Oceanside Fire Department

STANDARD OF COVER

Critical Tasking, Benchmarks Statements & Performance Gaps for Levels of Risk

The Oceanside Fire Department publishes a standard of response cover to outline the contract for services with the community. The document outlines varying levels of risk for emergency medical services, fire suppression, hazardous materials response, technical rescue, and swift water. For each program of community risk reduction, the document identifies the critical tasks with each benchmark statement, the resources needed, the output of a three-axis risk scoring methodology, and the response time goals and performance gaps.

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SECTION I
STANDARDS OF COVER

RISK SCORE METHODOLOGY & DEFINITIONS

Probability of Occurrence & Consequence to the Community

The Oceanside Fire Department uses the last five years of response data to determine the likelihood of occurrence. The three-axis model uses a numeric score based on the definitions below. Additionally, the department subjectively assigns a consequence score based on the definitions outlined below.

PROBABILITY SCORING	
1	More than Annually
2	Annually
3 4	Quarterly
5 6	Monthly
7 8	Weekly
9	Daily
10	Multiple Times Daily

CONSEQUENCE SCORING	
1	One Person
2	One Household
3	Single Business Interruption - One-Day
4	Single Business Interruption - 2-7 Days
5	Multiple Businesses or Households Impacted
6	Neighborhood-wide Impact
7 8	City-wide Impact
9 10	Region-wide Impact

Impact on the Oceanside Fire Department:

The department calculates the impact score by dividing the staff resources assigned by the department's minimum staffing and then multiplying by 10. This method provides a result on a ten-point scale and aligns with the practices of the other two axes.

(Staff Assigned to Incident / Minimum Staffing) x 10 = Impact Score

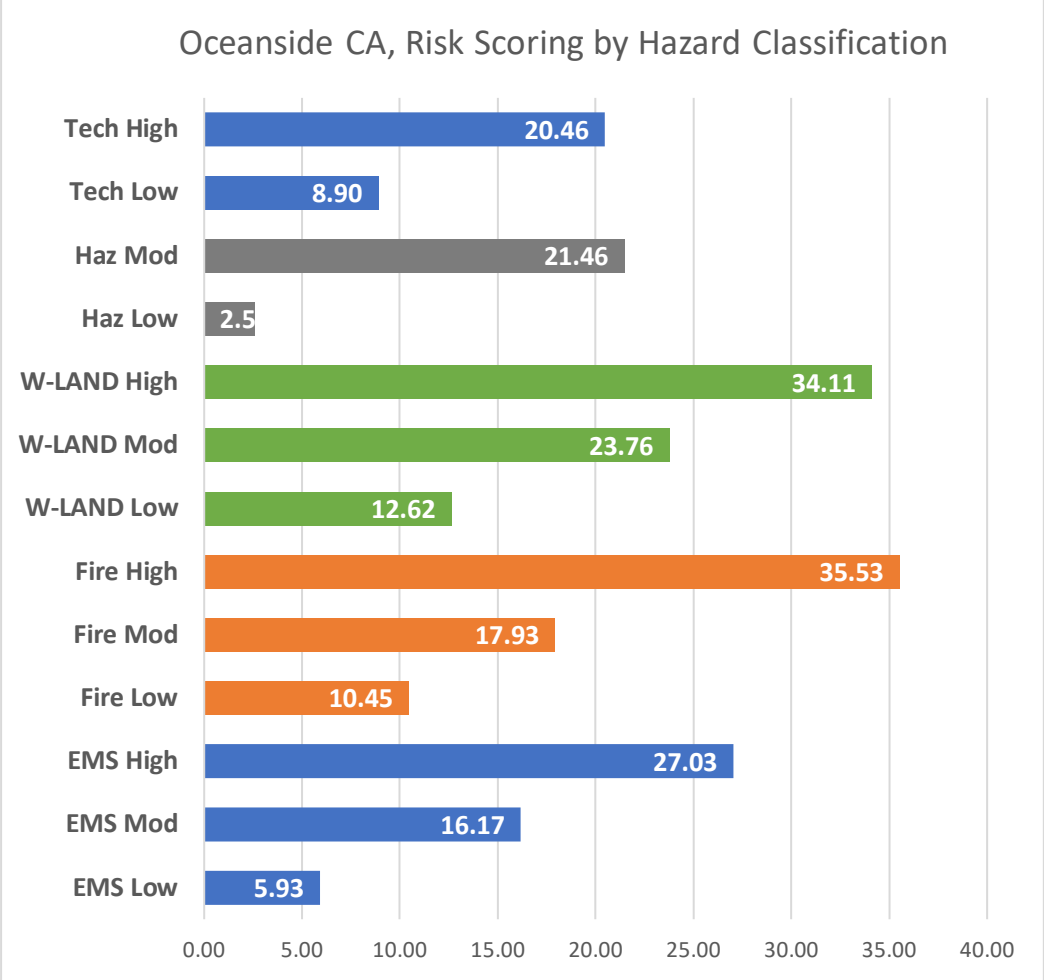
Three-Axis Risk Scoring Model

The Oceanside Fire Department uses the three-axis scoring methodology. This method uses the square root of each risk element value to determine the "surface area." The surface area value then becomes the risk's numeric value.

$$\textit{Square Root of } ((Prob^2 \times Cons^2/2) + (Cons^2 \times Imp^2/2) + (Prob^2 \times Imp^2/2)) = \textit{Risk Score}$$

The scores derived from this method indicate the level of risk associated with certain types of incident responses. The scores are sorted into three different risk classifications: Low, Moderate, and High risk. The figure below shows the score ranges for each type.

Figure 1: Oceanside Risk Scoring



Performance Definitions & Goals

Alarm Handling Time:

The amount of elapsed time between the receipt of the 911 call and the call being dispatched by the Emergency Communications Center (ECC).

Turnout Time:

The amount of elapsed time between the time the call is dispatched, and the assigned apparatus begins to physically move toward the dispatched call.

First Unit Travel Time:

The amount of elapsed time between the first unit marking en route and arriving on the scene of an incident.

Effective Response Force:

All units on the initial assignment, based on the call type, constitute the ERF.

ERF Travel Time:

The amount of elapsed travel time for the last unit to arrive fulfills the ERF.

This report highlights the significance of response performance goals for the Oceanside Fire Department, aligned with industry standards and best practices. It emphasizes the importance of setting specific response performance goals, explores the benefits they bring to the fire department and the community, and discusses how compliance ensures a high level of operational effectiveness and public safety.

The Oceanside Fire Department recognizes the critical role of response performance goals in delivering effective emergency services. By establishing clear performance objectives, the department can continuously improve its operational efficiency, response times, and overall effectiveness in protecting lives and property.

Figure 2: 2023 Risk-based Response Time Goals

Measure	2023 Goal	Sample Risk	Justification
Alarm Handling	1:00	All Risk	NFPA 1710
Turnout Time	1:00	All Risk	NFPA 1710
1st Unit Travel Time	8:00	EMS Low	NFPA 1710
1st Unit Travel Time	4:00	EMS Moderate & High	NFPA 1710

DAILY RESOURCE AVAILABILITY

Figure 3: 2023 Resources & Staffing

Unit	Resource Type	Location	Minimum Staffing	Staffing
E211	Engine	Station 1	3	24/7
MS211	Medic Squad	Station 1	2	24/7
E212	Engine	Station 2	3	24/7
RA212	Ambulance	Station 2	2	24/7
E213	Engine	Station 3	3	24/7
RA213	Ambulance	Station 3	2	24/7
BLS213	Ambulance	Station 3	2	24/7
OES PT 6612	Type 6	Station 3	0	Cross Staffed
E214	Engine	Station 4	3	24/7
RA214	Ambulance	Station 4	2	24/7
OES BR6321	Type 3	Station 4	0	Cross Staffed
E215	Engine	Station 5	3	24/7
PT215	Type 6	Station 5	0	Cross Staffed
WT215	Tender	Station 5	0	Cross Staffed
E216	Engine	Station 6	3	24/7
RA216	Ambulance	Station 6	2	24/7
BR216	Type 3	Station 6	0	Cross Staffed
E217	Engine	Station 7	3	24/7
T217	Truck/Ladder	Station 7	4	24/7
B217	Battalion	Station 7	1	24/7
BLS217	Ambulance	Station 7	2	24/7
BLS210	Ambulance	Station 7	2	24/7
BR217	Brush Truck	Station 7	0	Cross Staffed
E218	Engine	Station 8	3	24/7
2151 - 2154	Duty Investigator	Fire Admin	1	24/7
		Daily Staffing:	**46**	

AUTOMATIC & MUTUAL AID

The "North Regional Zone Master Automatic Aid Agreement for Fire-Rescue Responses & Support Activities" pertains to the provision of fire, rescue, and emergency medical services within San Diego County. The parties involved in this agreement are cities, districts, and other entities within the county that have organized fire departments. The agreement highlights the mutual benefits of extending emergency services beyond the normal jurisdictional boundaries to support other parties in the agreement.[1] Below is a selection of terms related to emergency response:

1. The involved parties will respond to emergencies outside their normal service areas based on mutual need.
2. Resources will be allocated disregarding political or jurisdictional boundaries, emphasizing the closest available resource for emergency response.
3. Operational specifics, procedures, and response types will be detailed in an Operational Plan formed by the respective Fire Department Chiefs.
4. Collaborative training is essential for effective emergency response, with each party bearing its training costs.
5. An operational committee, comprised of Chiefs from the parties involved, will manage the agreement's implementation.
6. The first officer to arrive at an emergency scene will assume the Incident Commander role, with the option of transferring it to an officer from the jurisdiction where the incident occurred.

The following communities are part of the agreement:

- Camp Pendleton Fire and Emergency Services
- Carlsbad Fire Department
- Deer Springs Fire Protection District Del Mar Fire Department
- Encinitas Fire Department
- CSA 107 (Elfin Forest)
- Escondido Fire Department and Rincon Del Diablo Fire Protection
- District North County Fire Protection District
- Oceanside Fire Department
- Pala Reservation Fire Department
- Pauma Reservation Fire Department
- Rancho Santa Fe Fire Protection District
- Rincon Reservation Fire Department
- San Diego County Fire-CAL FIRE
- San Marcos Fire Department/Fire Protection District
- San Pasqual Reservation Fire Department

[1] North Regional Zone [NRZ]. (2015). Master Automatic Aid Agreement for Fire-Rescue Responses & Support Activities. San Diego County.

- Solana Beach Fire Department
- Valley Center Fire Protection District
- Vista Fire Department/Fire Protection District

For the purpose of this study, ESCI will investigate the risk, resources, and staffing needs for the Oceanside community and not for the greater North Zone of San Diego County.

EMERGENCY MEDICAL SERVICES

The Oceanside Fire Department recognizes the crucial role of emergency medical services in protecting the health and well-being of the community. The EMS delivery system encompasses the placement of fire apparatuses and the coordination of personnel to respond promptly to medical emergencies. This report explores the key aspects of the EMS delivery system, including apparatus placement, resource allocation, and the integration of EMS services within the fire department's operations.

The Oceanside Fire Department strategically places fire apparatuses throughout its jurisdiction to optimize emergency medical response. The placement of fire stations and apparatuses is determined by factors such as population density, response time goals, geographic distribution, and historical incident data. The department aims to minimize response times by locating apparatuses in proximity to areas with higher call volumes and vulnerable populations.

Engine companies play a vital role in the EMS delivery system. These apparatuses are equipped with firefighting and medical equipment, including Automated External Defibrillators (AEDs), basic life support supplies, and advanced life support capabilities in some cases. Engine companies are strategically placed at fire stations to provide immediate medical response while waiting for dedicated medical units to arrive.

The Oceanside Fire Department strategically places ambulances throughout the jurisdiction to ensure comprehensive coverage and rapid response to medical emergencies. Ambulances are staffed with paramedics or emergency medical technicians (EMTs) trained to provide advanced life support and transport patients to medical facilities. The placement of ambulances is based on call volume, geographical considerations, and the need to cover both urban and rural areas effectively.

The EMS delivery system in Oceanside operates through a collaborative approach between firefighters and EMS personnel. Firefighters, trained as emergency medical responders, often arrive first at the scene to initiate medical care until the arrival of dedicated medical units. This integration allows for immediate assessment, basic and advanced life support, and the early application of life-saving interventions.

The Oceanside Fire Department allocates resources effectively to support the EMS delivery system. This includes personnel training, equipment maintenance, and the continual evaluation of response data to identify areas for improvement. The department ensures an adequate number of trained EMS personnel and regularly reviews staffing levels to meet community needs.

The Oceanside Fire Department leverages technology to enhance the efficiency of its EMS delivery system. Computer-aided dispatch systems and GPS tracking enable real-time monitoring and resource allocation based on incident location and severity. This integration optimizes response times and ensures the closest available apparatus is dispatched to the emergency.

To maintain a high level of performance, the Oceanside Fire Department emphasizes ongoing training and quality improvement initiatives for both EMS and firefighting personnel. Regular training sessions, simulations, and skill assessments enhance medical knowledge, response coordination, and patient care. Additionally, the department conducts reviews of EMS incidents to identify areas for improvement and implement necessary changes.

The EMS delivery system of the Oceanside Fire Department, including the strategic placement of fire apparatuses, demonstrates a commitment to providing efficient and timely emergency medical response. By strategically locating apparatuses, integrating EMS services within fire department operations, fostering collaboration, and leveraging technology, the department ensures the highest level of care.

Figure 4: EMS Resources

Unit	Resource Type	Location	Minimum Staffing	Staffing
MS211	Medic Squad	Station 1	2	24/7
E212	Engine	Station 2	3	24/7
RA212	Ambulance	Station 2	2	24/7
E213	Engine	Station 3	3	24/7
RA213	Ambulance	Station 3	2	24/7
BLS213	Ambulance	Station 3	2	24/7
E214	Engine	Station 4	3	24/7
RA214	Ambulance	Station 4	2	24/7
E215	Engine	Station 5	3	24/7
E216	Engine	Station 6	3	24/7
RA216	Ambulance	Station 6	2	24/7
E217	Engine	Station 7	3	24/7
B217	Battalion	Station 7	1	24/7
BLS217	Ambulance	Station 7	2	24/7
BLS210	Ambulance	Station 7	2	24/7
E218	Engine	Station 8	3	24/7

Emergency Medical Services – Low Risk

Low-risk EMS are those medical calls for service that the emergency medical dispatch process determines are non-emergency. Examples of low-risk EMS incidents may include ground-level falls without injury, general illness, low-acuity abdominal pain, and those incidents classified by ProQA as Alpha and Bravo. Within the OFD system, the Medic/Squad resources are deployed maintaining a high reliability for the transport resources to respond to critical emergencies.

CRITICAL TASK	REQUIRED STAFF
Primary Patient Care & Incident Command	1
Vehicle Operations	1
Effective Response Force:	**2**

RESOURCE DEPLOYMENT	MINIMUM STAFFING
Transport Ambulance (or Engine)	2 (3)
Total Personnel:	**2 (3)**

THREE-AXIS RISK SCORE	
Probability of Occurrence	7
Consequence to Community	1
Impact on Fire Department	1
SCORE:	**5.93**

BENCHMARK STATEMENTS

For 90% of low-risk emergency medical responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least two emergency medical technicians, one of which is a paramedic, shall be 10 minutes (10:00).

The first arriving unit for low-risk emergency medical responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Administering emergency medical patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR)
- Providing patient transport to the closest appropriate facility

The response model achieves the effective response force with the first arriving unit.

Emergency Medical Services – Moderate Risk

Moderate-risk EMS are those medical calls for service that the emergency medical dispatch process determines are emergent. Examples of moderate-risk EMS incidents may include chest pain, difficulty breathing, stroke, and those incidents classified by ProQA as Bravo and Charlie. As with "Low Risk," the Medic/Squad resources are deployed maintaining a high reliability for the transport resources to respond to critical emergencies.

CRITICAL TASK	REQUIRED STAFF
Incident Command	1
Primary Patient Care Provider	1
Secondary Patient Care Provider	1
Vehicle Operations	2
Effective Response Force:	**5**

RESOURCE	MINIMUM STAFFING
ALS Transport Ambulance	2
OFD Suppression Apparatus	3
Total Personnel:	**5**

THREE-AXIS RISK SCORE	
Probability of Occurrence	10
Consequence to Community	2
Impact on Fire Department	1
SCORE:	**16.17**

BENCHMARK STATEMENTS

For 90% of moderate-risk emergency medical responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least two emergency medical technicians, one of which is a paramedic, shall be 6 minutes (6:00).

The first arriving unit for moderate-risk emergency medical responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Obtaining vitals and patient medical history
- Administering advanced life support patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR)

For 90% of moderate-risk emergency medical responses in the area of responsibility, the total response time for the arrival of all fire and other EMS units and personnel necessary to complete the first-alarm assignment, otherwise referred to as the Effective Response Force (ERF), shall be 8 minutes (8:00).

The effective response force for moderate-risk emergency medical response shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Obtaining vitals and patient medical history
- Administering advanced life support patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR)
- Assisting transport personnel with packaging the patient
- Providing advanced life support
- Providing patient transport to the closest appropriate facility

Emergency Medical Services – High Risk

High-risk EMS are those medical calls for service that the emergency medical dispatch process determines are life-threatening. Examples of high-risk EMS incidents may include cardiac arrest, shootings, stabbings, and those incidents classified by ProQA as Charlie, Delta, and Echo.

CRITICAL TASK	REQUIRED STAFF
Incident Command	1
Primary Patient Care Provider	1
Secondary Patient Care Provider	1
Medical Equipment Operator	1
Vehicle Operations	2
Effective Response Force:	**6**

RESOURCE	MINIMUM STAFFING
ALS Transport Ambulance	2
OFD Suppression Apparatus	3
Battalion Chief	1
Total Personnel:	**6**

THREE-AXIS RISK SCORE	
Probability of Occurrence	9
Consequence to Community	4
Impact on Fire Department	1
SCORE:	**27.03**

BENCHMARK STATEMENTS

For 90% of high-risk emergency medical responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least two emergency medical technicians, one of which is a paramedic, shall be 6 minutes (6:00).

The first arriving unit for high-risk emergency medical responses shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Obtaining vitals and patient medical history
- Administering advanced life support patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR)

For 90% of high-risk emergency medical responses in the area of responsibility, the total response time for the arrival of all fire and other EMS units and personnel necessary to complete the first-alarm assignment, otherwise referred to as the Effective Response Force (ERF), shall be 8 minutes (8:00).

The effective response force for high-risk emergency medical response shall be capable of:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Obtaining vitals and patient medical history
- Administering advanced life support patient care
- Deploying automatic external defibrillation (AED)
- Performing cardiopulmonary resuscitation (CPR)
- Assisting transport personnel with packaging the patient
- Providing patient transport to the closest appropriate facility

FIRE SUPPRESSION

The Oceanside Fire Department operates out of eight strategically located fire stations located throughout the city service area. Each station is equipped with a pumper (designated as "Engine") with a 500-gallon booster tank (capacity) and a 1,500 gallon per minute pump. The department designates 46 operational personnel as minimum staffing. The table below shows the department's frontline apparatus. The table excludes the department's small complement of reserve apparatus.

The department follows the National Incident Management System for incident command and uses a commercial command process for the deployment of incident command. Company officers are used as initial incident commanders, and command is often passed to the first arriving chief officer.

Figure 5: Fire Suppression Resources

Unit	Resource Type	Location	Minimum Suppression Staffing	Staffing
E211	Engine	Station 1	3	24/7
MS211	Medic Squad	Station 1	2	24/7
E212	Engine	Station 2	3	24/7
RA212	Ambulance	Station 2	1*	24/7
E213	Engine	Station 3	3	24/7
RA213	Ambulance	Station 3	1*	24/7
OES PT 6612	Type 6	Station 3	0	Cross Staffed
E214	Engine	Station 4	3	24/7
RA214	Ambulance	Station 4	1*	24/7
OES BR6321	Type 3	Station 4	0	Cross Staffed
E215	Engine	Station 5	3	24/7
PT215	Type 6	Station 5	0	Cross Staffed
WT215	Tender	Station 5	0	Cross Staffed
E216	Engine	Station 6	3	24/7
RA216	Ambulance	Station 6	1*	24/7
BR216	Type 3	Station 6	0	Cross Staffed
E217	Engine	Station 7	3	24/7
T217	Truck/Ladder	Station 7	4	24/7
B217	Battalion	Station 7	1	24/7
BR217	Brush Truck	Station 7	0	Cross Staffed
E218	Engine	Station 8	3	24/7

*FF/PM and non-safety EMT - FF/PM contributes to the ERF.

RESPONSE PERFORMANCE GOALS

Measure	5-Year Baseline	2021 Goal	Sample Risk	Justification
Alarm Handling	1:49	1:00	Moderate	NFPA 1710
Turnout Time	2:28	1:20	Moderate	NFPA 1710
1st Unit Travel Time	5:11	4:00	Moderate	NFPA 1710
ERF Travel Time	7:46	8:00	Moderate	NFPA 1710

Fire Suppression – Low Risk

Low-risk fire incidents are those emergent calls for service that are unlikely to cause injury or significant property damage. Examples of low-risk fire incidents may include vehicles, trash, brush, and other non-structural fires.

CRITICAL TASK	REQUIRED STAFF
Attack Hoseline Deployment	2
Vehicle Operations	1
Effective Response Force:	**3**

RESOURCE	MINIMUM STAFFING
Suppression Apparatus	3
Total Personnel:	**3**

THREE-AXIS RISK SCORE	
Probability of Occurrence	7
Consequence to Community	2
Impact on Fire Department	1
SCORE:	**10.45**

BENCHMARK STATEMENTS

For 90% of low-risk fire responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three firefighters, shall be 6 minutes and 20 seconds (6:20).

The first arriving unit for low-risk fire responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for and requesting additional resources as needed
- Providing 1,500 GPM water pumping capacity
- Advancing a charged fire suppression attack hoseline for fire control or rescue

The response model achieves the effective response force with the first arriving unit.

Fire Suppression – Moderate Risk

Moderate-risk fire incidents are those calls for service that are unlikely to cause injury or significant property damage. Examples of moderate-risk fire incidents may include single-family homes, utility facilities, commercial & business occupancies, and storage facilities.

CRITICAL TASK	REQUIRED STAFF
Incident Command	1
Attack Hoseline Deployment	2
Secondary Hoseline Deployment	2
Search & Rescue	2
Water Supply	1
Engine Operations	2
Aerial Operations	2
Support Functions – Ventilation – Utility Control – Forced Entry	2
Medical Assistance & Rehab	2
Effective Response Force:	**16**

Note: NFPA 1710 establishes a standard for 17 personnel.

RESOURCE	MINIMUM STAFFING
Suppression Apparatus	3
Suppression Apparatus	3
Suppression Apparatus	3
Aerial Apparatus	4
Transport Ambulance	2
Battalion Chief	1
Total Personnel:	**16**

THREE-AXIS RISK SCORE	
Probability of Occurrence	4
Consequence to Community	4
Impact on Fire Department	3
SCORE:	**17.93**

BENCHMARK STATEMENTS

For 90% of moderate-risk fire responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three firefighters, shall be 6 minutes and 20 seconds (6:20).

The first arriving unit for moderate-risk fire responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for and requesting additional resources as needed
- Providing 1,500 GPM water pumping capacity
- Advancing a charged fire suppression attack hoseline for fire control or rescue

For 90% of all moderate-risk structure fire responses within the area of responsibility, the total response time for the arrival on the scene of all fire units and personnel necessary to complete a full first-alarm assignment, otherwise referred to as the Effective Response Force (ERF) shall be 10 minutes, 20 seconds (10:20).

The effective response force for moderate-risk fire responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Establishing an incident command system
- Providing an uninterrupted water supply
- Advancing a charged fire suppression attack hoseline and a backup line for fire control
- Complying with the OSHA requirements of two-in and two-out
- Completing forcible entry
- Searching and rescuing at-risk victims
- Ventilating the structure
- Controlling utilities
- Placing elevated master streams into service from aerial apparatus

Fire Suppression – High Risk

High-risk fire incidents are those calls for service that are likely to cause injury or significant property damage. Examples of high-risk fire incidents may include multi-family occupancies, places of assembly, high-rise buildings, academic, athletic, and health buildings, industrial buildings, mixed-use, and railway emergencies.

CRITICAL TASK	REQUIRED STAFF
Incident Command	1
Attack Hoseline Deployment	4
On-Deck Crew & Rapid Intervention Crew	2
Search & Rescue	4
Water Supply	2
Engine Operations	2
Aerial Operations	2
Support Functions – Ventilation – Utility Control – Forced Entry	2
Medical Assistance & Rehab	2
Effective Response Force:	**19**

Note: NFPA 1710 establishes a standard for 28 – 43 personnel

RESOURCE	MINIMUM STAFFING
Suppression Apparatus	3
Suppression Apparatus	3
Suppression Apparatus	3
Suppression Apparatus	3
Aerial Apparatus	4
Transport Ambulance	2
Battalion Chief	1
Total Personnel:	**19**

THREE-AXIS RISK SCORE	
Probability of Occurrence	6
Consequence to Community	6
Impact on Fire Department	4
SCORE:	**35.53**

BENCHMARK STATEMENTS

For 90% of high-risk fire responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three firefighters, shall be 6 minutes and 20 seconds (6:20).

The first arriving unit for high-risk fire responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for and requesting additional resources as needed
- Providing 1,500 GPM water pumping capacity
- Advancing a charged fire suppression attack hoseline for fire control or rescue
- Initiating other fire ground operations in accordance with department policies and procedures

For 90% of all high-risk structure fire responses within the area of responsibility, the total response time for the arrival on the scene of all fire units and personnel necessary to complete a full first-alarm assignment, otherwise referred to as the Effective Response Force (ERF) shall be 10 minutes and 20 seconds (10:20).

The effective response force for high-risk fire responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Establishing an incident command system
- Providing an uninterrupted water supply
- Advancing a charged fire suppression attack hoseline and a backup line for fire control
- Complying with the OSHA requirements of two-in and two-out
- Completing forcible entry
- Searching and rescuing at-risk victims
- Ventilating the structure
- Controlling utilities
- Placing elevated master streams into service from aerial apparatus

HAZARDOUS MATERIALS RESPONSE

The Oceanside Fire Department has adopted an operations-level stance to HazMat response, aligning with fundamental standards and practices. Their mission-specific responsibilities reflect a proactive, yet non-intrusive engagement strategy. The department prioritizes the containment and mitigation of HazMat releases, employing defensive techniques such as absorption, damming, and vapor dispersion, among others. Their team also boasts proficiency in essential air monitoring and has procedures for both technical and mass decontamination. Notably, they play a vital role in evacuation, victim rescue, and the demarcation of hazard zones, while also ensuring the proper preservation of evidence for subsequent investigations. While commendable, it is important to recognize that their approach is not advanced level; thus, in situations requiring higher technical expertise, collaboration with specialized teams may be necessary. Incidents that exceed the capacity of the OFD, the department adheres to the San Diego County Unified Hazardous Materials Incident Contingency Plan.

Hazardous Materials – Low Risk

Low-risk hazardous materials incidents are those calls for service that are unlikely to cause injury or significant property damage. Examples of low-risk hazardous materials incidents may include spills of 10 gallons of automotive fluid, smell of natural gas, or an investigation.

CRITICAL TASK	REQUIRED STAFF
Incident Command & Safety Officer	1
Leak & Spill Control	2
Effective Response Force:	**3**

RESOURCE	MINIMUM STAFFING
Suppression Apparatus	3
Total Personnel:	**3**

THREE-AXIS RISK SCORE	
Probability of Occurrence	3
Consequence to Community	1
Impact on Fire Department	1
SCORE:	**2.57**

BENCHMARK STATEMENTS

For 90% of low-risk hazardous materials responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three firefighters, shall be six minutes and twenty seconds (6:20).

The first arriving unit for low-risk hazardous materials responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Evacuating immediate and adjacent areas
- Isolating and controlling access to high-hazard areas

The response model achieves the effective response force with the first arriving unit.

Hazardous Materials – High Risk

Moderate-risk hazardous materials incidents are those calls for service that are unlikely to cause injury or significant property damage. Examples of high-risk hazardous materials incidents may include spills greater than 50 gallons of automotive fluid and other hazardous material responses not defined in Hazardous Materials – Low Risk.

The Oceanside Fire Department is contracted with San Diego County to receive hazardous materials mitigation services. Under contract, the county is obligated to offer emergency response services for actual or potential hazardous material releases within the Oceanside response area. These hazardous materials include substances deemed hazardous under Federal or California law or those that threaten life, property, or the environment.

Responses must adhere to the San Diego County Unified Hazardous Materials Incident Contingency Plan and the ICS system. The county will supply all required personnel, equipment, and materials, including administrative and supervisory staff available 24/7. The county is also encouraged to collaborate with external hazmat response agencies for swift handling of large or challenging incidents. Within the service area, the county must ensure that 90% of hazmat calls receive a response within 60 minutes.[2]

San Diego Fire Rescue deploys from San Diego Fire and Rescue- Station 45 located at 9366 Friars Road in the City of San Diego.

In regard to high-risk hazardous materials incidents, OFD responds with an initial collection or resources to provide "HazMat Operations-level" service until county resources arrive.

CRITICAL TASK	REQUIRED STAFF
Incident Command	1
Operations-Level Isolation & Evacuation	3
Operations-Level Containment & Exposure Protection	4
Patient Care & Transport	2
Effective Response Force:	**10**

RESOURCE	MINIMUM STAFFING
Suppression Apparatus	3
Aerial Apparatus	4
Transport Ambulance	2
Battalion Chief	1
Total Personnel:	**10**

[2] Emergency Response Services To Hazardous Materials Incidents, San Diego County, November 2012

THREE-AXIS RISK SCORE	
Probability of Occurrence	3
Consequence to Community	8
Impact on Fire Department	2
SCORE:	**21.46**

BENCHMARK STATEMENTS

For 90% of high-risk hazardous materials responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three firefighters, shall be six minutes and twenty seconds (6:20).

The first arriving unit for low-risk hazardous materials responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Evacuating immediate and adjacent areas
- Isolating and controlling access to high-hazard areas

Oceanside Fire Department deploys defensive tactics to contain the release of hazardous materials or gases from a safe distance, keep it from spreading, and prevent exposures without attempting to stop the release. Furthermore, the responders prioritize safety, isolation, deny entry, establish command, and notify appropriate resources.

San Diego Fire Rescue deploys from San Diego Fire and Rescue- Station 45 located at 9366 Friars Road in the City of San Diego.

TECHNICAL RESCUE RESPONSE

Technical Rescue – Low Risk

Low-risk technical rescue incidents are those calls for service that are unlikely to cause injury or significant property damage. Examples of low-risk technical rescue may include vehicle accidents with entrapment.

CRITICAL TASK	REQUIRED STAFF
Incident Command	1
Safety Officer	1
Extrication Team	2
Equipment Operator	2
Apparatus Operator	1
Primary Patient Care	2
Vehicle Operations	1
Effective Response Force:	**10**

RESOURCE	MINIMUM STAFFING
Suppression Apparatus	3
Aerial Apparatus	4
Transport Ambulance	2
Battalion Chief	1
Total Personnel:	**10**

THREE-AXIS RISK SCORE	
Probability of Occurrence	4
Consequence to Community	2
Impact on Fire Department	2
SCORE:	**8.90**

BENCHMARK STATEMENTS

For 90% of low-risk technical rescue responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three firefighters, shall be six minutes and twenty seconds (6:20).

The first arriving unit for low-risk technical rescue responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Isolating and controlling access to high-hazard areas

For 90% of all low-risk technical rescue responses within the area of responsibility, the total response time for the arrival on the scene of all fire units and personnel necessary to complete a full first-alarm assignment, otherwise referred to as the Effective Response Force (ERF) shall be 10 minutes, 20 seconds (10:20).

The effective response force for low-risk technical rescue responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Isolating and controlling access to high-hazard areas
- Rescuing and transporting victims to an appropriate medical facility

Technical Rescue – High Risk

High-Risk Incidents are those calls that can be mitigated by utilizing the expertise and resources of the OFD Rescue Group. Specialized gear, tools, equipment, or knowledge will be required beyond the scope of a First Responder. Examples of high-risk technical rescue responses include rope rescue, structural collapse, trenches, vehicle extrication with multiple patients, needing multiple extrication points and involving multiple vehicles, and, finally, confined space rescues.

High-risk technical rescue incidents generally use the North Zone Automatic Aid agencies' aid. Surrounding jurisdictions provide direct and indirect assistance in mitigating larger, more technical incidents. Although OFD can provide specialized technical rescue, the department does not have the training and equipment cache of a FEMA-typed team often seen in urban search and rescue arenas.

CRITICAL TASK	REQUIRED STAFF
Incident Command	1
Safety Officer	1
Technical Rescue Group Lead	1
Extrication Team #1	2
Extrication Team #1	2
Equipment Operator	3
Apparatus Operator	3
Medical Support & Rehab	2
Effective Response Force:	**15**

RESOURCE	MINIMUM STAFFING
Suppression Apparatus	3
Suppression Apparatus	3
Suppression Apparatus	3
Aerial Apparatus	4
Transport Ambulance	2
Supervisor	1
Total Personnel:	**16**

THREE-AXIS RISK SCORE	
Probability of Occurrence	2
Consequence to Community	7
Impact on Fire Department	3
SCORE:	**20.46**

BENCHMARK STATEMENTS

For 90% of high-risk technical rescue responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three firefighters, shall be six minutes and twenty seconds (6:20).

The first arriving unit for high-risk technical rescue responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Isolating and controlling access to high-hazard areas

For 90% of all high-risk technical rescue responses within the area of responsibility, the total response time for the arrival on the scene of all fire units and personnel necessary to complete a full first-alarm assignment, otherwise referred to as the Effective Response Force (ERF) shall be 10 minutes, 20 seconds (10:20).

The effective response force for high-risk technical rescue responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Assessing the need for additional resources
- Isolating and controlling access to high-hazard areas
- Rescuing and transporting victims to an appropriate medical facility

WILDLAND FIRE RESPONSE

Risk levels within the wildland response are based on weather conditions rather than the type or amount of fuel load. Because the Southern California landscape poses a significant risk for wildland fire and fires within the wildland urban interface, the North Zone's policy outlines three distinct levels of wildfire risk based on weather conditions. Here is a breakdown of each level:

Low Level Dispatch Mode: This mode indicates a non-critical situation for the region or state. The current and short-term forecasts suggest low to moderate fire danger. There are enough local contingency resources available to manage situations.

Weather Criteria:

- Temperatures: Ranging from 80 to 90 degrees
- Relative Humidity: Between 40% and 60%
- GACC 7 Day Fire Potential: Green or Yellow

High Level Dispatch Mode: This mode is activated when weather conditions suggest a serious situation or the potential for one. To initiate this mode, all the following conditions must be met.

Weather Criteria:

- Temperatures: 90 degrees and above
- Wind Speed: Greater than 15 MPH
- Relative Humidity: Between 15% and 40%
- GACC 7 Day Fire Potential: Orange, Red, or Brown

Red Flag Level Dispatch Mode: This mode is used when a "red flag" condition is declared by the National Weather Service, indicating extremely high fire danger.

- Weather Criteria (as set by the National Weather Service):
- Relative Humidity: 15% or less
- Sustained Winds: 25 MPH or greater
- Wind Gusts: Exceeding 35 MPH for 6 hours or more

Alternatively, the presence of dry lightning activity can also trigger this mode.

The North Zone also recognizes weather differences between inland and coastal areas. As such, it is divided into two distinct weather zones based on National Weather Service maps. One, or both, of these zones might be in different dispatch modes at any time. Weather data (including temperature, wind speed, and relative humidity) for these zones is evaluated twice daily to determine the appropriate dispatch mode.[3]

[3] Command Procedures Emergency Operations Manual. (2020). Wildland Dispatch Modes (EOM 206.00) (Revised ed.). [Manual].

Figure 6: Wildfire Resource Table

Unit	Resource Type	Location	Minimum Staffing	Staffing
E211	Engine	Station 1	3	24/7
E212	Engine	Station 2	3	24/7
E213	Engine	Station 3	3	24/7
OES PT 6612	Type 6	Station 3	0	Cross Staffed
E214	Engine	Station 4	3	24/7
OES BR6321	Type 3	Station 4	0	Cross Staffed
E215	Engine	Station 5	3	24/7
PT215	Type 6	Station 5	0	Cross Staffed
WT215	Tender	Station 5	0	Cross Staffed
E216	Engine	Station 6	3	24/7
BR216	Type 3	Station 6	0	Cross Staffed
E217	Engine	Station 7	3	24/7
T217	Truck/Ladder	Station 7	4	24/7
B217	Battalion	Station 7	1	24/7
BR217	Brush Truck	Station 7	0	Cross Staffed
E218	Engine	Station 8	3	24/7

Wildland – Low Risk

(North Zone Low)

This mode indicates a non-critical situation for the region or state. The current and short-term forecasts suggest low to moderate fire danger. There are enough local contingency resources available to manage situations.

Weather Criteria:

- Temperatures: Ranging from 80 to 90 degrees
- Relative Humidity: Between 40% and 60%
- GACC 7 Day Fire Potential: Green or Yellow

CRITICAL TASK	REQUIRED STAFF
Incident Command	1
Attack Hoseline Deployment	4
Vehicle Operations	2
Effective Response Force:	**7**

RESOURCE	MINIMUM STAFFING
Suppression Apparatus	3
Suppression Apparatus	3
Battalion Chief	1
Total Personnel:	**7**

THREE-AXIS RISK SCORE	
Probability of Occurrence	7
Consequence to Community	2
Impact on Fire Department	2
SCORE:	**12.62**

BENCHMARK STATEMENTS

For 90% of low-risk wildland responses in the area of responsibility, the total response time for the first arriving fire unit, staffed with at least three firefighters, shall be 6 minutes and 20 seconds (6:20).

The first arriving unit for low-risk wildland responses shall be capable of the following:

- Conducting a rapid size-up of the emergency scene
- Initiating an incident command system
- Developing an initial incident action plan
- Providing either mobile attack or progressive hose lays
- Extinguishing fire

For 90% of all moderate-risk wildland fires, the total response time for the arrival of the Effective Response Force, staffed with 16 firefighters, shall be 10 minutes and 20 seconds (10:20). The Effective Response Force must be capable of the following:

- Establishing command
- Sizing up the incident
- Developing an initial incident action plan
- Extending appropriate hoselines
- Providing either mobile attack or progressive hose lays
- Extinguishing fire

Wildland – Moderate Risk

(North Zone High)

This mode is activated when weather conditions suggest a serious situation or the potential for one. To initiate this mode, all the following conditions must be met.

Weather Criteria:

- Temperatures: 90 degrees and above
- Wind Speed: Greater than 15 MPH
- Relative Humidity: Between 15% and 40%
- GACC 7 Day Fire Potential: Orange, Red, or Brown

CRITICAL TASK	REQUIRED STAFF
Incident Command, Size up, Initial Safety Officer, Develop IAP	1
Initial Confinement/Extinguishment Actions	2
Continued Confinement & Extinguishment with Mobile Attack	6
Water Supply or Tender Operations	3
Incident Command, Accountability, & IAP Refinement	1
Medical Rehab & Support	2
Effective Response Force:	**15**

RESOURCE	MINIMUM STAFFING
Suppression Apparatus (Type 3)	3
Suppression Apparatus (Type 3)	3
Suppression Apparatus (Type 3) (Mutual Aid)	0
Suppression Apparatus	3
Suppression Apparatus	3
Water Tender	2
Battalion Chief	1
Total OFD Personnel:	**15**

THREE-AXIS RISK SCORE	
Probability of Occurrence	4
Consequence to Community	6
Impact on Fire Department	3
SCORE:	**23.76**

BENCHMARK STATEMENTS

For 90% of all moderate-risk wildland fires, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be 6 minutes 20 seconds (6:20). The first arriving unit shall be capable of the following:

- Establishing command
- Sizing up the incident
- Developing an initial incident action plan
- Extending an appropriate hoseline
- Providing either mobile attack or progressive hose lays
- Extinguishing fire

For 90% of all moderate-risk wildland fires, the total response time for the arrival of the Effective Response Force, staffed with 16 firefighters, shall be 10 minutes and 20 seconds (10:20). The Effective Response Force must be capable of the following:

- Establishing command
- Sizing up the incident
- Developing an initial incident action plan
- Extending appropriate hoselines
- Providing either mobile attack or progressive hose lays
- Extinguishing fire

Wildland – High Risk

(North Zone High)

This mode is used when a "red flag" condition is declared by the National Weather Service, indicating extremely high fire danger.

- Weather Criteria (as set by the National Weather Service):
- Relative Humidity: 15% or less
- Sustained Winds: 25 MPH or greater
- Wind Gusts: Exceeding 35 MPH for 6 hours or more

CRITICAL TASK	REQUIRED STAFF
Incident Command, Size up, Initial Safety Officer, Develop IAP	1
Initial Confinement/Extinguishment Actions	2
Continued Confinement & Extinguishment with Mobile Attack	6
Water Supply or Tender Operations	3
Incident Command, Accountability, & IAP Refinement	1
Medical Rehab & Support	2
Effective Response Force:	**15**

RESOURCE	MINIMUM STAFFING
Suppression Apparatus (Type 3)	3
Suppression Apparatus (Type 3)	3
Suppression Apparatus (Type 3) (Mutual Aid)	0
Suppression Apparatus (Type 3) (Mutual Aid)	0
Suppression Apparatus (Type 3) (Mutual Aid)	0
Suppression Apparatus	3
Suppression Apparatus	3
Water Tender	2
Battalion Chief	1
Battalion Chief (Mutual Aid)	0
Total OFD Personnel:	**15**

THREE-AXIS RISK SCORE	
Probability of Occurrence	4
Consequence to Community	9
Impact on Fire Department	3
SCORE:	**34.11**

BENCHMARK STATEMENTS

For 90% of all high-risk wildland fires, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be 6 minutes and 20 seconds (6:20). The first arriving unit shall be capable of the following:

- Establishing command
- Sizing up the incident
- Developing an initial incident action plan
- Extending an appropriate hoseline
- Providing either mobile attack or progressive hose lays
- Extinguishing fire

For 90% of all high-risk wildland fires, the total response time for the arrival of the Effective Response Force, staffed with 21 firefighters, shall be 10 minutes and 20 seconds (10:20). The Effective Response Force must be capable of the following:

- Establishing command
- Sizing up the incident
- Developing an initial incident action plan
- Extending appropriate hoselines
- Providing either mobile attack or progressive hose lays
- Extinguishing fire

SECTION II
ORGANIZATIONAL OVERVIEW

FACILITIES

ESCI conducted a high-level review of the department's response and administrative facilities. The following is a review of those facilities. Refer to Appendix A for facility best practices and the self-reporting facilities assessment completed by Oceanside Fire Department.

Fire Administration

300 N Coast Hwy, Oceanside, CA 92054

Daily Staffing: 26

The Oceanside Fire Department's Administrative building, an integral part of the Oceanside City Administration Complex, covers an approximate area of 3,500 sq. ft. Within this space, the department houses ten individual offices and fifteen cubicles, two of which are shared cubicles. The shared cubicles indicate an effort to maximize the use of available space, which echoes the cramped nature of the work environment. There is also a conference room, which spans roughly 180 sq. ft., and serves as a space for meetings, briefings, and training sessions. Additionally, the administrative building features a file room, ensuring the secure storage of important documents and records. Adjacent to the workspaces, there is a small kitchenette, providing a communal area for daily personnel to prepare and enjoy their meals.

Up to 26 daily personnel operate within this space, revealing the high density and active nature of the department's administrative functions. This extensive daily staff presence further underscores the congested atmosphere of the building. From the evaluation by ESCI, the current layout and capacity of the Fire Administrative building falls short in providing a functional and efficient workspace. Like many other fire departments, the OFD grapples with a shortage of functional storage space. This has led to improvisation. Items, supplies, and spare equipment are stored in offices, walkways, and common areas. The lack of proper storage solutions not only impacts the daily operations, but also poses potential safety hazards in emergency situations.

Fire Station 1

714 Pier View Way, Oceanside, CA 92054

Figure 7: Station 1 Apparatus

Apparatus Name	Condition	Mileage	Model Year
E221 (Engine)	Good	123,489	2009
RA211 (Ambulance)	Fair	210,909	2016

Finding of the EMG Facility Condition Assessment | 2019

Fire Station 1 is housed within a structure dating back to 1929. It shares the premises with the Historical Society/Homeless Outreach tenants. The fire station occupies the southern section of the first floor and the entire second floor. Renovations were carried out in the years estimated to be 1957, 1989, and a partial interior update in 2018.

The building's roof, specifically the modified bitumen rooftops, has been observed to leak, causing pooling of water, especially over the fire station dorms. Interior mold is suspected around these leakage areas. While the exterior doors and windows vary in age, most are advised to be replaced soon. Notably, the exterior stucco finish appears uneven from prior repairs, necessitating a complete redo. Periodic updates on interior finishes have taken place over the years, with future replacements expected based on lifecycle considerations.

Mechanical systems, including the gas-packaged units and exhaust fans, have shown signs of aging, particularly in the Historical Society/Homeless Outreach sections. The electrical panels present in the building are old and need urgent replacement. Several light fixtures in the Historical Society are damaged, and those within the Fire Station need upgrades for enhanced energy efficiency and improved lighting. There is an impending large expense expected with the need for electrical and plumbing infrastructure replacements. A notable absence is the backflow preventer, essential for preventing potential water supply contamination. Despite its historical nature, the building lacks fire suppression or alarm systems, with a strong recommendation for a full fire system overhaul.

Fire Station 1 is adjacent to the Civic Center, sharing parking amenities that are not detailed in this report. The landscaping around the building features artificial turf and plantings. However, there is a tripping hazard due to an uneven sidewalk near the historical society entrance.

Station 1’s replacement facility, located one block north, is currently under construction and is expected to open in March 2024.

Fire Station 2

1740 Ditmar Street, Oceanside, CA 92054

Daily Staffing: 3

Figure 8: Station 2 Apparatus

Apparatus Name	Condition	Mileage	Model Year
E212 (Engine)	Good	41,900	2019
Reserve Engine	Fair	70,000	2012

Finding of the EMG Facility Condition Assessment | 2019

Oceanside Fire Station 2, built in 1960, underwent a significant renovation in 2005. In 2018, the kitchen of the station received a makeover.

Constructed with wood framing set on a concrete foundation, the station features a sloped roof adorned with asphalt shingles, likely replaced during the 2005 renovation. The exterior walls, finished with freshly painted stucco, are in commendable condition. The facility's windows are double-glazed vinyl. As for the interiors, finishes span from the era of the original construction to more modern updates. Approximately half of the building's interior was renovated in 2005. The kitchen underwent an update, and a sizable portion of the flooring was replaced in the recent past. One of the two restrooms, particularly the older one, is slated for renovation and modifications to meet ADA standards.

The station's temperature control comes from two split units coupled with furnaces. One is in pristine condition, while the other is nearing the end of its utility. Over time, the electrical system has seen several updates, making its age a mix of the old and the new. Hot water requirements are met by two domestic heaters; one is new, and the other is approaching the end of its functional life. Alarmingly, a backflow preventer is absent, risking potential contamination of the water supply. The building does not have fire suppression or fire alarm mechanisms in place. Although this may be because the building's construction date might have exempted it from the then-prevailing codes, a full sprinkler system retrofit is strongly recommended by EMG.

The surrounding landscape of the station employs water-efficient practices. The grounds are paved with concrete and bordered by masonry fencing. Notably, there is an absence of designated or handicap-accessible parking spots.

Fire Station 3

3101 Oceanside Boulevard, Oceanside, CA 92056

Daily Staffing: 7

Figure 9: Station 3 Apparatus

Apparatus Name	Condition	Mileage	Model Year
E213 (Engine)	Good	62,326	2017
RA213 (Ambulance)	Fair	185,932	2016
BLS213 (Ambulance)	Fair	166,897	2016
OES6612 (Type-6 Brush)			

Note: There was no 2019 EMG facility evaluation performed on Station 3. During the EMG evaluation, Station 3 was being remodeled following a fire.

Built in 1963, this two-story structure spans 7,075 square feet and underwent a significant remodel in 2019 following a fire. Its primary function is to serve as an emergency operations hub, and it sees the active involvement of seven personnel daily. The station currently lacks a training room and a separate decontamination area. While it is equipped with a security fence and door keypads to maintain safety and privacy, there are areas of potential improvement in line with the best practices.

For instance, one of the recent improvements within Station 3 is the installation of the turnout gear extractor and the vehicle exhaust removal system. These advancements are crucial in reducing potential carcinogenic exposure to firefighters, a concern due to the increased risk firefighters face when it comes to cancer. However, with no dedicated decontamination area, there is room to further minimize cross-contamination risks.

The station's infrastructure also features two drive-through apparatus bays to prevent the potential safety risks associated with backing in emergency vehicles. Additionally, the station is equipped with fuel pumps for diesel and gas and an emergency power generator. While the presence of smoke alarms adds to the safety quotient of the station, the absence of automatic cooking appliance shut-offs can be an area of improvement, especially with the history of a residential-style fire.

In conclusion, Station 3 remains in fair condition, and with some enhancements, it can serve as a testament to the OFD's dedication to the safety of both its firefighters and the community at large. As fire station design best practices continue to evolve, incorporating these into Station 3's design could further enhance its functionality and safety.

Fire Station 4

3990 Lake Boulevard, Oceanside, CA 92056

Daily Staffing: 5

Figure 10: Station 4 Apparatus

Apparatus Name	Condition	Mileage	Model Year
E214 (Engine)	Fair	133,032	2009
RA214 (Ambulance)	Fair	68,715	2020
OES6321 (Type-3 Brush)			

Finding of the EMG Facility Condition Assessment | 2019

Constructed in 1989, Fire Station 4 has been continuously occupied by the Oceanside Fire Department since its inception. The station's structural composition includes CMU or wood framing, topped with a flat roof. While the roof remains in good condition, evident wear and a diminished granular overcoat have been noted. Several windows in the building suffer from deteriorated seals. The interior finishes, though well-kept, display signs of wear and tear. Regular lifecycle-based interior and exterior finish replacements have been budgeted for, with replacements anticipated in the near future.

The HVAC systems, specifically the rooftop package units and rooftop exhaust fans, though functioning optimally, are approaching the end of their expected service life. Dual gas-fired water heaters cater to the hot water needs of the building. Unused solar water heaters are present on the roof but are not a concern. Additionally, the building houses a diesel generator and an automatic transfer switch, both appearing to be in good shape. However, a notable issue is the electrical conduit, located at the building's southeast corner, which is missing its cover and exposes wiring- a replacement cover is advisable.

The fire department and city staff recognized the need to rehabilitate and remodel Fire Station 4. The lack of appropriate project-specific capital improvement funding has caused several delays. Fire Station 4 Rehabilitation Phase 1 took place in June of 2023 with interior improvements to the living and sleeping quarters and the hallways. The FY 24/25 budget has both project-specific and recurring CIP (Capital Improvement Program) funds allocated for repairing deficiencies on the interior not addressed in Phase 1 and for exterior improvements in Phase 2.

Fire Station 5

4841 North River Road, Oceanside, CA 92057

Daily Staffing: 3

Figure 11: Station 5 Apparatus

Apparatus Name	Condition	Mileage	Model Year
E215 (Engine)	Fair	105,211	2011
WT215 (Water Tender)	Fair	12,507	2006
PT215 (Type-6 Engine)	Good	13,702	2009

Finding of the EMG Facility Condition Assessment | 2019

Constructed in 1986, Fire Station 5 has seen periodic updates in equipment and finishes, though a significant portion of its infrastructure remains original. The architectural elements of the station are in decent condition without notable flaws. A roof, presumably less than a decade old, remains intact without any leakage issues. Immediate plans include replacing a water-damaged exterior door. Over time, sections of the interior, such as the kitchen and flooring, have received updates when required. Predictably, both internal and external finishes are set to undergo lifecycle-based replacements, with provisions already budgeted.

Much of the station's mechanical apparatus, renewed in the early 2000s, is approaching the end of its operational lifespan. While the electrical distribution system is believed to be as old as the building itself, the generator is a more recent addition from 2008. The switch to LED lighting is commendable; however, the older fixtures housing them necessitate replacements soon. The plumbing components are in satisfactory condition, with replacements scheduled for the medium-term horizon. Concerningly, the absence of a backflow preventer puts the water supply at potential contamination risk. The facility's lack of fire suppression or alarm systems, though possibly exempted at the time of its construction, calls for a comprehensive fire system retrofit, as recommended by EMG.

The pavement, seemingly original from 1986, exhibits signs of wear, such as isolated cracks in the concrete driveway. To preserve its condition, resealing and restriping of the asphalt are suggested. A damaged chain-link fence near the main entrance requires attention, and an accessible parking spot lacks proper signage. The landscaping is simplistic, consisting mainly of rocks and soil, while trees and shrubs provide a natural border alongside the roadway. The external lighting, supplemented by both the building's lights and city street lighting, seems sufficient.

Fire Station 6

895 North Santa Fe Avenue, Oceanside, CA 92056

Daily Staffing: 6

Figure 12: Station 6 Apparatus

Apparatus Name	Condition	Mileage	Model Year
E216 (Engine)	Poor	30,545	2001
RA216 (Ambulance)	Fair	70,000	2012
BR216 (Type 3 Brush)	Good	4,162	2020

Finding of the EMG Facility Condition Assessment | 2019

Fire Station 6, constructed in 1980, belongs to the City of Oceanside and remains occupied by its Fire Department. Since its inception, the facility has not undergone any substantial renovations.

The station consists of a single building, with its roof, façade, and interior finishes all in commendable condition, devoid of any major flaws. As is standard practice, interior and exterior finishes will undergo periodic lifecycle-based replacements, which are already accounted for in the budget.

The HVAC system for the non-apparatus bay spaces is comprised of condensing unit/heat pump split-system units, whereas the apparatus bay is equipped with suspended unit heaters. Overall, there are no reported deficiencies with the HVAC, plumbing, or electrical systems. However, the emergency generator is projected to require a replacement within the next five years. The report also clarifies that the site does not feature any conveyance systems.

Externally, the station boasts concrete sidewalks and apparatus driveways complemented by asphalt parking zones. The grounds are aesthetically landscaped, dominated by large trees. The area's illumination relies on a combination of building-mounted and pole-mounted lights. Upon evaluation, no significant deficiencies have been pinpointed within the premises.

Fire Station 7

3350 Mission Avenue, Oceanside, CA 92058

Daily Staffing: 10

Figure 13: Station 7 Apparatus

Apparatus Name	Condition	Mileage	Model Year
E217 (Engine)	Good	2,396	2022
T217 (Truck)	Good	75,647	2011
B217 (Battalion)	Good		2020
BLS217 (Ambulance)	Fair	143,792	2016
BR217 (Brush)	Good	11,772	2020
Engine (Reserve)			
Ambulance (Reserve)			

Finding of the EMG Facility Condition Assessment | 2019

Fire Station 7, erected in 2008 under the jurisdiction of the City of Oceanside, is occupied by its Fire Department. Since its inception, no major renovations have been carried out. The facility comprises a single building. Both its external envelope and interior finishes are in admirable condition. However, a repaint is on the horizon for the near term. As is customary, the budget anticipates periodic lifecycle-based replacements for both interior and exterior finishes. The station features two roof types: concrete tiles and a modified bituminous membrane. These decade-old roofs have experienced occasional leaks, which have been duly addressed. The building's windows and doors stand without any notable issues.

Given the relatively recent construction of the facility, all MEPF (Mechanical, Electrical, Plumbing, and Fire) systems are in tip-top shape, devoid of any significant deficiencies. Most of the HVAC equipment, including package units and split-system condensing units/heat pumps, is conveniently situated on the flat roof sections. For power backup, the building possesses an emergency generator tailored for long-term outages, complemented by an uninterruptible power supply (UPS) for shorter electricity disruptions. The report confirms the absence of any conveyance systems and ESCI is assured that the station's interior lighting is both adequate and in satisfactory condition.

The station's exteriors are characterized by concrete pavements that serve gate-controlled driveways, parking zones, general storage sections, and sidewalks. Perimeter security is ensured by metal tube fencing, which currently demands repainting to address recurrent peeling. The facility's lighting mechanism incorporates building-mounted and pole-mounted fixtures, and no inadequacies in illumination have been reported.

Fire Station 8

1935 Avenida Del Oro, Suite F, Oceanside, CA 92056

Daily Staffing: 3

Figure 14: Station 8 Apparatus

Apparatus Name	Condition	Mileage	Model Year
E218 (Engine)	Good	76,182	2014

Oceanside Fire Department's Station 8 serves primarily as an operational base with three personnel assigned daily. Located within a larger multi-tenant industrial building, Station 8 is approximately 5,084 square feet. First occupied 2013, this single-story industrial facility is in overall good condition. Notably, Station 8 is a leased facility used temporarily by the fire department.

The station's infrastructure includes door keypads, a single back-in apparatus bay, six beds distributed across three bedrooms, and an emergency power generator. However, it lacks several essential facilities. There is no training room, decontamination area, vehicle exhaust removal system, or turnout gear extractor. Furthermore, while the station has smoke alarms, it does not feature automatic cooking appliance shut offs or adequate storage areas. Considering Station 8's current setup, there are several areas where upgrades or changes could be beneficial to align with these best practices.

Fire Training Center

110 Jones Road, Oceanside, California 92054

Established in 1978, the Oceanside Fire Training Center shares its location with the City Water Department. The training facilities consist of one multi-bay masonry walled garage (pre-1978), three mobile buildings established in 2000, one modular garage added around 2007, and a five-story burn tower completed in 2022. The facilities have seen minor repairs since their construction, but no remodels or upfits.

The Training Center's mobile buildings (A, B, and E) boast wood siding, raised wood flooring, and metal roofing. Their entrances are accentuated by wood stairs and ramps. The modular garage is traditionally framed in wood, positioned on a concrete slab with integral footings, and sports wood siding. The masonry garage (Building F) has a unique design with masonry bearing walls, a wood-framed roof, and a slab-on-grade foundation. Buildings A, B, E and F are at the end of their life span and have a partial budget consideration in 2024 to accommodate replacement to also include interior finishes and appropriate ramps and stairs.

In the MEPF domain, Buildings A, B, and E of the Training Center use packaged heat pumps situated at their rear for heating and cooling. The modular garage is conditioned by a split unit air conditioning unit and heating, whereas Building F has no heater or cooling facility. The existing plumbing systems across the buildings are sufficient, with fixtures and equipment being updated as required. Buildings A, B, E, and F are equipped with electric domestic water heaters, while the modular garage lacks any plumbing. Although most MEPF components at the center are original and have been consistently maintained, some of them, such as HVAC components and pump motors, are approaching their anticipated end-of-life. Overall, the MEPF infrastructure is robust and does not foresee any significant short-term expenditure.

The center's parking facility has seen periodic repaving and sectional replacements. The site is minimally adorned with sidewalk spaces and landscaping elements.

Lifeguard Administration Facility

301 The Strand North, Oceanside, CA 92054
Located under the Pier View Way Bridge

Lifeguard Headquarters has long been a pivotal hub for emergency responses along the beachfront. However, the station currently faces deteriorating conditions due to its advanced age, substandard construction quality, and the glaring fact that it has not seen any significant renovations since 1987. To better meet the evolving requirements of the fire service, a remodeled facility or even a new building would need to incorporate essential features such as kitchen facilities, expanded storage for equipment, and dedicated exercise areas. The long-term stability and efficiency of operations hinge on constructing a completely new facility.

As of September 2023, the Coastal Commission has given its preliminary nod to the design proposed by the City of Oceanside for a new Lifeguard Administration Facility. Envisioned to replace the aging structure that the lifeguard program has outgrown, the planned building will proudly stand adjacent to the iconic pier. While it remains in its conceptual phase, the Oceanside Fire Department remains optimistic that the city, together with its strategic partners, will march ahead with the ambitious plan.

The bigger picture reveals even more revamping. The Oceanside City Council has endorsed plans to completely replace the 96-year-old Pier View Way Bridge and the Lifeguard Headquarters instead of restoring them. This decision goes hand-in-hand with the council's approval of a $3.2 million contract earmarked for the subsequent design and environmental undertakings. Notably, the city's lifeguard station currently sits tucked beneath the bridge on the western flank of the beachfront lane named The Strand. The lifeguard team frequently faces challenges like dodging falling concrete from the aging infrastructure above. The present headquarters is cramped, accommodating merely 18 of the department's 35 employees, a number that is poised to rise in the coming years. To complicate matters further, any renovations to the existing facility west of The Strand can only occur within its current boundaries. Space constraints aside, the lifeguards' view of the beach, crucial for public safety, needs to remain unobstructed. Measure X, a seven-year temporary half-cent sales tax greenlit by Oceanside voters back in November 2018, has played a pivotal role in bankrolling the design and environmental review for these paramount beachfront projects.[4]

[4] San Diego Union-Tribune. (2023, August 28). Replacement approved for Oceanside pier access bridge. Retrieved from https://www.sandiegouniontribune.com/communities/north-county/oceanside/story/2023-08-28/replacement-approved-oceanside-pier-access-bridge

Marine Safety Unit Staff Facility

Daytime Operations – Harbor Business Hours

Oceanside Small Craft Harbor
1540 N Harbor Dr, Oceanside, CA 92054

Afterhours Deployment Location:

Oceanside Marina Suites (Motel)
2008 N Harbor Dr, Oceanside, CA 92054

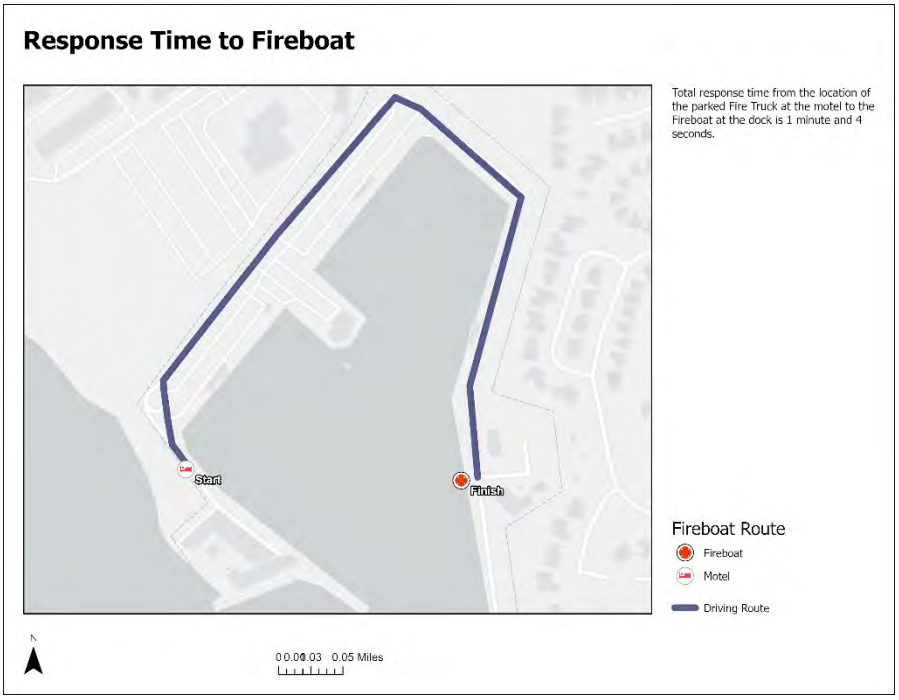
Daily Staffing: 3

On February 5, 2023, the Oceanside Police Department transferred the Marine Safety Unit and associated staffing to the Oceanside Fire Department.

The Marine Safety Unit (MSU) is temporarily housed in two rooms at the Oceanside Marina Suites Motel. The setup is less than ideal; however, it is filling the facilities gap in the absence of a permanent structure. OFD is working closely with strategic partners and the City of Oceanside. The city assembled a team to develop the facility's concept and seek preliminary approvals in 2024.

The current set-up houses one firefighter/paramedic and two lifeguards that, after-hours, occupy two rooms at the marina motel. Traveling from the marina motel to the mooring location involves driving a vehicle 0.65 miles. During the day, the MSU personnel operate from the harbor administration building and within the harbor waters.

Figure 15: Lifeguard Response Time Map



SYSTEM PERFORMANCE: PERFORMANCE OVERVIEW

SERVICE DELIVERY & DATA ANALYTICS

Understanding the full nature of service delivery within the community provides OFD leadership with some of the tools needed to plan for appropriate standards of cover. To attain this full understanding, the following components were analyzed.

- Service demand
- Resource distribution
- Resource concentration
- Resource reliability
- Response performance

Service Demand Analysis

OFD is a fire department that provides many services to the community, one of which is responding to calls for service (the primary purpose of the department). This response to incidents (calls for service) is commonly called service demand, the first broad analysis category. For each analysis, information is grouped into calendar years for illustration from a progression point of view.

Incident Type Analysis

While the original creation of a fire department was to respond to incidents involving fires, this has expanded to response to many different types of incidents and providing a wide variety of services to mitigate those incidents. Understanding the details as to the types of incidents, provides OFD leadership and elected officials with information that is vital to planning for staffing and resources to provide service to the community.

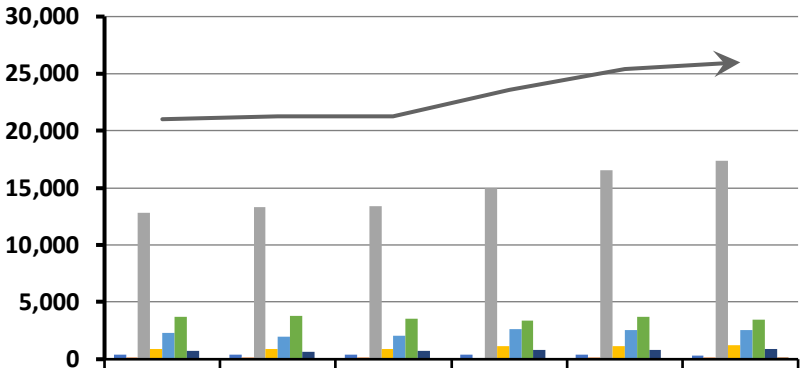
Due to the wide variety of types of incidents to which fire departments respond, the National Fire Incident Reporting System (NFIRS) was developed. Through a standardized reporting system, fire departments are better equipped to quantify and qualify the service demand within their community and compare their department to other communities throughout the nation. Within this system, each incident type is assigned a numerical three-digit code, and these codes are then grouped into broader series by the first digit of each code, as illustrated in the following figure. There are currently 178 incident types within the code set.

Figure 16 NFIRS Incident Series

Incident Series	Incident Heading
100-Series	Fires
200-Series	Overpressure Rupture, Explosion, Overheat (No Fire)
300-Series	Rescue and Emergency Medical Service (EMS) Incidents
400-Series	Hazardous Condition (No Fire)
500-Series	Service Call
600-Series	Canceled, Good Intent
700-Series	False Alarm, False Call
800-Series	Severe Weather, Natural Disaster
900-Series	Special Incident Type
100-Series	Fires

OFD personnel respond to incidents and then document the response within a software platform compliant with the NFIRS standards. While this documentation includes many different datapoints, one is the NFIRS incident type. As illustrated in the following figure, there has been an increase of 23.7% in service demand from 2018 to 2023. Included in this overall increase is a decrease of 0.1% from 2019 to 2020 and increases of 1.1% from 2018 to 2019, 11.0% from 2020 to 2021, 7.7% from 2021 to 2022, and 2.4% from 2022 to 2023.

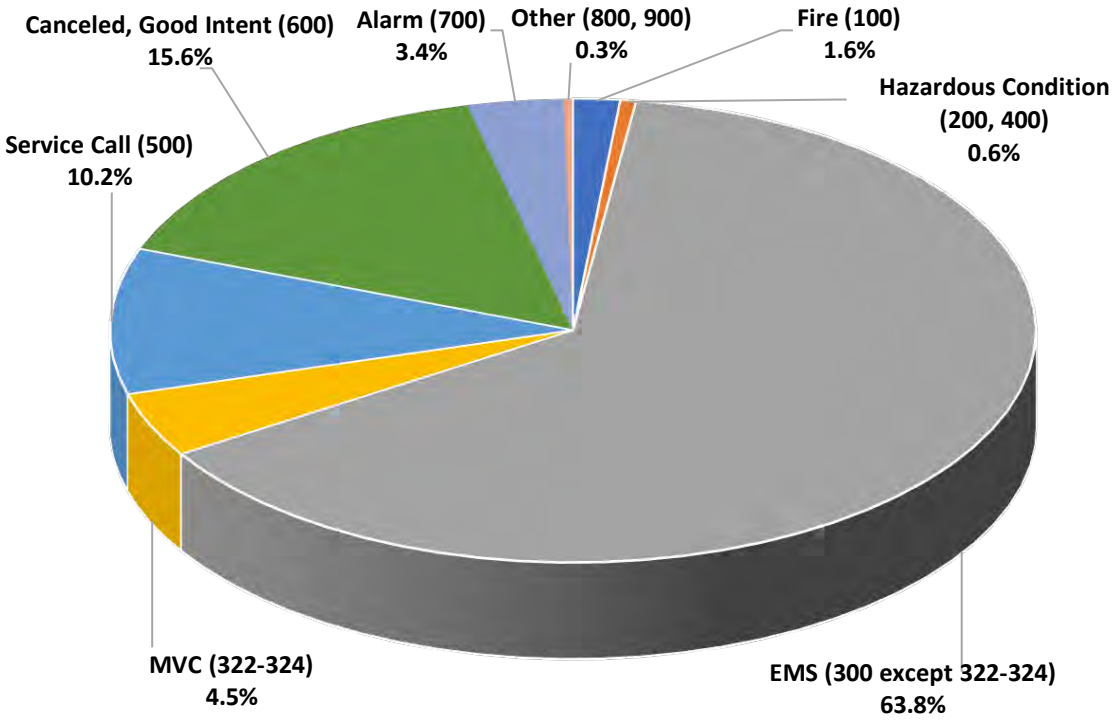
Figure 17 OFD Service Demand by NFIRS Incident Series, 2018–2023



	2018	2019	2020	2021	2022	2023
Fire (100)	377	377	385	408	388	327
Hazardous Condition (200, 400)	145	149	125	100	118	126
EMS (300 except 322-324)	12,787	13,278	13,401	14,977	16,584	17,360
MVC (322-324)	875	930	858	1,183	1,168	1,226
Service Call (500)	2,268	1,998	2,086	2,660	2,560	2,514
Canceled, Good Intent (600)	3,749	3,829	3,568	3,347	3,676	3,425
Alarm (700)	746	635	747	840	788	886
Other (800, 900)	66	53	55	55	101	127
Total	21,013	21,249	21,225	23,570	25,383	25,991

The preceding figure illustrates the data from an annual perspective and provides a year-to-year progression of service demand. There is associated value in viewing the same data from the perspective of how each NFIRS incident series compares to the overall total service demand, expressed as a percentage. As illustrated in the following figure, the greatest service demand is emergency medical service incidents, and the lowest service demand is other incidents.

Figure 18 OFD Service Demand by NFIRS Incident Series, 2018–2023



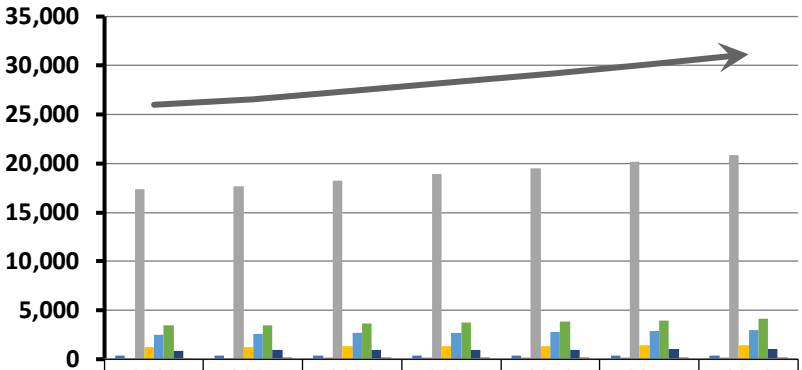
Future Service Demand

A major part of the planning process for OFD leadership is to consider the potential changes in service demand volume moving forward into the future. Through comparison of historical changes and projected future changes, leadership can work to ensure appropriate staffing, resources, training, and equipment are available to provide services to the community.

Future Service Demand by Population

One method of projecting future service demand analyzes the number of incidents per 1,000 people within the community. Then, through analysis of the historical population changes within the community obtained from the United States Census Bureau, a projection of future population is extrapolated, the incidents/1,000 population is applied to achieve the total number of incidents each year, which is then distributed based on the incident frequency percentages. The following figure illustrates the projected OFD service demand based on changes in population and provides the lower estimate.

Figure 19 OFD Projected Service Demand by Population Change, 2025–2050

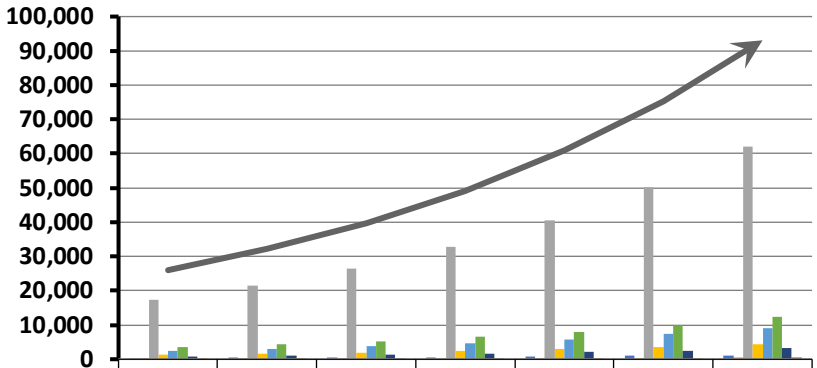


	2023	2025	2030	2035	2040	2045	2050
Fire (100)	327	333	344	356	367	379	392
Hazardous Condition (200, 400)	126	128	133	137	142	146	151
EMS (300 except 322-324)	17,360	17,700	18,281	18,882	19,502	20,142	20,804
MVC (322-324)	1,226	1,250	1,291	1,333	1,377	1,422	1,469
Service Call (500)	2,514	2,563	2,647	2,734	2,824	2,917	3,013
Canceled, Good Intent (600)	3,425	3,492	3,607	3,725	3,848	3,974	4,104
Alarm (700)	886	903	933	964	995	1,028	1,062
Other (800, 900)	127	129	134	138	143	147	152
Total	25,991	26,500	27,370	28,269	29,198	30,157	31,147

Future Service Demand by Historical Change

A second method of projecting future service demand analyzes the historical percentage of change during the study period to determine the average increase or decrease per year. This figure is then extrapolated over time to provide the total number of incidents each year, which is then distributed based on the incident frequency percentages. The following figure illustrates the projected OFD service demand based on historical changes in service demand and provides the upper estimate.

Figure 20 OFD Projected Service Demand by Historical Change, 2025–2050



	2022	2025	2030	2035	2040	2045	2050
Fire (100)	327	404	500	619	765	947	1,171
Hazardous Condition (200, 400)	126	156	193	238	295	365	451
EMS (300 except 322-324)	17,360	21,473	26,559	32,851	40,634	50,260	62,167
MVC (322-324)	1,226	1,516	1,876	2,320	2,870	3,549	4,390
Service Call (500)	2,514	3,110	3,846	4,757	5,884	7,278	9,003
Canceled, Good Intent (600)	3,425	4,236	5,240	6,481	8,017	9,916	12,265
Alarm (700)	886	1,096	1,356	1,677	2,074	2,565	3,173
Other (800, 900)	127	157	194	240	297	368	455
Total	25,991	32,148	39,764	49,184	60,836	75,248	93,075

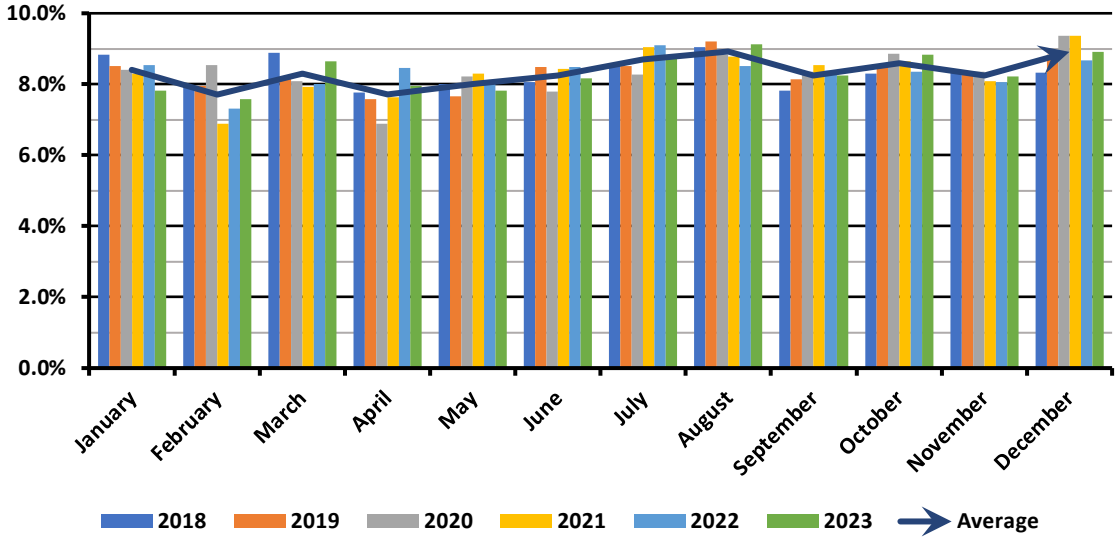
Temporal Analysis

The prior section analyzed the types of incidents occurring within the community. The next analysis of service demand considers when incidents occur, otherwise known as temporal variation. This is a key component which provides leadership insight for scheduling of resources to respond to incidents, as well as scheduling non-incident activities during periods of lower service demand. These non-incident activities may include, but are not limited to, the following activities below.

- Pre-incident planning
- Training
- Station maintenance
- Apparatus maintenance
- Fire hose testing
- Fire hydrant testing
- Public education

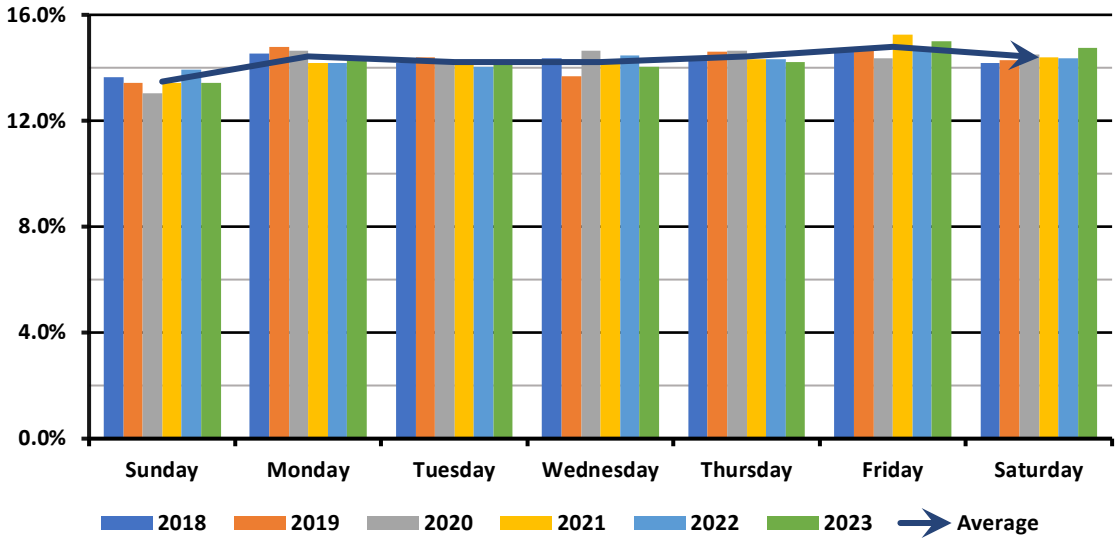
The first temporal analysis considers how each month of the year compares to the overall total service demand, expressed as a percentage of the whole. As illustrated in the following figure, the greatest service demand occurs in August and December, followed closely by July and October. The lowest service demand occurs in February and April.

Figure 21 OFD Service Demand by Month, 2018–2023



The second temporal analysis considers how each day of the week compares to the overall total service demand, expressed as a percentage of the whole. As illustrated in the following figure, the greatest service demand occurs on Friday, followed closely by Monday, Thursday, and Saturday. The lowest service demand occurs on Sunday.

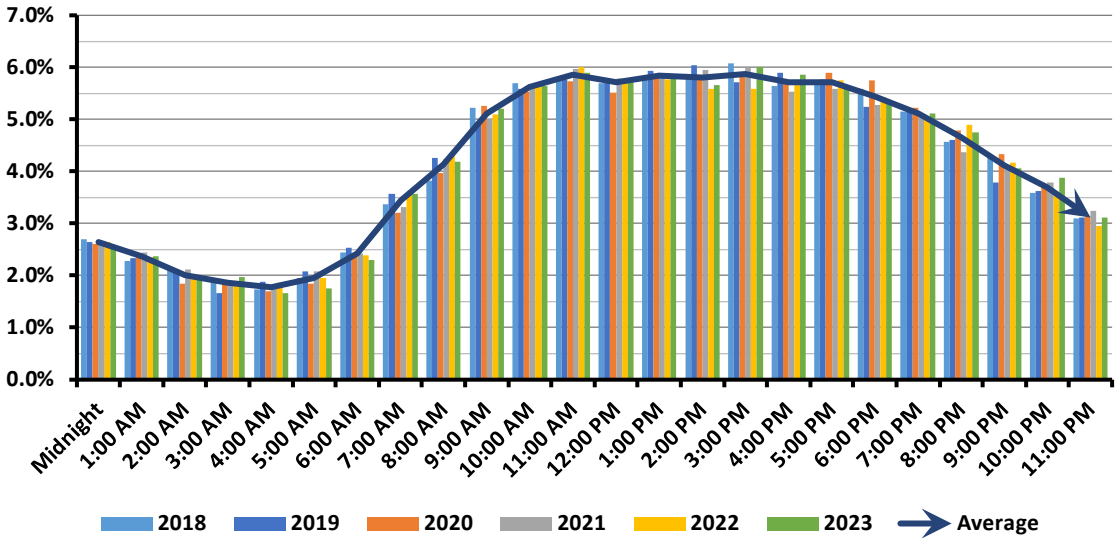
Figure 22 OFD Service Demand by Day, 2018–2023



The final temporal analysis considers how each hour of the day compares to the overall total service demand, expressed as a percentage of the whole. As illustrated in the following figure, the lowest service demand occurs at 4:00 AM, followed by slight increases over the next two hours. At 7:00 AM, the rate of increase steepens and continues throughout the morning until reaching a peak of greatest demand at 11:00 AM. Throughout the daytime hours, service

demand fluctuates slightly before beginning to decrease at 6:00 PM. Throughout the evening, service demand continues to gradually decreases and then rapidly declines starting at 12:00 AM. This pattern—common in most communities—ties closely with the movement of the population as people are generally sleeping in the early morning hours, arise and prepare for their day, go about their daily activities, begin their evening activities, and return to their homes.

Figure 23 OFD Service Demand by Hour, 2018–2023



While the preceding figure illustrates that demand for service is at its lowest during the late night and early hours, leadership should ensure adequate staffing is still in place to quickly respond and mitigate structure fire incidents. Based on a national study recently published, from 2018 to 2020, the occurrence of residential structure fires with fatalities were highest between midnight and 1:00 AM. The 8-hour peak period (11:00 PM to 7:00 AM) accounted for 45% of residential fatal fires[5].

Geographic Analysis

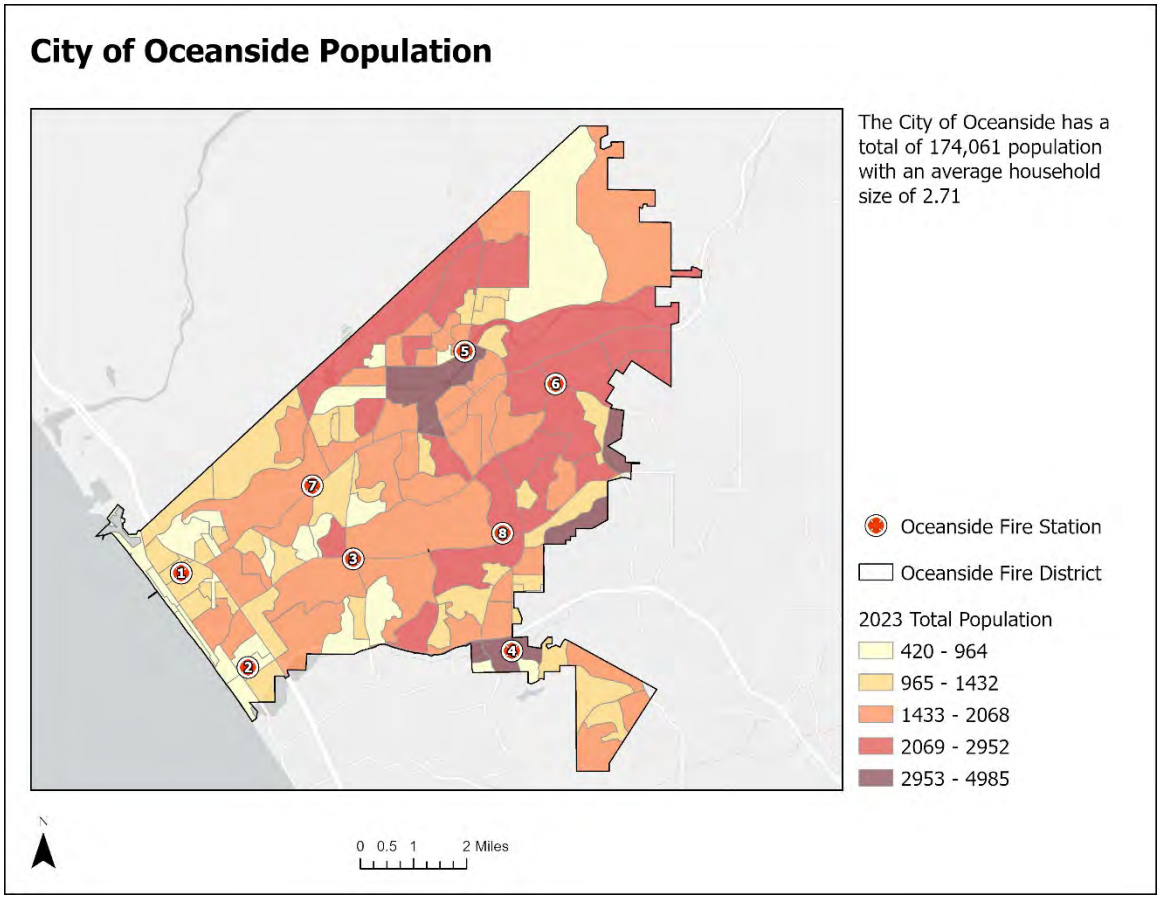
The preceding two sections provide insight as to the types of incidents occurring within the community and when they occur. The next analysis of service demand considers where incidents occur, otherwise known as geographical analysis. As shown in the preceding section, the level of service demand is closely tied with the population's movement. This is also a close relationship for the geographic location of service demand. Where there is a greater density of population within the community, there is also a greater density of service demand.

Through analysis of the population density data as provided by the U. S. Census Bureau, the majority of the OFD service area is urban density (greater than 1,000 persons per square mile).

[5] *Fatal Fires in Residential Buildings (2018–2020), Topical Fire Report Series Volume 22, Issue 2 /June 2022, U.S. Department of Homeland Security, U.S. Fire Administration, National Fire Data Center.*

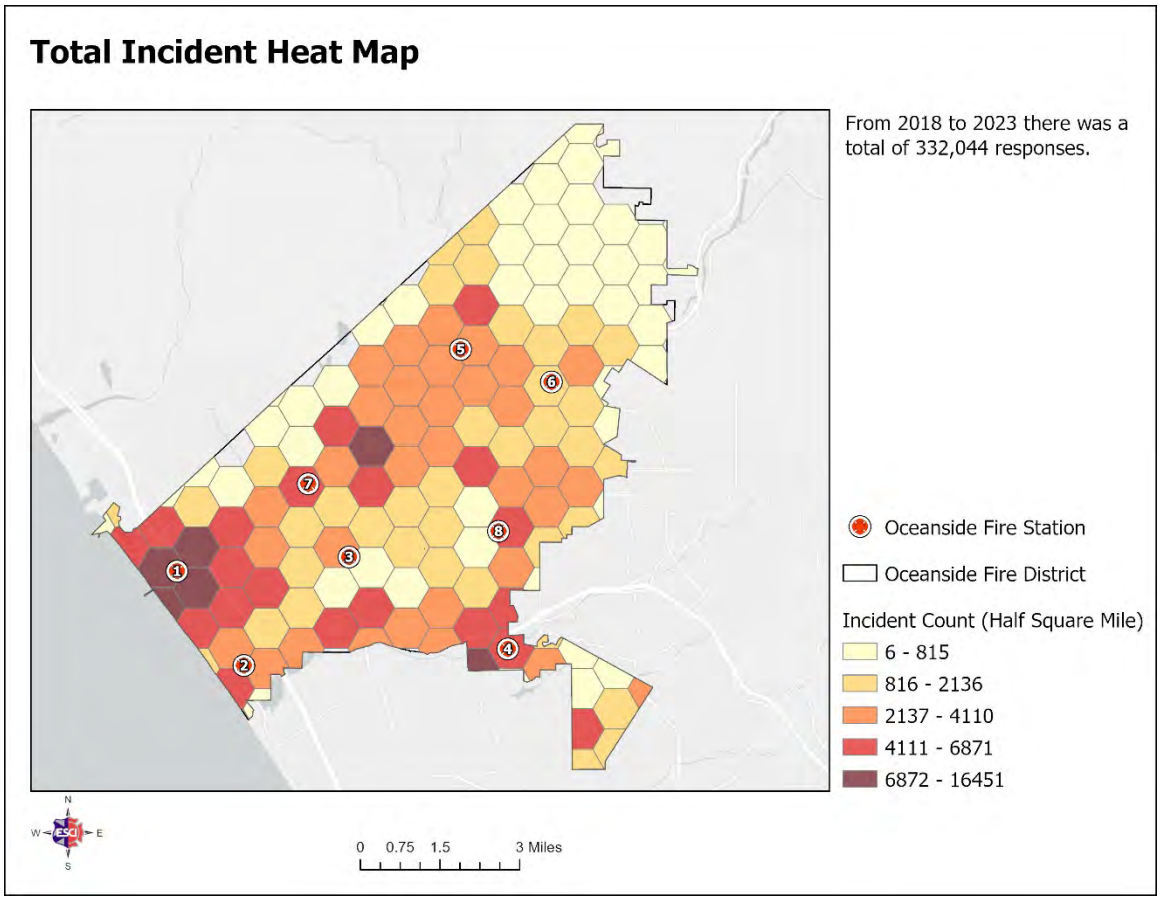
Pockets of greatest density are near Station 4 and 5, along with additional areas on the city's eastern side.

Figure 24 City of Oceanside, Population Density



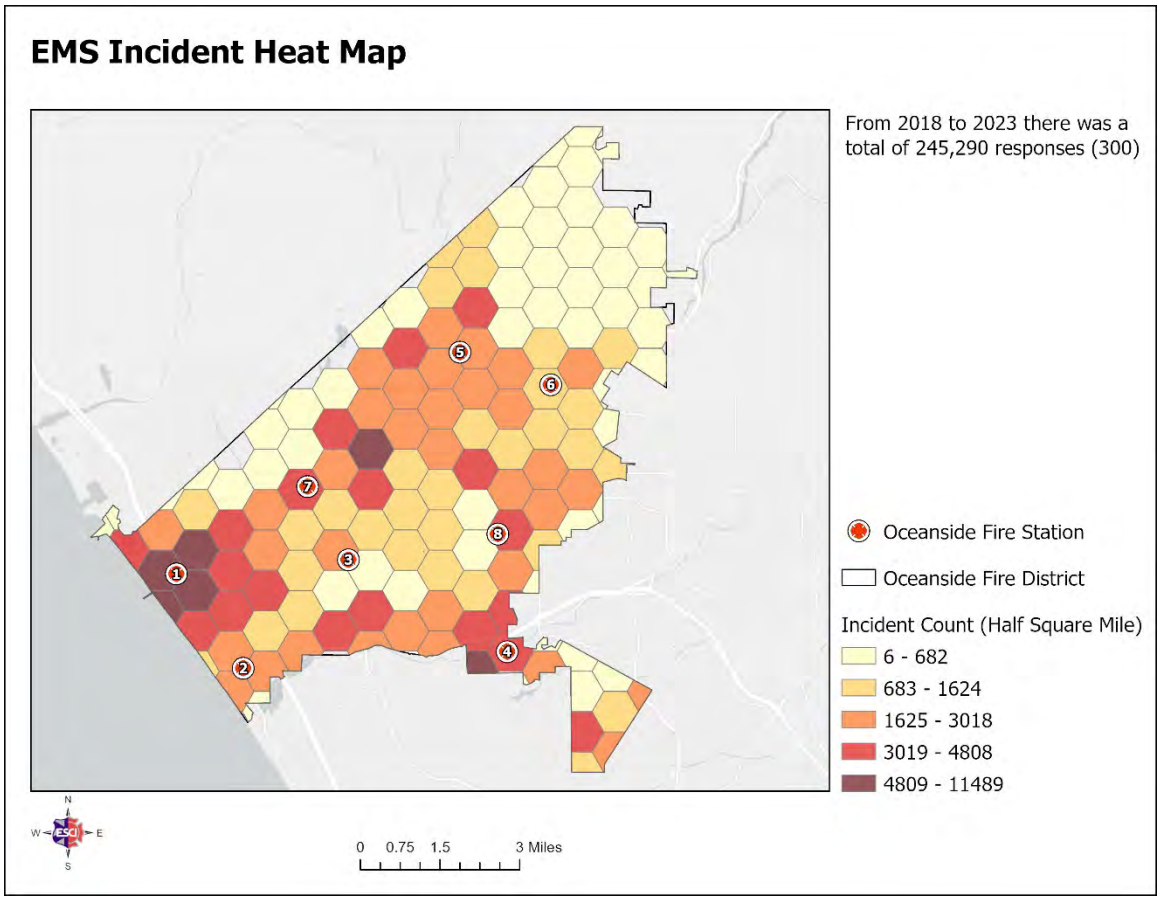
Using geographic information system (GIS) software, ESCI plotted the location of each incident. Then, the mathematical density of incidents (incidents per square mile) was calculated and illustrated as a heat map. As illustrated in the following figure, the areas of greatest incident density—when considering all incidents—are near Station 1 and Station 4. Station 4 density is consistent with a greater population density. Station 1 density is in the same location as the Oceanside City Beach and the Oceanside Pier, and thus is directly related to the activities associated with those locations, and influx of people not living in that immediate area.

Figure 25 OFD Incident Density (All Incidents), 2018–2023



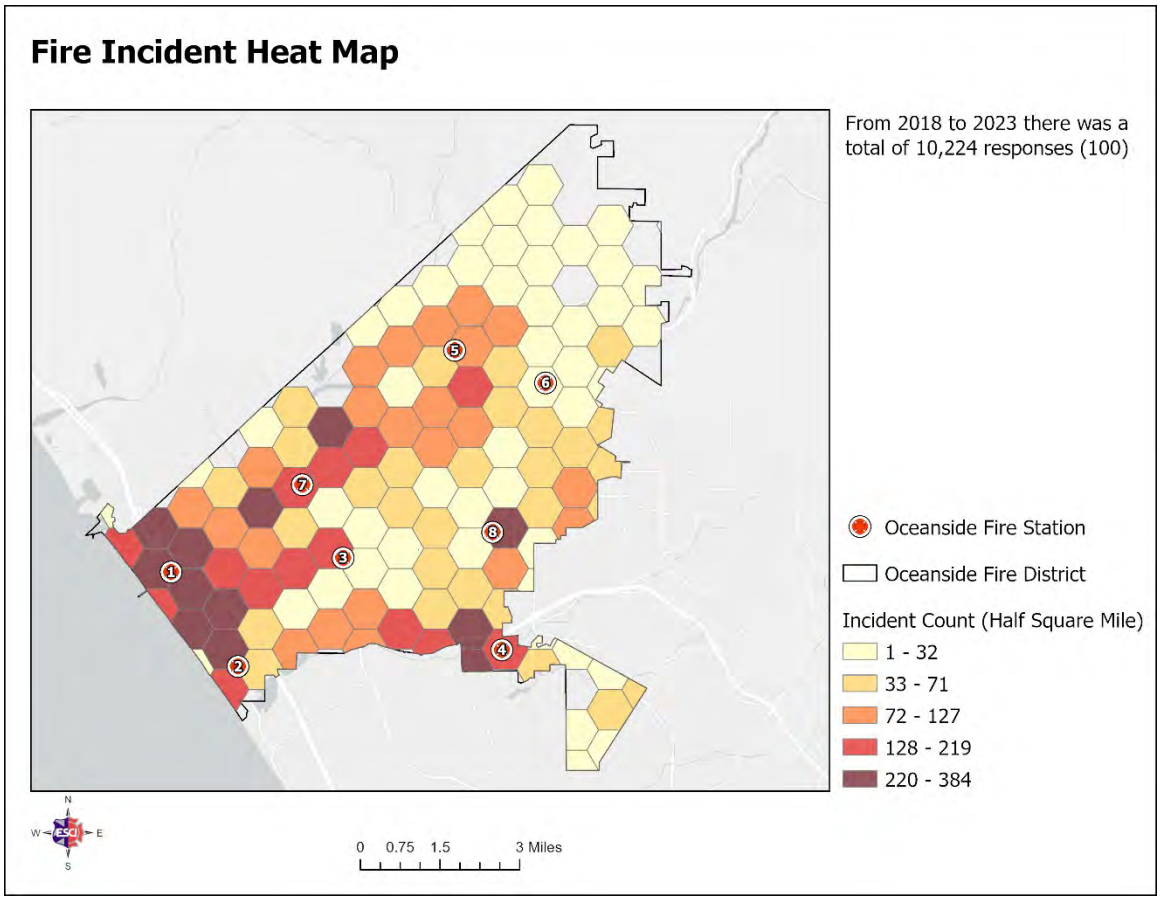
With the greater portion of service demand directly related to emergency medical service incidents, there is value in performing the same analysis with only those incidents that fall within the NFIRS 300 series. As illustrated in the following figure, incident density for this subset follows the same pattern as the overall incident density.

Figure 26 OFD Incident Density (NFIRS 300-Series), 2018–2023



Finally, it is also important to consider fire incidents (NFIRS Series 100) as a separate analysis since these incidents generally require a greater number of resources and personnel. As illustrated in the following figure, density of fire incidents varies slightly from the overall incident density in areas of greater density that are near Station 1 and Station 7.

Figure 27 OFD Incident Density (NFIRS 100-Series), 2018–2023



Resource Distribution Analysis

The second broad category of analysis considers the location of resources within the community. This information, combined with the service demand information already presented, helps leadership and elected officials to understand the efficacy of resource locations as compared to service demand locations. It also assists with planning for future resource locations. To assess the distribution of resources, there are various industry standards and recommendations that provide insight.

ISO Distribution

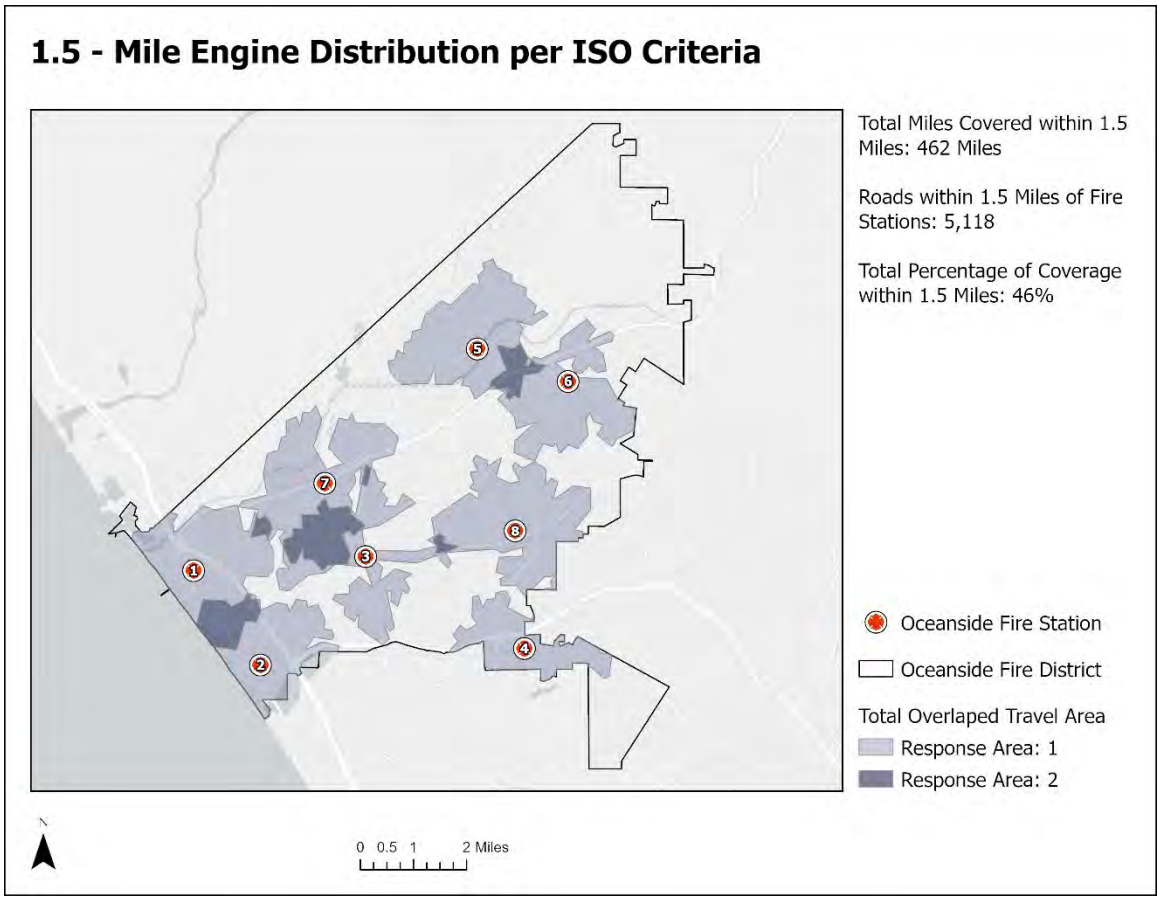
The Insurance Services Office (ISO) is a national insurance industry organization that evaluates fire protection for communities across the country. ISO assesses all areas of fire protection as broken down into four major categories including emergency communications, fire department, water supply, and community risk reduction. Following an on-site evaluation, an ISO rating, or specifically, a Public Protection Classification (PPC®) number is assigned to the community ranging from 1 (best protection) to 10 (no protection). The PPC® score is developed using the Fire Suppression Rating Schedule (FSRS), which outlines sub-categories of each of the major four, detailing the specific requirements for each area of evaluation.

A community's ISO rating is an important factor when considering fire station and apparatus concentration, distribution, and deployment due to its effect on the cost of fire insurance for the residents and businesses. To receive maximum credit for station and apparatus distribution, ISO evaluates the percentage of the community (contiguously built upon area) that is within specific distances of fire stations, central water supply access (fire hydrants), engine/pumper companies and aerial/ladder apparatus.

1.5-Mile Distribution

When evaluating the information towards an ISO rating, the first component to consider is the location of staffed fire engines within the community. This analysis considers the percentage of the community that falls within a 1.5-mile travel distance of a staffed fire engine. This 1.5-mile travel distance standard for ISO equates to a similar 4-minute travel time recommended by the National Fire Protection Association (NFPA). As illustrated in the following figure, 46% of the OFD service area is within 1.5 road miles of a staffed fire engine.

Figure 28 OFD 1.5-Mile Engine Distribution per ISO Criteria

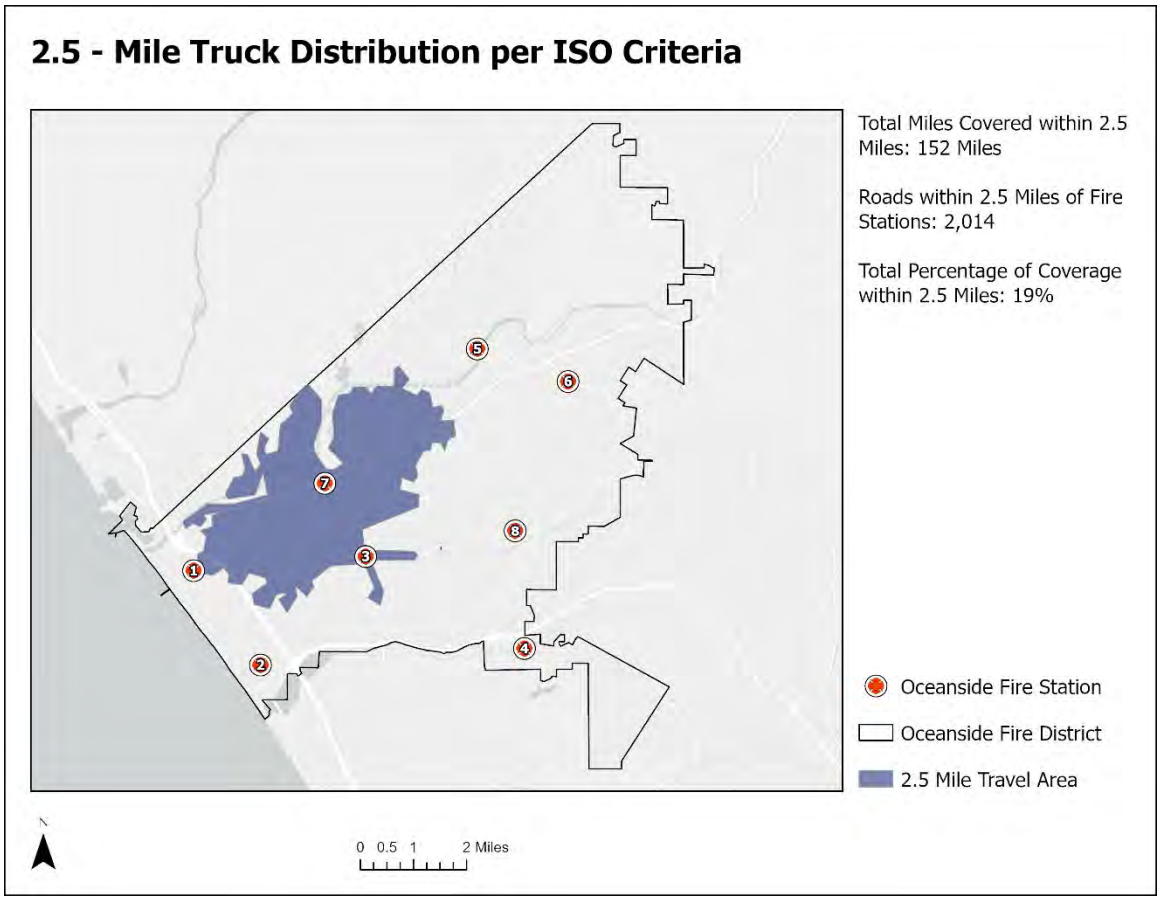


2.5-Mile Distribution

The second component considered as part of the evaluation of the information towards an ISO rating is the location of staffed aerial apparatus within the community. This analysis considers the percentage of the community that falls within a 2.5-mile travel distance of a staffed aerial

apparatus. This 2.5-mile travel distance for ISO equates to a similar 8-minute travel time recommended by NFPA for arrival of the full assignment. As illustrated in the following figure, 19% of the OFD service area is within 2.5 road miles of a staffed aerial apparatus.

Figure 29 OFD 2.5-Mile Aerial Apparatus Distribution per ISO Criteria

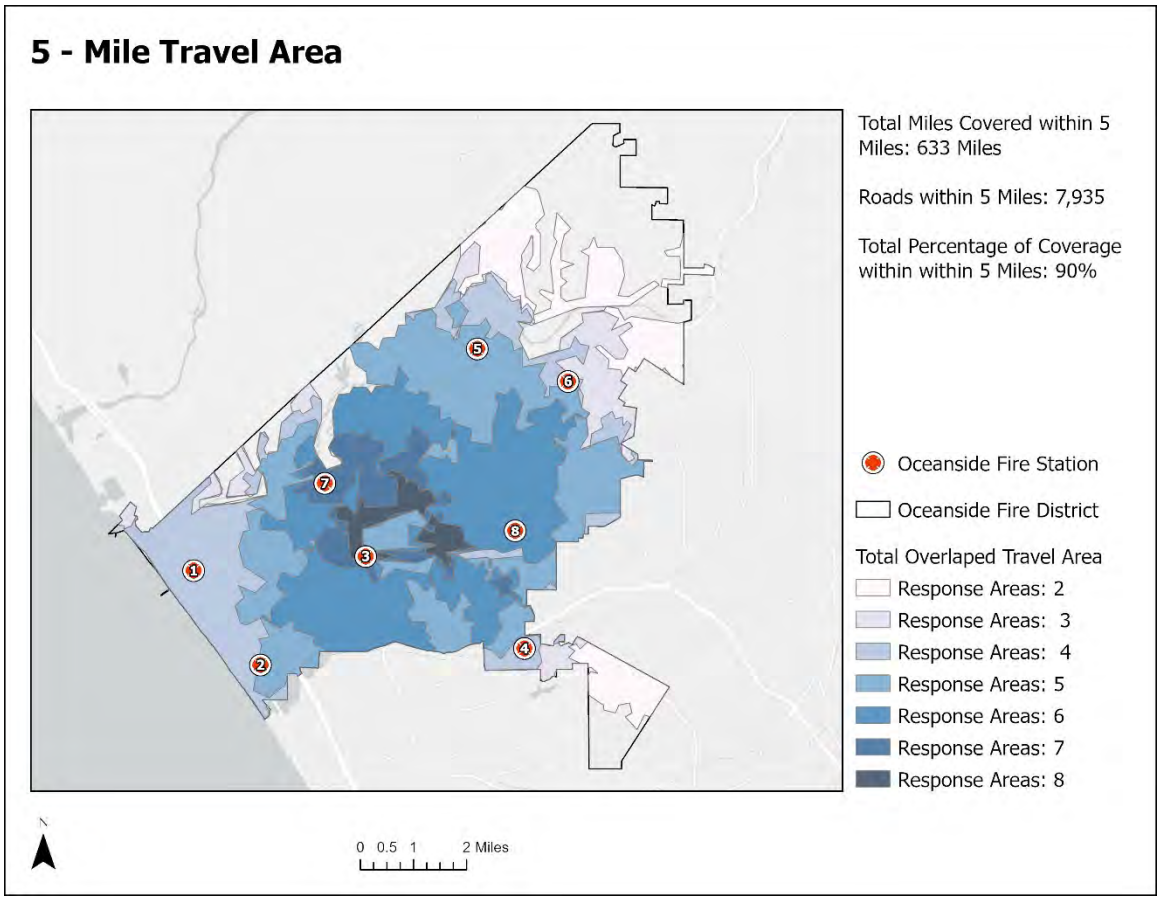


The use of aerial apparatus is more specifically needed in areas of the community where there are five or more buildings of three stories (or 32-feet) or more in height, or with five or more buildings requiring a needed fire flow of greater than 3,500 gallons per minute, or five or more buildings meetings any combination of these requirements.

5-Mile Distribution

The third component considered as part of the evaluation of the information towards an ISO rating is the location of fire stations within the community. This analysis considers the percentage of the community that falls within a 5-mile travel distance of a staffed fire station. As illustrated in the following figure, 90% of the OFD service area is located within a 5-road-mile travel distance of a fire station.

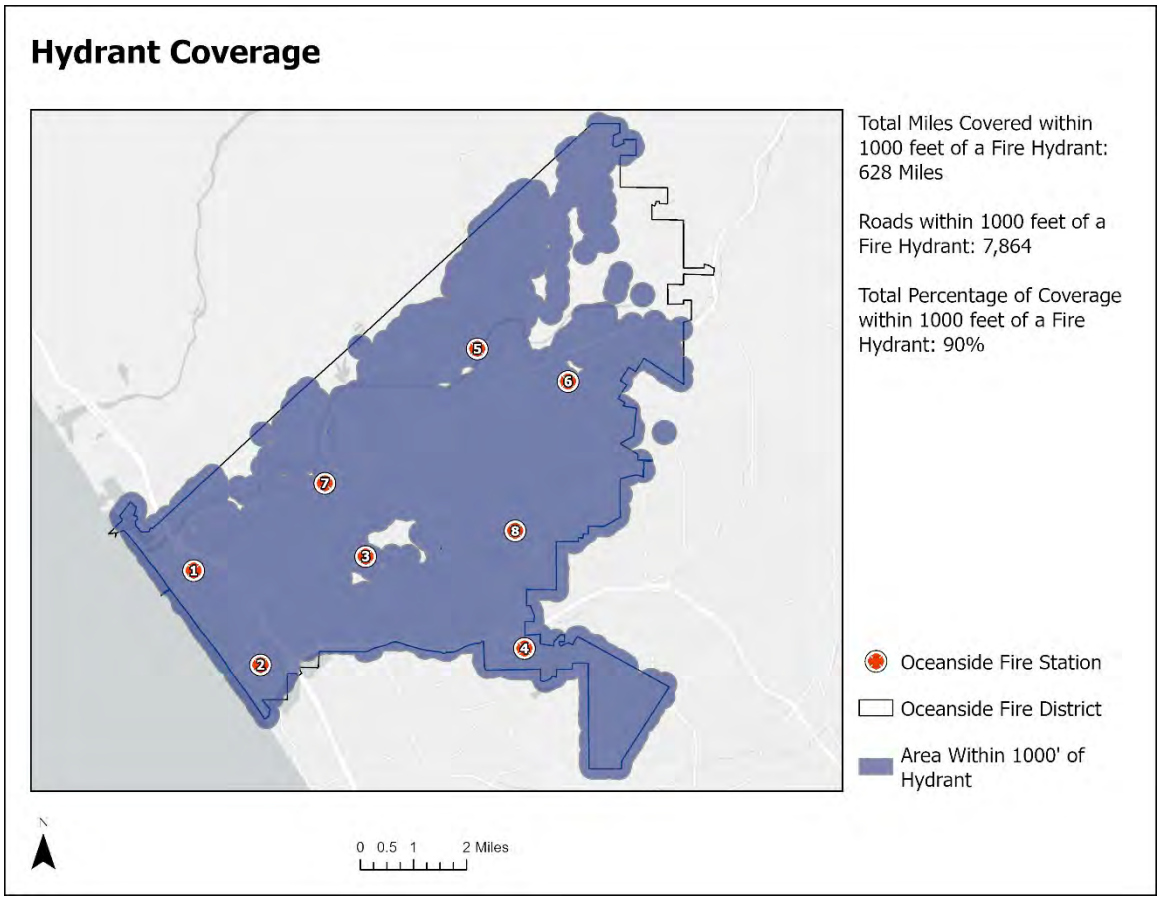
Figure 30 OFD 5-Mile Station Distribution per ISO Criteria



Water Supply

Along with evaluation of fire department resources within the community, ISO also evaluates the community's availability of a sufficient water supply, which is critical for the extinguishment of fires. Included in this evaluation is the geographic location and distribution of fire hydrants. Structures outside a 1,000-foot radius of a fire hydrant are subject to a lower Public Protection Classification® rating than areas with adequate hydrant coverage, thus signifying limited fire protection. Exceptions are made when a fire department can show that either a dry hydrant or a suitable water tanker operation is possible to provide the needed volume of water for fire suppression activities for a specific period. As illustrated in the following figure, 90% of the OFD service area is within 1,000 feet of a fire hydrant.

Figure 31 OFD Hydrant Distribution per ISO Criteria

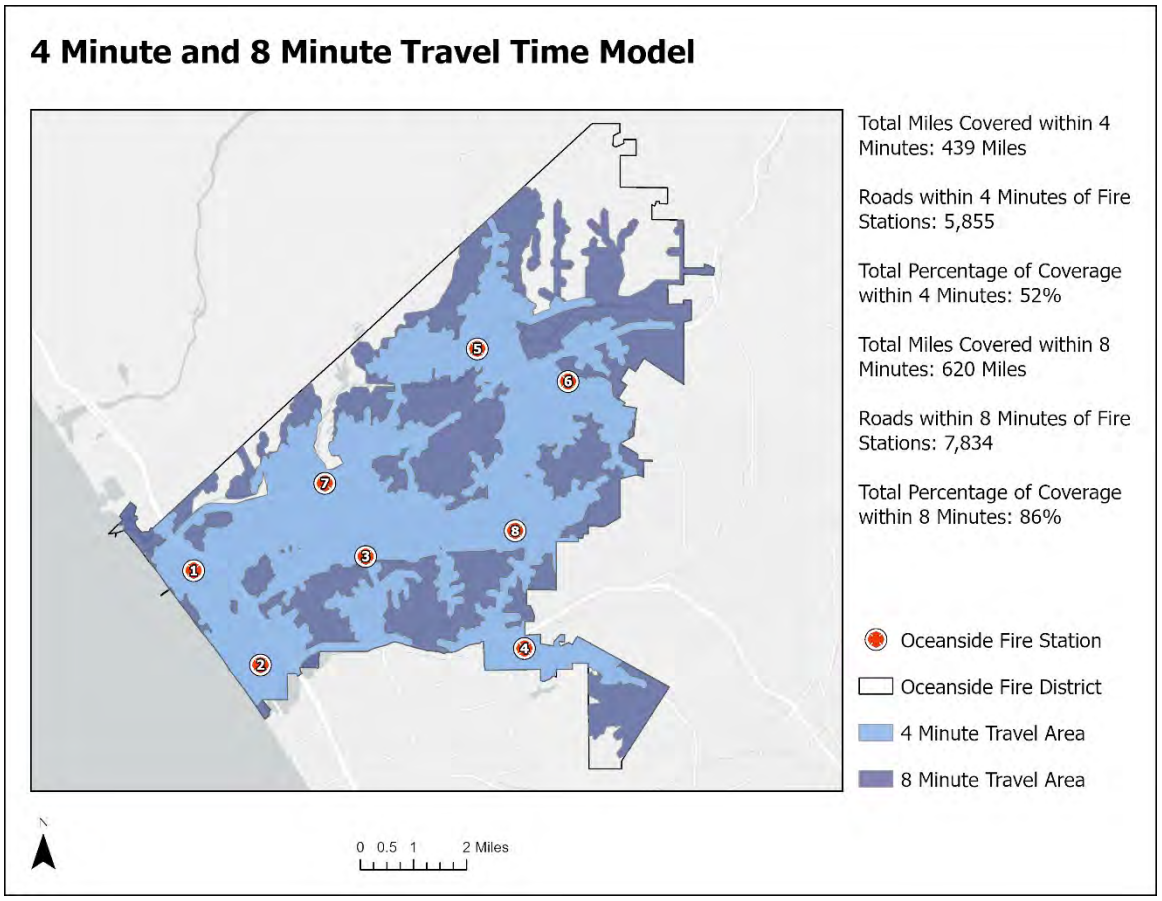


NFPA Distribution

The National Fire Protection Association (NFPA) is an industry trade association that develops and provides standards and codes for fire departments and emergency medical services for use by local governments. One of these standards, 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*, serves as a national consensus standard for career fire department performance, operations, and safety. Within this standard, a travel time of 240 seconds, or 4 minutes, is identified as the benchmark for career departments to reach emergency incidents within their jurisdiction with the first arriving unit. Additionally, the balance of the response (called the effective response force or ERF) is required to arrive at the incident within 480 seconds, or 8 minutes.

When analyzing this measure, travel time is calculated using the posted speed limits and adjusted for negotiating turns, intersections, and one-way streets. Unshaded pockets indicate that the area falls outside of the model's maximum extension from the road network. Note that other impedance factors, such as traffic congestion, road closures, or weather conditions, are not factored into this analysis. Rarely are conditions perfect. As illustrated in the following figure, 52 % of the OFD service area falls within the 4-minute travel time of a fire station and 86 % falls within the 8-minute travel time of a fire station.

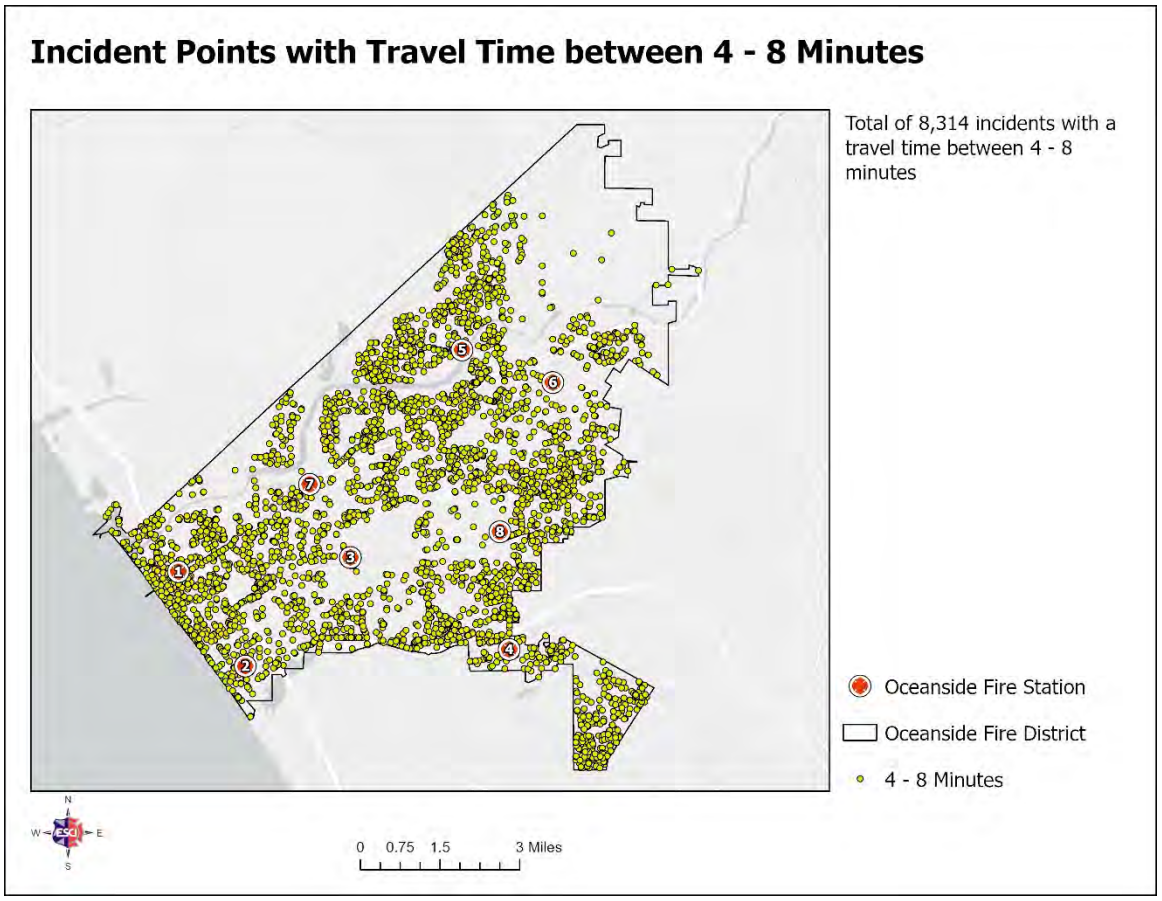
Figure 32 OFD 4/8-Minute Travel Time per NFPA Criteria



As units are not always in their assigned station at the time of dispatch, actual travel time may vary from the theoretical numbers illustrated in the preceding figure. In 2023, OFD units responded to 38.97% of incidents within 4 minutes or less, as recommended by NFPA 1710.

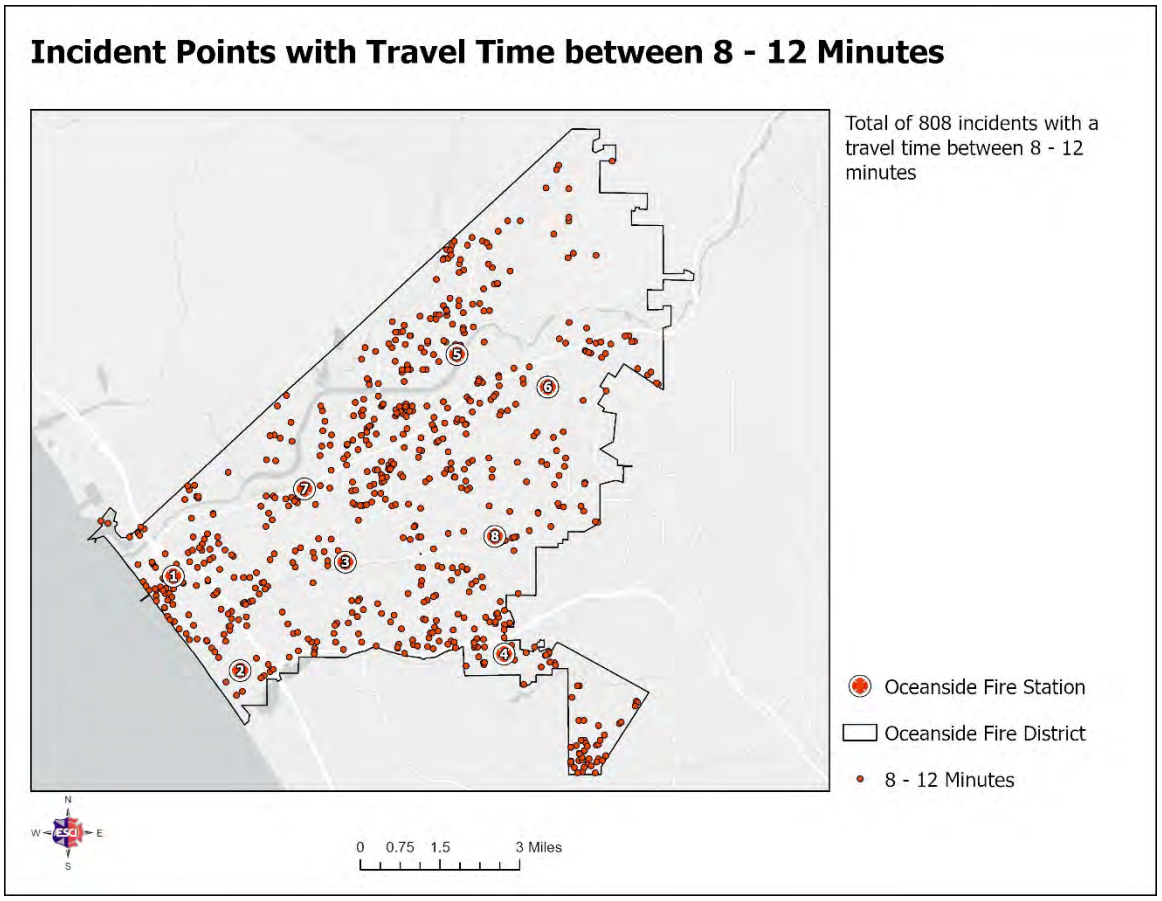
To assist leadership with an understanding of areas of the community where this standard was not met during 2022, ESCI categorized the additional responses and plotted the location using the GIS software. This may provide insight as to gaps in coverage from existing stations. OFD units responded to 54.36% of incidents within 4–8 minutes as illustrated in the following figure.

Figure 33 OFD Travel Time 4–8 Minutes, 2023



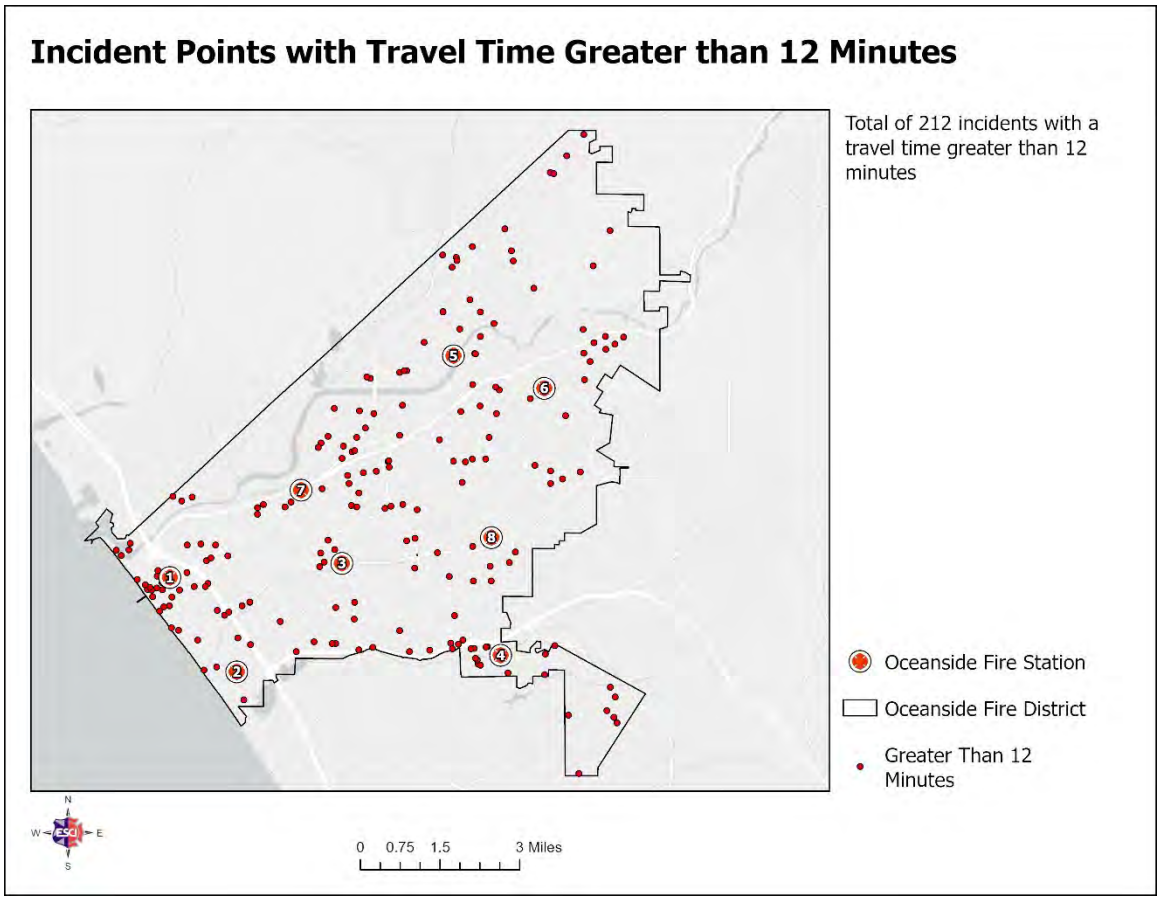
OFD units responded to 5.28% of incidents within 8–12 minutes as illustrated in the following figure.

Figure 34 OFD Travel Time 8–12 Minutes, 2023



OFD units responded to 1.39% of incidents within greater than 12 minutes as illustrated in the following figure.

Figure 35 OFD Travel Time Greater than 12 Minutes, 2022



Resource Concentration Analysis

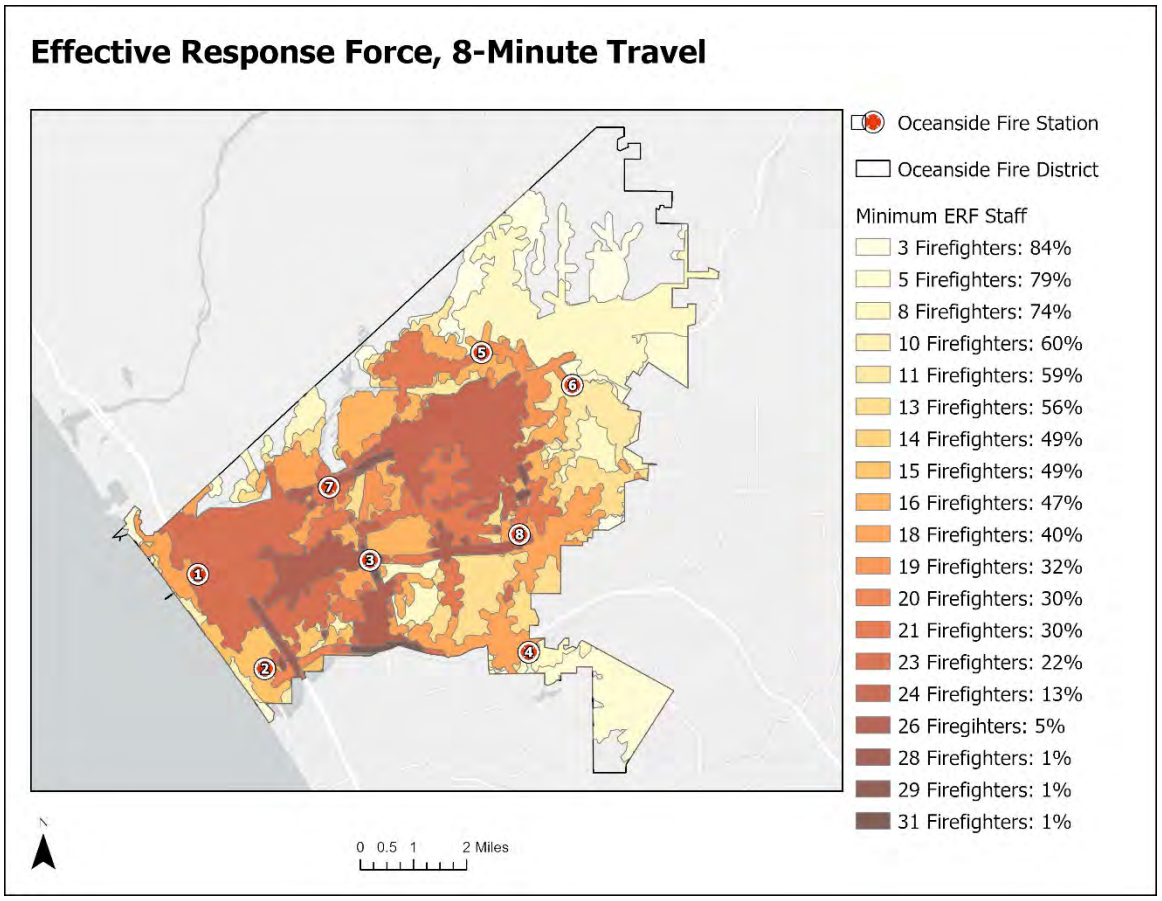
As already identified, NFPA 1710 recommends arrival of the full assignment within an 8-minute travel time. This full assignment means enough personnel and resources to safely mitigate the incident and is called an effective response force (ERF). The concept of sufficient resources is based on personnel safety and the amount of people required to perform the various tasks and functions to reduce injury and property damage, when possible. Examples of the ERF recommended by NFPA, and the Commission on Fire Accreditation (CFAI) Standards of Cover are illustrated in the following figure.

Figure 36 NFPA 1710 EFR Recommendation Based on Risk

Function/Task	Single-Family Residence (2,000 ft²)	Open Air Strip Shopping Center (13,000–196,000 ft²)	3-Story Garden Apartment (1,200 ft²)
Command	1	2	2
Apparatus Operator	1	2	2
Handlines (2 members each)	4	6	6
Support Members	2	3	3
Victim Search and Rescue team	2	4	4
Ground Ladders/Ventilation	2	4	4
Aerial Ladder Operator (if ladder used)	(1)	(1)	(1)
Initial Rapid Intervention Team	4	4	4
Initial Medical Care Component	N/A	2	2
Total	**16 (17)**	**27 (28)**	**27 (28)**

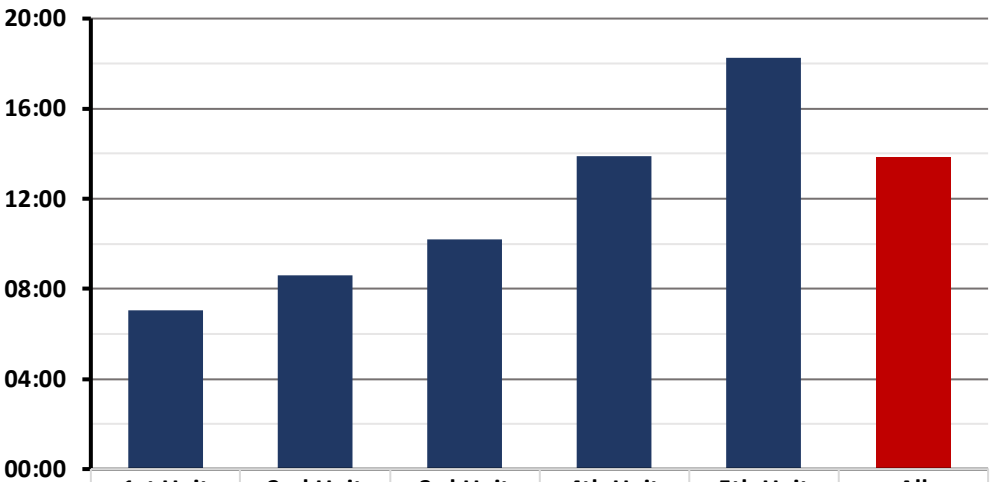
The analysis of effective response force for OFD considered an 8-minute travel time and the minimum staffing of career personnel at each station within the service area. As with other analyses, this considers that all units are within their assigned station at the time of dispatch. The following figure illustrates the percentage of the service area in which OFD can assemble the specified number of firefighters for each category. In areas where the ERF is not met within the 8-minute travel time, the on-scene incident commander will have to determine which actions may be implemented safely or wait beyond the 8-minute travel time for sufficient resources to arrive.

Figure 37 OFD Effective Response Force



When all units are not within their assigned station at the time of dispatch, actual travel time may vary, which may impact the available ERF within the 8-minute travel time. To assist OFD leadership with consideration of response to actual incidents, the following figure illustrates the 90th percentile response time (from dispatch until arrival) of primary units to structure fires. The criteria included in this analysis was the NFIRS incident type 111 or 112, the unit responded emergency (lights/sirens), was designated by OFD leadership as a primary unit for structure fires, and the incident had three or more primary units arrive on scene.

Figure 38 OFD Structure Fire Order of Arrival, 2018–2023



	1st Unit	2nd Unit	3rd Unit	4th Unit	5th Unit	All
90th Percentile	07:03	08:35	10:12	13:53	18:16	13:49

Resource Reliability Analysis

The third broad category of analysis considers the reliability of resources within the community. While location of incidents versus location of resources impacts the reliability of response, there are additional factors to consider that may also impact the reliability of response. Two primary additional factors to consider are workload and incident concurrency.

Workload

Simply put, workload considers how busy each unit is for a specific period of time. For many years, this was calculated from the basic concept of how many incidents to which a unit responded. However, the length of incidents can vary widely, from minutes to hours, and thus does not give an accurate comparison of workload. Another method is to consider the commitment time of units—in other words the amount of time they are assigned to incidents. Comparing the commitment time measure to the total in-service hours produces a measure referred to as unit hour utilization (UHU). While this is more accurate than a simple incident count, it also is not complete as it does not account for time committed to non-incident activities such as pre-incident planning, training, station maintenance, apparatus maintenance, fire hose testing, fire hydrant testing, public education, etc. As workload percentages increase, that unit is no longer available to respond to additional incidents, requiring units from further distant locations to respond and thus increasing response times.

While there are limited formal performance measures to use as a target measure, in May 2016, Henrico County (VA) Division of Fire published an article after studying their department's EMS workload.[6] Due to the study, Henrico County Division of Fire developed a general commitment factor scale for their department. The next figure is a summary of the findings as it relates to

[6] *How Busy Is Busy?; Retrieved from https://www.fireengineering.com/articles/print/volume-169/issue-5/departments/fireems/how-busy-is-busy.html*

commitment factors and may be utilized by OFD leadership as a base for developing internal workload measures.

Figure 39 Commitment Factors as Developed by Henrico County (VA) Division, 2016

Factor	Indication	Description
16%-24%	Ideal Commitment Range	Personnel can maintain training requirements and physical fitness and can consistently achieve response time benchmarks. Units are available to the community more than 75% of the day.
25%	System Stress	Community availability and unit sustainability are not questioned. First-due units are responding to their assigned community 75% of the time and response benchmarks are rarely missed.
26%-29%	Evaluation Range	The community served will experience delayed incident responses. Just under 30% of the day, first-due ambulances are unavailable; thus, neighboring responders will likely exceed goals.
30%	"Line in the Sand"	Not Sustainable: Commitment Threshold—community has less than a 70% chance of timely emergency service and immediate relief is vital. Personnel assigned to units at or exceeding 0.3 may show signs of fatigue and burnout and may be at increased risk of errors. Required training and physical fitness sessions are not consistently completed.

ESCI worked with OFD leadership to identify units for evaluation of workload. Within some stations, the same on-duty crew may move from various apparatus within the station depending on the incident type and resources needed—commonly referred to as cross-staffing. Where units were cross-staffed, the individual unit numbers were merged into a combined unit number to account that the same personnel would respond in any of the individual units within that combined unit. As illustrated in the following figure, six of the OFD units are at a concerning level of workload.

Figure 40 OFD Unit Hour Utilization, 2018–2023

Unit	2018	2019	2020	2021	2022	2023	% of Change
Station 1							
E211	10.80%	10.94%	11.33%	11.67%	14.68%	10.92%	0.12%
MS211	0.00%	0.00%	0.00%	0.00%	0.00%	6.25%	6.25%
Station 2							
E212	6.17%	7.19%	7.86%	8.32%	10.30%	8.07%	1.90%
RA211/RA212	26.05%	27.08%	26.27%	28.55%	33.44%	32.00%	5.95%
Station 3							
E213/6612	11.01%	10.83%	11.32%	12.81%	13.56%	13.91%	2.90%
RA213	26.77%	18.51%	0.10%	8.63%	37.69%	41.15%	14.38%
BLS213	0.00%	7.03%	23.74%	30.91%	33.86%	29.93%	29.93%
Station 4							
E214/6321/8633	10.60%	10.99%	11.28%	12.38%	13.35%	11.30%	0.70%
RA214	23.88%	25.88%	28.26%	31.10%	30.88%	32.85%	8.97%
Station 5							
E215/PT215/WT215	8.43%	8.13%	10.04%	11.24%	10.94%	11.18%	2.75%
Station 6							
E216/BR216	2.30%	4.87%	7.22%	8.60%	9.27%	9.78%	7.48%
RA216	23.32%	25.88%	27.65%	30.34%	33.47%	36.15%	12.82%
Station 7							
T217	3.30%	1.98%	2.02%	2.18%	2.02%	1.93%	-1.37%
E217/BR217	6.12%	7.84%	10.56%	10.67%	14.36%	12.40%	6.28%
BLS210	0.00%	0.00%	0.00%	0.00%	0.00%	14.52%	14.52%
BLS217	0.00%	0.00%	12.42%	19.94%	32.96%	25.72%	25.72%
B217	1.92%	1.63%	1.70%	2.00%	2.25%	2.14%	0.22%
Station 8							
E218	8.44%	8.84%	8.00%	9.89%	9.92%	9.99%	1.55%

Incident Concurrency

Incident concurrency is an industry term that refers to those moments when more than one incident is occurring simultaneously. As with workload, as incident concurrency increases, the number of units available to respond to additional incidents decreases. This may result in extended response times or necessitate relying on automatic aid and mutual aid resources to respond.

Figure 41 OFD Incident Concurrency (All Locations), 2018–2023

Concurrent Incidents	2018	2019	2020	2021	2022	2023	% of Change
Single Incident	16.40%	14.60%	12.98%	2.40%	5.35%	8.96%	-7.44%
Two Incidents	25.29%	23.59%	22.28%	12.19%	12.19%	17.61%	-7.67%
Three Incidents	23.87%	23.32%	22.69%	19.71%	17.10%	22.16%	-1.71%
Four Incidents	16.89%	17.85%	18.09%	20.46%	18.09%	20.27%	3.37%
Five Incidents	9.61%	10.69%	12.05%	17.07%	16.56%	14.19%	4.59%
Six Incidents	4.94%	5.67%	6.58%	12.50%	11.97%	8.67%	3.73%
Seven Incidents	2.01%	2.57%	3.05%	7.90%	8.04%	4.68%	2.68%
Eight Incidents	0.70%	1.09%	1.34%	4.35%	5.02%	2.25%	1.54%
Nine Incidents	0.20%	0.41%	0.56%	2.07%	2.96%	0.84%	0.65%
Ten or More Incidents	0.10%	0.20%	0.38%	1.36%	2.71%	0.36%	0.26%

Figure 42 OFD Incident Concurrency (Oceanside), 2018–2022

Concurrent Incidents	2018	2019	2020	2021	2022	2023	% of Change
Single Incident	22.07%	20.10%	17.68%	3.68%	8.25%	12.29%	-9.78%
Two Incidents	30.08%	28.82%	27.16%	16.56%	17.72%	22.84%	-7.23%
Three Incidents	23.60%	24.32%	23.60%	23.78%	21.67%	24.47%	0.88%
Four Incidents	14.07%	14.58%	16.25%	21.33%	19.79%	18.98%	4.91%
Five Incidents	6.54%	7.21%	8.96%	15.79%	14.37%	11.31%	4.77%
Six Incidents	2.53%	3.16%	4.15%	9.77%	9.16%	5.80%	3.27%
Seven Incidents	0.83%	1.25%	1.45%	5.53%	4.90%	2.80%	1.97%
Eight Incidents	0.24%	0.40%	0.53%	2.30%	2.36%	1.14%	0.90%
Nine Incidents	0.05%	0.11%	0.16%	0.89%	1.04%	0.32%	0.28%
Ten or More Incidents	0.01%	0.05%	0.05%	0.38%	0.74%	0.04%	0.03%

Response Performance Analysis

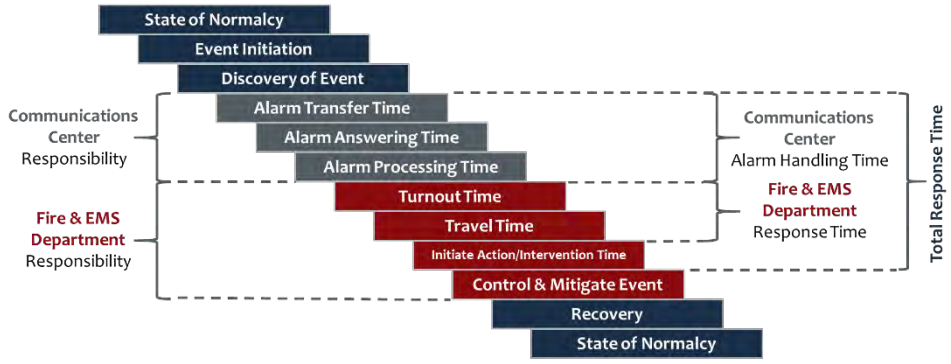
The fourth broad category of analysis considers the time it takes for OFD units to arrive at the scene of an incident. For the public, this is often the most visible component of service delivery and the primary component used to judge the value of the department. While the measure of time between activation of the 911 system and arrival of the first unit at the scene is the overall measure (commonly referred to as response time), it is actually comprised of several interim measures that allow departments to focus on individual components to make improvements as needed. Tracking the individual components of response time can help OFD leadership identify impediments to timely response and make operational adjustments to improve, including developing relevant and achievable response time goals and standards. Fire service best practices recommend that fire service organizations monitor and report the components of total response time.

This overall response performance (known as the response time continuum) is comprised of the following components and illustrated in the following figure.

- **Alarm Handling Time:** The amount of time between when a call is answered by the 911 Primary Public Safety Answering Point (PSAP) or dispatch center, and when resources are dispatched.
- **Turnout Time:** The time interval between when response units are notified of the incident and when the apparatus begins to respond.

- **Travel Time:** The time the responding unit spends on the road traveling to the incident until arrival at the scene. This is a function of speed and distance.
- **Response Time:** The time from initial alerting of an incident until arrival on the scene. Response Time equals the sum of "Turnout Time" and "Travel Time."
- **Total Response Time:** This is the most apparent time to the caller requesting emergency services, as the time from when the emergency call is placed until units arrive on the scene.

Figure 43 Response Time Continuum



In analyzing response performance, ESCI generates percentile measurements of time performance. The use of percentile measurement using the components of response time follows the recommendations of industry best practices. The best practices are derived by the Center for Public Safety Excellence (CPSE), Standard of Cover document and the National Fire Protection Association (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*.

The "average" measure is a commonly used descriptive statistic also called the mean of a data set. The most important reason for not using the average for performance standards is that it may not accurately reflect the performance for the entire data set and may be skewed by outliers, especially in small data sets. One extremely good or bad value can skew the average for the entire data set.

The "median" measure is another acceptable method of analyzing performance. This method identifies the value at the middle of a data set and thus tends to not be as strongly influenced by data outliers.

Percentile measurements are a better measure of performance because they show that most of the data set has achieved a particular level of performance. The 90th percentile means that 10% of the values are greater than the value stated, and all other data are at or below this level. This can be compared to the desired performance objective to determine the degree of success in achieving the goal.

As this report progresses through the performance analysis, it is important to keep in mind that each component of response performance is not cumulative. Each is analyzed as an individual component, and the point at which the percentile is calculated exists in a set of data unto itself. Each of the following analyses only included those incidents where the response was coded as "emergency" priority. Each of the following analyses were conducted using the response data as provided by OFD and only includes those incidents located within their response area.

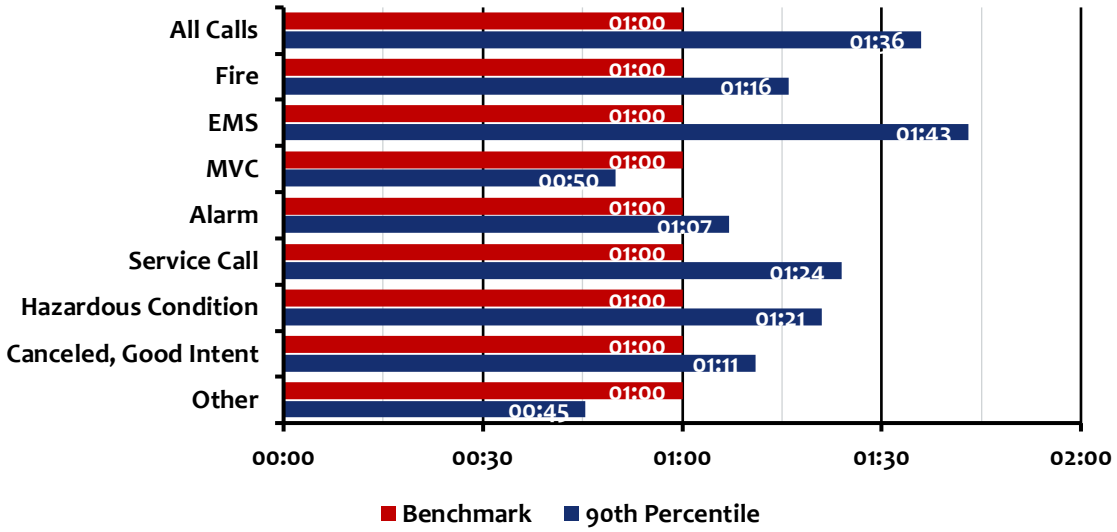
Alarm Handling Time

The measure of time between activation of the 911 system and dispatch of units is known as alarm handling time. For this measure, there is one applicable standard as illustrated in the following figure.

Standard	Performance
NFPA 1225: *Standard for Emergency Services Communications* (2022 Edition)	60 seconds at the 90th percentile

As illustrated in the following figure, the overall time performance for OFD is 1 minute, 36 seconds. When analyzed by NFIRS incident series, performance ranges from 45 seconds for other incidents to 1 minute, 43 seconds for emergency medical service incidents.

Figure 44 OFD Alarm Handling Performance, 2018–2023



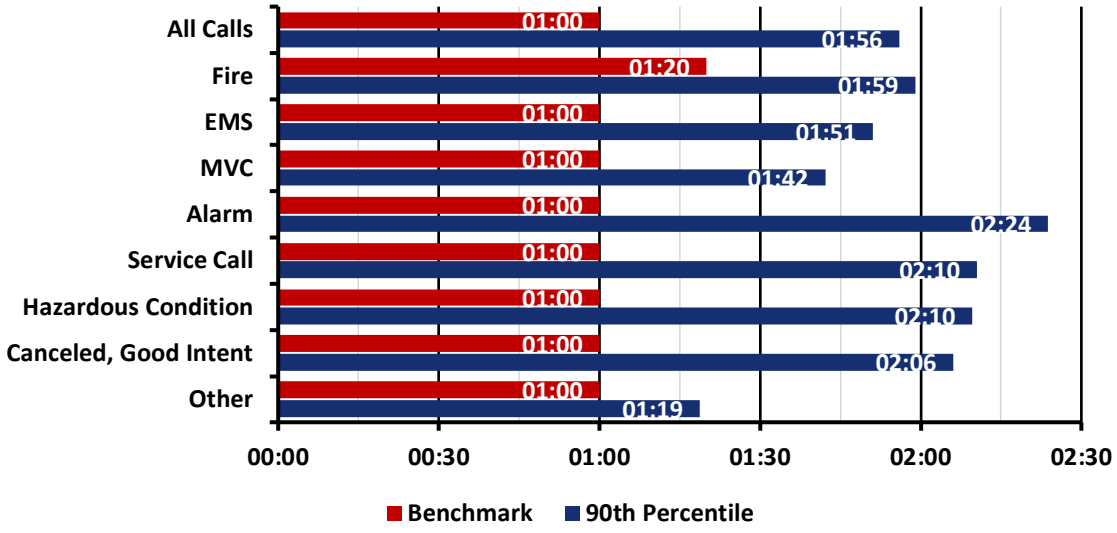
Turnout Time

The measure of time between dispatch of units and the units beginning to respond to the scene is known as turnout time. For this measure, there is one applicable standard as illustrated in the following figure.

Standard	Performance
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 recommends*	Fire and Special Operations Incidents 80 seconds at the 90th percentile All Other Incidents 60 seconds at the 90th percentile

As illustrated in the following figure, the overall turnout time performance for OFD is 1 minute, 56 seconds. When analyzed by NFIRS incident series, performance ranges from 1 minute, 19 seconds for other incidents to 2 minutes, 24 seconds for alarm incidents.

Figure 45 OFD Turnout Time Performance, 2018–2023



As this is the first measure under direct control of the fire department, OFD leadership may consider the various actions that occur within this measure and determine if there are areas where process changes could improve performance. These factors are detailed below.

- Systems used to notify personnel of an incident
- Station design as it relates to the movement of personnel from living quarters to the apparatus bay
- Personnel adherence to department policies and acting with appropriate speed towards the apparatus

- Time required to don protective equipment prior to responding
- Moving equipment between apparatus when units are cross staffed
- Time from starting apparatus until radio system is capable of transmitting

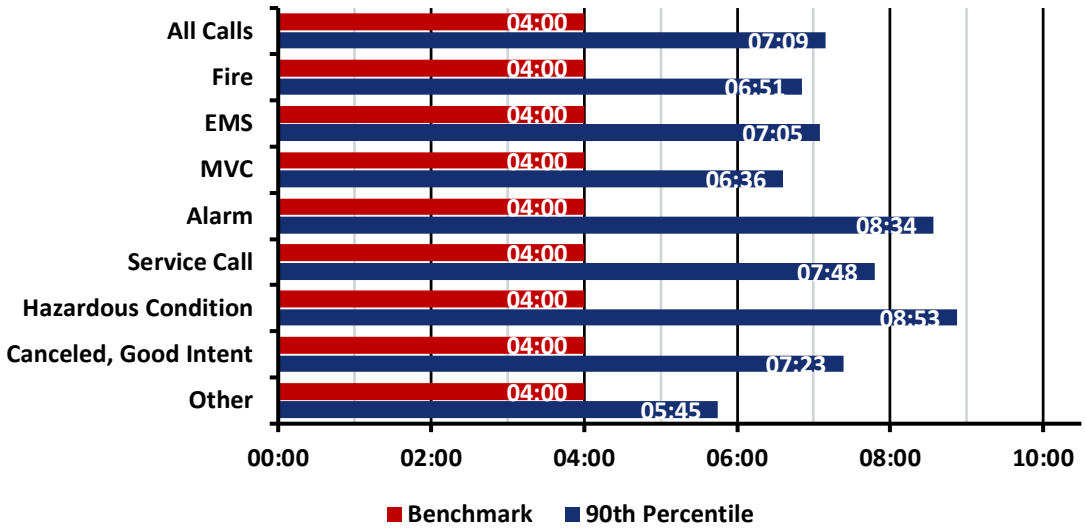
Travel Time

The measure of time between units beginning to respond and arrival at the scene is known as travel time. For this measure, there is one applicable standard, as illustrated in the following figure.

Standard	Performance
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*	4 minutes at the 90th percentile

As illustrated in the following figure, the overall travel time performance for OFD is 7 minutes, 9 seconds. When analyzed by NFIRS incident series, performance ranges from 5 minutes, 45 seconds for other incidents to 8 minutes, 53 seconds for hazardous condition incidents.

Figure 46 OFD Travel Time Performance, 2018–2023



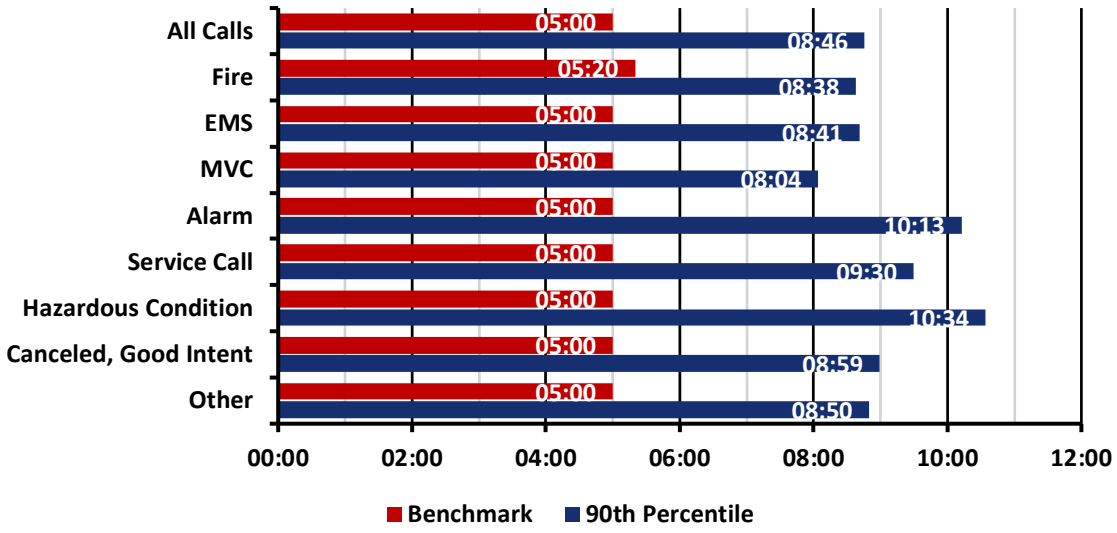
Response Time

The measure of time between dispatch of units and arrival at the scene is known as response time. For this measure, there is not a specific applicable standard. However, by combining the individual component standards, the following figure illustrates expected performance.

Component	Performance
Turnout Time	Fire and Special Operations Incidents 80 seconds at the 90th percentile All Other Incidents 60 seconds at the 90th percentile
Travel Time	4 minutes at the 90th percentile
Combined	Fire and Special Operations Incidents 5 minutes, 20 seconds at the 90th percentile All Other Incidents 5 Minutes at the 90th percentile

As illustrated in the following figure, the overall response time performance for OFD is 8 minutes, 46 seconds. When analyzed by NFIRS incident series, performance ranges from 8 minutes, 4 seconds for motor vehicle collision incidents to 10 minutes, 34 seconds for hazardous condition incidents.

Figure 47 OFD Response Time Performance, 2018–2023



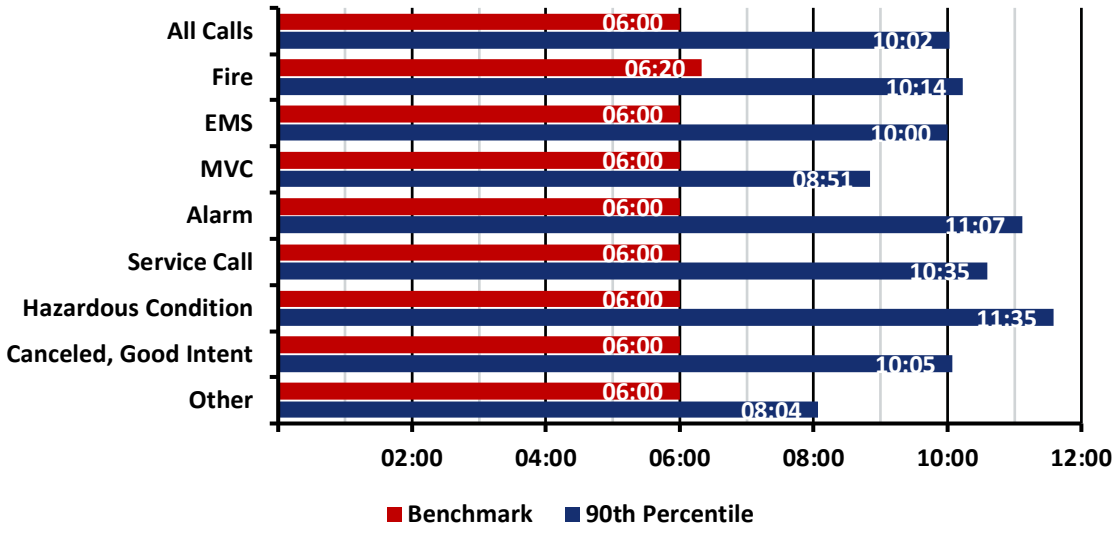
Total Response Time

The measure of time between activation of the 911 system and arrival at the scene is known as total response time. For this measure, there is not a specific applicable standard. However, by combining the individual component standards, the following figure illustrates expected performance.

Component	Performance
Alarm Handling Time	60 seconds at the 90th percentile
Turnout Time	Fire and Special Operations Incidents 80 seconds at the 90th percentile All Other Incidents 60 seconds at the 90th percentile
Travel Time	4 minutes at the 90th percentile
Combined	Fire and Special Operations Incidents 6 minutes, 20 seconds at the 90th percentile All Other Incidents 6 minutes at the 90th percentile

As illustrated in the following figure, the overall total response time performance for OFD is 10 minutes and 2 seconds. When analyzed by the NFIRS incident series, performance ranges from 8 minutes and 51 seconds for motor vehicle collision incidents to 11 minutes and 35 seconds for hazardous condition incidents.

Figure 48 OFD Total Response Time Performance, 2018–2023



Mutual Aid and Automatic Aid

Agencies often enter into agreements that are of benefit to their community and the surrounding communities. These provide circumstances where units and personnel from other agencies respond into other jurisdictions to assist by providing needed resources to mitigate a given incident. The two types of agreements are mutual aid and automatic aid, both of which are an integral part of emergency operations. Mutual aid agreements generally include the provision of units and resources only when requested by the incident commander from the agency receiving mutual aid. In contrast, automatic aid agreements provide units and resources through a predefined matrix, and the aid agency units and personnel are included in the initial dispatch to the incident concurrently with the requesting agency units and personnel.

As identified in the previous section for automatic and mutual aid, OFD participates in the North Regional Zone Master Automatic Aid Agreement for Fire-Rescue Responses & Support activities, which includes the following agencies.

- Camp Pendleton Fire and Emergency Services
- Carlsbad Fire Department
- Deer Springs Fire Protection District Del Mar Fire Department
- Encinitas Fire Department
- CSA 107 (Elfin Forest)
- Escondido Fire Department and Rincon Del Diablo Fire Protection
- District North County Fire Protection District
- Oceanside Fire Department
- Pala Reservation Fire Department
- Pauma Reservation Fire Department
- Rancho Santa Fe Fire Protection District
- Rincon Reservation Fire Department
- San Diego County Fire-CAL FIRE
- San Marcos Fire Department/Fire Protection District
- San Pasqual Reservation Fire Department

As part of completing the documentation for each incident response, firefighters complete a data field that documents aid given or aid received. This is illustrated in the following figure.

Figure 49 OFD Aid Given/Received, 2018–2023

Description	2018	2019	2020	2021	2022	2023
Mutual aid received	284	476	227	66	61	54
Automatic aid received	2,250	2,414	2,459	3,101	3,871	3,645
Mutual aid given	307	560	143	25	34	29
Automatic aid given	2,680	2,604	2,112	2,019	1,703	1,949
Other aid given	39	9	268	257	60	44
No aid given/received	15,453	15,186	16,016	18,102	19,654	20,270

MEASURE X & STAFFING FUNDING

Measure X was a ballot initiative approved on November 6, 2018, by 55.7% of Oceanside voters. It raised the city's sales tax rate by 1/2 cent, increasing the rate to 8.25% for a duration of seven years, starting from April 1, 2019, and ending in 2026. The purpose of Measure X was to support the following city responsibilities listed below.

- Enhancing public safety
- Improving road conditions
- Strengthening the city's infrastructure
- Assisting in addressing homelessness

Specific to the Oceanside Fire Department's program deployment, Measure X supports the following elements:

- Enhanced Emergency Service Delivery Model:
    - EMT Program: The EMT program consists of authorized emergency medical technicians who deploy on three basic life support (BLS) transport ambulances. These ambulances respond and transport non-acute patients to area hospitals, thus keeping paramedic ambulance resources in Oceanside.
    - Operational Oversight of EMT Program: One operations captain, assigned to administration, provides direct oversight and supervision of the EMT program and continued training.
    - Fully Staffed Truck Company: OFD, through Measure X support, deploys dedicated staffing to the ladder truck. This unit is the only fire suppression resource in Oceanside fully compliant with the standards the National Fire Protection Association set forth. Ladder trucks provide critical, high-hazard rescue operations during structure fires and other critical incidents.
    - Support to CRR: The Community Risk Reduction Division has a Measure X supported Firefighter/Paramedic supplementing fire prevention. The position bolsters the division's ability to provide arson investigation inspection, education, and mitigation, creating a safer community.
    - Support to Training: The Training Division employs a Measure X-supported firefighter/paramedic to increase the professional competencies of operational firefighters in the Oceanside community.
    - Medic Squad: OFD deploys two paramedics on a light apparatus to increase the reliability and availability of fire engines in Oceanside. The Medic Squad is staffed 24/7 and responds to low acuity medical calls for service, supported by the BLS transport ambulances. This model maintains compliance with the San Diego County P801 regulation requiring localities to deploy two paramedics to all 911 medical calls. However, this model reduces the need for paramedic ambulance responses to non-paramedic level calls for service.
- Architecture, Engineering, and Construction of Station 1

- Architecture and Environmental Studies for the Lifeguard Facility[7]

A Citizen Oversight Committee periodically reviews the expenditures and makes recommendations to the City Council, ensuring the funds are used for their intended purposes. The following is a four-year summary of Measure X-funded benefits provided to the community by the Oceanside Fire Department[8]:

Year One[9]:

- Introduced the Enhanced Emergency Service Delivery Model that hired EMTs for basic and advanced life support and added an ambulance ($1,381,893)
- Began the planning and designing of a new Fire Station 1 ($1,600,000)

Year Two[10]:

- Continued the Enhanced Emergency Service Delivery Model ($1,218,682)
- Procured fire equipment to bolster emergency response capabilities for lifeguards and firefighters/paramedics. This equipment included underwater handheld sonar, drones, automatic compression devices, and more. ($300,000)

Year Three[11]:

- Continued the Enhanced Emergency Service Delivery Model ($1,378,439)
- Commenced the design and construction of the new Fire Station 1 ($0)
- Funded Fire Department equipment, training, planning, and operational studies ($300,000)

Year Four[12]:

- Continued the Enhanced Emergency Service Delivery Model ($1,793,577)
- Proceeded with the construction of the new Fire Station 1 ($7,500,000)
- Continued investment in fire department training, equipment, planning, and operational studies ($300,000)

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[7] San Diego Union-Tribune. (2023, August 28). Replacement approved for Oceanside pier access bridge. Retrieved from https://www.sandiegouniontribune.com/communities/north-county/oceanside/story/2023-08-28/replacement-approved-oceanside-pier-access-bridge

[8] Measure X – Public Safety. Retrieved from: https://www.ci.oceanside.ca.us/government/financial-services/measure-x-sales-tax/measure-x-funds-public-safety-items

[9] Measure X FY2019-20. Retrieved from: https://www.ci.oceanside.ca.us/home/showpublisheddocument/4844/637960003174670000

[10] Measure X FY2020-21. Retrieved from: https://www.ci.oceanside.ca.us/home/showpublisheddocument/4848/637960003185430000

[11] Measure X FY2021-22. Retrieved from: https://www.ci.oceanside.ca.us/home/showpublisheddocument/4846/637960003179870000

[12] Measure X 2022-23. Retrieved from: https://www.ci.oceanside.ca.us/home/showpublisheddocument/4850/637960006630600000

Measure X represents a dedicated effort by the Oceanside community to improve public safety, infrastructure, roads, and address homelessness through a minor tax increase. The measure brings accountability via the Citizens Oversight Committee, ensuring transparency in the utilization of funds.

The Measure X timeline is commencing. Maintaining the measure's funding will continue the services and staffing the community currently needs. Without the Measure X funding, the Oceanside Fire Department will decrease services, resulting in the following actions:

1. Eliminate EMT positions and the captain position overseeing the EMT program
2. Eliminate an Engine Company at Fire Station 7
3. Eliminate three basic life support ambulances from the Oceanside response system and, in turn, transfer that workload to the paramedic ambulances
4. Remove two firefighter support positions, one from training and one from CRR
5. Eliminate the Medic Squad from the response system and in turn, transfer the workload to Fire Station 1 and Fire Station 2
6. Reduce the staffing below NFPA compliance on the ladder truck

Figure 50: Measure X Funded & Indexed Positions

Position	Type	Number of Positions
Fire Operations	Operations 56 Hour	13
Full-Time EMT	Operations 56 Hour	21
Part-Time EMT	Operations 29 Hour	31
Staff Positions	Administration 40 Hours	3

RECOMMENDATIONS

The study by Emergency Services Consulting International (ESCI) is of significant importance for the Oceanside Fire Department (OFD) and the community it serves. The subsequent findings and recommendations provide valuable insights and a roadmap for improving the department's operations, preparedness, and overall effectiveness.

The recommendations derived from the analysis guide informed decision-making, helping the department enhance its capabilities and address areas of improvement. Implementing these recommendations will lead to a more efficient and effective fire department, ensuring community safety and better emergency response.

Furthermore, the study encourages a proactive approach, fostering a culture of continuous improvement within the OFD. By embracing the recommendations, the department can stay ahead of emerging challenges and maintain its position as a leader in public safety excellence.

1. Oceanside has experienced significant upward expansion in recent years, resulting in an expanded coverage area for the fire department. As the city continues to grow upward, the department must adapt to the changing landscape and address the unique challenges posed by its geographic layout. To effectively meet the community's needs, it is necessary to **establish two areas of responsibility (or battalions)**, allowing for better distribution of resources, employee oversight, and span of control. The City of Oceanside is not growing outward but is growing upward, with an increase in population density through residential mid- and high-rise construction.
   Primarily, ESCI recommends the placement of the battalion chiefs at stations 6 and 3 to obtain optimal coverage in the city; however, based on facility constraints and logistics considerations, ESCI altered the recommendation to Figure 52: Proposed Areas of Responsibility. However, the figure below shows optimal coverage in the Oceanside Fire Department.

Figure 51: Optimal Battalion Chief Deployment

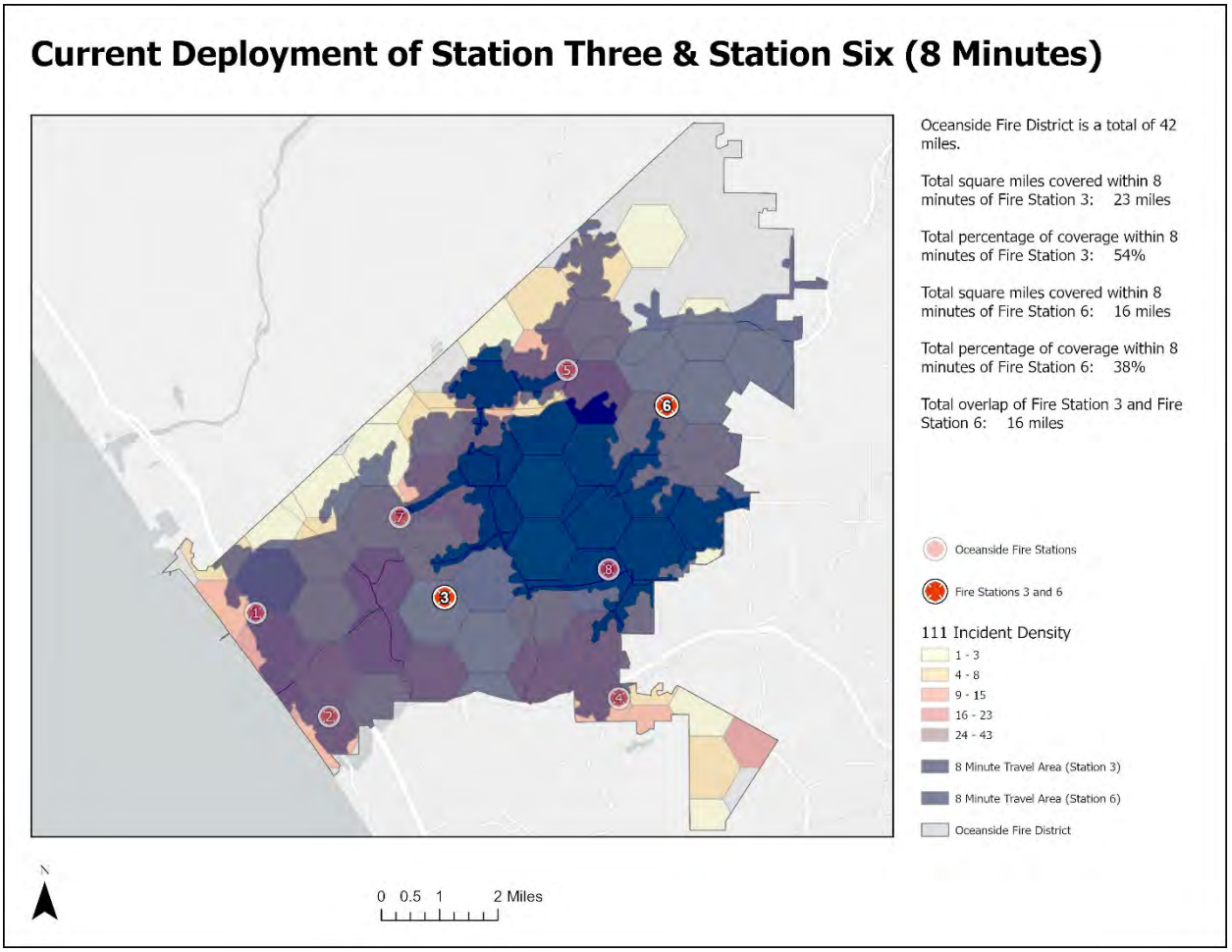

Figure 52: Proposed Areas of Responsibility

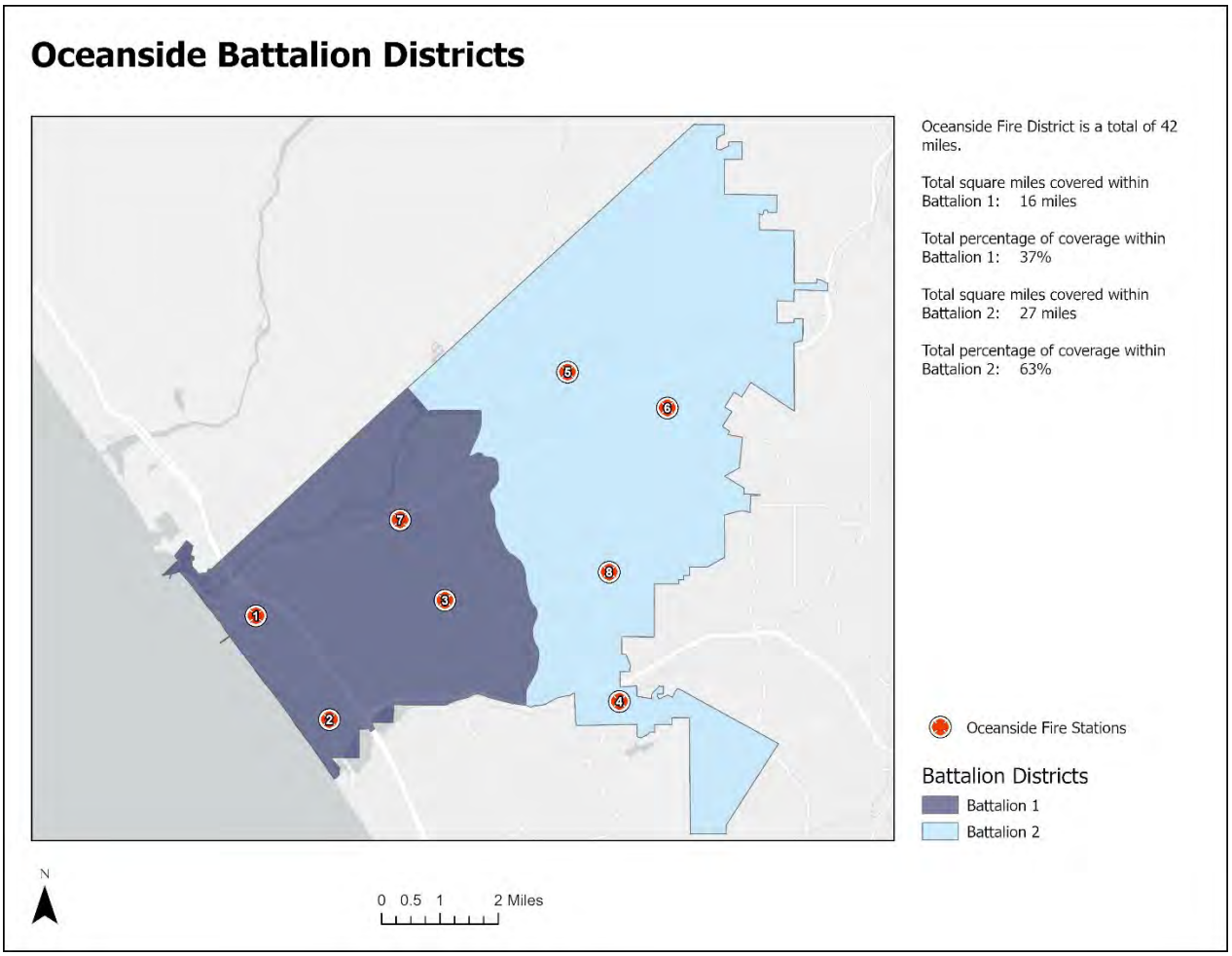

Figure 53: Battalion Model Comparison

Model	Total Personnel Per Shift	Direct Reports	Daily Response Units
One Battalion Model (2023)	46	9	19
One Battalion Model (2024)*	48	10	20
Two Battalion Model (2024)*	28/20	5/5	10/10

*Includes the addition of Fire Station 9

2. The completion of Station 8 provides an opportunity for the Oceanside Fire Department to expand its services. Establishing Station 9 in the North River community will enhance coverage and reduce response times in previously underserved areas. Furthermore, **adding an additional battalion chief to Station 8** will enable the department to establish two districts, optimizing resources and increasing operational efficiency. These measures will ensure that emergency services can effectively respond to incidents throughout Oceanside.
3. ESCI recommends that the City of Oceanside and Oceanside Fire Department consider planning for a future fire station to mitigate the gap in the 4-minute drive time between station 5, 7, and 8 as noted in the Figure 32 OFD 4/8-Minute Travel Time per NFPA Criteria.
   Additionally, ESCI recommends addressing the area between Station 3, Station 4, and Station 8, where the capacity to achieve an effective response force is low. Alternatively, this area would benefit from an increase in resource staffing, such as an additional Medic/Squad, to bolster the resource concentration. For details on OFD's effective response force, refer to Figure 37 OFD Effective Response Force.
4. ESCI recommends improving the department's structure fire and special rescue capabilities by addressing identified hazards in the westside, including the downtown corridor, the area includes a mix of mid-rise residential occupancies, mixed-use commercial, and lodging occupancies. In the east side, the community exhibits industrial and commercial occupancies including the Tri-City Medical Center. ESCI recommends **adding an additional fully staffed ladder company** to Fire Station 8 upon the facility's opening. This recommendation requires both additional staffing and a functional response apparatus. The following figure visualizes ESCI recommendation to distribute OFD's ladder trucks at Station 1 and Station 8.
5. Station 9 is slated to open in the fall of 2024. The developer is providing initial funding for a captain and firefighter position to operate a 2-person Type-6 engine. However, ESCI recommends securing long-term funding commitments for three personnel at Fire Station 9 to operate a structural firefighting engine company, consistent with all other stations in the North Zone. The total personnel should include a captain, firefighter, and engineer on each shift.
6. The City of Oceanside should **prioritize community outreach and marketing to obtain community support to continue Measure X Funding**. This revenue is crucial for maintaining the EMS and staffing models currently being deployed by the Oceanside

Fire Department. If Measure X is approved by the Oceanside community, the Oceanside Fire Department will be able to further expand the services to the community, provide alternative deliverables, and create an environment for improved performance.

7. The City of Oceanside should **conduct a third-party nexus study of the existing public facility and impact fees**, considering factors such as the cost of administrative work, service delivery requirements, and industry standards. The review should include input from relevant stakeholders, such as local businesses, community organizations, and residents, to ensure a fair and transparent process. By assessing the current fees, the department can identify opportunities for adjustments that align with revenue needs while considering the financial impact on the community.
8. Based on the findings of the comprehensive nexus study, the Oceanside Fire Department should **propose an appropriate fee structure that balances reimbursement and avoids excessive administrative costs**. This structure should be designed to cover a reasonable portion of the department's expenses related to fire prevention activities. It should also consider the unique challenges posed by the wildland-urban interface and align with the mandates set forth by California.
9. Oceanside Fire Department plans to adopt standards of cover to set performance benchmarks for emergency response. With that adoption comes the need for performance measurement, analytics, and routine reporting. These elements allow the OFD leadership to base decisions on reliable and validated data. Currently, OFD uses a fire operations captain to maintain and analyze data. ESCI recommends **creating a non-safety, non-sworn management analyst position** to provide a professional background and expertise to support decision-making in OFD. Additionally, ESCI recommends that **the management analyst position report to the administrative chief** under the recommended organizational chart. ESCI notes that similarly sized fire departments in the region or that ESCI clients operate in a data-driven decision-making environment with a management analyst. For example, Chula Vista Fire Department (regional, non-client), Heartland Fire Rescue (region, client), Oshkosh Fire Department (client), and Charlottesville Fire Department (client) employee management analyst. Appendix B is an example of a position description for a management analyst.
10. ESCI recommends **maintaining the Oceanside Fire Department Medic Squad model.** The “Medic Squad” is a two-paramedic resource unit that responds in place of a fire truck to medical emergencies and increases the reliability of the fire truck or an ambulance transport resource to the community served. OFD’s Medic/Squad reduced (or eliminated) engine or ambulance responses 1,428 times in 2023.

    The OFD Medic/Squad was first deployed on May 28, 2023. During the remaining 218 days in 2023, the Medic/Squad was cumulatively utilized for 549.8 hours, which equals 920.7 hours if the Medic/Squad was deployed at the beginning of the year.

    Increasing ambulance transport reliability within Oceanside also increases OFD’s revenue for the city EMS transport and prevents other agencies from collecting those fees. In the end, the Medic/Squad reduces the city’s reliance on mutual aid assistance.

The resource also increases the availability for E211 to respond to concurrent emergencies by 13.91%. Using Heartland Fire Rescue's El Cajon Medic Squad as an example, that community has seen a positive impact on engine company reliability over the past five years with a steady increase in unit commitment. The El Cajon Squad is staffed with two firefighter/paramedics, and the unit responds out of Station 6. In 2022, Heartland E206 and Squad 6 were the district's busiest units, with unit commitment (unit hour utilization) measured at 29% and 31%, respectively. In this case, Squad 6 has doubled the community's reliability (avoiding surrounding engine companies from drawing into Station 6's area) and reduced E206's utilization on EMS responses.

As a best practice, ESCI uses "unit commitment" or "Unit Hour Utilization" to measure resource use in public safety. To measure and determine a unit's commitment, ESCI determines the total time (in seconds) the resource was committed to an incident over the given time. Then that value is divided by the total time available. Typically, the measurement is displayed as a percentage.

11. To improve efficiencies with the Oceanside Fire Department Human Resources functions, **ESCI recommends funding a dedicated Human Resources Analyst.** Considering the volume of personnel changes within the EMT Program and OFD's growth, an in-house Human Resources Analyst would reduce workload on both the Operations Captain (EMT Program Manager) and administrative staff. In addition, it would directly benefit both the Operations and Training Division in meeting staff needs.
12. ESCI recommends that the City of Oceanside conduct a **workspace analysis study to determine the amount of space required to support leadership and administrative functions** for the Oceanside Fire Department. The current administrative offices are at capacity and show signs of inefficiency and barriers to workplace function. OFD has expanded the training division and onboarded the lifeguard division without increasing the department's administrative footprint.
13. ESCI recommends that the Oceanside Fire Department **develop and deploy a strategic plan** that includes feedback and input from the community and department membership. Furthermore, OFD should develop implementation processes to maintain the strategic direction.

TABLE OF FIGURES

APPENDIX A
Facilities Best Practices & Facility Report

ESCI recognizes fire station design best practices have changed significantly within the last ten years due to research and new technology. ESCI understands that it is not possible or financially practical to incorporate all of these best practices within existing fire stations. However, ESCI recommends that the OFD consider these when designing new facilities and remodeling existing facilities.

Automatic Sprinkler Protection

NFPA 1: Fire Code requires that "new buildings housing emergency fire, rescue, or ambulance services shall be protected throughout by approved supervised automatic sprinkler systems." The requirement for sprinkler protection not only protects the emergency services personnel occupying the facility but also reduces the risk of disrupting the provision of emergency services to the community because of a fire.

Cancer Prevention Engineering

The occupation of a firefighter is recognized as one where those working in the industry are more likely to be diagnosed with cancer than the public. Firefighters have a 9% higher risk of being diagnosed with cancer and a 14% higher risk of dying from cancer than most Americans.[13] The danger for firefighters does not stop when the fire is extinguished but returns to the fire stations through their gear, equipment, and vehicles that were exposed to, and contaminated by, smoke or other vapors. When contaminated gear and equipment are returned to the station via their respective response apparatus, the potential for cross-contamination occurs.

The International Agency for Research on Cancer rates diesel engine exhaust as a Group 1 carcinogen, which means it is known to cause cancer in humans.[14] Installing exhaust capture and removal systems in fire stations reduces exposure to these carcinogens.

To limit/reduce firefighter exposure to toxic products of combustion which occur after the fire, turnout gear should be stored in well-ventilated rooms to prevent additional firefighter exposure to off-gassing of chemicals absorbed into turnout gear during a fire. Fire departments should take additional steps to protect firefighters from cancer, including, but not limited to, relocating any current fitness areas that are housed within apparatus bays to locations where firefighters can exercise without exposure to the toxic products of combustion, pressurizing corridors to keep contaminates out of designated clean areas, separating gear storage from the apparatus bay and living spaces, and private showers.

Back-In Bays

[13] "Registry aims to track firefighters' higher cancer risk."
[14] Fire Station Design: Best Practices to Reduce Exposures. https://www.iaff.org/wp-content/uploads/FFCancer_FireStationDesign.pdf

Back-in is a serious safety concern as many firefighter injuries and accidents occur when emergency vehicles are being backed into the fire station. For future stations, the OFD should consider a design that allows for drive-through bays that are large enough to accommodate all frontline and reserve apparatus.

Facility Security

Fire stations have typically been open environments where residents and visitors from the community have been allowed access to any part of a fire station with very few limitations. The current social environment requires emergency services providers to implement specific security measures limiting and controlling access to fire rescue facilities. This is driven by the need to protect firefighters, expensive equipment, and sensitive data from inadvertently being accessed by individuals desiring to harm the community.

ESCI lists the following security measures that the OFD should consider incorporating into current and future fire stations.

1. Dedicated secure parking

   Dedicated parking areas for staff are a start, and fenced or walled secure parking areas are even better, providing physical and visual separation from the public.

2. Protection of building infrastructure

   Facility infrastructure like emergency generators, fuel storage, transformers, and communications equipment are often outside the building enclosure. It is best to locate these items out of public view in a secure portion of the site, which might be within the secure parking area recommended previously. This keeps infrastructure from being tampered with and avoids the possibility of children playing on sensitive or dangerous equipment.

3. Secure building zones

   While most facilities want to project a friendly and welcoming atmosphere at the entrance, lobby, and reception desk, it is advantageous to create distinct control points with restricted access doors, solid walls, and lockable transaction counters. This can be accomplished at the lobby zone, enabling the public to enter the lobby, pick up literature, view antique rigs or historical photographs and gear, access a community room or restrooms, and even speak with someone at a reception desk without entering secure staff-only areas.

4. Community room access

   When developing a dual-purpose training/community room, consider having two means of entry: one off the lobby where the public can enter and a second from the secure portion of the facility. This strategy enables staff to come and go from training without having to

circulate through the unsecured portion of the facility. This maintains the visual and physical separation of staff from the public.

5. Video monitoring and access control

Digital and/or electronic security measures add a higher level of security and can reduce theft and vandalism. Cameras and electronic locks can serve as an added deterrent against thieves and vandals and, if the situation arises, provide evidence in the prosecution of suspects. This includes video monitoring in parking areas and at entrance points. This allows crews to see who is at the door without having to walk to the door.

6. Secure apparatus bay access

Overhead doors are frequently left open to aid in ventilation, cooling, or access to the apparatus bay. This reduces security for the staff, equipment, and building. Implementing a means to mitigate having the doors left open will improve security. Consider securing all doors of the apparatus bay by electronic means (electric lock, electric strike, or magnetic lock). This enables staff to gain access to the apparatus bay from secure portions of the building without any restriction and limits potential unauthorized personnel to the bay itself.

Separate Administrative and Operational Areas

Fire service leaders, such as fire chiefs and assistant fire chiefs, are problem solvers by nature. When these leaders have easy access to operational personnel, there is a tendency to solve and work on low-level problems that should and can be solved at the company officer level.

Additionally, company officers need a space dedicated to administrative work with privacy measures. This measure will improve interactions between supervisors and staff during coaching, counseling, and mentoring sessions. The administrative areas, such as the captain's office, can be used for report writing, special projects, and to improve an individual's focus.

Separated Sleeping Quarters

Even though common sleeping quarters are normal among many fire departments across the United States, it is not ideal for various reasons. Many departments are now designing fire stations with individual living quarters. Improved effective sleep is a major benefit of having individual living quarters. Firefighters work a 24-hour shift, and the need for sleep to keep firefighters alert during their shifts is paramount for them to be at their best when they respond to an emergency. Studies have shown that being awake for 17 hours straight can impair cognitive abilities that are equivalent to a person with a blood alcohol level of 0.05 percent.[15] Individual living quarters limit sleep interruptions with proper alerting systems allowing members to only be alerted for responses for the specific unit they are assigned to during that shift. Other distractions found in communal living quarters, such as snoring and cell

[15] "EMS: Sleep-Deprived on the Job." https://www.firehouse.com/careers-education/article/12159596/ems-sleepdeprived-on-the-job

phones, are eliminated with individual living quarters. Recent research has increased understanding of the importance of effective sleep hygiene environments relative to mental and physical health. Sleep deprivation has been linked to cardiovascular disease, cancer, Alzheimer's disease, and immune system malfunctions.[16] Ultimately, individual living quarters can help improve the ability of OFD members to perform in emergency incidents and improve their long-term physical and mental health.

Another important reason for individual sleeping quarters is that it provides privacy. As the industry seeks to improve the number of women within the department, moving towards individual living quarters can help departments recruit and retain women firefighters to make them feel more comfortable in the workplace.[17] In an International Association of Women in Fire & Emergency Services survey, almost half of the women reported that they had problems with privacy within a firehouse.[18] Sharing sleeping facilities can be uncomfortable, not just for women, but for all genders. A 2020 Civil Grand Jury of Santa Clara County, California report highlights the need for gender-separate accommodations in fire departments moving forward.[19]

Heart Safe Alert Tones

The tones that alert firefighters of a response in the fire stations are another concern. Historically, fire departments have used a loud and quick tone to alert firefighters of the need to respond. This tone causes a tachycardic response in firefighters, which means it makes their heart rate spike. Studies have shown that ramp-up tones are better for the heart health of firefighters. Experts say ramp-up alerting could be an effective way to deal with fatigue, tachycardia, and potentially long-term physical and psychological disorders.[20] Ramp-up tones gradually increase the volume of alert tones.

Decontamination Area

A facility layout can encourage the proper decontamination process a firefighter must follow when returning from a call. Placement of the decontamination room, turnout cleaning, and turnout storage in a linear circulation pattern on the way to the apparatus bay supports the process of decontamination and turnout cleaning prior to entering the apparatus bay. The addition of handwashing sinks and boot cleaning stations at any entrance to the living area, in addition to the decontamination zone, helps firefighters maintain a clean-living area called the "Clean Zone" that is separated from the "Hot Zone" of the apparatus bay and support area. A

[16] "The Dangers of Sleep Deprivation - Firehouse." https://www.firehouse.com/safety-health/news/12268164/the-dangers-of-sleep-deprivation-for-emergency-workers
[17] "Breaking the 'brass ceiling': Women face unique obstacles in the fire service."
[18] "Women in the Fire Service." https://www.powerdms.com/policy-learning-center/women-in-the-fire-service
[19] "Why Aren't There More Female Firefighters in Santa Clara County?" Civil Grand Jury of Santa Clara County. https://www.scscourt.org/court_divisions/civil/cgj/2020/Why%20Arent%20There%20More%20Female%20Firefighters%20in%20Santa%20Clara%20County.pdf
[20] "Ramp-up tones cut firefighter, paramedic rapid-heart response to station alarms." https://www.ems1.com/ems-products/fitness-mental-health-wellness/articles/ramp-up-tones-cut-firefighter-paramedic-rapid-heart-response-to-station-alarms-Z3C9s9Cbs4AuUUVC/

facility also should provide an airlock vestibule "Transition Zone" at the connection points of the "Clean" and "Hot" zones to ensure the vehicle exhaust from the apparatus bay does not enter the area where firefighters live and sleep. These processes will protect the long-term health of the firefighters living at the station. A layout that features these zones can embed healthy practices into the culture of the department.

Estimate Square Foot Per Function

Fire station construction, design, and maintenance are of concern for fire chiefs and elected officials abroad. The rising cost of land and construction materials are the main elements in discussing if, and when, a government structure should forgo constructing a fire station. Once the decision has been made to construct a new emergency services facility, the next decision is to determine the structure's size. The organization's current and future needs should be included in this determination. To determine the needed square footage for a new facility, several standards and reports are available as references when discussing the required square footage. Selected architects and contractors would also assist in this determination.

- United States Fire Administration – Safety and Health Considerations for the Design of Fire and Emergency Medical Service – May 2018 – This guide addresses the key elements when discussing fire station design and square footage.
- NFPA 1500 Standard on Fire Department Occupational Safety, Health, and Wellness Program. Specific sections of this standard address fire station design, cancer prevention, firefighter fitness, and creating decompression spaces for firefighters' mental health.
- NFPA 1851 Standard on Fire Department Infection Control Program – has a section designated to PPE storage and cleaning. It also requires that PPE be separated from other laundry utilities.

In 2020, NFPA formed the Technical Committee on Emergency Responders Occupational Health to draft new procedures for firefighters, including station design layout among the organization's work.

A standard estimated square foot theme was present when comparing federal contracts for building a fire and emergency response facility.[21] [22]

- Training space – 25 square feet per person of the occupancy of the room
- Fire Chief's Office – 300 square feet
- Captains/Deputy's Office- 200 square feet

[21] "How Much Office Space Do You Really Need?" https://thereceptionist.com/blog/how-much-office-space-do-you-really-need/
[22] "How much office space for that?" https://www.officefinder.com/how.html

- Apparatus Bay – square footage is dependent on the quantity of response vehicles.
- Consider that using a drive-thru bay concept will require additional square footage.
- Add 33% additional square footage for apparatus support items (Decon, Laundry, SCBA, Storage, etc.).
- Community space – 500 to 550 square feet per person assigned. This does not include administrative offices.
- One acre for every 5000 square feet of the structure.

Many fire departments lack storage space, administrative working spaces, and essential operational functions. ESCI recommends planning for future growth when deciding how much space is needed to meet the needs of the department. Additionally, ESCI notes that leaders and executives usually require between 200- and 400-foot square feet of office space.[23] ESCI suggests that the new facility should include executive leadership space for future growth.

For company officers, inspection personnel, and administrative assistants, ESCI recommends office space of around 100-125 square feet for each person.[24] ESCI suggests that the new facility should include offices of at least 100 square feet to allow for future growth.

[23] "How Much Office Space Do You Really Need?" https://thereceptionist.com/blog/how-much-office-space-do-you-really-need/
[24] "How much office space for that?" https://www.officefinder.com/how.html

Station 1

Facility Name / Station Number: Station 1	
Address: 714 Pier View Way Oceanside, CA 92054	*For office use only*
Primary use (check all that apply) ☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training ☐ Communications Center ☐ Other (specify):	

Structure

Square Footage:7200	Construction Type:	# of Stories:2
Dates of Construction	Original:1929	Last Remodel:1989
General Condition	☐ Excellent ☐ Good ☐ Fair ■ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ■ No
Special Considerations (ADA, etc.)		

Facilities and Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 5			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ■ No
Kitchen Facilities	■ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Training/Meeting Rooms	☐ Yes ■ No	Shower Facilities	■ Yes ☐ No
Individual Lockers	■ Yes ☐ No	Equipment Storage	☐ Yes ■ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	☐ Yes ☐ No
# of Beds:	# of Bedrooms:	# of Back-in:2	# of Drive Through:
Cascade System/Compressor	☐ Yes ■ No	Helipad	☐ Yes ■ No
Emergency Power	☐ Yes ■ No	Automatic Sprinklers	☐ Yes ■ No
Smoke Detectors and Alarms	☐ Yes ■ No	Apparatus Exhaust System	■ Yes ☐ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ■ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	■ Yes ☐ No
Decontamination Area	☐ Yes ■ No	Biohazard Disposal	☐ Yes ■ No

Fuel: ■ None ☐ Diesel, gal ☐ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ☐ Diesel, Day Tank Size:

Station 2

Complete facilities and apparatus information using these tables. Use one table for each facility.	
Facility Name / Station Number: Station 2	*For office use only*
Address: 1740 South Ditmar Street Oceanside, CA 92054	
Primary use (check all that apply) ☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training ☐ Communications Center ☐ Other (specify):	

Structure

Square Footage:4556	Construction Type: Conventional	# of Stories:1
Dates of Construction	Original:1960	Last Remodel:2005
General Condition	☐ Excellent ☐ Good ☐ Fair ☐ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ☐ No
Special Considerations (ADA, etc.)		

Facilities and Building Services

Security System Type (check all that apply): ■ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ■ Key ☐ Other, specify:

Maximum Staffing Capacity:			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ■ No
Kitchen Facilities	■ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Training/Meeting Rooms	☐ Yes ■ No	Shower Facilities	■ Yes ☐ No
Individual Lockers	■ Yes ☐ No	Equipment Storage	☐ Yes ■ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	■ Yes ☐ No
# of Beds:	# of Bedrooms: 5	# of Back-in:2	# of Drive Through:
Cascade System/Compressor	☐ Yes ■ No	Helipad	☐ Yes ■ No
Emergency Power	☐ Yes ■ No	Automatic Sprinklers	☐ Yes ■ No
Smoke Detectors and Alarms	■ Yes ☐ No	Apparatus Exhaust System	■ Yes ☐ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ■ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	■ Yes ☐ No
Decontamination Area	☐ Yes ■ No	Biohazard Disposal	☐ Yes ■ No

Fuel: ■ None ☐ Diesel, gal ☐ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ☐ Diesel, Day Tank Size:

Station 3

Facility Name / Station Number: Station 3	For office use only
Address:	
3131 Oceanside Boulevard	
Oceanside, CA 92056	
Primary use (check all that apply) ☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training ☐ Communications Center ☐ Other (specify):	

Structure

Square Footage: 7075	Construction Type: Conventional	# of Stories: 2
Dates of Construction	Original: 1963	Last Remodel: 2019
General Condition	☐ Excellent ☐ Good ■ Fair ☐ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ■ No
Special Considerations (ADA, etc.)		

Facilities and Building Services

Security System Type (check all that apply): ■ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity: 7			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ■ No
Kitchen Facilities	■ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Training/Meeting Rooms	☐ Yes ■ No	Shower Facilities	■ Yes ☐ No
Individual Lockers	■ Yes ☐ No	Equipment Storage	☐ Yes ■ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	■ Yes ☐ No
# of Beds: 14	# of Bedrooms: 7	# of Back-in:	# of Drive Through: 2
Cascade System/Compressor	■ Yes ☐ No	Helipad	☐ Yes ■ No
Emergency Power	■ Yes ☐ No	Automatic Sprinklers	☐ Yes ■ No
Smoke Detectors and Alarms	■ Yes ☐ No	Apparatus Exhaust System	■ Yes ☐ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ■ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	■ Yes ☐ No
Decontamination Area	☐ Yes ■ No	Biohazard Disposal	☐ Yes ■ No

Fuel: ☐ None ■ Diesel, gal ■ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ☐ Diesel, Day Tank Size: Generator

Station 4

Complete facilities and apparatus information using these tables. Use one table for each facility.	
Facility Name / Station Number: Station 4	*For office use only*
Address: 3990 Lake Boulevard Oceanside, CA 92056	
Primary use (check all that apply) ☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training ☐ Communications Center ☐ Other (specify):	

Structure		
Square Footage:4556	Construction Type: Wood-Frame	# of Stories:1
Dates of Construction	Original:1989	Last Remodel:2023
General Condition	☐ Excellent ☐ Good ☐ Fair ☐ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ☐ No
Special Considerations (ADA, etc.)		

Facilities and Building Services				
Security System Type (check all that apply):	■ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ■ Key ☐ Other, specify:			
Maximum Staffing Capacity:				
24-hour Watch office	☐ Yes ■ No		Emergency Ops Center	☐ Yes ■ No
Kitchen Facilities	■ Yes ☐ No		Exercise/Workout Areas	■ Yes ☐ No
Training/Meeting Rooms	☐ Yes ■ No		Shower Facilities	■ Yes ☐ No
Individual Lockers	■ Yes ☐ No		Equipment Storage	☐ Yes ■ No
Living Quarters	■ Yes ☐ No		Apparatus Bays	■ Yes ☐ No
# of Beds:	# of Bedrooms:		# of Back-in:	# of Drive Through: 2
Cascade System/Compressor	☐ Yes ■ No		Helipad	☐ Yes ■ No
Emergency Power	☐ Yes ☐ No		Automatic Sprinklers	■ Yes ☐ No
Smoke Detectors and Alarms	■ Yes ☐ No		Apparatus Exhaust System	■ Yes ☐ No
Automatic Cooking Shut-off	☐ Yes ■ No		Seismic Protection	☐ Yes ☐ No
Washer/Dryer for station wear/linen	■ Yes ☐ No		Washer/Extractor for PPE	■ Yes ☐ No
Decontamination Area	☐ Yes ■ No		Biohazard Disposal	☐ Yes ■ No
Fuel:	■ None ☐ Diesel, gal	☐ MoGas, gal	☐ AvGas, gal	☐ Jet A, gal
Emergency Power:	☐ Gas ☐ Diesel, Day Tank Size:			

Station 5

Facility Name / Station Number: Station 5	
Address:	
4841 North River Road	
Oceanside, CA 92057	
Primary use (check all that apply) ☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training ☐ Communications Center ☐ Other (specify):	*For office use only*

Structure

Square Footage:4672	Construction Type:Masonry	# of Stories:1
Dates of Construction	Original:1986	Last Remodel:
General Condition	☐ Excellent ☐ Good ☐ Fair ☐ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ☐ No
Special Considerations (ADA, etc.)		

Facilities and Building Services

Security System Type (check all that apply): ■ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ■ Key ☐ Other, specify:

Maximum Staffing Capacity:			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ☐ No
Kitchen Facilities	■ Yes ☐ No	Exercise/Workout Areas	☐ Yes ☐ No
Training/Meeting Rooms	☐ Yes ■ No	Shower Facilities	☐ Yes ☐ No
Individual Lockers	■ Yes ☐ No	Equipment Storage	☐ Yes ☐ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	☐ Yes ☐ No
# of Beds:	# of Bedrooms: 3	# of Back-in:	# of Drive Through:
Cascade System/Compressor	☐ Yes ■ No	Helipad	■ Yes ☐ No
Emergency Power	☐ Yes ■ No	Automatic Sprinklers	☐ Yes ■ No
Smoke Detectors and Alarms	■ Yes ☐ No	Apparatus Exhaust System	■ Yes ☐ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ■ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	■ Yes ☐ No
Decontamination Area	☐ Yes ■ No	Biohazard Disposal	☐ Yes ■ No

Fuel: ■ None ☐ Diesel, gal ☐ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ☐ Diesel, Day Tank Size:

Station 6

Facility Name / Station Number: Station 6	*For office use only*
Address:	
895 North Santa Fe Avenue	
Oceanside, CA 92084	
Primary use (check all that apply) ☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training ☐ Communications Center ☐ Other (specify):	

Structure

Square Footage:9143	Construction Type:Concrete Tilt-up	# of Stories:1
Dates of Construction	Original:1980	Last Remodel:
General Condition	☐ Excellent ☐ Good ☐ Fair ☐ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ☐ No
Special Considerations (ADA, etc.)		

Facilities and Building Services

Security System Type (check all that apply): ■ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ■ Key ☐ Other, specify:

Maximum Staffing Capacity:			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ☐ No
Kitchen Facilities	■ Yes ☐ No	Exercise/Workout Areas	☐ Yes ☐ No
Training/Meeting Rooms	■ Yes ☐ No	Shower Facilities	☐ Yes ☐ No
Individual Lockers	■ Yes ☐ No	Equipment Storage	☐ Yes ☐ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	☐ Yes ☐ No
# of Beds: # of Bedrooms:		# of Back-in:	# of Drive Through:
Cascade System/Compressor	☐ Yes ■ No	Helipad	☐ Yes ■ No
Emergency Power	■ Yes ☐ No	Automatic Sprinklers	☐ Yes ■ No
Smoke Detectors and Alarms	☐ Yes ■ No	Apparatus Exhaust System	■ Yes ☐ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ☐ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	■ Yes ☐ No
Decontamination Area	☐ Yes ■ No	Biohazard Disposal	☐ Yes ■ No

Fuel: ■ None ☐ Diesel, gal ☐ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ☐ Diesel, Day Tank Size: Generator

Station 7

Facility Name / Station Number: Fire Station 7	*For office use only*
Address: 3350 Mission Avenue Oceanside, CA 92058	
Primary use (check all that apply) ☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training ☐ Communications Center ☐ Other (specify):	

Structure

Square Footage:18362	Construction Type:Steel Frame	# of Stories:1
Dates of Construction	Original:2008	Last Remodel:
General Condition	☐ Excellent ☐ Good ☐ Fair ☐ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ☐ No
Special Considerations (ADA, etc.)		

Facilities and Building Services

Security System Type (check all that apply): ■ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ☐ Key ☐ Other, specify:

Maximum Staffing Capacity:			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ■ No
Kitchen Facilities	■ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Training/Meeting Rooms	■ Yes ☐ No	Shower Facilities	■ Yes ☐ No
Individual Lockers	■ Yes ☐ No	Equipment Storage	■ Yes ☐ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	■ Yes ☐ No
# of Beds:	# of Bedrooms:	# of Back-in:1	# of Drive Through:4
Cascade System/Compressor	■ Yes ☐ No	Helipad	☐ Yes ■ No
Emergency Power	■ Yes ☐ No	Automatic Sprinklers	■ Yes ☐ No
Smoke Detectors and Alarms	■ Yes ☐ No	Apparatus Exhaust System	■ Yes ☐ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ☐ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	■ Yes ☐ No
Decontamination Area	■ Yes ☐ No	Biohazard Disposal	■ Yes ☐ No

Fuel: ☐ None ■ Diesel, gal ☐ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ■ Diesel, Day Tank Size:

Station 8

Facility Name / Station Number: Station 8	
Address:	
1935 Avenida Del Oro Suite F	
Oceanside, CA 92056	*For office use only*
Primary use (check all that apply) ☐ Administration ☐ Maintenance ■ Emergency Ops ☐ Special Ops ☐ Training ☐ Communications Center ☐ Other (specify):	

Structure

Square Footage: 5084	Construction Type: Concrete Tilt_Up	# of Stories: 1
Dates of Construction	Original:	Last Remodel: 2013
General Condition	☐ Excellent ■ Good ☐ Fair ☐ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ☐ No
Special Considerations (ADA, etc.)	Industrial Space which is a portion of a larger multi-tenant building	

Facilities and Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ■ Key ☐ Other, specify:

Maximum Staffing Capacity: 3			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ■ No
Kitchen Facilities	■ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Training/Meeting Rooms	☐ Yes ■ No	Shower Facilities	■ Yes ☐ No
Individual Lockers	■ Yes ☐ No	Equipment Storage	☐ Yes ■ No
Living Quarters	■ Yes ☐ No	Apparatus Bays	■ Yes ☐ No
# of Beds: 6	# of Bedrooms: 3	# of Back-in: 1	# of Drive Through:
Cascade System/Compressor	☐ Yes ■ No	Helipad	☐ Yes ☐ No
Emergency Power	■ Yes ☐ No	Automatic Sprinklers	☐ Yes ☐ No
Smoke Detectors and Alarms	■ Yes ☐ No	Apparatus Exhaust System	☐ Yes ☐ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ☐ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	☐ Yes ☐ No
Decontamination Area	☐ Yes ■ No	Biohazard Disposal	☐ Yes ☐ No

Fuel: ■ None ☐ Diesel, gal ☐ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ☐ Diesel, Day Tank Size:

Fire Training Center

Facility Name / Station Number: Training	
Address:	
110 Jones Rd	
Oceanside, CA 92058	
Primary use (check all that apply) ☐ Administration ☐ Maintenance ☐ Emergency Ops ☐ Special Ops ■ Training ☐ Communications Center ☐ Other (specify):	*For office use only*

Structure

Square Footage:8340	Construction Type:Varies	# of Stories:1
Dates of Construction	Original:1978	Last Remodel:2007
General Condition	☐ Excellent ☐ Good ☐ Fair ☐ Marginal ☐ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ☐ No
Special Considerations (ADA, etc.)		

Facilities and Building Services

Security System Type (check all that apply): ■ Security Fence and Gate ☐ Sallyport ☐ CCTV ☐ Keypad ■ Key ☐ Other, specify:

Maximum Staffing Capacity:			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ■ No
Kitchen Facilities	☐ Yes ☐ No	Exercise/Workout Areas	■ Yes ☐ No
Training/Meeting Rooms	■ Yes ☐ No	Shower Facilities	■ Yes ☐ No
Individual Lockers	■ Yes ☐ No	Equipment Storage	■ Yes ☐ No
Living Quarters	☐ Yes ■ No	Apparatus Bays	■ Yes ☐ No
# of Beds:	# of Bedrooms:	# of Back-in:3	# of Drive Through:
Cascade System/Compressor	■ Yes ☐ No	Helipad	■ Yes ☐ No
Emergency Power	☐ Yes ■ No	Automatic Sprinklers	☐ Yes ■ No
Smoke Detectors and Alarms	☐ Yes ☐ No	Apparatus Exhaust System	☐ Yes ■ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ☐ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	■ Yes ☐ No
Decontamination Area	☐ Yes ■ No	Biohazard Disposal	☐ Yes ☐ No

Fuel: ☐ None ☐ Diesel, gal ☐ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ☐ Diesel, Day Tank Size:

Lifeguard Administration Facility

Facility Name / Station Number: Lifeguard HQ	*For office use only*
Address: 301 The Strand N Oceanside, CA 92054	
Primary use (check all that apply) ■ Administration ■ Maintenance ■ Emergency Ops ■ Special Ops ■ Training ■ Communications Center ☐ Other (specify):	

Structure

Square Footage:3709	Construction Type:Concrete	# of Stories: 1
Dates of Construction	Original: 1927	Last Remodel: 1985
General Condition	☐ Excellent ☐ Good ☐ Fair ☐ Marginal ■ Poor	
Applicable Fire Code & Edition		Code-compliant ☐ Yes ☐ No
Special Considerations (ADA, etc.)		

Facilities and Building Services

Security System Type (check all that apply): ☐ Security Fence and Gate ☐ Sallyport ☐ CCTV ■ Keypad ■ Key ☐ Other, specify:

Maximum Staffing Capacity: Built for 35 current 96			
24-hour Watch office	☐ Yes ■ No	Emergency Ops Center	☐ Yes ■ No
Kitchen Facilities	☐ Yes ■ No	Exercise/Workout Areas	■ Yes ☐ No
Training/Meeting Rooms	■ Yes ☐ No	Shower Facilities	■ Yes ☐ No
Individual Lockers	☐ Yes ■ No	Equipment Storage	■ Yes ☐ No
Living Quarters	☐ Yes ■ No	Apparatus Bays	■ Yes ☐ No
# of Beds: # of Bedrooms:		# of Back-in: 4	# of Drive Through: 0
Cascade System/Compressor	☐ Yes ■ No	Helipad	☐ Yes ■ No
Emergency Power	☐ Yes ■ No	Automatic Sprinklers	☐ Yes ■ No
Smoke Detectors and Alarms	■ Yes ☐ No	Apparatus Exhaust System	☐ Yes ■ No
Automatic Cooking Shut-off	☐ Yes ■ No	Seismic Protection	☐ Yes ■ No
Washer/Dryer for station wear/linen	■ Yes ☐ No	Washer/Extractor for PPE	☐ Yes ■ No
Decontamination Area	☐ Yes ■ No	Biohazard Disposal	☐ Yes ■ No

Fuel: ■ None ☐ Diesel, gal ☐ MoGas, gal ☐ AvGas, gal ☐ Jet A, gal

Emergency Power: ☐ Gas ☐ Diesel, Day Tank Size:

APPENDIX B
Fire Department Management Analyst

POSITION SUMMARY

The primary purpose of this position is to use data analytics to assess systems and processes and deliver data-driven recommendations and reports to the Fire Chief and Fire Department Command Staff to improve service, safety, and efficiency. The Management Analyst provides leadership in continuous quality improvement and program management. Additionally, it provides advice, counsel, and expertise to the Fire Chief.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The following duties are normal for this position. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

- Data Analysis & Reporting (50%) Establish, measure, monitor, and report on departmental Key Performance Indicators. Lead and benchmark continuous quality improvement processes. Query, extract, validate and publish data. Collaborate with internal and external departments to create & maintain dashboards. Use advanced computing skills to visualize and present meaningful reports to assist the Fire Chief in making strategic business decisions. Prepare Annual NFPA Survey and submit NFIRS reports to State and Federal agencies. Prepare daily, weekly, monthly, quarterly, and annual reports.
- Project & Program Management (15%) Manage multiple projects and the Continuous Quality Improvement Program. Manage the department's self-assessment, strategic planning, community risk assessment and standards of cover. Department liaison with the CPSE and CFAI. Draft new or revise written directives, policies, and process maps. Create meeting agendas and minutes, facilitate teams and meetings, create project plans and monitor progress. Collaborate with community agencies for program development and evaluation. Establish, measure, monitor, and report on departmental surveys and feedback.
- Budgeting and CIP (15%) – Analyze historical budget information to assist in developing annual operating budget and Capital Improvement Plan (CIP). Prepare and coordinate the operational budgeting process. Participate in regular budget review meetings and presentation to the City Manager, Finance Director, and City Council.
- Marketing & Communication (15%) Prepare the Department Annual Report. Author, submit, and manage grants. Design collateral materials for the department including recruiting, marketing, and training materials. Develop and present related messaging to internal and external stakeholders.
- Collaboration (5%) Attend meetings on behalf of the Fire Chief. Participate in local, state, or national organizations and committees as needed.
- Perform other duties as assigned.

REQUIRED MINIMUM QUALIFICATIONS

Education and Experience:

- Master's degree in Public Administration or closely related field, or a Bachelor's degree in Public Administration or a closely related field and 5 years of practical experience.
- Program and policy development, accounting and/or budget development; continuous quality improvement (CQI) experience, training or certification, project management certificate or experience.
- Successful completion of Quality Improvement through Accreditation (QITA) workshop and the CFAI Peer Assessment Training.
- Advanced experience with multiple software platforms, data analysis and management, and data visualization.
- Valid Driver's License.

Necessary Knowledge, Skills, and Abilities:

- Knowledge of principles, methods and techniques of data collection and analysis.
- Skill in researching, compiling, and summarizing statistical data and information materials.
- Knowledge and ability to use the following software: MUNIS, Envisio, MS Project, MS Visio, Excel, Word, PowerPoint, ImageTrend, Aladtec, Vector Solutions, ESRI GIS, Canva, Trello, Outlook, SurveyMonkey, Heyzine Flipbooks, and Webex
- Knowledge of financial accounting practices and principles, budgetary procedures, statistics, and quantitative analytic techniques
- Possess the ability to maintain confidentiality.
- Possess excellent interpersonal skills; be team oriented and be able to establish and maintain effective working relationships with co-workers, other city employees and the public.
- Meet deadlines, manage multiple priorities, and effectively resolve challenging interpersonal relations.
- Bring fresh perspective to the organization regarding public administration and public policy and offer unique outside perspectives and experiences to the organization.
- Provide enthusiasm and focused energy to important high priority projects. Serves as the "champion" of continuous quality improvement.

In evaluating candidates for this position, the city may consider a combination of education, training and experience which provides the necessary knowledge, skills and abilities to perform the position's duties.

PHYSICAL DEMANDS

The physical demands described in this position description are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the essential functions of this job, the employee is frequently required to sit, talk, or listen. The employee is occasionally required to walk, use hands to finger/handle objects or operate tools/controls, and reach with hands or arms. The employee must occasionally lift and/or move up to 25 pounds.

Specific vision abilities required of this job include close vision and the ability to adjust focus.

WORK ENVIRONMENT

The work environment characteristics described in this position description are representative of those an employee encounters while performing the essential functions of this job. This position is an office position. The noise level in the work environment is moderately quiet.

SELECTION GUIDELINES

Formal application, rating of education and experience, oral interviews, background check and job-related tests may be required.

The duties listed in this position description are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if work is similar, related, or a logical assignment to the position.

The position description does not constitute an employment agreement between the employer and employee and is subject to change by the employer as the needs of the employer and requirements of the job change.