal)	<ul style="list-style-type: none"> <li>• Reports to the Junior Lifeguard Program Coordinator I.</li> <li>• Supervises and evaluates the activities of an assigned group of Junior Lifeguard Instructor I personnel and participants.</li> <li>• Gives lectures to various groups relating to the activities of the program.</li> <li>• Performs the principal duties of a Recurrent Ocean Lifeguard I.</li> </ul>
Junior Lifeguard Instructor I (Seasonal)	<ul style="list-style-type: none"> <li>• Reports to the Junior Lifeguard Instructor II.</li> <li>• Supervises, coaches, and instructs an assigned group of Junior Lifeguard Program participants and oversees their safety and direction.</li> <li>• Gives lectures to various groups relating to the activities of the program.</li> <li>• Performs the principal duties of a Recurrent Ocean Lifeguard I.</li> </ul>

**FIRE DEPARTMENT EMERGENCY RESPONSE**

The Huntington Beach Fire Department is an all-hazard response agency. The Department responds to calls for service from eight stations and serves as the EMS transport agency for the City of Huntington Beach. The Department is also responsible for Marine Safety operations and services for the City.

The following calls for service (CFS) data in table A-9 was obtained by the agency records management system and shows the calls for service responded to by HBFD during the 2012 and 2013 calendar years:

**Table A-9, HBFD Calls for Services 2012 - 2013**

<b>In Jurisdiction Incidents</b>	<b>2012</b>	<b>2013</b>	<b>Difference</b>
Fire	395	369	-6.6%
Medical	12,982	12,976	-0.1%
Hazardous Materials	139	116	-16.6%
Other Emergencies	737	697	-5.4%
Service	1,197	1,257	5.0%
Strike Team (In HB)	0	1	100%
<b>Total</b>	<b>15,450</b>	<b>15,416</b>	<b>-0.2%</b>

As shown in table A-9, the Huntington Beach Fire Department responded to a total of 15,416 unique “in jurisdiction” calls for service during 2013, which is just slightly below the number of in jurisdiction calls responded to in 2012. Approximately 84% of the calls responded to were medical related calls. This incident response information is used by the project team as a basis for further analysis to determine the effectiveness of HBFD to place units on scene at emergency calls for service. The data indicates that HBFD typically responds to approximately 42 calls for service per day. It is important to note that specific types of emergency calls require more than one apparatus to respond in order to provide the appropriate level of service required to mitigate the incident.

Table A-10 illustrates the response time performance for “immediate” dispatch priority calls:

**Table A-10, Current HBFD Overall Performance**

<b>High Priority Fire Calls</b>				
	<b>Call Processing</b>	<b>Turnout</b>	<b>Travel</b>	<b>Total</b>
Average	0:00:51	0:01:32	0:03:10	0:05:33
90 <sup>th</sup> Percentile	0:01:22	0:02:05	0:04:37	0:08:04

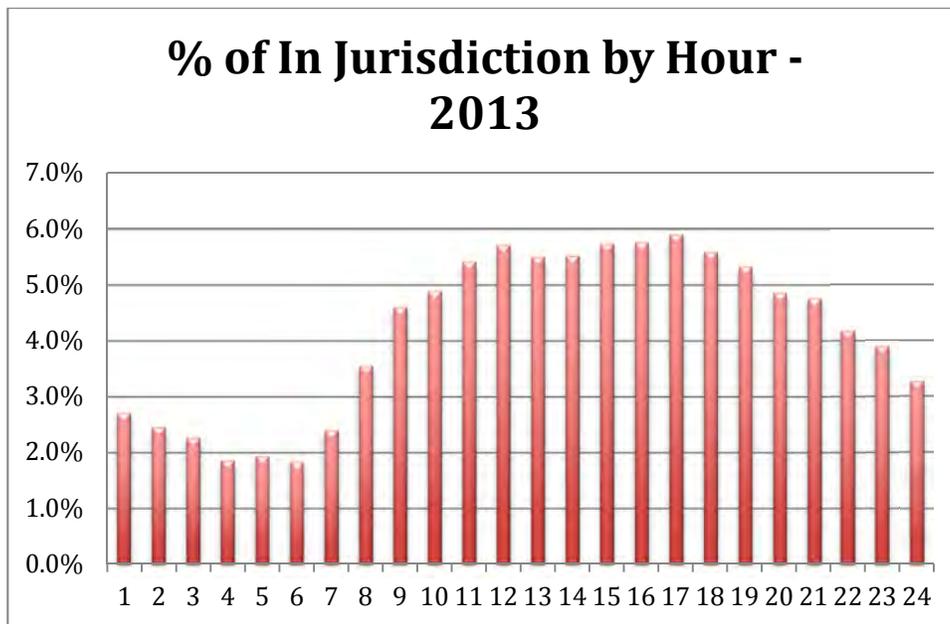
<b>High Priority EMS Calls</b>				
	<b>Call Processing</b>	<b>Turnout</b>	<b>Travel</b>	<b>Total</b>
Average	0:00:38	0:01:25	0:03:54	0:05:57
90 <sup>th</sup> Percentile	0:01:04	0:02:10	0:05:41	0:08:55

As shown in table A-10, the call processing time (call received until units notified) averages 51 seconds for fire calls and 38 seconds for EMS calls, turnout time (unit notification unit en-route) averages 1 minute 32 seconds for fire calls and 1 minute 25 seconds for EMS calls and travel time (en-route to arrival) averages 3 minutes 10 seconds for fire calls and 3 minutes 54 seconds for EMS calls.

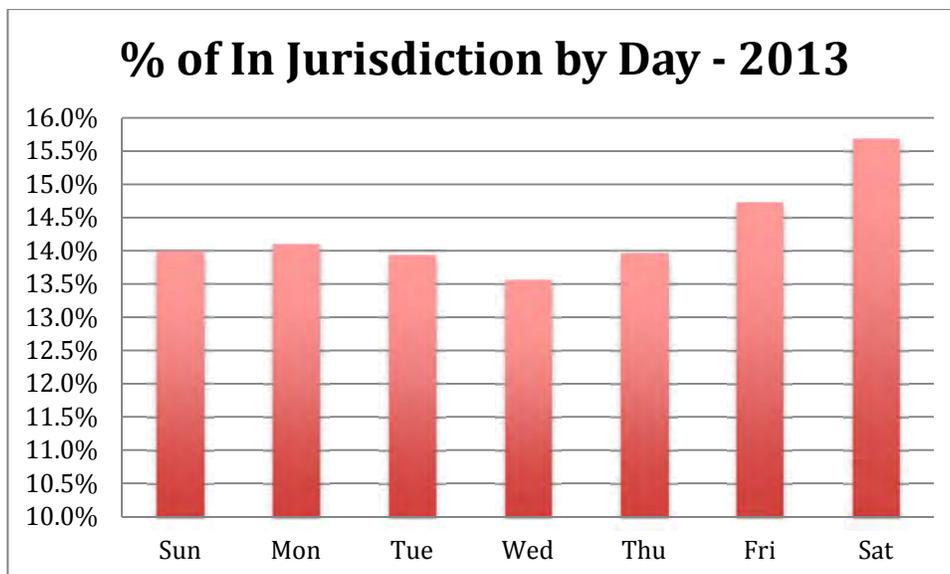
When the performance standard is held to the 90<sup>th</sup> percentile, indicating how well the agency performs 90% of the time the following points are noted:

- Call processing time for fire calls is 1 minute 22 seconds
- Call processing time for EMS calls 1 minute 4 seconds
- Turnout time for fire calls is 2 minutes and 5 seconds
- Turnout time for EMS calls is 2 minutes 10 seconds
- Travel time is 4 minutes 37 seconds for fire calls
- Travel time is 5 minutes 41 seconds for EMS calls
- Total response time is 7 minutes 3 seconds for fire calls
- Total response time is 7 minutes 55 seconds for EMS calls

The following chart shows the breakdown of “in jurisdiction” calls by hour of day in 2013 for the Huntington Beach Fire Department:



As shown above, the hour between 4:00 p.m. and 5:00 p.m. is the busiest hour of the day and 5:00 a.m. to 6:00 a.m. is the slowest period of the day. The next chart illustrates the “in jurisdiction” calls by day of week:



As shown above, the Huntington Beach Fire Department is busiest on Saturday, responding to 15.7% of calls, and slowest on Wednesday when 13.6% of calls occur. The Huntington Beach Fire Department also provides automatic aid assistance to neighboring communities when required.

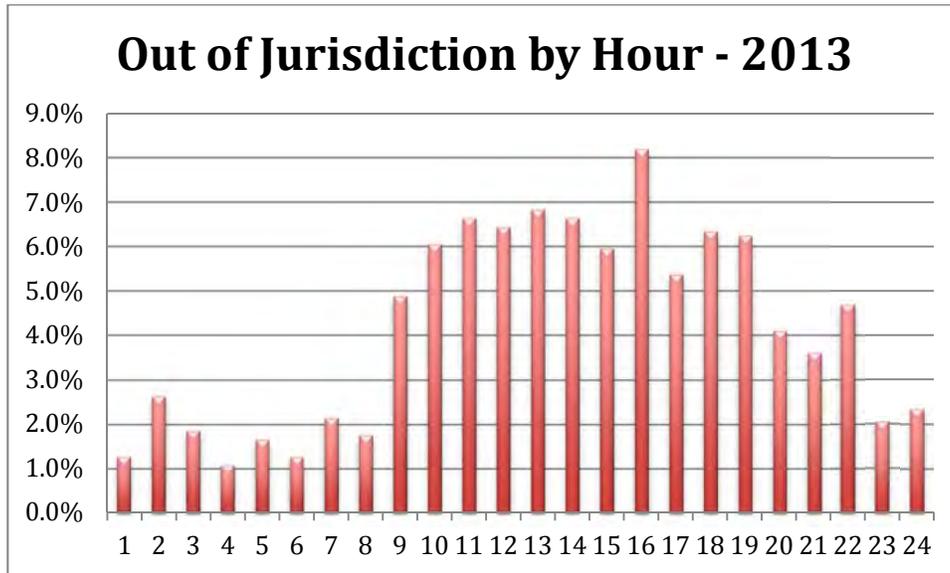
Table A-11 shows the “out of jurisdiction” calls responded to by the Huntington Beach Fire Department in 2012 and 2013:

**Table A-11, Out of Jurisdiction Incidents 2012 – 2013**

<b>Out of Jurisdiction Incidents</b>	<b>2012</b>	<b>2013</b>	<b>Difference</b>
Fire	100	115	15.0%
Medical	877	786	-10.4%
Hazardous Materials	20	17	-15.0%
Other Emergencies	23	26	13.0%
Service	48	65	35.4%
Strike Team (In HB)	3	5	66.7%
<b>Total</b>	<b>1,071</b>	<b>1,014</b>	<b>-5.3%</b>

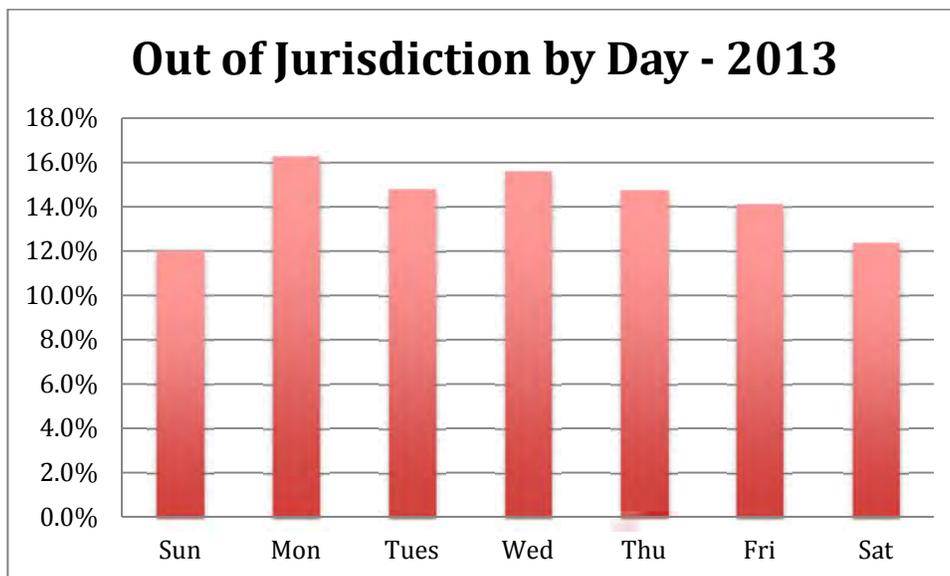
As shown in table A-11, the Huntington Beach Fire Department responded to 1,014 out of jurisdiction calls in 2013. These calls are in addition to the 15,416 “in jurisdiction” calls discussed earlier.

The following chart illustrates the out of jurisdiction calls by hour of day in 2013:



As shown above, the majority of out of jurisdiction calls occur between the hours of 8:00 a.m. and 6:00 p.m., with the peak of 8.2% occurring between 3:00 p.m. and 4:00 p.m.

The next chart shows the breakdown of out of jurisdiction calls by day of week:



As shown above, in 2013, the out of jurisdiction calls were most frequent on Monday, and least frequent on Sunday. The following table shows the apparatus responses to emergency calls responded to by the HBFD during 2013 for both in and out of jurisdiction calls:

Table A-12 shows the total apparatus responses in 2013 for the HBFD:

**Table A-12, Total Apparatus Responses 2013**

<b>Total Apparatus Responses - 2013</b>		
<b>Station</b>	<b>Unit</b>	<b>Calls</b>
<b>Station 1</b>	HB4	383
	HB5	11
	HE41	2,877
	HET41	3,662
	HE241	14
	HET241	3
<b>Station 2</b>	HE42	2,467
	HET42	3,266
	HT42	1,280
	HE242	1
	HU42	1
	HUSAR42	42
<b>Station 3</b>	HE43	1,963
<b>Station 4</b>	HE44	1,888
	HET44 (partial year)	655
<b>Station 5</b>	HE45	2,512
	HE245	67
	HET45	3,596
	HT45	1,232
	HU45	2
	HET245	27
	HM345	2
<b>Station 6</b>	HE46	1,137
	HET46	2,827
	HHM46	48
	HET246	17
<b>Station 7</b>	HE47	1,634
<b>Station 8</b>	HE48	2,128
<b>Other</b>	HB56	2
	HFC	4
	HI10	17
	HI11	10
	HI13	13
	HI14	15
	H15	17
	H17	13
	H19	7
	HOPS	6
	HP2	6

<b>Total Apparatus Responses - 2013</b>		
<b>Station</b>	<b>Unit</b>	<b>Calls</b>
	HPC	6
	HTR1	1
	HTR2	1
	HTR42	1
	<b>Grand Total</b>	<b>34,132</b>

As shown, the emergency transport units are the busiest response apparatus, followed by the engine companies and then truck companies. Huntington Engine 41 is the busiest fire apparatus, responding to 2,877 emergencies in 2013, an average of eight calls per day. In total there are approximately 94 unit responses on average per day to the 42 incidents or an average of 2.24 units responding to each emergency call.

### **FIRE PREVENTION DIVISION ACTIVITY**

The Fire Prevention Division has a goal to inspect occupancies on an annual basis and Certified Unified Program Agency (CUPA) occupancies every three years. Fire Companies and the Fire Prevention Division staff conduct these inspections. Table A-13 illustrates the inspections conducted in 2013:

**Table A-13, Fire Inspections – 2013**

<b>Inspection Type</b>	<b>Inspector</b>	<b>Number of Occupancies</b>	<b>Number Inspected</b>	<b>% Inspected</b>
Occupancy	Fire Companies	6,068	6,064	99%
Schools	Fire Prevention	57	57	100%
Oil Wells	Fire Prevention	207	207	100%
CUPA	Fire Prevention	429	249	58%
Fire Permit	Fire Prevention	661	385	58%

The Fire Prevention Division also conducts new construction and tenant improvement inspections. Table A-14 shows the inspections related to new construction and tenant improvements in 2013:

**Table A-14, New/Tenant Improvement Activity – 2013**

<b>Inspection Type</b>	<b>Count</b>
New construction and tenant improvement	474
System Inspections	1,528
Miscellaneous Inspections (Methane, state licensed, etc.)	1,705
Plan Checks	2,203
<b>Total</b>	<b>5,910</b>

As shown in table A-14, there were a total of 3,707 field inspections and 2,203 plan checks performed by the Fire Prevention Division in 2013. The 2,203 plan checks completed represent an increase of 51% from the 1,456 conducted in 2012 and an increase of 176% from the 797 plan checks conducted in 2011.

Personnel in the Huntington Beach Fire Department also conducted a number of public education activities in 2013. Table A-15 illustrates the public education activity for HBFD in 2013:

**Table A-15, Public Education Activity – 2013**

<b>Activity</b>	<b>Count</b>
Fire Station Tour	49
School Programs	21
Community Events	21
<b>Total</b>	<b>91</b>

The Fire Prevention Division also has a Fire Investigation Section consisting of seven (7) Fire Investigators that determine the origin and cause of fires and conduct criminal investigations in cooperation with the Huntington Beach Police Department. This is a supplemental assignment and Fire Investigators within this section respond from home.

### **MARINE SAFETY DIVISION ACTIVITY**

The Marine Safety Division provides lifeguard, emergency medical, wildlife, rescue, and law enforcement services on the City's Main Beach and Sunset Beach. Hours of operation vary according to the time of year from a minimum of ten hours per day (7:00 a.m. to 5:00 p.m.) during the winter months to 18 hours per day (6:00 a.m. to midnight) during the summer months. Daily staffing levels also fluctuate throughout the year. A minimum of one (1) Marine Safety Lieutenant, five (5) Marine Safety Officers and one (1) Ocean Lifeguard III supplemented by seasonal staff as necessary are scheduled to meet demands for service from October through April. The daily staffing levels during the summer months increases by an additional 53 seasonal lifeguard personnel for aquatic rescue and preventative action response. Additional personnel are assigned to special events and to supplement the operation during periods of unusually high rescue activity due to surf conditions or holidays. The Marine Safety Division has mutual aid agreements with a number of other regional agencies.

Table A-16 illustrates the rescue activity for the Marine Safety Division in 2013.

**Table A-16, Marine Safety Rescues – 2013**

<b>Rescue Type</b>	<b>Count</b>
Swimmer	2,982
Apparatus*	1,101
Boat	5
Other	69
<b>Total</b>	<b>4,157</b>

\*Swimmers with flotation (body boards/surfboards)

As shown in table A-16, the Marine Safety Division conducted 4,157 rescue activities in 2013. Rescuing swimmers accounted for the majority of the incidents, accounting for 72% of the rescue activity. Rescues are defined as anyone physically assisted from the hazardous condition (e.g., rip current) by a lifeguard.

Table A-17 shows the preventative actions by Marine Safety personnel in 2013:

**Table A-17, Marine Safety Preventative Actions – 2013**

<b>Rescue Type</b>	<b>Count</b>
Swimmer	113,080
Apparatus	33,677
SCUBA	0
Other	0
<b>Total</b>	<b>146,757</b>

As shown in table A-17, the Marine Safety Division conducted 146,757 preventative actions in 2013. Preventative actions involve lifeguard staff contacting, warning, and advising swimmers, surfers, and others of hazardous conditions before the assistance of Marine Safety staff is needed.

Table A-18 shows the medical aid provided by Marine Safety personnel in 2013:

**Table A-18, Marine Safety Medical Aid – 2013**

<b>Call Type</b>	<b>Count</b>
Minor Medical Aid	694
Major Medical Aid	1,017
<b>Total</b>	<b>1,711</b>

Open wounds were the most common minor medical aid request, accounting for 493 (71%) of the 694 incidents. Stingray encounters were the most common cause of major

medical aid being required, accounting for 655 (64%) of the 1,017 major medical aid calls.

The Division also responded to other incidents and provided preventive services. Table A-19 illustrates these activities in 2013:

**Table A-19, Marine Safety Other Services – 2013**

<b>Activity</b>	<b>Count</b>
Lost & Found Persons	232
Health Advisory Posting	1
Wildlife Calls	68
Ocean Hazard	64
Beach Hazard	124
Public Education Lectures	29

The Marine Safety Division also provided a number of enforcement activities in 2013. The table A-20 illustrates the enforcement activities provided by the Marine Safety Division in 2013:

**Table A-20, Marine Safety Enforcement Activity – 2013**

<b>Activity</b>	<b>Count</b>
Arrests	2
Boat Warning	70
Citations	23
Field Interviews	7
Warnings	56,216
Police Assists	38
<b>Total</b>	<b>56,356</b>

Warnings were the most common law enforcement action taken by Marine Safety staff. These include contacts seeking voluntary compliance for violations of the Huntington Beach Municipal Code for illegal fires, alcohol consumption, dogs outside of permitted areas, speeding bicycles on the beach service road, and fishing violations on the pier.

## **TRAINING ACTIVITY**

The Central Net Operations Authority provides training. Personnel from Huntington Beach Fire Department staff the training center and provide training to HBFD personnel and contract agencies. Specific to HBFD, training drills primarily consist of the following categories: Night, Second or Greater Alarm, Evaluated Manipulated Company, and other classes as assigned. The training requirement for HBFD shift personnel is two hours of training per shift, per member. From June 2012 through May 2013 HBFD personnel received a total of 16, 311 hours of training. Table A-21 illustrates the training provided in 2013 to HBFD personnel.

<b>Table A-21, Training by Class Type – 2012/13</b>	
<b>Topic</b>	<b>Hours</b>
Apparatus and Equipment	1,599
Central Net Training	655
Company	225
Computer	166
Confined Space	36
Driver	430
EMS	190
EMT	799
EMT-P	774
Evaluated Drill	460
Fire Ground/Fire Behavior	34
Fire Prevention/Inspection	474
Fire Suppression	16
Forcible Entry	178
Hazardous Materials	618
High Angle/Heavy Rescue	128
Hose Evolutions/Hose	1,141
Hydraulics	159
Incident Command/Safety	315
Live Fire Training	134
Multi-Company	219
Multi-Family Operations	128
Planning	184
Policies/Rules and Regulations	1,052
Pre-Fire/Incident Planning	610

<b>Table A-21, Training by Class Type – 2012/13</b>	
<b>Topic</b>	<b>Hours</b>
Public Education/Public Relations	270
Pump Operations	328
Residential Fire Operations	151
Tactics and Strategy	326
Tiller	313
Ventilation	272
Wildland	154
Other*	4,471
EVOC - Marine Safety	54
EMT - Marine Safety	144
Line Up - Marine Safety	480
Dive - Marine Safety	168
Boat Operations - Marine Safety	176
Helicopter Rescue - Marine Safety	40
Swiftwater - Marine Safety	64
Night Operations - Marine Safety	88
CPR/AED - Marine Safety	88
Homeland Security - Marine Safety	60
Tsunami - Marine Safety	10
Medical/Other - Marine Safety	110
<b>Total</b>	<b>17,793</b>

**\*Other includes numerous training courses that occurred in isolated cases with few hours noted for the particular training title.**

# APPENDIX B – COMPARATIVE SURVEY

## INTRODUCTION

As a function of the General Plan review, the project team conducted a comparative survey of the Huntington Beach Fire Department with the fire departments of other similar California cities: Fremont, Glendale, Newport Beach, Orange City, Torrance, and Santa Monica. During the analysis conducted based on survey results it was determined by the Huntington Beach Fire Department that Fremont was not a good representative jurisdiction due to its location, size, and demographic characteristics. As a result, data from the City of Fremont is not included in the final survey. All tables provided in this Appendix represent the opinion of Huntington Beach Fire Department Staff.

The data contained in this section was acquired through a combination of contacts made with participating agencies and online research conducted by the project team, including the review of budget documents, relevant municipal government records, and departmental annual reports, as well as the online websites of various agencies. Each of the contacts representing the surveyed Fire Departments consisted of current leading position of one of the following: Assistant Chief, Deputy Chief or Captain. The comparisons highlight a wide range of subject areas relating to fire services, including departmental budgets, staffing levels, accreditation, Insurance Services Offices rating, civilianization, the overall scope of operations within the agency, and many others.

It is important to stress that the contents and findings of the comparative survey should not be considered recommendations of the overall study, but rather a reflection of current trends and commonalities present in a limited sample of agencies similar to the Huntington Beach Fire Department. An additional limitation of the survey that is worth noting is that some agencies did not have all of the data requested in the survey readily available. As a result, certain comparisons will be limited in scope.

## Community Overview

As a basis for comparison, Table B-1 examines various background statistics across each of the cities included in the survey, listed in order of population.

**Table B-1, Surveyed Cities by Population**

City	Population	Population Density	Area (Sq. MI.)	Per Capita Income	Fire Stations	Square Miles per Station
Newport Beach	87,068	3,628	24.0	80,893	8.0	3.0
Santa Monica	91,812	11,477	8.0	58,377	4.0	2.0
Orange City	139,419	5,577	25.0	32,633	8.0	3.1
Torrance	147,027	7,351	20.0	36,240	6.0	3.3
Glendale	194,478	6,483	30.0	29,766	9.0	3.3

Huntington Beach	194,708	7,211	27.0	42,113	8.0	3.4
<b>Average</b>	<b>142,419</b>	<b>6,955</b>	<b>22</b>	<b>46,670</b>	<b>7</b>	<b>3</b>

While the cities included in Table B-1 vary considerably by population, area, and average income, Huntington Beach is near the group average in each of these categories. These were not the only deciding factors in the selection of cities for the comparative survey; input from fire department staff, city staff, geography, community similarities (e.g., coastal community, region of the state) were other factors that guided this process.

## COMPARISON OF FIRE SERVICES

### Overall Staffing

Table B-2 displays overall staffing levels separated into divisional categories by the each position's functionality. The first city shown has the fewest total number of staff employed by the agency.

**Table B-2, Number of Staff Employed  
(Excluding Marine Safety)**

City	Fire Suppression Staff	Fire Prevention Staff	EMS* Personnel	Civilian Support Staff	Sworn Admin	Total Staff
Newport Beach	119.0	1.0	0.0	13.0	1.0	134.0
Orange City	117.0	6.0	1.0	4.8	8.0	136.8
Huntington Beach	123.0	9.0	31.0	10.5	5.0	178.5
Torrance	138.0	16.0	16.0	1.0	18.5	189.5
Santa Monica	108.0	11.0	94.0	20.0	6.0	239.0
Glendale	150.0	14.0	72.0	4.0	7.0	247.0
<b>Average</b>	<b>125.8</b>	<b>9.5</b>	<b>35.6</b>	<b>8.8</b>	<b>7.5</b>	<b>187</b>

\* Personnel providing emergency medical services such as ambulance operation and transport.

In all of the categories Huntington Beach is below, although distinctively close, to the group average.

Table B-3 displays the Marine Safety staffing levels of the two agencies in the study that operate a Marine Safety Division under the Fire Department are displayed in Table B-3.

**Table B-3, Number of Marine Safety Division Staff Employed**

City	Marine Staff	Civilian Support Staff	Total Staff
Newport Beach	13.0	1.0	14.0
Huntington Beach	14.0	1.0	15.0
Average (update)	13.5	1	14.5

Huntington Beach and Newport Beach staff the Marine Safety Division fairly equally. The two agencies of Huntington Beach and Newport Beach respectively employ 160 and 200 additional seasonal lifeguards. Newport Beach Marine Safety personnel are not peace officers and therefore, do not have powers of arrest. Huntington Beach Marine Safety Officers are sworn peace officers under PC 830.31 (b)

**Budget**

Table B-4 presents the overall budget figures for each department, using fiscal year 13/14 data.

**Table B-4, Fire Department Budget and Cost per Capita  
(Excluding Marine Safety)**

City	Personnel	Maintenance & Operations	Total Budget	Overtime Budget	Full Time Salaries*	Overtime % of FTE Salaries*	Cost per Capita
Huntington Beach	32,676,739	2,543,925	35,220,664	3,645,497	17,606,900	20.70%	181
Orange City	23,272,810	2,442,066	25,714,876	1,714,388	12,488,635	13.73%	184
Torrance	34,946,345	2,338,248	37,284,593	3,752,772	--	--	254
Glendale	42,231,153	10,817,660	53,048,813	5,242,105	22,153,905	23.66%	273
Santa Monica	30,415,312	2,004,214	32,419,526	4,824,419	16,145,414	29.88%	353
Newport Beach	26,464,472	5,205,717	31,670,189	2,830,249	12,669,916	22.34%	364
<b>Average</b>	<b>\$31,667,805</b>	<b>\$4,225,305</b>	<b>\$35,893,110</b>	<b>\$3,668,238</b>	<b>\$16,212,954</b>	<b>22.06%</b>	<b>\$268</b>
*No data was available for City of Torrance at the time of survey. As such, calculated averages do not include Torrance.							

- It should be noted that these budget figures include general fund expenditures only; they do not include capital costs.
- Among the agencies included in the survey, the average proportion of personnel expenses in an agency is approximately 88.2%.
- Huntington Beach ranks above the average in this category, with spending on salaries and benefits constituting approximately 92.7% of the department's overall budget.

The proportions of overall fire budgets to the population totals for each city, however, vary far more extensively, ranging from a low of \$181 (Huntington Beach) to a high of \$364 (Newport Beach) per resident. In this regard, at \$181 Huntington Beach is below the group average of \$268 spent on fire services per capita.

Table B-5 presents the overall budget figures for Marine Safety Division of the two departments: Huntington Beach and Newport Beach, using the most recent fiscal year.

**Table B-5, Marine Safety Budget and Cost per Capita**

City	Personnel	Maintenance & Operations	Total Budget	Overtime Budget	Full Time Salaries	Overtime % of FTE Salaries	Cost per Capita
Huntington Beach	4,141,117	544,533	4,685,650	312,593	1,473,130	21.22%	24
Newport Beach	3,942,617	1,173,368	5,115,985	140,482	1,235,600	11.37%	59
<b>Average</b>	<b>\$4,041,867</b>	<b>\$858,951</b>	<b>\$4,900,818</b>	<b>\$226,538</b>	<b>\$1,354,365</b>	<b>16.29%</b>	<b>\$41</b>

- It should be noted that these budget figures include general fund expenditures only; they do not include capital costs.
- Among the two agencies included in the survey, the average proportion of personnel expenses in an agency is approximately 82.72%.
- Huntington Beach ranks above the average in this category, with spending on salaries and benefits constituting approximately 88.38% of the department's Marine Safety budget.
- The proportions of overall Marine Safety budgets to the population totals for Huntington Beach at \$24 is less than Newport Beach at \$59 per resident.

### Sworn Positions

Sworn staffing levels for each city are displayed in Table B-6, excluding the top executive management positions.

**Table B-6, Fire Department Sworn Positions  
(Excluding Marine Safety)**

City	Asst. Chief	Deputy / Division Chief	BC	Captain	Eng.	FF Paramedic**	FF EMT	EMS*	Total Staff
Newport Beach	2	2	2	29	30	24	30	0	119
Orange City	0	2	3	33	30	--	54	1	123
Huntington Beach	0	2	4	31	30	48	12	0	127
Torrance	0	1	4	30	27	48	33	1	144
Glendale	0	2	6	38	36	--	75	1	158
Santa Monica	0	4	3	25	21	48	45	94	240
<b>Average</b>	<b>0.3</b>	<b>2.1</b>	<b>3.6</b>	<b>31</b>	<b>29</b>	<b>42</b>	<b>41.5</b>	<b>16.1</b>	<b>151.8</b>

\* Personnel providing emergency medical services such as ambulance operation and transport.  
\*\* Glendale and Orange City have paramedic personnel.

Huntington Beach has one of the lower total sworn staffing levels in the group. While there are a number of differences among the cities regarding sworn staffing levels by each position, Huntington Beach ranks near the average in a majority of each sworn position. Though Huntington Beach distinctly ranks below the average of sworn staff that holds the position of firefighter EMT, Huntington Beach ranks above the average of sworn staff that holds the position of Firefighter Paramedics, which are assigned to paramedic engine companies.

Sworn staffing levels for the two agencies that operate a Marine Safety Division under the respected Fire Department are displayed in Table B-7, excluding the top executive management positions.

**Table B-7, Marine Safety Division Sworn Positions**

City	Asst. Chief	Deputy / Division Chief	BC	Captain	Lieut.	Safety Officer	Total Staff
Huntington Beach	0	1	0	0	3	10	14
Newport Beach	1	0	2	6	0	4	13
<b>Average</b>	<b>0.5</b>	<b>0.5</b>	<b>1</b>	<b>3</b>	<b>1.5</b>	<b>7.0</b>	<b>13.5</b>

Huntington Beach and Newport Beach operate their Marine Safety Divisions with different organization structures, though have relatively close total sworn staff positions.

### **Apparatus and Vehicles**

Table B-8 compares the total number of staffed apparatuses and by each type of vehicle an agency uses daily. The table is sorted by the total amount of vehicles used daily in an ascending order.

**Table B-8, Daily Apparatus and Vehicle Staffing (including some Cross Staffed)  
(Excluding Marine Safety)**

City	Engines	Truck Companies	Ambulances/ Rescues/ Emergency Transports	Command Vehicles	Specialty Vehicles	Total Daily Staffed Vehicles
Torrance	7	2	N/A	1	0	10
Santa Monica	6	1	0	1	4	12
Orange City	7	2	3	1	3	16
Newport Beach	8	2	5 (2 are flex staffed units)	1	1	17
Huntington Beach	8	2	5	1	3	19
Glendale	9	3	6	1	0	19
<b>Average</b>	<b>7.5</b>	<b>2.0</b>	<b>3.8</b>	<b>1</b>	<b>1.8</b>	<b>15.5</b>

Huntington Beach and Glendale have the highest Daily Staffed Vehicles in the group, though Huntington Beach is near average vehicle staffing for majority of unit types.

Table B-9 compares the daily and minimum staffing figures for each agency relating to emergency operations, engine companies and truck companies.

**Table B-9, Daily Apparatus and Vehicle Staffing  
(Excluding Marine Safety)**

City	Total Daily Staffing of Emergency Operations	Minimum Daily Staffing of Emergency Operations	Schedule Staffing of Engine Companies	Minimum Staffing of Engine Companies	Schedule Staffing of Truck Companies	Minimum Staffing of Truck Companies	Are Ambulances Staffed by Firefighters?
Santa Monica	34	34	4	3	5	5	No
Orange City	36	36	3	3	4	4	Yes
Newport Beach	39	39	3	3	4	4	Yes
Torrance	46	46	4	4	4	4	No
Glendale	50	50	4	4	4	4	No
Huntington Beach	51	51	4	4	4	4	No
<b>Average</b>	<b>42.6</b>	<b>42.6</b>	<b>3.6</b>	<b>3.5</b>	<b>4.1</b>	<b>4.1</b>	

Staffing levels do not appear to vary to a significant degree across different agencies after accounting for factors such as department size and workload demands. Huntington Beach remains close to the group average in each category, except for the two categories: scheduled staffing of emergency operations companies and minimum staffing of emergency operations.

Table B-10 compares the performance times for emergency calls below. The agencies are presented in ascending order by the expected performance turnout times.

**Table B-10, Performance Times for Emergency Calls  
(In Seconds)**

City	Expected Performance Turnout Time	Expected Performance Travel Time	Current Performance Response Time to Fire Calls	Current Performance Response Time to EMS Calls
Torrance	60	240	300	300
Glendale	80	N/A	N/A	N/A
Newport Beach	80	N/A	271	320
Santa Monica	80	240	398	327
Orange City	80	240	240	480
Huntington Beach	No Standard	300	323	341
<b>Average</b>	<b>77</b>	<b>255</b>	<b>306</b>	<b>354</b>

Huntington Beach has no expected performance related to turnout time specifically for Fire response.

The expected travel time for Huntington Beach at 300 seconds is above the group average of 255. The current response time to emergency fire calls for Huntington Beach at 323 (5:33) seconds is above the group average of 306 seconds and the current response time to emergency EMS calls at 341 seconds is slightly below the group average of 354 seconds.

**Fire Prevention**

Table B-11 displays the fire prevention staffing numbers for each agency, as well as the areas personnel are assigned.

**Table B-11, Fire Prevention, Inspection and Investigations Staffing**

City	Fire Prevention Staff	Personnel Assigned to Plan Review	Personnel Assigned to Inspections	Fire Prevention Personnel Assigned to Fire Investigations
Newport Beach*	--	--	--	--
Orange City	6	0	7	1
Huntington Beach	9	2	4	0
Santa Monica	11	4	9	6
Glendale	14	4	1	0
Torrance	16	1	6	2
<b>Average</b>	<b>11.2</b>	<b>2.2</b>	<b>5.4</b>	<b>1.8</b>
*No data for Newport Beach was available at the time of survey. As such, the calculated averages do not include Newport Beach.				

The fire prevention staffing levels appear to vary a significant degree across the agencies. Huntington Beach has a staffing level for fire prevention 2.2 members less than the group average of surveyed agencies.

Table B-12 displays additional fire prevention service comparisons below.

**Table B-12, Fire Prevention Services**

City	Fire Inspectors Sworn or Civilian?	Fire Companies Conduct Annual Business Inspections?	Fire Companies Conduct Pre-Fire Planning Activities?	Agency Uses a Knox Box Program?	Administer of the Knox Box Program?
Newport Beach*	--	--	--	--	--
Orange City	Both	Yes	Yes	Yes	Fire Prevention
Santa Monica	Both	No	Yes	Yes	Fire Marshal
Glendale	Civilian	Yes	Yes	Yes	Fire Marshal
Torrance	Both	Yes	Yes	Yes	Area Inspector
Huntington Beach	Civilian	Yes	Yes	Yes	Fire Prevention
* No data for Newport Beach was available at the time of survey.					

The majority of the surveyed agencies provide fire companies that conduct annual business inspections and pre-fire planning activities including Huntington Beach. Huntington Beach does use a Knox Box program administered by fire prevention staff, similar to the majority of the surveyed agencies.

**Agency Accreditation, Insurance Services Offices (ISO), Regional Dispatch and Training**

Table B-13 displays the accredited status, ISO rating and type of dispatch concerning the surveyed agencies.

**Table B-13, Accreditation, ISO Classification, Regional Dispatch and Turnover Rate**

City	Agency Accredited?	ISO Class	Member of a Regional Dispatch Center?
Glendale	No	1	Yes
Newport Beach	No	2	Yes
Orange City	No	2	Yes
Santa Monica	Yes	1	No
Torrance	No	1	No
Huntington Beach	No	1	Yes

Only Santa Monica of the six in the group is currently recognized as an accredited agency.

Table B-14 displays the training and the conducted company evolution details pertaining to the surveyed agencies.

**Table B-14, Training and Company Evolutions**

City	Training Staff	Annual Target Training Hours for each Sworn Personnel	Are Planned Training Hours Being Met?	Conducted Annual Company Evolutions	Daytime & Nighttime Evolutions?	Conduct Company Evolutions with First Due Automatic/Mutual Aid Partners?
Glendale	3	204	Yes	N/A	Yes	Yes
Newport Beach	3	N/A	N/A	Varies	Yes	No
Orange City	1	240	Yes	12 multi-company	Yes	Yes
Santa Monica	2	192	Yes	4 multi-company	Yes	Yes
Torrance	1	240	Yes	6	Yes	Yes
Huntington Beach	3	240	Yes	4	Yes	Yes

Huntington Beach utilizes three training personnel in the agency, which is similar to Glendale and Newport Beach. All of the agencies provide daytime and nighttime

evolutions and a majority of the agencies, including Huntington Beach provide company evolutions with their first due automatic aid or mutual aid partners.

### **Emergency Medical Services**

Information regarding EMS transportation services, the organization of ambulance staffing and the limited years of service paramedics can provide is displayed in Table B-15.

**Table B-15, EMS**

<b>City</b>	<b>Provide EMS Transport Services?</b>	<b>Ambulances/Emergency Transport Units Staffed with Paramedics?</b>	<b>EMS Personnel Limited to a Fixed Number of Years of Service?</b>	<b>How Many Years?</b>
Glendale	Yes	No	Yes	3
Newport Beach	Yes	Yes	No	No
Orange City	Yes	Yes	No	No
Santa Monica	No	Yes	No	No
Torrance	No	No	No	No
Huntington Beach	Yes	No	Yes	3

Huntington Beach provides EMS transport service utilizing five (5) emergency transport units, each staffed with two (2) BLS Ambulance Operators. The HBFD emergency transport units carry advanced life support (ALS) equipment and a paramedic/paramedics, from a responding Paramedic Engine company, will staff the ambulance during patient transport to provide ALS care. Ambulance Operators personnel are limited to a fixed 3 years of service in the HBFD. Only one other agency (Glendale) limits the number of year EMS ambulance personnel can serve as an ambulance operator. According to the Huntington Beach Fire Department, the Ambulance Operators for Glendale and Huntington Beach are contract personnel. Newport Beach, Orange and Santa Monica staff use their rescue/paramedic units with firefighter paramedics. Torrance uses private ambulances.