Fort Lauderdale Fire Rescue

Community Risk and Standards of Cover

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Introduction

The following report describes the legal basis, history, service milestones, and area description of Fort Lauderdale Fire Rescue (FLFR) and the community it serves. It has been compiled to introduce and orient the reviewer to FLFR and the Greater Fort Lauderdale Area.

Also included in this Community Risk and Standards of Cover document is actual input from external stakeholders describing their expectations and current views of the services provided by FLFR. The department has collected this information to assist with improving and assessing FLFR in all areas and to provide direction so the department will achieve the goals set forth in the mission statement.

Following this review, FLFR shall discuss areas such as risk assessment, critical task analysis, agency service level objectives, and distribution and concentration measures. The report shall conclude with policy recommendations.

TABLE OF CONTENTS

LIST OF TABLES

TABLE OF FIGURES

Executive Summary

Fort Lauderdale Fire Rescue protects the Venice of America with dedicated, honorable and empathetic professional firefighters embodying core values that originated from 1912 in response to a fire in the downtown district. Firefighters acted with valor and teamwork to preserve the tropical paradise settled by Hugh Taylor Birch, who first landed at Las Olas Boulevard in a small sailboat in 1893. The small plot of land by Las Olas Boulevard expanded to become a thriving popular tourist destination, while maintaining the allure of big business and enterprise.

Evolving with the City, Fire Rescue has adopted an increasingly more strategic approach to managing resources and approaching disasters with greater efficiency to protect the people, structures and environment in a sustainable and responsible way. The approach that follows in this plan is the result of community interaction and input, with a strong emphasis on connecting with Fire Staff at all levels of the organization, by soliciting their opinions and experience to produce a road map for the next five years from 2019 until 2024.

Fort Lauderdale Fire Rescue (FLFR) provides an all-hazards approach in the protection of the lives and property of the residents, businesses, and visitors of Fort Lauderdale, Florida. FLFR is consistently working to achieve and maintain the highest level of professionalism and efficiency on behalf of those it serves. FLFR contracted with the Center for Public Safety Excellence (CPSE) to facilitate a method to document the department's path into the future via a "Community-Driven Strategic Plan." The following strategic plan was written in accordance with the guidelines set forth in the Commission on Fire Accreditation (CFAI) *Fire & Emergency Service Self-Assessment Manual* 9th *Ed.* and is intended to guide the organization within established parameters set forth by the authority having jurisdiction.

The CPSE utilized the community-driven strategic planning process to go beyond just the development of a document. It challenged the department's members to work in the best interest of the "team" by critically examining paradigms, values, philosophies, beliefs and desires. It also provided the department with an opportunity to participate in the development of their organization's long-term direction and focus. Members of the community and department stakeholders' demonstrated commitment to the Strategic Plan completion and future execution.

The City of Fort Lauderdale is situated on the southeast coast of Florida, centrally located between Miami and Palm Beach. Encompassing more than 36 square miles with an estimated population of 182,827, the city is the largest of Broward County's 31 municipalities and one of the ten largest cities in Florida. The City of Fort Lauderdale, known as the "Venice of America" for its waterways, temperate climate, world class

beach and hotels, is a popular tourist destination. Several large companies are based in Fort Lauderdale, such as AutoNation, Citrix Systems, DHL Express, Spirit Airlines and National Beverage Corporation to name a few. Fort Lauderdale is a major manufacturing and maintenance center for yachts with several international marinas located within the city. The Fort Lauderdale International Boat show is the world's largest boat show with over 100,000 attending annually.

FLFR is a legally established agency by virtue of State Statutes and Local Ordinances. On June 7, 1912, the city council voted to purchase its first piece of fire equipment, a hand-drawn, hand-operated pump and a chemical extinguisher mounted on carriage wheels. The chemical extinguisher was pulled by a one-cylinder International Harvester truck, and the pump was pulled to the fires by a dozen or so volunteers.

From our humble beginnings, FLFR evolved into a full-service fire and rescue department consisting of 411 uniformed personnel serving from 12 strategically placed fire stations. Operating out of the 12 fire stations are 12 engines, 3 ladders, 16 medical rescues, 1 squad, 1 ARFF truck, 1 hazardous materials unit and 2 fire boats. FLFR has expanded from providing only fire suppression and first responder services to providing: ALS/BLS emergency medical transports, fire investigation and prevention, hazardous materials, dive rescue, technical high angle rescue, trench rescue, structural collapse rescue, confined space rescue and ocean rescue.

FLFR follows the CFAI Standards of Cover 6th Edition guidelines to complete its evaluations on delivery systems using the analysis and performance objectives/measures developed to this point. The initial analysis conducted was a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats). Along with the SWOT analysis an external stakeholders meeting was held to determine community expectations. The expectations of the community are used as the focal point of the strategic planning process. Our Mission, Values, Critical Issues, Service Gaps and Strategic Initiatives are established during the Community-Driven Strategic Planning process. The agency can avoid distractions and mitigate obstacles by following the goals and objectives set forth in the Strategic Plan.

The overall evaluation process is the last component of the CR/SOC document, and the recommendations were derived from information gathered during the creation of the CR/SOC. The CR/SOC describes FLFR's history, services provided to the community, the service area protected, and community risk levels. FLFR is committed to providing the finest fire and rescue services through the development of the CR/SOC.

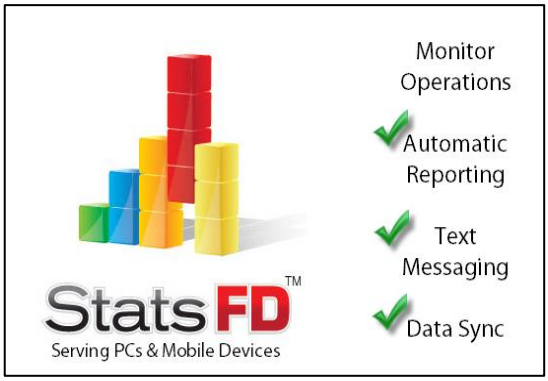
The CR/SOC will be a tool used by FLFR to achieve departmental goals and objectives. The process will be ongoing for the department. The information gathered during the external stakeholders meeting and Strategic Plan has been used to direct FLFR during the accreditation process and the creation of the CR/SOC.

During the community-based risk assessment, FLFR utilized a formal methodology to assess the levels of risks within the community or the relationship between a hazards, probabilities and values. FLFR's community risk assessment consists of four levels:

1. Identifying/classifying community hazards
2. Identifying/classifying community assets/values
3. Estimating probability, quantifying agency impact, and predicting community consequence
4. Fusing all of the elements into a visual display of existing hazards

During the risk assessment, buildings were classified through the use of probability, consequences, and agency impact methodology. Listed in the CR/SOC are 426 high-rise buildings with the planning area and address. These buildings have the greatest potential impact to the agency and District 2 had the highest number of high-rise buildings with 111. FLFR reviewed historical data from past fire, EMS, hazardous materials, ARFF, marine rescue and technical rescue incidents. The information gathered was used to complete the community risk assessment. Community risk was categorized as one of the following; low risk, moderate risk, high/special risk and maximum risk.

Within the risk assessment, critical task analyses were completed along with risk assessments for both fire and non-fire related responses. FLFR reviewed historical data and previous years' incident response times to evaluate responses and to facilitate benchmarks and measure baseline performance measures. Considering benchmarks are determined from industry best practices, FLFR measured performance based on standards found in 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 Center for Public Safety Excellence CFAI Standards of Cover 6th edition as well as the Center for Public Safety Excellence Fire & Emergency Service Self-Assessment Manual 9th edition.



FLFR evaluated the following categories; pick-up to dispatch; turnout time 1st unit; travel time 1st unit distribution; travel time ERF concentration; total response time 1st unit on scene distribution and total response time ERF concentration at the 90th percentile.

System performance analyses for all services were conducted for the years 2015 -2019 using StatsFD. FLFR found there was room for improvement in all areas. The following times are the percentages and the associated benchmark:

Segment of Response Time (90th Percentile Measures)	Benchmark Time (NFPA 1710)	2015-2019 (StatsFD)	Percentage of Benchmark
Pick up to dispatch, moderate risk bldg. fire	64 sec. (1:04)	89 sec. (1:29)	139%
Pick up to dispatch, low risk EMS	64 sec. (1:04)	83 sec. (1:23)	130%
Turnout time, moderate risk bldg. fire	80 sec. (1:20)	142 sec (2:22)	178%
Turnout time, low risk EMS	60 sec. (1:00)	142 sec. (2:22)	237%
Travel time 1st unit, moderate risk bldg. fire	240 sec. (4:00)	290 sec. (4:50)	121%
Travel time 1st unit, low risk EMS	240 sec. (4:00)	352 sec. (5:52)	147%

Baseline times in all risk areas exceed the benchmarks even with the March 2017 upgrade to the CAD system.

FLFR evaluated distribution and concentration factors. The downtown/central portion of the city has the highest population and building density. Therefore, FLFR deploys the highest number of resources to the area. Fire stations are more concentrated in the higher population density downtown/central area and less concentrated as you move away from the downtown / central area into less dense sections of the city.

Drive time analysis of four, six, and eight minutes, using GIS mapping determined if any areas of the city lacked adequate fire coverage. GIS system values are set to reflect speed limits, stop signs and roads which may be driven in the four, six or eight-minute time period. Areas with service gaps above four minutes exist in zones 2, 35, 47, 49, 53. The remainder of the districts had adequate four-minute coverage. External factors such as road closures, drawbridges, rush-hour traffic, special events and weekend beach traffic were not factored into the analysis.

Unit reliability studies were completed, and charts created for unit hour utilization, unit response time of day and FLFR time of day responses. Total unit responses for all engines, medical rescues, ladders, chief officers and specialty units were analyzed and graphs created showing responses for the year 2019. FLFR found units in the central portion of the city have higher unreliability rates compared to the outlying stations. Units servicing the central portions of the city were also found to have a higher hour and day utilization on a daily basis. When evaluating the charts and graphs, a definite pattern can be seen for fire stations 2/8 and 46 in relation to unit hour utilization and unit responses by time of day. The majority of the demand during peak hours is generated by the downtown / central portion of the city.

Information gathered during the creation of the CR/SOC show out of zone unit responses occur on a regular basis which places a strain on the entire system. Out of zone responses are defined as incidents which cannot be handled by the assigned first-due units. Fire stations 2/8, and 46 comprising the downtown areas, accrued the highest number of out of zone responses with 8,667 for the year 2019 or 46% of all out of zone incidents going into these zones. Out of zone responses from other zones affect the times from the originating zone and reduce unit availability. Most importantly during a cardiac arrest a one-minute delay in defibrillation decreases the chance of survival by 10%.

The purpose of the CR/SOC is to provide FLFR an ongoing instrument to:

- Assess community fire and non-fire risk
- Review critical task analysis for all fire, EMS and specialty responses
- Evaluate distribution factors
- Attain a community drive-time response overlay of 4 ,6 and 8 minutes
- Evaluate concentration, reliability and comparability factors
- Measure service delivery performance by evaluating baseline and benchmark performance objectives
- Evaluate service level capability in terms of ERF

To ensure the agency is meeting current service level objectives, continuous monitoring of service levels is conducted on a regular basis. The CR/SOC describes how FLFR will achieve this goal. A Compliance Team made up of members from Fire Administration, Operations Division and Fire

Prevention will oversee the process. The Compliance Team reviews service level baselines on a quarterly basis. Included in the review is a summary of the results of the service level objectives, a comparison of current results to previous results and calculations of the difference between time periods. The Accreditation Manager is responsible for monitoring reports relating to the CR/SOC and provide continuous feedback to the organization and to the Fire Chief.

To remain current with the CFAI Standards of Cover and Self-Assessment requirements, FLFR Compliance Team meets on a quarterly basis to review the available data to date with the Accreditation Manager. During the annual review recommendations will be made to the Fire Chief regarding changes in service to ensure ongoing compliance. An annual review/evaluation will be made available to the Fire Chief with at minimum the following recommendations; resources that should be reallocated, alternative methods to provide service at desired levels; budget estimates and maximization of existing resources.

The creation of the CR/SOC led to the following recommendations:

- Relocate Battalion 35 from Fire Station 53 to Fire Station 16. Once the move is completed the position will assume the title of Battalion 16. The four, six and eight-minute drive time study shows Battalion 35 is not properly located. Relocating the position will provide better response times and help achieve the desired ERF.
  (*FLFR is dedicated to the accreditation process and has implemented this recommendation starting July 7, 2014)*.
- Reduce first unit baseline response times to incidents in all risk levels in regards to the 90th Percentile Benchmarks. *(FLFR is continually identifying and working on improving these times through monthly Accreditation meetings, as well as identifying any and all concerns line personnel report back as potential issues).*
- Acquire and staff a new fire station on the south side of the New River with an engine and rescue. The fire station will assist in covering the central portion of the city which generates the highest volume of calls. Creating an additional South side station will achieve the goal of lowering overall department response times and assist in lowering first unit out of zone responses for stations 2/8, 3 and 49. *(FLFR constructed a new Fire Station 8 on the South side which opens in 2020).*
- Add an additional rescue, stationed at Fire Station 2/8. The unit will improve the overall system performance. *(Added an additional 24-hour Rescue (R302) as well as a 12-hour peak hour Rescue (R202) to Fire Station 2). These changes took place October 2015 and March 2017.*
- Renumber the stations to properly reflect their county designation. The new fire station on the south side of the New River should be Fire Station 8. Units within Fire Station 2 should be numbered Engine 2, Ladder 2, Rescue 2, Rescue 302, and Rescue 202. *(All changes took place in 2020 when new Fire station 8 goes into service).*
- Renumber Battalion 35 suburban to Battalion 53 and remain located within Fire Station 53/88.
- Renumber Engine 88 to Engine 53. *(Takes effect in 2020 when station 8 opens).*
- Rename the existing 88 zones to zone 53A, B, C, D, E etc. *(Takes effect in 2020 when station 8 opens).*
- All paper tactical surveys should be converted over to electronic documents and placed into First Look Pro. (*FLFR implemented this process in summer 2014 with a two-year goal of*

converting all documents). (In 2019, FLFR converted to a new and updated software called First-Due Size-up).

- Install timers in the stations to keep responding personnel aware of their turnout times. *(Countdown timers are currently being installed in all stations along with the new upgraded alerting system).*
- The Operations Division must be made aware of times in regards to benchmark performance measures. Reports shall be created and distributed to all members via the FLFRs email system. *(Operations AC are made aware of times through bi-monthly staff meetings, it is also distributed on the digital signage at each station for all personnel to see).*
- Evaluate and improve areas of performance identified within the CR/SOC in regards to the Effective Response Force (ERF) in all risk classifications*. (FLFR continually evaluates and makes recommendations for improvements to our times through our monthly Accreditation meetings).*
- Install digital signage televisions in all fire stations to enhance internal communications. (*FLFR initiated this process during the fall of 2014).*

FLFR has defined baseline standards and will strive to achieve the benchmarks set forth in each of the defined categories. FLFR will use the CR/SOC as a tool for planning future station locations, staffing, apparatus placement and measuring daily workloads. FLFR is committed to meeting the recommendations set forth in the CR/SOC and will use it as a tool to measure system delivery, future policy development and future budget planning. FLFR is proud to present the CR/SOC document to the CFAI for review.

A. Description of Community Served

Legal Basis

Fort Lauderdale Fire Rescue is a legally established agency by virtue of State Statues and Local Ordinances. Florida State Statute Title XII Chapter 166 Section 166.021 grants municipalities the authority to perform municipal functions. Section 13-26 of the City Charter created the department by stating "A fire department for the city is hereby created and established for the protection of life and property from hazardous situations, for the giving of aid in emergencies and for the suppression and prevention of fire."

History of the Agency

The need for the city's first fire department became apparent as a result of a large fire in the city's downtown district. The bustling little town of 250 pioneers had just been incorporated in 1911 and was expected to experience a major growth spurt spurred on by plans to fill in and develop the Everglades. Due to a minor flaw in planning, the city would instead experience a setback that would kill its budding business district and leave townsfolk scrambling to recover from the utter devastation.

It was about midnight on June 2, 1912 when Dr. Kelso noticed a small fire just beginning to flicker in the Wheeler store, only 100 feet from New River. The three-story Wheeler store was the town's most imposing building and the only one with a concrete face, the rest were all wood. It consisted of shops on the first floor, including H. G. Wheeler Mercantile Co., J.B. Jeffries' meat market and Dr. Thomas Oliver's drugstore. Offices were on the second floor and lodging on the third. The town did not have any alarm boxes to warn people of impending danger, much less a fire department to

help put it out. So, Dr. Kelso went to get the owner of the burning building, H. G. Wheeler. By the time they made it back to the site, the building was hopelessly engulfed in flames. Before the flames died down nearly everything between Wall Street and New River on both sides of Brickell Avenue (now S.W. 1st Avenue) would be ashes.

Ironically, just two weeks before the disaster a local paper cautioned against the town having no formal fire department, but no one thought an inferno of such magnitude would occur. A fierce wind swept through the town feeding the flames and carrying them from building to building. At one point the fire rode a gust that blew it nearly fifty feet across the width of Brickell Avenue to set the Stranahan Company building ablaze. The wooden structures burned like tissue paper. In a desperate attempt to contain the inferno, merchants used dynamite to blow up small adjoining buildings. News of the fire spread quickly, and residents rallied together to form bucket brigades.

Prior to the fire, citizens figured they would be able to rely on their neighbors from the south, Miami, and from the north, West Palm Beach, to take care of any large fires. The night of the fire a frantic call for help was sent out on the Florida East Coast Railway Telegraph. Aide was sent from West Palm Beach and Miami, but in the time that it took to get there, all hope of stopping the blaze was gone. The blaze burned through the night and by morning only three structures were left standing in Fort Lauderdale's once bustling business district, the Osceola Hotel, the Everglades Grocery Store and the Fort Lauderdale State Bank.

After only five days the town concluded that it needed a fire department to have any hope of surviving and growing into a major city. A $40,000 bond issue was floated to buy firefighting equipment, a water plant and a fire department building.

On June 7, 1912, the city council voted to purchase its first fire equipment, a hand-drawn, hand-operated pump and a chemical extinguisher mounted on carriage wheels. The chemical extinguisher was pulled by a one-cylinder International Harvester truck, and the pump was pulled to the fires by the dozen or so volunteers.

The newly formed volunteer fire department ran without a Fire Chief until C.E. Newland was appointed on November 15, 1912. The fire department would not have a permanent home until January 7, 1913 when some property at Andrews Avenue and S.W. 2nd Street was purchased for $1,800. The new city hall building was constructed on the site and it housed the fire station, including all firefighting equipment, as well as the police department, jail and offices. Eventually this station would be known as the central fire station.

In the year after the 1912 blaze, Fort Lauderdale Fire Department fought several house and woods fires, but it was not until 1913 that it would really be tested. It was July 13 when C. A. Guttchen discovered a fire burning in the room just over the kitchen of the Osceola hotel. The flames spread quickly throughout the Dade County pine structure and created a fire that could not be extinguished. The only saving grace was the fact that there was no wind that night to carry the flames as in the 1912 fire. It did, however, manage to completely incinerate the hotel, as well as the town's only pumper.

The method of alerting folks to the threat of a fire back then was primitive, but effective. If a fire were called in, Esther, the operator at the time, would sound a fire siren located on the roof of the phone company building that could be heard throughout the city. When the firefighters heard the siren they would call Esther and she would tell them where the fire was. Shortly after the 1913 fire, the town got its first fire truck, a used car that pioneer Reed Bryan sold to the town. Fire Chief Newland resigned on February 17, 1914 and was replaced by Dr. R. S. Lowry who divided the town into four sections; each section having its own distinct whistle to signal which district the fire was in. Esther's job got a little easier.

Milo Sherman became the town's third fire chief and the first paid fire chief. The year was 1917 and the salary offered was $25 per month. Shortly after Chief Sherman's hiring the city gave its blessing to purchase a new truck. Chief Sherman went to Atlanta, Georgia and came back with an American La France fire engine, which served until World War II when it was sold to the Navy for use at Port Everglades. Chief Sherman did not wait long after purchasing the first engine to approach the city once again for a second fire truck. They were easily convinced and $7,500 was given to buy a Brockway truck that carried a large tank holding hundreds of gallons of water.

Chief Sherman envisioned having fire stations on both the north and south side of the New River. The first station was on the north side of the river, so, when the town refused to finance this latest venture, Chief Sherman invested his own money on a piece of land on the south side of the river where he envisioned the second station. He built this second station himself because the city did not have the money to build what he wanted. This fire station was located at 700 S. Andrews Avenue.

Frank Stone became the city's first paid firefighter in 1920 at a salary of $150 per month for working 24-hours-a-day, seven days a week. "Some nights I would take his place so that he could have some leisure time, but other than that Stone was always on duty," Chief Sherman said in a 1957 interview with a local newspaper. When Chief Sherman had a falling out with several city officials he was offered and agreed to an early retirement in 1923. Stone would replace him as Chief.

In 1925, the town invested in its fire department again, this time with $10,500 in a new American La France pumper. The truck could spray 500 gallons of water per minute. It was shipped south

by train and the day the shiny, red engine arrived was a big occasion. It was reported that nearly everyone in the town turned out to see her. C. R. Gray was hired to keep the truck clean, gassed up and ready to go at a moment's notice. He and his wife lived above the engine garage at city hall, (where the present day Broward County government building is located). The pumper was moved to the beach station in 1948 and stayed in service as a reserve until the late 1950s.

During the boom or bust years from 1924 to 1926 several large proposals were considered for improving and expanding the fire department. Most notable was Chief Dooley's request for funds to build a new west side fire station. Bids for the construction of the new station ranged from $13,324 from Knight Construction Company to $18,641 from Miller and Baler. The bid that the Commission would approve came from Prescott and Cotes for $15,219. Land for the new station was purchased at 1022 West Las Olas Boulevard for an additional $7,000 (This station now currently houses the Fort Lauderdale Fire Museum). This would be Fire Station 3, designed by Francis Abreu, a renowned local architect of the time.

In 1926, Chief Dooley also submitted proposals to change the firefighter's schedule to a 24-hour on, 24-hour off rotation and for a staffing increase. At the time there were 18 firefighters on staff. Dooley wanted to see this increase to a total of 38 firefighters, not including himself. He suggested there be 18 men at central station, nine per shift; 10 firefighters at the south side fire station, five per shift; and 10 at the future west side fire station, five per shift. .

On August 3, 1926 the city approved a proposal from the Seagrave Corporation to build a Model F 5060 city service ladder truck with chemical equipment at a cost of $9,500. Also purchased was a Model F 5060 D, double bank city service ladder truck with chemical equipment for $9,750. This would be the department's first ladder truck.

On September 18, 1926, South Florida would experience the full brunt of the worst hurricane in the area's history. Firefighters were assigned a task even worse, if possible, than fighting fires. They were told to drive around town and pick up the remains of those who did not survive the hurricane and bring them to local funeral homes.

After 1926 the number of firefighters was steadily decreased and so was their salary. While firefighters were taking home a $25 paycheck each week by 1927 they were only making $12.50 per week for working four days on and one day off. During the fiscal year September 1, 1927 to August 31, 1928, there were 192 alarms answered, this was down from 314 alarms the previous year. Loss due to fire equaled $25,732.25, a whopping $51,631.75 less than the previous year.

On November 7, 1929, Chief Cody resigned. Clarence "C.W." King took his place. At this time there were about 22 firefighters to run the central, south side and west side stations. Shortly after the depression struck, that same year, the west side and south side stations were closed and personnel were reduced to seven firefighters.

In 1935 there were only five firefighters and Chief John L. Cody on staff. While the department had two pumpers, there were only enough men to operate one. This would change after a fire at the Pilkington Yacht Basin on June 24, 1935. The Pilkington fire was the largest fire in the city's history to date. It was 1:15 p.m. when Captain R.C. Able went aboard a 150-foot boat, the Seminole that was docked at the Pilkinton Yacht Basin, later known as Broward Marine. Captain Able had been on the boat for only two minutes when there was a tremendous explosion.

Out of the five firefighters on staff Jerry Carter, then a captain, who drove the department's only pumper, was the first to arrive on the scene. The only source of water was the river, but before the pumper could get to the river planks of wood had to be laid so it would not sink into the ground.

The fire caused an estimated one million dollars in damages at a time when coffee was selling for 17 cents per pound and choice steak was selling for 21 cents a pound. Out of the 80 watercrafts docked in the marina, only three escaped harm. Shortly after this fire, Chief Cody was replaced by Chief Jordan R. "Jerry" Carter and the city hired about seven more firefighters. Chief Carter held the title of Fire Chief until 1966.

In 1940 there were 19 firefighters on staff and seven vehicles serving 18,000 fulltime residents and nearly as many "snowbirds" who came south for the winter, which doubled the population during the holiday season. The department was run on a $33,000 budget, an increase of $2,000 over the 1939 budget. Chief Carter noted that there were 71 fire alarm boxes in the city.

On December 7, 1940 the fire department received a call for help and the firefighters jumped into action. Before the night was over, one 22-year-old firefighter, Fort Lauderdale's first line of duty death, would be killed by a volt of electricity. When he heard the siren signal that help was needed, firefighter Robert Knight who had only worked for eleven days hastily threw on his shoes and raced to jump on the fire truck. As soon as they reached their destination Knight jumped off the back of the pumper and stepped into a larger puddle. He could not see through the driving rain that a live power line had fallen and lay in the water. With deadly precision the electric current shot through his body, killing him instantly. Before noticing the danger, firefighter Homer Edenfield also jumped off the truck landing in the puddle behind his friend and co-worker. The volt once more found a victim, but this time it was grounded by a pair of rubber fire boots, lessening the severity of contact, but knocking Edenfield unconscious.

In 1940, fire loss was $24,201.63. A fire in a mattress factory accounted for nearly $15,000 of this figure. By the time 1941 rolled around Chief Carter and a crew of 19 firefighters kept fire losses down to 18 cents per person. The average for the nation was $3.50 at the time. The fire department held fire losses to zero during the months of May and June of 1940.

In 1941 there were two fire stations in operation, the Central Station at City Hall and the South Side Station. Equipment consisted of a new 1941 model booster truck with a capacity of 210 gallons of water and the ability to carry two ¾-inch chemical lines. This truck answered all calls. Also on hand were three pumping engines, two with a pumping capacity of 750 gallons per minute and one that could pump 500 gallons per minute. There was also a hook and ladder truck and a fire alarm truck to carry electrical equipment for repairs to alarm boxes.

After being closed since 1928, the West Side Fire Station was reopened in 1947. Firefighters from Central Station were relocated there while the new Central Station, at 301 N. Andrews Avenue, was being built.

The beach fire station, at 2871 East Sunrise Boulevard, was built in 1948. At the time of its opening it was equipped with a 1926 ladder truck and an engine from about 1925. During this year the firefighters earned a pension plan that was based on a life insurance benefit.

Being a firehouse dog in South Florida was a hazardous job in the early 50's. The West Side Fire Station's mascot, Skipper, found out there was more to fear than fire in those days when he crossed paths with an alligator. In 1953, after hearing of the tragedy, a local woman donated a new firehouse dog, Mascara, to the department. Fire losses during the year were only $2.12 per capita. The average for the nation at the time was $4.20 per capita.

On January 1, 1957, with the establishment of the three-platoon system, the fire department needed to hire 21 firefighters to fill the ranks, increasing the total number of firefighters to 107. This new system also meant that firefighters worked five days a week. For two days they

worked the day shift from 8 a.m. to 6 p.m., then for two nights they worked the night shift from 6 p.m. to 8 a.m., followed by two days off, reducing their hours from 72-hours to 56-hours per week.

On October 4, 1959 Fire Prevention Week officially kicked off when then Mayor Russell jumped off the roof of Fire Station 1. He landed safely in a life net held by nine Fort Lauderdale firefighters. The life net was a piece of equipment carried in a compartment on Ladder 1. It was used in situations where folks might need to jump from a burning building. Also included in the festivities that year were: a parade, the crowning of Miss Flame and a visit from Sparky, the fire dog, played by Inspector Harry Kenney. During this year, Fire Station 5 was built at 2000 N.E. 16th Street.

In the 1950s and 1960s, fires were reported by either pulling an alarm box or directly calling the fire department at the telephone number Jackson 21711. This would connect you with the secretary or firefighter in the watch office at Fire Station 1. They would then alert the proper station by placing a cord in a switchboard. Next, they would punch a card into a "time clock" type of machine to record the times.

On November 28 of the same year, Driver Engineer Norman Hastings was training near Fire Station 1 when he suddenly started having chest pains. Eugene "Doc" Dougherty was there. "He stepped out of the cab and collapsed face first into the running board of the pumper," said Dougherty. Hastings suffered a massive heart attack and was pronounced dead at only 45-years-old and 13 years into his firefighting career. Hastings was Fort Lauderdale's second line of duty death.

In 1963, the city's fire loss came to only $1.03 per person; the national average that year was $9.50 per person. Total damage from the building fires for 1964 was $195,000, a figure that works out to $1.43 per person, one of the lowest averages in the country. Firefighters answered 896 alarms in 1963, but only 655 of these alarms involved some kind of fire. There were six deaths and $314,155 worth of property damage despite the theory that Broward's concrete block homes were supposed to be flame proof.

The fire department's budget for the year was $1,162,577 with a total of 178 firefighters on staff, an increase of 18 firefighters over the previous year, but less than 198 that were requested. Firefighters wore black leather helmets and black fire coats along with blue jeans and long boots. Firefighters were also given canister masks for fighting fires in smoked filled environments.

The first fireboat was purchased in 1965 under Chief Carter. The craft was a 26-foot steel hull "jet" out drive, out of Louisiana Bayou Country. The "jet" was so corroded that after only six months in Fort Lauderdale's seawater it had to be replaced.

The department built two new fire stations in 1964, Fire Station 7 at 1121 N.W. 9th Avenue and Fire Station 8 at 1000 S.W. 27th Avenue. Personnel from other stations were relocated to operate the new stations.

On March 8, 1965 a ten-story apartment building fire was called in at 2900 N.E. 30th Street. William Britt and Lieutenant Enoch Smiley were among the firefighters to respond. As they were dragging a hose line into the burning building they found a couple, Mr. And Mrs. Roskifly, collapsed in their living room. Firefighter Britt dragged the woman out of the apartment, but did not make it out of the burning building. He was making his way down the hallway when he collapsed from smoke inhalation. When other firefighters found Britt and the woman, the two were rescued from the high-rise and sent to Holy Cross Hospital where they were treated for

smoke inhalation. They were both in fair condition the following day. Mr. Roskilly was pronounced dead at the scene from smoke inhalation.

On February 1, 1966 Chief Carter passed the torch on to, then assistant Fire Chief, Monroe T. Whidby. Population for the city was 133,000 with about 211 firefighters employed to protect them. The department answered 1,358 calls that year, of which 238 were commercial fires, 195 brush fires, 150 vehicle fires and nine boat fires. False alarms accounted for 77 of the calls and fire loss equaled $722,832.

During the year 1966, Fire Station 6 was rebuilt one block west of its location in order to give its neighbor, the First Presbyterian Church, room to expand. In May 1966 the Broward Marine repair shop, which had been leased up until this time, was converted into Fire Station 9. It was located at 1015 Seabreeze Boulevard, next to the Bahia Mar Marina. Cost for the Fire Station 9 conversion was about $125,000. Chief Whidby stated at the time that it would be staffed with an engine, a ladder truck and a fireboat.

In 1966, Fort Lauderdale firefighters fought a fire at Broward Marine, 1601 S.W. 20th Street. It would prove to be the costliest fire in terms of dollars in the city's history. Ironically it happened at the same location as the Pilkington Marine fire, which up to that time, was the costliest in terms of dollars. The Broward Marine fire would destroy 17 yachts ranging from a 31-foot vessel to the 102-foot Heather IV yacht. It was aboard the 85-foot Venus that the fire began, driven west from there by 25-mile-per-hour winds. The scene was described by Jim Brown as looking like "a giant ash tray" and Chief Whidby said, "The Venus burned, exploded then sank. Gasoline tanks exploded like giant firecrackers." The conflagration took 50 firefighters three hours to put out and caused nearly two million dollars in damage.

In 1969 firefighters fought one of the deadliest battles to date. One hundred firefighters heroically struggled for three days to get a chemical fire at the Everglades Fertilizer Plant under control. The fire caused $750,000 in damages. Yellow smoke emanated from the blaze and drifted into downtown Fort Lauderdale causing the need for police to divert traffic several blocks away. "The fire started in a mix bin or hopper on the roof of the one story building," said Chief Whidby. The potential for even more of a disaster was averted when three freight cars of ammonium nitrate were unloaded and removed, by hand, from within striking distance of the fire.

From 1969 to 1970, Fort Lauderdale Fire Department answered 1,951 calls and made 21,810 inspections. There were eight fire fatalities and there were 70 injuries, about half of which involved firefighters. During this same year, the department was named the best fire-preventing department in its class in the state.

On September 20, 1970, Bobby Glenn would become the first black firefighter in the history of Fort Lauderdale Fire Department. "They did not have provisions for segregation, it was more like an army bunk, set up semi military," said Glenn who admits that it was not always an easy road. "There were times that I worried the guys might not be there when I needed help, but they always came through. They never left me in an emergency situation."

City commissioners voted on June 12, 1971 in favor of a request for $12,000 to purchase MSA self-contained breathing apparatus to replace the old canister masks that were in use.

In 1973 the City looked into adopting a unified 911 phone number for all emergencies. The 911 emergency number would replace the alarm boxes throughout the city as well as the need to directly dial each department. Telephone calls to 911 would be answered by a "call taker" who would then determine if it was a police, fire or medical emergency and transfer the call to the

appropriate dispatcher who would send the unit needed. Fire loss for 1973 was $509,611, which reflected a decline of almost $300,000 from the prior year. Firefighters responded to 1,006 fires and 876 other emergencies.

The reorganization chart of 1977 shows fire department staffed apparatus as follows: Engine 1, Squirt 1 and Ladder 1, Engine 2, Engine 3, Engine 4, Engine 4A, Engine 5, Engine 6, Snorkel 6, Engine 7, Engine 8, Engine 9, Snorkel 9, Fireboat 1, Engine 10 and Engine 11. The district commander I (battalion chief) covered Stations 1, 2, 3 and 8. The district commander II covered Stations 5, 6, 7 and 10. The district commander III covered Stations 4, 9 and 11.

In 1978 the city hired its first female firefighters, five in all; Elizabeth "Desiree" O'Donnell, Ann Lindie, Virginia Coney Galloway, Carol Kittila Welsh and Maxine Wicks. Also hired in the group was male firefighter Shane Morgan. "They will have to complete a six-week training course to prepare for a state examination," explained Fire Captain Cosimo Ricciardi. "Once they've become certified firefighters, of course, they still have to go to the field to demonstrate their abilities, just like all the other firefighters."

The Fort Lauderdale Fire Department Hazardous Materials Response Team (FLFR HMRT) was established in 1979 and was the first of its kind in Broward County. The HMRT is trained to respond to all types of hazardous materials emergencies, whether natural, accidental, or intentional.

In a 1986 letter, Fire Chief Lane described fire department staffing as follows: 275 firefighters, nine engines, three aerials, two squirts, three rescue companies, one fireboat and one airport crash truck, housed in 11 stations.

Fort Lauderdale hired a new Fire Chief in 1987 at a starting salary of $70,000. James Sparr, who left his position as Fire Chief in Wichita, Kansas, replaced former Fire Chief Fred Lane as the first outside hired Fire Chief. On April 1, 1989, Chief Sparr was credited with creating the First-Responder Program, where firefighters responded to any medical emergency.

The Incident Command System of accountability was put into operation on October 1, 1988. Rapid intervention crews, engines or ladder companies that stay ready for action at the command post, were utilized. The duty of a rapid intervention crew is solely to rescue a lost or trapped firefighter. The rapid intervention crew, or RIC team, is dispatched when a working fire is declared. Also dispatched to a working fire is a second Battalion Chief, who acts as a safety officer.

On February 6, 1989, firefighters received a new piece of equipment to add to their protective clothing, PBI sock hoods. Many of the senior firefighters felt the new hoods hampered their entry into a fire and they did not support the decision to wear the hoods. They also claimed they could gauge the heat of a structure fire by their exposed ears. If their ears started to feel burned, they would crawl lower or ventilate before they proceeded. However, the sock hood became a required part of the protective gear.

Driver Engineer Herbie Blabon was a driving force behind the fire department, and he had the members involved in many charitable events. He helped organized blood donations, burn center fundraisers and when a firefighter passed away, he made sure representatives were there to show respect for the lost brother or sister. It was primarily through the efforts of Driver Engineer Blabon and firefighter T. J. Quinn that a memorial was erected on the grounds of Fire Station 2. The granite obelisk is topped with a chrome bell off of a retired Fort Lauderdale American La France fire truck. It was Driver Engineer Blabon who inspired the formation of the Honor Guard in 1992. The first "Presentation of Colors" for the Honor Guard was at the dedication of the

firefighters Memorial on February 13, 1993. Through the assistance of Driver Engineer Bryan Hack, the Fort Lauderdale Firefighters Explorers Post was established in conjunction with the Boy Scouts of America.

In December of 1992, the Technical Rescue Team was formed. Originally named the SHARC Team, an acronym for Special Hazards and Rescue Company, the team was coordinated by Battalion Chief Joe Richter.

On March 17, 1993 the city's highest single fire death toll in history occurred when a Hess tanker truck collided with an Amtrak Silver Star train near N.W. 62 Street just west of Andrews Avenue. The inferno created from the tanker melted a railroad car and consumed several vehicles on the other side of the train. Six victims died in their cars, including the driver of the tanker. During 1993, a record 11 people would perish in fires in the City of Fort Lauderdale.

According to the Sun-Sentinel, in 1993 Fort Lauderdale was the only major city in Florida whose firefighters were not licensed to treat the sick and injured. If a patient needed anything more than basic first aid, they had to wait for county paramedics to provide more sophisticated, advanced life support.

The decision to hire Don Harkins as Fort Lauderdale's new Fire Chief in 1993 was based on his ability to bring ALS services to the City of Fort Lauderdale. He led many battles with Broward County in an effort to obtain a certificate of need. The first step was to obtain a license from the State of Florida. The county steadily refused to give the city a license that would allow the FLFR to provide its own paramedic and emergency transport service. It took two years, but in 1995 Chief Harkins finally succeeded in getting the proposal passed.

On the heels of the 1993 recession, City Manager George Hanbury placed the City's Building Department within FLFR. The former Building Department's upper management was decimated by lay-offs and reorganization was required to accommodate the new responsibilities. Deputy Chief Rick Earle, in addition to Operations, was charged with coordinating the Training, Support Services, and Administration Bureaus. Deputy Chief Keith Allen was placed in charge of the newly created Inspection Services Division, which included Fire Prevention, Construction Services (Building Permitting), Community Services (Code Enforcement), and Occupational Licenses. This structure existed from September 1994 until the Building Department was removed by newly appointed City Manager, Floyd Johnson in October 1999. At that time FLFR began full EMS services with 10 rescue Transport Units and added 12 dispatchers to the Support Services Bureau.

A new 2.9-million-dollar three-year plan was devised that would outfit eight fire stations with medical rescue units (MRU), train its firefighters to do advanced life support and hire additional paramedics. In 1996 Chief Harkins left FLFR to head the Orlando Fire Department.

Several safety changes occurred in 1994. The MSA breathing apparatus was replaced with the Interspiro breathing apparatus. The new Interspiro breathing apparatus had a "Spiro Hatch" that allowed the mask to be put on securely and the wearer could breathe outside air until the hatch was depressed, at which time they would breathe tank air. Leather fire helmets were retired from service and replaced with polycarbonate helmets. The color of the firefighters' helmets was also changed from black to a more visible yellow. Lieutenant's helmets remained red and chief officers still wore white helmets. A third safety change that occurred was the issuance of portable radios to all firefighters. Prior to this time only the Lieutenant and Driver Engineers carried a portable radio.

In the summer of 1995, the city hired Dr. Wayne Lee as the Advanced Life Support (ALS) Medical Director. By the end of this year ALS Rescue Engines went into service. On December 20, 1995 two Fort Lauderdale fire engines, Engine 3 and Engine 8 were reassigned as Rescue Engine 3 and Rescue Engine 8. On this day, the first ALS call in the city was answered by Rescue Engine 8, where a victim in Zone 8 had trouble breathing. An "IV" was started and breathing treatment was given by Fort Lauderdale firefighter/paramedics as Broward County paramedics stood by until patient care was transferred. The patient was transported to Broward General Hospital.

The third ALS unit to join the ranks was Engine 2. On its first day the crew needed to defibrillate, intubate and administer cardiac medications to an unresponsive patient.

On February 13, 1996, Engine 49 was the fourth unit to become an ALS apparatus. Its first call brought it to one of the worse homicides in the city's history where seven people were shot by a disgruntled city employee in the beach clean-up crew's meeting trailer, located by the Las Olas Bridge. When Engine 49 arrived, firefighters confirmed that five of the victims were dead at the scene, two were critically injured and one person escaped physical harm. One of the critically injured victims would not make it to the hospital.

In the same year Lieutenant Bill Findlan called a third alarm after only 28 seconds of being on scene of a blaze, the date was September 6, 1996. The oldest boatyard in the city, Broward Marina, was ravaged by the fire, which caused more than 15 million dollars in damages. Buildings, as well as multi-million dollar yachts, were scorched and severely damaged. During the fire numerous explosions were set off from high-pressure cylinders. Three hours into the fire a fifth and sixth alarm was issued, bringing units from Hollywood, Davie, Dania and Hallandale.

For the first time in the city's history, FLFR transported a patient to the hospital in a licensed fire rescue vehicle, the date was October 6, 1996. Under a joint venture agreement with Broward County, there were 32 Broward County paramedics on loan to assist with staffing the four city fire rescue transport units at Stations 2, 3, 13 and 35 as well as eight ALS fire engines. Within two years all 32 Broward County employees were returned to the county or hired by Fort Lauderdale. Broward County continued to staff four rescue trucks in the city at Stations 8, 46, 47 and 54 until October 1, 1999.

Rescue 2, the city's first new ALS transport vehicle, was given a traditional welcome and on March 14, 1997 it was pushed backward into the bay and staffed for service.

On June 12, 1997, Fort Lauderdale City Manager George Hanbury announced the appointment of Otis J. Latin Sr. as the city's Director of the Fort Lauderdale Fire Rescue and Building Department. During this same month, the department purchased four new Pierce Quantum Pumpers for Stations 2, 3, 35 and 46. They were painted the traditional red instead of the lemon/lime color, which had been used since 1985.

A new position was created by Chief Latin within the fire department on December 7, 1998, and it went into action as Battalion 29. It was a paramedic Battalion Chief who worked on a shift schedule and also served as the immediate supervisor of another new position EMS 3, a Lieutenant position.

In August 1999, the City of Fort Lauderdale hired its largest group of new recruits, sixty-four state certified firefighter paramedics in all. This was partially to fill a gap created when 30 firefighters retired in 2000. "We did not want there to be any void in service," said Fire Chief Latin. "The new recruits are needed to get our department up to the Advanced Life Support level that we need to

be at in October." The city also purchased additional medical rescue units increasing their fleet from four to ten.

As of September 20, 1999, Wilton Manors was added to the list of cities served by FLFR. Fire Station 16 is located at 533 N.E. 22 Street. The station, after being run by volunteers for 40 years, would now be staffed with Fort Lauderdale Firefighter Paramedics. Beginning on March 31, 2000, the City of Wilton Manors would also have access to Fort Lauderdale's Emergency Medical Transport Services, which replaced Lifefleet Ambulance Company as well at the city's volunteer fire department.

By October 1, 1999, FLFR would assume all ALS services in the City of Fort Lauderdale. This dissolved the joint venture with Broward County E.M.S. About this same time, the Building Department was separated from FLFR.

The entire fleet of apparatus was revamped from 1998 to 1999. All of the new vehicles were painted red and each of the engines and rescue trucks were advanced life support capable, staffed with at least one paramedic and one EMT. Rescue trucks were staffed with two paramedics. Each of the new engines was equipped with an electric Hurst tool power unit with pre-connected hose reels, which made for a fast deployment of extrication tools.

On October 17, 2001, FLFR held a groundbreaking ceremony for a new Fire Rescue Station and Administration Building. The ceremony was held at the construction site of the new facility located at 528 N.W. 2nd Street in Fort Lauderdale. The first floor of this fire station like every fire station since this date is equipped with a community room and training room.

In 2002 Battalion 29 and EMS 3 merged into one position at the rank of Captain. The new call sign was EMS 29 and was responsible for all EMS calls and the "Safety" position at all fires.

September 2002, Fort Lauderdale annexed Melrose Park and the Riverland area adding 12,493 residents and 4,244 homes to the area protected by FLFR. A second rescue truck was added to Fire Station 47 to assist with the added call volume.

In 2006, FLFR, with the assistance of the new Medical Director, Dr. Nabil El Sanadi, instituted the Joint EMS protocols. The switch to these protocols was a landmark for patient treatment in the City of Fort Lauderdale. FLFR was now independent of every other city in the county when it came to the medical treatment of its citizens. Fire Chief James Eddy was appointed Fire Chief in 2007.

On March 10, 2008, a fire broke out in a multi-story high-rise on 100 SW 18 Ave. There was heavy smoke and fire showing upon arrival and reports of victims trapped. FLFR rescued 40 people from the building using ground ladder and interior stairwells. Two firefighters were also transported with injuries.

Fire Station 47 was rebuilt and opened to house the Fort Lauderdale Technical Rescue Team. The station houses two MRU's as well as an engine company and a heavy rescue. The response area for Station 47 encompasses two major highways, numerous schools, several marine facilities, a railroad yard, a major warehouse district and a large residential community.

Fire Station 53 at 2200 Executive Airport Way was opened. This station combined Fire Station 88 and the Airport Fire Station 53. The station houses one battalion chief, one aircraft rescue truck (ARFF), the Fort Lauderdale Hazardous Materials Team, one engine and a medical rescue unit. It is also the home of the FLFR Training Special Operations Bureau and Emergency Management.

Assistant Chief Jeffrey Justinak was appointed Fire Chief in 2009. Fire Chief Justinak was the first Fire Chief in over 24 years to be promoted from within the ranks to Fire Chief.

December 2009, TRT was split into two separate teams. The marine (dive) unit remained at Fire Station 49 and the TRT (rope, confined space, trench, and collapse) team moved to Fire Station 47. Ladder 49 was also moved to Fire Station 13 and renamed Ladder 13.

In 2010 the new Fire Station 3 opened its doors. It replaced the old station that was built in 1984 located on the same location.

Fire Station 29 also reopened its doors in April 2010 replacing the original station that stood on the exact same location. The original station was built in 1959.

Fire Station 49 also opened in 2010. This station houses Engine 49, Ladder 49, and Rescue 49 as well as the fireboat and back up fireboat. As mentioned previously, it houses the marine rescue team.

In 2012 the new Fire Station 35 opened its doors on the site of the original Fire Station 35 one block east of 1841 E. Commercial.

In 2013 Fire Chief Robert F. Hoecherl was named Fort Lauderdale's twenty fourth Fire Chief and was promoted from within the fire department.

In 2013 Fire Station 46 was rebuilt next to Mills Pond Park at 1515 NE 19 street.

In 2014, FLFR, under the leadership of Fire Chief Robert Hoecherl, began the Accreditation process.

October 2015 Rescue 202 was put in service at Fire station.

November 2015, zone 8B was renamed 3F and zone 46D was renamed 8D.

November 2015, the Training Bureau was designated its own training Engine V-4586.

In 2016, Dr. Benny Menendez was appointed as the Departments Medical Director.

In 2017, Ladder 13 was relocated to station 49 and renamed Ladder 49 as part of the Dive Rescue team.

In 2017, Fort Lauderdale Fire Rescue was accredited for one-year through the Commission on Accreditation of Ambulance Services (CAAS).

In 2018, Fort Lauderdale Fire Rescue was Accredited for an additional two-years through the Commission on Accreditation of Ambulance Services (CAAS).

July 2018, Implemented an Automatic Aid agreement with Oakland Park Fire Rescue.

July 2018, Rhoda Mae Kerr was appointed as the twenty fifth Fire Chief and First Female Fire Chief in Departments history.

In 2018, FLFR created its own Internal Professional Standards Bureau.

January 2019, the TRT team was relocated from Fire Station 47 to Fire Station 29 in attempt to be more centrally located in the City.

In 2019, Fire Chief Kerr was designated as the Interim Assistant City Manager.

May 2019, Alexandre O'Connor was promoted to first female Ocean Rescue Chief.

Service Milestones

2004

- During FY 2003/04 the Public Safety Grants Office was able to obtain a total of $1,969,256 in grant funds in support of Fire rescue efforts. These grant funds, coupled with cash

matches and other funding, leveraged a total of $2,333,537 to support the purchase of Fire rescue equipment, equipment and medical supplies for emergency preparedness, exercise equipment and wellness physical program, safety equipment and other equipment, and training efforts.

- FLFR assumed responsibility for Ocean Rescue effective October 1, 2003, with an operating budget of $1,831,533. During that fiscal year, accomplishments achieved included: new radio distribution, training and integration with Fire Rescue dispatch, new radio designations for all personnel, design and distribution of new Ocean Rescue badges, patches, uniforms, new maps, re-numeration designating locations of life guard towers, TeleStaff and SunPro Incident report writing training for all Ocean-Rescue employees; and certification and/or re-certification of personnel.

2005

- FLFR continued with software configuration, interface development with CAD, billing, LifePak 12 defibrillators, and server connectivity with the Lifenet EMS reporting system. The department made the transition from a paper report to computer reports (paperless system).
- All Ocean Rescue personnel earned a medical certification of first responder. In addition, all new Ocean Rescue employees received first responder training prior to being placed on the beach protecting citizens and visitors. New state-of-the-art medical equipment including Automatic External Defibrillators (AED) were placed in each lifeguard tower. Fort Lauderdale Ocean Rescue earned a certification from the United States Life Guard Association (USLA) by meeting or exceeding national standards for policy and procedures and training.
- Implemented Federal Emergency Management Agency (FEMA) Assistance to Firefighters Grant program. The program provided a total project cost of $419,900 and authorized the staff to execute the program. The program introduced a wellness and fitness regime modeled after the International Association of Firefighters - International Association of Fire Chiefs (IAFF-IAFC) Fitness and Wellness Joint Initiative program to promote job specific physical fitness through strengthening and conditioning. Its purpose is to create a comprehensive wellness and fitness program for 100% of our career Fire rescue personnel.
- FLFR placed a new 28-foot fireboat in service with a 1,000-gallon per minute fire pump and outfitted for dive rescue operations. The older fireboat was kept as a reserve and used during large events such as the International Boat Show, 4th of July and Winterfest Boat Parade.
- A $40 million bond issue to replace nine fire stations and build a new facility in the southeast section of the City was overwhelmingly passed in November 2004.
- Dr. Nabil ElSanadi becomes medical Director for FLFR. Dr. El Sanadi brought an entirely new perspective on medical care to the department.

- The TRT team converted to a "dry suit only" policy. This policy protects divers from being exposed to hazardous elements in the water thus making it safer for all divers and victims.

2006

- Through grant funding, the EOC was updated to help meet the needs during activation. Technology was upgraded to include the purchase and implementation of new computers, Personnel Data Assistant (PDA's), satellite phones, new furniture, and radios.
- Successfully processed RFP's for the purchase of nine rescue units, one HAZMAT trailer, and one aircraft fire rescue vehicle.
- Through the Metropolitan Medical Response System (MMRS) grant program FLFR purchased four (4) emergency response trailers stocked with enough medical supplies and equipment to treat 1000 chemical exposure injuries, 10,000 biological exposure injuries, and 25,000 radiological exposure injuries.

2007

- The Life Net EMS/MedUSA electronic EMS reporting system was fully implemented.
- Continued implementation of new technologies (MDT's – Mobile Data Terminals).
- James Eddy was hired as Chief of the Department replacing Gerald Simon.
- Completed State re-certification for all Emergency Medical Technicians (EMT) and Paramedics.
- Continued implementation of inventory control system.
- Officer development program integrated with all department employees from the rank of Lieutenant to Assistant Fire Chief.
- Critical Incident Stress deployment program employed to deal with all department related incidents, as needed or requested.
- Comprehensive Hazardous Materials/Airport Rescue Firefighter training for all personnel assigned to specialty teams.

2008

- As part of the Fire Bond, Fire Station 53 and Fire Station 47 were completed and placed into service.
- Continued implementation of new technologies with MDT's.
- The Fire Prevention bureau successfully implemented the use of laptop computers, which allow Field Inspectors to input inspection data in the field.
- The Ocean Rescue Division successfully recruited, hired, and staffed the addition of five (5) new lifeguard towers on the area known as "North Beach". The addition of these new towers increased service levels to an area of the beach that was previously unprotected.
- The Communications and Ocean Rescue Divisions were reorganized into the FLFR Operations Division.
- Completed biennial State re-certification for all EMT's and Paramedics.

- Implemented Management transitional, Officer, and Pre-Officer development programs with employees from the rank of Driver-Engineer through Assistant Fire Chief.
- Continued implementation of Critical Incident Stress Debriefing.
- Comprehensive Hazardous Materials/Airport Rescue Firefighter training for all personnel assigned to specialty teams.

2009

- Placed new fire apparatus into service replacing aging fleet.
- The Fire Prevention Bureau continued to implement the use of laptop computers.
- Three (3) CBRNE classes were offered through UASI funding that included Rope Rescue Technician, Trench Rescue Technician, and Vehicle and Machinery Rescue (VMR) training in support of our Technical Rescue Team (TRT). A total of 88 students attended the three (3) classes.

2010

- Implemented a new EMS protocol, Induced Hypothermia, which resulted in a dramatic increase in patient survivability and reduced neurological deficit for those patients who have suffered a cardiac arrest or have been a drowning victim.
- New engines, ladders, and a tower ladder were placed into service.
- FLFR was awarded $1,067,861 Assistance to Firefighters Grant (AFG) for the purchase and replacement of all Cardiac Monitor Defibrillators with the Lifepak 15.
- Awarded $642,432 from the Metropolitan Medical Response System (MMRS) from the United States Department of Homeland Security for program enhancements (WMD).
- A Structural Collapse Technician course was provided to our personnel to further strengthen the Technical Rescue Team (TRT) capabilities. This training was funding with Urban Area Security Initiative (UASI) funding.
- Security improvements at the department's warehouse (Support Services) were completed.
- The dispatch alerting system at Fire Station 2 was replaced to fully integrate the system Citywide for all Fire Stations.
- Developed/Revised the "Standard Operating Procedures & Rules and Regulations".
- Construction was completed and staff moved into Fire Stations 3 and 49 as part of the 2004 Fire Bond. Land was also acquired for the construction of Fire Station 35.
- Installed a new Computer Aided Dispatch (C.A.D.)
- Completed a "Feasibility Study", at the request of the Fire Bond "Blue Ribbon Committee", that confirmed the design and locations of the Fire Stations, as proposed in the Fire Bond .

2011

- Implemented ST elevation Myocardial Infarction or "STEMI" protocol that has decreased the time between a heart attack call is received and definitive treatment at the hospital (AKA "Door to Balloon time").

- Implemented the recommendations of the Fort Lauderdale City Auditors Office (CAO) regarding controlled substances.
- Applied for and received Certificate of Public Convenience and Necessity (COPCN) COPCN Class 2 ALS transfer service license.
- FLFR firefighter developed and implemented the Pre-Hospital Post Exposure Handbook. This handbook is now utilized by every Fire Rescue agency in Broward County as the "Go To" reference for exposure to pathogens.
- The procurement process was completed and a vendor was selected to replace the electronic patient care reporting system (ePCR). All personnel were trained and the department fully integrated the new system.
- Published an abstract that was showcased at the Chicago American Heart Association National Meeting. This abstract identified the importance of pre-hospital stroke evaluation and the positive result on patient outcomes.
- Completed multiple UASI, MMRS, and Broward County EMS grant performance cycles with the expenditure of $1,071,672 for Interoperable Communications, CBRNE Equipment, Special Operations Training, Critical Facility Hardening, and EOC Enhancements.
- Awarded $321,221 from the Metropolitan Medical Response System (MMRS) from the United States Department of Homeland Security for program enhancements (WMD).
- Awarded $250,000 from the Assistance to Firefighters Grant (AFG) for Shipboard Firefighting Training.
- Awarded $236,818 Urban Areas Security Initiative (UASI) Grant from the United States Department of Homeland Security for program enhancements.
- Implemented "Web-Based Medical Protocol" and recertification training for all EMT and Paramedic personnel.
- Completed biennial medical recertification for all EMT and Paramedics.

2012

- Instituted new Emergency Medical Services (EMS) reporting system (Triptix).
- Initiated research, conducted a feasibility study, and developed an inter-facility, non-emergency medical transport service.
- Implemented a community based "Baby Sleep Safe" initiative to reduce incidents of infant mortality.
- Modernized the City's Emergency Operations Center (EOC), making it more professional, efficient, functional, and in-line with national standard models.
- As part of the 2004 Fire Bond, Fire Station 35 was completed in May 2012.

2013

- FLFR developed the Comprehensive Emergency Management Plan (CEMP) which guides City efforts to prepare for, respond to, mitigate, and recover from emergency and disasters.

- The Emergency Management Coordinator received final approval to be a FEMA Instructor. This allows the Emergency Manager to deliver national emergency management training in support of FEMA's mitigation, response, recovery, and preparedness programs.
- The volunteer Community Emergency Response Team (CERT) competed in the first annual CERT Citywide Competition. This event increased member coordination, knowledge, skills and abilities.
- The Continuity of Operations Plans (COOP) was developed to ensure performance of essential functions such as the ability to operate stations and respond to incidents while under a broad range of circumstances including natural, manmade, terrorism, CBRNE (chemical, biological, radiological, nuclear, and explosive) and many other disaster situations.
- Fire Prevention adopted a recognized formula to determine productivity and effectiveness, comparing the percentage of inspections performed by bureau fire inspectors in commercial occupancies to actual fire incidents to determine how many fires were prevented or could be prevented by an inspection or a community outreach program.
- As head of the Fire Prevention Bureau, the Fire Marshal was designated "Fire Marshal of the Year" by the Broward Association of Fire Marshals.
- Achieved consensus with the marine industry regarding challenges associated with commercial spray-painting.
- Continued expansion of non-emergency Inter-facility Transport services.
- Augmented all Special Event Operational Plans into National Incident Management System (NIMS) compliance. NIMS is an incident management system for large-scale or multi-jurisdictional incidents. It establishes a uniform set of processes and procedures that emergency responders at all levels of government will use to conduct response operations.
- Created an EMS module training for all probationary employees. These modules will assist all probationary employees with familiarization of FLFR EMS protocols, procedures, and rules and regulations.
- Became a Certified Training Center (CTC) with the American Heart Association, the first Fire rescue department in the State approved as a training center in all three disciplines in the last 5 years. This enables FLFR to teach citizens as well as Public Safety employees in Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), and Basic Life Support/Cardio Pulmonary Resuscitation (BLS/CPR).
- Implemented new medical devices including the video laryngoscopes, EZ-IO devices, and outfitted four Rescue units with equipment needed for pediatric intensive care transports.
- Implemented Shipboard firefighting training for land and water based firefighting.
- Conducted an in-house forty-hour Officer Development course.
- From 2004 to 2013 received "outstanding" rating by the state of Florida after State inspections of EMS system.

2014

- Robert F. Hoecherl was named Fire Chief replacing Jeffrey Justinak.
- FLFR began the Accreditation process through the Center for Public Safety Excellence Technical Advisor Program.
- August 1st, 2014, FLFR transferred to the Regional Communications System.
- Fire Station 46 construction was completed, and the station was opened July of 2014.
- The construction project to rebuild Fire Station 54 started during the summer of 2014.
- FLFR was awarded an AFG grant for the purchase of 158 Scott self-contained breathing apparatus to replace outdated equipment.
- Implemented an Active Shooter standard operating procedure and issued ballistic body armor (vest/helmets) to all operations apparatus.
- Continued to have a near 0% rate of death by drowning in areas protected by Fort Lauderdale Ocean Rescue lifeguards during hours of operation.
- Conducted large-scale Mass Casualty Incidents (MCI) exercises with local fire rescue departments and outside agencies to prepare for any potential large scale event.
- Continued expansion of non-emergency Inter-Facility Transport services.
- Completed shipboard firefighting training for land and water based firefighting.
- The Training Bureau expanded the fire and medical training offered to employees to include monthly CQI case scenarios, monthly fire performance objectives, hands on training (HOT), monthly EMS HOT training.
- Held a 3 day Strategic Plan session with the CPSE Technical Advisors.
- Following the recommendations made during the creation of the CR/SOC Battalion 35 was moved from Fire Station 53/88 to Fire Station 16.
- Rescue 47, 49 and 53 were replaced with new apparatus.
- FLFR started a public relations / social media campaign.
- Deputy Chief Heiser was named the department's Public Information Officer.
- A fire prevention public education trailer was placed into service
- The fireboat had the motors replaced at a cost of $60,000.
- The fire assessment fee was increased to $225.00 per residential dwelling.
- Published FLFR's first Strategic Plan, October 31st, 2014.

2015

- Fort Lauderdale Fire Rescue obtained Accredited Agency Status through the Center for Public Safety Excellence. The accreditation criteria required the department to track and monitor 253 performance measures, develop a five year strategic plan, and draft the department's first standard of cover document, by which a thorough risk assessment of the community was completed.

- Fort Lauderdale Fire Rescue was rated by the Insurance Services Offices (ISO) as a Class 1 Fire Department. The current rating will result in a decrease in overall fire insurance premiums.
- Fort Lauderdale Fire Rescue was awarded an $874,312 Port Security Grant via FEMA: US Department of Homeland Security/Port Security Grant Program with a $291,437 (25% local cash match). The grant was used to purchase of a 40' fire rescue rapid response watercraft.
- The Continuity of Operations Plans (COOP) was updated to ensure performance of essential functions, such as the ability to operate stations and respond to incidents while under a broad range of circumstances including natural and manmade disasters, CBRNE (chemical, biological, radiological, nuclear, and explosive), and many other disaster situations.
- Continued to implement the department's succession plan to ensure personnel are prepared for all dimensions of appropriate leadership and operational functionality.
- Conducted an Employee and Community Hurricane Preparedness Fair to increase education on emergency preparedness and mitigation.
- Fort Lauderdale Fire Rescue placed into service three new fire engines and eleven medical rescue transport vehicles which will be in service in FY 2016. These apparatuses were sought to increase the availability and reliability of our fleet for effective incident response.
- The Emergency Management Bureau researched, hosted and facilitated a Weather Spotter training course instructed by the National Hurricane Center.
- The Emergency Management Bureau received the National Storm Ready designation by the
- Finalized transition of 911 regional communications coordinated through the Broward Office of Communications and Technology.
- Fort Lauderdale Fire Rescue renewed a Fire and Medical Services contract with the City of Wilton Manors. This service indirectly improves the services to neighbors and visitors of Fort Lauderdale because it provides an additional engine and medical rescue unit at the Wilton Manors station. These apparatuses fill a response gap created in the central portion of the City that provides additional units to the northern borders of the City and backs up the heavily utilized downtown units.
- Extended Ocean Rescue hours two additional hours per day.
- Purchased digital signage televisions in all fire stations to enhance internal communications.
- Continued to provide excellent response times while at the same time being challenged by a steadily increasing population which has increased calls for service by 12% over the prior year.
- Trained personnel and placed into service 155 Self-Contained Breathing Apparatus (SCBA).
- Relocated Battalion 35 from Fire Station 53 to Fire Station 16; providing better response times to all risk levels.

- Conducted a full-scale active shooter emergency response exercise with the Fort Lauderdale Police Department to identify preparedness capabilities and deficiencies, the first of its kind in South Florida.
- Conducted Incident Safety Officer Training through the National Fire Academy for all Chief Officers and Lieutenants on the current Battalion Chief promotional list.
- Trained tri-county area fire departments and law enforcement agencies in the treatment and transport of Ebola patients.
- Conducted Advanced Cardiac Life Support Classes during the months of February and August.
- Conducted Pediatric Advanced Life Support Classes during the months of March and September.
- Technical Rescue Teams (TRT) and Hazardous Materials Team (Hazmat) hosted and participated in numerous county wide specialty training exercises.
- Added an additional rescue apparatus to be stationed at Fire Station 2/8. The unit will improve the overall system performance.

2016

- Awarded the Assistance to Firefighters Grant (AFG) wellness/fitness program in the amount of $470,810 for Firefighter physicals, body scans, and immunizations. This also includes Ocean Rescue, and civilian support staff.
- Awarded the fiscal year 2015 DHS/FEMA Port Security grant for two vessels.
- One police marine unit rigid hull inflatable (Brunswick/RHB) 30-foot boat with a grand award amount of $160,000.
- One fireboat 43-foot FireStorm (Metalcraft) with a grant award amount of $1,005,750.
- Maintained CFAI accredited agency status and ISO Class 1 rating.
- Awarded the fiscal year 2015 Urban Area Security Initiative (UASI) grant in the amount of
- $151,674.
- Community Emergency Response Team (CERT): $25,000
- Emergency Operations Center Enhancements: $63,369
- Fort Lauderdale Police Marine Unit Forward Looking Infrared (FLIR): $9,000
- Fort Lauderdale Police SWAT Communications gear: $32,500
- Regional Citizen Corp training and drills: $21,805
- Placed the new Peak Hour Rescue truck into service in the downtown area from 09:00 – 21:00 hours each day to enhance response times due to the increased demand for service.
- Replaced aging fleet with 11 new Advanced Life Support (ALS) Rescue transport vehicles.
- Replaced aging fleet with 3 new Advanced Life Support (ALS) Fire Engines.
- Installation of exhaust extraction system at Fire Station 2 in an effort to reduce and mitigate the potential for carbon monoxide and carcinogens exposure in the apparatus bay.

- Yellow dot program was implemented in corporation with Broward County Fire Chiefs Association. This program allows easy identification of medical issues and medications during traffic incidents.

2017

- Implemented the Assistance to Firefighters Grant (AFG) wellness/fitness program for the firefighters' physicals, body scans and immunizations. This grant also includes Ocean Rescue and civilian support staff. The grant award amount is $479,000.
- As part of the 2004 Fire Bond, continued work towards the construction of Fire Stations 8, 13, and 54.
- Maintained Commission on Fire Accreditation International (CFAI) accredited agency status and Insurance Services Office (ISO) Class 1 Department rating.
- Applied for Commission on Accreditation of Ambulance Service (CAAS) Accreditation.
- Applied for Emergency Management Accreditation Process (EMAP).
- The Training Bureau recruited, hired, and trained 33 new firefighter/paramedics to fill newly funded positions as well as vacated positions due to attrition.
- Received Public Emergency Medical Transport (PEMT) expense reimbursement with an estimated impact of $793,000 in new revenues.
- Dedicated a decommissioned Rescue unit to the Community Emergency Response Team (CERT).
- Purchased one new Advanced Life Support transport vehicle and one new Advanced Life Support fire engine.
- Continue to operate the 12-hour Advanced Life Support Peak Demand Rescue Unit.
- Staffed and placed into service an additional full-time 24-hour Advanced Life Support Medical Rescue Unit stationed at Fire Station 2.
- Assigned an additional ten firefighter/paramedics to create two 3-person medical rescue units in the busy downtown area of the City.
- Placed into service and conducted extensive in-service training with the new 43-foot Fireboat.
- Performed over 1,000 pre-fire planning surveys, and conducted 102 community outreach events.

2018

- Completed Phase II of the LMS (Learning Management System) project. The purchase of this software data transfer tool provides data connectivity of the records within FireRMS to the records in the LMS for reporting purposes.
- Enhanced the Emergency Operations Center (EOC) capabilities through the addition of equipment and facility renovations.
- Replaced the entire vehicle exhaust removal system at Fire Station 2, a core competency for CFAI Accreditation and re-accreditation.

- Developed a well-defined Wellness Program, a core competency for CFAI Accreditation and reaccreditation.
- Funded the second year of life scan physicals for all employees, a core competency for CFAI Accreditation and re-accreditation.
- Acquired Commission on Accreditation of Ambulance Service (CAAS) Accreditation.
- Acquired Emergency Management Accreditation Process (EMAP).
- Maintained Commission on Fire Accreditation International (CFAI) accredited agency status.
- Maintained Insurance Services Office (ISO) Class 1 Department rating status.
- Trained the City's police department and Wilton Manors Police in life-saving administrations of Narcan after receiving an $86,000 grant. Training focused on recognizing a suspected Opioid patient and on the proper use of the drug to counteract overdoses from Opioids.
- Placed one new Nissan Frontier truck into service in support of the Fire Inspector to address the needs and challenges that are fire-related with a proactive approach to his role as part of the Nighttime Economy team.
- Additionally, the efficiency of the Fire Boat was increased by replacing dive gear and outfitting the boat. The equipment onboard the boat will reduce the time to transfer equipment to the boat prior to an emergency response, with the goal being to reduce response times.
- Placed the new atmospheric monitor into service to ensure our HazMat team has the tools necessary to monitor environments for harmful substances.
- Created an "operational dashboard" and a "unit dashboard" to view dispatch information for Fire Rescue in conjunction with the City's GIS Division accessible through a web connection within the City network. Dashboards provide direct access to CAD information and unit statuses, making it possible to maintain situational awareness and reduce information delays.
- Enhanced command board capabilities and accountability with a new Tablet Command contract by issuing iPads to all operational chief officers.
- Funded a uniform allowance for CERT and Fire Explorer Programs, Advertising, Brochures, and Education.
- Purchased two Kawasaki Mules for use during special events.
- Obtained approval for the location of Fire Station 8 and started construction on Fire Station 54.
- Completed the 5-year installation and replacement project for fire inspector laptops, docking stations, and related accessories
- Continued to operate the 12-hour Advanced Life Support Peak Demand Rescue Unit.
- Acquired one new Advanced Life Support fire engine and phased out the older unit to increase in-service time for the apparatus.

- Increased the quality of care and reduced response times through the addition of staffing to Rescue trucks, thus keeping the Engine in service on most medical calls in zone 2 and 8.
- Purchased and replaced HazMat ID equipment used in Hazmat incidents.
- Replaced the Bunker Gear extractor machines used to clean and maintain firefighter gear.
- Purchased new long sleeve shirts and body wipes to provide additional protection from the soot and toxic residues involved in a post-fire atmosphere.
- Purchased half-face breathing respirators to be used with CO and Hydrogen Cyanide detectors for use during Fire Investigations for long periods of the investigation when deemed safe.
- Placed two new multi-gas monitors into service for SQ47 and HM88 to update the gas monitors on both vehicles to current technology.
- Installed new Hazmat monitors (multiRAE and AreaRAEs) on Fire Boat 49.Placed new carbon monoxide (CO) monitors on each LifePak 15 rescue and suppression units

2019

- Re-allocated a 3rd person to rescue units 2, 3, 247 and 35. By placing a 3rd person on four (4) of the medical rescue units, it has allowed a single apparatus to respond to incident types that would otherwise require two apparatuses to respond. This increases Fire Rescue's overall unit availability within the City.
- Created the promotional supervisory position of Lieutenant for the transport rescue trucks by allocating a 3rd person on a medical rescue unit. This new position has increased supervision in field training as well as quality assurance of patient care in the field, while simultaneously decreasing the workload demand of Fire Rescue personnel per incident.
- Increased accountability and quality of care with the promotion of 16 Lieutenants, forming a full complement of advanced life-saving personnel and integrating essential quality control to units.
- Distributed iPads with tablet command to each truck allowing them to see real-time information on active emergency incidents throughout the City with live unit status and locations.
- Created a foundation for comprehensive wellness with LifeScan physicals. LifeScan focuses on longevity of firefighter/paramedics and addresses job-related exposures that may cause cancer and terminal illness; it focuses on reducing impact to long-term health care costs.
  Guided and reorganized staffing with a reengineered department structure; revamped resource assignments with the goal of reducing overtime and enhancing focus on EMS issues across a bureau of 457 full-time employees.
- Enhanced the data analytics and accounting management for the Fire Rescue EMS Bureau by assigning a new budgeted position related to EMS billing issues, inquiries and collections.
- Created an enhanced "Water-Safety" presentation for elementary schools as well as a "Career Day" program at local high schools.

- Imparted two 40 hour United States Lifesaving Association Compliant Surf Rescue courses using City facilities, equipment and off-duty personnel; the funds generated by these courses paid for equipment, travel and uniforms for one national lifeguard and seven Florida local tournaments.
- Created a five-year community driven Fire Rescue Strategic Plan for 2019-2024 with the Commission on Fire Accreditation International (CFAI), by engaging external stakeholders from the public and internal Fire Rescue employees across all rank levels and disciplines within the organization.
- Attained the Commission on Accreditation of Ambulance Services (CAAS). CAAS provides a quality assurance system to help identify areas for improvement in service delivery and where standards exceed those of state or local regulation. CAAS standards increase operational efficiency while decreasing risk and liability to our organization and municipality.

Financial Basis

FLFR is primarily financed by the City's general fund. The City's General Fund is funded through property taxes (40.2%), Taxes (19.3%), Licenses & Permits (1%), Inter-governmental (6.1%), Charges & Services (6.6%), Fines & Forfeitures (0.6%), Fire Assessment Fee (11%), and Miscellaneous Revenues (6%). The fire department annual adopted budget for fiscal year 2019 was $94,008,602 and the estimated budget for 2020 is $ 98,873,108.

Figure 1: Fire Assessment Costs for FY2020

The Fire Rescue Assessments to be assessed and apportioned among benefited parcels pursuant to the Cost Apportionment and Parcel Apportionment to generate the estimated Fire Rescue Assessed Cost for the Fiscal Year commencing October 1, 2019, are as follows:

RESIDENTIAL PROPERTY USE CATEGORIES			
		$311	
NON-RESIDENTIAL PROPERTY USE CATEGORIES			
Building Classification (sq ft)	**Commercial**	**Industrial/Warehouse**	**Institutional**
< 1,999 square feet	$476	$78	$1,273
2,000 - 3,499	$951	$156	$2,546
3,500 - 4,999	$1,663	$273	$4,455
5,000 - 9,999	$2,376	$390	$6,364
10,000 - 19,999	$4,752	$779	$12,727
20,000 - 29,999	$9,503	$1,558	$25,453
30,000 - 39,999	$14,255	$2,337	$38,179
40,000 - 49,999	$19,006	$3,115	$50,905
50,000 -59,999	$23,758	$3,894	$63,631
60,000 -69,999	$28,509	$4,673	$76,357
70,000 -79,999	$33,260	$5,451	$89,084
80,000 - 89,999	$38,012	$6,230	$101,810
90,000 - 99,999	$42,763	$7,009	$114,536
> 100,000 square feet	$47,515	$7,787	$127,262

Figure 2: FLFR Financial Summary (reprinted from City FY2020 Adopted Budget)

Fire-Rescue - General Fund

Departmental Financial Summary

Financial Summary - Funding Source

	FY 2018 Actual	FY 2019 Adopted	FY 2019 Estimate	FY 2020 Adopted	FY 2019 Adopted vs. FY 2020	Percent Difference
General Fund - 001	$ 87,585,027	94,008,602	98,461,560	97,372,948	3,364,346	3.6%
Total Funding	**87,585,027**	**94,008,602**	**98,461,560**	**97,372,948**	**3,364,346**	**3.6%**

Financial Summary - Program Expenditures

	FY 2018 Actual	FY 2019 Adopted	FY 2019 Estimate	FY 2020 Adopted	FY 2019 Adopted vs. FY 2020	Percent Difference
Office of the Chief	13,366,575	13,513,583	13,837,391	14,541,263	1,027,680	7.6%
Fire-Rescue	74,218,451	80,495,019	84,624,169	82,831,685	2,336,666	2.9%
Total Expenditures	**87,585,027**	**94,008,602**	**98,461,560**	**97,372,948**	**3,364,346**	**3.6%**

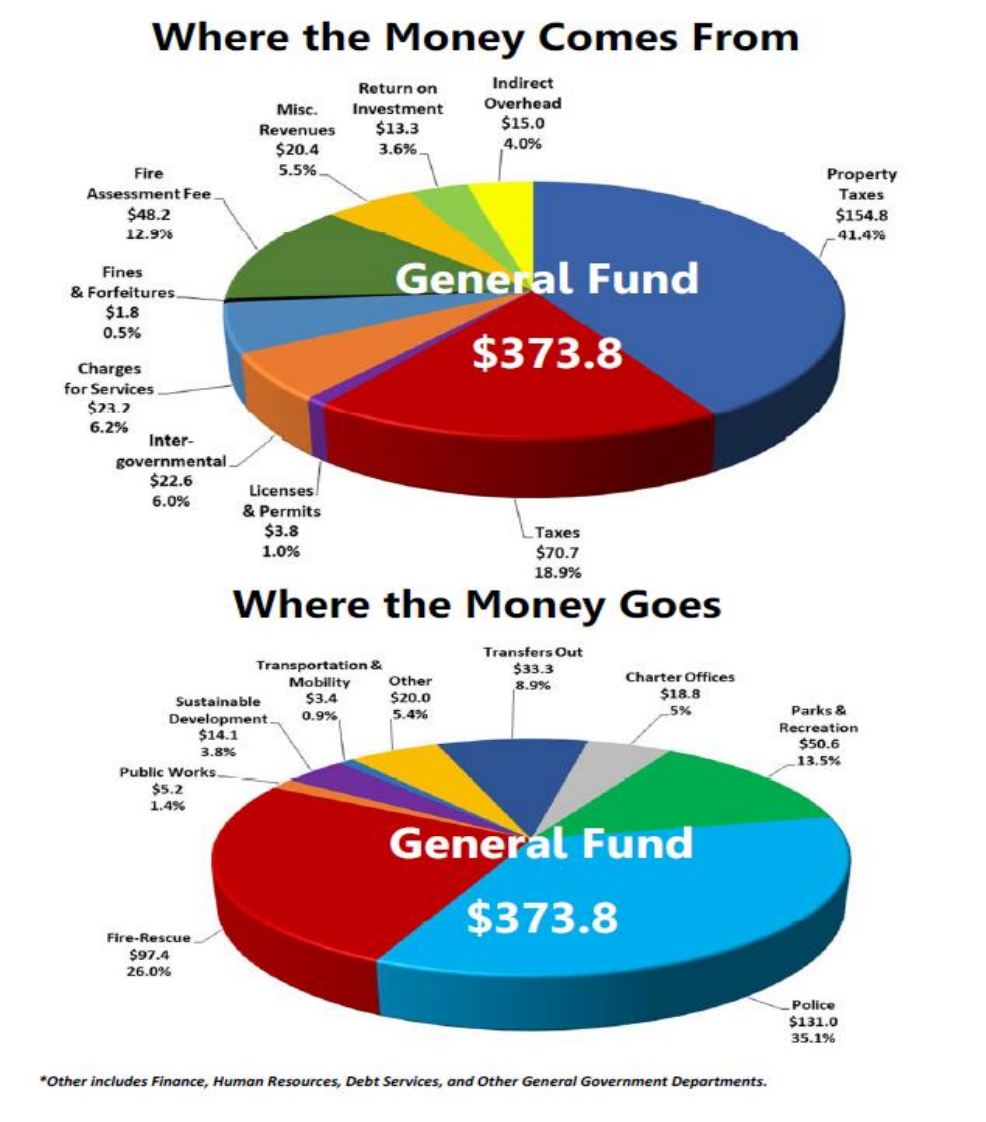
Financial Summary - Category Expenditures

	FY 2018 Actual	FY 2019 Adopted	FY 2019 Estimate	FY 2020 Adopted	FY 2019 Adopted vs. FY 2020	Percent Difference
Personal Services	71,507,179	75,158,801	79,618,194	79,177,352	4,018,551	5.3%
Operating Expenses	15,642,821	18,026,301	18,019,866	18,102,241	75,940	0.4%
Capital Outlay	435,027	823,500	823,500	93,355	(730,145)	(88.7%)
Total Expenditures	**$ 87,585,027**	**94,008,602**	**98,461,560**	**97,372,948**	**3,364,346**	**3.6%**
Full Time Equivalents (FTEs)	*484.8*	*485.8*	*485.8*	*484.8*	*(1.0)*	*(0.2%)*

FY 2020 Major Variances

Personal Services	
Increase due to the 75th percentile pay range adjustments for salaries, benefits, and overtime	$ 3,291,899
Decrease in overtime expenses	(247,654)
Increase in health care expenses	375,290
Decrease in workers compensation expenses	(389,946)
Removal of one (1) Fire Inspector for the Nighttime Economy Division	(70,247)
Increase in Social Security/Medicare expenses	246,998
Increase in allocation of pension obligation bond payment	332,808
Operating Expenses	
Decrease in tools and equipment for one-time funding for body armor replacement, uniforms, and bunker gear	(135,000)
Increase to fund a Chaplaincy Program	30,000
Decrease in insurance charges	(209,179)
Increase in fleet operation and management expenses	109,779
Increase in post-retirement pay step (PPS) expenses	107,426
Increase in computer maintenance due to the addition of First Due Sizeup, Target Solutions, Power Document Manangement Simplified (DMS), and Operative Intelligence Quotient (IQ) computer software programs	108,047
Operating Expenses	
Increase in building lease for Ocean Rescue headquarters	43,500
Increase in data procurement supplies for SMARSH application and Pulse Point softwares	29,500
Capital Outlay	
Decrease in one-time equipment expenses for replacement of thermal imaging cameras, additional power lift stretchers, and self contained breathing apparatus equipment	(646,500)
Decrease in one-time vehicle expense for two (2) Fire Rescue HumVees and three (3) administrative vehicles	(150,000)
Increase in computer software due to TeleStaff upgrade	66,355

Figure 3: General Fund Revenue and Expense Graphs - FY2020 Adopted Budget



Annually FLFR is given guidance through the Office of Management and Budget department to assist with the preparation of a budget for the upcoming fiscal year. The Fire Chief and her executive staff review expenditures and capital investments for the next budget cycle and estimate the costs associated. They also lay out goals and objectives for the New Year. All increases in capital investments and the overall budget must be approved by the City Manager and adopted by the Mayor and Commissioners.

The annual fire assessment fee includes costs to improve and operate FLFR. The fee is collected on the November property tax bill. All residential property owners are assessed a single rate each year for fire services, while business owners are assessed based on the square footage of the property.

Area Description

Fort Lauderdale, Florida is a cosmopolitan modest sized coastal community located on South Florida's eastern coastline midway between Miami and West Palm Beach and is the county seat of Broward County. It is a principal city of the South Florida metropolitan area, which was home to 6,110,715 people at the 2018 census. The City of Fort Lauderdale is affectionately known as "The Venice of America" due to the 165 miles of waterways within the city limits.

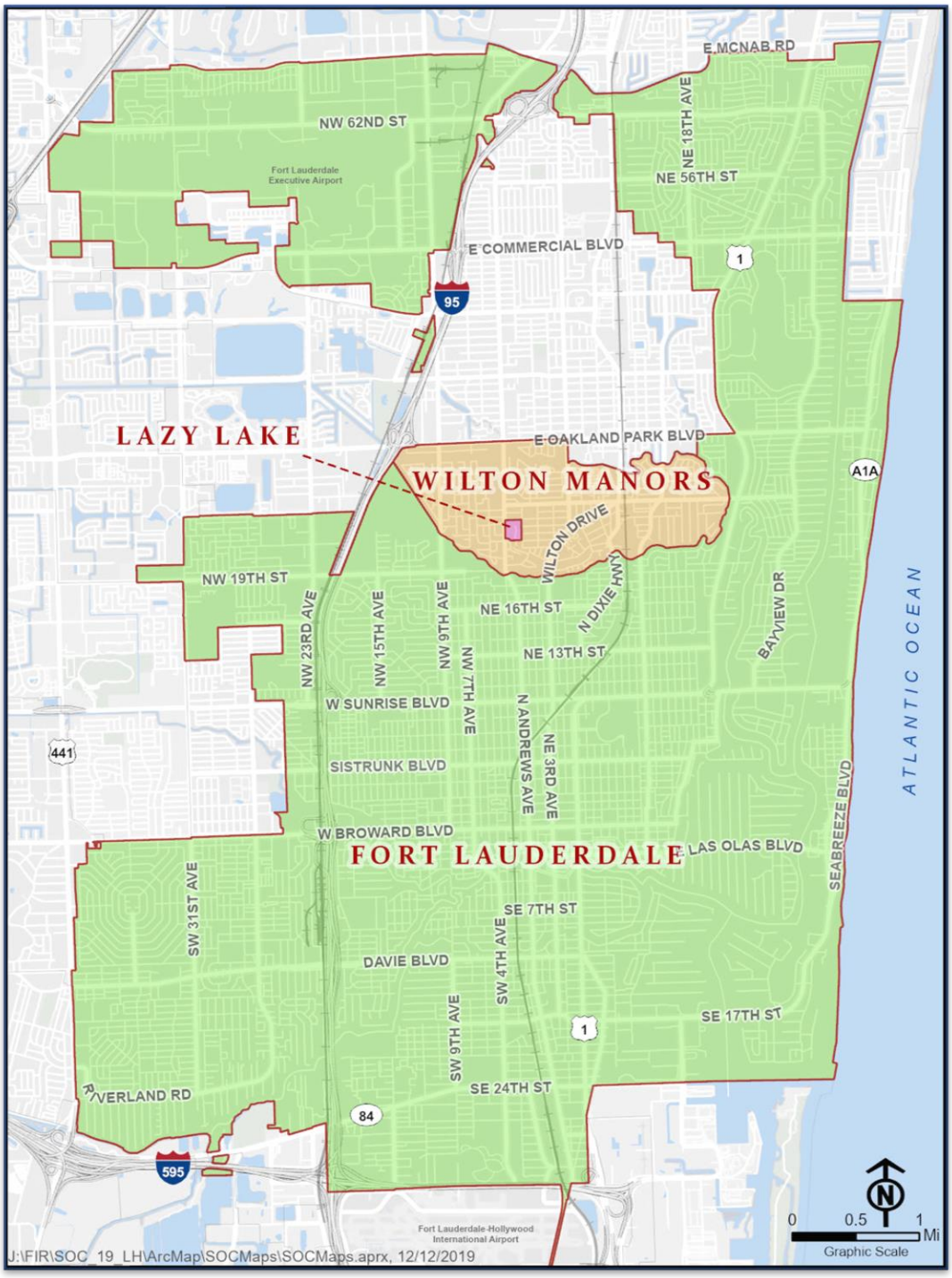
Fort Lauderdale is named after a series of forts built by the United States during the Second Seminole War. The forts took their name from Major William Lauderdale, who was the commander of the detachment of soldiers who built the first fort. However, development of the city did not begin until 50 years after the forts were abandoned at the end of the conflict. Three forts named "Fort Lauderdale" were constructed; the first was at the fork of the New River, the second at Tarpon Bend on the New River between the Collee Hammock and Rio Vista neighborhoods, and the third near the site of the Bahia Mar Marina. The city was incorporated in 1911, and in 1915 was designated the county seat of newly formed Broward County.

Fort Lauderdale's first major development began in the 1920's, during the Florida land boom of the 1920's. The 1926 Miami Hurricane and the Great Depression of the 1930's caused a great deal of economic dislocation. When World War II began, Fort Lauderdale became a major US base, with a Naval Air Station to train pilots, radar operators, and flight control operators. A Coast Guard base at Port Everglades was also established.

After the war ended, service members returned to the area, spurring an enormous population explosion. A 1967 report estimated that the city was approximately 85% developed. As Fort Lauderdale became essentially built out after 1970, the population stagnated as growth shifted to suburbs to the west. The city actually shrank by almost 4,000 people between 1980 and 1990. A slight rebound brought the population back up for the 2000 census. Since 2000, Fort Lauderdale has gained slightly over 18,000 residents through annexation of seven neighborhoods in unincorporated Broward County. Today, Fort Lauderdale is a major yachting center, one of the nation's largest tourist destinations, and the center of a metropolitan division with 1.8 million people.

FLFR currently provides fire rescue services to the City of Wilton Manors and the Village of Lazy Lake, Florida via contract. Please refer to Exhibit 1 for more information regarding the City of Wilton Manors or Lazy Lake.

Figure 4: City of Fort Lauderdale, City of Wilton Manors, and Village of Lazy Lake

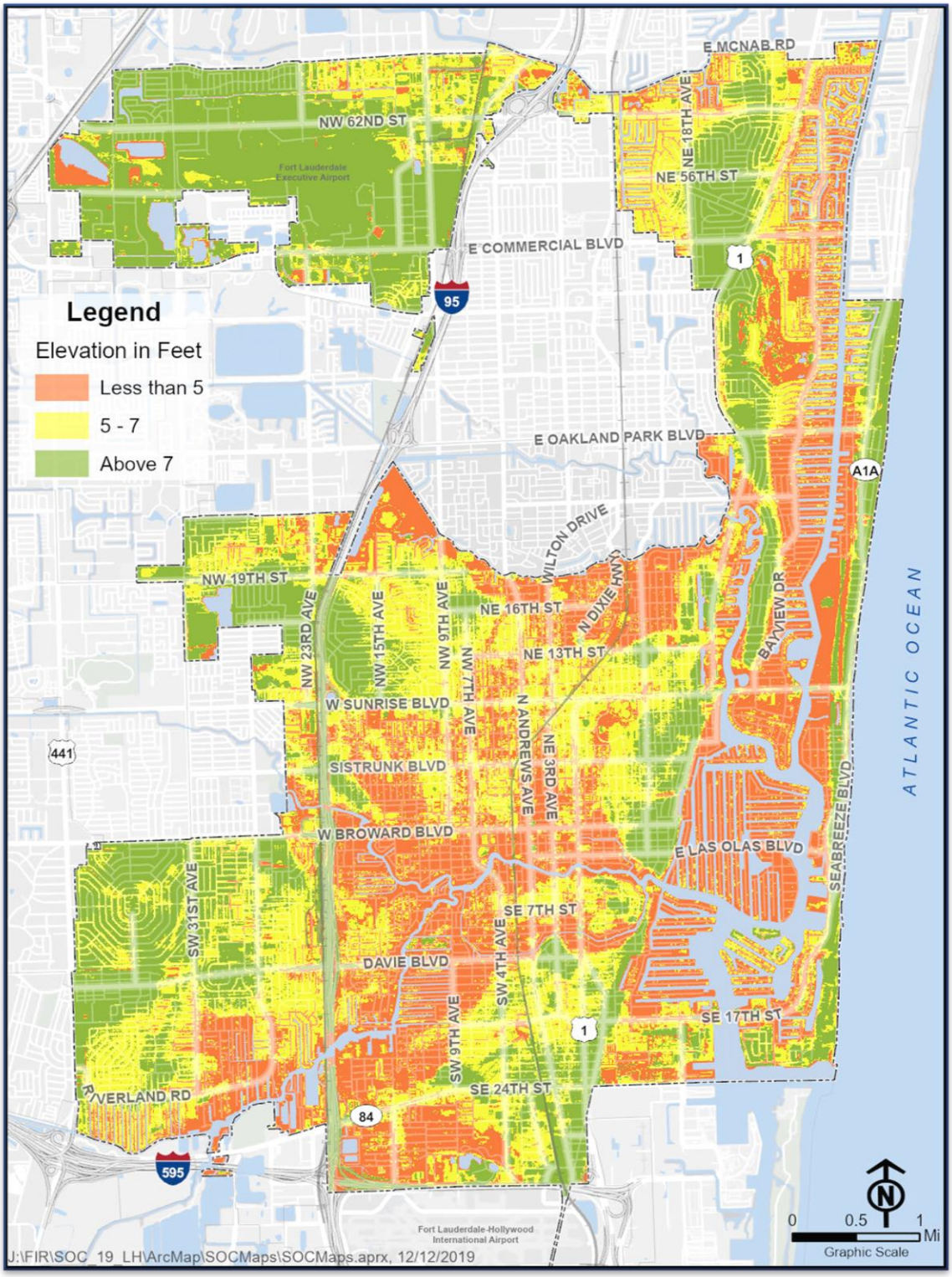


Topography

Fort Lauderdale is located at 26°08’28” N 80°08’38 W. According to the United States Census Bureau, the city has a total area of 35 square miles, 34.7 square miles of which is relatively flat land, 3.8 square miles of which is water. Fort Lauderdale is known for its extensive network of canals that intertwine throughout the city. There are 165 miles of waterways within the city limits.

The highest elevation in the city is nine (9) feet and the majority of the city ranges between 5 and 7 feet as shown in the map below.

Figure 5: City of Fort Lauderdale Elevation Map



The City of Fort Lauderdale is adjacent to the Atlantic Ocean, includes seven miles of beaches, and borders the following municipalities:

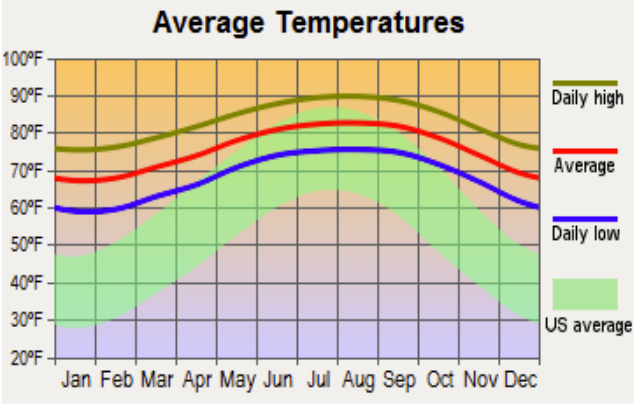
Table 1: Bordering Municipalities

Northeast	West	South	Northwest	Southwest	North
Lauderdale-by-the-Sea	Plantation	Hollywood	North Lauderdale	Davie	Wilton Manors
Sea Ranch Lakes	Lauderhill	Dania Beach	Oakland Park		Pompano Beach
	Lauderdale Lakes		Tamarac		

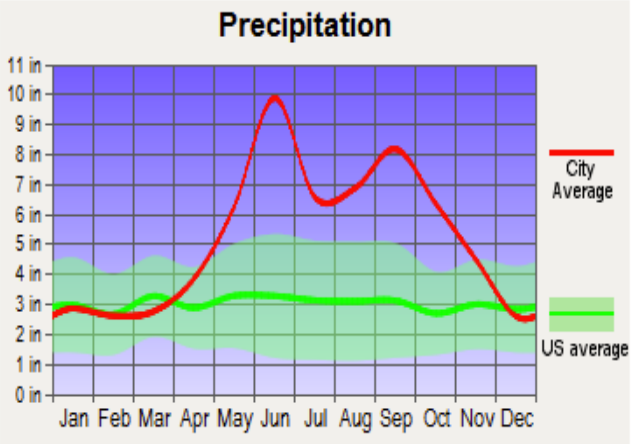
The northwestern section of Fort Lauderdale is separate from the remainder of the city, connected only by the Cypress Creek Canal as it flows under I-95. This section of Fort Lauderdale borders the cities of Tamarac and Oakland Park on its south side. Oakland Park also borders Fort Lauderdale on the west side of its northeastern portion. The greater portion of Fort Lauderdale in the south is bordered, along its north side by Wilton Manors.

Climate

Fort Lauderdale along with the contract city (Wilton Manors) and village (Lazy Lake) features a tropical rainforest climate with little seasonal variations in temperature. Average monthly temperatures are always above 66°F and average monthly precipitation is above 2.39 inches. That data qualifies the city's climate as a tropical climate, and the city does not have a true dry season. As you can see on the chart below, the majority of precipitation is received during the summer months.

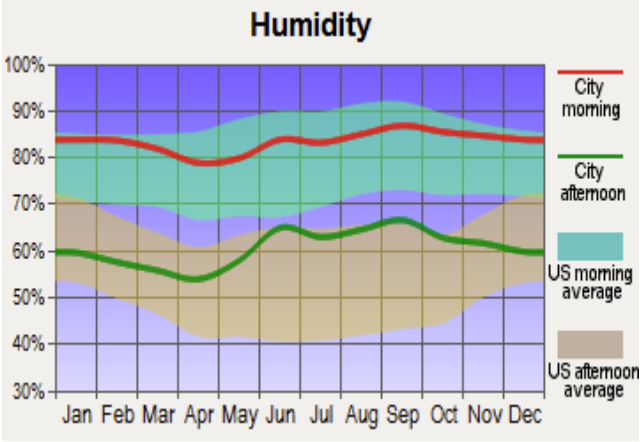


Summers (wet season) are hot, humid and wet with average high temperatures of 86-90°F and lows of 71-76°F. During this period more than half of the summer days bring afternoon or evening thunderstorms. The frequency of temperatures at or above 95°F is approximately about 4 days per year. The frequency of temperatures at or above 98°F is about once every three years. All-time record highs in Fort Lauderdale are 100°F set on two different occasions (08/04/44 and 6/22/09).



Winters (dry season) are warm and mostly dry with average temperatures of 75-82°F and lows of 59-67°F. However, the city experiences occasional cold fronts during this period, bringing high temperatures in the 60s °F and lows in the 40s °F, lasting usually for a day or so. Rare freezes do occur every few years, which are devastating to the tropical plants and reptiles. Only once in reported history - January 19, 1977, snow flurries were reported in the air or trace amounts on the ground. Frequency of temperatures at or below 32°F in Fort Lauderdale

is about once every three years. Lowest recorded temperature in Fort Lauderdale is 28°F set on three different occasions February 6th, 1917, January 19th, 1977 and January 20th, 1977. During the dry season (winter), brush fires can be a concern to the County and area. Annual average precipitation is 64.2 inches, with most of it occurring during our wet season (May thru October). However, rainfall occurs in all months, mainly as short-lived heavy afternoon thunderstorms in wet season and light to moderate rain dry season. Fort Lauderdale and contracted cities have an average of 143 rain days and 250 sunshine days annually. The frequency of daily rainfall amounts in excess of five inches is about once every two years.



During late October 2011, spring tides and a low-pressure system created flooding of (approximately 1' – 2') throughout our City. The flooding was so severe apparatus could not respond to certain areas because of streets being inaccessible. Then in late October 2012, Hurricane Sandy moved east of the coastline, which caused extremely high tides. This event caused beach erosion, undermining of State Road A-1-A and two feet of ocean on the roadway. Due to the saltwater, sand and undermining of the road, apparatus could not respond to emergencies in the affected area. In the event of an emergency in that area, ATV's are loaded with medical and fire equipment, making it easier to respond.

The City of Fort Lauderdale is a coastal community with low-lying areas and 300 miles of canal coastline. From time to time the city experiences severe flooding associated with extreme weather events such as tropical storms and hurricanes. Flooding might also occur as a result of inclement weather conditions including prolonged heavy rains, storm surge and seasonal tides. These conditions are expected to worsen with projected sea level rise increases associated with the climate change theory.

While the City maintains an extensive storm water master plan and is instituting both aggressive maintenance and innovative adaptation solutions to address drainage, the location and natural geography of our City makes it susceptible to flooding.

Population

Relating to the 2019 BEBR population estimates, the City of Fort Lauderdale had a total population of 182,827. The population density is approximately 5,223 people per square mile. In addition to our local population, Fort Lauderdale hosts hundreds of thousands of tourists each year.

Figure 6: US Census ACS 5-year Fort Lauderdale Population by Age

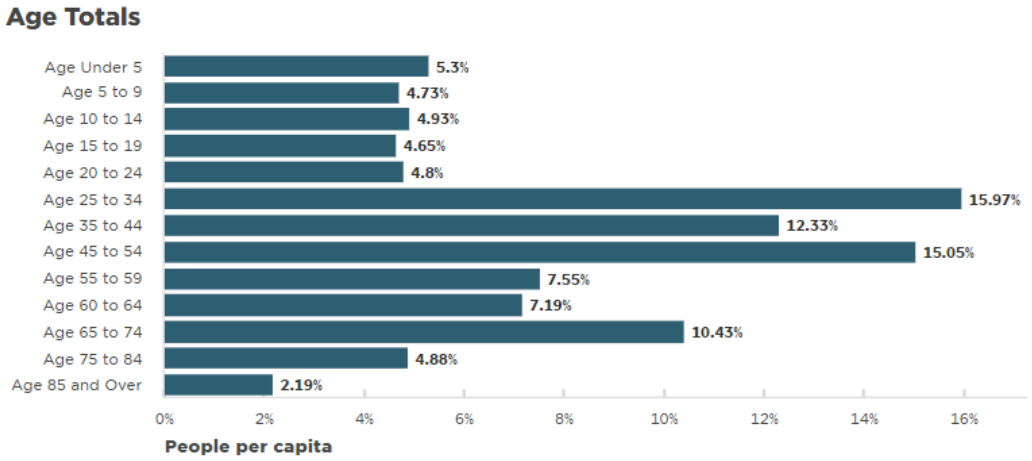


Figure 7: US Census ACS 5-year Fort Lauderdale Population by Gender: Female

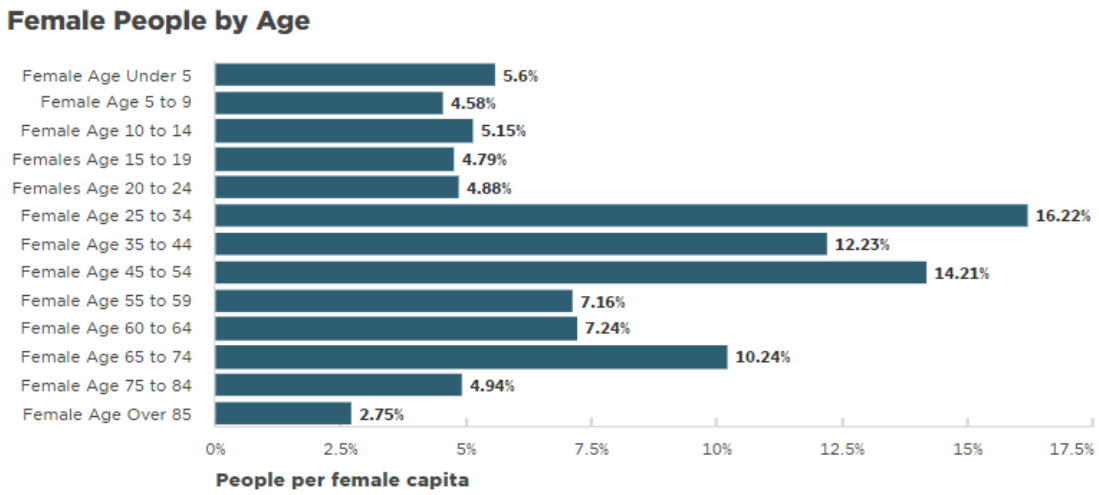
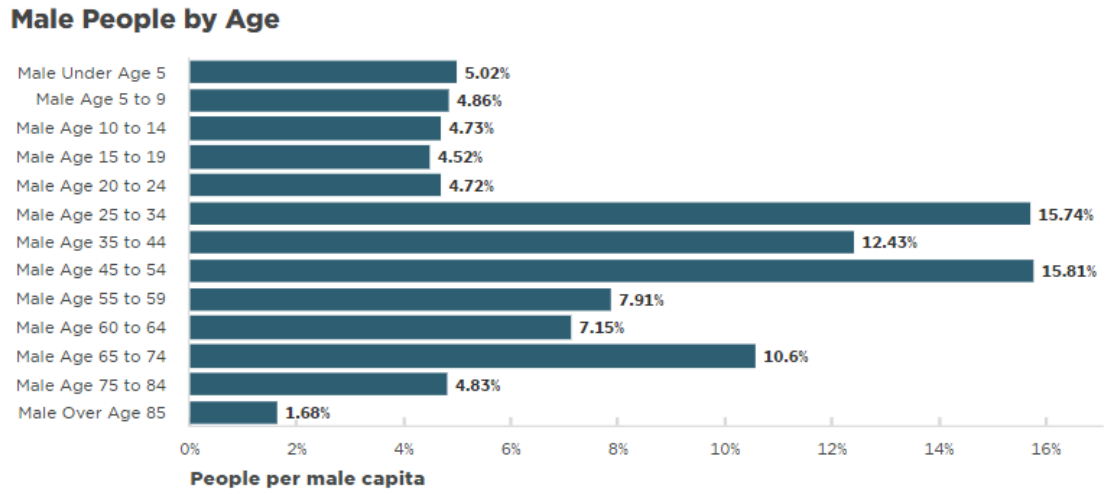


Figure 8: US Census ACS 5-year Fort Lauderdale Population by Gender: Male



Disaster Potentials

The City of Fort Lauderdale and its two contracted cities Wilton Manors and Lazy Lake are vulnerable to the following natural hazards/disasters: tropical cyclones (tropical storms & hurricanes), tornadoes, severe thunderstorms with damaging winds, hail, flash floods and seasonal tidal flooding. Hurricane season hits between June 1 and November 30 with major hurricanes most likely to affect the city or state in September and October. The most recent hurricanes to directly affect Fort Lauderdale and its contract cities were Hurricane Katrina and Hurricane Wilma, both of which struck the city in 2005. Other direct hurricane hits were Hurricane Cleo in 1964, Hurricane King in 1950, and the 1947 Fort Lauderdale Hurricane.

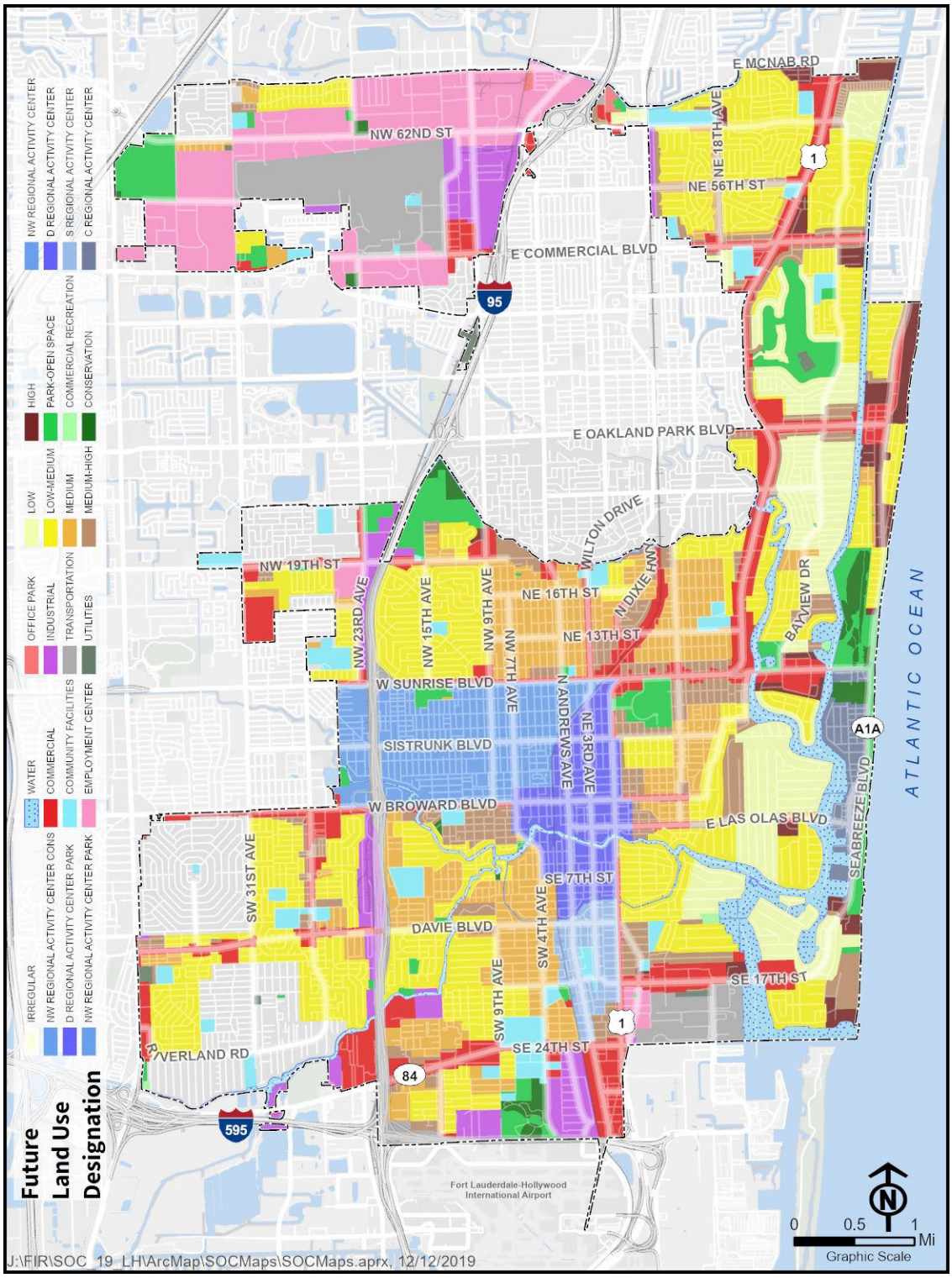
The city may encounter man-made hazards which are hazardous materials spills or releases, mass transit accidents (airplanes, boats, trains, trucks and automobiles), massive urban fires, radiation contamination from nuclear power plant accidents, and terrorism. All of which is difficult to plan for due to the randomness of their timing and lack of warning.

Many of the City's facilities used by citizens, tourists and boaters are located in areas with potential exposure to the man-made hazards. Although the City of Fort Lauderdale is most vulnerable to hurricanes, tornadoes and flooding, the other hazards noted pose significant risks for potentially large portions of the City's population and property. In the event of a major disaster the following conditions are possible:

- A large number of fatalities and/or injuries;
- The displacement of large groups of people;
- Difficulty in providing food, clothing and shelter to those people and areas most severely affected:
- Damage and/or the destruction of private homes, businesses and industries;

Area Development

Figure 9 City of Fort Lauderdale Official Future Land Use Map



Business or Pleasure

Fort Lauderdale is a mature urban environment that is nearly at build-out. At present (2019), twenty-nine (29%) of the City land area is vacant, most of which is zoned for industrial, institutional or commercial land uses. Thus, most future development will be the result of re-development.

Table 2 City of Fort Lauderdale Existing Property Uses

Land Use	Acres	Percent of Land Area
Single Family	6,736	29%
Multi-Family	2,080	9%
Commercial	3,246	14%
Industrial	1,263	5%
Agriculture	18	0%
Institutional	731	3%
Government/Utilities	1,913	8%
Vacant	6,865	29%
Total	**23,432**	**100%**

Source: Broward County Property Appraiser.

Contemporary high-rise condominium residences and hospitality properties are transforming downtown and the central beach area of Fort Lauderdale as well as adding a new dimension to the region's year-round appeal to leisure and business travelers. Many of the northern beach area condominiums are home to the elderly and transients that live in Fort Lauderdale during the winter months. The downtown area condominiums attract the younger generation, who can work and live within the City. Downtown Fort Lauderdale is the base of Broward's economy, and home to Fortune 500 companies like AutoNation, and Citrix Systems as well as service companies, retailers and thousands of new residents. In the northern corner of Fort Lauderdale lies the Fort Lauderdale Executive Airport free-trade zoned neighborhood known as Uptown which has many assets including high-quality office and industrial space, nearby housing, a walk-to-work Tri-Rail station, convenient access to I-95, and one of the busiest executive airports in the nation.

Venice of America

Fort Lauderdale is a world-renowned port of call for the yachting industry and home to the world's largest boat show. With more than 165 miles of waterways, marinas, marine manufacturing and repair facilities all catering to the "mega-yacht" market. More than 1,400 vessels over 80 feet visit Fort Lauderdale each year on their way to the Caribbean or other destinations around the world.

Fort Lauderdale's Riverwalk arts and entertainment district runs east-west along Las Olas Boulevard, from the beach to the heart of downtown. The district is anchored in the west by the Broward Center for the Performing Arts, and runs through the city to the intersection of Las Olas and A-1-A. This intersection is the "ground zero" of Fort Lauderdale Beach, and is the site of the Elbo Room bar featured in the 1960 film *Where the Boys Are.* The city and its suburbs host over 4,100 restaurants and over 120 nightclubs, many of which are in the arts and entertainment district.

Historical

The Sailboat Bend District is located in the southwestern section of the City. It is the largest of the three districts and includes more than 550 buildings. It is also the oldest neighborhood in the City,

dating from the early 1900s until the 1950s. The majority of the houses are small, one-story, vernacular residences with Bungalow, Mission, or Mediterranean Revival style details. These were popular elements found in adjacent communities throughout the United States. The inventory also includes some larger homes located along the New River. There are several Key Contributing sites associated with the growth of this community, including the Swing Bridge, the West Side Fire Station, and the West Side School. These last three sites are also listed as local individual landmarks.

The Himmarshee Historic District is the second district and oldest section of the commercial downtown. It includes early 20th century businesses located along the north and south sides of Himmarshee Street. The district is bounded on the east by the railroad tracks, on the south by the New River, and the west by Nugent Ave. and portions of the north side of SW 2nd St. There are about 17 properties over there, including the Fort Lauderdale Historical Society in the Hoch Heritage Center, the Philemon Bryan House, the King-Cromartie House, and the restored New River Inn, which operates as a historical museum. In addition, the historic Bryan Homes operates as the River House Restaurant. A replica of the first Fort Lauderdale schoolhouse has been reconstructed within the district.

The third historical district is the Stranahan House and property. In 1982, the City rezoned it as an H-1 district in order to protect the area from development.

The Snow-Reed Swing Bridge is one of the oldest bridges in the Fort Lauderdale area, and one of the few remaining swing bridges in Florida. Located between the 300 and 500 block of Southwest 11th (Palm) Avenue in Fort Lauderdale, Florida, the bridge connects the neighborhoods of Sailboat Bend and Riverside Park. The bridge was closed for nearly a year for a major renovation and re-opened on August 1, 2010. Contractors replaced damaged structural steel, added new railings and grating, upgraded mechanical and electrical systems, and constructed a new tender control house.

Schools

Fort Lauderdale is host to twenty-eight Broward County Public Schools. There are seventeen elementary schools, three middle schools, three high schools one combination school and four educational centers. Additionally, there are 39 private schools that are grades PK-12.

There are six institutions of higher learning that have main or satellite campuses in the city:

- Broward College–satellite campus one building
- City College- main campus
- Florida Atlantic University – satellite campus one building
- University of Phoenix– satellite campus one building
- Keiser University– main campus one building
- The Art Institute of Fort Lauderdale- main campus, dormitories

Parks & Recreation

Table 3 Total Recreational Space by Park Classification through 2040

	Current Level of Service (Pop. - 176,013)*			2030 Estimates (Pop. - 202,072)**		2040 Estimates (Pop. - 208,618)**	
Park Type	Number of Parks	Acreage	2014 LOS (acres/1000 pop)	2030 LOS (acres/1000 pop)	2030 Acreage needed to maintain current LOS	2040 LOS (acres/1000 pop)	2040 Acreage needed to maintain current LOS
Total Parks	**104**	**956.50**	**5.43**	**4.73**	**141.61**	**4.58**	**177.18**
Large Urban Parks	3	319.19	**1.81**	1.58	47.26	1.53	59.13
Community Parks	9	102.62	**0.58**	0.51	15.19	0.49	19.01
Neighborhood Parks	47	88.98	**0.51**	0.44	13.17	0.43	16.48
Special Use Parks	18	372.29	**2.12**	1.84	55.12	1.78	68.96
Urban Open Space	21	11.83	**0.07**	0.06	1.75	0.06	2.19
School Parks	6	61.57	**0.35**	0.30	9.12	0.30	11.41
Other Parks							
State Parks	1	166.02	**0.94**	0.82	24.58	0.80	30.75

City of Fort Lauderdale Comprehensive Plan (ordinance C-08-18) Volume II – Parks & Rec

Fort Lauderdale is a regional focal point and one of the older cities in Broward County. As the county's urban core, the city is concerned about preserving, upgrading and retrofitting its parks facilities to keep pace with redevelopment. The current trend is for young professionals and families to return to the downtown area and its surrounding neighborhoods to live, work, and play.

Fort Lauderdale currently has 11.83 acres of urban open space parks. The minimum area of urban open space is 0.1 acre or ¼ -mile service radius. These urban open space parks are described as enhancements surrounding neighborhoods, entranceways, water towers and other utility sights, and over-sized right-of-ways or medians.

The City has upgraded or retrofitted neighborhood parks, which typically are 5-10 acres or ½-mile service radius. The neighborhood parks were developed for recreational/athletic activities and serve as the social focus of the neighborhood. The City has a total of 88.98 acres for neighborhood parks.

The next type of park that the city has classified is a community park. These parks typically are 10 to 40 acres or one-mile service radius. Their focus is on meeting the needs of several neighborhoods or large sections of the community, as well as preserving unique landscapes and open spaces. The community parks feature benches, play area, picnic tables, paved walkways, youth athletic fields, tennis courts, volleyball courts, fitness trails, pools, recreation centers or facilities, and shuffleboard courts. There a few of the larger community parks in the city: Oswald Park, George English Park and Croissant/Davis Park. The total community park acreage is 102.62.

School-parks are the next type of park that the city utilizes. By combining the resources of two public agencies, the school-park classification allows for expanding the recreation, social, and educational opportunities available to the community in an efficient and cost effective manner. There are a total 61.57 acres of school-park areas in the City. The largest is Stranahan High School with 32.7 acres.

There are three large urban parks within the city limits. These parks serve a broader purpose than community parks. The focus is on meeting community-based recreational needs, as well as preserving unique landscapes and open spaces. Large urban parks usually consist of a minimum of 50 acres. The large urban parks in the city are: Holiday Park (92 acres), Mills Pond Park (133.04 acres), and Snyder Park (92.3 acres).

Finally, special use parks/facilities cover 372.29 acres in Fort Lauderdale. This classification covers a broad range of parks and facilities orientated toward single-purpose use. Special uses generally fall into three categories: historical/cultural/social sites, recreational facilities, and outdoor recreation facilities. Some examples of special use parks/facilities include: public beach (166.6 acres), Fort Lauderdale Stadium (45.6 acres), Riverwalk Linear Park (14.33 acres), South Beach Park (27.5 acres), Fort Lauderdale Aquatic Complex (5 acres).

Sports

Lockhart Stadium in Fort Lauderdale has been purchased by Miami Beckham United and Inter Miami CF to be transformed into a new state of the art professional soccer stadium. The 64-acre site will bring 60 million in upgrades and improvements including new training facilities, team offices, youth soccer academy, multi-purpose community athletic fields, and a major public park to go along with the new professional soccer stadium. It was previously the home of the Fort Lauderdale Strikers, which played in the previous version of the North American Soccer League. The Miami Fusion of Major League Soccer played at the stadium from 1998 to 2001. The Florida Atlantic University Owls football team played its home games at the stadium from 2003 through 2010.

Fort Lauderdale is also home to Fort Lauderdale Aquatic Complex, which is located at the International Swimming Hall of Fame. The Aquatic Complex is undergoing a complete renovation, which will contain two 25-yard by 50-meter competition pools, one 20 by 25-yard diving well and a smaller pool for swim lessons. The renovation has an estimated completion date in 2021. The complex is open to Fort Lauderdale residents, and has been used in many different national and international competitions since it's opening in 1965.

Sites of Interest

Hugh Taylor Birch State Park is a 180-acre park along the beach, with nature trails, camping and picnicking areas, canoeing and features the Terramar Visitor Center, with exhibits about the ecosystem of the park. The Henry E. Kinney Tunnel on U.S. Route 1 is the only tunnel on a state road in the State of Florida. It was constructed in 1960, and its 864-foot length travels underneath the New River and Las Olas Boulevard.

Transportation

Broward County Transit, the county bus system, provides local bus transportation in Fort Lauderdale. Tri-Rail, a commuter rail system, connects the major cities and airports of South Florida. Fort Lauderdale has two Tri-Rail stops within the city. In 2018, the Brightline train made its inaugural trip from Fort Lauderdale to West Palm Beach. The Brightline is a high speed passenger train connecting Palm Beach, Broward and Miami Dade counties and future services to Orlando. Fort Lauderdale has one stop in the heart of downtown, this makes for easy access to our local beaches, nightlife, and business district. Four railroads serve Fort Lauderdale. Florida East Coast Railroad (FEC) and CSX Transportation are freight lines, Amtrak provides passenger service

to other cities on the Atlantic Coast via the Fort Lauderdale station, and Tri-Rail provides commuter service between Palm Beach County, Broward County, and Miami-Dade County. The FEC runs through the center of Fort Lauderdale, while CSX, Tri-Rail, and Amtrak run on the western border of the city.

There are two main Interstates that run through or start in the City of Fort Lauderdale. Interstate 95 (I-95) runs north and south thru the City, while Interstate 595 (I-595) starts in Port Everglades and runs east/west. The main thoroughfares that enter the City are: State Road 84, Davie Boulevard, Broward Boulevard, Sunrise Boulevard, Oakland Park Boulevard and Commercial Boulevard. These thoroughfares bring 75,000 – 85,000 commuting workers in and out of the city during the week. The heaviest traffic is between 7:00 am and 9:00 am, and then 4:30 pm to 6:00 pm. State roads that run north/south through the City are: Federal Highway and State Road A-1-A, which run along the coastline of Fort Lauderdale. State Road A-1-A has the heaviest traffic during the weekends, winter months and when the City hosts large-scale special events on the beach.

Fort Lauderdale-Hollywood International Airport, in neighboring Dania Beach, Florida, is the city's main airport and is the fastest-growing major airport in the country. Fort Lauderdale-Hollywood International Airport is an emerging international gateway for Caribbean and Latin America.

Fort Lauderdale Executive Airport (FXE) is a general aviation airport located within the city limits of Fort Lauderdale, five miles (8 km) north of downtown Fort Lauderdale. It is a division of the Community and Economic Development Department of the City of Fort Lauderdale. The FXE airport was built in 1941 to train Naval Aviators during World War II, and named West Prospect Satellite Field. In 1947, the federal government deeded the airport to Fort Lauderdale for use as a public airport. FXE serves over 150,000 aircraft operations per year, making it the eighth busiest General Aviation center in the United States. The airport is designated as general aviation reliever facility for the Fort Lauderdale-Hollywood International Airport by the FAA. The airport is a port of entry with a full-service Customs facility. The airport also operates a 24/7 ARFF facility that meets the requirements of index B, although the airport is not certificated under FAR Part 139. ARFF services are provided by Fort Lauderdale Fire Rescue.

Fort Lauderdale Executive Airport covers an area of 1,050 acres, which contains two asphalt paved runways: 8/26 measuring 6,001 x 100 ft. and 13/31 measuring 4,000 x 100 ft. FXE grounds are home to two rare Florida native species of animal, the Gopher Tortoise and the Florida Burrowing Owl.

Fort Lauderdale is home to forty-four marinas/dry docks along with Port Everglades, the nation's third busiest and Florida's deepest cruise port. The Port's containerized cargo business has gained prominence among the nation's top seaports, while establishing it as Florida's number one container ship and storage port. Port Everglades is also South Florida's hub for import and export of petroleum products, from gasoline, diesel and ethanol, to jet fuel and asphalt, supplying a 12-county area that includes three international airports. Approximately one-fifth of Florida's energy supply comes from petroleum products transported through Port Everglades.

Being the "Venice of America," the City of Fort Lauderdale has five drawbridges that connect mainland Fort Lauderdale to the barrier island. These drawbridges open every thirty minutes for boat traffic. In addition, the City has 58 fixed bridges all of which are in the process of being repaired and raised in the upcoming years. Bridges influence response times due to the delays

from traffic build up while in the open position and the amount of time they need to close. Additionally, these areas of the city have accessibility issues due to the waterways, bridges, and roadway connectivity issues.

Healthcare

Fort Lauderdale is served by Broward Health Medical Center and Imperial Point Medical Center. They are operated by Broward Health, the third largest hospital consortium in the United States. Broward Health Medical Center is a 716-bed acute care facility, which is, designated as a Level I trauma center. The hospital serves as a training site for medical students from Nova Southeastern University, as well as nursing and paramedic programs throughout the area. Imperial Point is a 240-bed facility. Holy Cross Hospital is a 571-bed hospital operated by the Sisters of Mercy.

Demographic Features[1]

As of the 2017 ACS Survey there are 73,657 total households within the city limits of Fort Lauderdale. Further breakdown of the households are as follows: family households 35,733 (48.5%); with children under 18 years of age 13,316 (18%); husband-wife family 24,012 (32.6%); husband-wife with children under 18 years 7,345 (9.9%); male householder/no wife present 3,052 (4.1%); male householder/no wife present with children under 18 years 1,233 (1.7%); female householder/no husband present 8,669 (11.8%); female householder/no husband present with children under 18 years 4,738 (6.4%).

Additionally, the non-family households (people living alone/no members related to householder) in Fort Lauderdale are represented as follows: non-family households 37,924 (51.5%); householder living alone 29,818 (40.5%); males 65 year and over 15,034 (16.2%); females 65 years or older 14,509 (17.2%); households with individuals under 18 years 15,593 (21.2%); households with individuals 65 years and over 18,947 (25.7%). The average household size in Fort Lauderdale is 2.37 and the average family size is three.

Population estimates as of July 1, 2019, place the per capita income of Fort Lauderdale is $41,887, which is higher than the state average of $30,197 and is higher than the national average of $32,621. Fort Lauderdale median household income is $52,315, which has grown by 28% since 2000. There are 19.3% residents living in poverty within the city.

Fort Lauderdale has a significantly higher percentage of foreign-born residents than the rest of the United States as a whole. The 2017 ACS survey has indicated that 24.4% of the city's population was foreign-born. Of foreign-born residents, 75.8% were born in Latin America and 14.5% were born in Europe, with smaller percentages from North America, Africa, Asia and Oceania. In 2000, Fort Lauderdale had the 26th highest percentage of Haitian residents in the United States, at 9.6% of the city's population, and the 127th highest percentage of Cuban residents, at 1.7% of the city's residents.

Like South Florida in general, Fort Lauderdale has many residents who speak languages other than English. As of 2017, 71.4% of the population spoke only English at home. Speaker of Spanish were 15.9%, other Indo-European languages 10.8%, Asian and Pacific Islander languages 0.7%, and Other languages 1.2%.

[1] Source: factfinder.census.gov (https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF) American Community Survey

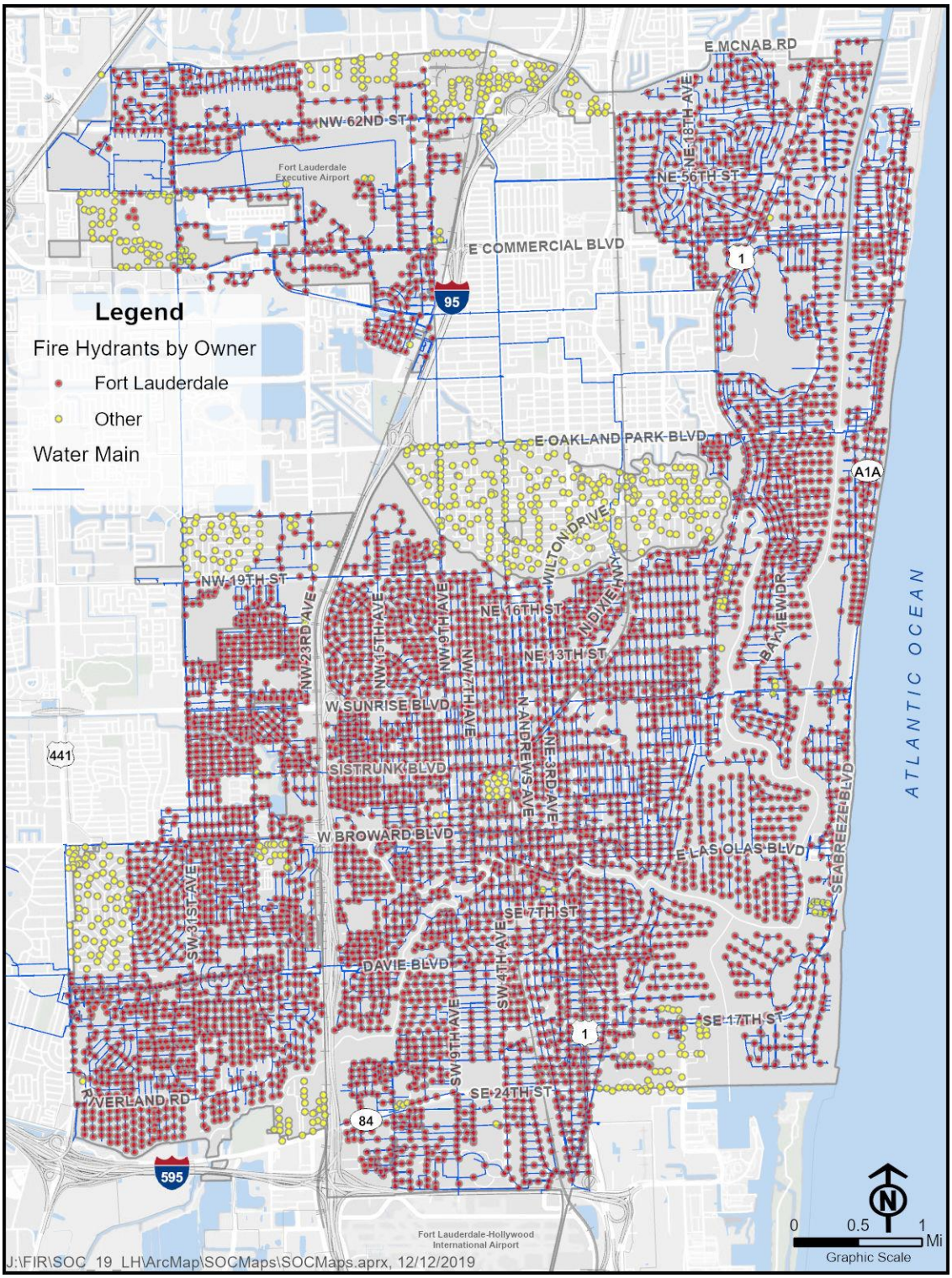
The city, along with surrounding cities Oakland Park and Wilton Manors, is known for its large lesbian, gay, bisexual, and transgender (LGBT) community and has one of the highest ratios of gay men and lesbians in the United States. The city is also known as a popular vacation spot for gays and lesbians.

Water Supply

The City of Fort Lauderdale Public Works Department is responsible for the operation, maintenance, repair, and improvement of the water distribution, collection and pumping system. The Public Works Department operates two water treatment plants, Fiveash Regional Water Treatment Plant is designed to produce maximum capacity of 70 million gallons of water per day and Peele Dixie Water Treatment Plant is designed to produce a maximum capacity of 12 million gallons of water per day. The City of Fort Lauderdale has 784 miles of water mains and operated 6,168 fire hydrants throughout the City of Fort Lauderdale, Wilton Manors and Lazy Lake.

The map on the following page shows water lines and fire hydrants within the City of Fort Lauderdale.

Figure 10: Fort Lauderdale Water Main & Hydrant Map



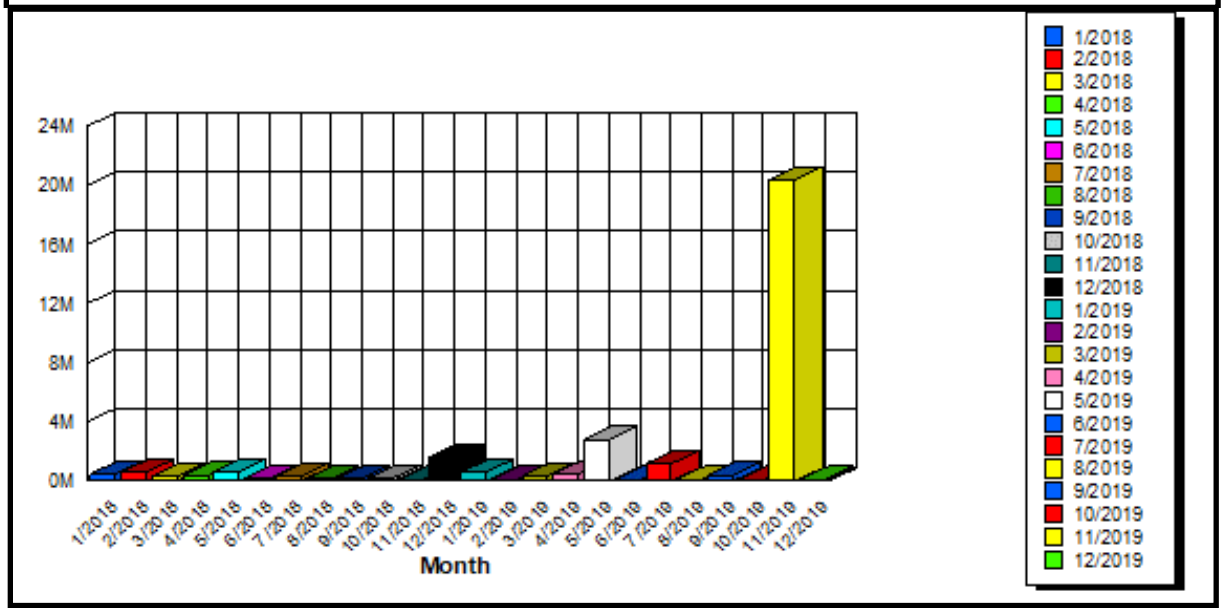
Fire Loss

Figure 11: Total Fire Loss by Month (1/1/18- 12/31/19)

Total Fire Loss by Month

Date Range: From 1/1/2018 To 12/31/2019

Month	Count of Fires With Loss	Total Loss	Total Value
1/2018	15	$473,850.00	$8,927,009.00
2/2018	29	$603,102.00	$20,821,979.00
3/2018	50	$331,111.00	$201,346,681.00
4/2018	70	$390,675.00	$5,875,248.00
5/2018	90	$649,330.00	$9,814,070.00
6/2018	107	$184,400.00	$13,170,065.00
7/2018	130	$322,725.00	$162,926,155.00
8/2018	143	$141,745.00	$731,975.00
9/2018	152	$188,600.00	$2,666,060.00
10/2018	172	$216,400.00	$69,473,230.00
11/2018	188	$131,821.00	$12,371,726.00
12/2018	210	$1,642,527.00	$47,232,962.00
1/2019	229	$592,624.00	$23,539,774.00
2/2019	240	$121,345.00	$35,658,660.00
3/2019	260	$361,715.00	$164,555,815.00
4/2019	275	$494,540.00	$53,668,450.00
5/2019	289	$2,823,225.00	$39,309,745.00
6/2019	311	$120,901.00	$207,440,580.00
7/2019	326	$1,176,575.00	$15,575,435.00
8/2019	338	$130,522.00	$30,428,562.00
9/2019	354	$398,200.00	$67,557,950.00
10/2019	362	$99,000.00	$1,955,210.00
11/2019	380	$20,386,150.00	$27,024,522.00
12/2019	394	$117,960.00	$3,502,810.00



B. Services Provided

Fort Lauderdale Fire Rescue (FLFR) has over one hundred years of tradition providing the highest level of emergency services to its residents and visitors. During this time FLFR has grown from its origins as a dedicated fire suppression agency, into a comprehensive provider of fire suppression, emergency medical services, and specialized rescue.

Found within this section will be a breakdown of FLFR, including the subtopics within this category; Fire Service Delivery Programs and Fire Service Deployment within the City of Fort Lauderdale. This section will further analyze and document FLFR's capability to respond to and mitigate emergencies. Information for this report was gathered from the current Staffing & Organizational Study for the FLFR (Matrix Study - 2019), Original Justification for the Fire Bond, and historical data found within the FireRMS record keeping system.

The data and information contained within this analysis is being utilized by FLFR to enhance the decision-making process regarding the proper coverage of our community, its residents and guests. FLFR is a dynamic entity, never settling for the status quo while continuously motivated to provide the highest level of all-hazard response to its customer base.

The department takes an approach of mitigating all hazards, a cohesive response profile for all possible threats, hazards, and emergencies. The services that FLFR provides include, but are not limited to, fire response, emergency medical services, vehicle accidents, hazardous materials, technical rescue (rope, confined space, trench, and collapse rescue, vehicle and machinery rescue), dive/marine rescue, aircraft firefighting (ARFF), and SWAT (special weapons and tactics) Medics.

Service Delivery Programs

Fire Suppression

The origins of the department can be traced back to 1912, when a disaster swept through the downtown business district and left only three buildings standing. Within a week the townspeople had voted to establish a fire department, a $40,000 bond initiative was passed and Fort Lauderdale Fire Rescue was born.

FLFR currently provides a structured response for the following types of fire incidents; single and multi-family residences, commercial, residential and mixed-use high-rise occupancies, manufacturing, industrial and storage facilities. The department also provides fire response for motor vehicles of all types, including; passenger and commercial vehicles, plus rail and heavy equipment. FLFR also provides fire response for marine vessels and occupancies as well as a specialized aircraft firefighting unit (ARFF), dedicated to the Fort Lauderdale Executive Airport. There is also a response profile for rubbish and vegetation fires.

The following staffing levels are budget dependent and the numbers given are for the current fiscal year 2020. FLFR currently has a staff of 411 uniformed personnel; this can be further broken down into firefighters, driver-engineers, lieutenants, captains and chief officers. FLFR functions operationally from twelve stations and the daily staffing is a minimum of 86 uniformed personnel. Fort Lauderdale firefighters must possess a minimum Firefighter II certification, and a statutory requirement to be employed as a Firefighter in the State. This course provides the basic fundamental knowledge and skills to function in a fire fighting environment. The course consists of Firefighter part I and Firefighter part II curriculum. The part I curriculum is a minimum of 206 hours and part II is an additional 192 hours. It is currently a requirement that you must be a State certified EMT-P (paramedic) to apply for the position.

Operationally, FLFR responds to all-hazards with the following apparatus and associated staffing; 12 engine companies, minimum staffing of 3, 3 ladder companies, minimum staffing of 3, 12 medical rescues, with minimum staffing of 2, 4 medical rescues with minimum staffing of 3, 1 ARFF Crash Truck, minimum staffing of 2, Technical Rescue Team Heavy Rescue (squad), staffed with one driver-engineer, Hazardous Materials tractor-trailer, 2 fireboats and 4 chief officers (3 Battalion Chiefs and one Assistant Chief).

When assigning units to a fire suppression related response, the FLFR has a structured response profile which will depend on the associated, possible threats, hazards, the probability of the incident to escalate, and the Chief Officer's discretion to minimize or maximize the response. For example, a commercial fire alarm will have 2 engine companies, 1 ladder company and one Chief Officer. This type of incident is one of the more common for FLFR; it can be reduced at any time with on-scene information by first arriving companies and Chief Officer approval.

FLFR responds to unconfirmed structure fires, regardless of occupancy, with the following; 3 engine companies, 1 ladder company, 1 medical rescue unit, 2 Battalion Chiefs, 1 Assistant Chief and the Squad. This assignment will have a minimum of 16 personnel. Upon declaration of a *working incident,* an additional engine company, ladder company and medical rescue will be added to the assignment, this will be an additional 8 personnel.

This information was obtained from the FLFR Response Directory, revised in January of 2017.

FLFR apparatus are equipped with the most advanced fire suppression equipment in the world. The equipment on the apparatus is there for several reasons, the FLFR Research & Development Committee, Apparatus & Equipment Committee, and the past experiences of FLFR staff. The FLFR currently meets or exceeds the minimum requirement for apparatus and equipment set forth by the National Fire Protection Agency (NFPA) and the Insurance Services Organization (ISO).

All of the apparatus within the FLFR system are standardized with regards to equipment carried and placement within the apparatus, this is done regardless of apparatus manufacturer. With available equipment, reserve apparatus will be standardized like their frontline counterparts.

Technical Rescue Team

The SHARC Team (Special Hazards and Rescue Company) was the original FLFR Technical Rescue and Dive Team and was founded in 1992; these members were trained in elevated victim rescue, collapse rescue and dive rescue. The current Technical Rescue Team (TRT) was established in 1997 and is trained in 5 rescue disciplines; rope or high-angle, confined space, trench, vehicle and machinery and structural collapse. The members of this team are also an in-service engine, medical rescue, and squad covering the northeast area of Fort Lauderdale, technical rescue is a secondary responsibility.

The FLFR TRT is comprised of 1 engine company, 1 medical rescue and the squad. A response to an incident which is moderate risk or greater within one of these five disciplines will have, at minimum, the following apparatus assigned; TRT (engine, medical rescue, and squad), 2 engines, 1 ladder, and additional rescue and a Chief Officer. This is an assignment of at least 18 personnel for a technical rescue incident.

With regards to vehicle and machinery rescue, all operations personnel are trained on the use of hydraulic extrication equipment, each engine company carries a complete set (spreader, cutter and ram) and will only utilize the specialized equipment and personnel from TRT in the event the *standard* extrication equipment is not adequate to complete the task assigned.

The members of the FLFR TRT must complete a minimum 320 hours of formalized training within the 5 disciplines to be considered for assignment to Fire Station 29, home of the TRT. FLFR will utilize those members who have completed the training necessary to be on the TRT, but assigned to a different station in the city, as support personnel on these types of incidents.

The parameters for assignment are taken from portions of NFPA 1006- Standard for Technical Rescuer Professional Qualifications and NFPA 1670- Standard on Operations and Training for Technical Search and Rescue Incidents.

Medical

FLFR operates a paramedic program by staffing all rescue trucks with a minimum of 2 paramedics, and all fire suppression units with a minimum of 1 paramedic. All firefighters and personnel must maintain at least a minimum of emergency medical technician. Medical response is dictated by the nature of the call, whether it be a single unit or multi company response. Prior to the implementation of a 1 tier transport system in 2004, the minimum required medical training was set at first responder level.

FLFR operates 16 ALS medical rescue units, 12 ALS engine companies and 3 ALS ladder companies. These apparatuses are located within 12 fire stations throughout the city. All ALS units within the

EMS system at FLFR have uniformed equipment inventories, as prescribed by the Medical Director and the State of Florida.

The City of Fort Lauderdale hosts multiple major events each year, such as, the Winterfest Boat Parade, and the Tortuga Music Festival. These events require a great deal of planning, preparation and ingenuity. Several specialized programs were developed to allow for quicker access to patients, such as bike medics, all-terrain rescue carts and all-terrain medics (mobile paramedics with streamlined backpack style ALS equipment).

Hazardous Materials

The Fort Lauderdale Fire Rescue Hazardous Materials Response Team (FLFR HMRT) was established in 1979 and was the first of its kind in Broward County. The HMRT is trained to respond to all types of hazardous materials emergencies, whether natural, accidental, or intentional.

In its infancy, the HMRT responded in a modified bread truck carrying a small inventory of tools, most of which were created by Team members themselves. The HMRT has since evolved to its current state of readiness, responding in a tractor trailer with an extensive cache including the highest levels of monitor technology, state of the art mitigation equipment, and a walk-in research area at the back of the trailer. The hazmat medical rescue unit has equipment that is above and beyond that of a standard front-line medical rescue, including radiation detection equipment, multi-gas monitors, and thermal imaging technology.

All FLFR suppression and medical units carry the DOT Emergency Response Guidebook (ERG), the NIOSH Pocket Guide, and basic equipment to be used defensively on hazardous materials incidents prior to the arrival of the HMRT. These units also carry level B splash suits and chemical resistant gloves. These can be used at the direction of the HMRT for assistance on scene of a hazmat emergency or during the transport of chemically exposed patients to local hospitals.

Additionally, Operations Battalion Chiefs and Assistant Chiefs carry single gas monitors for carbon monoxide (CO) and hydrogen cyanide (HCN). Though CO has always been a major component of smoke, recent research into structural firefighting has proven that HCN is also a large component of smoke and is as dangerous, if not more so, than CO itself. The proliferation of plastics and man-made materials inside occupancies is the major reason for the rise of HCN in modern day fires.

The HMRT is staffed at all times by a minimum of 5 HazMat Technicians. When not responding to hazmat emergencies, those personnel staff an Advanced Life Support (ALS) engine and hazmat medical rescue. Over 78 members of the department are hazmat certified and may be called upon as additional support on large scale incidents. All members who are eligible to be placed on the HMRT must maintain their refresher competencies on a yearly basis. They are also required to have yearly physicals, as stated in OSHA 1910.120(f). At a minimum all firefighters attend Hazmat Awareness training during minimum standards class.

HMRT personnel have all completed the 160 hour Hazardous Materials Technician Certification. Team member's complete quarterly hands-on performance objectives and attend monthly training drills with the three other HazMat Teams in Broward County. Complex incidents may require the need for additional teams, making interagency training vital. Team members attend additional training throughout the year based on grant funding, operational demands, and class availability. In 2017-2018 additional classes have included Advanced Radiation Training provided by the State of Florida Department of Energy, FBI – Suspicious Package Training Class along with multiple days of Regional Training with the three other Hazmat teams in Broward County.

Since the aftermath of 9/11, the HMRT has upgraded the cache of equipment and monitors through numerous federally funded grants. The HMRT can monitor for all types WMD/CBRNE material, including radioactive agents, explosive compounds, biological agents, flammable and combustible liquids and gases, corrosives, and toxic industrial chemicals. The accumulation of equipment carried by the HMRT is state of the art and includes chemical and biological sampling equipment, leak detection and mitigation tools, and a resource containing computers with internet access and hazmat-related computer programs installed.

The FLFR HMRT is one of four teams within Broward County. Response is dictated not only by location, but size and complexity of the incident. The FLFR HMRT is the first response team within Fort Lauderdale city limits and north to the Palm Beach County line.

Marine Firefighting and Dive Rescue Team

The current Marine Team was also a portion of the Special Hazards and Response Company (SHARC) Team and housed at Fire Station #49, which consists of fireboat operations, dive and surface rescue.

The City of Fort Lauderdale has over 165 miles of navigable waterway and a major seaport (Port Everglades) bordering the city to the Southeast. All FLFR personnel have received shipboard rescue and firefighting training. This training includes vessel familiarization, vessel stability, strategy, tactics and special considerations. This allows the ERF to initiate fireboat operations, establish patient contact, staging and apparatus set-up, providing technical expertise, initiating fire attack, knowledge, skills and abilities during marine rescue incidents and providing medical support.

The FLFR Marine Team currently consists of 8 members, assigned to 1 Engine Company, 1 Ladder company, 1 medical rescue and 2 fireboats. The members of the Marine Team are assigned to Fire Station #49, which has ICW (Intracoastal Waterway) access to the rear of the fire station. All members of the Marine Team must attend an approved 40-hour shipboard firefighting class in order to be eligible to be on the team. These members must complete several swimming, diving and general marine courses for assignment to the Marine Team. These courses include an open water dive certification, Public Safety Diver 1, shipboard firefighting for the land based firefighter and dry suit training. In addition, members of the Marine Team must complete an annual basic scuba skills course, annual swim test, as well as 18 open water dives every 3 years. All FLFR apparatus are equipped with surface water rescue equipment and members of the department are trained in surface water rescue using snorkel and fins, throw bag, Peterson buoy and paddle board.

The response for an incident involving a dive rescue or marine incident is as follows; for a marine vessel fire the assignment will include, 3 engine companies, 1 ladder company, fireboat with all members of the Marine Team, 1 Medical Rescue, 2 Chief Officers and the Squad. A dive rescue incident will get the following units assigned; fireboat with all Marine Team members, 1 Chief Officer, 1 engine company, 1 ladder company, 1 medical rescue, and the squad. In addition to the above responses, the Marine Team will utilize the fireboat for any other hazardous conditions within the Intracoastal Waterway or Atlantic Ocean within our jurisdiction.

Ocean Rescue

Fort Lauderdale Ocean Rescue lifeguards operate 20 beachside towers. Ocean Rescue operates in the first responder capacity and any medical emergency on the beach is called in to Firecom. Once Ocean Rescue initiates contact with Firecom, the EMS response is activated. All medical responses are handled by ALS units assigned to the operations division.

ARFF-Aircraft Rescue and Firefighting

The Fort Lauderdale Executive Airport (FXE) is in the northernmost section of the city began operations in 1941 as an auxiliary landing field to train naval aviators. FXE is nationally recognized as being in the top ten for busiest general aviation airports across the country. FXE has in excess of 150,000 take-offs and landings each year. FXE is owned and operated by the City of Fort Lauderdale and the airport is not an indexed airport as described by the Federal Aviation Administration (FAA) within the Federal Aviation Regulations, Part 139, Certification and Operations: Land Servicing Certain Air Carriers. The City of Fort

Lauderdale also owns and operates a heliport located in the downtown area of the city. Although the heliport is not covered by ARFF services, FLFR does provide coverage for fire and rescue through the use of structural firefighting crews.

The need for fire protection on airport property with a dedicated ARFF unit was recognized and then established in 1972. Today the ARFF Crash Truck is staffed with 2 highly trained members, 1 driver-engineer and 1 Captain. The members must go through a 40-hour ARFF course as well as internal training with both FLFR Training Bureau staff and FXE trainers. This training must be done prior to assignment and badge credentialing for FXE.

Fire Prevention

In 1973, the National Commission on Fire Prevention and Control produced a report called "America Burning" in an effort to evaluate fire loss. The report concluded that educating the public with fire prevention and life safety education information was critical to reducing the losses associated with fires. As a result of the report, firefighting agencies began to place a greater emphasis on planning life and property loss-reduction strategies before incidences actually occurred.

Some of the earliest pre-incident actions taken by the City of Fort Lauderdale were in 1937 when the placement of additional fireboxes was required. By 1941, 700 fire hydrants were distributed around the city. The Fort Lauderdale Fire Chief at that time, convinced that "preventing one fire was better than putting out two," took the initiative to visit public schools in the city during National Fire Prevention Week to deliver his message about fire safety.

On November 10, 1977, the Broward County Board of Rules and Appeals, at the request of the League of Cities and the local Fire Chiefs, approved a number of certification requirements for fire inspectors. The impetus that brought about new requirement was the desire for uniform application of the Fire Code and the desire for qualified fire inspectors to enforce it.

Today, twenty (20) highly qualified fire inspectors review and approve building and fire protection system designs, conduct new construction inspections according to approved design, and conduct periodic follow-up inspections on existing buildings to insure that the integrity of their original design is maintained. In addition, fire inspectors investigate fire cause and origin. Information gathered during these investigations often becomes the foundation for the development of new fire codes and public education programs about fire and life safety.

Community Service

FLFR provides various community-based services such as, CERT (Community Emergency Response Team), juvenile fire setters, baby safe sleep program, every child a swimmer, fire explorers, and junior life guards. The operations division conducts fire safety demonstrations and other information to schools, churches and other community events on a daily basis. These events are scheduled through administration and entered into the daily operations scheduling calendar.

Current Deployment

Points of Service Delivery

The City of Fort Lauderdale encompasses a total of 37 square miles to include all property within the city limits and also the City of Wilton Manors and Village of Lazy Lake. FLFR is staffed with a minimum of 86 personnel on duty per day and operates out of 12 stations.

Station 2 528 NW 2nd Street- Fire Administration / Fire Prevention
Station 3 2801 SW 4th Avenue
Station 8 1717 SW 1st Avenue
Station 13 2871 East Sunrise Boulevard
Station 16 533 NE 22nd Street, Wilton Manors
Station 29 2002 NE 16th Street
Station 35 1969 East Commercial Boulevard
Station 46 1515 NW 19th Street
Station 47 1000 SW 27th Avenue- Technical Rescue Team
Station 49 1015 Seabreeze Boulevard- Marine Rescue Team
Station 53 2200 Executive Airport Way- HazMat Team/ ARFF/ Training Bureau
Station 54 3211 NE 32 Street

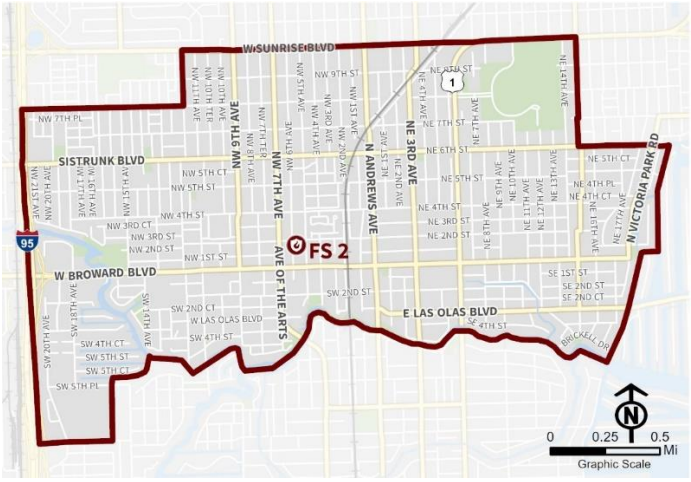
Resources

Table 4 Resources by Station

Station 29 staffs the Technical Rescue Team, Engine 29, Rescue 29 and Squad 29. Station 53 staffs the ARFF Truck and Hazardous Materials Team, HM88, Engine 53 and Rescue 53. Station 49 staffs the fireboats as needed, Engine 49, Ladder 49 and Rescue 49.

	Number of Personnel minimum	Number of Assistant Chiefs	Number of Battalion Chiefs	Number of Engines	Number of Rescues	Number of Ladder Truck	Number of Special Apparatus
Station 2	16	1	1	1	3	1	
Station 3	5			1	1		
Station 8	5			1	1		
Station 13	6		1	1	1		
Station 16	6		1	1	1		
Station 29	6			1	1		1
Station 35	9			1	1	1	
Station 46	7			1	2		
Station 47	8			1	2		
Station 49	8			1	1	1	2
Station 53	7			1	1		2
Station 54	5			1	1		

Fire Station # 2 – 528 N.W. 2nd Street



Description: Fire Station 2 was originally built in 1912. Fire Station 2 was relocated and rebuilt in 2004. Fire Station 2 provides service to the central / downtown district of the city. The station is home to Fire Administration, the Fire Inspection Bureau and houses 1 ALS engines, 3 ALS medical rescue units, 1 ALS tower ladder, a Battalion Chief and the shift Assistant Chief. The station has ten bays, a community style training room, and a medical exam room.

Apparatus/Staffing:

Engine 2:	3 Personnel	Rescue 2:	3 Personnel
Tower 2:	3 Personnel	Rescue 302:	3 Personnel
Assistant Chief:	1 Personnel	Rescue 202:	2 Personnel
Battalion 2:	1 Personnel		

Administrative/Day Staffing:
1 Fire Chief, 1 Fire Marshal, 1 Assistant Fire Marshal, 3 Deputy Fire Chiefs, 1 EMS Assistant Chief, 1 EMS Battalion Chief, 1 Homeland Security Assistant Chief, 1 Professional Standards Bureau Battalion Chief.

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Facility Safety: Station 2 relocated and constructed a 10-Bay facility in 2004.

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

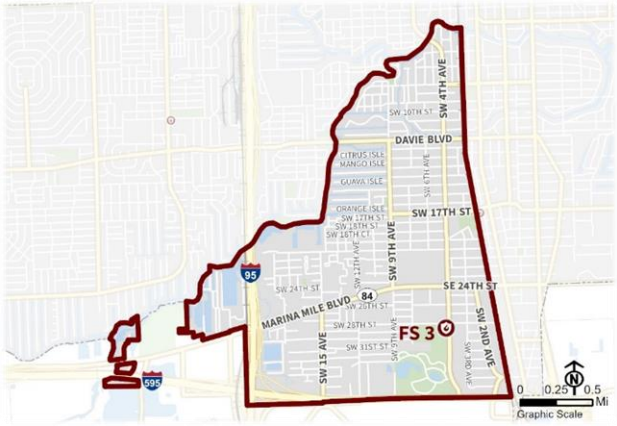
Response Area Characteristics:

First Due Area Size:	**3.7 square miles**	*(10% of Total FLFR Response Area)*
Population:	**28,564**	*(15% of Total FLFR Response Area Pop.)*
Households:	**13,904**	
Median Age:	**37.3**	

Property Class Distribution (units):

Residential:	**16,281**
Commercial:	**1,421**
Industrial:	**313**

Fire Station # 3 – 2801 S.W. 4th Avenue



Description: Fire Station 3 was originally built in 1925 and rebuilt in 2010. Fire Station 3 provides service to the southern portion of the city, which is home to a large number of warehouses, marinas, railways, and highways. The station is home to 1 ALS engine and 1 ALS medical rescue unit. Station 3 has four bays, a large community style training room and a medical exam room

Apparatus/Staffing:
Engine 3: 3 Personnel
Rescue 3: 2 Personnel

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

Response Area Characteristics:

First Due Area Size:	**3.4 square miles**	*(9% of FLFR Response Area)*
Population:	**13,569**	*(7% of Total FLFR Response Area Pop.)*
Households:	**6,529**	
Median Age:	**43.5**	

Property Class Distribution (units):

Residential:	**7,360**
Commercial:	**895**
Industrial:	**437**

Fire Station # 47 – 1000 S.W. 27th Avenue

Description: The Fire Station was originally built in 1964 and rebuilt in 2008. Fire Station 47 is home to 1 ALS engine, and 2 ALS medical rescue units. The station has 8 bays a community style training room and a medical exam room. The station provides service to the southeast portion of the city and covers large portions of I-95 north and southbound.

Apparatus/Staffing:

Engine 47:	3 Personnel
Rescue 47:	2 Personnel
Rescue 247:	3 Personnel

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

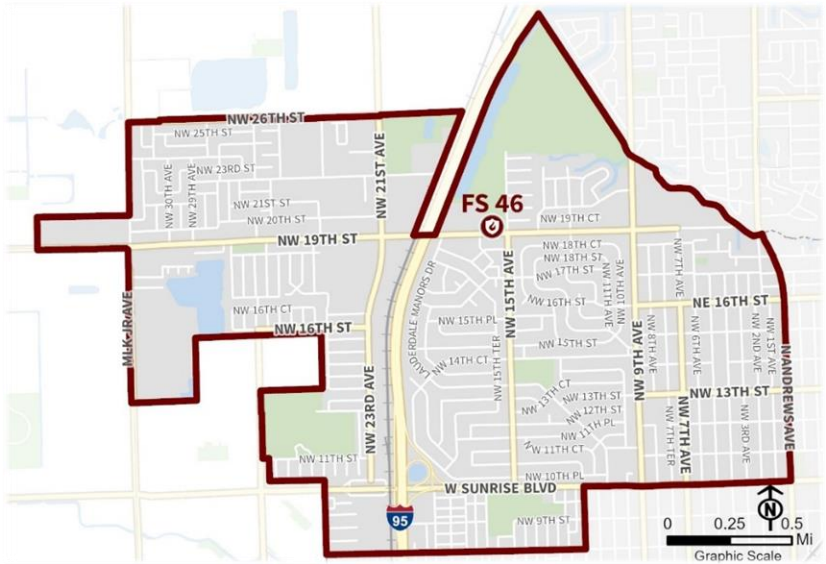
Response Area Characteristics:

First Due Area Size:	**5.3 square miles**	*(14% of FLFR Response Area)*
Population:	**32,254**	*(17% of Total FLFR Response Area Pop.)*
Households:	**10,764**	
Median Age:	**38.5**	

Property Class Distribution (units):

Residential:	**11,340**
Commercial:	**293**
Industrial:	**130**

Fire Station # 46 – 1515 N.W. 19th Street



Description: Fire Station 46 was originally built in 1964 and relocated to its current location in 2013. Fire Station 46 is home to 1 ALS engine and 2 ALS medical rescue units. The station has 3 drive-through a community style training room and a medical exam room. The station provides service to a large residential section of the city, highways and railway.

Apparatus/Staffing:

Engine 46:	3 Personnel
Rescue 46:	2 Personnel
Rescue 246:	2 Personnel

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

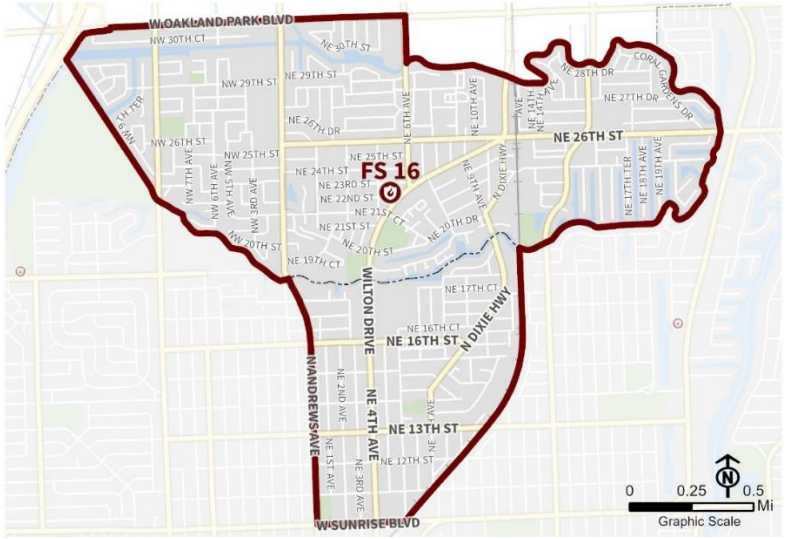
Response Area Characteristics:

First Due Area Size:	**3.8 square miles**	*(10% of FLFR Response Area)*
Population:	**23,081**	*(12% of Total FLFR Response Area Pop.)*
Households:	**7,297**	
Median Age:	**35.5**	

Property Class Distribution (units):

Residential:	**8,061**
Commercial:	**122**
Industrial:	**109**

Fire Station # 16 – 533 N.E. 22nd Street, Wilton Manors



Description: Fire Station 16 was built in 1990 and services the City of Wilton Manors and Lazy Lake. The station is home to 1 ALS engine, 1 ALS medical rescue unit and Battalion 16. The station has 6 bays and just renovated in 2018.

Apparatus/Staffing:

Engine 16:	3 Personnel
Rescue 16:	2 Personnel
Battalion 16:	1 Personnel

Construction:
Ordinary Construction

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

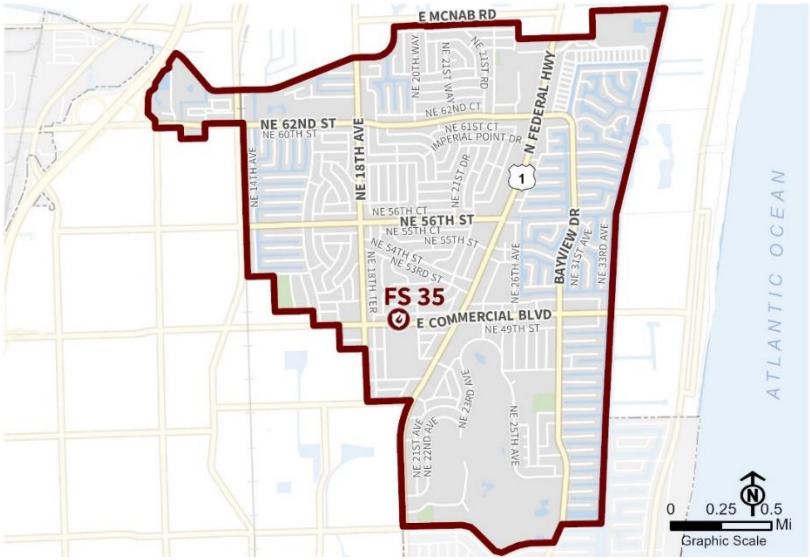
Response Area Characteristics:

First Due Area Size:	**2.7 square miles**	*(7% of FLFR Response Area)*
Population:	**18,104**	*(9% of Total FLFR Response Area Pop.)*
Households:	**9,159**	
Median Age:	**47.0**	

Property Class Distribution (units):

Residential:	**9,749**
Commercial:	**500**
Industrial:	**195**

Fire Station # 35 – 1969 E. Commercial Boulevard



Description: Fire Station 35 was originally built in 1962 and rebuilt in 2012. The station has 3 drive-through bays and is home to 1 ALS engine, 1 ALS ladder and 1 ALS medical rescue unit. The station has a community style training room and a medical exam room.

Apparatus/Staffing:

Engine 35:	3 Personnel
Ladder 35:	3 Personnel
Rescue 35:	3 Personnel

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

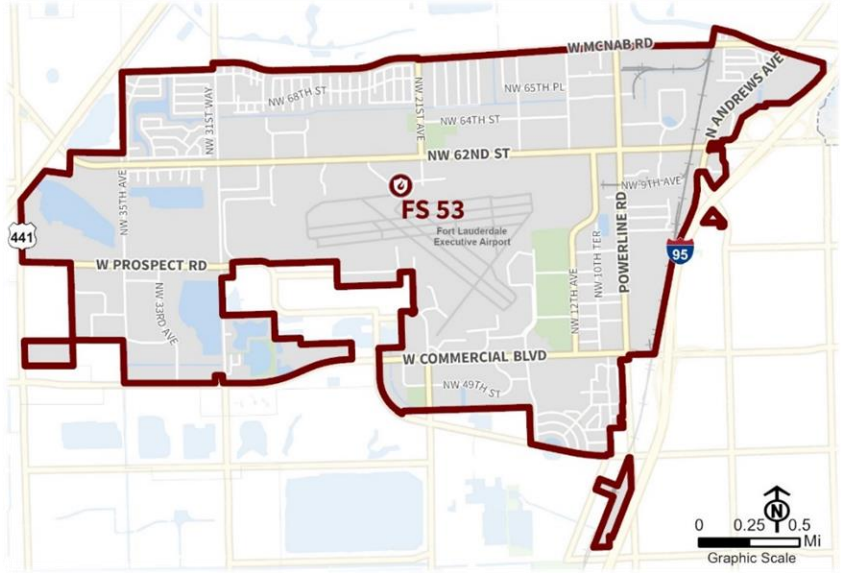
Response Area Characteristics:

First Due Area Size:	**3.9 square miles**	*(10% of FLFR Response Area)*
Population:	**21,594**	*(11% of Total FLFR Response Area Pop.)*
Households:	**11,291**	
Median Age:	**51.2**	

Property Class Distribution (units):

Residential:	**12,828**
Commercial:	**1,032**
Industrial:	**22**

Fire Station # 53 – 2200 Executive Airport Way



Description: Fire Station was originally two stations and combined into one station in 2008. Fire Station 53 is home to the Training and Special Operations bureau, Emergency Management Division, and a Broward County emergency operations location center. The station houses 1 ALS engine, 1 ALS medical rescue unit, the hazardous materials team and the ARFF truck. The station provides service to the northwest section of the city and Fort Lauderdale Executive Airport.

Apparatus/Staffing:

Engine 53:	3 Personnel
Rescue 53:	2 Personnel
Hazmat 88:	Tractor Trailer
ARFF Truck 53:	2 Personnel

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

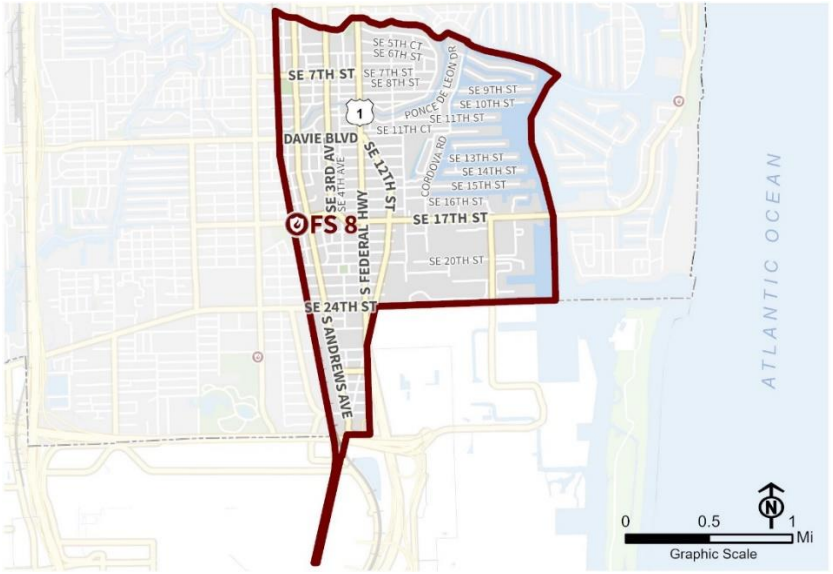
Response Area Characteristics:

First Due Area Size:	**5.0 square miles**	*(13% of FLFR Response Area)*
Population:	**6,004**	*(3% of Total FLFR Response Area Pop.)*
Households:	**2,118**	
Median Age:	**40.0**	

Property Class Distribution (units):

Residential:	**1,941**
Commercial:	**2,004**
Industrial:	**748**

Fire Station # 8 – 1717 S.W. 1st Avenue



Description: Fire Station 8 was originally built in 1927. Fire Station 8 was relocated and combined with Fire Station 2 in 2004. A new Fire Station 8 has been rebuilt and relocated in 2020. Fire Station 8 will provide services to the growing southern downtown portion of the city. The station is home to 1 ALS engine and 1 ALS medical rescue unit. Station 8 has six bays, a large community style training room and a medical exam room.

Apparatus/Staffing:

Engine 8:	3 Personnel
Rescue 8:	2 Personnel

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

Response Area Characteristics:

First Due Area Size:	**2.8 square miles**	*(7% of FLFR Response Area)*
Population:	**11,708**	*(6% of Total FLFR Response Area Pop.)*
Households:	**5,382**	
Median Age:	**42.0**	

Property Class Distribution (units):

Residential:	**7,049**
Commercial:	**2,878**
Industrial:	**1,071**

Fire Station # 49 – 1015 Seabreeze Boulevard

Description: The Fire Station was originally built in 1966 and rebuilt in 2010. Fire Station 49 is home to the Marine Firefighting and Dive Rescue Team. The station has 1 ALS engine, 1 ALS ladder, 1 ALS medical rescue unit and 2 fire boats. The station has 4 bays a community style training room and a medical exam room. The station provides service to the south portion of the beach, surrounding high-rise buildings and hotels.

Apparatus/Staffing:

Ladder 49:	3 Personnel	Fireboat 49
Engine 49:	3 Personnel	Fireboat 249
Rescue 49:	2 Personnel	

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

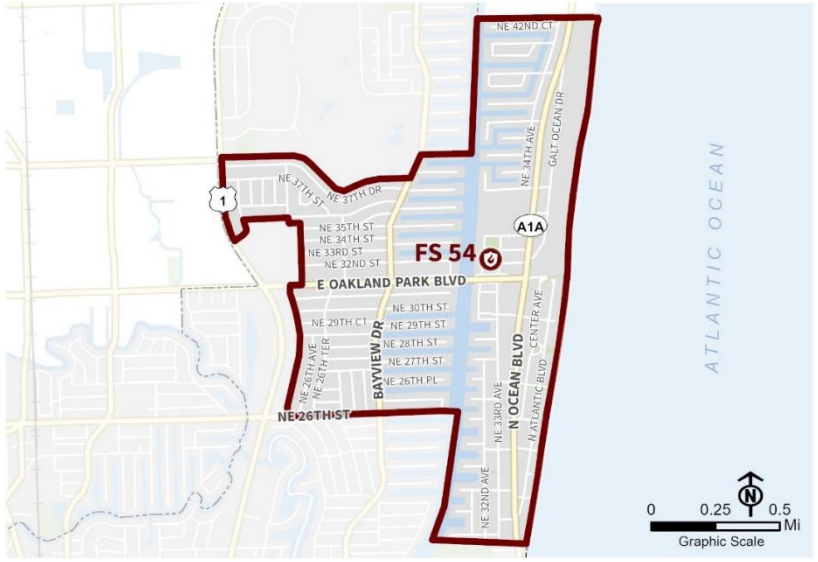
Response Area Characteristics:

First Due Area Size:	**2.5 square miles**	*(6% of FLFR Response Area)*
Population:	**7,315**	*(4% of Total FLFR Response Area Pop.)*
Households:	**4,015**	
Median Age:	**61.1**	

Property Class Distribution (units):

Residential:	**6,146**
Commercial:	**2,019**
Industrial:	**1**

Fire Station # 54 – 3211 N.E. 32nd Street



Description: Fire Station 54 was originally built in 1971 then rebuilt on its new location in 2018. Station 54 is home to 1 ALS engine and 1 ALS medical rescue unit The station provides service to a large number of residential high-rise structures and the northern portion of the beach.

Apparatus / Staffing:
Engine 54: 3 Personnel
Rescue 54: 2 Personnel

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

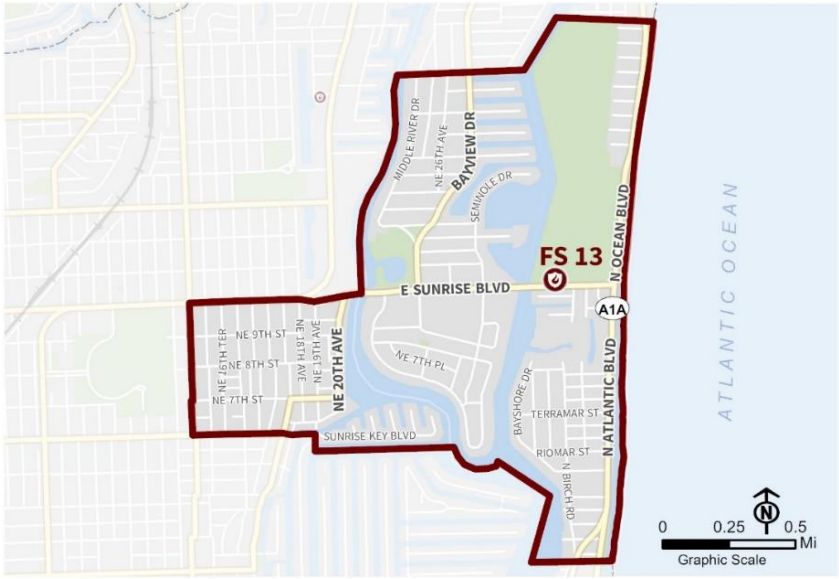
Response Area Characteristics:

First Due Area Size:	**1.5 square miles**	*(4% of FLFR Response Area)*
Population:	**12,560**	*(7% of Total FLFR Response Area Pop.)*
Households:	**7,500**	
Median Age:	**63.1**	

Property Class Distribution (units):

Residential:	**11,548**
Commercial:	**1,377**
Industrial:	**0**

Fire Station # 13 – 2871 East Sunrise Boulevard



Description: Fire Station 13 was originally built in 1948 and rebuilt in 1972 and is the central beach station. Station 13 has 4 bays and is of the original fire stations still in service. Station 13 is home to 1 ALS engine, 1 ALS medical rescue unit and Battalion 13. The station has four bays and a training room.

Apparatus / Staffing:

Engine 13:	3 Personnel
Rescue 13:	2 Personnel
Battalion 13:	1 Personnel

Construction:
Ordinary Construction

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

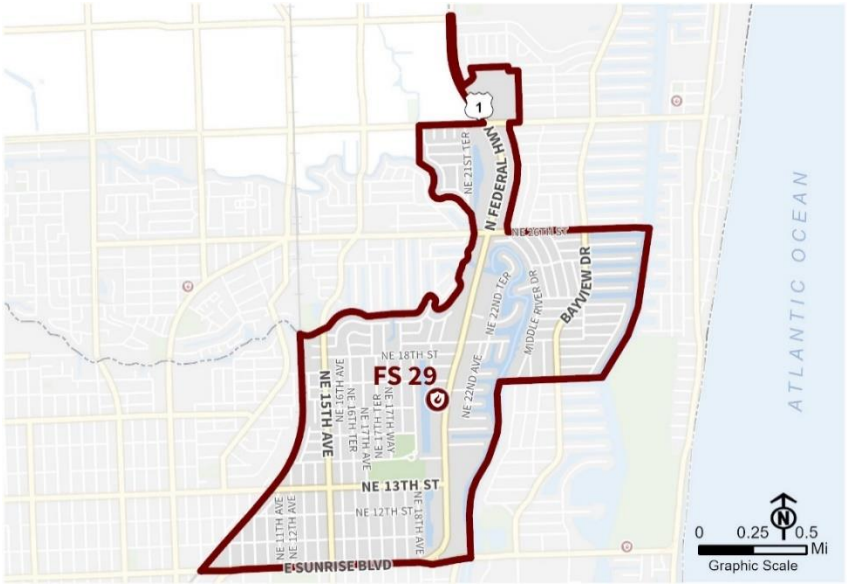
Response Area Characteristics:

First Due Area Size:	**1.9 square miles**	*(5% of FLFR Response Area)*
Population:	**8,956**	*(5% of Total FLFR Response Area Pop.)*
Households:	**5,316**	
Median Age:	**52.7**	

Property Class Distribution (units):

Residential:	**7,015**
Commercial:	**3,439**
Industrial:	**0**

Fire Station # 29 – 2002 N.E. 16th Street



Description: Fire Station 29 was originally built in 1959 and rebuilt in 2010. Fire Station 29 is home to the Technical Rescue Team. The station has 1 ALS engine, 1 ALS medical rescue unit and 1 squad. The station has 4 bays and a community style training room and medical exam room.

Apparatus / Staffing:

Engine 29:	3 Personnel
Rescue 29:	2 Personnel
Squad 29:	1 Personnel

Construction:
Built to withstand Category 5 Hurricanes per Florida Building Codes

Safety: Building is fully alarmed and sprinklered. Security is controlled by electronic card reader access.

Code Compliance: No code compliance issues

Facility Adequacy: Has adequate space to house current staff and line crews. Has male/female facilities on property. Has backup generator to power entire station during storms or power outages.

Response Area Characteristics:

First Due Area Size:	**1.9 square miles**	*(5% of FLFR Response Area)*
Population:	**9,249**	*(5% of Total FLFR Response Area Pop.)*
Households:	**4,888**	
Median Age:	**46.8**	

Property Class Distribution (units):

Residential:	**5,251**
Commercial:	**728**
Industrial:	**47**

Response Areas

FLFR is divided into zones to identify the primary response areas for apparatus and to aide in pinpointing the area of the city in which a request for service is made. The numbering system for the zones coincides with the station number for each fire station and represents its geographical primary response area. Each zone is further broken down with the addition of an alpha numeric identifier so that the zones are smaller and define a more specific area. As an example, station number 3 would have zones that include zone 3, zone 3A zone 3B zone 3C, and are considered a part of Zone 3. These smaller defined areas help crews to pinpoint exact map locations more quickly in an effort to aide in response. In most cases the zones use geographical boundaries to help define them such as roads, waterways or other geographical features.

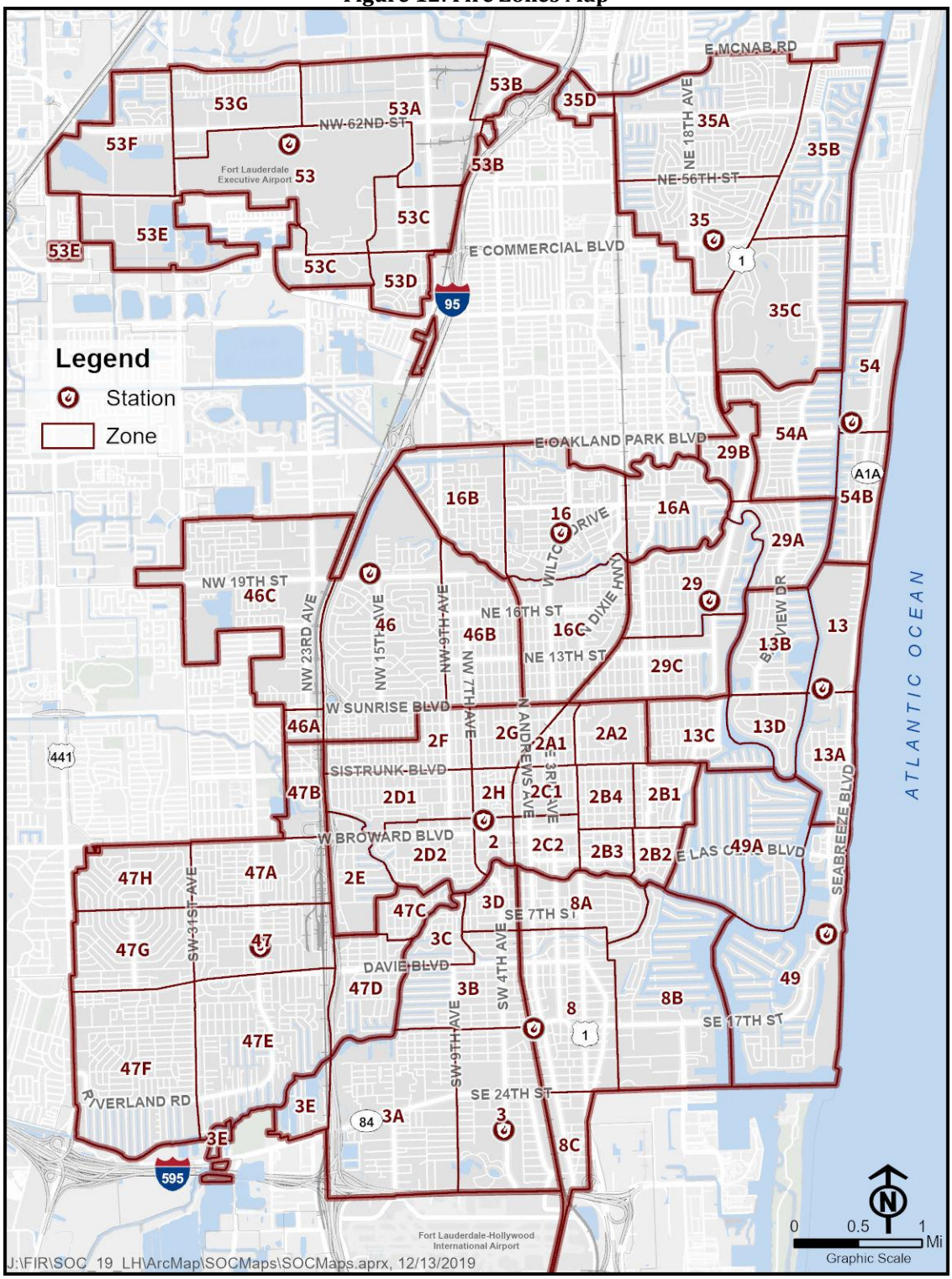
Periodic reviews of response areas are conducted, and changes made based on call volume and response times. In some cases, due to the movement and construction of new fire stations, response zones named for one station have been assigned to units that are housed at another.

Table 5 Approximate Road Feet and Miles, Square Feet and Miles, by Planning Area

Planning Area	Road Ft.	Road Miles	Square Ft.	Square Miles
Planning Area 2	500,165	94.7	102,988,602	3.7
Planning Area 3	410,824	77.8	93,733,297	3.4
Planning Area 8	329,447	62.4	50,481,260	1.8
Planning Area 13	167,728	31.8	54,346,775	1.9
Planning Area 16	309,177	58.6	75,900,578	2.7
Planning Area 29	205,107	38.8	52,205,606	1.9
Planning Area 35	385,595	73.0	108,509,169	3.9
Planning Area 46	399,403	75.6	117,572,481	3.8
Planning Area 47	657,745	124.6	147,312,181	5.3
Planning Area 49	152,471	28.9	69,531,810	2.5
Planning Area 53	302,756	57.3	139,249,099	5.0
Planning Area 54	37,950	30.7	41,656,590	1.5
Average	321,531	62.9	87,790,621	3.1

Below is a copy of a map that is broken down by zones and defines the primary response areas. (2019)

Figure 12: Fire Zones Map



Wilton Manors and Lazy Lake (Contract Areas)

The city of Wilton Manors and Lazy Lake response history are not reported on separately. Both areas are incorporated into the annual totals. Wilton Manors is in planning zones 16, 16A and 16B. Lazy Lake is in planning zone 16. Staffing, equipment, responses within Wilton Manors and Lazy Lake are consistent with the City of Fort Lauderdale both contract cities receive the same service levels.

Community Response History

Figure 13: Community Response History (2015 -2019)

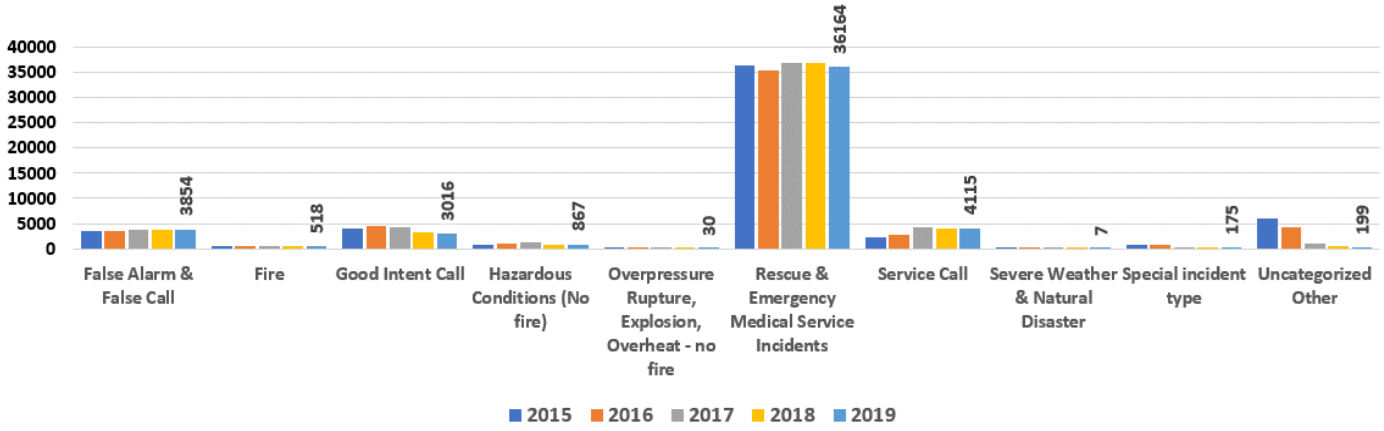
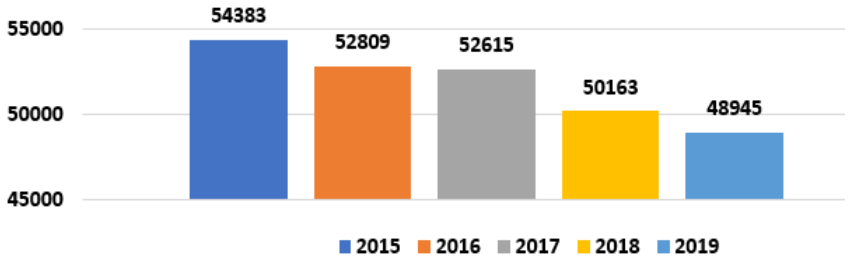
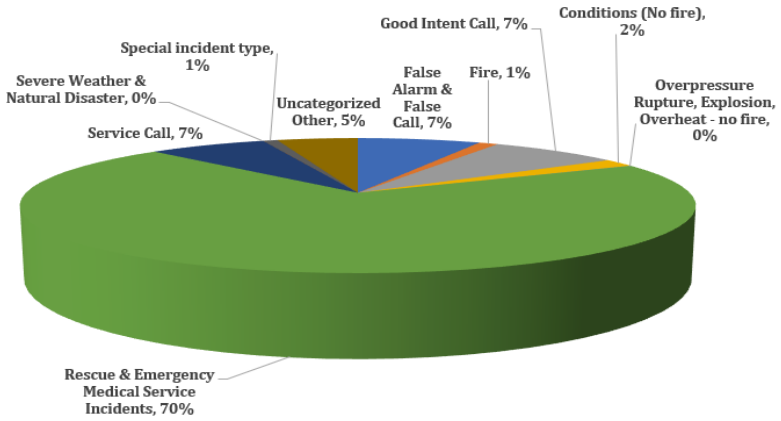


Figure 14: Total Incidents Trends (2015-2019)



Evaluating FLFR's response data over the past five years, FLFR total calls for service in EMS, Hazmat, and Fire Rescue has remained relatively consistent and unchanged over the past five-year period 2015 – 2019.

Figure 15: Percentage of Call Types (2015-2019)



The largest category of all call types are EMS type calls. EMS call types encompass both Advanced Life Support (ALS) and Basic Life Support (BLS) calls for service via 911, and Inter-facility transports where a patient will be transported from one hospital to another. The category of Good Intent, total 7%, is made up of mostly service calls where the fire department responds to find a minor incident. Fire calls and False Alarms account for 8% of our calls for service. Fire calls include everything FLFR responds to that could be or was related to an actual fire or potential for a fire. Actual building fires averaged 114 per year over the five-year period. The remaining incidents are shared by Service Calls and Hazardous Conditions. Specialty Teams comprise 1%, and 5% of the calls are other, uncategorized calls.

C. Community Expectations and Performance Goals

Community Expectations

Service Delivery Program Transitions

EMS Emergency Medical Service

- 1975 - First paramedic hired on the fire department-Prior to this date the fire department was staffed with first responders only.
- 1983 – Fire department requested all 10 paramedics to renew their license. -This was a response to the growing trend in Broward County for Fire Departments to run their own EMS systems. This event signaled the direction the fire department was anticipating for the future.
- 1995 – FLFR licensed to provide advanced life support (ALS) services as indicated by the move in 1983, FLFR received their COPCN and began ALS services.
- 1995 – FLFR licensed to transport patients in Fire Rescue vehicle- This was significant as it not only fulfilled a need but it allowed FLFR to set the level and quality of care within the City.
- 1995 - December, Engine 3 & Engine 8 were reassigned as Rescue Engine 3 & Rescue Engine 8-This name change was symbolic of the assumption of ALS services and designated these specific vehicles as ALS (Not every vehicle was ALS licensed yet.).
- 1995 – December, first time a patient in the City is treated with ALS procedures by Rescue Engine 8.
- 1996 – City has four fire rescue transport units at Stations 2, 3, 13, & 35- These Medical Rescue Units (MRU's) were the first in the city run entirely by Fort Lauderdale firefighters.
- 1996 – October 6, 1996 FLFR transported a patient to the hospital for the first time.
- 1999 – October 1, 1999 – Assumed all ALS services in the City of Fort Lauderdale with ten transport units. All units were staffed with two paramedics. This signifies Fort Lauderdale becoming autonomous as a medical rescue agency. Prior to this date all medical was directed by Broward County Fire Rescue.
- 2002 – Rescue 247 was added as a transport unit. FLFR annexed the Melrose Park neighborhood. The addition of this MRU enhanced the current services and increased coverage to the newly annexed area.
- 2004 – Rescue 246 was added as a transport unit. –This MRU was added to enhance response within the system as call volumes were increasing due to the new areas and population growth.
- 2007 – Electronic EMS reporting system was fully implemented. The "Medusa system was FLFR's launch into the future of EMS. This made the reporting system completely paperless and brought FLFR up to speed with neighboring medical systems.
- 2009 – Lifenet system implemented allowing transmission of ECGs directly to the hospital. The addition of Lifenet made it possible for emergency room physicians to read the EKG of a patient prior to arrival at the emergency room.
- 2009 – New EMS protocols implemented. These protocols, known as the "Joint EMS protocols", were computer based and dynamic as a field document. The previous protocols were outdated and difficult to update. The new protocols were also developed completely by FLFR paramedics along with the Medical Director Dr. Nabil ElSanadi.

- 2010 – Began induced hypothermia. FLFR was the first fire rescue agency in South Florida to begin this life saving procedure. The procedure cools the body temperature of the cardiac arrest patient which in turn decreases the amount of swelling in the brain. This enhances the chance for survival post arrest.
- 2010 – Received grant to update Lifepak to the most current model. This grant enabled FLFR to replace the existing cardiac monitors/defibrillators, which had reached their service life, with the newest model, the Lifepak 15. Without the grant, the 1.2 million dollar defibrillators would have been out of the financial reach of the department.
- 2011 – Instituted EMS Triptix electronic patient care reporting (PCR) system. The Triptix system allows for FLFR to not only gather better data and medical trends, it enables the department to better gather information for patient billing thus improving collection rates.
- 2011 – Implemented STEMI protocol. The STEMI protocol allows medics in the field to send EKG's directly to the cardiac catheterization laboratory thus decreasing the amount of time it takes to get definitive treatment for heart attack patients.
- 2012 – Developed and implemented sign-off program for newly hired employees. This program created a standardized format for all paramedics to use as a training guide for new hires. It allows them to focus on certain areas that the department has designated as "critical."
- 2014- Ordered 11 Braun ALS medical rescue units which are NICU and PICU capable. Placed Intubrite intubation equipment into service.

HazMat

- 2006- Hazmat tractor trailer purchased
- 2007- New monitors – RAZOR EX, Raman / Gamma spectrometer, RadEYE dosimeters, TPM-903B portable monitors
- 2008- 3 line decon system, AP4C, RadSeekers
- 2010- 12 new Level A suits, AreaRae, New Braun RE53, Drager X-act 5000, MultiRAE (2), LD-5000 Prowler leak detector, IRK sampling kit
- 2011- GoPro cameras, 40 cyano-kits, misting fan, decontamination shelter
- Since the aftermath of 9/11, our Hazmat Team has significantly upgraded our cache of equipment and monitors through numerous federally-funded grants.

Rescue

- 1992- FLFR first ventured into the field of technical rescue by creating the Special Hazards and Rescue Company (SHARC) team. The initial team members were trained in dive rescue and rope rescue disciplines. At the onset, 27 members of the department received certifications in dive and rope rescue. The SHARC team was located at Fire Station 49 where the department's fireboat was also docked to allow dive rescue capabilities from a boat or land based scenario.
- 1993- The SHARC team expanded its capabilities by training members in confined space operations.
- 1993-1997- Many team members continued to expand their knowledge base by attending trench rescue courses and expanding the rope rescue and confined space disciplines to the technician level. Although not required by the department for assignment to the SHARC team, this training proved vital in advancing the capabilities of the team.

- 1997- The TRT assisted Margate Fire Rescue with an incident involving an excavation collapse where one worker was killed and two were severely trapped under a large boulder for several hours. Fire Chief Robert Hoecherl, along with several team members, was instrumental in the successful rescue of two workers in that collapsed trench. Although the team did not have the required equipment to complete a trench rescue, the team relied upon equipment from mutual aid partners in the event of a trench rescue incident.
- 1997- FLFR entered into an agreement with the City of Miami that allowed for members of the TRT to become members of the federal FEMA Urban Search & Rescue Team FL-TF2.
- 1998- FLFR purchases a trailer and equipment to be able to handle a trench rescue if the need arose.
- 2000- The team changes its name from SHARC to the FLFR Technical Rescue Team.
- 2005- The TRT team receives a new 28' McKee Craft fireboat.
- 2008- Based on the extensive requirements to be considered a Technical Rescue Team according to NFPA 1670. The decision was made to separate dive rescue and technical rescue and relocate the TRT team to Fire Station 47.
- 2009- FLFR officially added trench rescue technician and vehicle and machinery rescue operations training to the requirements for assignment to the TRT team. Utilizing federal grant funds from the Urban Area Security Initiative, TRT members received training to the rope technician level and trench technician level. Additionally, the members received training to the operations level in Vehicle and Machinery rescue.
- 2010- Utilizing funding from UASI members received training to the technician level in Structural Collapse. The department also purchased its first heavy rescue a Hackney tandem axle vehicle capable of carrying most of the team's equipment. The vehicle, was also outfitted with a compressor and fill station allowing it to serve an additional role of providing air, lights, and power at all emergency incidents.
- 1992-2014- FLFR responded to numerous high-profile incidents involving the TRT. In addition, members assigned to the team that are or were members of the FEMA Urban Search & Rescue FL-TF2 responded to numerous natural and man-made disasters including the attacks of 9/11/01. Six members of FLFR were deployed with FL-TF2 to New York City where they assisted in rescue efforts at the World Trade Center site.

<u>Fire Suppression</u>

- 1912- The need for the city's first fire department became apparent as a result of a large fire in the city's downtown district. The city council voted to purchase its first fire equipment, a hand-drawn, hand-operated pump and a chemical extinguisher mounted on carriage wheels. The chemical extinguisher was pulled by a one-cylinder International Harvester truck, and the pump was pulled to the fires by the dozen or so volunteers. The fire department would not have a permanent home until January 7, 1913 when some property at Andrews Avenue and S.W. 2nd Street was purchased for $1,800.
- 1913- The City of Fort Lauderdale purchased its first permanent station at Andrews Avenue and S.W. 2nd Street for $1,800.
- 1920- The city added 750 feet of three-inch fire hose to its equipment bringing the total length of hose to 1,750 feet.
- 1929- Chief Cody resigned, Clarence "C.W." King took his place. At this time there were about 22 firefighters to run the central, south side and west side stations. Shortly after the

great depression struck, that same year, the west side and south side stations were closed and personnel were reduced to seven firefighters.

- 1937- The city authorized additional fire boxes to be placed around town. There were about 18 firefighters on staff and 10,300 residents at the time.
- 1939- The department budget was $35,000.
- 1940- 19 firefighters on staff and seven vehicles serving 18,000 residents.
- 1957- 21 firefighters were hired increasing the ranks to 107 and the three-platoon system was established.
- 1962- The city opened the 6th fire station at 1961 N.E. 50th Street.
- 1964- Fire station 7 1121 N.W. 9th Ave and fire station 8 at 1000 S.W. 27th Ave were built.
- 1965- The first fire boat was purchased a 26-foot steel haul "jet" outdrive.
- 1970- Firefighters were banned from riding tailboard and were placed in the cab or in a backwards facing seat.
- 1971- The City Commission voted to purchase MSA self-contained breathing apparatus for $12,000.
- 1977 The department was reorganized to show apparatus staffing as follows: : Engine 1, Squirt 1 and Ladder 1, Engine 2, Engine 3, Engine 4, Engine 4A, Engine 5, Engine 6, Snorkel 6, Engine 7, Engine 8, Engine 9, Snorkel 9, Fireboat 1, Engine 10 and Engine 11. The district commander I (battalion chief) covered Stations 1, 2, 3 and 8. The district commander II covered Stations 5, 6, 7 and 10. The district commander III covered Stations 4, 9 and 11.
- 1985- Fire station 88 opened at 6300 N.W. 21ST Avenue
- 1990- The department received new three-inch and one-and-three-quarter-inch lightweight synthetic hose. Most of the pumpers were outfitted with 1700 feet of three-inch hose and preconnect cross lays of one and three quarter inch hose that were 200 feet in length.
- 1993- The Passport Accountability System was implemented. Firefighters were required to place their name tags on a passport board during each call so they could track which firefighters were on the scene of a fire at all times
- 1994- Firehouse Magazine ranked an Emergency One hush pumper at Fort Lauderdale's Fire Station 46 as the fourth busiest engine in the country. During the year it went on 5,091.
- 1995- MSA breathing apparatus was replaced with the Interspiro breathing apparatus.
- 1995, Engine 46 was recognized as the third busiest engine ranked by Firehouse Magazine. The Engine responded to 5,777 runs in the year. Also responding to a large volume of calls was Engine 2 that answered 5,102 calls and Engine 8 that ran on 4,913 calls in 1995.
- 1995- Two FLFR engines went into service as ALS units. Engine 3 and Engine 8 were reassigned as Rescue Engine 3 and Rescue Engine 8. Engine 2 was soon to follow and renamed Rescue Engine 2.
- 1996- Otis Latin was hired as Fire Chief and was the first African American to hold the position. FLFR operates four ALS engine companies. Engine 46 was named the "Busiest Engine Company in the State" running 5,249 calls.
- 1997- For new Pierce Quantum Pumpers were purchased.
- 1998- The entire fleet of apparatus was revamped from 1998 to 1999. The two-year project included the replacement of three ladder trucks with three new Pierce Quantum Quints, with a 105-foot aerial. A total of 11 new Pierce Quantum pumpers with 2000 gallons per minute (gpm) pumps and a 750 gallon water tank, six new Chevy Suburbans, which served

as battalion vehicles, eight new freight-liner rescue trucks and a new air and light vehicle were put in service to replace existing units.

- 1999- Wilton Manors was added to the list of cities served by FLFR. The station, after being run by volunteers for 40 years, would now be staffed with FLFR firefighters.
- 1999- When Hurricane Irene hit land on October 15th, FLFR experienced the busiest shift in its 87-year history. Units were dispatched to more than 453 calls.
- 2000- Rhoda Mae Kerr was promoted to Deputy Chief of Administration, the first female to hold the position of Deputy Fire Chief.
- 2001- FLFR held a groundbreaking ceremony for a station and Administration Building. The ceremony was held at the construction site of the new facility located at 528 N.W. 2nd Street.
- 2001- Fire Station 2 was the ninth busiest station in the country in 2001with 24,000 calls.
- 2002- The City of Fort Lauderdale annexed Melrose Park and the Riverland area adding 12,493 residents and 4,244 homes to the area protected by FLFR.
- 2005- A DC-3 crash landed on NE 56th Street. Due to the extreme fire conditions Truck 53 sustained heavy damage and needed to be replaced.
- 2008- Fire Station 47 and 53/88 were rebuilt and opened for service.
- 2009- FLFR hosted the first Fort Lauderdale Fire Expo, a three day event training firefighters from all over the country.
- 2010- Fire Stations 3, 29, 49 were rebuilt and opened for service.
- 2012- Fire Station 35 was rebuilt and opened for service.
- 2013- Fire Station 46 was rebuilt and opened for service.
- 2014- FLFR contracted with the CPSE Technical Advisor Program seeking Accreditation through the CFAI.
- 2015- Fire Station 54 construction started. Crews and units were moved into a temporary station.
- 2015- Fireboat 49 along with crews from FLFR responded to a multiple alarm marina fire.
- 2015- Fireboat 49 responded off shore for five people overboard. One of the men was found trapped under the boat and was rescued by Fireboat 49 divers.
- 2016- Cessna plane crash off of Fort Lauderdale, Fireboat 49 responded. 2 souls died and FB49 dove the crash site
- 2016- 1 inch pipe leaked 900 gallons of Hydrogen Peroxide in an underground concrete vault – 3 Hazmat teams along with zone units.
- 2017- Three alarm fire due to a chemical explosion in zone 88. FLFR Hazmat Team mitigated this incident.
- 2017- Fireboat 49 assisted the Coast Guard in removing a passenger from a cruise ship having a stroke in the middle of the night.
- 2017- Fort Lauderdale Airport shooting took place killing 5 victims. Multiple crews responded to this Level 3 MCI incident.
- 2018- 2 alarm fire of an auto part store on Federal Highway. Fire resulted in a total loss of the structure.
- 2018- Mega Yacht fire in zone 3.
- 2018- Residential fire in zone 47 with 2 children possible trapped inside. E47 Crew found one child outside upon arrival and found one inside house hiding in a closet. E47 Crew rescued child from structure and child has made a full recovery.

- 2018- Plane Crash into a building filled with kids inside.
- 2019- Multiple FLFR crews provided assistance to a building explosion in Plantation.
- 2019- Largest Yacht fire in Fort Lauderdale history.

Performance Expectation Goals

Mission Statement

Since 1912, Fort Lauderdale Fire Rescue is steadfast in our dedication to providing the highest level of prevention, preparedness, and emergency response to our dynamic community.

"We Are More Than Our Mission"

Performance Goals

FLFR currently has a goal of obtaining the following in relation to response to calls for service and understands that, through the accreditation process, goals and objectives shall be updated and revised.

- Emergency Medical Services (EMS) - Total Time First Unit Arrival—Target: 6:00
- Turnout Time - Targets: 80 seconds for Fire; 60 seconds for EMS
- Fire Suppression - Residential Fire (Time of Arrival of 16th Firefighter)—Target: 10:20
- Fire Suppression - Commercial Fire (Time of Arrival of 22nd Firefighter)—Target: 14:20
- Percentage of Code 3 EMS incidents response (call to first arrival) within 6:00 minutes—Target: 90%
- Total Number of Incidents—Target: Decrease
- Number of Lives Saved and Interventions – Ocean Rescue—Target: <2% of Interventions are Lives Saved
- Percentage of Fires Confined to Structure of Origin—Target: 100%
- Percentage of NIMS Compliant Staff—Target: 95%

These response goals were developed through the City Manager's office and are currently being tracked in ClearPoint software. The Fire Chief and other department directors utilize ClearPoint to track department quality measures and budget metrics.

Figure 16: ClearPoint Scorecard Printout for Response Goals

Objective	Measures
Core Process: Maintain, monitor and improve a level of response times consistent with the ability to be an accredited agency, working toward NFPA 1710 standards	[CP]: Emergency Medical Services (EMS) - Total Time First Unit Arrival Fire Rescue Operations
	[CP]: Turnout Time Fire Rescue Operations
	[CP]: Fire Suppression - Residential Fire (Time of Arrival of 16th Firefighter) Fire Rescue Operations
	[CP]: Fire Suppression - Commercial Fire (Time of Arrival of 22nd Firefighter) Fire Rescue Operations
	[CP]: EMS: Percentage of Code 3 EMS incidents response (call to first arrival) within 6:00 minutes Fire Rescue Operations
Core Process: Reduce incident levels with risk reduction initiatives through community engagement	[CP]: Total Number of Incidents Fire Rescue Operations
	[CP]: Number of "Lives Saved" and Interventions - Ocean Rescue Fire Rescue Operations
	[CP]: Percentage of Fires Confined to Structure of Origin Prevention Bureau
Core Process: Improve preparedness of employees and neighbors through education and coordination of emergency management and disaster recovery	[CP]: Percent of National Incident Management System (NIMS) Compliant Staff Emergency Management

FLFR recently completed a strategic planning process hosted by the CPSE where input was received by the external stakeholders (citizens, business owners, schools, etc.) and the internal stakeholders (employees) and through a S.W.O.T. analysis (Strengths, Weaknesses, Opportunities, and Threats) analysis came up with the following goals;

Goal 1: Identify and implement a program for permanent, sworn and civilian staff to address the growing emergency response needs and community risk reduction goals.

Goal 2: Create a process to identify and define the facility needs of the organization, and to best support the department's ability to serve the community.

Goal 3: Create and sustain a process for purchasing, maintaining and evaluating our apparatus and equipment to improve service delivery across the community.

Goal 4: Evaluate, improve, and implement a comprehensive training and employee development program in order to maximize the efficiency of the training bureau.

Goal 5: Provide guidance and structure for the department's members' career paths, while fulfilling employee goals and department's objectives.

Goal 6: Improve the life-long mental and physical health of the department's personnel to provide services to our community and family.

Goal 7: Establish a foundation for addressing workforce challenges and opportunities that face the department today to provide better, comprehensive services.

Goal 8: Improve, educate, and implement a community risk reduction program for a safer community.

Community Service Expectations

During the community driven strategic planning process that the CPSE facilitated, the community members present gave the following list of priorities in numerical order of importance.

Table 6 Community Expectations, in Priority Order

1.	Immediate and serious response to my need. Fires, accidents, explosives, chemical issues, emergency health situations, etc. Fast response. Best in class response times. Fast response time to a 911 emergency call – meeting national standards for responses.
2.	Highly-trained and professional personnel. Highly trained, experienced firefighters who know what to do and provide quality services. High level training to respond to all situations – ongoing training.
3.	Trucks are in good running order. Equipment works well. Equipment needed for response – updated, works, and firefighters know how to use. State-of-the-art equipment.
4.	Assist in implementing safety training to the public. Community outreach and education. Be involved with educating business, property owners, and managers with improving their life safety needs.
5.	Treat people kindly. Professional attitude toward those involved in response – treating people right – from wealthy to homeless. Professionalism – manner in which interaction with callers. Display respect with all they encounter.
6.	Provide information for fire prevention, as well as for other hazards. Provide information for access to business for alarms, fire extinguishers. Explains what is happening. Communication with the community on the department's requirements. Communication with other departments in the city.

7.	Be able to offset any public safety situations other than crime. Respond to all emergencies. Safe and secure city.
8.	Conduct more drills with hospitals/nursing homes. Fire prevention. Drills and exercises with hospitals/EOC.
9.	Accessible to the community. Engaged with the community – interactions with neighbors in non-emergency situations, such as block parties, tree give-away. Even random opportunities to talk with neighbors. Good public relationship. Engage the community so they consider they are part of the team and their input is valued. Community-friendly organization and partnerships.
10.	Disaster mitigation. Prepare for terrorist and tornadoes.
11.	Continue to provide excellent service. Keep doing a good job..
12.	Protect and save lives.
13.	All staff members with PTSD are provided assistance
14.	Protect and save property.
15.	Cost-effective operations. Cost versus value of people and equipment.
16.	Diverse. More young women of all races.
17.	Transportation of vulnerable population prior to hurricanes.
18.	Competency on site for all emergencies.
19.	Medical services for the northwest because that is where most of the calls are.
20.	Proper safety accreditations and standards.
21.	Recruitment and retention of quality personnel.
22.	Strong leadership.
23.	Disaster recovery
24.	Maintain physical and mental capability.
25.	Forward-thinking on increased traffic delays.
26.	Performance of chain-of-command – top to bottom.
27.	Expect a presence in the downtown area. Currently, the station is located to the west of the railroad tracks, which adds greatly to response time. Under consideration are substations, but when and where?
28.	Transparency and oversight.

Community Service Priorities

Figure 17: External Stakeholders Providing Feedback

Obtaining input from the community is crucial to ensure the goals and objectives align with those of the community. The CPSE conducted an external stakeholder meeting where FLFR received input from the community on how they prioritize the core programs.

Table 7 Community Prioritized Core Programs

PROGRAMS	RANKING	SCORE
Emergency Medical Services	1	221
Fire Suppression	2	157
Rescue – Basic and Technical	3	137
Homeland Security, Domestic Preparedness/Emergency Management	4	134
Hazardous Materials Mitigation	5	122
Ocean Rescue	6	113
Aviation Rescue and Firefighting	7	97
Community Risk Reduction	8	93
Marine and Shipboard Rescue and Firefighting	9	92
Fire Investigation	10	88
Public Fire EMS Safety Education	11	66

D. Community Risk Assessment and Risk Levels

Risk Assessment Methodology

Methodology (Probability/Consequence of Risk)

Fort Lauderdale Fire Rescue (FLFR) utilizes a formal methodology to assess the levels of risks within the community or the relationship between hazards, probabilities and values. FLFR's community risk assessment consists of four levels:

1. Identifying/classifying community hazards
2. Identifying/classifying community assets/values
3. Estimating probability, quantifying agency impact, and predicting community consequence
4. Fusing all of the elements into a visual display of existing hazards.

The purpose is to ensure that a consistent and effective analytical process is in place that reliably quantifies the appropriate compliment of mobile resources to initially deploy to an emergency based on the risk level of that emergency. Historical data is utilized and integrated into the risk assessment methodology to augment its reliability. The data is studied to determine areas of concentration, trends in incident severity, and other challenges that may affect emergency response.

FLFR's risk assessment methodology quantifies the probability that an incident may occur and an estimation of its potential impact on people, property, the environment, and fire rescue itself. FLFR identifies credible hazards and realistically assesses their potential impact. A vulnerability assessment is conducted to estimate the impact of a hazard becoming active. The vulnerability of an asset (e.g. people, including emergency responders, property, operations, the environment, and FLFR itself) to a specific hazard and the significance of that hazard will determine its potential impact and consequence. Prevention and public education efforts are considered and may reduce the probability of a hazard occurrence and if it should occur; limit the consequences for the community and lessen the impact on the agency. Mitigation efforts can also contribute to reducing consequences and easing impact. Consequence and impact are of particular concern because of the affect they might have on the agency's ability to respond to not only coinciding, but future emergencies. Moreover, the consequence and impact factors can proliferate if the public's confidence in their agency's ability to respond is shaken and economic stability is disturbed. The tentacles can further spread outside the City's borders if its "destination" brand becomes compromised.

The primary purpose of the risk assessment process is to effectively address the concept of differential response. FLFR's goal is to put in place a customized initial incident response model that facilitates FLFR's mission to effectively confront and safely mitigate a variety of potential emergencies. FLFR's risk assessment methodology includes the establishment of a Risk Assessment Team who possess a considerable amount of incident command experience from a range of disciplines within the department. The Team reviews reports obtained from FLFR's incident database that summarizes prior incident information. For example, the report identifies the "property use" types where structure fires have occurred over the prior calendar year. The Team then assesses the effectiveness of FLFR's performance utilizing the response model(s) that were applicable when those incidences occurred and historical response trends by geographical areas over several years. A review of the volume, type, and frequency of incidents contributes to the overall process to effectively determine risk levels. Finally, FLFR modified Heron's formula for

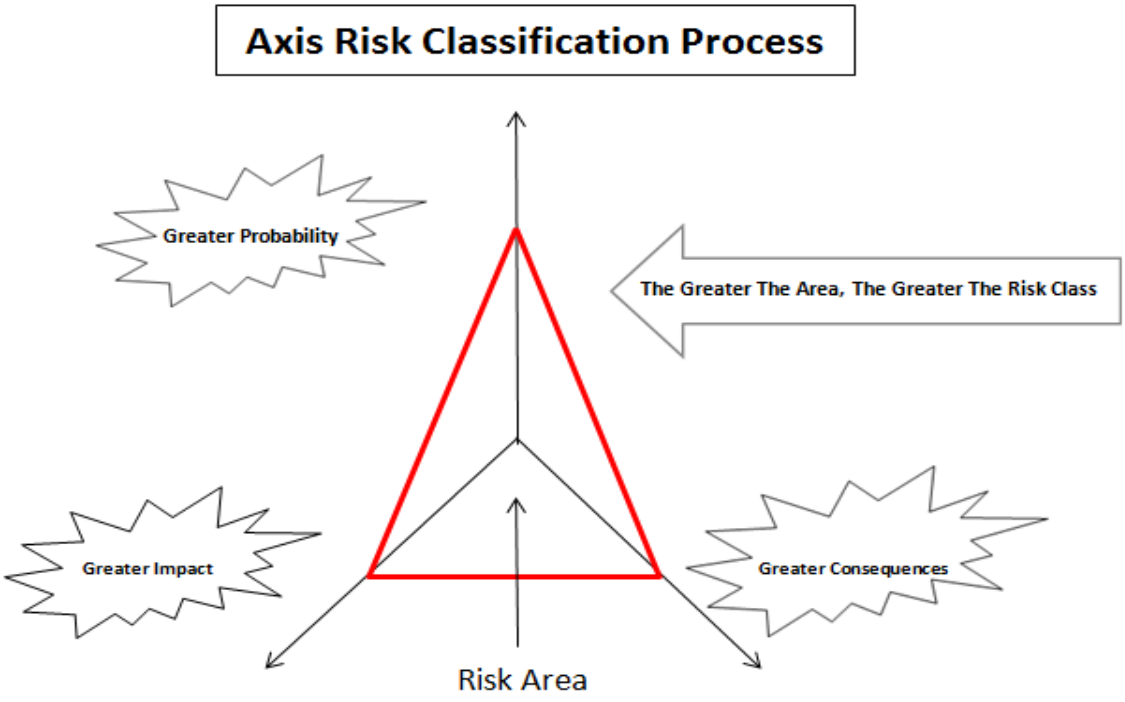
tetrahedrons in an effort to mathematically quantify probability, agency impact, and community consequence. As a result, four risk categories are in place: Low, Moderate, Special/High, and Maximum.

Presently, actual quantified or numeric values for each axis are not yet determined, however FLFR uses relationships and qualified historical data to review and determine the relative placement of each value for probability, consequences and impact on each appropriate axis.

Using Heron's formula modified for tetrahedrons with P equaling probability, I equaling agency impact, and C equaling community consequences, the formula used to calculate the risk score is:

Figure 18: Risk Calculation Formula and Axis Risk Classification Process

$$Risk = \sqrt{\frac{(pc)^2}{2} + \frac{(ci)^2}{2} + \frac{(ip)^2}{2}}$$



Finally, all property types are assigned to a risk category. An additional assessment is made of the property use types in the "Low probability/High consequence" category to determine if a particular property use type or a specific property in the City needs to be segregated into an additional "Special or Critical Risk" category. Typical facilities in this category include hospitals, fire stations, and police stations.

To illustrate the point; the frequency in which any one single-family home structure fire occurs is generally low, therefore its "probability" is scored as "low". In addition, a single-family home fire is unlikely to produce major community consequences therefore its "consequences" score is also "low". Scoring the third axis "agency impact" on a single-family home structure fire will likely have

"moderate" impact on agency suppression resources, therefore the overall score is "moderate impact". In contrast, the probability that a significant fire will occur at a hospital with its qualified staff on duty 24-hours a day may also be low; however, its impact on the agency and consequence for the community will be considerably higher. As a result, it would fall within the Low probability/high consequences/agency impact (special risk) category.

FLFR currently has developed several customized response profiles to mitigate the aforementioned risks as they relate to each incident type. Standard Operating Procedures (SOPs) are available to ensure that all personnel have access to the information and are familiar with their requirements of each response model. Additionally, the appropriate customized response is now automatically generated via Computer Aided Dispatch (CAD) to ensure the consistent application of those requirements.

Planning Areas/Zones

FLFR's jurisdiction is divided into zones to identify the primary response areas for apparatus and to aide in pinpointing the area of the City in which a request for service is made. The numbering system for the zones coincides with the station number for each fire station and represents its geographical primary response area. Each zone is further broken down with the addition of an alpha numeric identifier so that the zones are smaller and define a more specific area. As an example, station number 3 would have zones that include zone 3, zone 3A, zone 3B, zone 3C, and are considered a part of Zone 3. These smaller defined areas help crews to pinpoint exact map locations more quickly in an effort to aide in response. In most cases the zones use geographical boundaries to help define them such as roads, waterways or other geographical features.

Periodic reviews of response areas are conducted, and changes made based on call volume and response times. In some cases, due to the movement and construction of new fire stations, response zones named for one station have been assigned to units that are housed at another.

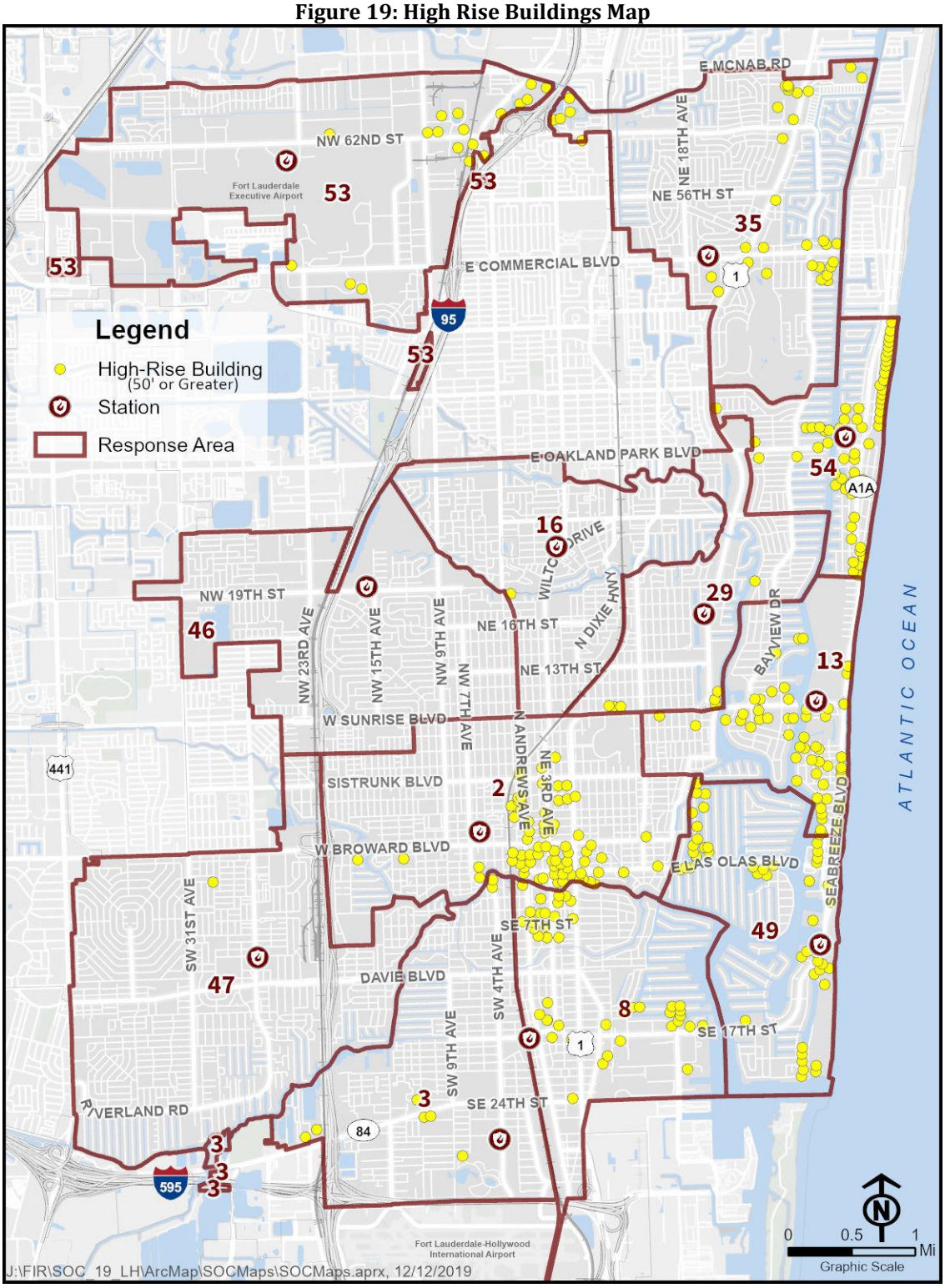
The overall or combined station response zones were used for the purposes of planning. This provides an opportunity for an examination of the workload of each station as it relates to call volume, call type, call location, and trend analysis per station. FLFR believes that planning based on the overall zone when considering risk is the best option since the assets from that station will need to respond to all the smaller zones as the first due apparatus if available. Lazy Lake and the City of Wilton Manors were also included in the process and the levels of risk within these two areas was consistent with the City of Fort Lauderdale.

Planning Area / Risk Assessment

Identifying the risk levels within each planning zone for each service type is currently underway but not complete.

The following map shows buildings which are three stories or more in size, for the calendar year 2019. The highest concentrations of buildings are in the downtown / central portion of the city, in planning zone 2.

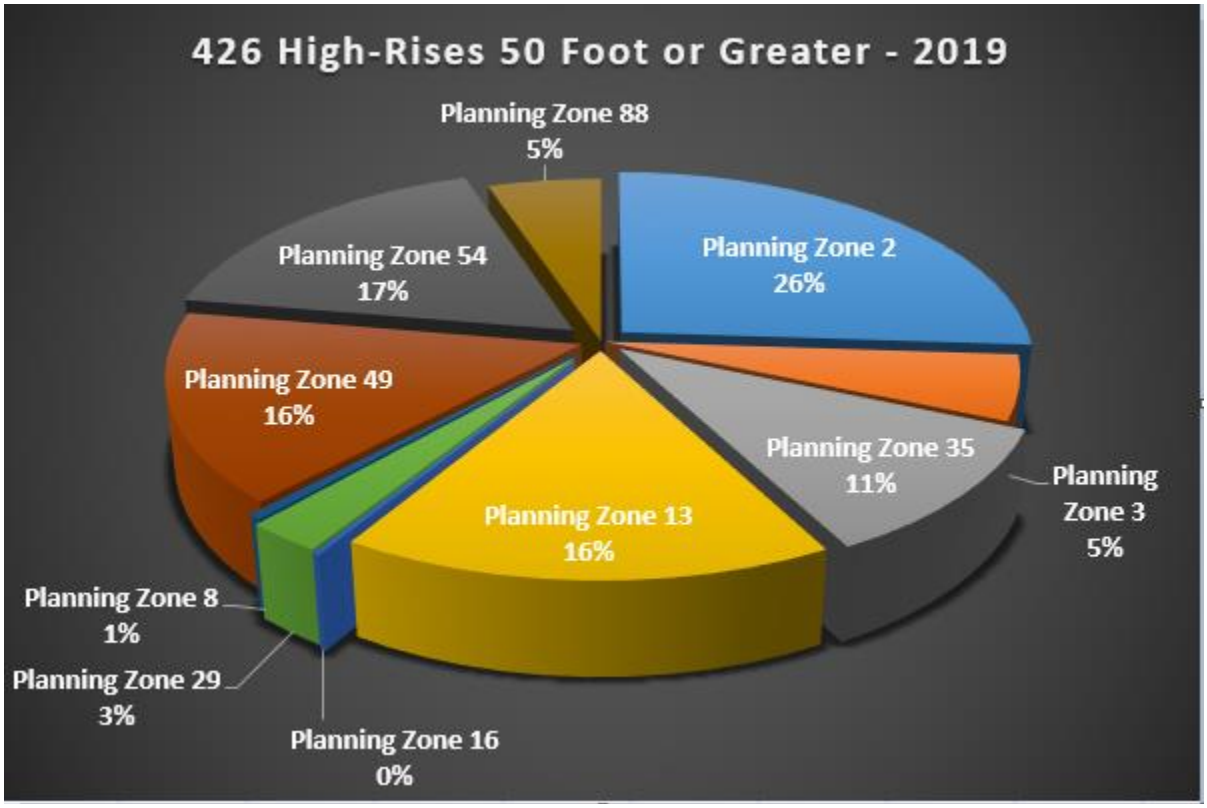
Figure 19: High Rise Buildings Map



The city of Fort Lauderdale has 426 buildings which are greater than 50 feet, with stand-pipe connections and generators (see a table of these buildings and addresses, by planning zone, in Exhibit 2).

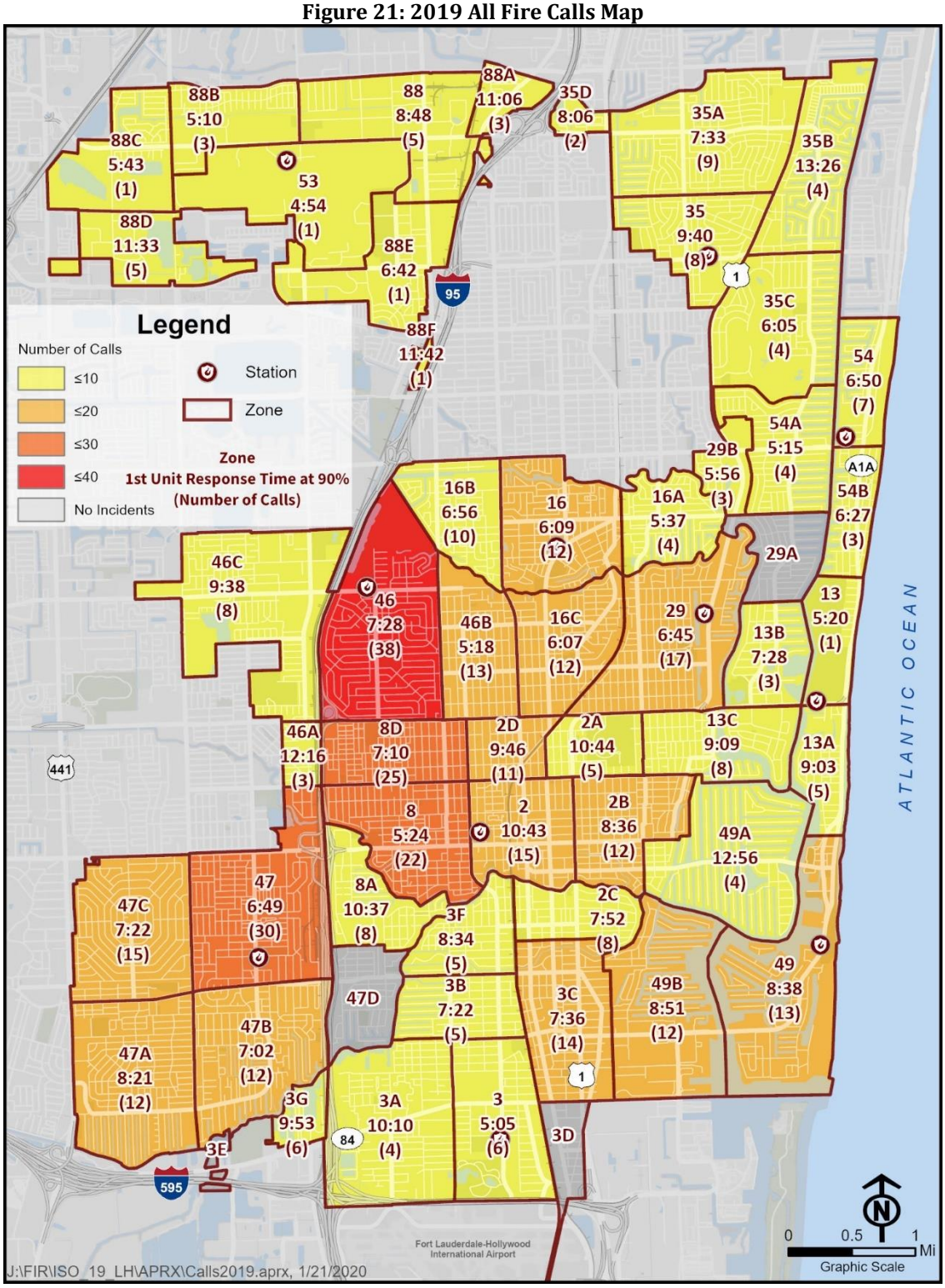
The following chart shows a breakdown of the planning zones and related number of buildings 50 feet or greater. Planning zones 47 and 53 do not have any structures which are greater than 50 feet.

Figure 20: High Rises, 50-foot or Greater, by Planning Zone (2019)



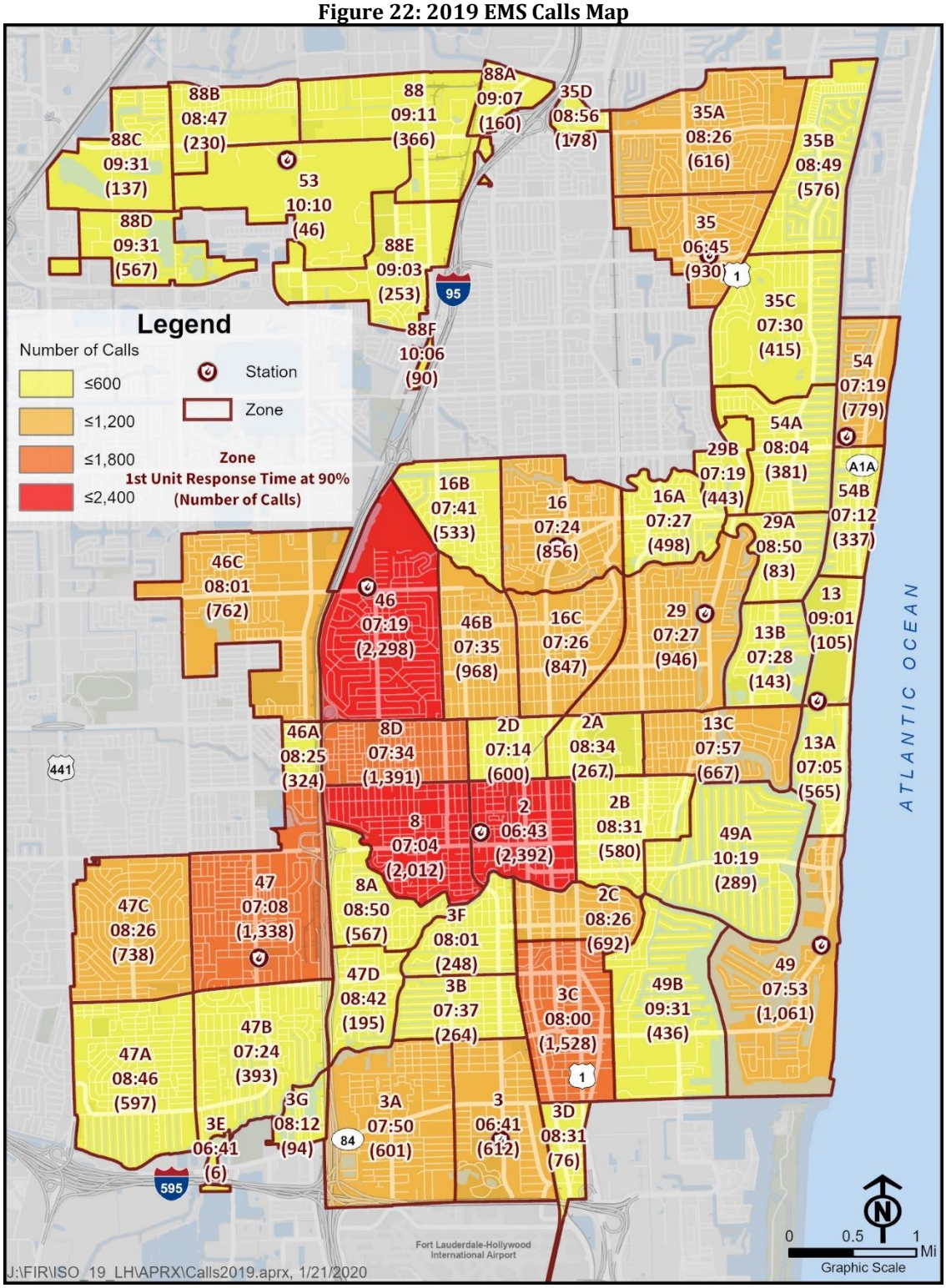
The map on the following page represents the number of fires and 90th percentile response times for each planning zone for 2019. All fires consist of anything which was on fire. Examples of such fires are structure fires, cooking fires, car fires, garbage fires and brush fires. The downtown corridor of the city (2, 8, 46) had a higher concentration of calls and as you move away from the central portion of the city, calls become more evenly distributed.

Figure 21: 2019 All Fire Calls Map



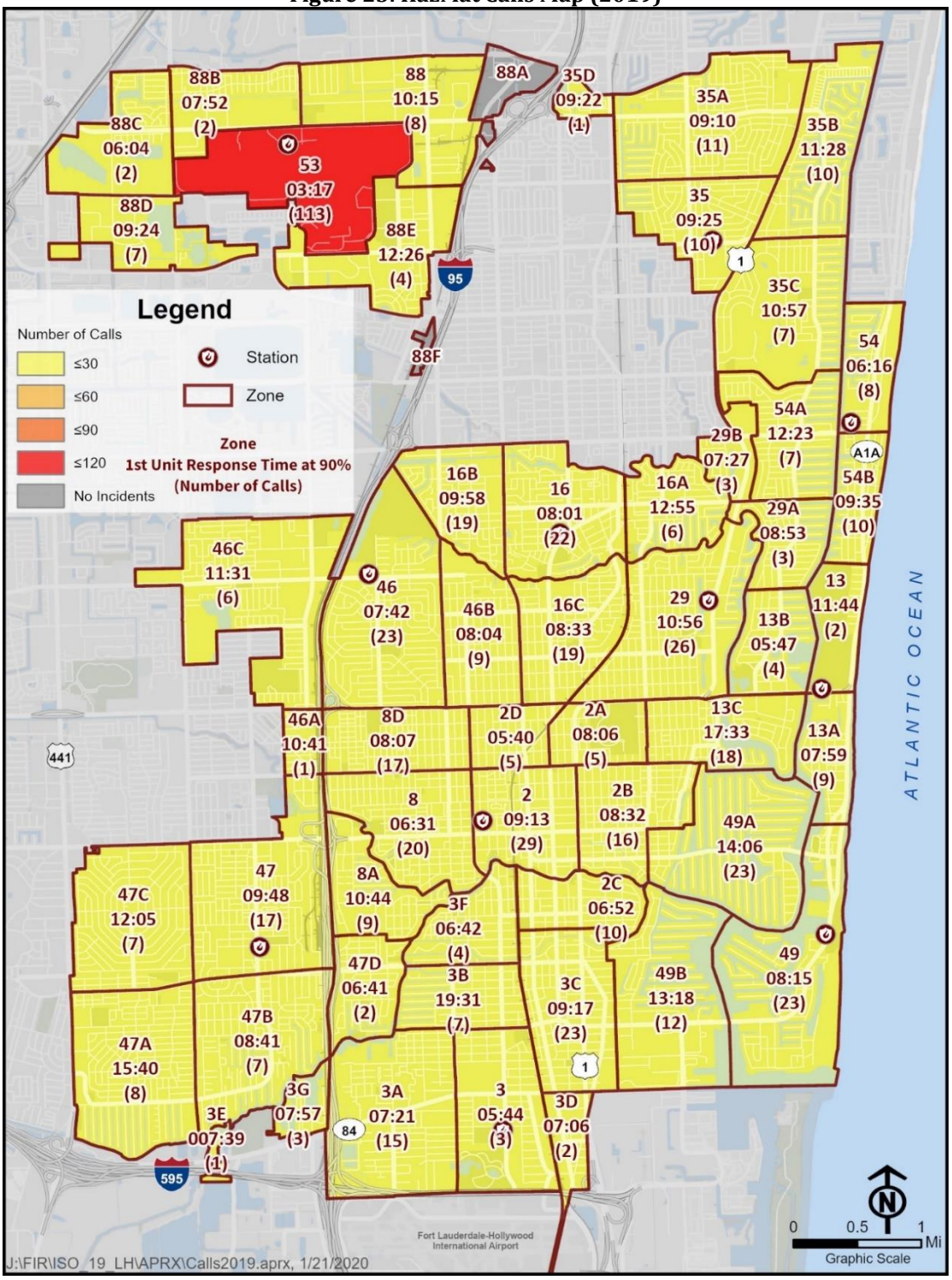
Below are all EMS calls and 90th percentile response times for each planning zone for the year 2019. The downtown corridor, zones 2,8,46 have the largest percentage of calls within the city. The downtown area is also the most densely populated area of the city.

Figure 22: 2019 EMS Calls Map



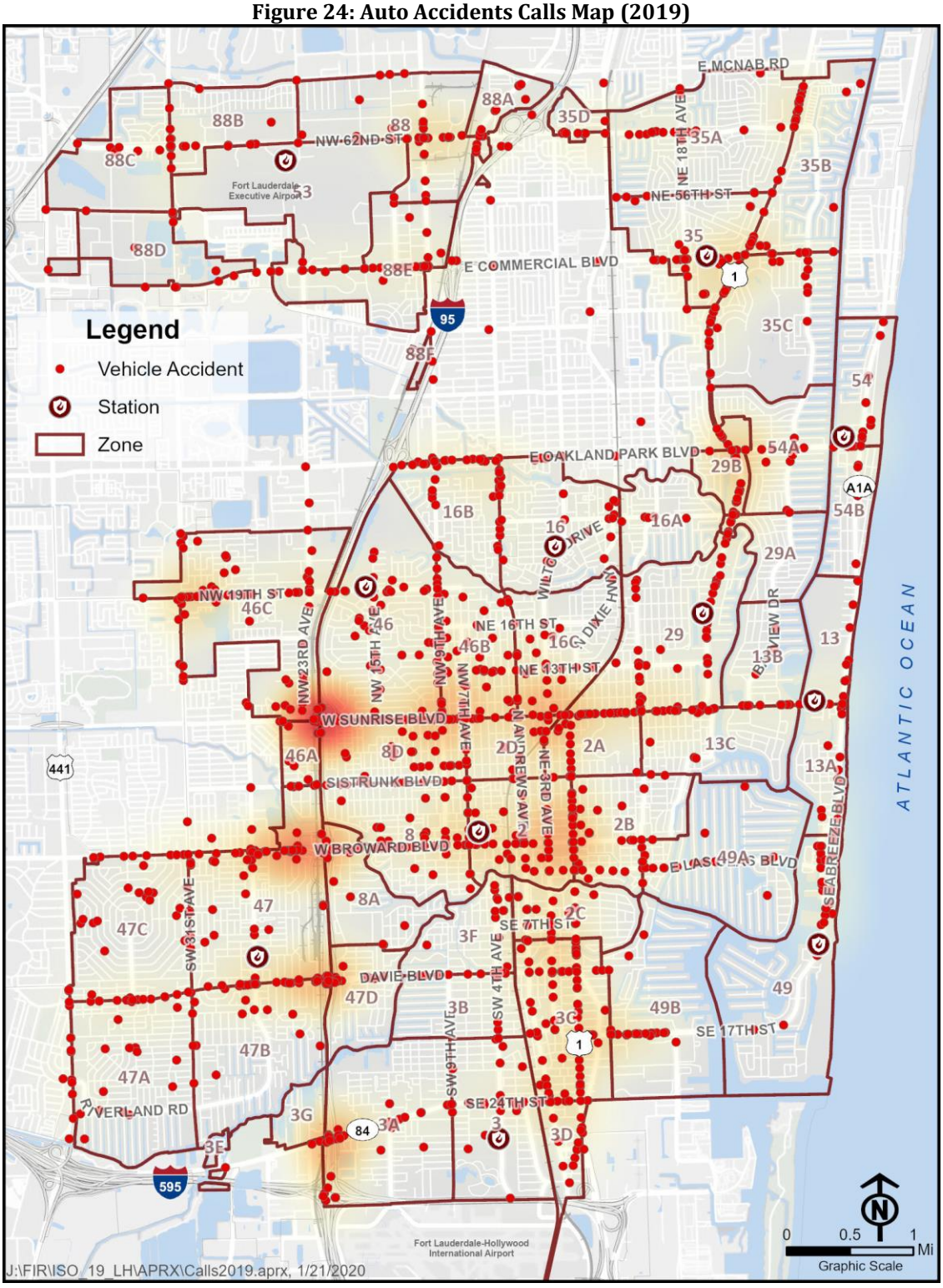
The following map represents all Hazardous Material calls and 90th percentile response times for each planning zone where the HazMat team responded in the year 2019. The majority of the calls for service regarding hazardous materials were evenly distributed throughout the city with the highest volume taking place in zone 2.

Figure 23: HazMat Calls Map (2019)



The following map represents automobile accidents which FLFR (Fire Responses) responded to during the year 2019. The map shows clear patterns where auto accidents follow the main roads leading in and out of out of the city. The accidents were non-fire accidents which required an engine company response along with a medical rescue unit.

Figure 24: Auto Accidents Calls Map (2019)



Risk Assessment

Fire Suppression Services

Defining fire risk begins with fire hazard identification. The extent of fire hazard identification for any given fire-related situation will depend on several factors:

1. Prior knowledge and experience with an activity
2. The size and complexity of a given facility and its operations, processes, and equipment
3. The overall potential for loss
4. Available FLFR resources

Probability Factors

Probability can be defined as a measurement expressing the likelihood of a specific event, such as the ratio of the number of experimental results that would produce the event to the total number of results considered possible. Fires that are intentionally set are excluded from FLFR's formula to measure the probability that a fire may occur. There is no indication that the City is more or less likely to experience an intentionally set fire than any other comparable city.

There are a number of factors that can influence the probability formula utilized by FLFR to calculate the likelihood that a fire could occur. The probability that a potential ignition source may cause a fire is primarily driven by the type of activity building occupants are engaging in and the frequency and/or volume of that activity. Extraordinary circumstances are excluded from the calculation process. Only a reasonably predictable event is considered. The following paragraphs in this section provide examples of factors that were considered.

The City of Fort Lauderdale is an international tourist destination. Tourism is vital to the city's economic viability. By nature, tourism connotes that people are in a state of being transient and therefore, engaging in temporary activity in areas where people are unfamiliar. Broward County welcomes over ten million visitors annually. The City, with its downtown business district, attractive beaches, high quality hotels, and lively nightlife, is the primary hub for hosting the lion's share of the County's visitors. Therefore, the volume of transients and their related activity is considerable, a factor that can increase the likelihood that a fire may occur.

The marine and boating industry is equally vital to the City's economic well-being. There are 165 miles of navigational waterways that reside within the City's boundaries. As a result, marinas and related industrial activity pertaining to vessel storage, maintenance, and repair are located along waterways throughout the City. Subsequently, the volume of related industrial type activity is high and much of it includes spray-painting mega-yachts inside temporary membrane structures instead of a typical spray-booth specifically designed for such activity. The volume is high, a considerable fuel source is readily available and varying degrees of operational oversight increases the probability that a fire-related event could occur.

The City is also home to well over 426 high-rise buildings. Many are residential buildings that contain activity characteristic to its property use. Residential activity, such as cooking, are often locations where fire-related events occur. In addition, the single-family homes that reside in the City range from those in areas that are economically challenged to multi-million-dollar residences that line the City's prestigious coastal waterways. In addition, the construction materials used to build residential structures in the City range from readily combustible Dade County Pine homes constructed early in the previous century and those of modern materials that hold up well under fire conditions (and everything in between).

In summary, a good portion of Fort Lauderdale's fire related concerns are common to other cities in Broward County. It is the nature of many of its occupants, the large number of high-rise buildings, its marine industry, and the number of special events with their ample scale that primarily make it unique from all others in the County.

Consequence Factors

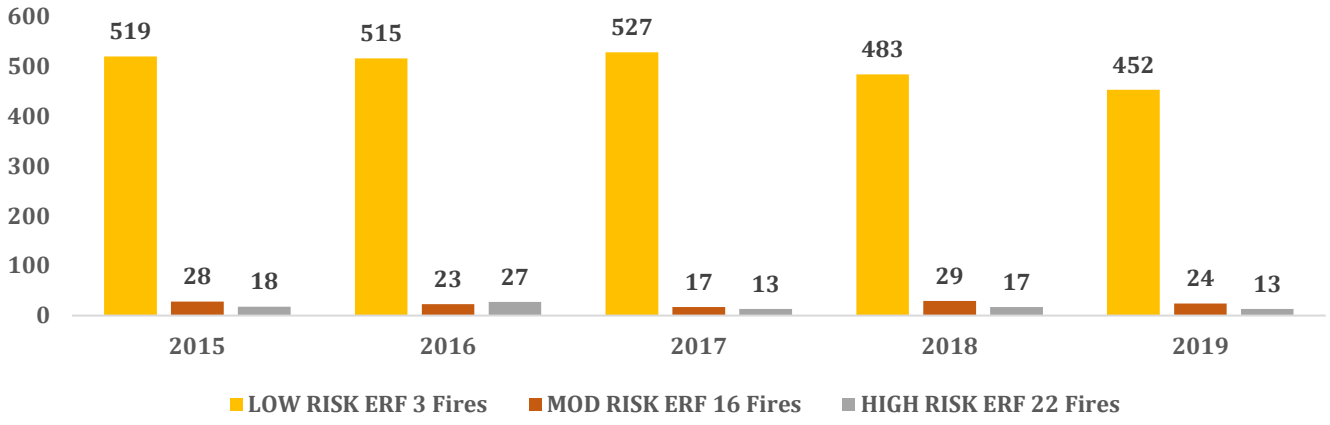
Consequence is the relation of a result to its cause; It is that which follows an action or condition. While probability is the measurement expressing the likelihood that a fire event may occur. Consequence pertains to the results the event will likely produce specifically, how it effects the City and its available resources, the economic environment, and the immediate building(s) and occupants directly involved in the incident. To quantify the result of a fire-related event, FLFR is required to forecast the impact of an event at a given location, of a predictable size and scope. The "consequence" formula must include a calculation that measures some of the following: (1) how will the incident affect FLFR and its response to other coinciding emergencies, (2) will the effect go beyond the City's borders, and (3) what are the short and/or long term economic implications. Especially, in regard to the City itself, the business community, the marine and tourism industries, and other vital assets.

In summary, a fire-related event can impact tangible available assets and resources. However, for the most part, those consequences are relatively easy to predict. The economic consequences affecting local business activity, tourism, the marine industry, and the overall perception of safety are of particular concern and are more challenging to measure.

Impact

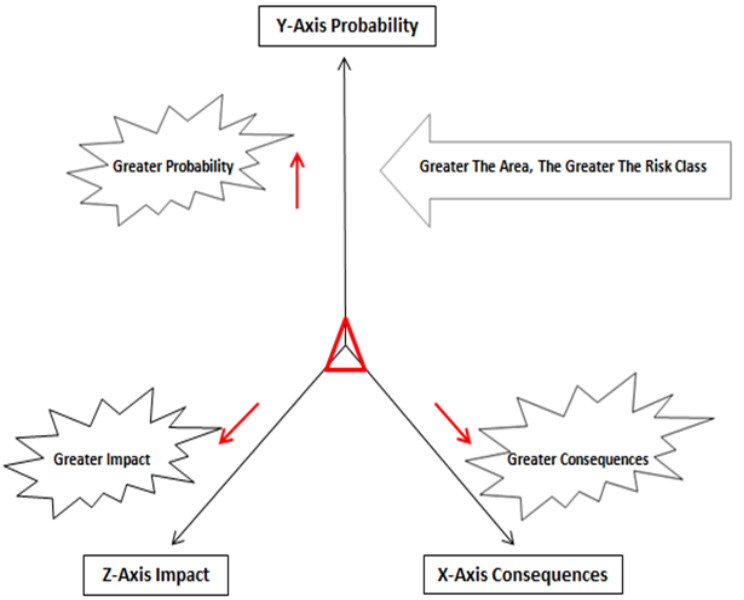
The direct agency impact due to the incident occurring at a specific location. Additionally, would an incident require additional resources because of its specific characteristics or location? Would FLFR be able to service other areas of the city or would the location affect the ability of FLFR to fulfill its mission?

Figure 25: Total Fires (2015-2019)

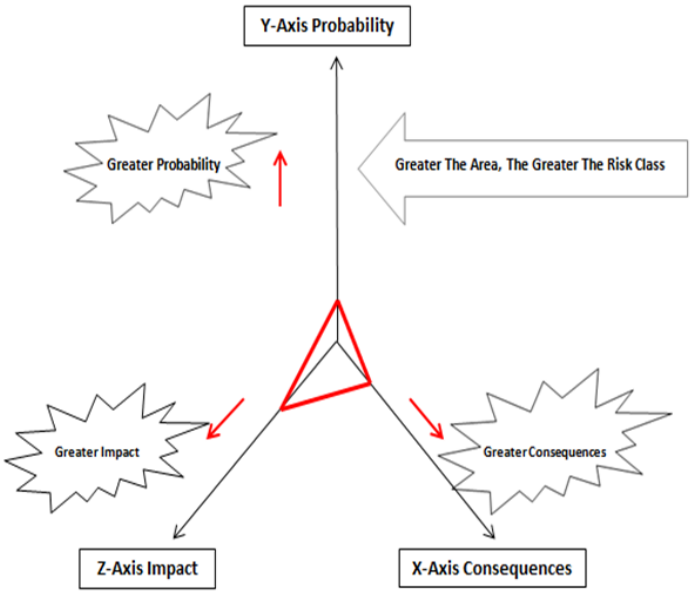


Low Risk: FLFR responds one (1) engine company staffed with a minimum of three (3) personnel to fire-related incidents with low risk levels.

These incidents require limited incident command structure to manage a minimal amount of fire suppression activity. Examples of such incidences types include minor brush fires, vehicle fires and confined trash fires. These types of incidences will rarely, if ever, challenge available FLFR resources.



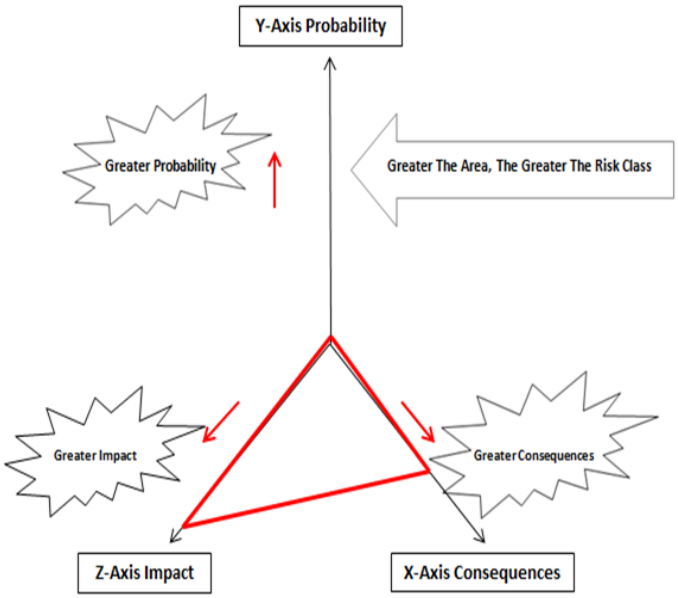
- **Probability- LOW**
- **Impact- LOW**
- **Consequences- LOW**



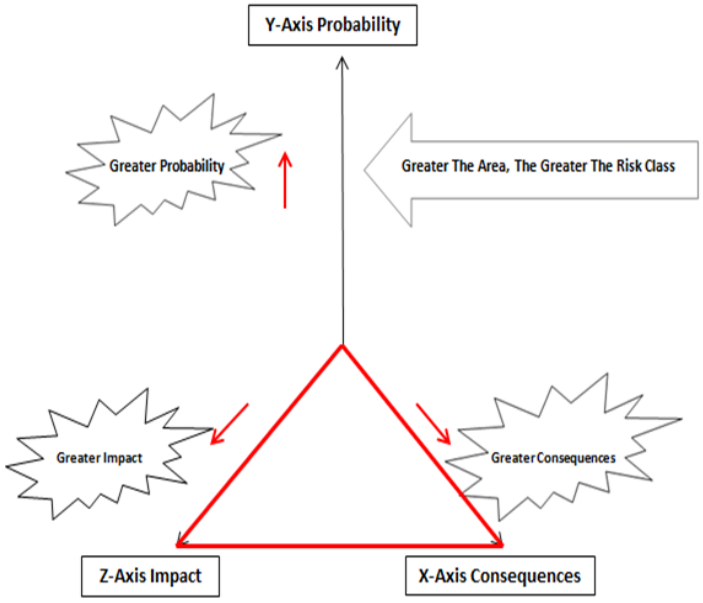
- **Probability- LOW**
- **Impact- MODERATE**
- **Consequences- LOW**

Moderate Risk: FLFR typically responds a total of sixteen personnel to fire-related incidences that require a modest incident command structure to manage a fair amount of fire suppression activity. Examples of such incidences include single-family residential structure fires and average boat fires. These types of incidences typically require an officer to assume command so as to coordinate all activities related to interior fire attack. These types of incidences are unlikely to deprive available FLFR resources.

High/Special Risk: FLFR typically responds a total of twenty-two personnel to fire-related incidences that require a complex incident command structure to manage a significant amount of fire suppression activity. An example of such an incidence would be a commercial structure fires or a high-rise type fire. These types of incidences may challenge available FLFR resources and may cause delays in other response zones.



- **Probability- LOW**
- **Impact- HIGH**
- **Consequences- HIGH**



- **Probability- LOW**
- **Impact- Maximum**
- **Consequences- Maximum**

Maximum Risk: There are not an established number of FLFR personnel that typically respond to incidents at maximum level risks. These incidences have the potential for reaching greater than four alarms and will definitely overwhelm available FLFR resources, outside mutual aid resources will be required to help mitigate the incident.

FLFR continues to periodically revisit its current distribution of services and its objective to deploy the appropriate amount of resources in a specified period of time.

A Fire Risk Assessment Team comprised of Chief Officers utilizes a modification of Heron's formula for tetrahedrons to quantify using past relationships and data such as the probability of whether an incident will occur, its agency impact and consequences to the community. The result is to group "like" property use types in the City and to create four possible relationships (known as "risk assignments") between structures or conditions and the distribution and concentration of resources.

Emergency Medical Services

Probability Factors

FLFR responds to over 48,000 calls annually. Over 32,300 of those calls are for EMS or rescue. Last year FLFR transported more than 25,000 patients to hospital emergency rooms. The greatest volume of calls occurs in the Downtown District, which is the responsibility of the 2nd Battalion. Clearly, the more densely populated areas produce the majority of the requests for service. However, with Fort Lauderdale being the economic hub of Broward County there are daily population shifts depending on the time of day thus affecting call volume. More than 10 million visitors come to Broward County annually and with Fort Lauderdale having more than 7 miles of pristine beach front, the majority will visit the city during their stay. The downtown district thrives with business during the day and when the sun goes down the district has a vibrant night life. Fort Lauderdale is known as the Venice of America with more than 40,000 residential yachts calling Fort Lauderdale home which requires a number of water rescues. There are over 25 miles of Inter-coastal waterway frontage and 165 miles of navigational waterway. There are areas of the city that have a greater concentration of nursing homes, mid to high-rise residential apartments, daycare, as well as schools and recreation centers. The city has areas that are heavily industrial and commercial and two of the major commuter thoroughfares (I-95 and SR 84) run through the heart of the city.

Consequence Factors

The severity and consequence of EMS emergencies varies with the type of emergency and the likelihood that they will happen. It is important to note that FLFR recognizes that to the individual caller, all EMS calls are major emergencies and are treated as such by the organization. FLFR identifies the consequences to the City of Fort Lauderdale, and the surrounding communities. Generally, most EMS calls will not have consequences outside of the victim, the victims' family, and the household. There are higher consequence calls that occur with low frequency such as terror attacks, natural disasters, or major accidents on the roadway. EMS calls that are high level risks not only have the propensity to stress or overwhelm FLFR resources but will also have a direct impact on the local hospitals regarding capability and availability. EMS incidents at high level risks also play havoc on traffic patterns, and the ability of neighboring systems to assist with treatment and transport. The system would be impacted further as the "closest appropriate" hospitals fill to capacity thus increasing transport times and stressing the system further due to lack of available Medical Rescue Units (MRU's).

Impact

The direct agency impact is defined as impact to the agency from an event occurring at a specific location. Additionally, would an incident require additional resources because of its specific characteristics or location? Would FLFR be able to service other areas of the city or would the location affect the ability of FLFR to fulfill its mission?

Figure 26: EMS Transports (2019)

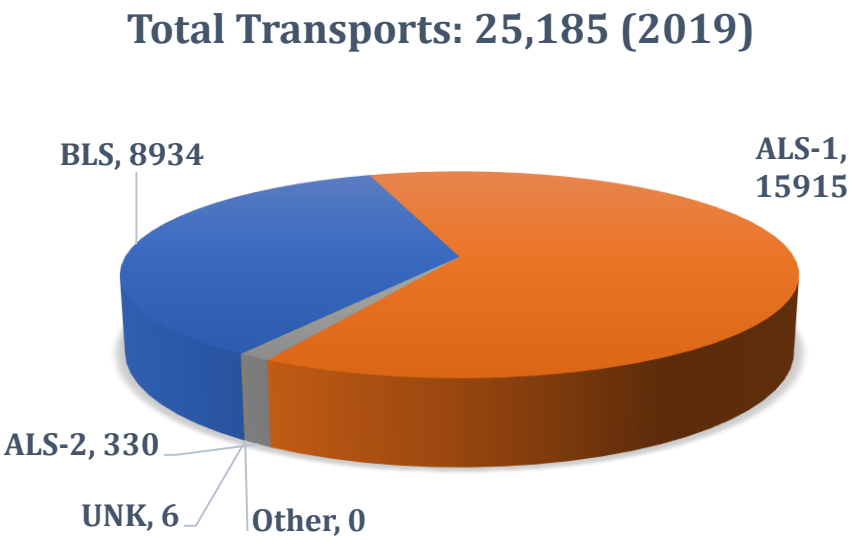
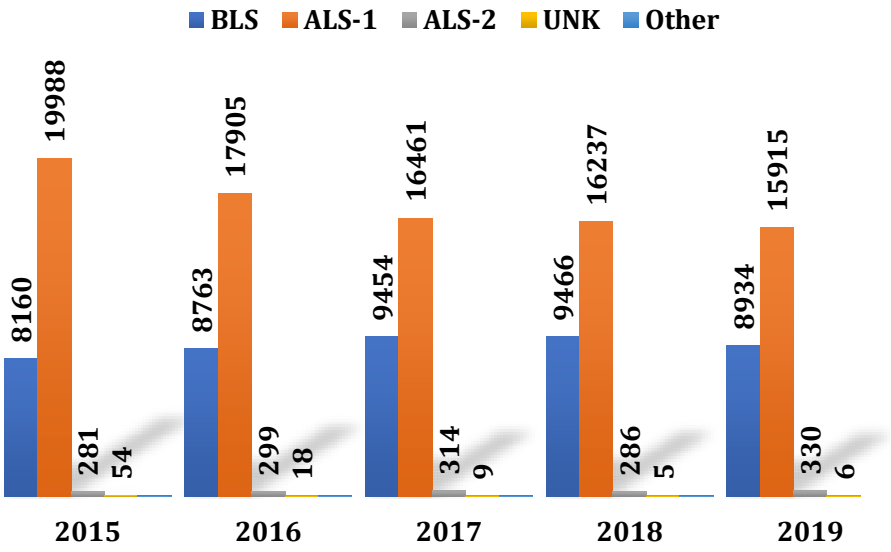
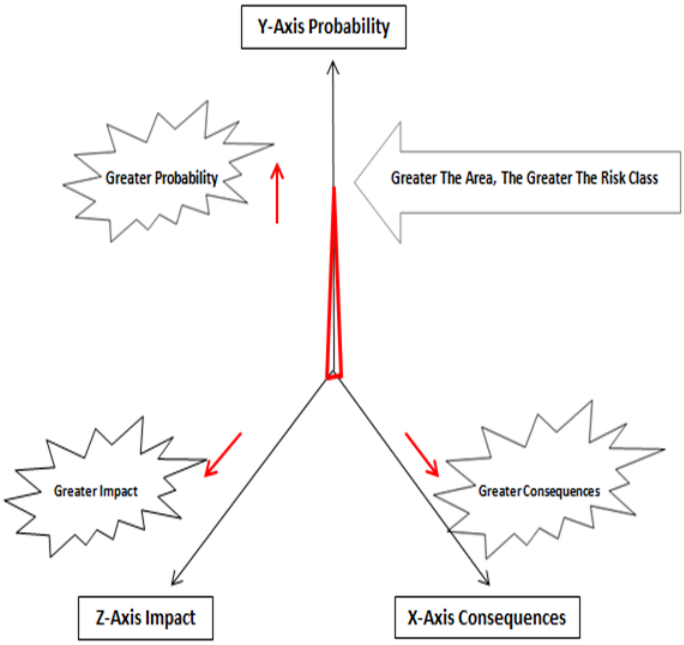


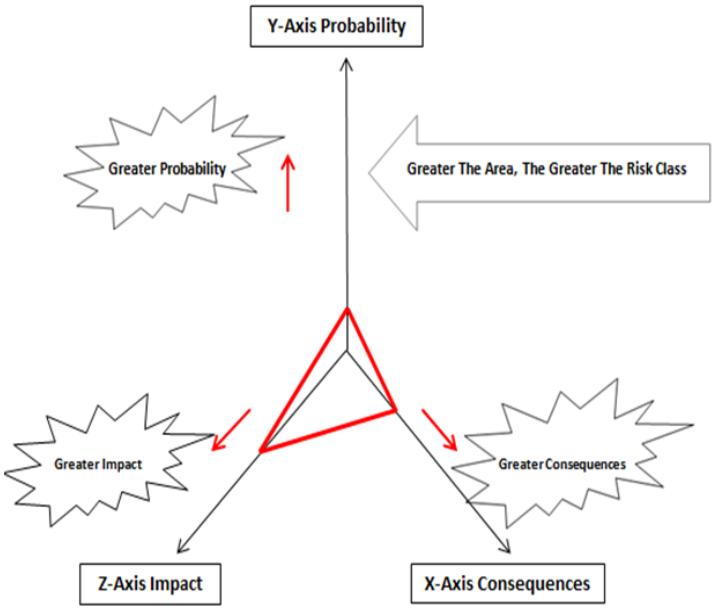
Figure 27: EMS Transports (2015-2019)



Low Risk: Responses to low level risks for EMS incorporate the majority of EMS Basic (BLS) and Advanced Life Support (ALS) calls, have very little impact on the community as a whole and little to no chance of escalation. In regards to impact low risk incidents have little to no agency impact on FLFR. Incidents at low level risks would include but are not limited to single family homes, mobile homes or trailers, houseboats (including live aboard vessels), and parks that are not actively holding a special event. There are some other properties/areas that become "low level risks" at the close of business each day. These would include corporate offices (that operate as a "9 to 5" capacity), beaches that typically are not used by large numbers of people in the evening, residential streets, and park and recreation buildings and areas that close at sunset.



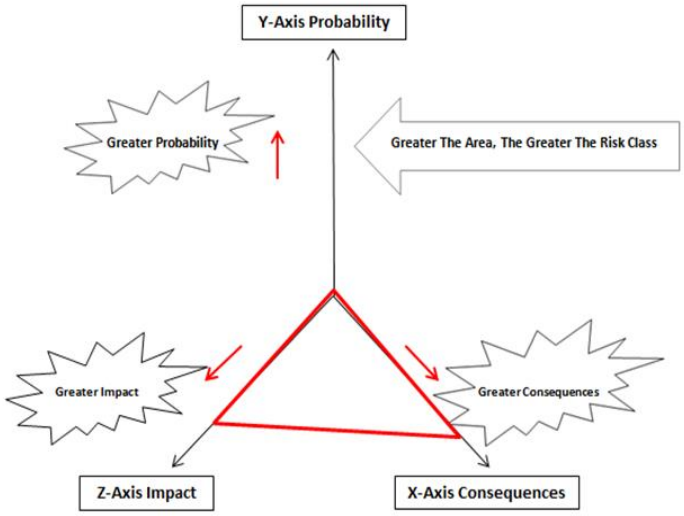
- **Probability- HIGH**
- **Impact- LOW**
- **Consequences- LOW**



- **Probability- LOW**
- **Impact- Moderate**
- **Consequences- Moderate**

Moderate Risk: Responses to a moderate level risk for EMS have some impact on the community as a whole however, due to their size and resident population may have the capacity to become a larger event. Included in Moderate risk categorization would be midrise to high rise residential or office buildings, nursing homes, hospitals, schools and parks during business hours of operation. Restaurants and night clubs also fall into this category.

High/Special Risk: EMS responses to High/Special risks are defined as having a larger potential for impact not only on FLFR but also the community and community partners as well. High risk would include all multiple lane highway and interstates. Special events such as the Fort Lauderdale Air Show and Tortuga Music Festival change the classification of Beach and parks into high/special risk but only while the event is being held.



- **Probability- LOW**
- **Impact- High**
- **Consequences- High**

Hazardous Materials Team

The Hazardous Materials Team is housed at Fire Station 53. The Team currently consists of 78 personnel who may be assigned to the Team. Five Hazmat Technicians are staffed every day. A Captain, a Driver-Engineer, and a Firefighter operate one ALS engine company (EN53) and two Firefighter/Paramedics operate one ALS Hazmat medical rescue unit (RE53). When the Team is dispatched, the members from the engine transfer their gear to Hazmat 88 (HM88) and respond to the call with RE53. If the response is out of the city or Hazmat mutual aid is requested, the Battalion Chief (B16) also is dispatched. In the event that the engine is out on a run when a Hazmat call comes in, they will complete their current run and then return to the station and respond as stated previously.

Minimum requirements to be assigned to either EN53 or RE53 are the 160-hour Hazardous Materials Technician certification. The member must also have a Hazmat entry physical. The member is then required to attend and have documented four quarterly drills yearly. Additional training occurs at regular intervals. Regular Hazmat training is coordinated through the Broward County Special Operations committee three Wednesdays per month. This training is above the required training and serves to allow the teams to work together regularly. Recent classes have included Advanced Radiation Training provided by the State of Florida Department of Energy, Hazmat Regional Training (multiple dates), Hazmat Elite training (2 days), and Multiple days of Regional Hazmat Training with the three other Hazmat teams in Broward County.

Probability Factors

Hazmat incidents total 1,279 from 2015 – 2019. Incidents requiring the dispatching of the HMRT vehicle (HM88) account for 548 (43%) unit responses. The most common types of Hazmat-related emergencies that the HMRT responded to between 2015 and 2019 were classified as gas leaks, chemical hazardous conditions or spills. Most calls occur during the daytime hours. Location of

these types of calls varied with the incident type, ranging from single family homes to businesses under construction. Locations of note include multiple water treatment plants within city limits, Port Everglades to the South, the Executive and International airports, 165 miles of waterway, 7 miles of beachfront, 2 railroads carrying large quantities of product, and major interstate highways transporting a variety of hazardous materials through and into the city.

Consequence Factors

Human, situational, and environmental factors must be considered when discussing the consequences of hazardous materials emergencies. Priority is always focused on saving lives and reducing exposure and harm to the public. Evacuation of residential or commercial structures is labor intensive and highly disruptive. Chemical exposure to individuals or groups of people may need special treatment beyond that of standard paramedic training, including decontamination, treatment using Hazmat Treatment protocols, and may invoke special transport considerations. To add to this, Emergency Departments must be pre-alerted so that they may prepare for any contaminated patient. Standard policy is decontaminating the patient prior to entry into the facility.

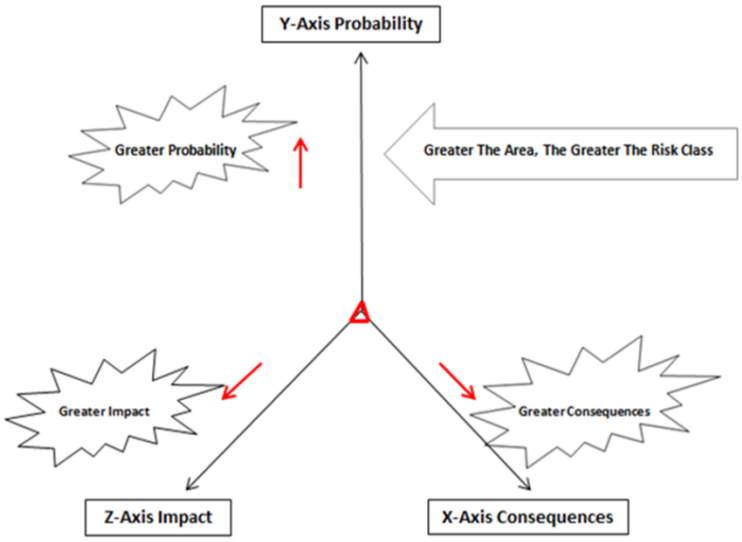
After the human factor is removed, stabilizing the incident is the focus. Use of chemical protective gear and specialized tools is often needed to mitigate or stop a release or leak of a product. The actions taken are methodical and systematic, considering the deadly nature of many of these materials.

Repercussions resulting from a large spill or a small spill of an extremely toxic substance can have effects on the environment lasting years. A 61-acre property at the west end of the city has been sitting vacant for over 40 years due to improper dumping from the mid-1950's to the late 1970's. Smaller levels of contamination may necessitate testing be performed by a third party to rule out chemical persistence. Depending on the location, Hazmat incidents may displace people from their homes for long periods of time, halt industrial processes, or impede transportation on busy highways, adversely affecting business.

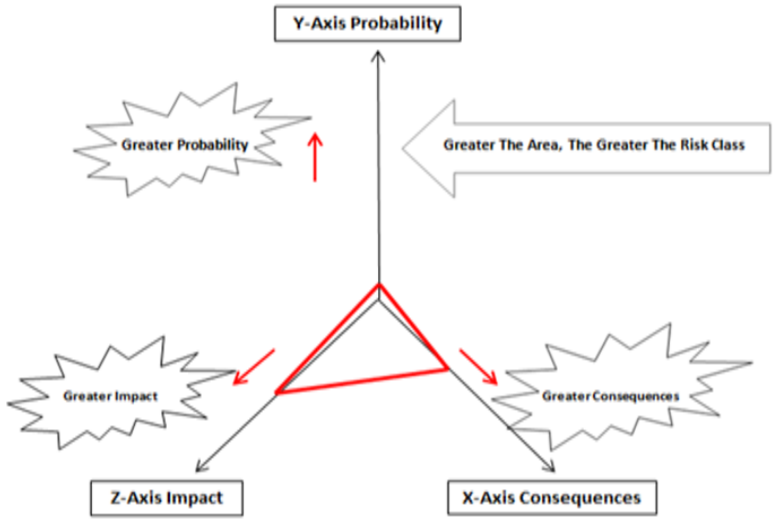
Impact

The direct agency impact due to the incident occurring at a specific location. Additionally, would an incident require additional resources because of its specific characteristics or location? Would FLFR be able to service other areas of the city or would the location affect the ability of FLFR to fulfill its mission?

Low Risk: Responses to low level risks involving hazmat are those that pose little potential harm to people or the environment. These types of incidents include small fuel spills onto the ground or the waterways, minor biological hazards, or reports of smells of fuel or gas in an area outside a building or residence. An ERF or 3 personnel is adequate to mitigate these types of situations, or refer them to the proper authority. (These types of incidents generally fall into what NFPA 471 describes as Level 1 Incidents.)



- Probability- LOW
- Impact- LOW
- Consequences- LOW

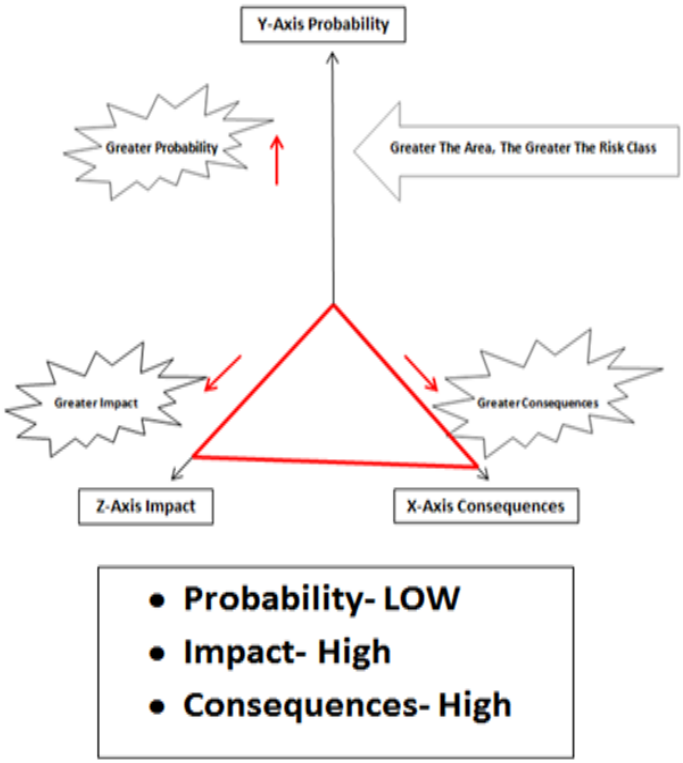


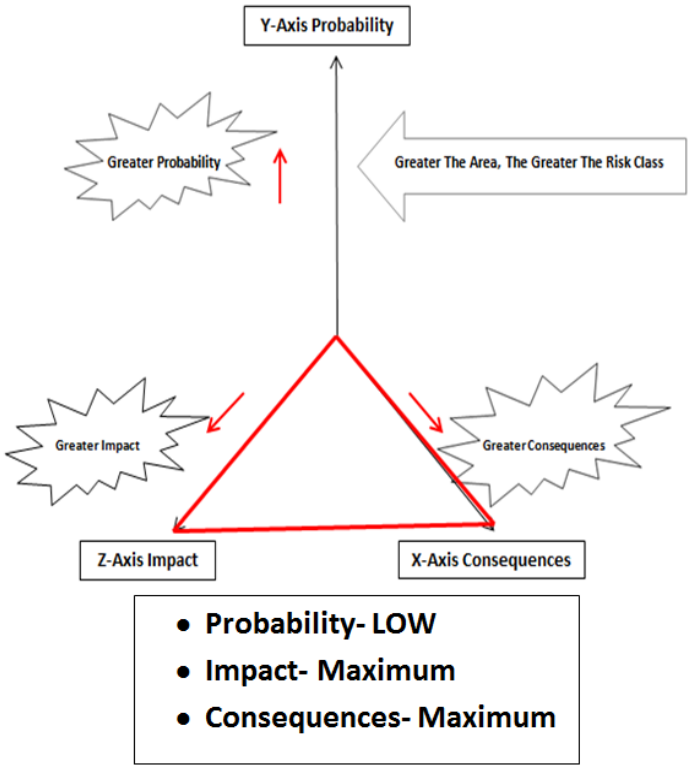
- Probability- LOW
- Impact- Moderate
- Consequences- Moderate

Moderate Risk: Moderate level risks, hazmat situations, require the dispatching of the Hazardous Materials Response Team along with additional operations personnel to assist with on scene actions. In addition to the HMRT, this agency dispatches 1 Battalion Chief, 2 Engine companies, 1 Ladder company, 1 Medical Rescue unit, and the Squad. This response puts an ERF of 17 personnel on scene. These incidents require monitoring equipment, chemical resistant PPE, and decontamination of personnel and equipment. (These types of incidents generally fall into what NFPA 471 terms a Level II Incident.)

Examples of moderate risk incidents include hazmat situations within one of the three water treatment plants, natural gas or LPG leaks, credible white powder calls, carbon monoxide leaks, or situations involving radioactive materials.

High/Special Risk: These are low probability, high level consequences that pose the greatest potential of danger to life safety and the environment, and are the most complicated calls to mitigate. Examples include incidents involving large amounts of products escaping a marine vessel and or on fire. The mixing of several hazardous products, major transportation accidents involving hazardous chemicals or waste, or industrial accidents. Several variables, such as a large area, the size of the leak or spill, or the need for evacuation of large amounts of people may lead to the request of additional resources to mitigate the scene. These resources may include a second or third HMRT, the striking of additional alarms for manpower, or specialty teams such as Technical Rescue or Marine teams. In addition to these resources, the County EOC may be put into operation to assist with the needs or prolonged and complicated scenes. Examples of high risk incidents include hazardous materials incidents on one of the major highways or waterways experiencing high commercial traffic. (These types of incidents generally fall into what NFPA 471 terms a Level III Incident.)





Maximum Risk: Responses to Maximum Level Risks involving hazmat will fall under the response profile of High Risk incidents. Maximum level risks include natural and man-made (terrorist) acts in any building within the City of Fort Lauderdale. Examples include:

- Chemical releases
- Biological Toxins or Poisons
- Radiological Material release
- Nuclear Material release
- Explosive/Incendiary incidents

These incidents will involve multiple agencies from a variety of disciplines based on the situation, and may include the military, ATF, and FBI.

ARFF Risk Assessment

Fort Lauderdale ARFF protects Fort Lauderdale Executive Airport (FXE) with one Crash truck. This truck is staffed 24/7 with one Driver Engineer and one Captain. To become a member of the ARFF special operations team the employee must complete a minimum of 40 hours of approved ARFF training as well as a 40-hour class conducted by the staff of the Executive airport. The airport serves over 150,000 aircraft operations per year, making it the eighth busiest general aviation center in the United States. The airport is designated as general aviation reliever facility for the Fort Lauderdale-Hollywood International Airport by the FAA. The airport is a port of entry with a full-service Customs facility.

Probability Factors

Aircraft incidents within the city are rare. There have been 718 total "Alert" incidents between 2015 and 2019. Twenty-three of the alerts were declared an "Alert" which means an actual aircraft accident has occurred. As mentioned previously, there were 718 "Alerts" which means the ARFF truck, Truck 53, actually was put on stand-by and reported to the edge of the airfield. In the event an airplane crash occurs off the airport property, depending on the proximity to the airport and the size of the aircraft, it is handled as a structure fire with the ARFF truck leaving the airport property on a case by case basis.

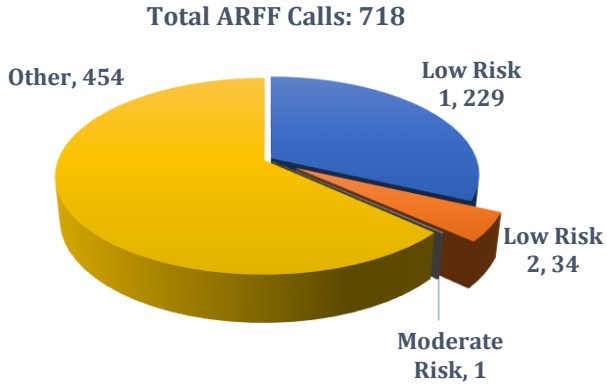
Consequence Factors

The historical rarity of aircraft disasters keeps the probability at low. The consequence of the actual event to the community is high. Factors such as the pilot steering the plane onto a residential road or crashing the plane without any damage to homes influence the potential consequences to the community. Other Alert 3 calls have been single plane accidents into a warehouse structure or crashes into individual homes without causing damage to surrounding area. Taking all of this into account, the likelihood of an incident is low, the consequence has the potential to be high, but FLFR has no data to support high consequence other than using the "what if" approach.

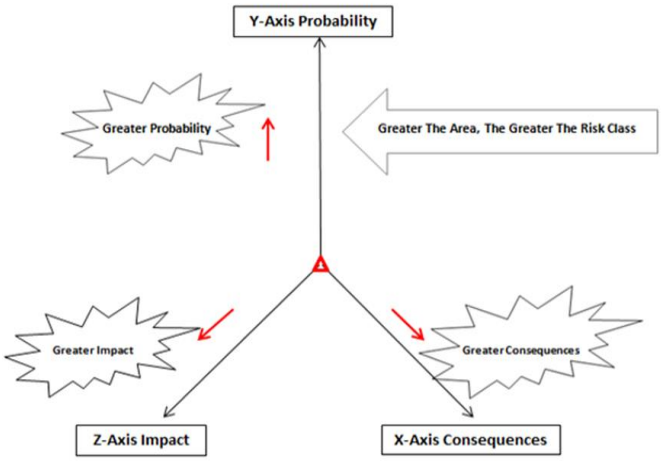
Impact

The direct agency impact due to the incident occurring at a specific location. Additionally, would an incident require additional resources because of its specific characteristics or location? Would FLFR be able to service other areas of the city or would the location affect the ability of FLFR to fulfill its mission?

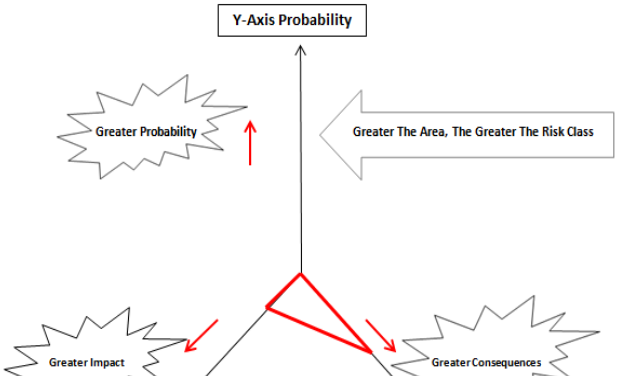
Figure 28: Risk ARFF (2015-2019)



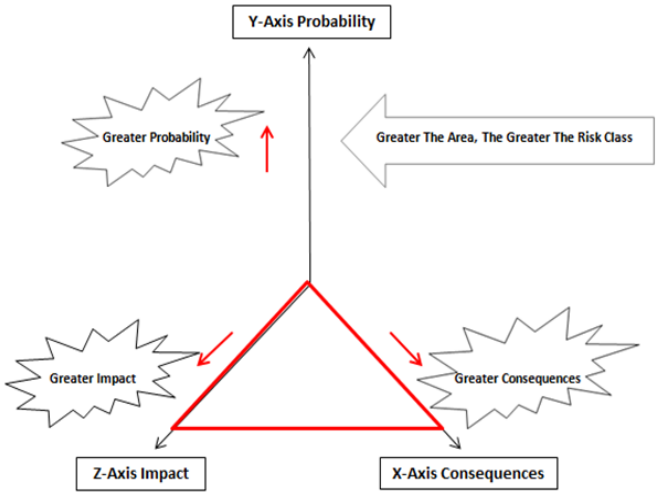
Low Risk: A Low-Level Risk for ARFF encompasses most of the ARFF catchment zone. There have been incidents where Truck 53 responded off property however they were all within a close proximity of the airport. Low level Risk incidents would involve the runway or taxi areas of the airport.



- Probability- LOW
- Impact- LOW
- Consequences- LOW



Moderate Risk: Moderate level risks involving ARFF are low probability with moderate consequences. These would include any incidents involving the surrounding roads, businesses or homes near the airport.



- Probability- LOW
- Impact- HIGH
- Consequences- HIGH

High/Special Risk: High/Special risk is defined as low probability, high impact and high consequence. These would include, but not be limited to, the Lockhart Stadium during an event or the Fort Lauderdale baseball stadium during an event. The Interstate 95 during peak hour traffic, and Alert 3 involving midrise to high-rise residential are also examples of High/Special Risk.

Technical Rescue Risk Assessment

Probability Factors

FLFR Technical Rescue Team (TRT) primarily handles technical rescue incidents within the City of Fort Lauderdale. However, the Technical Rescue Team is also considered a regional asset within the Mutual Fire Aid Interlocal Agreement. The team is capable of providing support for a variety of agencies, at their request, within Broward County. Standard operating procedures for local response, the TRT meets the State of Florida Association of Search & Rescue typing of a Type II – Light Technical Rescue Team. In 2004, FLFR entered into an agreement with the State of Florida to be considered a Region 7 asset as a Light Technical Rescue Team. This agreement provided FLFR with training and a limited amount of equipment in exchange for the response of those assets and trained personnel within the tri-county area. The State of Florida can request the response of six technical rescue trained members along with the minimum equipment provided by the State and the commitment to operate for up to twelve hours.

Currently the FLFR TRT is housed at Fire Station 29 with equipment stored ready for response on (1) engine company, (1) medical rescue, (1) heavy rescue/squad, and (2) tandem axle trailers. FLFR attempts to staff the team with 6 members assigned to Engine 29 (3), Rescue 29 (2), and Squad 29 (1). Each member is required to have certifications to the technician level in rope rescue, confined space rescue, and trench rescue along with operations level certification in vehicle/machinery rescue. Many members of the Technical Rescue Team are also members of FEMA U S & R FL-TF2 which requires their members to be trained to the technician level in each of the five NFPA 1670 disciplines. FLFR has different levels of response for technical rescue based on the severity of the incident.

Technical rescue incidents are most likely to occur in high-rise buildings under construction or one of the numerous bridges within the city. Incidents can be broken down into Trench, Confined Space, Structural Collapse, and High Angle Rescue.

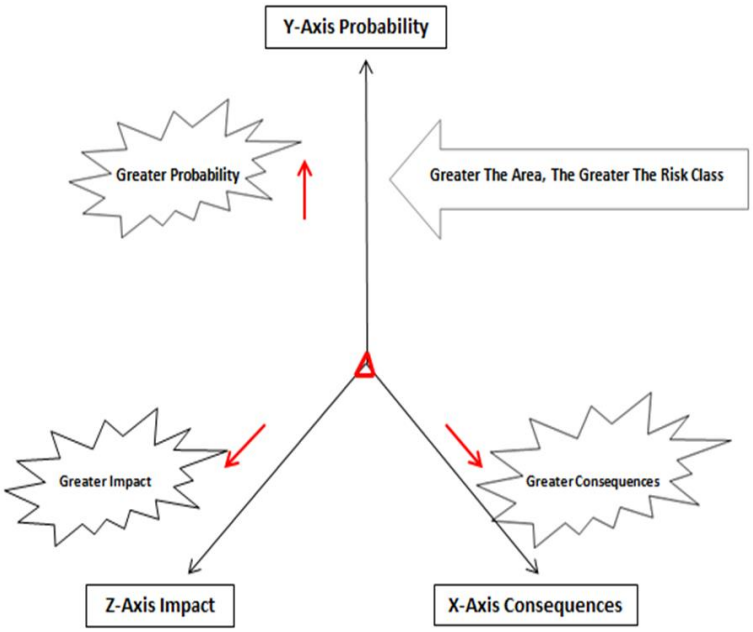
Consequence Factors

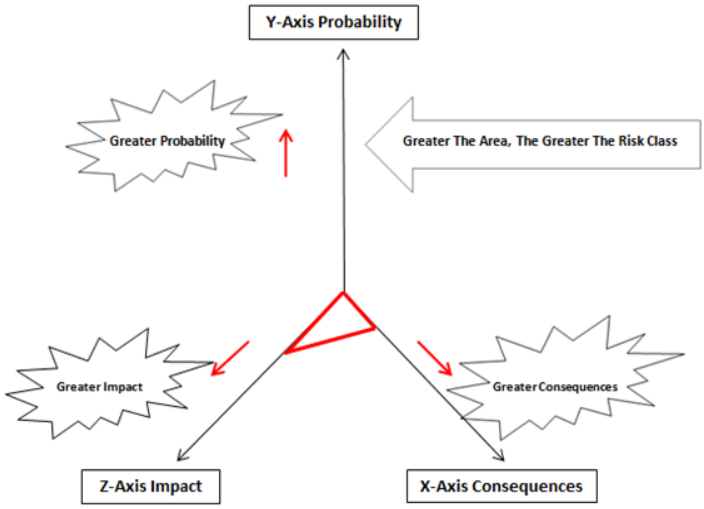
The severity and consequence of technical rescue emergencies varies with the risk and type of call. Though the probability of technical rescue accidents is low, the consequence varies upon the location and type of call. Generally, a technical rescue incident involving a high angle rescue will have no impact to the community overall and will just concern the victim. However, large incidents like a building collapse within the downtown area of Fort Lauderdale may have more consequences to the city.

Impact

The direct agency impact due to the incident occurring at a specific location. Additionally, would an incident require additional resources because of its specific characteristics or location? Would FLFR be able to service other areas of the city or would the location affect the ability of FLFR to fulfill its mission?

Low Risk: Low level risks involving TRT make up the majority of the calls responded to by the Technical Rescue Team. They may be dangerous for the crews involved but have little impact on the community as a whole. The probability of occurrence is low. Low level risk TRT would include but are not limited to vehicle accidents on the streets or highways with reported entrapment, assistance in removing a large person from a room in their home, elevator rescues and injuries on a roof less than two stories with no access.

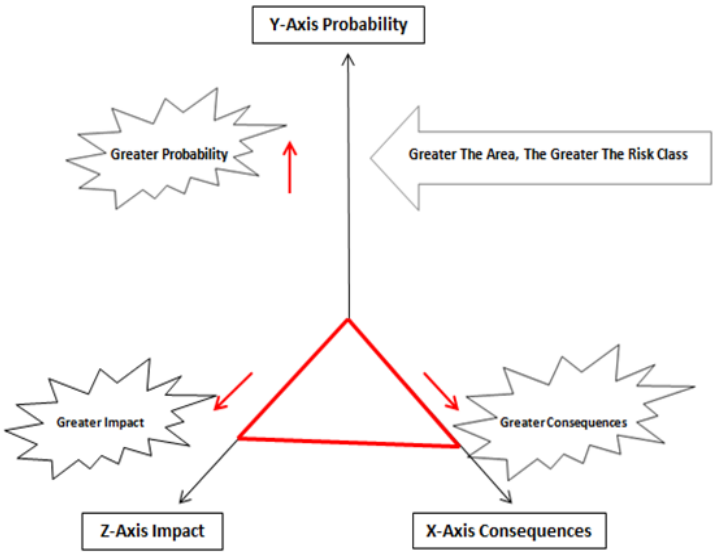




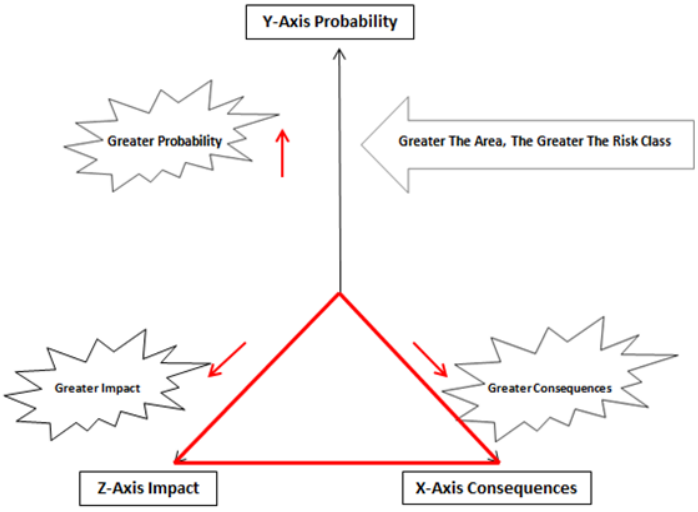
- **Probability- LOW**
- **Impact- MODERATE**
- **Consequences- LOW**

Moderate Risk: Moderate level risks have little impact on the community however, due to their size and location, have the capacity to escalate quickly. Moderate risk inclusion would include any evacuation of survivors from any scenario utilizing rope rescue techniques and equipment, survivors in a trench or excavation collapse, any person trapped in a confined space and persons trapped within heavy machinery or heavily entrapped within a vehicle. Locations for moderate risk incidents include any major highway or street, high-rise structure or trench being dug within the city limits.

High / Special Risk: High risk categorization includes situations that have a large impact to the community and that may overwhelm not only the FLFR system but the community as a whole. Included in the high risk category would be structural collapse with people trapped, any persons found in a high angle situation greater than 60 degrees, technical rescue requiring the assistance of outside resources and trench rescue greater than 8 feet. High risk locations would be any high-rise in the city, any building which sustains a collapse or any trench being dug on property within the city limits.



- **Probability- LOW**
- **Impact- HIGH**
- **Consequences- HIGH**



- **Probability- LOW**
- **Impact- Maximum**
- **Consequences- Maximum**

Maximum Risk: Would be dictated by the on-duty Assistant Chief and would be based on the incident exceeding the capabilities of the Broward County Regional assets. These incidents may require assistance from the State or Federal governments to provide technical rescue assistance from FASAR, FEMA or DOD. Examples would be natural disaster over a widespread area with heavy damage. Terrorist incidents involving explosive devices or any type of WMD within any target facility, hospital, school, government building etc. within the city limits.

Marine Firefighting and Rescue Risk Assessment

Probability Factors

The City of Fort Lauderdale operates two fireboats in Broward County. The fireboats are staffed by Ladder 49, Engine 49 and Rescue 49 crews as an adaptive response. When a call comes in that requires the fireboat, the Fire Station 49 crews will transfer from Ladder 49, Engine 49 and Rescue 49 to Fireboat 49/249. The FLFR Marine Team is located at Fire Station 49 and is comprised of firefighter/paramedics that are Dive Rescue certified. The marine team is responsible for 165 miles of waterway in the City of Fort Lauderdale but also provides fire suppression and dive rescue service offshore and to neighboring cities.

Marine incidents are most likely to occur on the New River and Intracoastal Waterway (ICW). Marine Rescue incidents can be broken down into water rescues (dive), fire suppression, fuel spills, and medical emergencies on board watercraft. The weekend and holiday marine traffic is much heavier than the weekday traffic and consists primarily of recreational boaters and fisherman versus the weekly traffic that consist primarily of commercial traffic and vessels under tow.

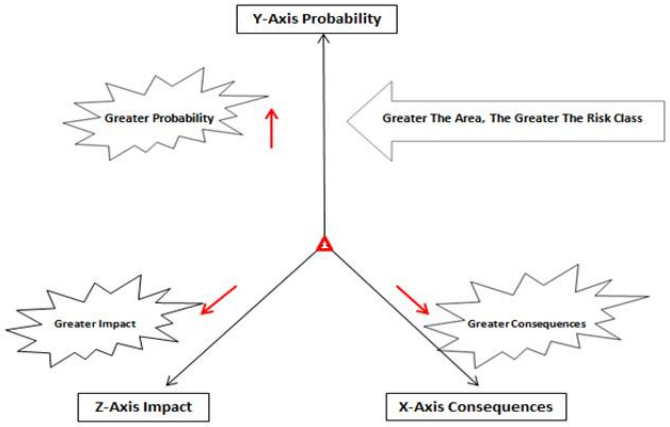
Consequence Factors

The severity and consequence of marine related emergencies varies with the risk and type of call. Though the probability of marine accidents is low, the consequence varies upon the location and type of call. Generally, a marine incident involving a dive rescue will have no consequence to the community overall and will just concern the victim. However, large boat fires in marinas or aircraft accidents off the coast of Fort Lauderdale may have more of an impact. The vessel “Musette” was cut by its moorings in 2007 causing it to wedge itself against both sides of the New River causing the shutdown of all marine commerce on the river until its removal. There is also the potential for impact to the tourism and fishing industry when incidents occur involving multiple fatalities such as the December 1999 boat collision.

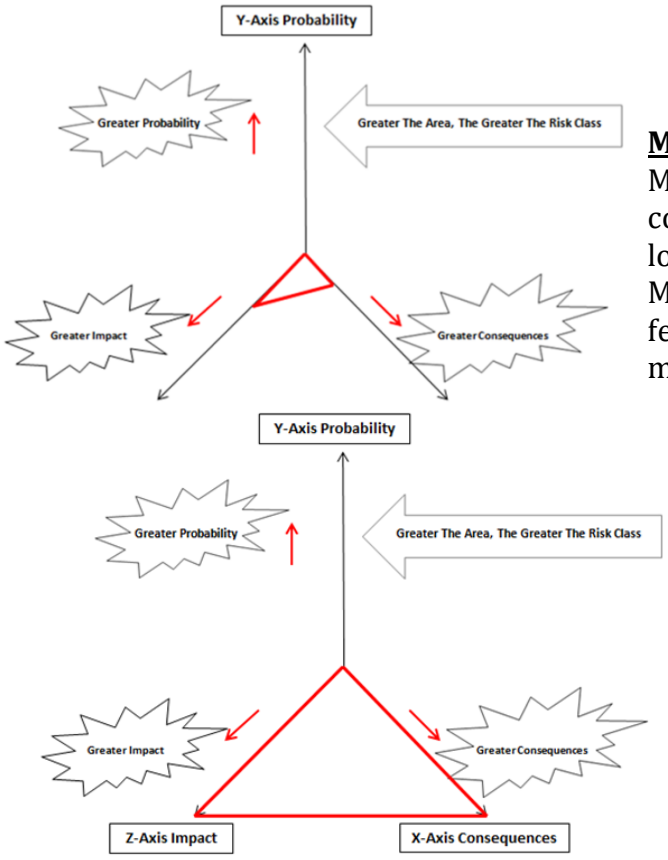
Impact

The direct agency impact due to the incident occurring at a specific location. Additionally, would an incident require additional resources because of its specific characteristics or location? Would FLFR be able to service other areas of the city or would the location affect the ability of FLFR to fulfill its mission?

Low Risk: Low level risks involving Marine Rescue make up the majority of the calls responded to by the marine team. They may be extremely dangerous for the firefighter/paramedic/rescue divers involved, however, they have little impact on the community as a whole and the probability of occurrence is low. Low risk calls would include but are not limited to marine vessels under 40 feet with no exposures, dive rescue calls in hi visibility/low current water with no overhead obstructions, and moored marine vessels under 40 feet.



- **Probability- LOW**
- **Impact- LOW**
- **Consequences- LOW**



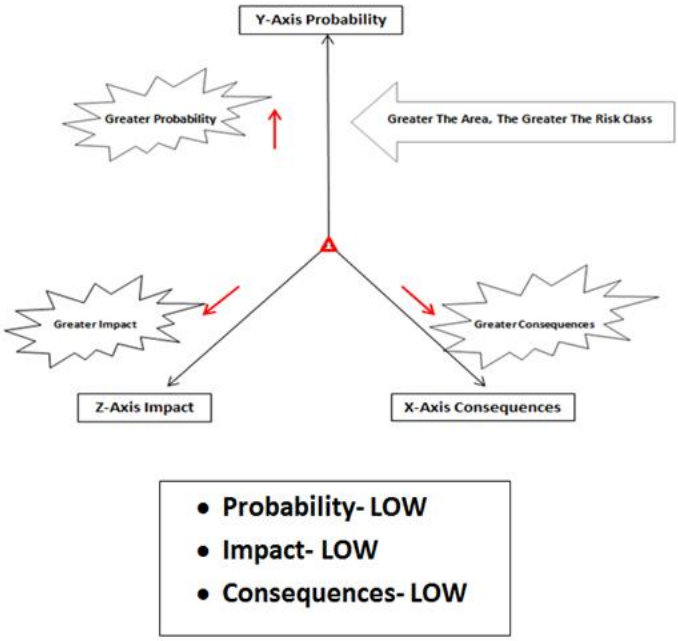
- **Probability- LOW**
- **Impact- Maximum**
- **Consequences- Maximum**

Moderate Risk: Moderate level risks involving Marine Rescue have little impact on the community however, due to their size and location, have the capacity to escalate quickly. Moderate Risk would include vessels above 40 feet with an enclosed cabin, vessels in smaller marinas or residential dock that have significant exposure to other vessels, bridges, and bodies of water that are 30 to 60 feet deep or that have moderate current.

High / Special Risk: High / Special level risk includes locations and situations that have a large impact to the community and that may overwhelm not only the FLFR system but the community as a whole. Included in the high risk category would be tourist vessels that have a high capacity of travelers (50+), water based mega yacht storage and manufacturing facilities and aircraft that have water involvement (crash).

Ocean Rescue Risk Assessment

Low Risk: Ocean Rescue would be only a Low Level Risk response. This would include preventable measures taken by Ocean Rescue lifeguards, as well as surface ocean side shallow water rescue. Any Ocean Rescue response greater than low would fall into EMS critical tasking and responses requested by the Incident Commander.



Critical Task Analysis

The City of Fort Lauderdale is a heavily populated dynamic urban community. Being a heavily populated community brings a variety of threats with increased levels of risk. FLFR should have adequate resources and staffing to effectively handle calls at or within risks of the highest potential to negatively affect the community.

The Hazard and Risk Assessment Effective Response Force (ERF) can be broken down into six critical tasks categories. Emergency Medical Services (EMS), Fire Suppression, Hazardous Materials, Airport/A.R.F.F., Technical Rescue, and Marine Rescue. The number of units, personnel and tasks required to mitigate the problem will vary from incident to incident. As a general rule, when the level of risk increases, the tasks needed to be accomplished to mitigate the incident also increase.

Critical tasks are items which need to be completed by responders in order to mitigate the situation. Tasks should be completed quickly, professionally, and in a safe manner with priority given to life safety situations.

Fire Tasks- The minimum number of firefighters required to perform the tasks at the level of risk present. Fires which extend beyond a first alarm fire assignment will require additional alarms bringing more personnel and equipment to the scene.

EMS- Critical tasks involving EMS incidents are the minimum number of personnel required to mitigate the level of risk involved. Tasks are identified based on FLFR medical protocols and under the direction of the Medical Director.

Special Operations- ARFF, TRT, Marine and Hazmat all fall into this category. Plus, the minimum number of firefighters and equipment required to complete the tasks are based on the level of risk involved. Generally speaking, these incidents have a lower probability of occurring but bring a much greater level of impact to FLFR and community consequences.

Table 8 ERF by Call Type and Risk

Hazard and Risk Assessment Effective Response Force (E.R.F.)				
Critical Tasks	**Max Risk**	**High Risk**	**Mod. Risk**	**Low Risk**
E.M.S.	**N/A**	**20**	**15**	**2, 3 or 5***
Fire Suppression	**>22**	**22**	**16**	**3**
Hazardous Materials	**N/A**	**>17**	**17**	**3***
Airport/A.R.F.F.	**N/A**	**>17**	**17**	**2 or 8***
Technical Rescue	**N/A**	**23**	**18**	**13**
Marine Rescue	**N/A**	**20**	**18**	**6**

* EMS low risk 2, 3, or 5 rescue only or engine and rescue response.
* Low risk ARFF, ARFF unit only or ARFF with additional units.
* Ocean Rescue would also be included as a single person Low Level Risk EMS response.

Table 9 Structure Fire Critical Tasking

Structure Fire Critical Tasking				
Minimum Personnel Needed Based On Level Of Risk				
Critical Task	**Max Risk**	**High Risk**	**Mod. Risk**	**Low Risk**
Command	**1**	**1**	**1**	**-**
Safety	**1**	**1**	**1**	**-**
Pump Operator	**1**	**1**	**1**	**1**
Water Supply	**3**	**2**	**2**	**-**
Attack Line	**2**	**2**	**2**	**2**
Primary Search	**2**	**2**	**2**	**-**
Utilities	**1**	**1**	**1**	**-**
Second Line	**3**	**2**	**2**	**-**
Rapid Intervention	**3**	**3**	**2**	**-**
Ventilation	**2**	**2**	**2**	**-**
Medical Group	**2**	**2**	**-**	**-**
Rear of Structure	**3**	**3**	**-**	**-**
Total	**>22**	**22**	**16**	**3**

Structure fire with risk levels of Low and Moderate have resources dispatched initially on the first alarm assignment. Any risk above moderate (High/Max) will have additional resources added on as necessary. FLFR recently transitioned to the Regional Dispatch System and currently only Maximum Risk will need additional add-ons. The Regional Dispatch System dispatch's Low, Moderate and High Risk automatically on the first alarm assignment. The start date for the new dispatch system was August 2014.

Table 10 EMS Critical Tasking

E.M.S. Critical Tasking			
Minimum Personnel Needed Based On Level Of Risk			
Critical Task	High Risk	Mod. Risk	Low Risk**
Patient Assessment	-	-	1
BLS or ALS Interventions	-	-	1
EKG Monitor / Airway	-	-	1
Report Writing	-	-	1
EKG Monitor / Airway	-	-	1
Transport	-	-	1
Command	1	1	-
Medical Group	1	-	-
Safety Officer	1	1	-
Triage Group	4	3	-
Treatment Group	6	5	-
Transport Group	6	4	-
Staging Officer	1	1	1
Total	20	15	2, 3 or 5*

*Depending on dispatch information Low Risk EMS calls may have 2 or 5 responders based on the patient complaint.

*Low Risk and Moderate Risk E.M.S. resources are dispatched on the initial alarm assignment. Any risk level over moderate will need additional resources added-on to complete the assignment.

**Ocean Rescue would be a low level risk response involving a single lifeguard. EMS is alerted through dispatch and their response is part of the EMS low level risk critical task response. Any Ocean Rescue response greater than low would fall into the EMS critical tasking for moderate, special. Additional ALS units would be requested as needed by the incident commander.

Table 11 ARFF Critical Tasking

Airport ARFF Rescue Critical Tasking				
Minimum Personnel Needed Based On Level Of Risk				
Critical Task	High Risk	Mod. Risk	Low Risk 2	Low Risk 1
ARFF Response	2	2	2	2
Handline Fire Attack	>3	3	1	-
Search/Evacuation	>3	3	2	-
Command	1	1	1	-
Safety	1	1	-	-
Medical	>4	4	2	-
Triage	>2	2	-	-
Staging	1	1	-	-
Total	>17	17	8	2

All risk levels regarding ARFF except Maximum Risk are dispatched on the initial alarm assignment. Truck 53 (ARFF) responds on all initial ARFF responses. Additionally, any plane crash within the surrounding area will have Truck 53 added to the assignment. Low risk 1 only the ARFF truck is needed. Alert 1 example (warning light) Low risk 2 the ARFF truck along with additional units are needed, example (landing gear malfunction).

Table 12 Marine and Shipboard Critical Tasking

Marine and Shipboard Operations Critical Tasking			
Minimum Personnel Needed Based On Level Of Risk			
Critical Task	High Risk	Mod. Risk	Low Risk
Fireboat Operations	4	4	4
Medical Group	2	2	2
Incident Command	1	1	-
Safety	1	1	-
Fire Attack	3	2	-
Back-up Line	2	2	-
RIT	2	2	-
Search and Rescue	2	2	-
Water Supply	1	1	-
Dewatering	1	1	-
Operations	1	-	-
Total	20	18	6

Low Risk and Moderate Risk marine rescue resources are dispatched on the initial alarm assignment. Any risk level over moderate will need additional resources added-on to complete the assignment.

Table 13 HazMat Critical Tasking

Hazmat Critical Tasking				
Minimum Personnel Needed Based On Level Of Risk				
Critical Task	Max Risk	High Risk	Mod. Risk	Low Risk
Command	1	1	1	1
Entry/Investigation	>2	2	2	2
Safety	1	1	1	-
Back-up Team	>2	2	2	-
Reasearch	>1	1	1	-
Decontamination	>2	2	2	-
Medical Group	>2	2	2	-
Hazmat Support	>4	4	4	-
Hazmat Group Leader	1	1	1	
Total	>17*	>17*	17	3

*Mutual Aid Hazmat Request

*Low Risk and Moderate Risk hazmat resources are dispatched on the initial alarm assignment. Any risk level over moderate will need additional resources added-on to complete the assignment and would involve a multiple agency response.

Table 14 Technical Rescue Critical Tasking

Technical Rescue Critical Tasking				
Minimum Personnel Needed Based On Level Of Risk				
Critical Task	Max Risk	High Risk	Mod. Risk	Low Risk
Command	1	1	1	1
Safety	1	1	1	1
TRT Operations	1	1	1	3
Entry	>4	4	2	-
Back-up	>4	4	2	-
Air Monitoring	2	2	1	-
Extrication	>3	3	2	3
Attack Line	2	2	2	1
Stabilization	2	2	2	2
Medical Group	2	2	2	2
Atmoshperic Monitoring	1	1	1	0
Total	>23	23	18	13

Low Risk and Moderate Risk technical rescue resources are dispatched on the initial alarm assignment. Any risk level over moderate will need additional resources added-on to complete the assignment and would involve a multiple agency response.

E. Historical Perspective and Summary of System Performance

Distribution Factors

The City of Fort Lauderdale consists of approximately 36 square miles of land consisting mostly of urban development. Fort Lauderdale Fire Rescue (FLFR) has a service area of 38.2 square miles which includes the City of Wilton Manors and Lazy Lake. FLFR planning areas are configured based upon the primary response for each station. Overall there are 13 planning areas which are covered by 11 stations. Several years ago, station 2 merged with station 8 and station 53 merged with station 88. Merging the stations allowed FLFR to lower costs by operating one station while still covering the same service area normally served by two stations. In 2020, new station 8 was built relocating Engine 8 and Rescue 8 to their new planning area. The move was made to improve response times along with having Fire/EMS coverage on the east side of the railroad tracks on the South side of the city. With this FLFR will now operate 12 stations with 12 planning zones The City of Fort Lauderdale contains approximately 754 miles of roadway ranging from residential city streets to interstate highways. Planning area 47 has the most road miles at 124.6 miles, while planning area 54 has the least at 30.7 miles. The comparison for square miles is similar with planning area 47 having the largest square miles at 5.0 and planning area 54 having the least at 1.5 square miles. The average road miles per planning area is 62.9 and the average square miles is 3.1. Road miles for each planning area and square miles are as follows:

Table 15 Approximate Road Feet and Miles, Square Feet and Miles, by Planning Area

Planning Area	Road Feet	Road Miles	Square Feet	Square Miles
Planning Area 2	500,165	94.7	102,988,602	3.7
Planning Area 3	410,824	77.8	93,733,297	3.4
Planning Area 8	329,447	62.4	50,481,260	1.8
Planning Area 13	167,728	31.8	54,346,775	1.9
Planning Area 16	309,177	58.6	75,900,578	2.7
Planning Area 29	205,107	38.8	52,205,606	1.9
Planning Area 35	385,595	73.0	108,509,169	3.9
Planning Area 46	399,403	75.6	117,572,481	3.8
Planning Area 47	657,745	124.6	147,312,181	5.3
Planning Area 49	152,471	28.9	69,531,810	2.5
Planning Area 53	302,756	57.3	139,249,099	5.0
Planning Area 54	37,950	30.7	41,656,590	1.5
Average	321,531	62.9	87,790,621	3.1

FLFR staffs 12 stations, and the city is broken into 12 response zones. The following map shows the City of Fort Lauderdale with station locations and response zones.

Figure 29: Fire Station Locations and Response Zones Map

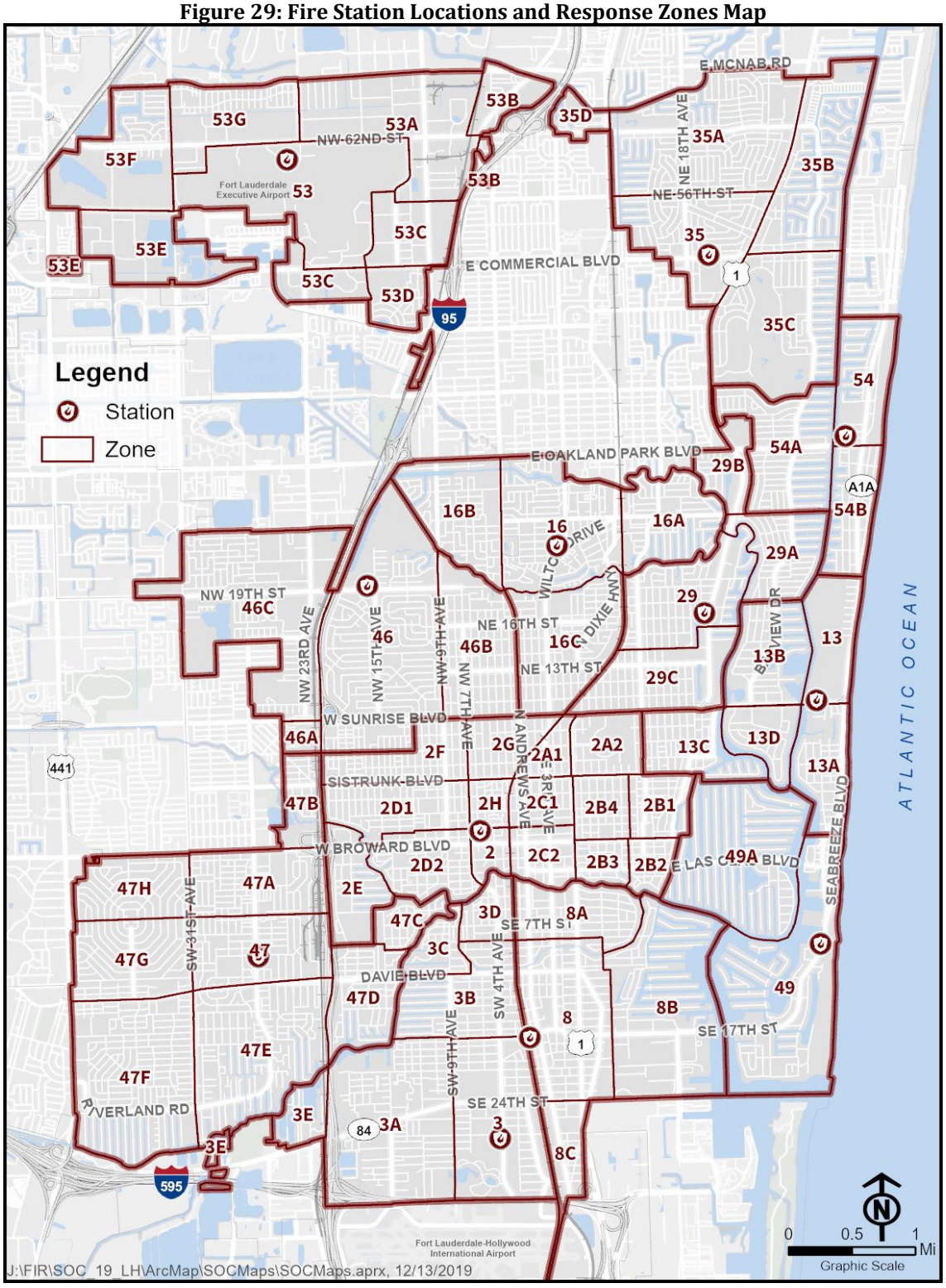


Figure 30: Station 2 Drive Time Map

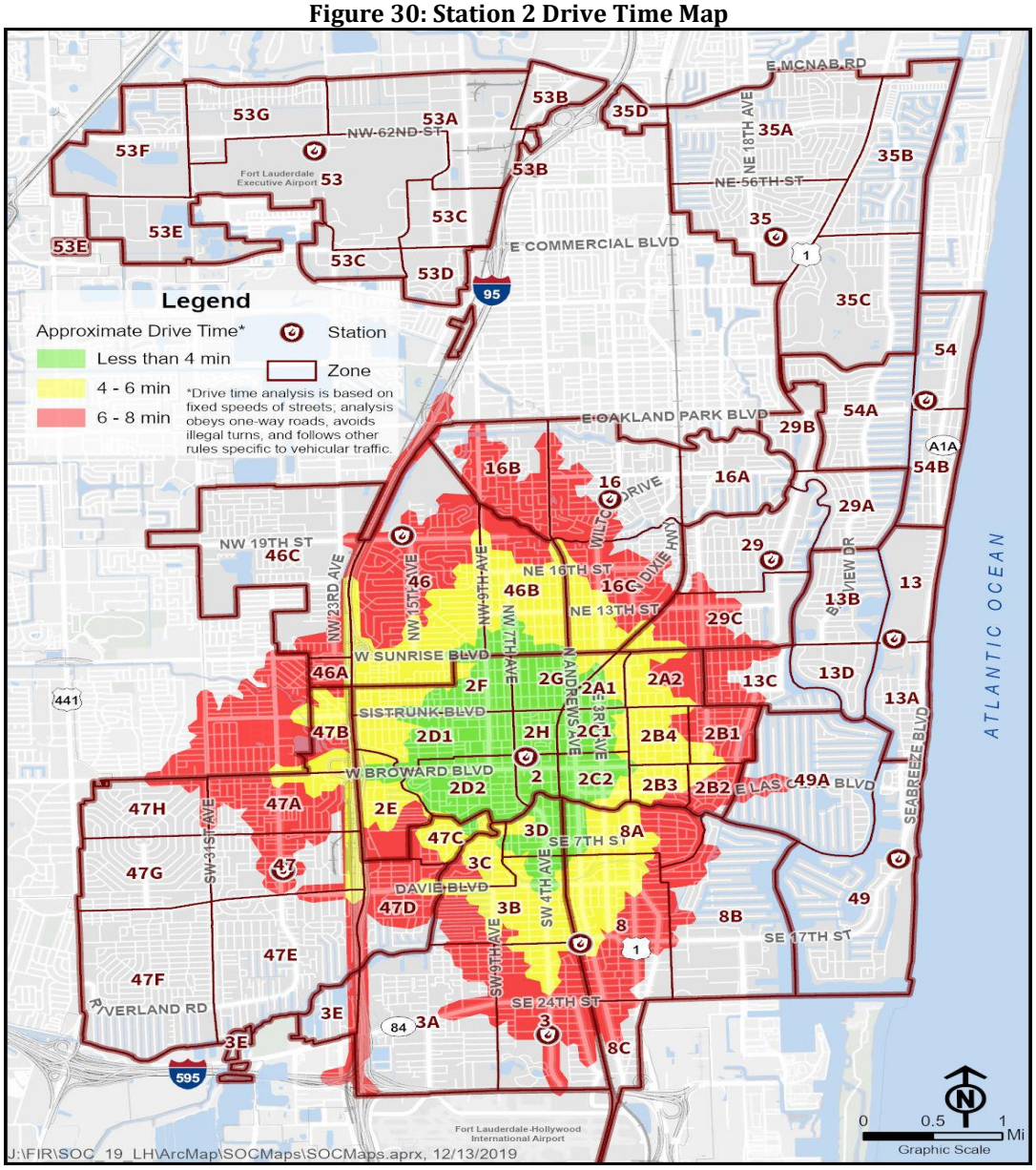


Table 16 Station 2/8 Responses (2019)

Unit	2019 Responses
Engine 2	3900
Rescue 2	3422
Rescue 202	3431
Rescue 302	3490
Ladder 2	2882
Engine 8	4800
Rescue 8	2849
Battalion 2	2487
Division 2	147
Total Unit Responses	27408

Figure 31: Station 3 Drive Time Map

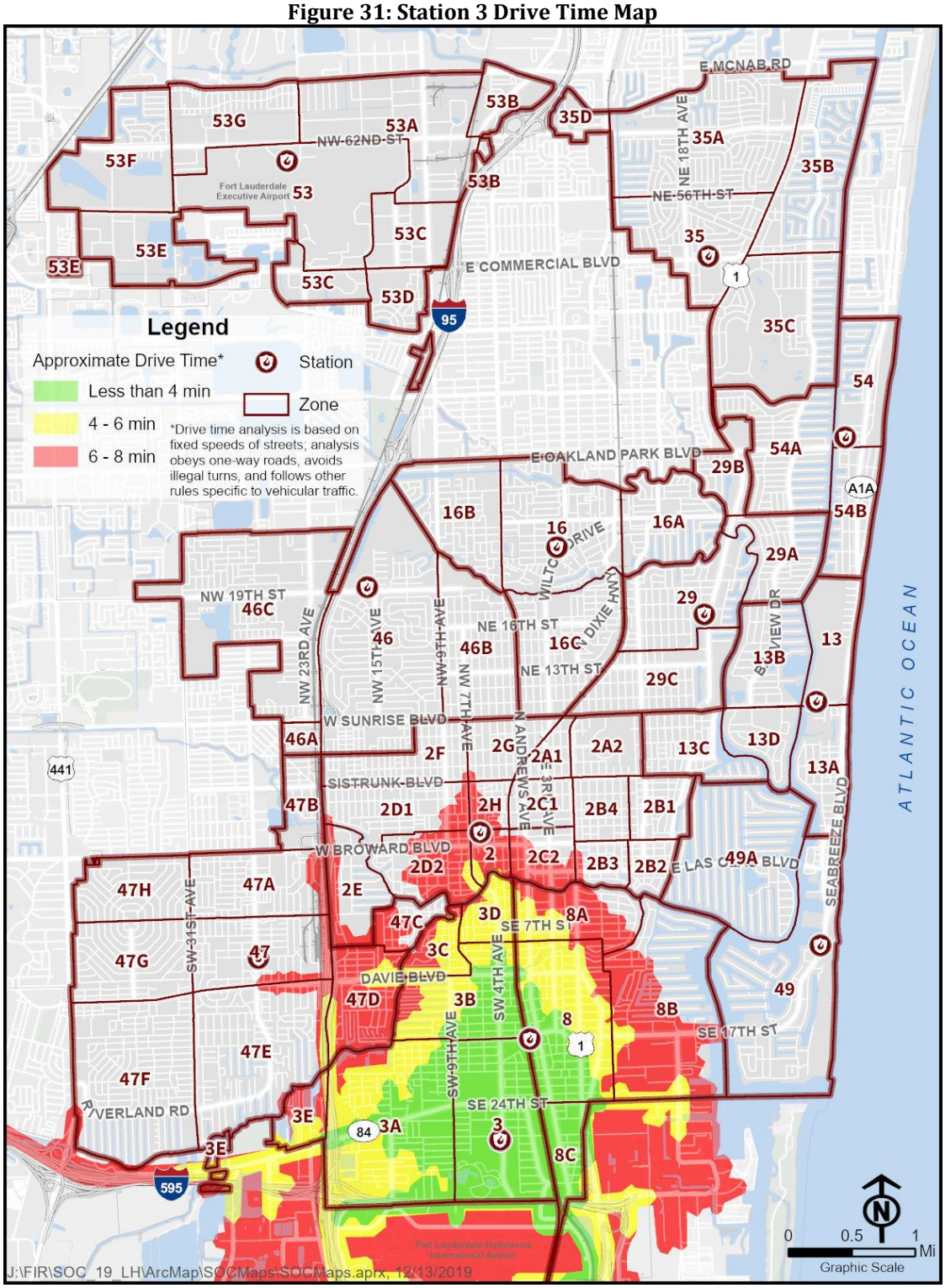


Table 17 Station 3 Responses (2019)

Unit	2019 Responses
Engine 3	2571
Rescue 3	3293
Total Unit Responses	5864

Figure 32: Station 13 Drive Time Map

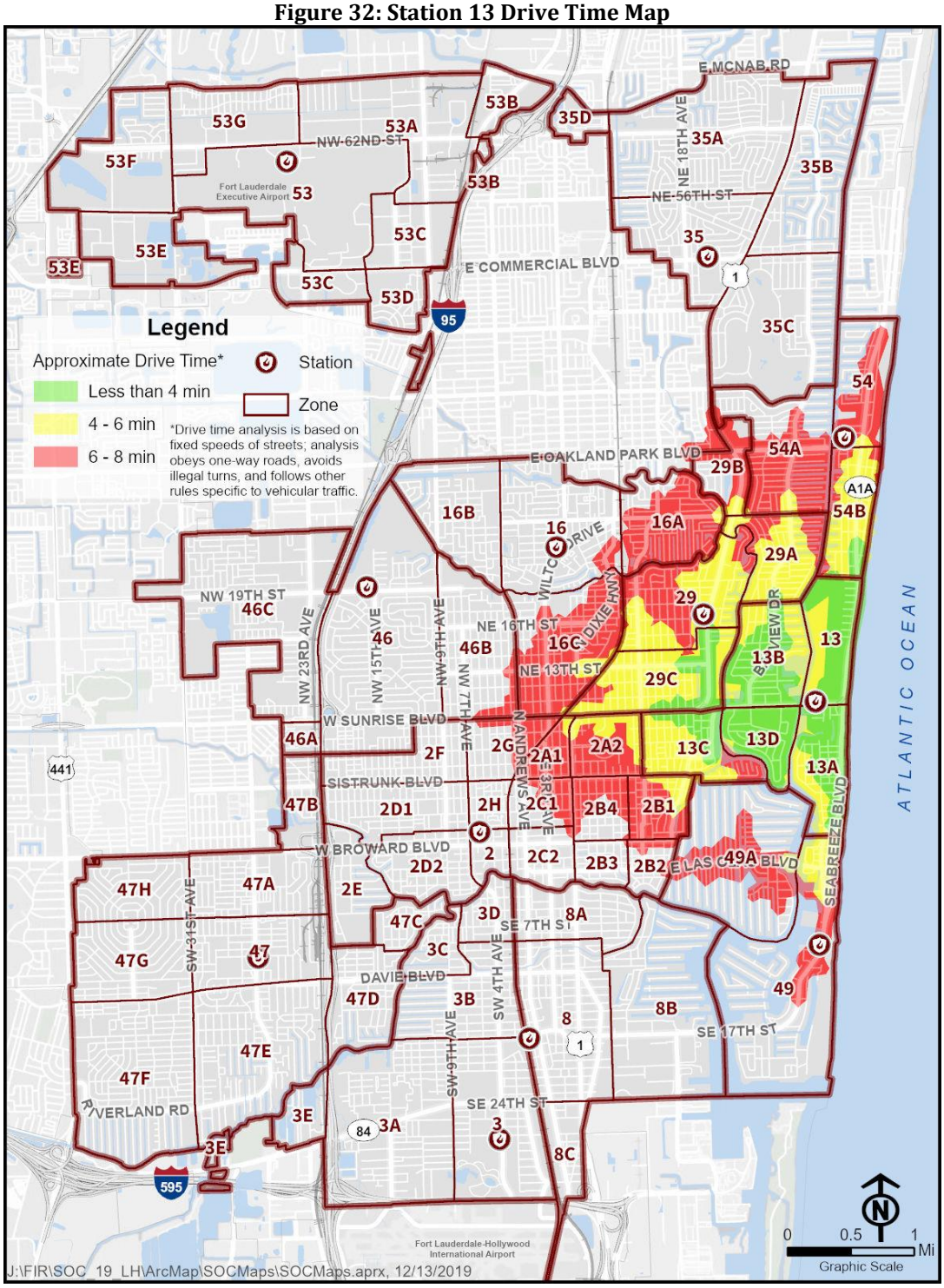


Table 18 Station 13 Responses (2019)

Unit	2019 Responses
Engine 13	2773
Rescue 13	2260
Battalion 13	1898
Total Unit Responses	6931

Figure 33: Station 16 Drive Time Map

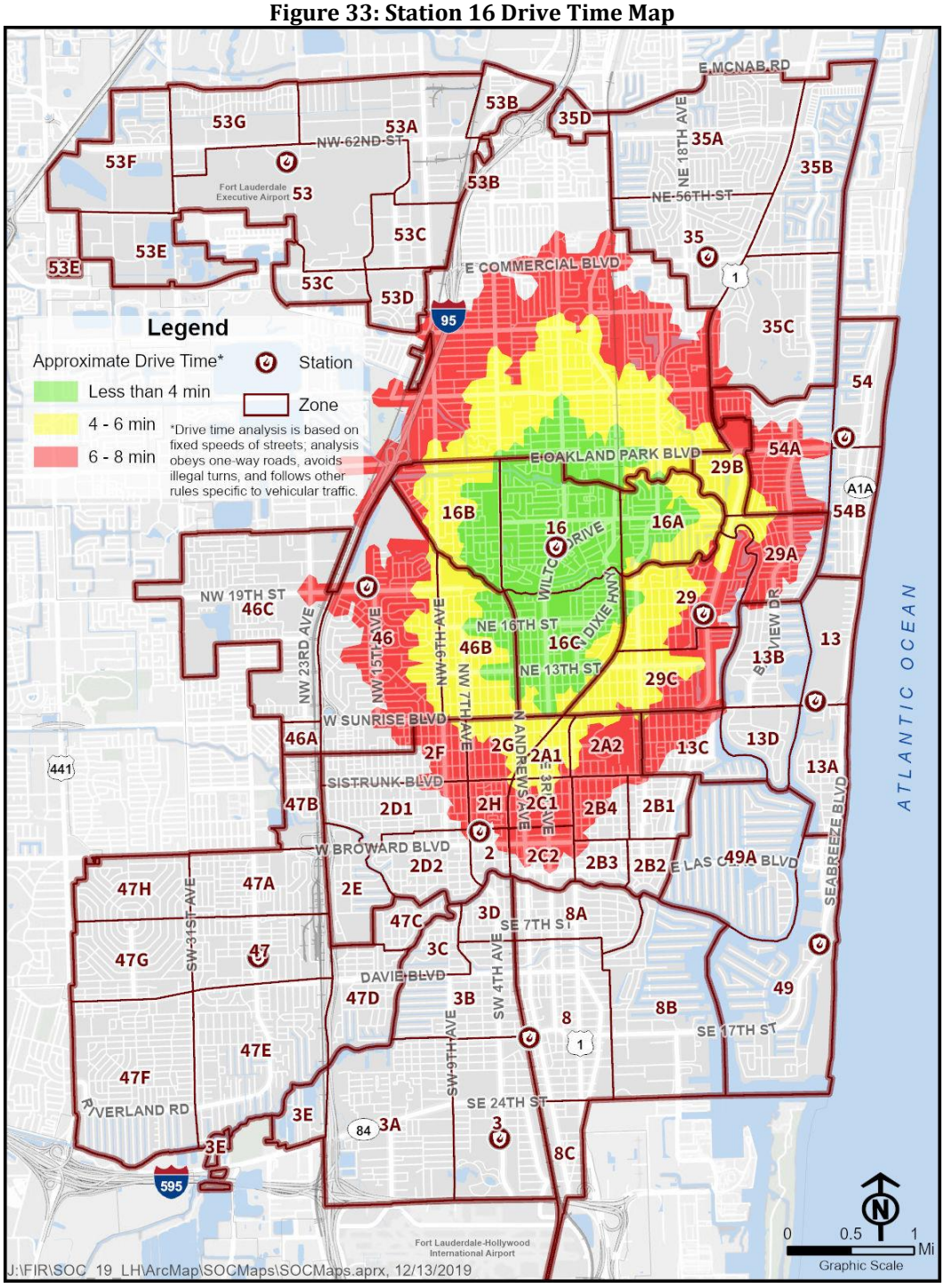


Table 19 Station 16 Responses (2019)

Unit	2019 Responses
Engine 16	3054
Rescue 16	2950
Battalion 16	2357
Total Unit Responses	8361

Figure 34: Station 29 Drive Time Map

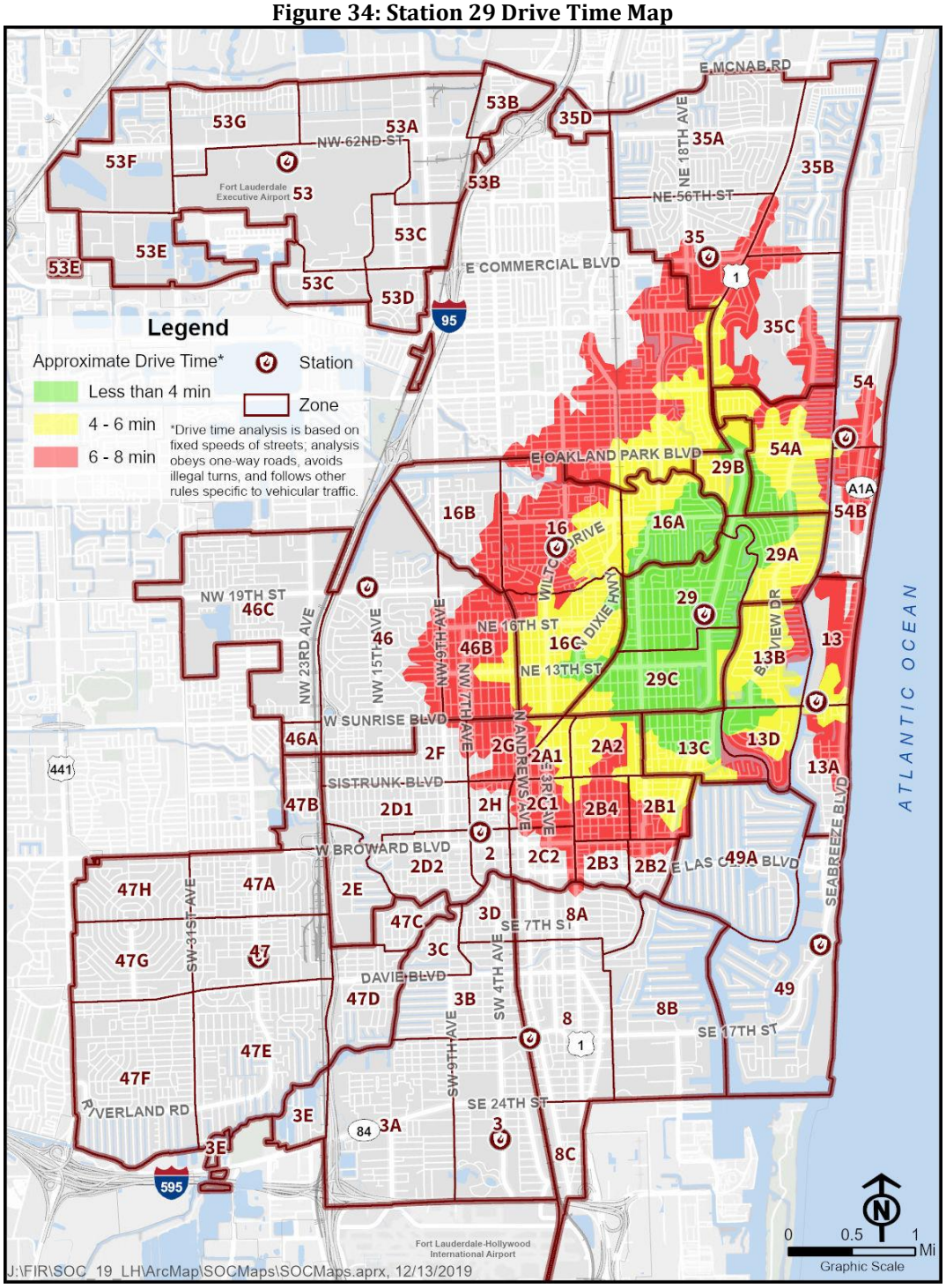


Table 20 Station 29 Responses (2019)

Unit	2019 Responses
Engine 29	3022
Rescue 29	2876
Squad 29	849
Total Unit Responses	6747

Figure 35: Station 35 Drive Time Map

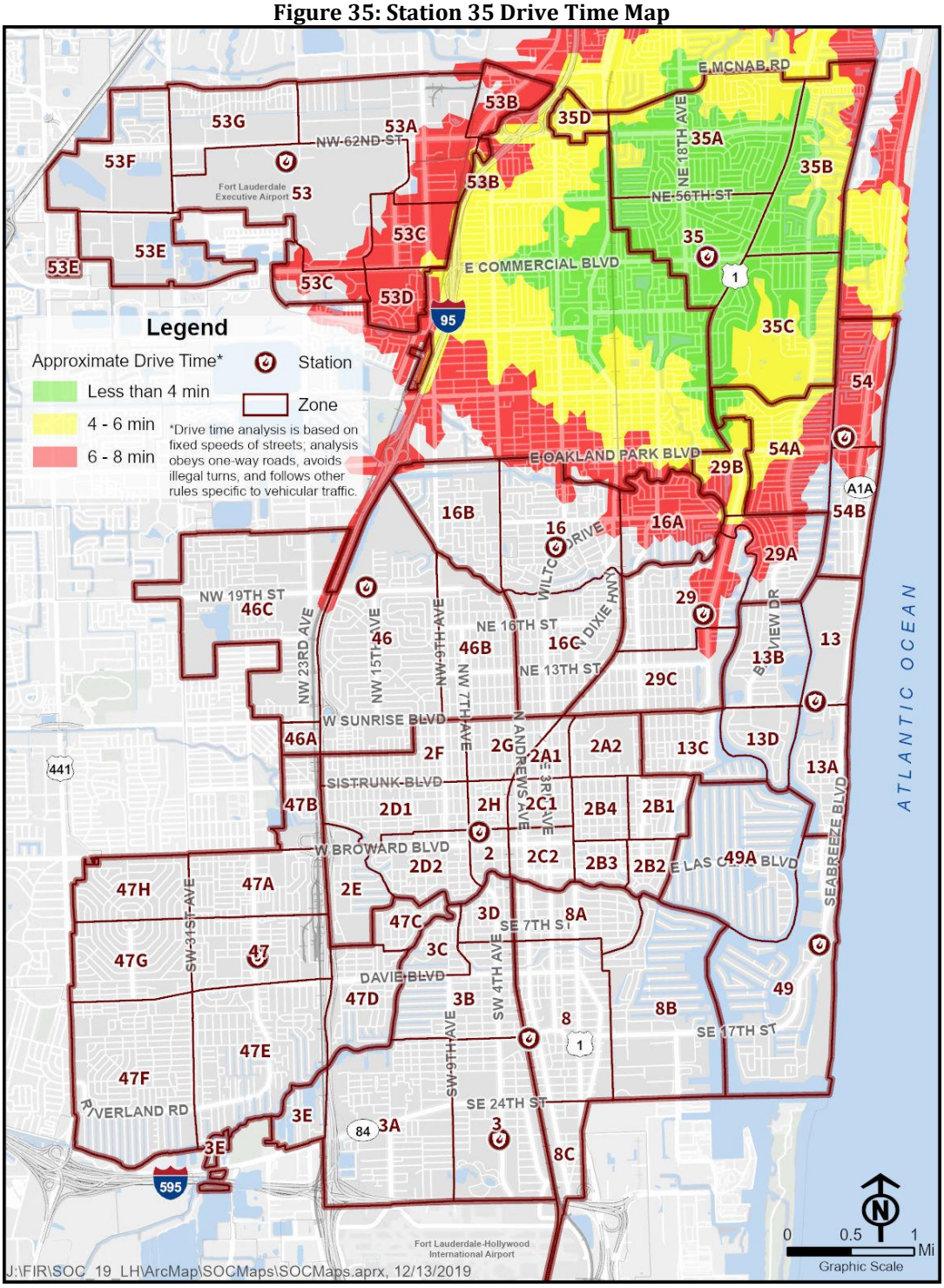


Table 21 Station 35 Responses (2019)

Unit	2019 Responses
Engine 35	2144
Ladder 35	1844
Rescue 35	2885
Total Unit Responses	6873

Figure 36: Station 46 Drive Time Map

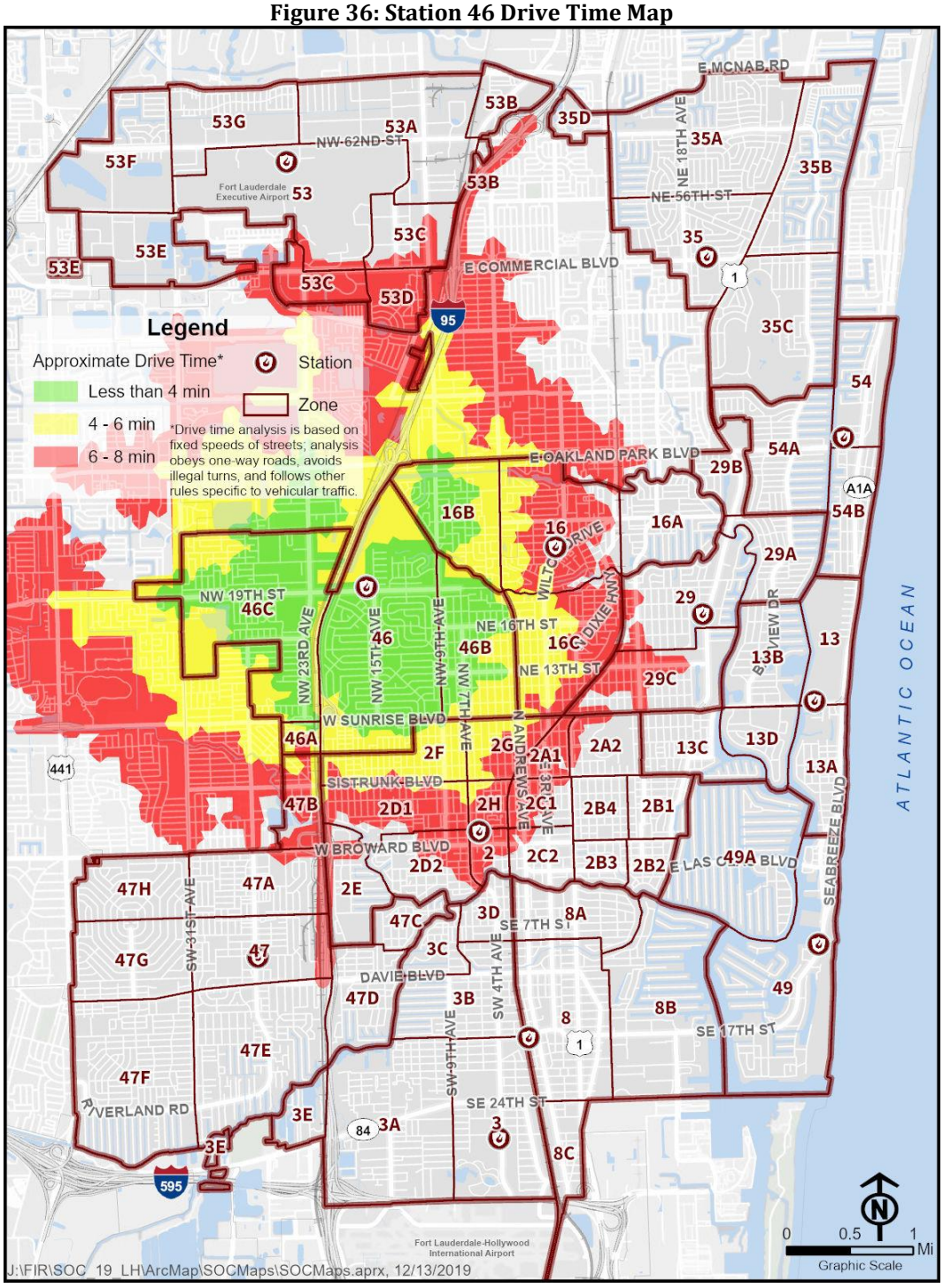


Table 22 Station 46 Responses (2019)

Unit	2019 Responses
Engine 46	4544
Rescue 46	3325
Rescue 246	3300
Total Unit Responses	11169

Figure 37: Station 47 Drive Time Map

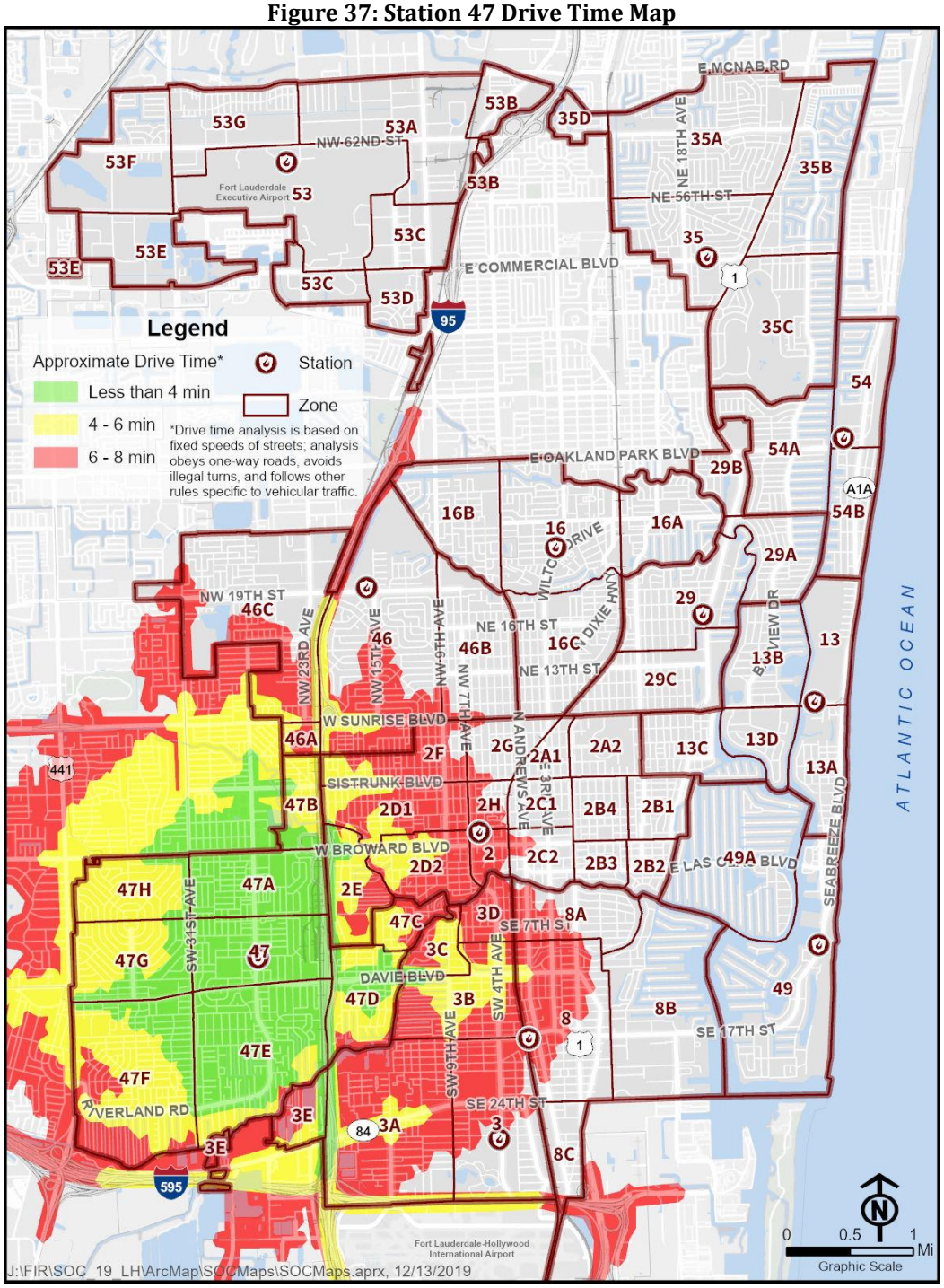


Table 23 Station 47 Responses (2019)

Unit	2019 Responses
Engine 47	2813
Rescue 47	2676
Rescue 247	2579
Squad 47	5
Total Unit Responses	8073

Figure 38: Station 49 Drive Time Map

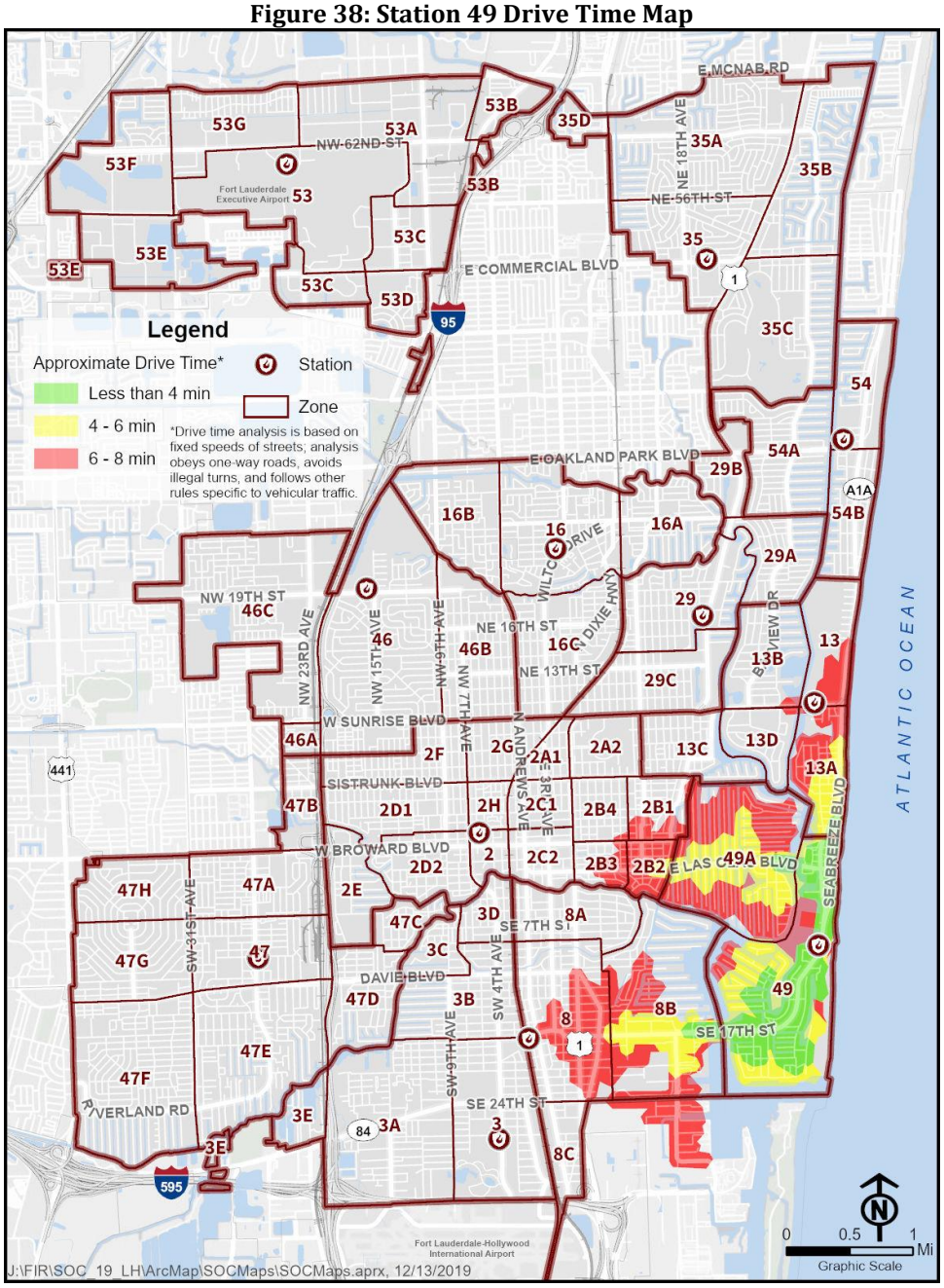


Table 24 Station 49 Responses (2019)

Unit	2019 Responses
Engine 49	2106
Rescue 49	1874
Ladder 49	1565
Fireboat 249	49
Fireboat 49	190
Total Unit Responses	5784

Figure 39: Station 54 Drive Time Map

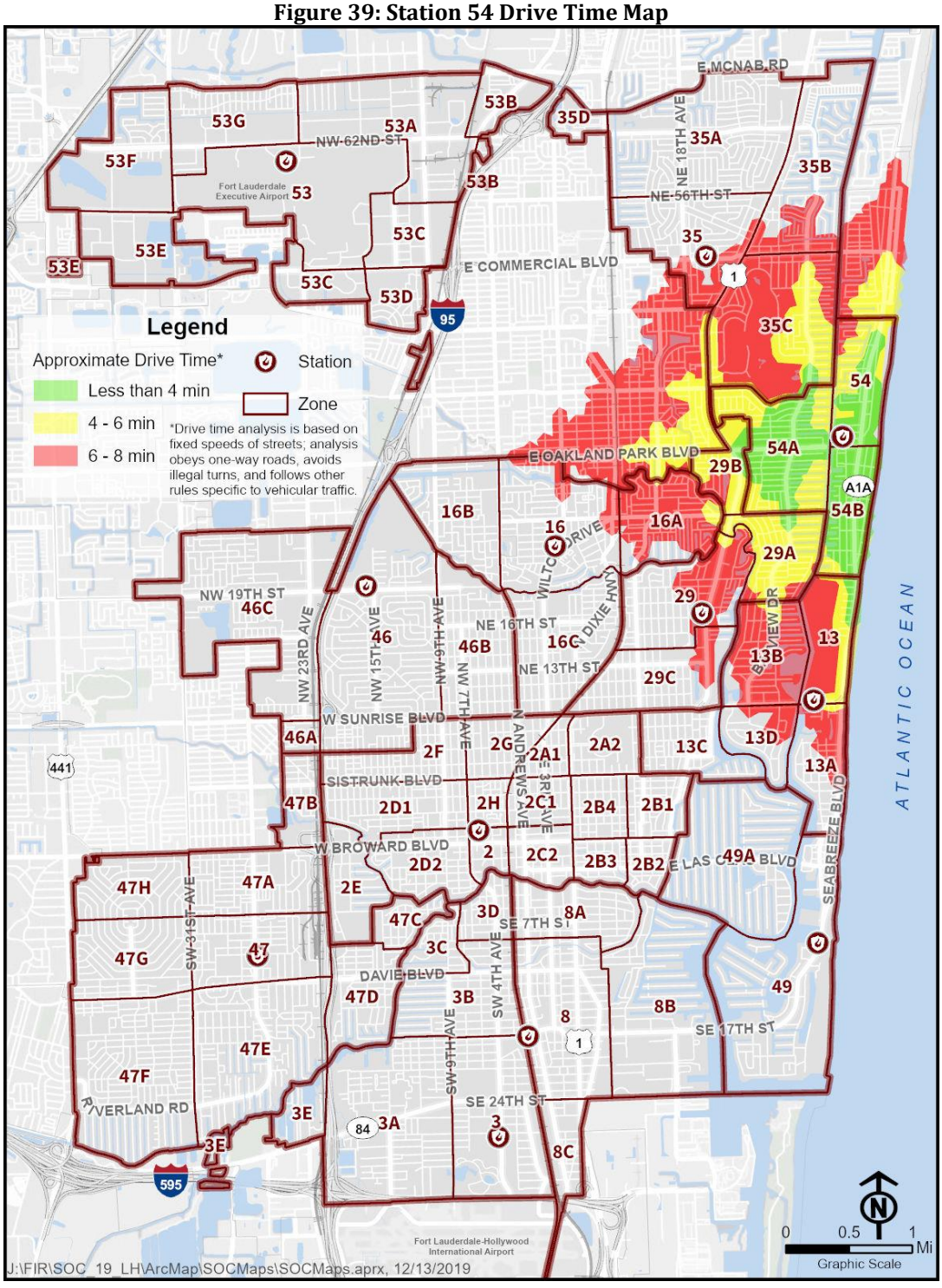


Table 25 Station 54 Responses (2019)

Unit	2019 Responses
Engine 54	2325
Rescue 54	2122
Total Unit Responses	4447

Figure 40: Station 53 Drive Time Map

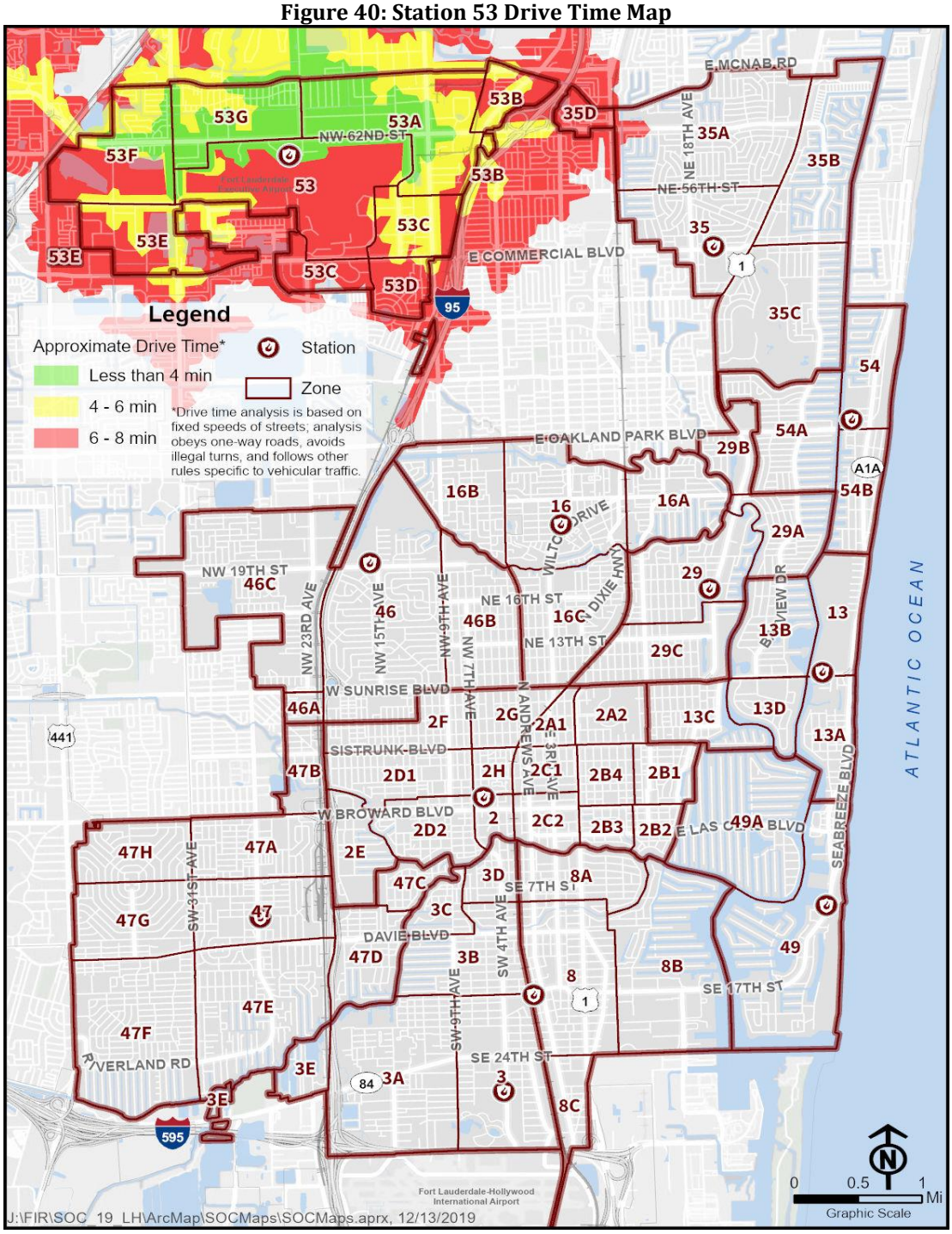
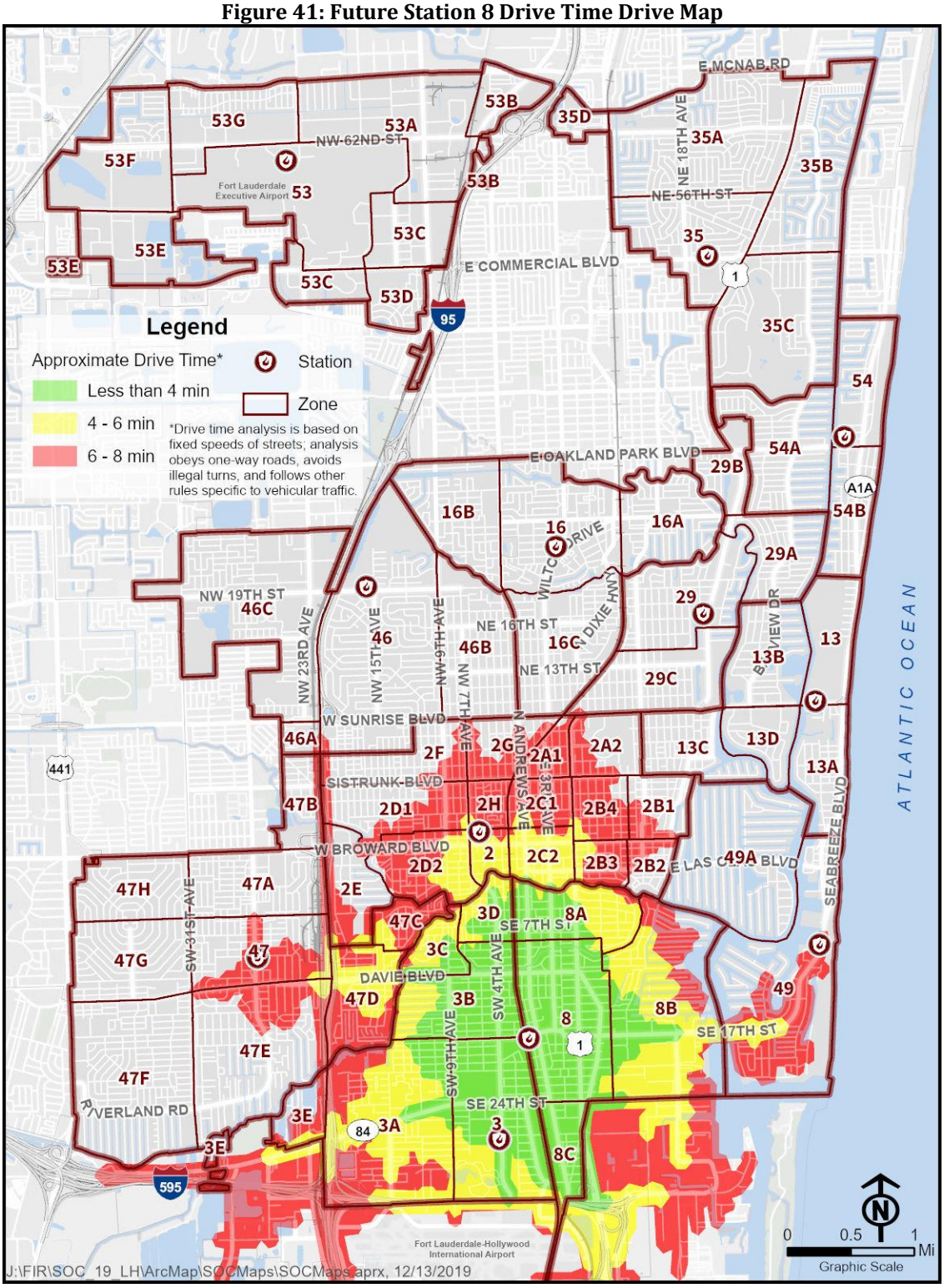


Table 26 Station 53/88 Responses (2019)

Unit	2019 Responses
Engine 88	2090
Rescue 53	2112
Truck 53	124
Hazmat 88	208
Total Unit Responses	4534

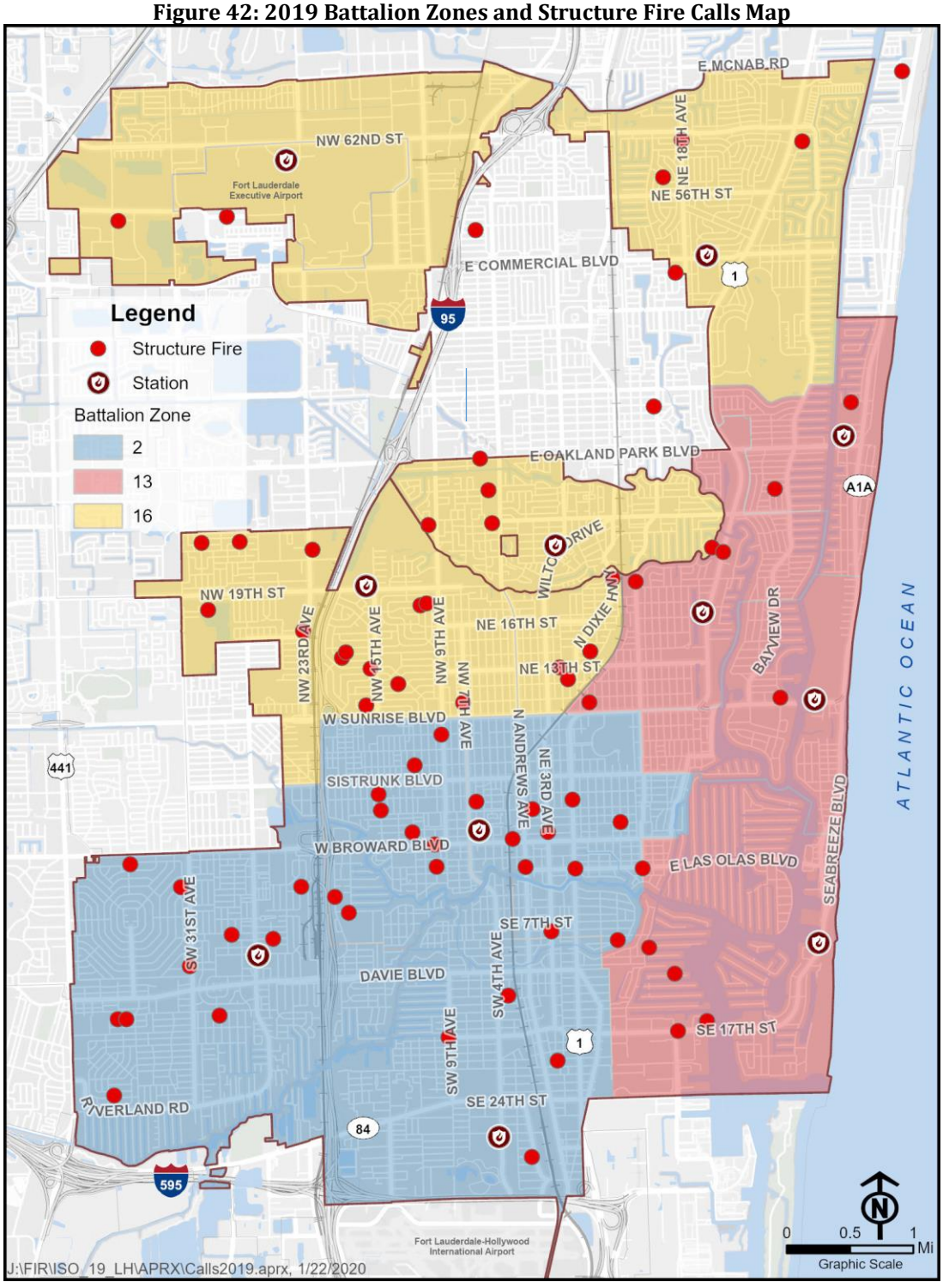
Figure 41: Future Station 8 Drive Time Drive Map



Concentration Factors

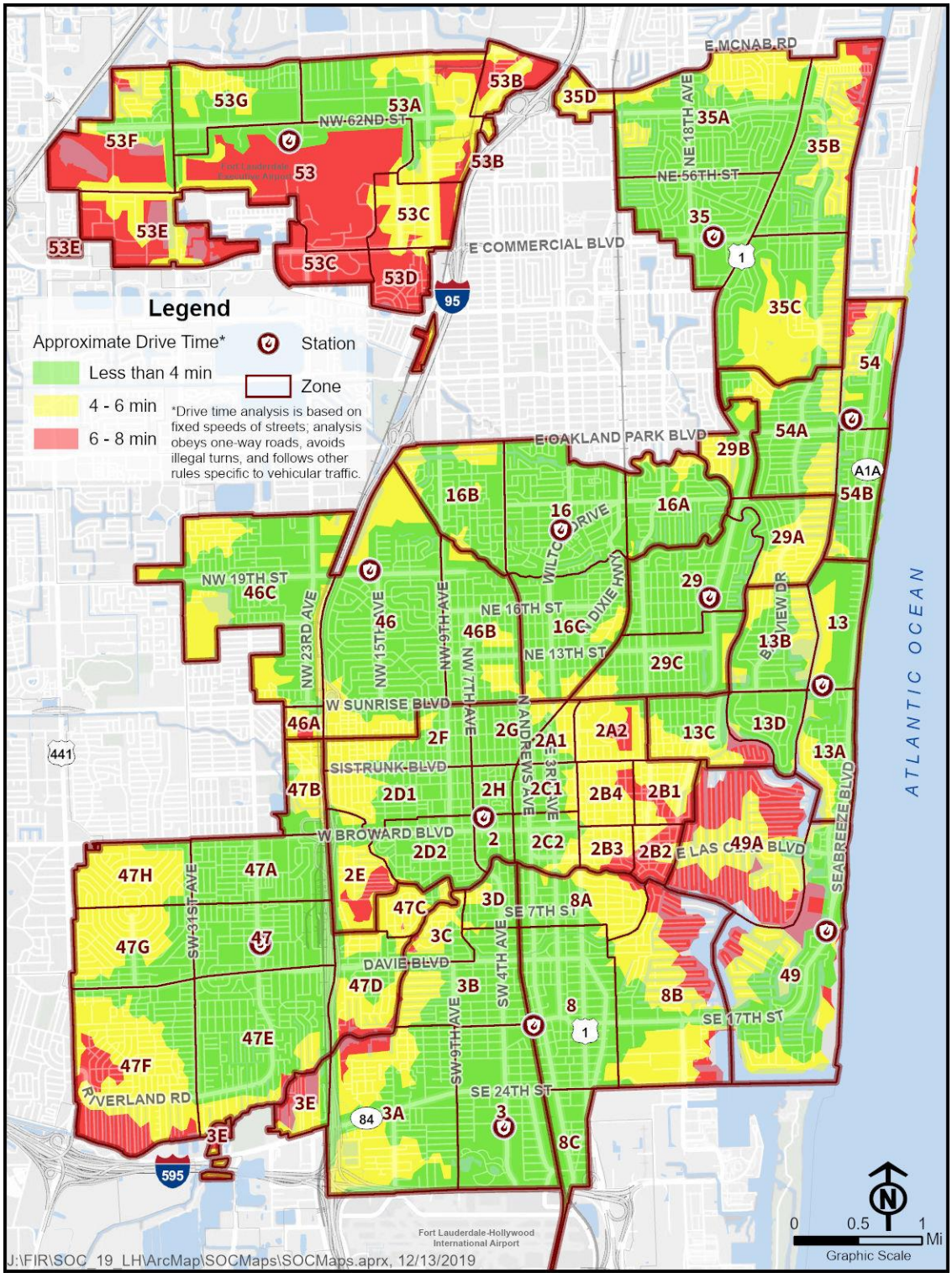
The following map shows the planning areas and how the three Battalions work to achieve an effective ERF of 16 firefighters. The blue represents B2, pink B13, and yellow B16. The overlapping represents areas where units from multiple battalions may work together to assemble the ERF. Not all calls achieved an ERF of 16 Firefighters (Units cancelled by command)

Figure 42: 2019 Battalion Zones and Structure Fire Calls Map



The 4, 6, 8 minute response time overlay map shows the City of Fort Lauderdale has adequate response time coverage. The only areas in the city with service gaps above four minutes exist in zones 2, 35, 47, 49, 53. Items not taken into consideration during this review were the drawbridges, trains, rushhour morning / evening traffic and the influx of cruise passengers / tourists visting the beach on Saturday and Sunday.

Figure 43: Citywide with Future Station 8 Drive Time Overlay Map



Reliability Factors

Figure 44: Service Calls by Type (2019)

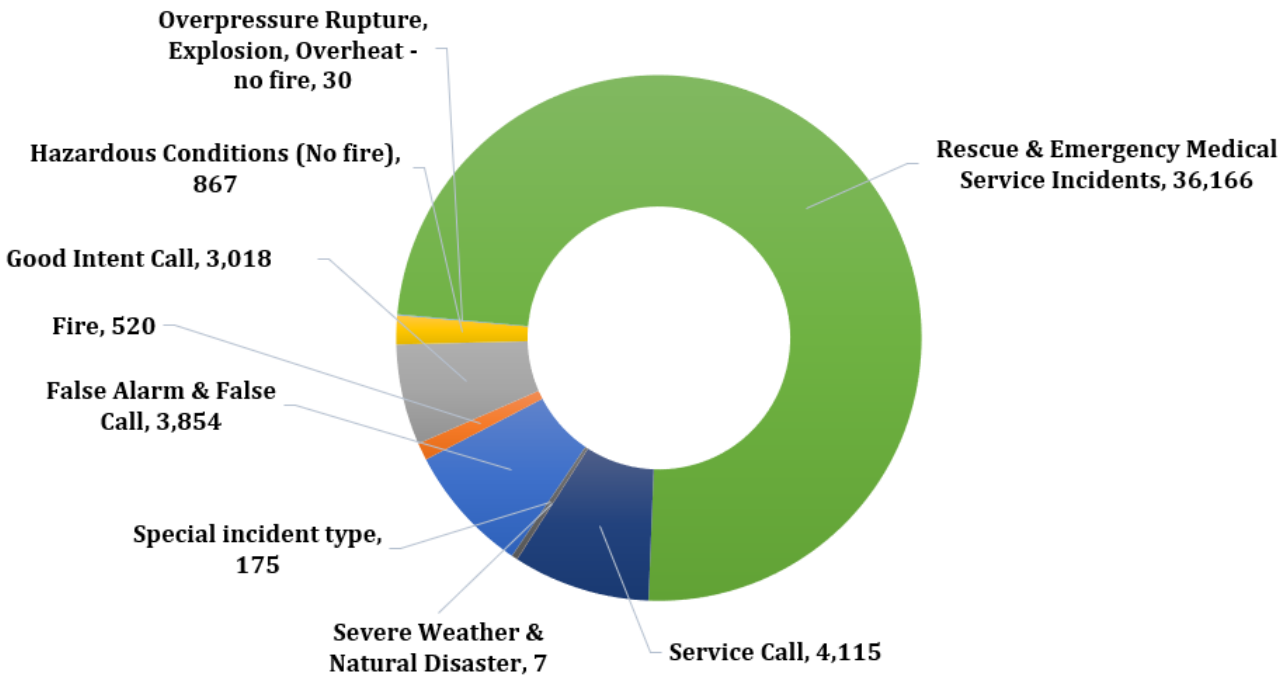


Figure 45: Calls by District (2019)

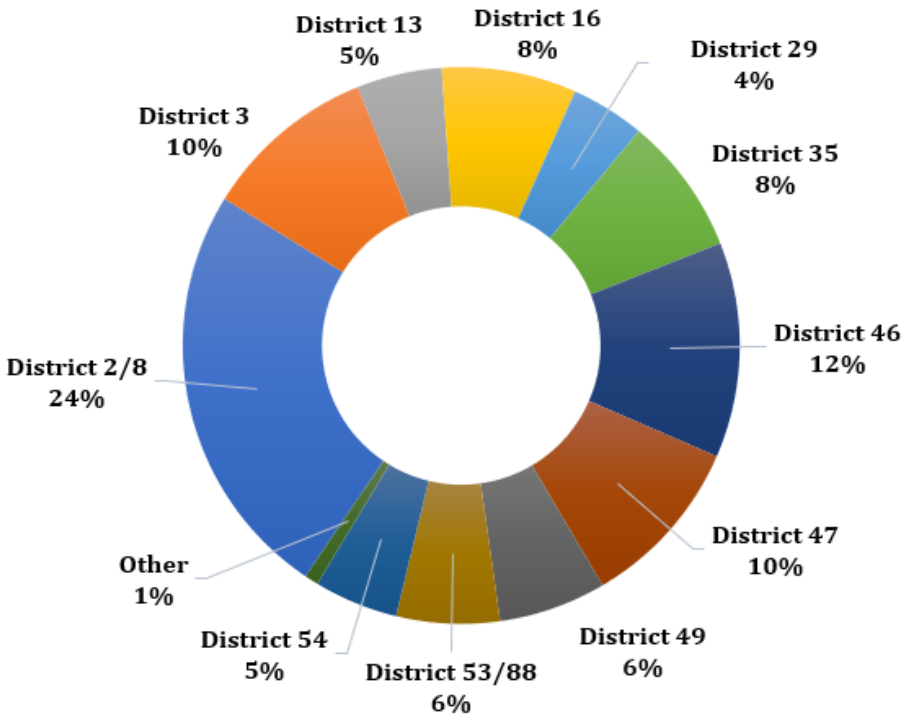
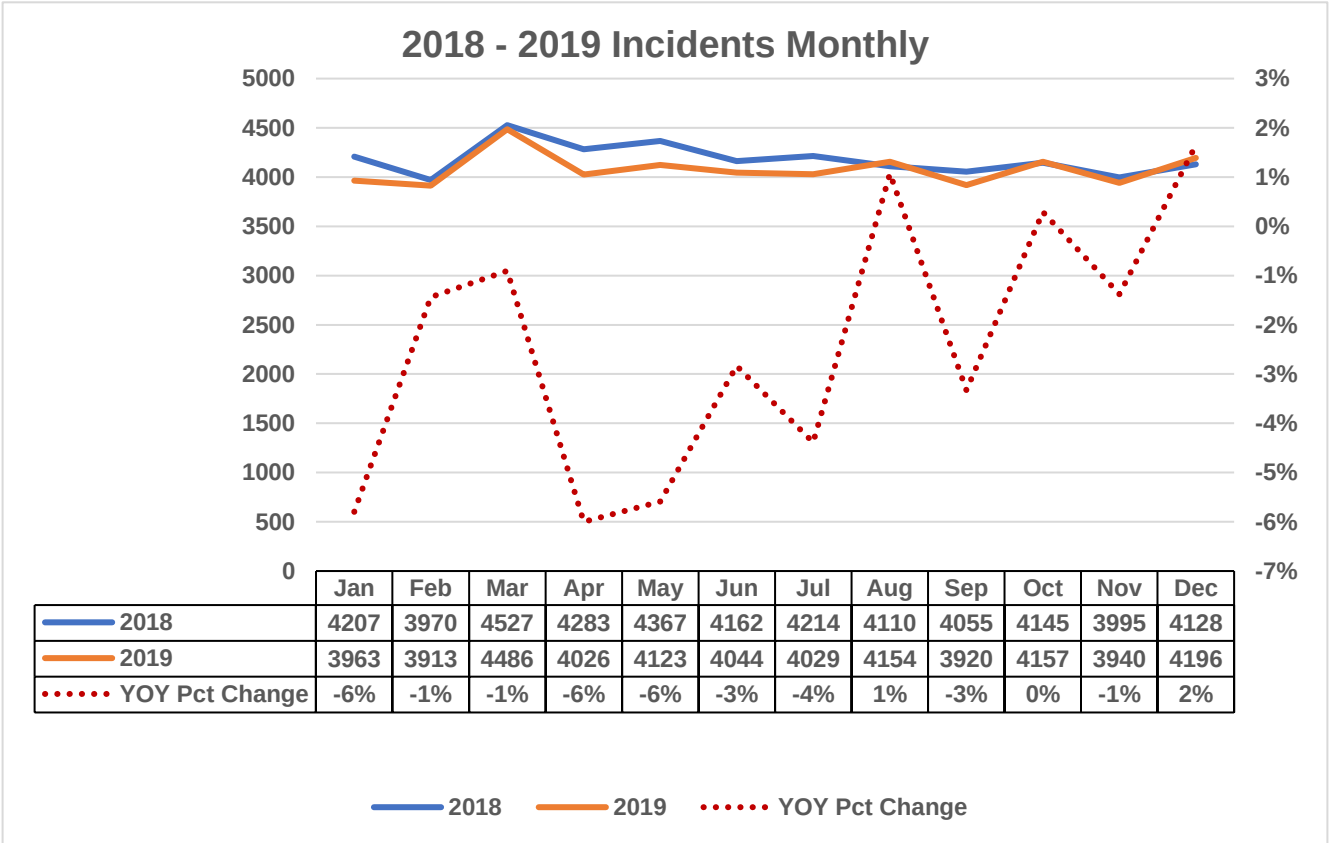


Table 27 Station Incidents and Percentage Increase (2019)

District	2017	2018	2019	Change from 2018	% Change from 2019	Daily Incidents 2019
2/8	13002	12418	11939	-479	-4%	32.7
03	5079	4824	4947	123	3%	13.6
13	2377	2454	2418	-36	-1%	6.6
16	3965	3940	3832	-108	-3%	10.5
29	2128	2097	2103	6	0%	5.8
35	4224	4127	3923	-204	-5%	10.7
46	6839	6277	6118	-159	-3%	16.8
47	5418	5117	4897	-220	-4%	13.4
49	3730	3131	3060	-71	-2%	8.4
53/88	3157	2933	2933	0	0%	8.0
54	2497	2596	2391	-205	-8%	6.6
Other	199	249	390	141	57%	1.1
All Districts	52615	50163	48951	-1212	-2%	134.1

Figure 46: Monthly Incident Count Comparative Chart (2018-2019)



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2018	4207	3970	4527	4283	4367	4162	4214	4110	4055	4145	3995	4128
2019	3963	3913	4486	4026	4123	4044	4029	4154	3920	4157	3940	4196
YOY Pct Change	-6%	-1%	-1%	-6%	-6%	-3%	-4%	1%	-3%	0%	-1%	2%

See Exhibit 3: Breakdown of Incident Types and District Responses (2019) for more detail.

See Exhibit 4: Historical Incident Summary (2009-2019) for more details on previous years.

See Exhibit 5: Breakdown of NFRS Codes by Incident (2012-2014) for a detailed incident view.

Figure 47: Simultaneous Calls by Station (2019)

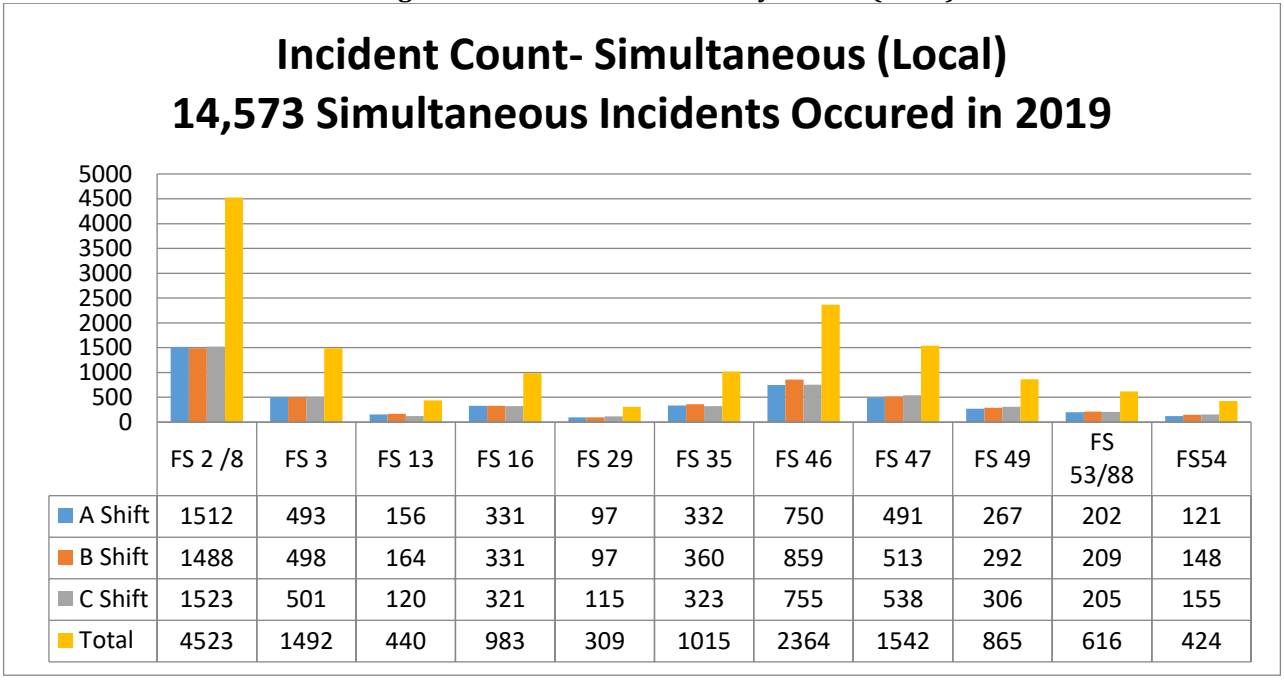


Table 28 Simultaneous Calls, by Station (2019)

Fire Station	Calls For Service	Simultaneous	Percentage
2/8	11939	4523	37.88%
3	4,947	1492	30.16%
13	2,418	440	18.20%
16	3,832	983	25.65%
29	2,103	309	14.69%
35	3,923	1015	25.87%
46	6,117	2364	38.65%
47	4,897	1542	31.49%
49	3,060	865	28.27%
53/88	2,933	616	21.00%
54	2,391	424	17.73%

Table 29 First Arriving Out of Area Zone (2019)

Station	2	3	8	13	16	29	35	46	47	49	53	54	88	Totals
Vehicle														
E13	11	1			2	34				27		41	1	117
E16	14	1		3		20	1	16	1	1		1	2	60
E2		28	136	2	4	1		36	16	8				231
E29	12	3	4	58	67		6	4	1	5	1	24	3	188
E3	4		3					1	6	16				30
E35	7	3	1		13	5		17			6	9	90	151
E46	4	1	39		39	3	1		6	1			9	103
E47		13	10					20		2			1	46
E49	5	6	1	29					3				1	45
E54	1			11	3	33	20			1				69
E8	161	41		2	2			55	51	2			1	315
E88	1			3	2	1	4	1			33			45
FB49	1			1										2
HM88				1									4	5
L2		14	38		4	1		8	2	4				71
L35	2		1		4	4		1			1	4	26	43
L49	5	5	1	8										19
R13	3	1	1		6	83	2	1		62		61	2	222
R16	25	4	4	3		31	14	27		1	2	3	7	121
R2		76	289	4	9	11		35	12	13			1	450
R202		128	814	4	4	7		59	28	17				1,061
R246	10	4	31		52	1	7		10		1	1	28	145
R247	1	34	16			3		31					2	87
R29	23	1	4	67	122		30	5	1	4		27	4	288
R3	22		7		1	1		2	11	35				79
R302		205	855	3	9	3		89	39	12				1,215
R35						3					1	7	89	100
R46	6	2	39		47	1	5		8	1	1		12	122
R47	6	12	10	1			3	48				2	1	83
R49	3	11		23								1		38
R53		1		4		3	33	1					1,211	1,253
R54			3	13	3	63	39			5				126
R8	265	55			1			33	20	2				376
Totals	592	650	2,307	240	394	312	165	490	215	219	46	181	1,495	7,306

Table 30 Unit Hour Utilization (2019)

Vehicle	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Overall	Runs
R202	0.2%	0.2%	4.6%	0.3%	0.4%	0.0%	0.0%	2.2%	3.2%	63.7%	56.7%	64.4%	59.9%	58.9%	58.4%	53.7%	59.1%	57.5%	50.9%	58.8%	11.9%	0.0%	0.0%	0.0%	27.7%	3,431
Peak Hour Rescue Above and Overall Percentages (at right) Illustrated in Separate Heat Map																										
R46	17.8%	16.0%	15.1%	14.5%	13.4%	13.4%	13.5%	17.5%	25.3%	24.3%	35.8%	31.7%	34.6%	36.0%	33.2%	34.8%	37.3%	36.0%	29.8%	30.2%	33.3%	28.2%	28.0%	19.6%	25.8%	3,325
R302	20.0%	17.7%	21.2%	19.2%	18.0%	17.9%	18.9%	27.6%	33.8%	25.1%	29.8%	27.1%	29.4%	27.7%	25.1%	29.9%	27.2%	24.7%	23.8%	26.4%	33.2%	34.9%	29.7%	25.4%	25.6%	3,490
R246	18.9%	14.1%	15.8%	12.3%	13.5%	15.4%	16.4%	23.1%	26.7%	29.0%	34.5%	28.3%	36.6%	34.4%	37.2%	35.3%	32.8%	28.5%	31.1%	27.3%	30.1%	31.0%	21.5%	18.1%	25.5%	3,300
R16	15.5%	14.3%	13.8%	15.1%	11.8%	10.5%	16.3%	20.1%	30.8%	32.6%	27.6%	32.5%	37.8%	37.0%	31.1%	28.4%	32.0%	25.9%	29.0%	26.5%	28.7%	29.1%	24.0%	20.8%	24.6%	2,950
R2	22.3%	20.7%	26.2%	19.2%	16.0%	18.7%	15.6%	23.8%	27.4%	20.9%	25.9%	21.4%	27.4%	27.8%	24.7%	25.2%	22.7%	27.6%	19.5%	23.4%	29.9%	35.0%	26.5%	27.5%	24.0%	3,422
R3	16.1%	13.0%	11.3%	10.0%	13.6%	11.7%	15.4%	22.9%	27.3%	23.8%	26.1%	30.6%	25.0%	32.4%	30.0%	31.1%	32.2%	32.1%	27.7%	23.9%	26.1%	27.0%	19.6%	15.8%	22.7%	3,293
R35	15.1%	10.7%	9.0%	10.4%	10.6%	14.1%	13.6%	18.6%	21.6%	28.4%	28.3%	33.1%	28.7%	26.2%	29.5%	30.5%	30.6%	31.1%	29.5%	27.6%	24.8%	21.9%	18.8%	16.0%	22.0%	2,885
R29	13.7%	13.3%	9.6%	8.1%	7.7%	7.5%	9.6%	18.6%	24.8%	25.0%	28.5%	27.1%	34.5%	27.5%	32.3%	28.9%	30.5%	27.4%	27.6%	25.6%	25.4%	23.8%	17.1%	16.9%	21.3%	2,876
R8	20.3%	16.0%	15.1%	12.5%	16.3%	15.4%	15.8%	20.3%	27.2%	20.1%	24.2%	18.7%	27.9%	27.4%	19.6%	23.1%	23.0%	22.5%	19.4%	23.1%	28.6%	26.3%	25.5%	21.6%	21.2%	2,849
R13	11.4%	11.8%	8.2%	7.9%	5.8%	6.3%	9.4%	16.7%	19.3%	23.6%	28.1%	27.5%	30.8%	26.5%	26.3%	27.5%	25.7%	22.0%	23.0%	22.3%	23.3%	20.7%	16.6%	13.7%	18.9%	2,260
R47	11.2%	12.4%	9.8%	8.7%	12.0%	8.2%	13.4%	14.5%	18.6%	18.7%	21.9%	27.0%	23.8%	27.4%	24.2%	25.6%	25.3%	24.7%	24.9%	25.1%	21.3%	20.4%	16.4%	16.2%	18.8%	2,676
R54	10.5%	8.2%	8.4%	8.2%	7.4%	9.4%	10.0%	14.6%	25.2%	23.3%	24.4%	24.0%	28.9%	26.1%	28.9%	23.9%	27.9%	21.7%	25.9%	17.6%	20.4%	18.5%	16.3%	14.3%	18.5%	2,122
R53	8.3%	4.4%	6.7%	3.7%	5.5%	10.8%	8.5%	12.9%	21.4%	24.0%	29.2%	27.2%	34.8%	26.1%	28.0%	29.3%	31.2%	21.4%	22.8%	17.9%	19.4%	14.0%	10.9%	11.8%	17.9%	2,112
R247	10.7%	13.1%	8.4%	6.9%	10.2%	8.2%	11.5%	15.7%	19.0%	18.4%	23.2%	20.4%	23.5%	23.0%	18.8%	22.9%	26.0%	24.0%	19.0%	21.1%	19.6%	17.7%	16.5%	11.9%	17.1%	2,579
R49	12.2%	11.8%	8.5%	9.1%	8.6%	9.0%	5.9%	12.4%	14.2%	16.5%	18.0%	22.3%	22.0%	19.9%	23.3%	18.8%	20.9%	20.4%	23.1%	22.0%	23.4%	17.5%	16.3%	11.0%	16.1%	1,874
E46	10.8%	10.2%	8.6%	7.7%	10.4%	10.6%	8.2%	13.8%	14.5%	16.5%	16.2%	15.0%	20.3%	17.7%	15.2%	18.7%	19.8%	18.5%	18.2%	19.4%	19.6%	19.0%	15.2%	11.3%	14.8%	4,544
E8	9.5%	7.4%	8.3%	6.2%	9.6%	9.4%	8.4%	10.5%	13.1%	15.3%	20.6%	16.9%	19.1%	16.0%	15.6%	20.2%	17.4%	16.9%	17.0%	16.6%	25.3%	14.0%	12.9%	13.7%	14.2%	4,800
E2	6.4%	5.4%	6.5%	5.5%	8.7%	5.3%	5.0%	8.7%	10.1%	20.9%	19.7%	16.3%	18.7%	15.9%	13.4%	16.1%	15.8%	16.9%	16.1%	19.7%	13.9%	11.5%	10.1%	9.5%	12.3%	3,900
E16	6.6%	5.8%	5.7%	5.8%	5.1%	5.2%	6.8%	8.8%	12.2%	16.0%	14.3%	15.5%	18.1%	17.1%	13.7%	13.4%	16.4%	13.1%	14.9%	13.5%	13.7%	13.2%	12.5%	10.0%	11.6%	3,054
E47	4.9%	5.4%	4.0%	3.6%	7.2%	4.4%	6.7%	8.7%	11.0%	10.2%	14.3%	10.3%	15.0%	15.2%	13.4%	13.9%	15.4%	12.5%	11.7%	13.5%	12.9%	10.7%	8.8%	8.0%	10.1%	2,813
E29	5.4%	5.4%	4.2%	3.6%	7.5%	3.1%	4.0%	7.8%	10.0%	11.4%	12.2%	14.2%	14.9%	10.6%	12.8%	14.0%	13.5%	12.5%	14.0%	13.0%	14.4%	10.6%	7.6%	6.5%	9.7%	3,022
E13	5.4%	5.5%	3.9%	4.0%	4.4%	3.6%	5.3%	7.9%	7.6%	11.4%	14.2%	16.4%	14.5%	13.1%	14.3%	13.5%	13.4%	11.3%	11.9%	9.4%	13.6%	10.6%	9.5%	7.3%	9.7%	2,773
E54	6.5%	6.1%	3.8%	4.7%	7.6%	5.4%	4.3%	8.4%	10.0%	11.2%	12.2%	13.0%	12.4%	12.7%	12.3%	13.2%	12.9%	11.8%	11.2%	9.9%	12.3%	11.5%	8.5%	6.8%	9.5%	2,325
E3	3.6%	3.6%	3.5%	3.8%	6.4%	5.8%	5.5%	6.9%	10.2%	12.6%	12.6%	14.0%	12.5%	13.6%	11.3%	12.7%	12.8%	13.7%	11.4%	10.2%	12.8%	9.7%	6.4%	3.9%	9.1%	2,571
E88	5.2%	2.4%	2.6%	3.1%	3.0%	5.3%	6.7%	7.1%	9.9%	11.8%	11.3%	11.8%	13.4%	14.1%	13.1%	14.4%	11.5%	12.3%	11.6%	8.6%	9.0%	7.5%	4.7%	5.7%	8.6%	2,090
E49	5.6%	6.3%	6.1%	4.5%	2.3%	3.7%	2.2%	5.5%	8.8%	11.1%	11.5%	11.7%	10.6%	9.5%	12.8%	10.8%	9.8%	11.7%	12.6%	10.3%	12.7%	9.0%	9.0%	5.6%	8.5%	2,106
L2	4.6%	4.3%	4.4%	3.9%	6.9%	4.2%	4.2%	4.7%	9.6%	9.1%	9.1%	7.2%	12.2%	12.4%	8.7%	11.6%	10.5%	6.4%	8.6%	9.9%	11.9%	6.5%	5.2%	5.6%	7.6%	2,882
E35	4.1%	2.5%	2.6%	3.3%	1.9%	3.1%	3.9%	5.4%	8.4%	10.2%	12.0%	12.2%	11.7%	9.6%	11.9%	12.1%	10.5%	11.8%	8.6%	9.6%	6.0%	6.8%	4.3%	4.6%	7.4%	2,144
L35	1.9%	1.8%	1.7%	1.8%	2.3%	2.4%	3.4%	2.4%	5.7%	9.4%	8.9%	7.1%	9.4%	6.8%	9.0%	9.0%	6.7%	6.1%	6.5%	5.8%	6.2%	3.9%	3.9%	2.7%	5.2%	1,844
L49	1.9%	2.5%	3.0%	1.3%	5.0%	2.6%	1.8%	3.0%	6.2%	5.3%	6.0%	6.9%	6.8%	6.7%	6.8%	7.0%	5.3%	5.1%	6.2%	6.6%	7.7%	4.6%	4.4%	3.4%	4.8%	1,565
HM88	0.3%	0.1%	0.1%	0.6%	0.0%	2.1%	0.0%	0.0%	8.5%	2.4%	6.3%	12.4%	6.7%	1.9%	4.5%	3.6%	6.2%	3.1%	0.7%	1.7%	1.4%	0.1%	0.6%	0.4%	2.7%	208
FB49	0.6%	0.7%	0.0%	0.2%	3.8%	0.2%	0.8%	0.6%	0.9%	1.3%	2.5%	0.9%	1.4%	0.8%	1.6%	1.3%	2.1%	1.4%	1.6%	1.5%	1.2%	1.0%	0.6%	0.1%	1.1%	190
T53	0.5%	0.0%	0.2%	0.2%	0.0%	0.1%	0.0%	0.0%	0.2%	2.1%	0.7%	0.6%	1.7%	2.1%	3.0%	1.0%	0.9%	0.3%	2.7%	0.9%	1.0%	0.5%	1.1%	0.5%	0.8%	124
S47	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5

Report based on 97,697 apparatus response records from 1/1/2019 to 12/31/2019.

Call volume and demand for services is greatly influenced by the time of day. FLFR sees a drastic increase for services and, when evaluating time of day responses for 2019, a clear picture emerges regarding downtown units during peak hours. Downtown rescue trucks (R46, R302, R246, R2) are heavily utilized during the hours of 08:00 – 22:00. Rescue 46 and R302, are the most utilized units in the system. Two engines (8, 46) in the system are the busiest two surpassing 4,500 runs a year. In 2019 Engine 8 had the most responses with 4,800. Rescue 302 was the busiest Rescue during 2019; handling 3,490 calls. The busiest ladder in 2019 was Ladder 2 with 2,882 responses and Battalion 2 was the busiest Battalion Chief responding to 2,487 calls.

Table 31 Unit Responses by Time of Day (2019)

01:00 *12:00* *23:59*

Hour of Day	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Totals
R202	2	1	4	2	2			2	14	319	285	311	306	313	304	266	300	291	263	286	154	3	2	1	3,431
	Rescue 202, Hazmat 88 and FB 49 Separated for Heat Mapping; Totals Separated for Heat Mapping																								
BC13	39	39	32	32	24	41	33	54	80	124	138	118	128	104	110	101	105	105	100	107	112	71	50	51	1,898
BC16	54	51	54	48	36	55	46	62	109	141	137	148	149	122	132	150	122	119	128	126	132	94	76	66	2,357
BC2	54	54	54	43	46	55	51	63	117	137	139	151	156	133	122	144	125	150	128	138	134	116	88	89	2,487
BC35	1	1	4	2	2		1	1	5	6	5	5	6	5	8	3	5	4	7	11	5	3	2	1	93
E13	73	73	50	43	31	51	53	88	115	145	175	184	174	164	188	159	152	142	150	116	147	114	104	82	2,773
E16	83	71	58	70	54	52	62	85	133	159	162	170	196	189	149	164	174	154	170	155	150	145	137	112	3,054
E2	94	75	71	74	55	56	63	95	157	240	251	220	243	234	215	255	226	226	216	219	180	173	133	129	3,900
E29	61	72	61	51	41	41	54	90	144	158	159	171	179	152	185	176	187	179	179	171	183	125	101	102	3,022
E3	49	47	38	33	33	60	55	84	112	148	150	164	167	166	151	164	142	163	133	135	125	117	79	56	2,571
E35	51	27	37	29	22	30	48	78	119	122	130	143	142	122	158	129	131	137	109	116	78	77	52	57	2,144
E46	145	117	115	101	95	101	106	136	203	210	242	229	256	245	229	243	246	250	230	245	237	216	188	159	4,544
E47	71	69	53	48	44	57	76	93	136	124	140	126	180	159	131	168	180	167	153	163	140	138	100	97	2,813
E49	61	62	54	37	22	34	26	60	80	111	117	127	111	117	137	120	109	112	119	113	121	107	93	56	2,106
E54	65	55	39	47	31	52	54	69	104	132	143	140	141	147	142	126	124	130	120	101	115	99	80	69	2,325
E8	123	115	107	90	102	114	105	162	229	238	262	264	267	272	260	279	254	252	241	257	240	205	196	166	4,800
E88	43	25	31	26	31	50	51	67	117	132	122	120	153	149	134	136	113	115	119	83	91	71	49	62	2,090
FB49	4	3	1	2	3	2	4	6	5	9	14	13	11	11	15	16	12	13	11	12	10	5	5	3	190
HM88	2	2	3	3	1	4		1	15	11	23	26	19	13	14	11	14	10	7	8	8	4	7	2	208
L2	58	56	50	58	46	59	56	71	144	163	177	166	190	190	175	192	152	144	147	139	156	121	80	92	2,882
L35	31	25	29	28	25	30	38	46	100	141	132	120	132	104	131	121	91	97	89	98	91	61	42	42	1,844
L49	25	38	29	15	19	40	28	38	68	88	94	100	112	97	98	87	84	76	75	94	92	71	60	37	1,565
R13	64	66	41	39	24	32	43	75	99	106	130	129	162	121	136	128	126	116	125	115	118	101	93	71	2,260
R16	90	80	83	83	62	57	72	99	143	143	134	160	179	171	153	152	155	135	150	134	133	134	135	113	2,950
R2	149	129	156	120	99	113	88	125	158	114	136	132	151	169	129	146	139	159	116	144	182	207	182	179	3,422
R246	107	100	82	72	74	78	76	105	127	141	183	149	183	179	194	181	174	162	170	161	170	169	140	123	3,300
R247	89	82	64	51	54	57	69	82	104	103	131	119	158	137	114	134	157	139	125	140	128	130	121	91	2,579
R29	88	85	59	53	46	45	53	95	128	128	142	152	170	147	174	163	180	154	163	152	150	133	110	106	2,876
R3	113	86	74	65	62	72	87	126	140	144	145	178	159	184	190	192	202	195	169	153	157	164	127	109	3,293
R302	131	114	98	118	90	92	94	136	185	136	159	151	173	168	142	165	149	158	138	162	207	209	167	148	3,490
R35	90	64	59	61	60	74	70	101	128	149	152	167	157	141	165	164	158	160	170	148	126	119	105	97	2,885
R46	111	97	84	76	77	70	65	93	129	137	181	159	188	173	183	183	187	184	169	173	166	174	152	114	3,325
R47	87	85	63	57	64	54	73	87	100	102	116	143	149	139	128	149	143	143	150	150	140	131	112	111	2,676
R49	71	62	53	43	29	30	23	56	59	77	86	102	97	95	113	96	107	109	107	97	113	100	88	61	1,874
R53	47	27	38	25	30	48	46	63	108	119	134	122	161	130	134	128	127	113	116	85	104	80	65	62	2,112
R54	52	44	43	39	37	44	47	62	104	102	106	121	148	125	132	121	134	103	121	83	96	97	84	77	2,122
R8	125	98	85	75	86	82	83	107	150	102	127	109	151	155	113	127	125	115	106	129	151	157	158	133	2,849
S47								1		1	1				1						1				5
T53	3		1	1		1			3	7	5	5	7	14	13	9	8	3	10	8	7	5	10	4	124
Totals	2,606	2,297	2,057	1,860	1,659	1,933	1,999	2,864	4,171	4,869	5,265	5,315	5,811	5,456	5,402	5,448	5,319	5,184	4,999	4,927	4,850	4,246	3,573	3,130	95,239

Frontline Apparatus Only

Table 32 Time of Day Responses (2019)

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
0	352	367	328	361	386	434	417	2,645
1	258	266	319	264	331	442	460	2,340
2	298	256	214	288	292	359	386	2,093
3	224	187	251	239	282	347	369	1,899
4	188	229	157	240	233	309	337	1,693
5	280	208	249	267	303	361	332	2,000
6	345	250	298	274	296	294	278	2,035
7	450	424	445	407	431	404	365	2,926
8	652	640	657	650	656	505	519	4,279
9	667	743	654	813	872	612	640	5,001
10	827	808	798	839	818	734	614	5,438
11	844	778	860	814	801	746	640	5,483
12	900	907	832	879	908	782	757	5,965
13	844	845	829	731	800	824	704	5,577
14	814	848	811	783	806	797	653	5,512
15	870	773	772	862	851	792	684	5,604
16	846	840	732	887	740	673	767	5,485
17	809	787	810	775	771	658	747	5,357
18	711	757	614	781	778	776	738	5,155
19	642	784	695	763	709	750	706	5,049
20	699	695	612	696	780	731	788	5,001
21	540	611	533	637	671	755	606	4,353
22	454	500	461	540	617	594	470	3,636
23	400	425	414	465	526	536	405	3,171
Totals	13,914	13,928	13,345	14,255	14,658	14,215	13,382	97,697

All Apparatus Responses 97,697

Figure 48: Responses by Day of the Week

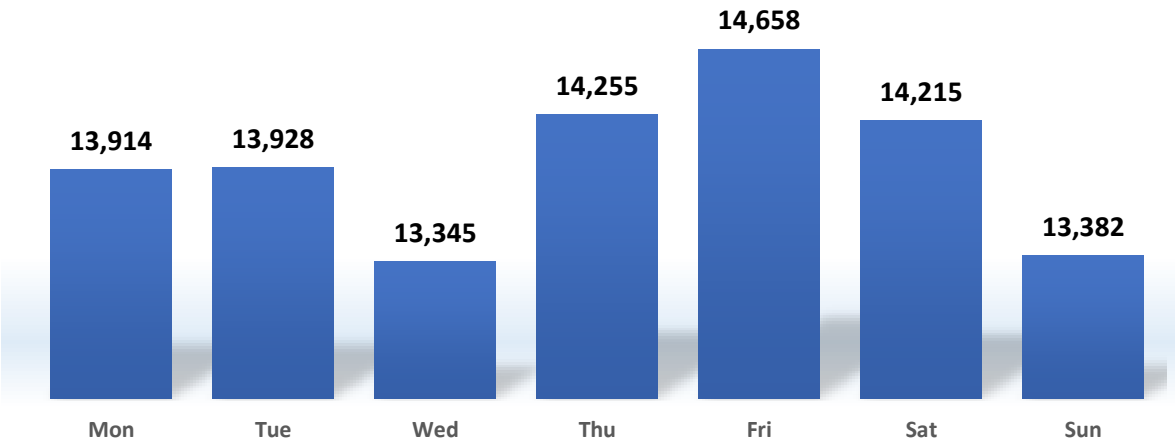


Figure 49: Station Unit Response Percentages (2019)

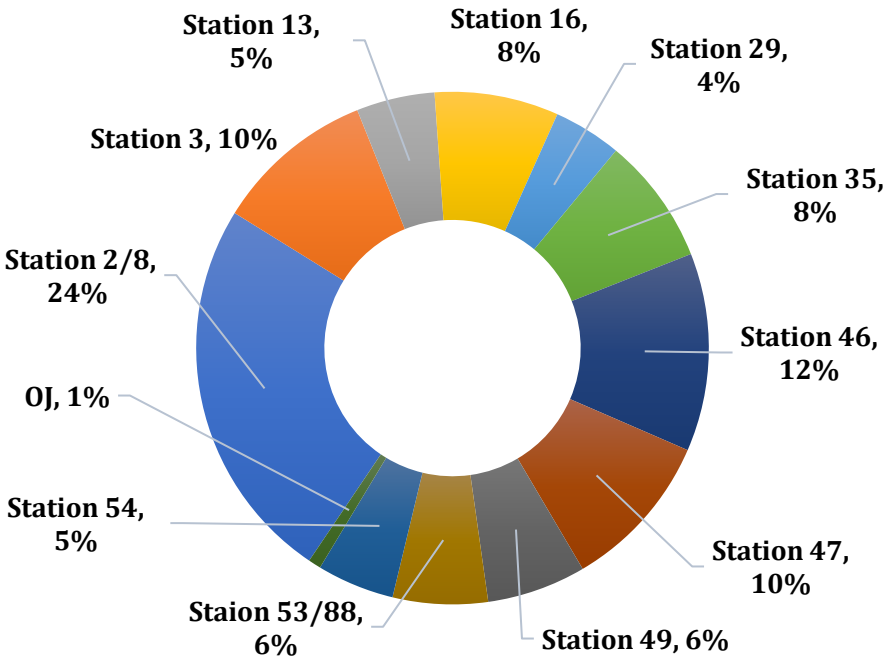


Figure 50: Battalion District Response Percentages (2019)

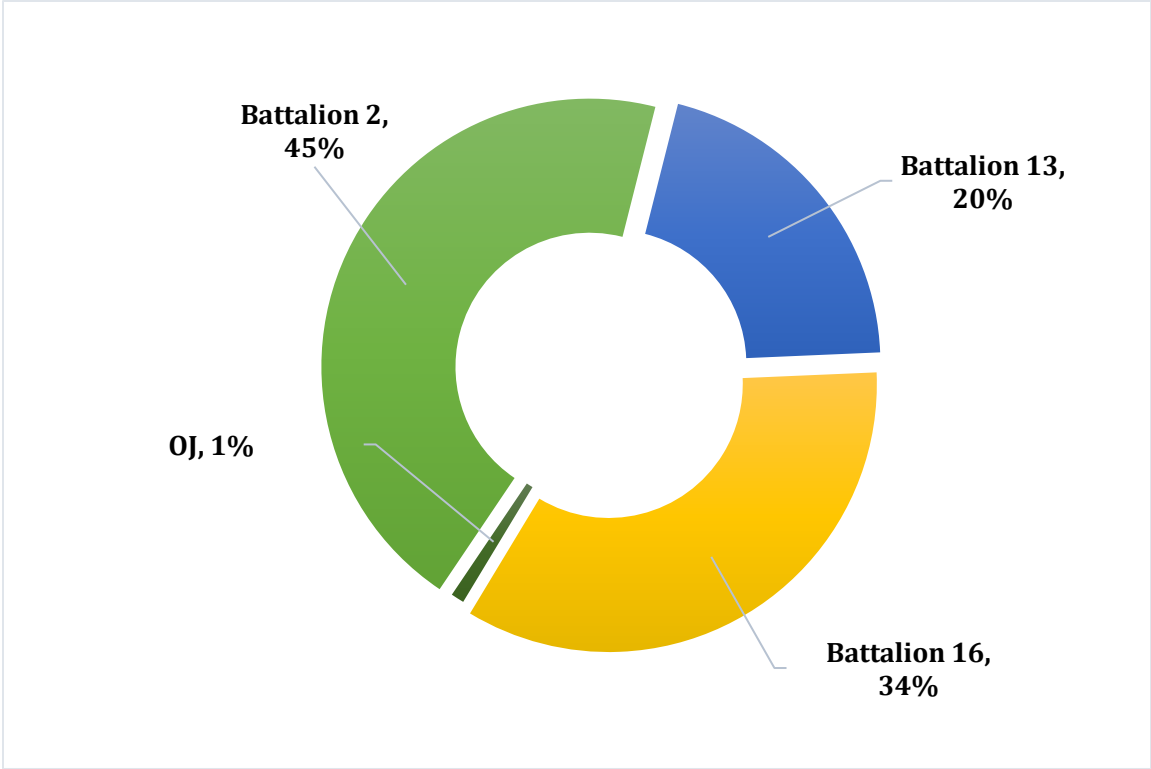


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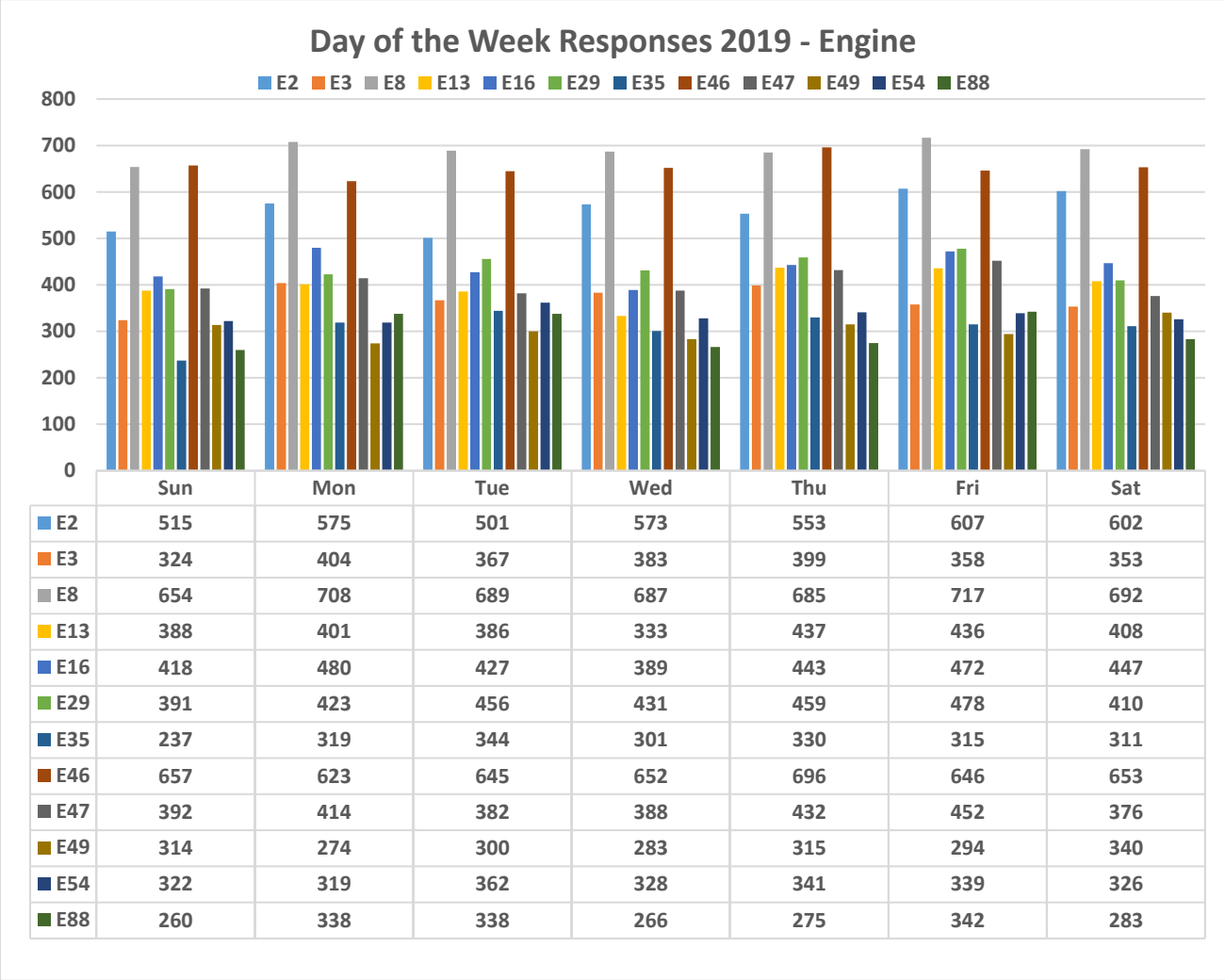
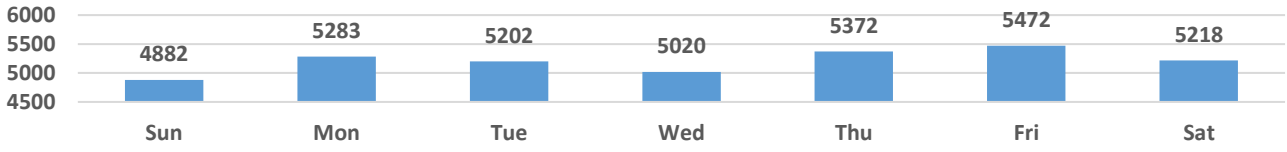
Table 33 Day of the Week Unit Responses (2019)

Day of Week	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Totals
BC13	279	275	243	293	290	263	255	1898
BC16	302	356	340	341	358	364	296	2357
BC2	352	339	335	381	356	369	355	2487
BC35	19	35	8	19	2	2	8	93
E13	399	382	331	437	434	406	384	2773
E16	476	425	383	440	469	444	417	3054
E2	572	499	568	550	602	595	514	3900
E29	419	451	427	454	476	406	389	3022
E3	403	360	381	395	356	352	324	2571
E35	318	341	301	326	314	307	237	2144
E46	620	637	649	692	642	652	652	4544
E47	412	380	385	430	445	373	388	2813
E49	271	298	279	314	293	339	312	2106
E54	319	358	325	340	338	325	320	2325
E8	700	687	683	682	715	684	649	4800
E88	338	335	266	271	339	281	260	2090
FB49	23	24	29	16	23	42	33	190
HM88	29	38	33	28	33	29	18	208
L2	427	428	404	415	445	394	369	2882
L35	286	312	263	290	254	232	207	1844
L49	241	218	199	259	241	210	197	1565
R13	309	277	299	329	351	359	336	2260
R16	444	402	381	431	437	442	413	2950
R2	455	417	472	480	557	552	489	3422
R202	508	509	498	473	496	465	482	3431
R246	468	506	466	475	452	471	462	3300
R247	360	372	335	391	367	362	392	2579
R29	419	400	353	425	449	417	413	2876
R3	480	481	448	463	495	468	458	3293
R302	485	467	501	517	552	515	453	3490
R35	377	425	410	404	437	430	402	2885
R46	442	480	468	484	486	483	482	3325
R47	366	401	358	377	409	363	402	2676
R49	254	273	222	242	259	305	319	1874
R53	331	333	298	299	314	287	250	2112
R54	296	281	283	319	315	335	293	2122
R8	409	391	401	399	438	419	392	2849
S47		3	1		1			5
T53	12	17	19	25	20	14	17	124
Totals	13620	13613	13045	13906	14260	13756	13039	95239

Figure 51: Total Engine Responses by Day of Week (2019)

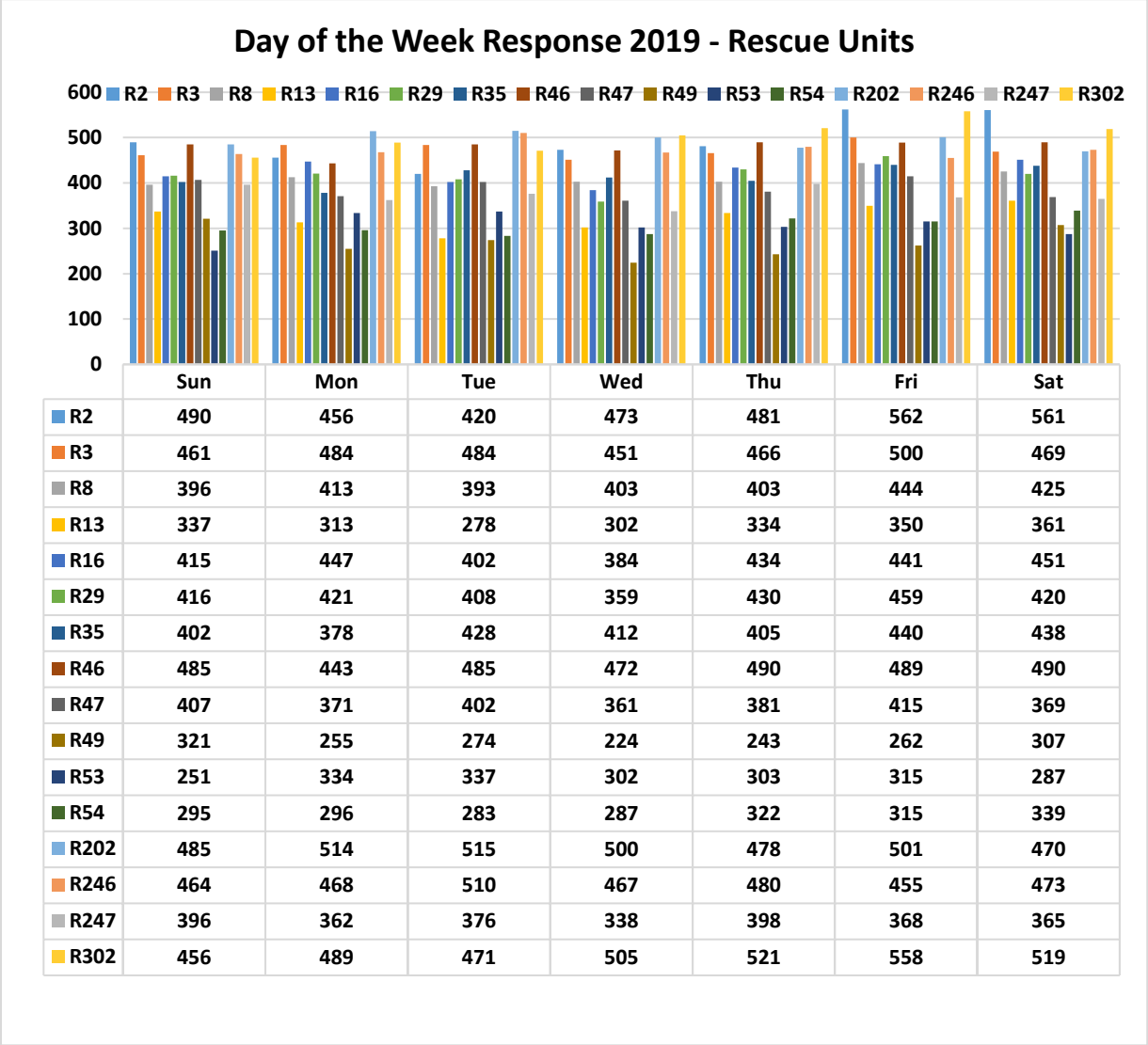


	Sun	Mon	Tue	Wed	Thu	Fri	Sat
E2	515	575	501	573	553	607	602
E3	324	404	367	383	399	358	353
E8	654	708	689	687	685	717	692
E13	388	401	386	333	437	436	408
E16	418	480	427	389	443	472	447
E29	391	423	456	431	459	478	410
E35	237	319	344	301	330	315	311
E46	657	623	645	652	696	646	653
E47	392	414	382	388	432	452	376
E49	314	274	300	283	315	294	340
E54	322	319	362	328	341	339	326
E88	260	338	338	266	275	342	283

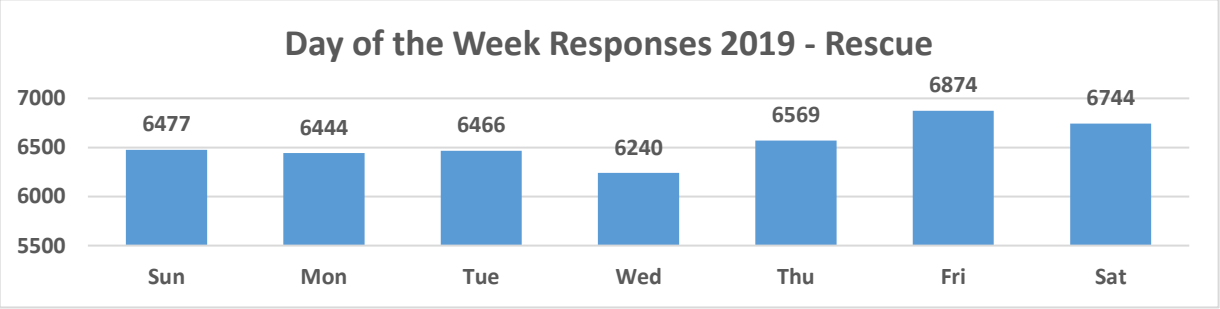


2019 calls for service required an engine to respond 37% of the time. Engine responses were 36,383 for 2019. The above graph shows that the downtown units are heavily utilized during all days of the week and the overflow spreads out to Engine 3, 16 and 47. Engine 8 has the most day responses with 717 Friday responses mostly attributed to the fact the downtown area bustles with businesses, restaurants, bars and nightclubs. Engine 88 has the least with 260 Sunday responses, mostly due to the limited residential, heavy business, and industrial complexes which make up the response zone which is closed on the weekends. Patterns can also be seen on the beach over the weekend. Engines 13 and 49, which service the beach area, have an increase in service demands over the weekend.

Figure 52: Total Rescue Responses by Day of Week (2019)

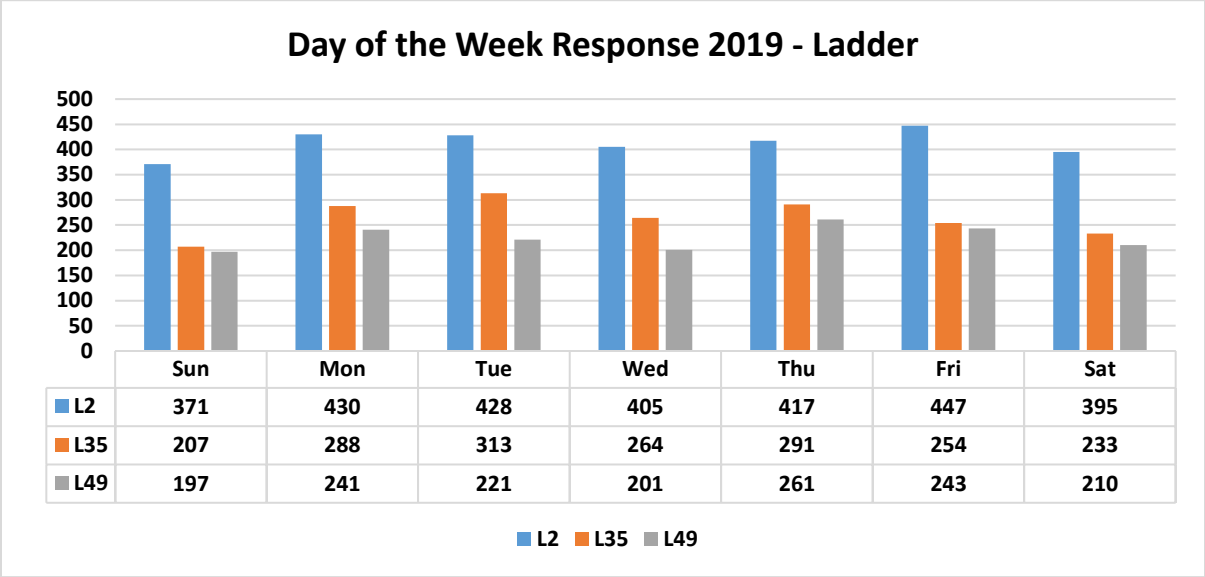


	Sun	Mon	Tue	Wed	Thu	Fri	Sat
R2	490	456	420	473	481	562	561
R3	461	484	484	451	466	500	469
R8	396	413	393	403	403	444	425
R13	337	313	278	302	334	350	361
R16	415	447	402	384	434	441	451
R29	416	421	408	359	430	459	420
R35	402	378	428	412	405	440	438
R46	485	443	485	472	490	489	490
R47	407	371	402	361	381	415	369
R49	321	255	274	224	243	262	307
R53	251	334	337	302	303	315	287
R54	295	296	283	287	322	315	339
R202	485	514	515	500	478	501	470
R246	464	468	510	467	480	455	473
R247	396	362	376	338	398	368	365
R302	456	489	471	505	521	558	519

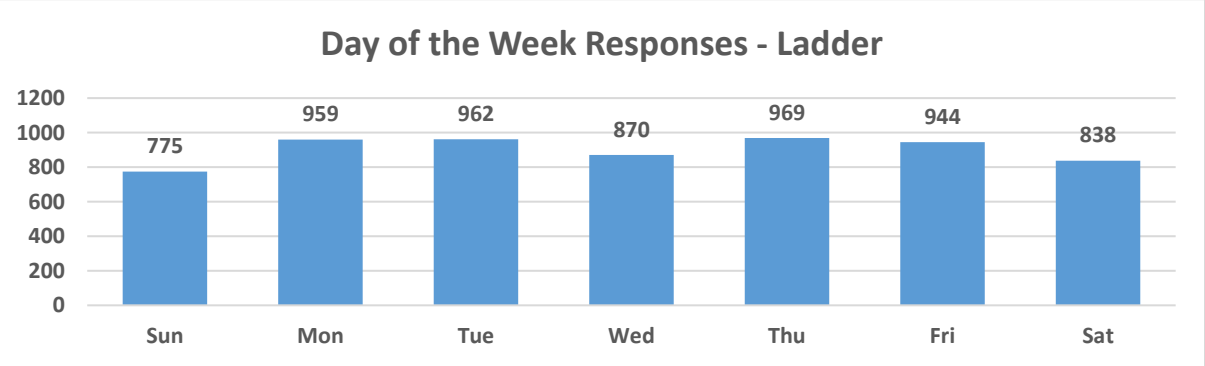


2019 calls for service required a rescue to respond 47% of the time. Rescue responses were 45,814 during 2019. Following the same patterns for day responses as the engines and rescues which service the downtown area of the city are heavily utilized through all days of the week. Rescues 2, 8, 46 and 246 have increased daily workloads in regard to the outlying rescues. The beach rescues (13, 49) show increased call volumes over the weekend days, influenced by the increase in the weekend beach population from tourism.

Figure 53: Total Ladder Responses by Day of Week (2019)

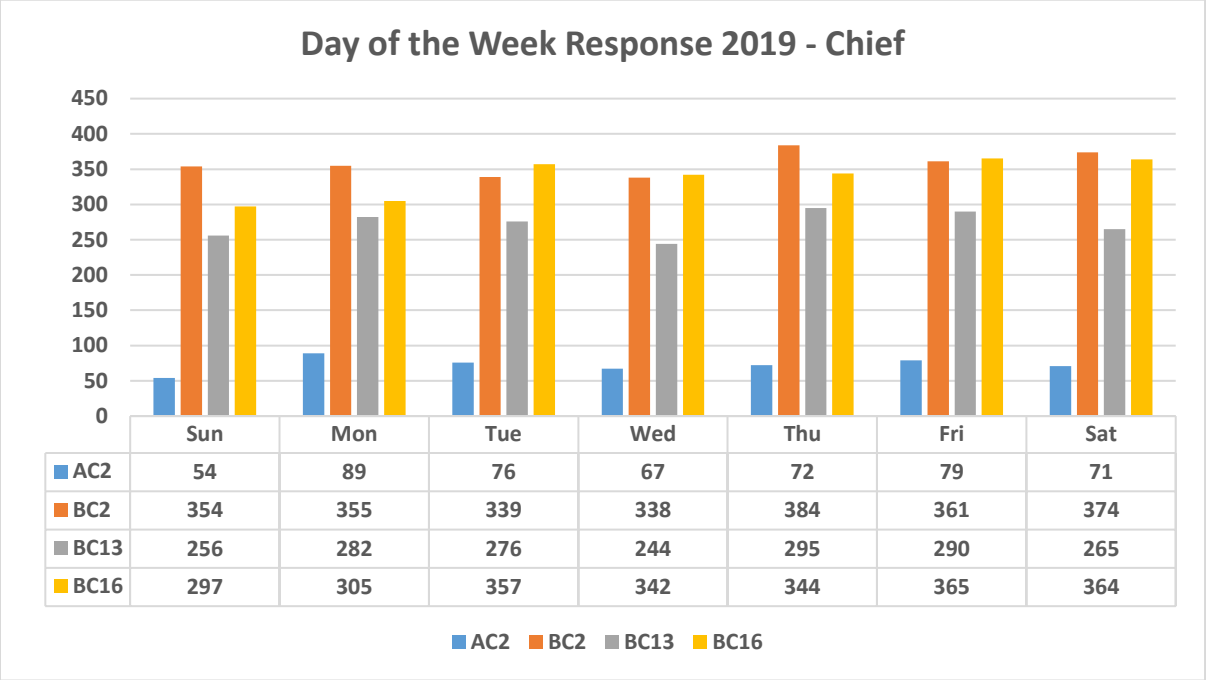


	Sun	Mon	Tue	Wed	Thu	Fri	Sat
L2	371	430	428	405	417	447	395
L35	207	288	313	264	291	254	233
L49	197	241	221	201	261	243	210

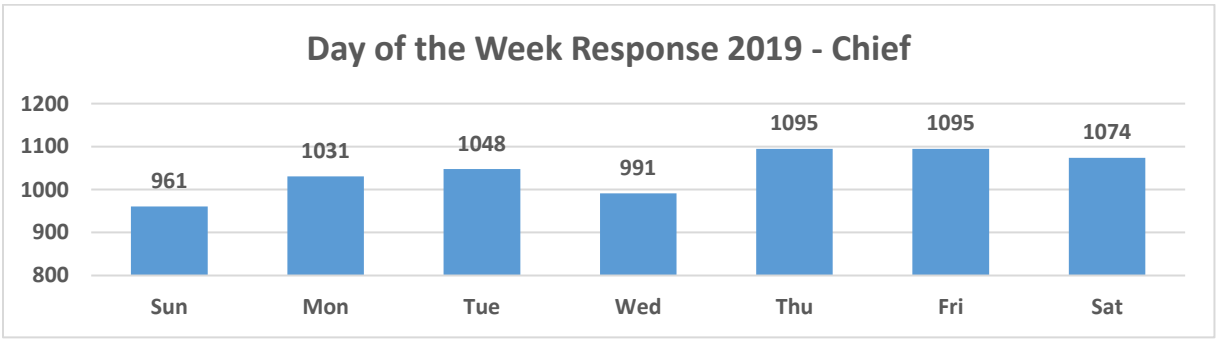


2019 calls for service required a ladder to respond 6.4% of the time. Ladder responses were 6,291 during 2019. Ladder 2 which services the 2nd Battalion is the busiest ladder in the city. Battalion 2 is not only the largest Battalion in the city it is also the busiest in regard to fire and EMS calls. Patterns show calls for service remain steady for Ladder 2 during Monday through Friday and drops down slightly over the weekend period. The decline in service demands may be related to downtown office buildings closing for the weekend. Ladders 13 and 35 have fewer calls for service compared to Ladder 2 and basically the same day to day pattern is demonstrated in the above graph.

Figure 54: Battalion Chief Responses by Day of Week (2019)

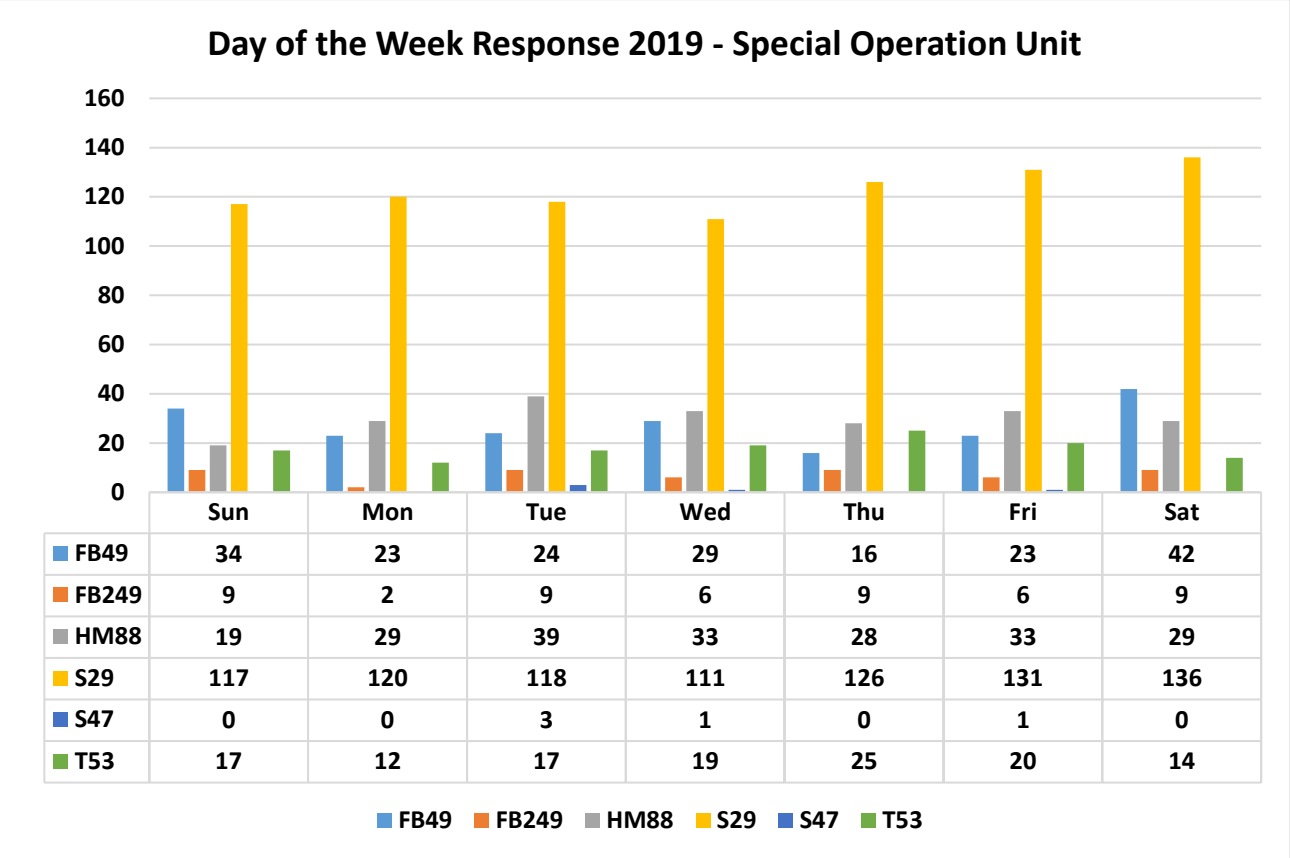


	Sun	Mon	Tue	Wed	Thu	Fri	Sat
AC2	54	89	76	67	72	79	71
BC2	354	355	339	338	384	361	374
BC13	256	282	276	244	295	290	265
BC16	297	305	357	342	344	365	364

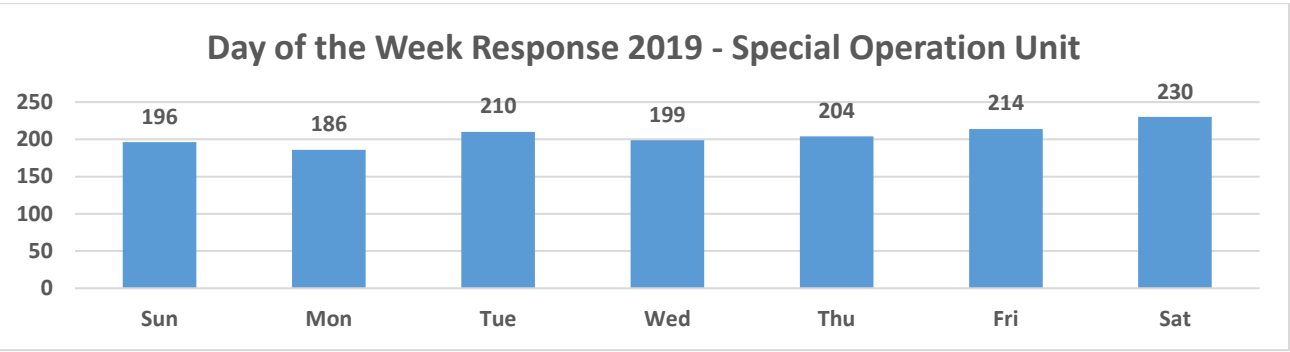


2019 calls for service required a Chief response 7.4% of the time. Chief responses were 7,295 during 2019. Battalion 2, which oversees the 2nd Battalion, is the busiest of the three battalion chiefs. The 2nd Battalion services the heart of Fort Lauderdale and is responsible for the majority of requests for fire and EMS services. The Assistant Chief oversees the daily shift operations, and responses represent multi-unit critical calls (structure fires, vehicle extrications and special operations).

Figure 55: Special Operation Unit Responses by Day of Week (2019)



	Sun	Mon	Tue	Wed	Thu	Fri	Sat
FB49	34	23	24	29	16	23	42
FB249	9	2	9	6	9	6	9
HM88	19	29	39	33	28	33	29
S29	117	120	118	111	126	131	136
S47	0	0	3	1	0	1	0
T53	17	12	17	19	25	20	14



2019 calls for service required a Special Operations Unit 1.5% of the time. Special Operation responses were 1,439 during 2019. Squad 29, formerly Squad 47, is the busiest of the special operations units for day of the week responses. Several factors influence the call volume. The squad is the air supply truck for FLFR and also handles firefighter rehab during fire incidents. Squad 29 responds to all structure fires, vehicle extrications, hazardous materials calls and technical rescue calls.

Comparability Factors

When evaluating performance of the time it takes for FLFR to respond to emergency incidents, an understanding of the components involved in the response is critical to understanding overall performance. As shown in Figure 53 (A.3.3.53.6 of the NFPA 2016 edition), there are many different components involved. The first three components; alarm transfer time, alarm answering time, and alarm processing time are controlled by dispatch and are under NFPA 1221. The next three time components; turnout time, travel time, and initiate action/intervention time are controlled by FLFR.

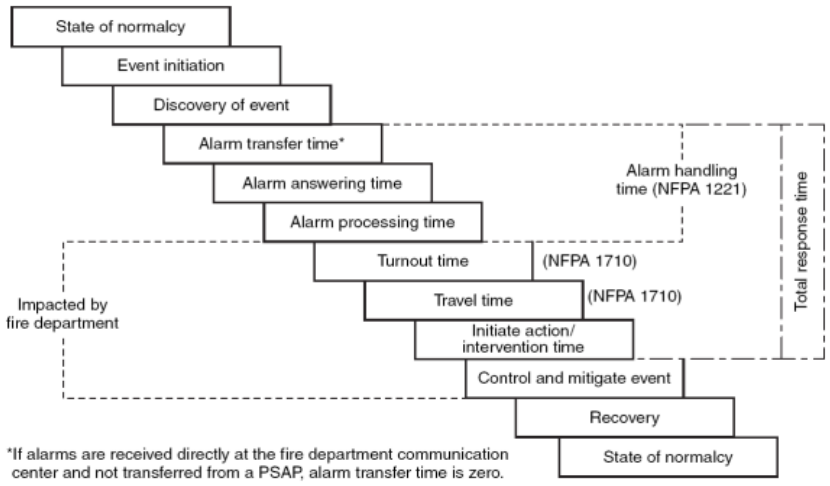
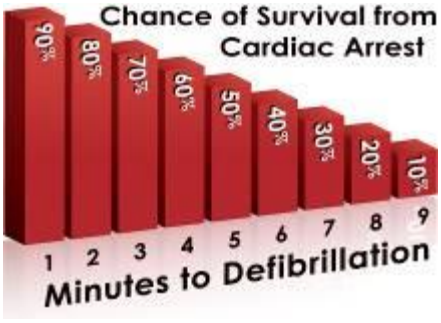


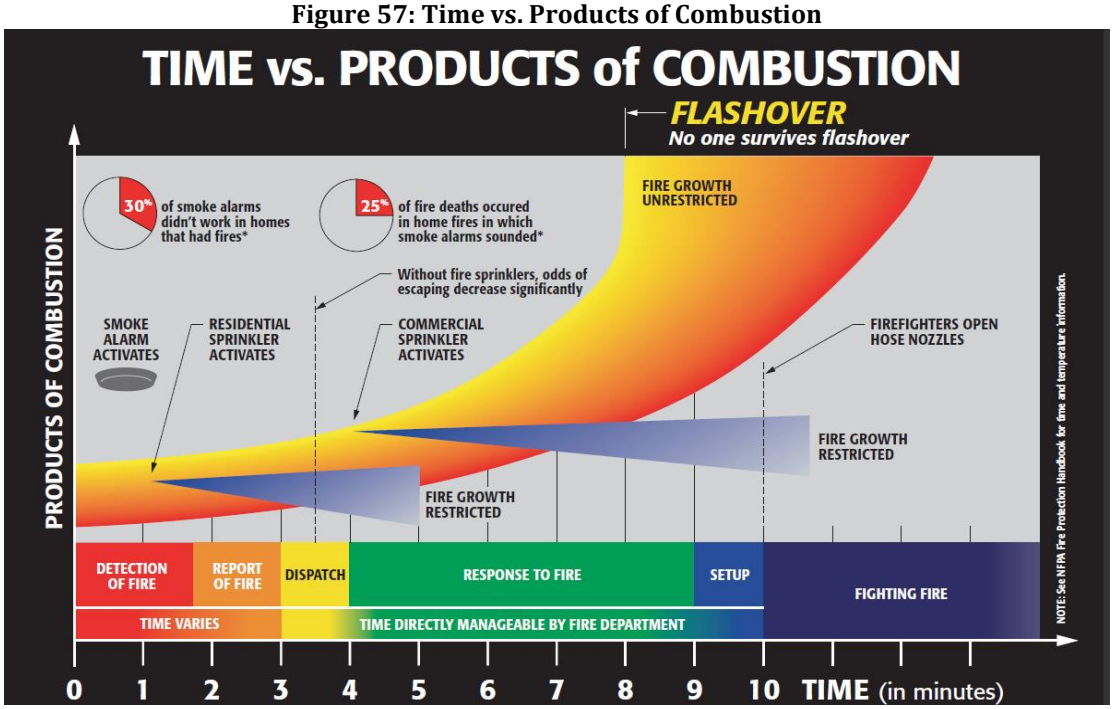
Figure 56: Cascade of Events

NFPA 1710, 2016 edition, recommends the turnout time for fires and special operations responses should be 80 seconds or less. NFPA 1710, 2016 edition, recommends EMS turnout time should be less than 60 seconds. During fire responses travel times should be limited to 240 seconds or less for the arrival of the first Engine Company and 480 seconds or less travel time for the remainder of the first alarm assignment for an urban / metropolitan area with a population of over 200,000 and or a population density of over 3,000 people per square mile. NFPA 1710 also states the first EMS unit with an AED travel times should be no more than 240 seconds and an ALS capable unit arrives within 480 seconds. Every unit within FLFR has ALS capabilities with the exception of Truck 53. Truck 53 is an ARFF with an AED. Truck 53 is a specialized unit which does not respond to medical emergencies, therefore, FLFR only needs to evaluate the first unit arrival on any EMS call to meet the 480 second benchmark. NFPA 1710 also recommends 90 percent proficiency when evaluating the 480 second benchmark for full ALS arrival.



Adequate fire suppression organization and deployment positively influencing the outcome of a structural fire is undeniably beneficial. Data generated by the National Fire Protection Association provides undeniable proof that a rapid and aggressive interior attack can substantially reduce civilian death along with property loss associated with structural fires. At each stage of a fire's extension beyond the room of origin, the rate of civilian deaths, injuries, and property damage grows exponentially. The following figure demonstrates at the 7-8-minute mark vertical escalation beyond the room or origin increases which greatly increases the percentage of property destruction.

Figure 57: Time vs. Products of Combustion



When analyzing FLFR performance for the years 2015-2019. FLFR found there was room for improvement in all areas. The following times are the percentages of the associated benchmark goal set by the NFPA and CPSE guidelines.

- Pick up to dispatch moderate fire - 139%
- Pick up to dispatch low EMS - 130%
- Turnout time moderate fire - 178%
- Turnout time low EMS - 237%
- Travel time moderate fire - 121%
- Travel time low EMS - 147%

Baseline times in all risk areas were consistently above the benchmarks,

In the tables on the following pages the ERF in the data set represents incidents where all of the responding Code 3 units went arrival. Cancelled scenes where an ERF was not achieved or where units responded Code 1 have been excluded from the tables.

Baseline Performance Tables

Table 34 Low Risk Fire Suppression Baseline Performance

Fire Suppression - Low Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	1:35 (n= 2496)	1:50 (n= 519)	1:34 (n= 515)	1:32 (n= 527)	1:27 (n=483)	1:35 (n=452)
Turnout Time	Turnout Time 1st Unit	2:28 (n=2496)	2:35 (n=519)	2:45 (n=515)	2:14 (n=527)	2:14 (n=483)	2:21 (n=452)
Travel Time	Travel Time 1st Due **Distribution**	6:03 (n=2496)	5:39 (n=519)	5:48 (n=515)	6:21 (n=527)	6:07 (n= 483)	6:20 (n=452)
	Travel Time ERF **Concentration**	6:29 (n=2496)	6:02 (n=519)	6:02 (n=515)	6:52 (n=527)	6:32 (n=483)	6:41 (n=452)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	8:10 (n=2496)	7:44 (n=519)	7:56 (n=515)	8:30 (n=527)	8:06 (n=483)	8:51 (n=452)
	Total Response Time ERF **Concentration**	8:30 (n= 2496)	8:07 (n= 519)	8:05 (n= 515)	8:48 (n= 527)	8:23 (n=483)	9:03 (n=452)

Table 35 Moderate Risk Fire Suppression Baseline Performance

Fire Suppression - Moderate Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	1:23 (n= 118)	1:03 (n= 27)	2:18 (n= 22)	0:53 (n= 17)	0:55 (n=28)	2:12 (n=24)
Turnout Time	Turnout Time 1st Unit	2:19 (n= 118)	2:17 (n= 27)	2:30 (n= 22)	1:35 (n=17)	2:22 (n=28)	2:04 (n=24)
Travel Time	Travel Time 1st Due **Distribution**	4:48 (n= 118)	4:35 (n= 27)	4:50 (n= 22)	4:11 (n=17)	4:48 (n= 28)	5:20 (n=24)
	Travel Time ERF **Concentration**	12:15 (n= 118)	11:37 (n= 27)	10:02 (n= 22)	9:19 (n=17)	13:45 (n=28)	11:10 (n=24)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	7:08 (n= 118)	6:44 (n= 27)	7:43 (n= 22)	5:55 (n=17)	7:05 (n=28)	7:25 (n=24)
	Total Response Time ERF **Concentration**	13:15 (n= 118)	13:10 (n= 27)	11:10 (n= 22)	10:51 (n= 17)	14:30 (n=28)	12:26 (n=24)

Table 36 Special/High Risk Fire Suppression Baseline Performance

Fire Suppression - High Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	1:16 (n= 88)	0:50 (n= 18)	0:44 (n= 27)	0:35 (n= 13)	0:56 (n=17)	3:33 (n=13)
Turnout Time	Turnout Time 1st Unit	2:54 (n= 88)	2:01 (n= 18)	3:00 (n= 27)	3:02 (n=13)	2:23 (n=17)	1:56 (n=13)
Travel Time	Travel Time 1st Due **Distribution**	4:47 (n= 88)	4:55 (n= 18)	4:56 (n= 27)	5:18 (n=13)	4:00 (n= 17)	3:36 (n=13)
	Travel Time ERF **Concentration**	18:36 (n= 88)	14:59 (n= 18)	18:36 (n= 27)	19:38 (n=13)	15:06 (n=17)	20:39 (n=13)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	6:04 (n= 88)	5:58 (n= 18)	6:44 (n= 27)	6:04 (n=13)	5:49 (n=17)	5:35 (n=13)
	Total Response Time ERF **Concentration**	20:07 (n= 88)	15:43 (n= 18)	19:47 (n= 27)	20:21 (n= 13)	16:17 (n=17)	21:45 (n=13)

There is no data for Fire Suppression for Maximum Risk Classification

Table 37 Low Risk Hazardous Materials Baseline Performance

Hazardous Materials - Low Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	2:00 (n=860)	1:45 (n=166)	1:56 (n=161)	2:18 (n=189)	2:22 (n=165)	1:31 (n=179)
Turnout Time	Turnout Time 1st Unit	2:42 (n=860)	2:43 (n=166)	2:58 (n=161)	2:21 (n=189)	2:32 (n=165)	2:31 (n=179)
Travel Time	Travel Time 1st Due **Distribution**	7:18 (n=860)	7:22 (n=166)	7:05 (n=161)	7:19 (n=189)	7:26 (n=168)	7:06 (n=179)
	Travel Time ERF **Concentration**	7:31 (n=860)	7:33 (n=166)	7:31 (n=161)	7:19 (n=189)	7:29 (n=168)	7:36 (n=179)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	10:08 (n=860)	10:21 (n=166)	9:32 (n=161)	10:27 (n=189)	9:47 (n=168)	9:25 (n=179)
	Total Response Time ERF **Concentration**	10:30 (n=860)	10:27 (n=166)	10:30 (n=161)	10:30 (n=189)	10:02 (n=168)	10:26 (n=179)

Table 38 Moderate Risk Hazardous Materials Baseline Performance

Hazardous Materials -Mod Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	1:51 (n=100)	1:32 (n=20)	1:09 (n=21)	1:23 (n=18)	3:43 (n=14)	0:47 (n=27)
Turnout Time	Turnout Time 1st Unit	2:30 (n=100)	2:04 (n=20)	2:30 (n=21)	1:52 (n=18)	2:41 (n=14)	2:36 (n=27)
Travel Time	Travel Time 1st Due **Distribution**	6:03 (n=100)	5:09 (n=20)	5:17 (n=21)	5:51 (n=18)	6:04 (n=14)	6:10 (n=27)
	Travel Time ERF **Concentration**	21:23 (n=100)	21:23 (n=20)	20:25 (n=21)	16:08 (n=18)	22:45 (n=14)	20:22 (n=27)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	8:04 (n=100)	8:04 (n=20)	8:00 (n=21)	7:28 (n=18)	8:53 (n=14)	8:40 (n=27)
	Total Response Time ERF **Concentration**	23:04 (n=100)	22:52 (n=20)	22:34 (n=21)	17:59 (n=18)	23:34 (n=14)	23:14 (n=27)

- There is no data for HazMat calls in the High/Special Risk classification.

Table 39 Low Risk 1 ARFF Baseline Performance

ARFF - Low Risk 1 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	00:32 (n=229)	00:49 (n=52)	00:27 (n=57)	00:31 (n=43)	00:24 (n=26)	00:25 (n=51)
Turnout Time	Turnout Time 1st Unit	1:11 (n=229)	1:11 (n=52)	0:53 (n=57)	1:03 (n=43)	1:31 (n=26)	1:04 (n=51)
Travel Time	Travel Time 1st Due **Distribution**	2:58 (n=229)	3:43 (n=52)	1:17 (n=57)	3:34 (n=43)	1:40 (n=26)	3:26 (n=51)
	Travel Time ERF **Concentration**	3:18 (n=229)	3:43 (n=52)	1:17 (n=57)	3:34 (n=43)	2:09 (n=26)	3:26 (n=51)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	4:05 (n=229)	5:20 (n=52)	2:45 (n=57)	4:00 (n=43)	3:59 (n=26)	4:47 (n=51)
	Total Response Time ERF **Concentration**	4:05 (n=229)	5:20 (n=52)	2:45 (n=57)	4:00 (n=43)	3:59 (n=26)	4:47 (n=51)

Table 40 Low Risk 2 ARFF Baseline Performance

ARFF - Low Risk 2 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	0:47 (n=34)	7:34 (n=5)	0:19 (n=8)	0:25 (n=7)	00:22 (n=6)	00:42 (n=8)
Turnout Time	Turnout Time 1st Unit	1:40 (n=34)	2:13 (n=5)	1:16 (n=8)	0:56 (n=7)	1:40 (n=6)	1:17 (n=8)
Travel Time	Travel Time 1st Due **Distribution**	2:09 (n=34)	2:36 (n=5)	0:03 (n=8)	0:10 (n=7)	1:22 (n=6)	1:25 (n=8)
	Travel Time ERF **Concentration**	11:08 (n=34)	11:09 (n=5)	5:43 (n=8)	8:53 (n=7)	9:06 (n=6)	11:35 (n=8)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	4:05 (n=34)	10:43 (n=5)	1:35 (n=8)	1:38 (n=7)	3:59 (n=6)	3:48 (n=8)
	Total Response Time ERF **Concentration**	12:25 (n=34)	12:35 (n=5)	6:02 (n=8)	9:09 (n=7)	9:54 (n=6)	12:39 (n=8)

- There is no data for ARFF calls in the High/Special Risk classification.

Table 41 Moderate Risk ARFF Baseline Performance

ARFF - Moderate Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	---	---	---	---	---	0:47 (n=1)
Turnout Time	Turnout Time 1st Unit	---	---	---	---	---	1:59 (n=1)
Travel Time	Travel Time 1st Due **Distribution**	---	---	---	---	---	1:25 (n=1)
	Travel Time ERF **Concentration**	---	---	---	---	---	9:04 (n=1)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	---	---	---	---	---	4:11 (n=1)
	Total Response Time ERF **Concentration**	---	---	---	---	---	11:01 (n=1)

Due to the limited amount of response data it is difficult to determine a statistically appropriate baseline time for this level of risk. There is no data for ARFF calls in the High/Special or Maximum Risk classification.

Table 42 Low Risk EMS Baseline Performance

EMS - Low Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	1:23 (n=164,798)	1:32 (n=32,655)	1:26 (n=31,300)	1:23 (n=33,374)	1:17 (n=33,382)	1:21 (n=33,637)
Turnout Time	Turnout Time 1st Unit	2:22 (n=164,798)	2:27 (n=32,655)	2:26 (n=31,300)	2:15 (n=33,374)	2:13 (n=33,382)	2:26 (n=33,637)
Travel Time	Travel Time 1st Due **Distribution**	5:52 (n=164,798)	5:41 (n=32,655)	5:49 (n=31,300)	6:06 (n=33,374)	5:47 (n=33,382)	5:55 (n=33,637)
	Travel Time ERF **Concentration**	5:53 (n=164,798)	5:42 (n=32,655)	5:50 (n=31,300)	6:07 (n=33,374)	5:48 (n=33,382)	5:56 (n=33,637)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	7:59 (n=164,798)	7:58 (n=32,655)	7:59 (n=31,300)	8:06 (n=33,374)	7:47 (n=33,382)	8:05 (n=33,637)
	Total Response Time ERF **Concentration**	8:00 (n=164,798)	7:58 (n=32,655)	8:00 (n=31,300)	8:08 (n=33,374)	7:48 (n=33,382)	8:05 (n=33,637)

Table 43 Moderate Risk EMS Baseline Performance

EMS - Moderate Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	2:06 (n=167)	3:41 (n=26)	0:56 (n=35)	2:04 (n=35)	2:06 (n=40)	1:41 (n=43)
Turnout Time	Turnout Time 1st Unit	2:37 (n=167)	2:51 (n=26)	2:37 (n=35)	2:18 (n=35)	2:48 (n=40)	2:35 (n=43)
Travel Time	Travel Time 1st Due **Distribution**	5:19 (n=167)	5:11 (n=26)	5:49 (n=35)	5:08 (n=35)	5:06 (n=40)	5:59 (n=43)
	Travel Time ERF **Concentration**	18:04 (n=167)	20:45 (n=26)	0:00 (n=35)	22:07 (n=35)	16:37 (n=40)	17:35 (n=43)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	8:11 (n=167)	9:43 (n=26)	8:46 (n=35)	7:22 (n=35)	7:43 (n=40)	7:19 (n=43)
	Total Response Time ERF **Concentration**	19:47 (n=167)	23:36 (n=26)	17:56 (n=35)	22:57 (n=35)	18:18 (n=40)	20:26 (n=43)

Date relative to Ocean Rescue from radio call to ALS transport arrive is part of the low EMS data. There were no EMS Special/High risk incidents in our data

Several factors contribute to Specialty Teams ERF being higher than other risk factors. The first item which needs to be taken into consideration would be the team was not on the initial assignment and was added on to the call once the first unit arrived and investigated the scene. Hazmat, Technical Rescue, Marine and ARFF are units which respond city wide. Response time regarding ERF would be greatly influenced based on the time of day and incident location.

Table 44 Low Risk Technical Rescue Baseline Performance

Technical Rescue Low Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	2:21 (n=152)	3:41 (n=34)	3:28 (n=21)	2:04 (n=20)	2:21 (n=41)	1:35 (n=36)
Turnout Time	Turnout Time 1st Unit	2:36 (n=152)	2:32 (n=34)	2:37 (n=21)	3:21 (n=20)	1:59 (n=41)	2:21 (n=36)
Travel Time	Travel Time 1st Due **Distribution**	5:33 (n=152)	5:16 (n=34)	5:49 (n=21)	5:08 (n=20)	5:06 (n=41)	6:09 (n=36)
	Travel Time ERF **Concentration**	18:37 (n=152)	20:01 (n=34)	16:25 (n=21)	14:04 (n=20)	14:28 (n=41)	21:01 (n=36)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	8:03 (n=152)	9:36 (n=34)	8:54 (n=21)	7:21 (n=20)	7:20 (n=41)	7:49 (n=36)
	Total Response Time ERF **Concentration**	20:16 (n=152)	21:00 (n=34)	18:23 (n=21)	15:39 (n=20)	16:43 (n=41)	23:34 (n=36)

Table 45 Moderate Risk Technical Rescue Baseline Performance

Technical Rescue Moderate Risk 90th Percentile Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	2:26 (n=65)	3:12 (n=7)	0:32 (n=8)	2:04 (n=12)	3:09 (n=21)	1:41 (n=17)
Turnout Time	Turnout Time 1st Unit	2:41 (n=65)	1:47 (n=7)	2:41 (n=8)	2:36 (n=12)	1:59 (n=21)	2:46 (n=17)
Travel Time	Travel Time 1st Due **Distribution**	5:33 (n=65)	4:31 (n=7)	5:49 (n=8)	5:19 (n=12)	3:34 (n=21)	6:34 (n=17)
	Travel Time ERF **Concentration**	19:33 (n=65)	18:48 (n=7)	18:46 (n=99)	15:20 (n=12)	16:03 (n=21)	19:59 (n=17)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	8:11 (n=65)	6:39 (n=7)	10:51 (n=88)	7:59 (n=12)	6:19 (n=21)	8:45 (n=17)
	Total Response Time ERF **Concentration**	21:15 (n=65)	19:54 (n=7)	20:44 (n=8)	16:43 (n=12)	18:15 (n=21)	21:32 (n=17)

Table 46 High/Special Risk Technical Rescue Baseline Performance

Technical Rescue High/Special Risk 90th Percentile Times Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	0:40 (n=16)	---	0:32 (n=1)	0:24 (n=2)	0:23 (n=6)	0:40 (n=7)
Turnout Time	Turnout Time 1st Unit	1:49 (n=16)	---	2:41 (n=1)	1:34 (n=2)	1:49 (n=6)	1:11 (n=7)
Travel Time	Travel Time 1st Due **Distribution**	5:13 (n=16)	---	4:03 (n=1)	4:17 (n=2)	2:35 (n=6)	6:53 (n=7)
	Travel Time ERF **Concentration**	22:25 (n=16)	---	16:47 (n=1)	22:25 (n=2)	15:22 (n=6)	23:44 (n=7)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	7:16 (n=16)	---	7:16 (n=1)	6:15 (n=2)	4:55 (n=6)	7:16 (n=7)
	Total Response Time ERF **Concentration**	23:45 (n=16)	---	20:00 (n=1)	23:45 (n=2)	15:22 (n=6)	25:45 (n=7)

Table 47 Low Risk Marine Baseline Performance

Marine Low Risk 90th Percentile Times Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	2:37 (n=178)	2:12 (n=37)	2:41 (n=41)	3:21 (n=37)	1:32 (n=30)	2:34 (n=33)
Turnout Time	Turnout Time 1st Unit	2:46 (n=178)	2:54 (n=37)	2:46 (n=41)	2:09 (n=37)	2:58 (n=30)	2:40 (n=33)
Travel Time	Travel Time 1st Due **Distribution**	7:12 (n=178)	6:52 (n=37)	5:58 (n=41)	6:51 (n=37)	7:25 (n=30)	6:50 (n=33)
	Travel Time ERF **Concentration**	12:23 (n=178)	13:05 (n=37)	11:15 (n=41)	11:16 (n=37)	10:40 (n=30)	13:20 (n=33)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	9:53 (n=178)	10:31 (n=37)	9:05 (n=41)	9:20 (n=37)	8:48 (n=30)	9:50 (n=33)
	Total Response Time ERF **Concentration**	15:03 (n=178)	15:27 (n=37)	14:08 (n=41)	15:22 (n=37)	13:09 (n=30)	17:14 (n=33)

Table 48 Moderate Risk Marine Baseline Performance

Marine Moderate Risk 90th Percentile Times Baseline Performance		2015-2019	2015	2016	2017	2018	2019
Call Processing	Pick-up to Dispatch	1:15 (n=37)	1:13 (n=7)	2:41 (n=5)	1:15 (n=11)	0:34 (n=7)	0:28 (n=7)
Turnout Time	Turnout Time 1st Unit	2:54 (n=37)	2:54 (n=7)	3:45 (n=5)	1:58 (n=11)	2:23 (n=7)	2:17 (n=7)
Travel Time	Travel Time 1st Due **Distribution**	6:06 (n=37)	5:31 (n=7)	4:23 (n=5)	5:50 (n=11)	5:24 (n=7)	6:18 (n=7)
	Travel Time ERF **Concentration**	16:24 (n=37)	13:23 (n=7)	16:05 (n=5)	15:09 (n=11)	16:24 (n=7)	18:04 (n=7)
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	8:28 (n=37)	7:46 (n=7)	8;43 (n=5)	7:22 (n=11)	6:54 (n=7)	8:28 (n=7)
	Total Response Time ERF **Concentration**	17:55 (n=37)	16:49 (n=7)	17:15 (n=5)	16:28 (n=11)	17:55 (n=7)	20:41 (n=7)

F. Performance Objectives and Measurement

Performance Objectives – Benchmarks

For 90 percent of all fire, EMS and special operations responses, alarm handling times shall be processed within 60 seconds or less.

For 90 percent of all fire and special operations, turnout times shall be 80 seconds or less.

For 90 percent of all EMS incidents, turnout times shall be 60 seconds or less.

Fire Suppression Services Program

For 90 percent of all low, moderate, high/special and maximum risk fires, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The first-due unit for all risk levels shall be capable of providing 500 gallons of water and 1,500 gallons per minute (GPM) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 GPM; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of low risk fires, the total response time for the responding unit, staffed with three firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The unit shall be capable of providing 500 gallons of water and 1,500 GPM pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 GPM; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims;

and performing salvage operations. These operations shall be done in accordance with standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all moderate risk fires, the total response time for the arrival of the effective response force (ERF) staffed with sixteen firefighters and officers shall be 10 minutes and 20 seconds in metro and urban areas. The ERF for moderate risk shall be capable of establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with Occupational Safety and Health Administration (OSHA) requirements of two in-two out; completing forcible entry; searching and rescuing at-risk victims; ventilation of the structure; controlling utilities; and performing salvage and overhaul. These operations shall be done in accordance with standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all high/special and maximum risk fires, the total response time for the arrival of the ERF, staffed with 22 firefighters and officers shall be 14 minutes and 20 seconds in metro and urban areas. The ERF for high/special and maximum risk shall be capable of establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with Occupational Safety and Health Administration (OSHA) requirements of two in-two out; completing forcible entry; searching and rescuing at-risk victims; ventilation of the structure; controlling utilities; and performing salvage and overhaul. Additionally, the ERF for high and special risk fires shall also be capable of placing elevated streams into service from aerial ladders. These operations shall be done in accordance with FLFR standard operating procedures while providing for the safety of responders and the general public.

Emergency Medical Services Program

For 90 percent of all low, moderate, high/special and maximum risk emergency medical services (EMS) responses, the total response time for the arrival of the first due unit staffed with two or three firefighters, shall be 6 minutes in metro and urban areas. The first-due unit shall be capable of assessing scene safety and establishing command; sizing-up the situation, patient assessment including vital signs and medical history, BLS or ALS interventions including automatic external defibrillation, EKG and airway monitoring and patient transport.

For 90 percent of all low risk emergency medical services (EMS) responses, the total response time for the arrival of the responding unit(s) staffed with two, three, or five firefighters, shall be 6 minutes in metro and urban areas. The unit shall be capable of assessing scene safety and establishing command; sizing-up the situation, patient assessment including vital signs and medical history, BLS or ALS interventions including automatic external defibrillation, EKG and airway monitoring and patient transport.

For 90 percent of all moderate risk EMS response incidents, the total response time for the arrival of the effective response force (ERF) staffed with 15 firefighters and officers shall be 8 minutes and 20 seconds in metro and urban areas. The ERF shall be capable of providing incident command and producing related documentation; completing patient assessment including vital signs and medical history, BLS or ALS interventions including automatic external defibrillation, EKG and airway monitoring and patient transport.

For 90 percent of all high/special and maximum risk EMS response incidents, the total response time for the arrival of the effective response force (ERF) staffed with 20 firefighters and officers

shall be 14 minutes and 20 seconds in metro and urban areas. The ERF shall be capable of providing incident command and producing related documentation; completing patient assessment including vital signs and medical history, BLS or ALS interventions including automatic external defibrillation, EKG and airway monitoring and patient transport. In addition, the ERF in high/special risk EMS should be able to provide a safety officer, medical group, triage group, transport group and a staging officer.

Hazardous Materials Services Program

For 90 percent of all low, moderate, high/special and maximum hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The first-due unit shall be capable of establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, war and cold zone.

For 90 percent of low risk hazardous materials response incidents the total response time for responding unit, staffed with three firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The unit shall be capable of establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, war and cold zone.

For 90 percent of all moderate risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF) including the hazardous materials team, staffed with 17 firefighter and officers, shall be 10 minutes and 20 seconds in metro and urban areas. The ERF shall be capable of providing the equipment, technical expertise, knowledge, skills and abilities to mitigate a hazardous materials incident in accordance with FLFR standard operating guidelines. In addition the ERF shall be able to establish command as needed; investigate; provide a back-up team; and conduct research; decontamination; medical group and hazmat support group.

For 90 percent of all high/special or maximum risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF) including the hazardous materials team, staffed with >17 firefighters and officers, shall be 14 minutes and 20 seconds in metro and urban areas. The effective response force (ERF) shall be capable of providing the equipment, technical expertise, knowledge, skills and abilities to mitigate a hazardous materials incident in accordance with FLFR standard operating guidelines. In addition, the ERF shall be able to establish command as needed; investigate; provide a back-up team; and conduct research; decontamination; medical group and hazmat support group.

Technical Rescue Services Program

For 90 percent of all low, moderate, special/high, maximum technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The first-due unit shall be capable of establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of low risk technical rescue incidents the total response time for responding units staffed with three firefighters shall be 6 minutes and 20 seconds in metro and urban areas. The unit shall be capable of establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all moderate risk technical rescue incidents, the total response time for the arrival of the effective response force (ERF) including the technical response team, staffed with 18 firefighters and officers, shall be 10 minutes and 20 seconds in metro and urban areas. The effective response force shall be capable of establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills and abilities during technical rescue incidents and providing medical support.

For 90 percent of all high/special or maximum risk Technical Rescue response incidents, the total response time for the arrival of the effective response force (ERF) including the Technical Rescue Team, staffed with 23 firefighter and officers, shall be 14 minutes and 20 seconds in metro and urban areas. The effective response force shall be capable of establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills and abilities during technical rescue incidents and providing first responder medical support.

Marine Rescue Services Program

For 90 percent of all low, moderate, special/high, maximum risk marine rescue incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The first-due unit shall be capable of establishing command; sizing up to determine if a marine rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all low risk marine rescue incidents, the total response time for responding unit staffed with three firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The unit shall be capable of establishing command; sizing up to determine if a marine rescue response is required, requesting additional resources, and providing basic life support to any victim without endangering response personnel.

For 90 percent of all moderate risk marine rescue incidents, the total response time for the arrival of the effective response force (ERF) including the marine response team, staffed with eighteen (18) firefighters and officers, shall be 10 minutes and 20 seconds in metro and urban areas. The effective response force (ERF) shall be capable of fireboat operations, establishing patient contact; staging and apparatus set up; providing technical expertise, initiating fire attack, knowledge, skills and abilities during marine rescue incidents and providing first responder medical support.

For 90 percent of all high/special or maximum risk marine rescue incidents, the total response time for the arrival of the effective response force (ERF) including the marine rescue team, staffed with 22 firefighters and officers, shall be 14 minutes and 20 seconds in metro and urban areas. The effective response force (ERF) shall be capable of fireboat operations, establishing patient contact; staging and apparatus set up; providing technical expertise, initiating fire attack, knowledge, skills and abilities during marine rescue incidents and providing medical support.

Ocean Rescue

Ocean Rescue baseline and benchmark performance objectives are established by the United States Lifesaving Association by which FLFR Ocean Rescue has been certified since 1994.

ARFF Rescue Services Program

For 90 percent of all low, moderate, special/high, maximum risk ARFF rescue incidents, the total response time for the arrival of the first-due unit, staffed with two firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The first-due unit shall be capable of establishing command; sizing up to determine if a ARFF response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all low risk ARFF rescue incidents, the total response time for the responding unit, staffed with two firefighters, shall be 6 minutes and 20 seconds in metro and urban areas. The first-due unit shall be capable of establishing command; sizing up to determine if an ARFF rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all moderate risk ARFF rescue incidents, the total response time for the arrival of the effective response force (ERF) including the ARFF response team, staffed with seventeen firefighters and officers, shall be 10 minutes and 20 seconds in metro and urban areas. The effective response force (ERF) shall be capable of establishing patient contact; staging and apparatus set up; providing technical expertise, initiating fire attack, knowledge, skills and abilities during ARFF rescue incidents and providing medical support.

For 90 percent of all high/special or maximum risk ARFF rescue incidents, the total response time for the arrival of the effective response force (ERF) including the ARFF response team, staffed with >17 firefighters and officers, shall be 14 minutes and 20 seconds in metro and urban areas. The effective response force (ERF) shall be capable of establishing patient contact; staging and apparatus set up; providing technical expertise, initiating fire attack, knowledge, skills and abilities during ARFF rescue incidents and providing medical support.

In summary, FLFR BENCHMARK objectives are as follows:

Table 49 Benchmark Objectives

Measured at the 90th Percentile			Suppression	EMS	Haz-Mat	Tech Rescue	Marine	ARFF
Call Processing	Pick-up to Dispatch		1:00	1:00	1:00	1:00	1:00	1:00
Turnout Time	Turnout Time 1st Unit		1:20	1:00	1:20	1:20	1:20	1:20
Travel Time	Travel Time 1st Due		4:00	4:00	4:00	4:00	4:00	4:00
	Travel Time ERF		8:00	8:00	8:00	8:00	8:00	8:00
Total Response Time	Total Response Time 1st Due		6:20	6:00	6:20	6:20	6:20	6:20
	Total Response Time ERF	Lo	6:20	6:00	6:20	6:20	6:20	6:20
		Mod	10:20	8:20	10:20	10:20	10:20	10:20
		High	14:20	14:20	14:20	14:20	14:20	14:20

Performance Objectives – Baselines (2019 Incidents)

For 90 percent of all fire responses, alarms are processed within 104 seconds or less.

For 90 percent of all EMS responses, alarms are processed within 83 seconds or less.

For 90 percent of all Hazardous Material responses, alarms are processed within 106 seconds or less.

For 90 percent of all Technical Rescue responses, alarms are processed within 110 seconds or less.

For 90 percent of all Marine Rescue responses, alarms are processed within 216 seconds or less.

For 90 percent of all ARFF responses, alarms are processed within 23 seconds or less.

For 90 percent of all fire responses, turnout times are 142 seconds or less.

For 90 percent of all EMS responses, turnout times are 142 seconds or less.

For 90 percent of all Hazardous Material responses, turnout times are 143 seconds or less.

For 90 percent of all Technical Rescue responses, turnout times are 139 seconds or less.

For 90 percent of all Marine Rescue responses, turnout times are 147 seconds or less.

For 90 percent of all ARFF responses, turnout times are 53 seconds or less.

Fire Suppression Services Program

For 90 percent of all low risk fires FLFR first due apparatus, staffed with three firefighters, arrived in 8 minutes and 51 seconds in metro and urban areas. The first-due unit is capable of providing 500 gallons of water and 1,500 gallons per minute (GPM) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 GPM; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. The operations are done in accordance with standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all moderate risk structure fires, the total response time for the arrival of the first-due unit, staffed with two firefighters and one officer, is: 7 minutes and 25 seconds. The first-due unit for all risk levels is capable of: providing 500 gallons of water and 1,500 gallons per minute (GPM) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 GPM; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; establishing RIT team; and performing salvage operations. These operations are done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all high/special risk fires FLFR first due apparatus staffed with three firefighters arrived in 5 minutes and 35 seconds in metro and urban areas. The first-due unit is capable of providing 500 gallons of water and 1,500 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; establishing RIT team; and performing salvage operations. The operations are done in accordance with standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all low risk fires, the total response time for the arrival of the ERF, staffed with three firefighters and officers was 9 minutes and 03 seconds in metro and urban areas. The ERF for low risk fires are capable of operating the pump and providing an attack line for fire control.

For 90 percent of all moderate risk fires, the total response time for the arrival of the ERF, staffed with sixteen firefighters and officers is 12 minutes and 26 seconds in metro and urban areas. The ERF for moderate risk are capable of establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with Occupational Safety and Health Administration (OSHA) requirements of two in-two out; completing forcible entry; searching and rescuing at-risk victims; ventilation of the structure; controlling utilities; and performing salvage and overhaul.

For 90 percent of all high/special and maximum risk fires, the total response time for the arrival of the ERF staff with 22 firefighters and officers is 21 minutes and 45 seconds in metro and urban areas. The ERF for high/special and maximum risk are capable of establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with Occupational Safety and Health Administration (OSHA) requirements of two in-two out; completing forcible entry; searching and rescuing at-risk victims; ventilation of the structure; controlling utilities; and performing salvage and overhaul. Additionally, the ERF for high and special risk fires are capable of placing elevated streams into service from aerial ladders.

These operations are done in accordance with FLFR standard operating procedures while providing for the safety of responders and the general public.

Emergency Medical Services Program

For 90 percent of all low risk emergency medical services (EMS) responses FLFR first due units staffed with two or three firefighters arrived in 8 minutes and 05 seconds in metro and urban areas. The first-due unit is capable of assessing scene safety and establishing command; sizing-up the situation, patient assessment including vital signs and medical history, BLS or ALS interventions including automatic external defibrillation, EKG and airway monitoring and patient transport.

For 90 percent of all low risk emergency medical services (EMS) responses, the total response time for the arrival of the effective response force (ERF) staffed with two, three or five firefighters, was 8 minutes and 05 seconds in metro and urban areas. The unit(s) shall be capable of assessing scene safety and establishing command; sizing-up the situation, patient assessment including vital signs and medical history, BLS or ALS interventions including automatic external defibrillation, EKG and airway monitoring and patient transport.

For 90 percent of all moderate risk emergency medical services (EMS) responses, FLFR first due apparatus staffed with two or three firefighters arrived in 7 minutes and 19 seconds in metro and urban areas. The first-due unit is capable of assessing scene safety and establishing command; sizing-up the situation, patient assessment including vital signs and medical history, BLS or ALS interventions including automatic external defibrillation, EKG and airway monitoring and patient transport.

For 90 percent of all moderate risk EMS response incidents, the total response time for the arrival of the effective response force (ERF) staffed with 15 firefighters and officers is 20 minutes and 26 seconds in metro and urban areas. The ERF is capable of providing incident command and producing related documentation; completing patient assessment including vital signs and medical history, BLS or ALS interventions including automatic external defibrillation, EKG and airway monitoring and patient.

Hazardous Materials Services Program

For 90 percent of all low risk hazardous materials response incidents, the total response time for the arrival of the first-due FLFR unit, staffed with three firefighters, is 09 minutes and 25 seconds in metro and urban areas. The first-due unit is capable of establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm and cold zone.

For 90 percent of all low risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF) staffed three firefighters, is 10 minutes and 26 seconds in metro and urban areas. The unit is capable of establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm and cold zone.

For 90 percent of all moderate risk hazardous materials response incidents, the total response time for the arrival of the first-due FLFR unit, staffed with three firefighters is 8 minutes and 40

seconds in metro and urban areas. The first-due unit is capable of establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm and cold zone.

For 90 percent of all moderate risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF) including the hazardous materials team, staff with seventeen (17) firefighter and officers is 23 minutes and 14 seconds in metro and urban areas. The ERF is capable of providing the equipment, technical expertise, knowledge, skills and abilities to mitigate a hazardous materials incident in accordance with FLFR standard operating guidelines. In addition, the ERF is able to establish command; investigate; provide a back-up team; and conduct research; decontamination; medical group and hazmat support group.

Technical Rescue Services Program

For 90 percent of all low risk technical rescue incidents, the total response time for the arrival of the first-due FLFR unit, staffed with three firefighters is 7 minutes and 49 seconds in metro and urban areas. The first-due unit is capable of establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all low risk technical rescue incidents, the total response time for the arrival of the effective response force (ERF) including the technical response team, staffed with thirteen (13) firefighters and officers, is 23 minutes and 34 seconds in metro and urban areas. The effective response force is capable of establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills and abilities during technical rescue incidents and providing first responder medical support

For 90 percent of all moderate-risk technical rescue incidents, the total response time for the arrival of the first-due FLFR unit, staffed with three firefighters is 8 minutes and 45 seconds in metro and urban areas. The first-due unit is capable of establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all moderate-risk technical rescue incidents, the total response time for the arrival of the effective response force (ERF) including the technical response team, staffed with eighteen (18) firefighters and officers, is 21 minutes and 32 seconds in metro and urban areas. The effective response force is capable of establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills and abilities during technical rescue incidents including air monitoring, attack line, stabilization, medical group and providing medical support.

For 90 percent of all high-risk technical rescue incidents, the total response time for the arrival of the first-due FLFR unit, staffed with three firefighters is 7 minutes and 16 seconds in metro and urban areas. The first-due unit is capable of establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all high-risk technical rescue incidents, the total response time for the arrival of the effective response force (ERF) including the technical rescue response team, staffed with twenty-three (23) firefighters and officers is 25 minutes and 45 seconds in metro and urban areas. The effective response force (ERF) is capable of establishing patient contact; staging and apparatus

set up; providing technical expertise, knowledge, skills and abilities during technical rescue incidents including air monitoring, attack line, stabilization, medical group and providing medical support.

Marine Rescue Services Program

For 90 percent of all low risk marine rescue incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, is 9 minutes and 50 seconds in metro and urban areas. The first-due unit is capable of establishing command; sizing up to determine if a marine rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all low risk marine rescue incidents, the total response time for the arrival of the effective response force (ERF) including the marine response team, staffed with six firefighters and officers is 17 minutes and 14 seconds in metro and urban areas. The effective response force (ERF) is capable of fireboat operations, establishing patient contact; staging and apparatus set up; providing technical expertise, initiating fire attack, knowledge, skills and abilities during marine rescue incidents and providing medical support.

For 90 percent of all moderate risk marine rescue incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, is 8 minutes and 28 seconds in metro and urban areas**.** The first-due unit is capable of establishing command; sizing up to determine if a marine rescue response is required; requesting additional resources; and providing medical support to any victim without endangering response personnel

For 90 percent of all moderate risk marine rescue incidents, the total response time for the arrival of the effective response force (ERF) including the marine response team, staffed with eighteen (18) firefighters and officers is 20 minutes and 41 seconds in metro and urban areas. The effective response force (ERF) is capable of fireboat operations, establishing patient contact; staging and apparatus set up; providing technical expertise, initiating fire attack, knowledge, skills and abilities during marine rescue incidents and providing medical support.

ARFF Rescue Services Program

For 90 percent of all low risk – one, ARFF rescue incidents, the total response time for the arrival of the first-due unit, staffed with two firefighters is 4 minutes and 47 seconds in metro and urban areas. The first-due unit is capable of establishing command; sizing up to determine if a ARFF response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all low risk- one ARFF rescue incidents, the total response time for the arrival of the effective response force (ERF), staffed with two firefighters is 4 minutes and 47 seconds in metro and urban areas. The effective response force (ERF) is capable of establishing patient contact; staging and apparatus set up; providing technical expertise, initiating fire attack, knowledge, skills and abilities during ARFF rescue incidents and providing medical support.

For 90 percent of all low risk – two, ARFF rescue incidents, the total response time for the arrival of the first-due unit, staffed with two firefighters is 3 minutes and 48 seconds in metro and urban areas. The first-due unit is capable of establishing command; sizing up to determine if a ARFF

response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all low risk- two ARFF rescue incidents, the total response time for the arrival of the effective response force (ERF), staffed with eight (8) firefighters is 12 minutes and 39 seconds in metro and urban areas. The effective response force (ERF) is capable of establishing patient contact; staging and apparatus set up; providing technical expertise, initiating fire attack, knowledge, skills and abilities during ARFF rescue incidents and providing medical support.

In the years of 2015-2019, FLFR did not respond to enough moderate or high ARFF incidents to efficiently evaluate.

The effective response force (ERF) for specialty teams is greatly affected by the fact that specialty units are add-on units. One engine may be dispatched to the call and once it is determined to be a specialty response, the first on scene unit may call for the additional units which greatly affects the overall response time of the ERF.

In summary, FLFR baseline performance has been as follows when compared to the BASELINE objectives:

Table 50 Low Risk Fire Suppression Baseline Performance vs Objective

Suppression Low Risk Fires 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	1:50 (n= 519)	1:34 (n= 515)	1:32 (n= 527)	1:27 (n=483)	1:35 (n=452)	1:00
Turnout Time	Turnout Time 1st Unit	2:35 (n=519)	2:45 (n=515)	2:14 (n=527)	2:14 (n=483)	2:21 (n=452)	1:20
Travel Time	Travel Time 1st Due **Distribution**	5:39 (n=519)	5:48 (n=515)	6:21 (n=527)	6:07 (n= 483)	6:20 (n=452)	4:00
	Travel Time ERF **Concentration**	6:02 (n=519)	6:02 (n=515)	6:52 (n=527)	6:32 (n=483)	6:41 (n=452)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	7:44 (n=519)	7:56 (n=515)	8:30 (n=527)	8:06 (n=483)	8:51 (n=452)	6:20
	Total Response Time ERF **Concentration**	8:07 (n= 519)	8:05 (n= 515)	8:48 (n= 527)	8:23 (n=483)	9:03 (n=452)	6:20

Table 51 Moderate Risk Fire Suppression Baseline Performance vs Objective

Suppression Moderate Risk Fires 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	1:03 (n= 27)	2:18 (n= 22)	0:53 (n= 17)	0:55 (n=28)	2:12 (n=24)	1:00
Turnout Time	Turnout Time 1st Unit	2:17 (n= 27)	2:30 (n= 22)	1:35 (n=17)	2:22 (n=28)	2:04 (n=24)	1:20
Travel Time	Travel Time 1st Due **Distribution**	4:35 (n= 27)	4:50 (n= 22)	4:11 (n=17)	4:48 (n= 28)	5:20 (n=24)	4:00
	Travel Time ERF **Concentration**	11:37 (n= 27)	10:02 (n= 22)	9:19 (n=17)	13:45 (n=28)	11:10 (n=24)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	6:44 (n= 27)	7:43 (n= 22)	5:55 (n=17)	7:05 (n=28)	7:25 (n=24)	6:20
	Total Response Time ERF **Concentration**	13:10 (n= 27)	11:10 (n= 22)	10:51 (n= 17)	14:30 (n=28)	12:26 (n=24)	10:20

Table 52 High/Special Risk Fire Suppression Baseline Performance vs Objective

Suppression High Risk Fires 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	0:50 (n= 18)	0:44 (n= 27)	0:35 (n= 13)	0:56 (n=17)	3:33 (n=13)	1:00
Turnout Time	Turnout Time 1st Unit	2:01 (n= 18)	3:00 (n= 27)	3:02 (n=13)	2:23 (n=17)	1:56 (n=13)	1:20
Travel Time	Travel Time 1st Due **Distribution**	4:55 (n= 18)	4:56 (n= 27)	5:18 (n=13)	4:00 (n= 17)	3:36 (n=13)	4:00
	Travel Time ERF **Concentration**	14:59 (n= 18)	18:36 (n= 27)	19:38 (n=13)	15:06 (n=17)	20:39 (n=13)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	5:58 (n= 18)	6:44 (n= 27)	6:04 (n=13)	5:49 (n=17)	5:35 (n=13)	6:20
	Total Response Time ERF **Concentration**	15:43 (n= 18)	19:47 (n= 27)	20:21 (n= 13)	16:17 (n=17)	21:45 (n=13)	14:20

Table 53 Low Risk EMS Baseline Performance vs Objective

EMS Low Risk 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	1:32 (n=32,655)	1:26 (n=31,300)	1:23 (n=33,374)	1:17 (n=33,382)	1:21 (n=33,637)	1:00
Turnout Time	Turnout Time 1st Unit	2:27 (n=32,655)	2:26 (n=31,300)	2:15 (n=33,374)	2:13 (n=33,382)	2:26 (n=33,637)	1:00
Travel Time	Travel Time 1st Due **Distribution**	5:41 (n=32,655)	5:49 (n=31,300)	6:06 (n=33,374)	5:47 (n=33,382)	5:55 (n=33,637)	4:00
	Travel Time ERF **Concentration**	5:42 (n=32,655)	5:50 (n=31,300)	6:07 (n=33,374)	5:48 (n=33,382)	5:56 (n=33,637)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	7:58 (n=32,655)	7:59 (n=31,300)	8:06 (n=33,374)	7:47 (n=33,382)	8:05 (n=33,637)	6:00
	Total Response Time ERF **Concentration**	7:58 (n=32,655)	8:00 (n=31,300)	8:08 (n=33,374)	7:48 (n=33,382)	8:05 (n=33,637)	6:00

Table 54 Moderate Risk EMS Baseline Performance vs Objective

EMS Moderate Risk 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	3:41 (n=26)	0:56 (n=35)	2:04 (n=35)	2:06 (n=40)	1:41 (n=43)	1:00
Turnout Time	Turnout Time 1st Unit	2:51 (n=26)	2:37 (n=35)	2:18 (n=35)	2:48 (n=40)	2:35 (n=43)	1:00
Travel Time	Travel Time 1st Due **Distribution**	5:11 (n=26)	5:49 (n=35)	5:08 (n=35)	5:06 (n=40)	5:59 (n=43)	4:00
	Travel Time ERF **Concentration**	20:45 (n=26)	0:00 (n=35)	22:07 (n=35)	16:37 (n=40)	17:35 (n=43)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	9:43 (n=26)	8:46 (n=35)	7:22 (n=35)	7:43 (n=40)	7:19 (n=43)	6:00
	Total Response Time ERF **Concentration**	23:36 (n=26)	17:56 (n=35)	22:57 (n=35)	18:18 (n=40)	20:26 (n=43)	8:20

Table 55 Low Risk HazMat Baseline Performance vs Objective

Hazmat Low Risk 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	1:45 (n=166)	1:56 (n=161)	2:18 (n=189)	2:22 (n=165)	1:31 (n=179)	1:00
Turnout Time	Turnout Time 1st Unit	2:43 (n=166)	2:58 (n=161)	2:21 (n=189)	2:32 (n=165)	2:31 (n=179)	1:20
Travel Time	Travel Time 1st Due **Distribution**	7:22 (n=166)	7:05 (n=161)	7:19 (n=189)	7:26 (n=168)	7:06 (n=179)	4:00
	Travel Time ERF **Concentration**	7:33 (n=166)	7:31 (n=161)	7:19 (n=189)	7:29 (n=168)	7:36 (n=179)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	10:21 (n=166)	9:32 (n=161)	10:27 (n=189)	9:47 (n=168)	9:25 (n=179)	6:20
	Total Response Time ERF **Concentration**	10:27 (n=166)	10:30 (n=161)	10:30 (n=189)	10:02 (n=168)	10:26 (n=179)	6:20

Table 56 Moderate Risk HazMat Baseline Performance vs Objective

Hazmat Moderate Risk 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	1:32 (n=20)	1:09 (n=21)	1:23 (n=18)	3:43 (n=14)	0:47 (n=27)	1:00
Turnout Time	Turnout Time 1st Unit	2:04 (n=20)	2:30 (n=21)	1:52 (n=18)	2:41 (n=14)	2:36 (n=27)	1:20
Travel Time	Travel Time 1st Due **Distribution**	5:09 (n=20)	5:17 (n=21)	5:51 (n=18)	6:04 (n=14)	6:10 (n=27)	4:00
	Travel Time ERF **Concentration**	21:23 (n=20)	20:25 (n=21)	16:08 (n=18)	22:45 (n=14)	20:22 (n=27)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	8:04 (n=20)	8:00 (n=21)	7:28 (n=18)	8:53 (n=14)	8:40 (n=27)	6:20
	Total Response Time ERF **Concentration**	22:52 (n=20)	22:34 (n=21)	17:59 (n=18)	23:34 (n=14)	23:14 (n=27)	10:20

Table 57 Low Risk Technical Rescue Baseline Performance vs Objective

Technical Rescue Low Risk 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	3:41 (n=34)	3:28 (n=21)	2:04 (n=20)	2:21 (n=41)	1:35 (n=36)	1:00
Turnout Time	Turnout Time 1st Unit	2:32 (n=34)	2:37 (n=21)	3:21 (n=20)	1:59 (n=41)	2:21 (n=36)	1:20
Travel Time	Travel Time 1st Due **Distribution**	5:16 (n=34)	5:49 (n=21)	5:08 (n=20)	5:06 (n=41)	6:09 (n=36)	4:00
	Travel Time ERF **Concentration**	20:01 (n=34)	16:25 (n=21)	14:04 (n=20)	14:28 (n=41)	21:01 (n=36)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	9:36 (n=34)	8:54 (n=21)	7:21 (n=20)	7:20 (n=41)	7:49 (n=36)	6:20
	Total Response Time ERF **Concentration**	21:00 (n=34)	18:23 (n=21)	15:39 (n=20)	16:43 (n=41)	23:34 (n=36)	10:20

Table 58 Moderate Risk Technical Rescue Baseline Performance vs Objective

Technical Rescue Moderate Risk 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	3:12 (n=7)	0:32 (n=8)	2:04 (n=12)	3:09 (n=21)	1:41 (n=17)	1:00
Turnout Time	Turnout Time 1st Unit	1:47 (n=7)	2:41 (n=8)	2:36 (n=12)	1:59 (n=21)	2:46 (n=17)	1:20
Travel Time	Travel Time 1st Due **Distribution**	4:31 (n=7)	5:49 (n=8)	5:19 (n=12)	3:34 (n=21)	6:34 (n=17)	4:00
	Travel Time ERF **Concentration**	18:48 (n=7)	18:46 (n=99)	15:20 (n=12)	16:03 (n=21)	19:59 (n=17)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	6:39 (n=7)	10:51 (n=88)	7:59 (n=12)	6:19 (n=21)	8:45 (n=17)	6:20
	Total Response Time ERF **Concentration**	19:54 (n=7)	20:44 (n=8)	16:43 (n=12)	18:15 (n=21)	21:32 (n=17)	10:20

Table 59 High Risk Technical Rescue Baseline Performance vs Objective

Technical Rescue High Risk 90th Percentile Times		2015*	2016 Δ	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	---	0:32 (n=1)	0:24 (n=2)	0:23 (n=6)	0:40 (n=7)	1:00
Turnout Time	Turnout Time 1st Unit	---	2:41 (n=1)	1:34 (n=2)	1:49 (n=6)	1:11 (n=7)	1:20
Travel Time	Travel Time 1st Due **Distribution**	---	4:03 (n=1)	4:17 (n=2)	2:35 (n=6)	6:53 (n=7)	4:00
	Travel Time ERF **Concentration**	---	16:47 (n=1)	22:25 (n=2)	15:22 (n=6)	23:44 (n=7)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	---	7:16 (n=1)	6:15 (n=2)	4:55 (n=6)	7:16 (n=7)	6:20
	Total Response Time ERF **Concentration**	---	20:00 (n=1)	23:45 (n=2)	15:22 (n=6)	25:45 (n=7)	14:20

*No observations for this period
Δ Less than 5 observations for this period

Table 60 Low Risk Marine Rescue Baseline Performance vs Objective

Marine Rescue Low Risk 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	2:12 (n=37)	2:41 (n=41)	3:21 (n=37)	1:32 (n=30)	2:34 (n=33)	1:00
Turnout Time	Turnout Time 1st Unit	2:54 (n=37)	2:46 (n=41)	2:09 (n=37)	2:58 (n=30)	2:40 (n=33)	1:20
Travel Time	Travel Time 1st Due **Distribution**	6:52 (n=37)	5:58 (n=41)	6:51 (n=37)	7:25 (n=30)	6:50 (n=33)	4:00
	Travel Time ERF **Concentration**	13:05 (n=37)	11:15 (n=41)	11:16 (n=37)	10:40 (n=30)	13:20 (n=33)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	10:31 (n=37)	9:05 (n=41)	9:20 (n=37)	8:48 (n=30)	9:50 (n=33)	6:20
	Total Response Time ERF **Concentration**	15:27 (n=37)	14:08 (n=41)	15:22 (n=37)	13:09 (n=30)	17:14 (n=33)	10:20

Table 61 Moderate Risk Marine Rescue Baseline Performance vs Objective

Marine Rescue Moderate Risk 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	3:41 (n=26)	0:56 (n=35)	2:04 (n=35)	2:06 (n=40)	1:41 (n=43)	1:00
Turnout Time	Turnout Time 1st Unit	2:51 (n=26)	2:37 (n=35)	2:18 (n=35)	2:48 (n=40)	2:35 (n=43)	1:20
Travel Time	Travel Time 1st Due **Distribution**	5:11 (n=26)	5:49 (n=35)	5:08 (n=35)	5:06 (n=40)	5:59 (n=43)	4:00
	Travel Time ERF **Concentration**	20:45 (n=26)	0:00 (n=35)	22:07 (n=35)	16:37 (n=40)	17:35 (n=43)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	9:43 (n=26)	8:46 (n=35)	7:22 (n=35)	7:43 (n=40)	7:19 (n=43)	6:20
	Total Response Time ERF **Concentration**	23:36 (n=26)	17:56 (n=35)	22:57 (n=35)	18:18 (n=40)	20:26 (n=43)	10:20

Table 62 Low Risk 1 ARFF Baseline Performance vs Objective

ARFF Low Risk Level 1 (ERF 2) 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	00:49 (n=52)	00:27 (n=57)	00:31 (n=43)	00:24 (n=26)	00:25 (n=51)	1:00
Turnout Time	Turnout Time 1st Unit	1:11 (n=52)	0:53 (n=57)	1:03 (n=43)	1:31 (n=26)	1:04 (n=51)	1:20
Travel Time	Travel Time 1st Due **Distribution**	3:43 (n=52)	1:17 (n=57)	3:34 (n=43)	1:40 (n=26)	3:26 (n=51)	4:00
	Travel Time ERF **Concentration**	3:43 (n=52)	1:17 (n=57)	3:34 (n=43)	2:09 (n=26)	3:26 (n=51)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	5:20 (n=52)	2:45 (n=57)	4:00 (n=43)	3:59 (n=26)	4:47 (n=51)	6:20
	Total Response Time ERF **Concentration**	5:20 (n=52)	2:45 (n=57)	4:00 (n=43)	3:59 (n=26)	4:47 (n=51)	6:20

Table 62 Low Risk 2 ARFF Baseline Performance vs Objective

ARFF Low Risk Level 2 (ERF 8) 90th Percentile Times		2015	2016	2017	2018	2019	Baseline Objective
Call Processing	Pick-up to Dispatch	7:34 (n=5)	0:19 (n=8)	0:25 (n=7)	0:22 (n=6)	0:42 (n=8)	1:00
Turnout Time	Turnout Time 1st Unit	2:13 (n=5)	1:16 (n=8)	0:56 (n=7)	1:40 (n=6)	1:17 (n=8)	1:20
Travel Time	Travel Time 1st Due **Distribution**	2:36 (n=5)	0:03 (n=8)	0:10 (n=7)	1:22 (n=6)	1:25 (n=8)	4:00
	Travel Time ERF **Concentration**	11:09 (n=5)	5:43 (n=8)	8:53 (n=7)	9:06 (n=6)	11:35 (n=8)	8:00
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	10:43 (n=5)	1:35 (n=8)	1:38 (n=7)	3:59 (n=6)	3:48 (n=8)	6:20
	Total Response Time ERF **Concentration**	12:35 (n=5)	6:02 (n=8)	9:09 (n=7)	9:54 (n=6)	12:39 (n=8)	10:20

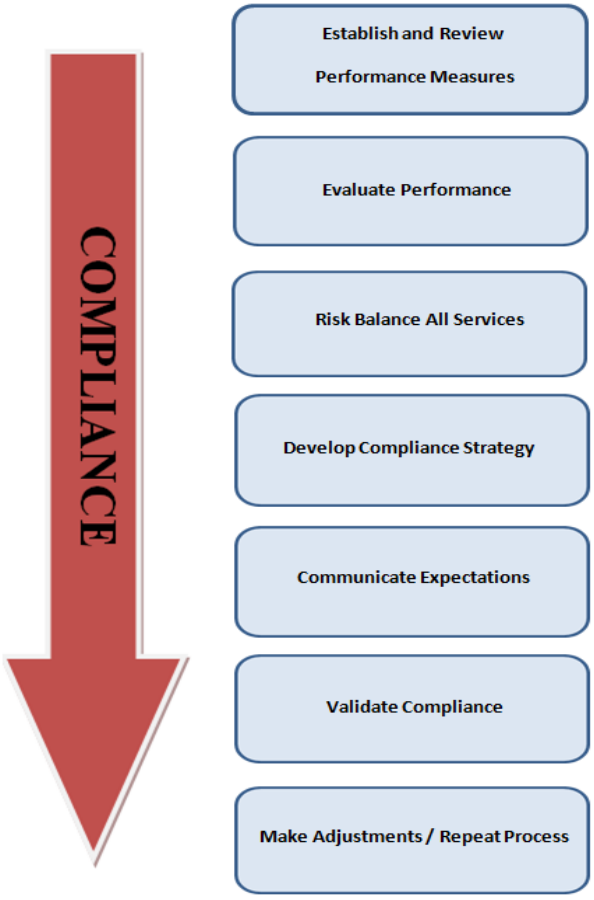
Calls based on observations (n) <10.

G. Compliance Methodology

Fort Lauderdale Fire Rescue (FLFR) has identified the following compliance methodology model which will be used to evaluate performance objectives and measures to maintain the established service levels.

"That which gets measured gets done."

Figure 58: Compliance Methodology Model



Compliance Team / Responsibility

To ensure the agency is meeting current service level objectives, continuous monitoring of service level baselines must be conducted on a regular basis. The specific roles of the members are to be identified by the Deputy Fire Chief overseeing accreditation. The Compliance Team will review service level baselines on a quarterly basis. Included in the review shall be a summary of the results of the service level objectives, a comparison of current results to previous results and calculations of the difference in results between time periods.

Performance Evaluation and Compliance Strategy

In addition to the review of service level objectives, the Compliance Team will review the response demands within each zone and the identified risks within. Additionally, the team will review community demographics and growth over the last year. The Compliance Team will determine if there have been any changes within a planning zone, changes to service demands or changes in

standards or operations that impact the service level objectives or the CR/SOC document. The evaluations will be conducted at various levels including first-due area, Unit level and ERF. In addition to the above the following will also be reviewed by the Compliance Team, fire investigation, code compliance and fire education programs; technical rescue, ARFF, marine rescue, EMS, facilities All-hazards plan and the domestic preparedness program. These reviews will be conducted by the Compliance Team on an annual basis. FLFR acknowledges during the Compliance Team reviews gaps in performance will be found and will use the findings as the main foundation to improve the overall performance of the organization and will strive for continuous improvement.

Compliance Verification Reporting

FLFR will utilize STATSFD as an analytical tool to assist FLFR in monitoring the current baselines and ultimately assist in reaching FLFR's benchmark goals. STATSFD is another tool which will aid FLFR in monitoring all aspects of time compliance. To aid in the collection and presentation of this information, the Compliance Team will work as a group to assemble all required information and assist the Accreditation Manager in the interpretation of data and considerations for improvement towards achieving targets (benchmarks). The final report will be presented to the Fire Chief by the Accreditation Manager.

Findings will be communicated quarterly to the organization via emails. Communications to the body will not only include statistics but will be used as a tool to provide feedback mechanisms and define consequences for noncompliance. Quarterly reports to the organization will include but are not limited to the following;

<u>Performance by organization</u>

- Pick-up to Dispatch
- Turnout Time 1st Unit
- Travel Time 1st Unit (Distribution)
- Travel Time ERF (Concentration)
- Total Response Time 1st Unit on Scene (Distribution)
- Total Response Time ERF (Concentration)

<u>Compliance by Station</u>

- Turnout Time
- Travel Time 1st Unit (Distribution)
- Total Response Time 1st Unit on Scene (Distribution)

<u>Compliance by Incident Type</u>

- Pick-up to Dispatch
- Turnout Time 1st Unit
- Travel Time 1st Unit (Distribution)
- Travel Time ERF (Concentration)
- Total Response Time 1st Unit on Scene (Distribution)
- Total Response Time ERF (Concentration)

In the event there are changes in policies or procedures, training will be implemented to educate the affected personnel and to communicate consequences for noncompliance.

Constant Improvement Strategy

The Accreditation Manager will continue to monitor reports relating to the CR/SOC and provide constant and continuous feedback to the organization and Fire Chief. To remain current with the CFAI Standard of Cover and Self-Assessment requirements, FLFR Compliance Team will meet on a quarterly basis to review the recorded data to date with the Accreditation Manager. During the January annual review recommendations will be made to the Fire Chief regarding changes in service to ensure ongoing compliance. An annual review/evaluation will be made available to the Fire Chief with at minimum the following recommendations: resources that can/should be reallocated, alternative methods to provide service at desired levels, budget estimates and maximization of existing resources.

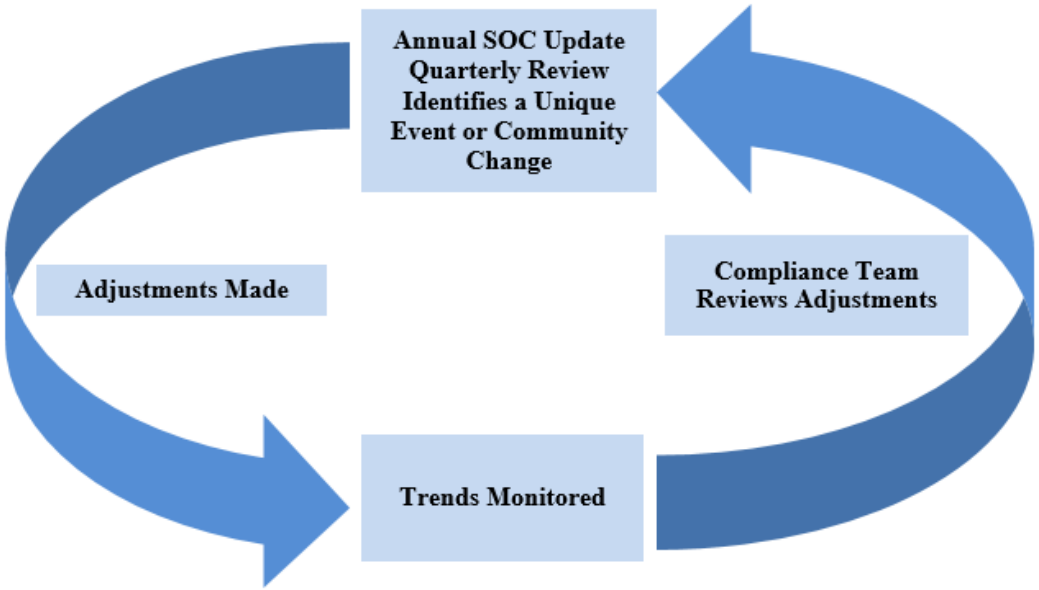
The following measures will be documented in the annual review:

- Performance by unit, first-due, and overall performance
- Compliance by time of day, day of week, month of year for each type of service
- Indication of workload may show future trends and past performance
- Review of performance
- Adjustment of service levels as deemed necessary

Balancing Risks with Capabilities

FLFR will strive to adjust the levels of service provided to meet the demands of the community served. Through the annual and quarterly reviews any unique events or changes within the community will be tracked by documenting the changes which occurred during the prior time period. FLFR will make every effort to make the necessary adjustments in the services provided by reviewing critical tasking, baseline performance objectives, etc. The review will continue throughout the year and the Compliance Team will review any adjustments which were made and the new trends will be monitored during the new reporting cycle.

Figure 59: CR/SOC Update Cycle



H. Overall Evaluation and Conclusion Recommendations

Evaluation Methodology and Determinations

Evaluation Methodology

Fort Lauderdale Fire Rescue (FLFR) followed the CFAI Standards of Cover, 6th Edition guidelines to complete the evaluations on delivery systems using the analysis and performance objectives/measures developed to this point. The initial analysis conducted was a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats). Along with the SWOT analysis an external stakeholders meeting was held to determine the community expectations. Those expectations of the community were used as the focal point of the strategic planning process. Our Mission, Values, Critical Issues, Service Gaps and Strategic Initiatives were established during the Community-Driven Strategic Planning Process. The agency can avoid distractions and mitigate obstacles by following the goals and objectives set forth in the Strategic Plan.

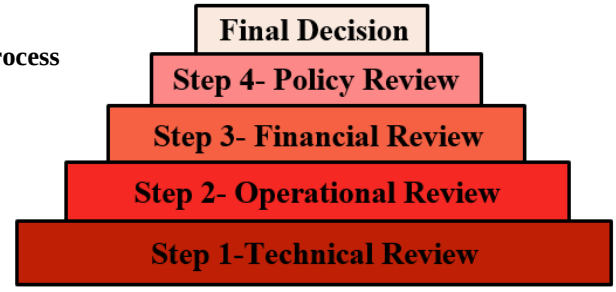
The overall evaluation process is the last component of the CR/SOC document and the recommendations were derived from information gathered during the creation of the CR/SOC. The CR/SOC is a dynamic document and as such, the self-evaluation of FLFR will be an ongoing process.

The evaluation process will utilize four steps found in the CFAI Standards of Cover 6th Edition.

1- Identification of System Strengths and Weakness
2- Development of System Opportunities/Threats
3- Conclusion/Recommendations
4- Policy Change Adoption/Validation

Once the above mentioned evaluations are completed a review will be conducted to determine if change is feasible. The process will include the following:

Figure 60: SOC Review Process



1- Technical Review- The technical review process will provide documentation of the analysis, results and conclusion of the review process. The review should include detailed identification of options, expected outcomes, rationale for changes or considerations, recommendations, basic financial impact, cost benefits / financial impact and implementation timelines.
2- Operational Review- Safety, first and foremost; will the change work in the field and will the organization support the change? What impact will the change have on the agencies overall operations?
3- Financial Review- A cost-benefit analysis will be conducted to conclude what the overall impact will be to FLFR and the City of Fort Lauderdale. Is the change worth the cost and will it be sustainable?

4- Policy Review- How does the change further the mission statement of the organization? Which alternatives best represent the organization's values? Does the change make significant impact on the level of service (good or bad)? What is the impact of growth and development? Which alternatives have unacceptable impacts and should be eliminated?

FLFR conducted an overall comprehensive evaluation which included completing a community risk assessment for fire, EMS, hazardous materials, ARFF, marine rescue and technical rescue. During the risk assessment, buildings were classified through the use of probability, consequences and agency impact methodology. FLFR reviewed historical data from past incidents and used the information gathered to complete the community risk assessment. Community risk was categorized as one of the following; low risk, moderate risk, high/special risk and maximum risk.

Historical data and previous year's calls for service were factored into the evaluations for response times and used to measure benchmark and baseline performance measures based on times from the following categories: pick-up to dispatch, turnout time 1st unit, travel time 1st unit distribution, travel time ERF concentration, total response time 1st unit on scene distribution and total response time ERF concentration at the 90th percentile.

Drive time analysis of four minutes, six minutes and eight minutes, using GIS, was conducted to determine if any areas of the city lacked adequate fire rescue coverage.

Critical task analysis was conducted for all fire, EMS, hazardous materials, ARFF, marine rescue and technical rescue. Tasks were based on low, moderate, high/special and maximum risk levels.

Company distribution and concentration analysis was completed along with a company reliability factor study was completed on first arriving out of area zone and unit hour utilization. A time of day unit response along with a FLFR time of day response study was completed. Total unit responses were analyzed, and graphs created showing responses for the year 2019 of all engines, rescues, ladders, chief officers and specialty units.

Evaluation Determinations

FLFR conducted an overall evaluation of all services including baseline and benchmark performance evaluations. FLFR evaluated low, moderate, high/special and maximum risk levels in fire, EMS, ARFF, marine rescue, technical rescue and hazardous materials. In almost all of the risk levels FLFR has fallen short in meeting the benchmark times in comparison to the standards recommended by the CPSE in Fire and Emergency Services Self-Assessment Manual, 9th edition and NFPA 1710.

Reliability – Planning Areas

FLFR operates twelve fire stations which service twelve planning areas. On a regular basis, areas of the city known to have higher call volumes, are serviced by stations which are not normally first due. Out of zone responses have extended response times due to the fact the unit responding is coming from a greater distance than the first due unit. The effect ultimately becomes a "Ripple Effect", meaning units from other zones are responding from a much greater distance and now multiple zones are left uncovered. Information gathered during the creation of the CR/SOC show out of zone unit responses occur on a regular basis which places strain on the entire system.

FLFR had units responding out of their zone as the first due unit 6,095 times in 2019. Out of zone responses were a direct result of the first-due zone unit responding to or operating at another emergency incident.

During 2019 Fire Station 2/8 required the most out of zone responses with 2,899 or 24%. Stations which service the central portions of the city (2/8, 46) required the most 2019 out of zone responses. During the year 2019, 3389 or 56% of the 6095 out of zone responses occurred in the central portion of the city. The following chart is an analysis of assigned first-due workload versus assigned first-due reliability for the year *2019.*

Table 60 First Due Workload, Responses, Availability, Calls Missed, Reliability (2019)

Fire Station	Calls For Service	Simultaneous	Simultaneous Percentage	Out of zone unit required	Unreliability Percentage
2/8	11937	4523	38%	2899	24%
3	4,939	1492	30%	650	13%
13	2,417	440	18%	240	10%
16	3,827	983	26%	394	10%
29	2,102	309	15%	312	15%
35	3,897	1015	26%	165	4%
46	6,106	2364	39%	490	8%
47	4,884	1542	32%	215	4%
49	3,050	865	28%	219	7%
53/88	2,919	616	21%	330	11%
54	2,390	424	18%	181	8%

*Units from outside the first-due area handled the call. The first due units were either responding to or already on another incident. There were 14,573 simultaneous calls dispatched in 2019 with fire station 46 having the highest percentage of occurrence at 39%. Simultaneous calls accounted for 35% of all calls within the system.

Table 61 Simultaneous Calls for Service, by Station (2019)

Fire Station	Calls For Service	Simultaneous	Percentage
2/8	11937	4523	38%
3	4,939	1492	30%
13	2,417	440	18%
16	3,827	983	26%
29	2,102	309	15%
35	3,897	1015	26%
46	6,106	2364	39%
47	4,884	1542	32%
49	3,050	865	28%
53/88	2,919	616	21%
54	2,390	424	18%

Performance Benchmarks / Baselines

Table 62 Pick-up to Dispatch Benchmark vs Baseline Performance

FLFR Performance Benchmarks 90th Percentile	Benchmark	Baseline 2017-2019	Difference
Pick-up to Dispatch Fire Low	1:00	1:32	0:32
Pick-up to Dispatch Fire Moderate	1:00	1:07	0:07
Pick-up to Dispatch Fire High/Special	1:00	1:16	0:16
Pick-up to Dispatch EMS	1:00	1:20	0:20
Pick-up to Dispatch ARFF	1:00	0:28	0:32
Pick-up to Dispatch Marine Rescue	1:00	2:37	1:37
Pick-up to Dispatch Technical Rescue	1:00	2:04	1:04
Pick-up to Dispatch Hazmat	1:00	2:15	1:15

Table 63 Turnout Benchmark vs Baseline Performance

FLFR Performance Benchmarks 90th Percentile	Benchmark	Baseline 2017-2019	Difference
Turnout Time Fire Low	1:20	2:15	0:55
Turnout Time Fire Moderate	1:20	2:11	0:51
Turnout Time Fire High/Special	1:20	2:27	1:07
Turnout Time EMS	1:00	2:19	1:19
Turnout Time ARFF	1:20	1:14	0:06
Turnout Time Marine Rescue	1:20	2:27	1:07
Turnout Time Technical Rescue	1:20	2:36	1:16
Turnout Time Hazmat	1:20	2:30	1:10

Table 64 Travel Benchmark vs Baseline Performance

FLFR Performance Benchmarks 90th Percentile	Benchmark	Baseline 2017-2019	Difference
Travel Time First Unit Fire Low	4:00	6:18	2:18
Travel Time First Unit Fire Moderate	4:00	4:51	0:51
Travel Time First Unit Fire High/Special	4:00	4:07	0:07
Travel Time First Unit EMS	4:00	5:56	1:56
Travel Time First Unit ARFF	4:00	3:18	0:42
Travel Time First Unit Marine Rescue	4:00	7:19	3:19
Travel Time First Unit Technical Rescue	4:00	5:33	1:33
Travel Time First Unit Hazmat	4:00	7:18	3:18

Conclusions

FLFR is an organization of dedicated professionals working together to provide superior fire rescue services to the City of Fort Lauderdale, Wilton Manors, and Lazy Lake. FLFR provides the community with a multitude of services from fire and emergency medical to specialty responses, achieved through Standard Operating Procedures. FLFR recognizes areas within the department which may have deficiencies and acknowledges additional improvements can be made by utilizing the CR/SOC as a guide to achieve the ultimate goal of providing superior service to the City of Fort Lauderdale, Wilton Manors, and Lazy Lake.

Recommendations from last CFAI review and current outcomes

- Relocate Battalion 35 from Fire Station 53 to Fire Station 16. Once the move is completed the position will assume the title of Battalion 16. The four, six and eight-minute drive time study shows Battalion 35 is not properly located. Relocating the position will provide better response times and help achieve the desired ERF.
  (*FLFR is dedicated to the accreditation process and has implemented this recommendation starting July 7, 2014)*.
- Reduce first unit baseline response times to incidents in all risk levels in regards to the 90th Percentile Benchmarks. *(FLFR is continually identifying and working on improving these times through monthly Accreditation meetings, as well as identifying any and all concerns line personnel report back as potential issues).*
- Acquire and staff a new fire station on the south side of the New River with an engine and rescue. The fire station will assist in covering the central portion of the city which generates the highest volume of calls. Creating an additional South side station will achieve the goal of lowering overall department response times and assist in lowering first unit out of zone responses for stations 2/8, 3 and 49. *(FLFR constructed a new Fire Station 8 on the South side which opens in 2020).*
- Add an additional rescue, stationed at Fire Station 2/8. The unit will improve the overall system performance. *(Added an additional 24-hour Rescue (R302) as well as a 12-hour peak hour Rescue (R202) to Fire Station 2). These changes took place October 2015 and March 2017.*
- Renumber the stations to properly reflect their county designation. The new fire station on the south side of the New River should be Fire Station 8. Units within Fire Station 2 should be numbered Engine 2, Ladder 2, Rescue 2, Rescue 302, and Rescue 202. *(All changes took place in 2020 when new Fire station 8 goes into service).*
- Renumber Battalion 35 suburban to Battalion 53 and remain located within Fire Station 53/88.
- Renumber Engine 88 to Engine 53. *(Takes effect in 2020 when station 8 opens).*
- Rename the existing 88 zones to zone 53A, B, C, D, E etc. *(Takes effect in 2020 when station 8 opens).*
- All paper tactical surveys should be converted over to electronic documents and placed into First Look Pro. (*FLFR implemented this process in summer 2014 with a two-year goal of converting all documents). (In 2019, FLFR converted to a new and updated software called First-Due Size-up).*
- Install timers in the stations to keep responding personnel aware of their turnout times. *(Countdown timers are currently being installed in all stations along with the new upgraded alerting system).*
- The Operations Division must be made aware of times in regard to benchmark performance measures. Reports shall be created and distributed to all members via the FLFRs email system. *(Operations AC are made aware of times through bi-monthly staff meetings, It is also distributed on the digital signage at each station for all personnel to see).*
- Evaluate and improve areas of performance identified within the CR/SOC in regard to the Effective Response Force (ERF) in all risk classifications*. (FLFR continually evaluates and makes recommendations for improvements to our times through our monthly Accreditation meetings).*

- Install digital signage televisions in all fire stations to enhance internal communications. (*FLFR initiated this process during the fall of 2014)*

I. References

City Charter Section 13-26- Legal basis for the City of Fort Lauderdale Fire Rescue

Census 2010- Population census

City of Fort Lauderdale Comprehensive Plan (ordinance C-08-18) Volume II – Parks & Rec

CPSE in Fire and Emergency Services Self-Assessment Manual, 9th edition

Florida Statutes Title XII Chapter 116 Section 116.021- Legal statute for the City of Fort Lauderdale municipality powers

NFPA 1006- Standard for Technical Rescuer Professional Qualifications

NFPA 1670- Standard on Operations and Training for Technical Search and Rescue Incidents.

J. Glossary

ACLS: Advanced Cardiac Life Support.

ALS: Advanced Life Support

AED: Automatic External Defibrillators.

AFG: Assistance to Firefighters Grant

ARFF: aircraft rescue firefighting truck.

ATF: Bureau of Alcohol Tobacco Firearms and Explosives

BC: Battalion Chief

BLS/CPR: Basic Life Support/Cardio Pulmonary Resuscitation.

C.A.D.: Computer Aided Dispatch.

CAO: City Auditors Office

CBRNE: chemical, biological, radiological, nuclear, and explosive and many other disaster situations.

CEMP: Comprehensive Emergency Management Plan.

CERT: Community Emergency Response Team

CFAI: Commission on Fire Accreditation International

CO: Carbon monoxide

Code 3 Incident: Emergency response requiring lights and sirens

COOP: The Continuity of Operations Plans

COPCN: Certificate of Public Convenience and Necessity

CPSE: Center for Public Safety Excellence

CR/SOC: Community Risk and Standards of Cover.

CTC: Certified Training Center.

ECG: Electrocardiography, recording of the electrical activity of the heart

EMS: Emergency Medical Service.

EMT: Emergency Medical Technicians.

EMT-P: Emergency Medical Technician Paramedic.

EOC: Emergency Operations Center

ePCR: electronic patient care reporting system.

ERF: Effective Response Force.

ERG: Emergency Response Guidebook.

FASAR: Florida Association of Search and Rescue

FBI: Federal Bureau of Investigation.

FEMA: Federal Emergency Management Agency.

FEMA U S & R FL-TF2: Federal Emergency Management Agency Urban Search and Rescue Florida Task Force 2

FEMA: Federal Emergency Management Agency.

FXE: Fort Lauderdale Executive Airport

FLFR: Fort Lauderdale Fire Rescue.

High/Special Risk: Incidents which require a complex incident command structure to manage a significant amount of fire suppression activity.

HMRT: hazardous materials rescue team.

HM88: Hazardous Materials Team - Hazmat 88.

HCN: Hydrogen cyanide

IAFC: International Association of Fire Chiefs.

IAFF: International Association of Firefighters.

ICW: Intracoastal Waterway.

IFT: inter-facility transports.

ISO: Insurance Services Organization.

Lifepak: Medical equipment, monitor / defibrillator

Low Risk: Incidents requiring limited incident command structure to manage a minimal amount of fire suppression activity.

Maximum Risk: Incidents which have the potential for reaching greater than four alarms and will definitely overwhelm available FLFR resources, outside mutual aid resources will be required to help mitigate the incident.

MCI: Mass casualty incidents.

MDT's: Mobile Data Terminals.

Medical Incident: Incident requiring medical treatment categorized as BLS or ALS

MMRS: Metropolitan Medical Response System.

Moderate Risk: Incidents which require a modest incident command structure to manage a fair amount of fire suppression activity.

MRU's: These Medical Rescue Units

NFPA: National Fire Protection Association

NIMS: National Incident Management System.

NIOSH: National Institute for Occupational Safety and Health

PACE Center: Enter for girls and young women which assists in providing an opportunity for a better future through education, counseling, training and advocacy

PALS: Pediatric Advanced Life Support.

PDA's: Personnel Data Assistant.

RFP's: Requests for purchase

SOPs: Standard Operating Procedures.

SNOWBIRDS: Term used for someone from the northeast or Canada who spend large portions of winter in a warmer location

"STEMI": ST elevation Myocardial Infarction.

SWAT: special weapons and tactics medics.

Squad: Specialty unit which carries specialized rescue equipment

Triptix: Emergency Medical Services reporting system.

TRT: Technical Rescue Team (rope, confined space, trench, and collapse).

UASI: Urban Area Security Initiative.

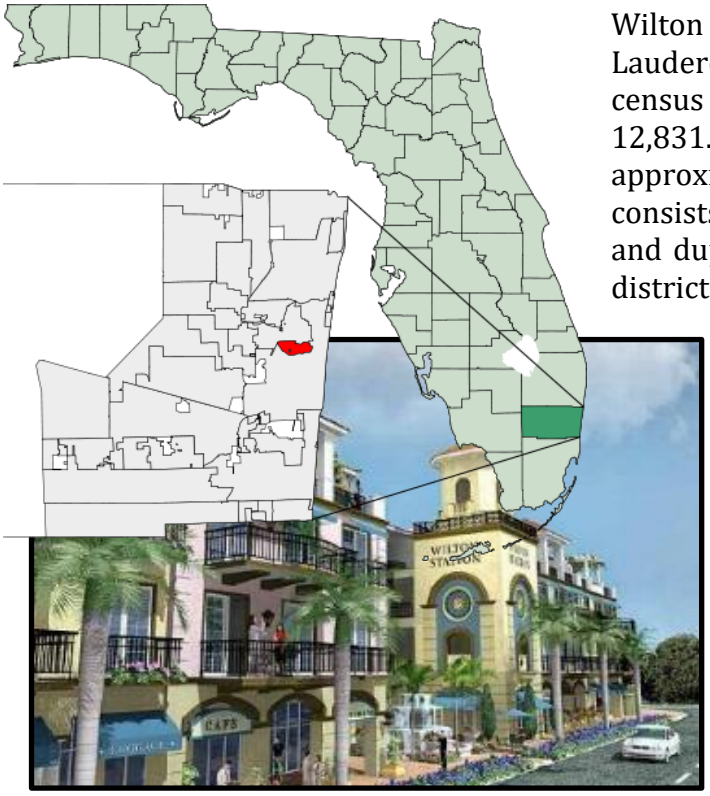
USLA: United States Life Guard Association.

VMR: Vehicle and Machine Rescue

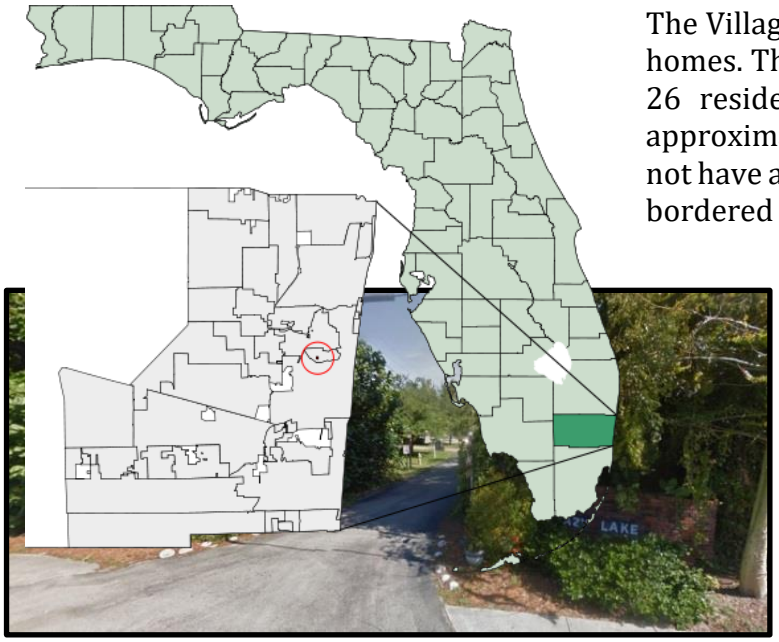
WMD: Waste Management Disposal.

K. Exhibits

Exhibit 1 – Additional Information: Wilton Manors and Lazy Lake



Wilton Manors is a city bordered by the City of Fort Lauderdale on the East, West and South. The 2018 census listed the population of Wilton Manors at 12,831. Wilton Manors has a land area of approximately 2 square miles. Wilton Manors consists mostly of single family homes, apartments and duplexes. Wilton Manors has a small business district located in the central portion of the city.



The Village of Lazy Lake is a village consisting of 15 homes. The 2018 census listed a total population of 26 residents. Total land area of Lazy Lake is approximately 0.02 square miles. Lazy Lake does not have any structures other than residential and is bordered on all sides by the City of Wilton Manors.

Exhibit 2 - High Rise Buildings, 50 foot or greater, with Generator and Standpipe

High Rise Building	Address	Planning Area
WATERGARDEN CONDO ASSN INC	347 N NEW RIVER DR	2
LAS OLAS GRAND CONDO ASSN INC	411 N NEW RIVER DR	2
LAS OLAS RIVER HOUSE CONDO ASSN INC	333 LAS OLAS WAY	2
PRII SR 200 EAST LAS OLAS OWNER LLC	200 E LAS OLAS BLVD	2
PRII SR 200 EAST LAS OLAS OWNER LLC	200 E LAS OLAS BLVD	2
SYMPHONY SOUTH CONDO ASSN INC	600 W LAS OLAS BLVD	2
LOYCA PROPERTY OWNER LLC	500 E LAS OLAS BLVD	2
RAR2-LAS OLAS CENTRE LLC%RREEF-RYAN	350 E LAS OLAS BLVD	2
RAR2-LAS OLAS CENTRE LLC%RREEF-RYAN	350 E LAS OLAS BLVD	2
RAR2-LAS OLAS CENTRE LLC %RREEF	450 E LAS OLAS BLVD	2
RAR2-LAS OLAS CENTRE LLC %RREEF	450 E LAS OLAS BLVD	2
ELEVATE ONE RIVER LLC	305 S ANDREWS AVE	2
STEELBRIDGE LAS OLAS WEST LLC	501 E LAS OLAS BLVD	2
ONE WEST LOA LLC % KOPELOWITZ OSTRO	1 W LAS OLAS BLVD	2
PERFORMING ARTS CENTER AUTHORITY	201 SW 5 AVE	2
S/OP ASSOCIATES LTD & THIRD	301 E LAS OLAS BLVD	2
TAF GG LAS OLAS LP	401 E LAS OLAS BLVD	2
200 BRICKELL LTD %STILES CORPORATIO	200 SW 1 AVE	2
200 BRICKELL LTD %STILES CORPORATIO	200 SW 1 AVE	2
MUSEUM PLAZA CONDO ASSN INC	200 S ANDREWS AVE	2
STEELBRIDGE LAS OLAS WEST LLC	515 E LAS OLAS BLVD	2
LAS OLAS RIVERFRONT LP	300 SW 1 AVE	2
FRANKLIN TEMPLETON COMPANIES LLC	300 SE 2 ST	2
350 LAS OLAS PLACE CONDO ASSN	350 SE 2 ST	2
BROWARD COUNTY BOARD OF COUNTY COMM	115 S ANDREWS AVE	2
BROWARD COUNTY BOARD OF COUNTY COMM	115 S ANDREWS AVE	2
BROWARD COUNTY BOARD OF COUNTY COMM	100 S ANDREWS AVE	2
CITY OF FORT LAUDERDALE PARKING	100 SE 1 ST	2
CAMDEN SUMMIT PARTNERSHIP LP	501 SE 2 ST	2
BROWARD COUNTY BOARD OF COUNTY COMM	151 SW 2 ST	2
W-CROCKER FIN PLACE OWNER VIII LLC	100 SE 3 AVE	2
W-CROCKER FIN PLACE OWNER VIII LLC	100 SE 3 AVE	2
STOCKBRIDGE 110 EAST BROWARD LLC %	110 E BROWARD BLVD	2
FTL 500 CORP	500 E BROWARD BLVD	2
BANYAN STREET/GAP200 EAST BROWARD	200 E BROWARD BLVD	2
WELLS FARGO TOWER	1 E BROWARD BLVD	2
IVY TOWER 101 PROPERTY LLC %IVY REA	101 NE 3 AVE	2
IVY TOWER 101 PROPERTY LLC %IVY REA	101 NE 3 AVE	2

CITY OF FORT LAUDERDALE	100 N ANDREWS AVE	2
PLAZA 100	100 NE 3 AVE	2
BRE SILVER MF EXCHANGE FL LLC % PRO	115 NE 3 AVE	2
AT&T	211 NE 2 ST	2
NOLA LOFTS CONDO ASSN I INC	313 NE 2 ST	2
APPLE NINE HOSPITALITY OWNERSHIP IN	250 N ANDREWS AVE	2
ECLIPSE WEST ASSOCIATES LTD	307 NW 1 AVE	2
STRADA 315 CONDO ASSN INC	315 NE 3 AVE	2
THE FOUNDRY LOFTS CONDO ASSN INC	411 NW 1 AVE	2
THE MILL CONDO ASSN INC	410 NW 1 AVE	2
EXTRA SPACE STORAGE	421 NW 1 AVE	2
AVENUE LOFTS CONDO ASSOC INC	425 N ANDREWS AVE	2
PPF AMLI 440 NE 4TH AVENUE LLC % AM	440 NE 4 AVE	2
PPF AMLI 440 NE 4TH AVENUE LLC % AM	450 NE 5 ST	2
PPF AMLI 440 NE 4TH AVENUE LLC % AM	450 NE 5 ST	2
AVENUE LOFTS CONDO ASSOC INC	434 NW 1 AVE	2
AVENUE LOFTS CONDO ASSOC INC	435 N ANDREWS AVE	2
THE EDGE - BUILDING 1	495 N FEDERAL HWY	2
THE EDGE - PARKING GARAGE	495 N FEDERAL HWY	2
THE EDGE - BUILDING 4	495 N FEDERAL HWY	2
THE EDGE - BUILDING 3	495 N FEDERAL HWY	2
THE EDGE - BUILDING 2	495 N FEDERAL HWY	2
AVENUE LOFTS CONDO ASSOC INC	444 NW 1 AVE	2
AVENUE LOFTS CONDO ASSOC INC	445 N ANDREWS AVE	2
ALEXAN PARKING GARAGE	408 NE 6 ST	2
ALEXAN	408 NE 6 ST	2
T-C THE MANOR AT FLAGLER VILLAGE LL	501 NE 5 TER	2
T-C THE MANOR AT FLAGLER VILLAGE LL	501 NE 5 TER	2
SOLE AT FORT LAUD CONDO ASSN INC	533 NE 3 AVE	2
HTG FORT LAUDERDALE LLC	720 NE 4 AVE	2
RIVERCREST APTS INC	818 SE 4 ST	2
CHATEAU MAR CONDO ASSN INC	800 SE 4 ST	2
LAS OLAS RIVERSIDE HOTEL CO	620 SAGAMORE RD	2
THE LAS OLAS COMPANY INC	620 SAGAMORE RD	2
LAS OLAS RIVERSIDE HOTEL CO	620 E LAS OLAS BLVD	2
THE LAS OLAS COMPANY INC	600 E LAS OLAS BLVD	2
HIMMARSHEE LANDING HOMEOWNERS ASSOC	1200 E LAS OLAS BLVD	2
LAS OLAS PLACE II LLC	1200 E LAS OLAS BLVD	2
THE LAS OLAS COMPANY INC	888 E LAS OLAS BLVD	2
AMARAY LAS OLAS BY WINDSOR LLC%LE	215 SE 8 AVE	2
CHATEAU WEIN OFF LAS OLAS INC	900 SE 2 ST	2
VENEZIA LAS OLAS CONDO ASSOC INC	111 SE 8 AVE	2

C U M INCORPORATED	800 E BROWARD BLVD	2
PINE CREST VILLAGE I CONDO ASSN INC	1501 E BROWARD BLVD	2
PINE CREST VILLAGE I CONDO ASSN INC	1515 E BROWARD BLVD	2
THE WAVERLY AT LAS OLAS CONDO	110 N FEDERAL HWY	2
GADDIS PROPERTIES LLC	460 N FEDERAL HWY	2
LOFTS AT TARPON RIVER LLC %PINNACLE	805 SE 3 AVE	2
LOFTS AT TARPON RIVER LLC %PINNACLE	805 SE 3 AVE	2
COURTHOUSE LEGAL CENTER ASSN	888 SE 3 AVE	2
BP Q LLC %ADAM G WALKER	817 SE 2 AVE	2
HRE/SEIFIRA COURTHOUSE PLACE LLC %H	12 SE 7 ST	2
HRE/SEIFIRA COURTHOUSE PLACE LLC %H	12 SE 7 ST	2
THIRD AVENUE LTD PRTNR % PHIL DISQU	707 SE 3 AVE	2
BROWARD COUNTY BOARD OF COUNTY COMM	612 S ANDREWS AVE	2
FAZIO LIMITED PRTNRSHIP % INDUSTRY	633 S ANDREWS AVE	2
SCHERER REALTY LLLP	633 S FEDERAL HWY	2
SCHOOL BOARD OF BROWARD COUNTY	600 SE 3 AVE	2
GV IP 110 TOWER OWNER LLC % GEM REA	110 SE 6 ST	2
FIDELITY PROPERTIES TRUST INC	200 SE 6 ST	2
HARARE DEV INC	600 S ANDREWS AVE	2
BROWARD COUNTY BOARD OF COUNTY COMM	540 SE 3 AVE	2
LAS OLAS BY THE RIVER CONDO ASSN IN	520 SE 5 AVE	2
BROWARD COUNTY BOARD OF COUNTY COMM	555 SE 1 AVE	2
BROWARD COUNTY BOARD OF COUNTY COMM	201 SE 6 ST	2
BROWARD COUNTY BOARD OF COUNTY COMM	201 SE 6 ST	2
VU NEW RIVER	510 SE 5 AVE	2
NURIVER LANDING CONDO ASSN INC	511 SE 5 AVE	2
TRG NEW RIVER II LTD	400 SW 1 AVE	2
TRG NEW II RIVER LTD	400 SW 1 AVE	2
WISDOM VILLAGE CROSSING LP	615 N ANDREWS AVE	2
RELIANCE-PROGRESSO ASSOCIATES LTD	619 N ANDREWS AVE	2
FAIRFIELD FLAGLER LP %FF REALTY II	673 NE 3 AVE	2
NOVA SOUTHEASTERN UNIVERSITY INC FA	3100 SW 9 AVE	3
HOLIDAY INN EXPRESS	1150 W 84 SR	3
CANDLEWOOD HOTEL	1120 W 84 SR	3
VH FORT LAUDERDALE INVEST LTD	2301 SW 12 AVE	3
FLL HOTELS INC	455 SE 24 ST	3
FLL HOTELS INC	455 SE 24 ST	3
WDF-4 WOOD HARBOR PARK OWNER LLC	1919 SE 10 AVE	3
ASHANTI HOLDINGS / HYATT PLACE	1851 SE 10 AVE	3
SHELINI HOSPITALITY FT LAUDERDALE L	1800 S FEDERAL HWY	3
GREG DETTMAN INC	500 SE 17 ST	3
NORTH BROWARD HOSPITAL DISTRICT	150 SE 17 ST	3

NORTH BROWARD HOSPITAL DISTRICT	303 SE 17 ST	3
RUNAWAY BAY CONDO APTS INC	1625 SE 10 AVE	3
NORTH BROWARD HOSPITAL DISTRICT	1625 SE 3 AVE	3
NORTH BROWARD HOSPITAL DISTRICT	1608 SE 3 AVE	3
NORTH BROWARD HOSPITAL DISTRICT	1600 S ANDREWS AVE	3
NORTH BROWARD HOSPITAL DISTRICT	1512 S ANDREWS AVE	3
NORTH BROWARD HOSPITAL DISTRICT	210 SE 14 ST	3
HOUSING AUTHORITY OF THE CITY OF FO	425 SW 4 AVE	3
ESPLANADE ON THE NEW RIVER	401 SW 4 AVE	3
HOTEL AT MARINA BAY LLC	2161 W 84 SR	3
FALLS AT MARINA BAY LP - BLDG 5	2610 E MARINA BAY DR	3
FALLS AT MARINA BAY LP - BLDG 4	2610 E MARINA BAY DR	3
CITY OF FORT LAUDERDALE	1300 W BROWARD BLVD	8
FTL HOUSING/SUNNY REACH ACRES	100 SW 18 AVE	8
HPT IHG-2 PROPERTIES TR	999 N FTL BEACH BLVD	13
PARK TOWER ASSOCIATION INC	1151 N FTL BEACH BLVD	13
1200 CLUB CONDO ASSN INC	1200 N FTL BEACH BLVD	13
HARBOR HOUSE EAST CONDO ASSN	9 N BIRCH RD	13
HARBOR HAVEN CONDO ASSN	95 N BIRCH RD	13
CWI-GG RCFL PROPERTY OWNER LLC %RYA	1 N FTL BEACH BLVD	13
SOME LIKE IT HAUTE	17 S FTL BEACH BLVD	13
BEACH PLACE	17 S FTL BEACH BLVD	13
MARRIOTT OWNERSHIP RESORTS INC ATTN	21 S FTL BEACH BLVD	13
HARBOR HOUSE NORTH INC	101 N BIRCH RD	13
SEASIDE MAGIC RESORT LLC	205 N FTL BEACH BLVD	13
SEASONS CONDO ASSN OF FT LAUD INC	209 N FTL BEACH BLVD	13
ALHAMBRA PLACE CONDO ASSN	209 N BIRCH RD	13
THE VERSAILLES INC	215 N BIRCH RD	13
WESTIN CONVENTION CENTER	303 N FTL BEACH BLVD	13
DIAMONDROCK FL OWNER LLC	303 N FTL BEACH BLVD	13
DIAMONDROCK FL OWNER LLC	321 N FTL BEACH BLVD	13
SPRING TIDE APTS INC	345 N FTL BEACH BLVD	13
BIRCH POINTE CONDO ASSN	301 N BIRCH RD	13
CAPRI HOTEL LLC	401 N FTL BEACH BLVD	13
BIRCH CREST APTS INC	336 N BIRCH RD	13
FTL YACHT & BEACH CLUB CONDO ASSN I	341 N BIRCH RD	13
LEISURE HOUSE ASSN INC	3000 RIOMAR ST	13
Q CLUB RESORT & RESIDENCES	505 N FTL BEACH BLVD	13
BAYSHORE TOWERS OF FORT LAUD INC	511 BAYSHORE DR	13
FLB HOTEL LLC	551 N FTL BEACH BLVD	13
BRITANNIA CONDO ASSN INC	524 ORTON AVE	13
OPP ATLANTIC, LLC	601 N FTL BEACH BLVD	13

SEA CLUB OCEAN RESORT HOTEL INC	619 N FTL BEACH BLVD	13
NORTH BEACH HOTEL LLC	551 BREAKERS AVE	13
BIRCH SQUARE ASSOC INC	600 N BIRCH RD	13
BIRCH SQUARE ASSOC INC	3003 TERRAMAR ST	13
THE GALLERY CONDO ASSN INC	619 ORTON AVE	13
LA CASCADE CONDO ASSN INC	615 BAYSHORE DR	13
SANDY ZAGHLI	701 N FTL BEACH BLVD	13
HAWTHORNE EAST INC	711 N BIRCH RD	13
NAUTICAL TOWERS CONDO ASSN INC	720 BAYSHORE DR	13
LA RIVE CONDO ASSN INC	715 BAYSHORE DR	13
LEISURE SANDS ASSOCIATION INC	720 ORTON AVE	13
AMERICAS ON THE PARK ASSN	777 BAYSHORE DR	13
LE CLUB INTL CONDO ASSN	2845 NE 9 ST	13
BREAKERS OF FT LAUD CONDO ASSOC	909 BREAKERS AVE	13
SUNRISE EAST CONDO INC	2800 E SUNRISE BLVD	13
CARLTON TOWER CONDO ASSN INC	3000 E SUNRISE BLVD	13
SUNRISE HARBOUR MULTIFAMILY INC	1030 SEMINOLE DR	13
GCC CONDO ASSN INC	2455 E SUNRISE BLVD	13
SUNRISE & BAYVIEW PARTNERS LLC	1040 BAYVIEW DR	13
HORIZON HOUSE CONDO ASSN INC	2555 NE 11 ST	13
ADAGIO ON THE BAY CONDO ASSN INC	1110 SEMINOLE DR	13
ROYALE MANAGEMENT COMPANY	1332 BAYVIEW DR	13
PORTO VENEZIA CONDO ASSN INC	2765 NE 14 ST	13
2801 CLUB INC	2801 NE 14 ST	13
SUNRISE TOWER CONDO ASSN	888 INTRACOASTAL DR	13
THE OCEAN SUNRISE INC	2400 NE 9 ST	13
VICTORIA PARK TOWER ASSN INC	900 NE 18 AVE	13
TRULUCK'S	2584 E SUNRISE BLVD	13
CAPITAL GRILLE OF FT LAUD	2430 E SUNRISE BLVD	13
Q-1/1006/PF CHANG'S	2418 E SUNRISE BLVD	13
KEYSTONE-FLORIDA PROPERTY HOLD	2414 E SUNRISE BLVD	13
GALLERIA PROFESSIONAL BUILDING	915 MIDDLE RIVER DR	13
S-2/1008/BLUE MARTINI	2432 E SUNRISE BLVD	13
SBARRO	2436 E SUNRISE BLVD	13
DEJ HOTELS LLC	2670 E SUNRISE BLVD	13
CORINTHIAN INTRACOASTAL ASSN	936 INTRACOASTAL DR	13
DILLARD DEPARTMENT STORES INC	2500 E SUNRISE BLVD	13
GS SUNRISE SUBSIDIARY LLC % GREYSTA	1640 E SUNRISE BLVD	13
GS SUNRISE SUBSIDIARY LLC % GREYSTA	1700 E SUNRISE BLVD	13
GS SUNRISE SUBSIDIARY LLC % GREYSTA	1600 E SUNRISE BLVD	13
MACYS	2314 E SUNRISE BLVD	13
% NEIMAN GROUP INC-PROP TAX DEPT	2442 E SUNRISE BLVD	13

CK 8 INVESTMENT LLC	1800 N ANDREWS AVE	16
SATORI GARDENS/BLDG #2	1030 NE 11 AVE	29
SATORI GARDENS PARKING GARAGE	1021 NE 12 AVE	29
SATORI GARDENS BLDG # 3	1111 E SUNRISE BLVD	29
SUNRISE INVESTORS LLP % MONOGRAM RE	1020 NE 12 AVE	29
SATORI GARDENS, BLDG 4	1201 E SUNRISE BLVD	29
LEASEFLORIDA SUNRISE LLC	1975 E SUNRISE BLVD	29
SATORI GARDENS BUILDING # 1	1015 E SUNRISE BLVD	29
EAST POINT TOWERS CONDO INC	1160 N FEDERAL HWY	29
EAST POINT TOWERS CONDO INC	1170 N FEDERAL HWY	29
PREMIER RIVA LLC	1180 N FEDERAL HWY	29
MIDDLE RIVER TOWER INC	1881 MIDDLE RIVER DR	29
4800 MEDICAL COMPLEX LLC	4800 NE 20 TER	35
VALERIE INCORPORATED % HOLY CROSS H	4701 N FEDERAL HWY	35
VALERIE INCORPORATED % HOLY CROSS H	4701 N FEDERAL HWY	35
VALERIE INCORPORATED % HOLY CROSS H	4701 N FEDERAL HWY	35
HOLY CROSS HOSPITAL INC ATT:LEGAL A	4725 N FEDERAL HWY	35
HEART & VASCULAR/JIM MORAN	4725 N FEDERAL HWY	35
HOLY CROSS HOSPITAL INC %LEGAL AFFA	4875 N FEDERAL HWY	35
AFFIRMED CORP	5001 N FEDERAL HWY	35
IMPERIAL POINT CONDO ASSN OF FT LAU	6000 NE 22 WAY	35
AVP INVEST LLC	6245 N FEDERAL HWY	35
NORTH BROWARD HOSPITAL DISTRICT	6401 N FEDERAL HWY	35
PARKING(MASTER)GARAGE/ATLANTECH TWR	6451 N FEDERAL HWY	35
ROC III FAIRLEAD BAYVIEW CORPORATE	6451 N FEDERAL HWY	35
BMIRF MANOR LLC % BERKSHIRE GROUP	2400 NE 65 ST	35
LAUDERDALE ONE CONDO ASSN INC	2411 NE 65 ST	35
LAUDERDALE ONE CONDO ASSN INC	2401 NE 65 ST	35
LAUDERDALE ONE CONDO ASSN INC	2421 NE 65 ST	35
ACS COMMERCIAL LLC	2425 E COMMERCIAL BLVD	35
STONEGATE BANK	2929 E COMMERCIAL BLVD	35
HERITAGE LANDINGS ASSOCIATION INC	3121 NE 51 ST	35
THE WARWICK CONDO ASSN INC	5100 DUPONT BLVD	35
HERITAGE LANDINGS ASSOCIATION INC	3111 NE 51 ST	35
5554 SOUTHERN STAR LLC	5554 N FEDERAL HWY	35
CUSHMAN & WAKEFIELD	6550 N FEDERAL HWY	35
PORT ROYALE JV PHASE I LLC %DEVELOP	3343 S PORT ROYALE DR	35
PORT ROYALE JV PHASE I LLC %DEVELOP	3321 S PORT ROYALE DR	35
PORT ROYALE JV PHASE I LLC %DEVELOP	3307 S PORT ROYALE DR	35
PORT ROYALE JV PHASE I LLC %DEVELOP	3333 S PORT ROYALE DR	35

THE TOWER AT PORT ROYALE CONDO ASSN	3200 N PORT ROYALE DR	35
WESTCHESTER HOUSE ASSOC INC	3080 NE 47 CT	35
WINSTON HOUSE ASSOC INC	3050 NE 47 CT	35
WILSHIRE EAST ASSN INC	3101 NE 47 CT	35
COUNTRY CLUB TOWERS ASSN INC	2500 NE 48 LN	35
RIDGEVIEW TOWERS INC	3051 NE 48 ST	35
PILOT HOUSE CONDO ASSN INC	3100 NE 48 ST	35
CORAL TOWERS CONDO ASSN INC	4800 BAYVIEW DR	35
CARDINAL POINT MANAGEMENT	2400 E COMMERCIAL BLVD	35
CARDINAL POINT MANAGEMENT	2400 E COMMERCIAL BLVD	35
ROYAL MARINER OF FORT LAUD INC	3100 NE 49 ST	35
800 CYPRESS ASSOC LLC	800 NE 62 ST	35
COLE INTERNATIONAL INVESTMENTS LLC	800 NE 62 ST	35
WESTIN FORT LAUDERDALE	400 CORPORATE DR	35
% CUSHMAN & WAKEFIELD OF FL	600 CORPORATE DR	35
RCC II INC % CUSHMAN & WAKEFIELD	800 CORPORATE DR	35
RADICE III CORP	1000 CORPORATE DR	35
LAUDERDALE TOWER CONDO ASSN INC	2900 NE 3 ST	47
SKY HARBOUR EAST INC	2100 S OCEAN DR	49
POINT OF AMERICAS CNDO APTS II INC	2200 S OCEAN LN	49
EVERGLADES HOUSE CONDO APTS INC	2000 S OCEAN DR	49
POINT OF AMERICA CONDO COMMON AREA	2100 S OCEAN LN	49
ATLANTIC TOWERS CORP	1920 S OCEAN DR	49
BREAKWATER TOWERS CORP	1900 S OCEAN DR	49
LAKE MAYAN APARTMENTS INC	1850 S OCEAN DR	49
PIER 66 VENTURES LLC %TAVISTOCK DEV	2301 SE 17 ST	49
MARRIOTT HARBOR BEACH	3030 HOLIDAY DR	49
MAYA MARCA CONDO APTS INC	3000 HOLIDAY DR	49
HARBOUR CONDO/ATTRI DEV	3010 HOLIDAY DR	49
COCONUT GROVE RESIDENCES ON	1200 HOLIDAY DR	49
CRP INSITE CLIPPER LLC % THE CARLYL	1136 HOLIDAY DR	49
CRP INSITE CLIPPER LLC % THE CARLYL	1140 SEABREEZE BLVD	49
HARBOURAGE PLACE CONDO ASSN INC	3055 HARBOR DR	49
CRP INSITE CLIPPER LLC %THE CARLYLE	1101 SEABREEZE BLVD	49
KPC ASSOCIATES LLC	3030 HARBOR DR	49
RADISSON BAHIA MAR BCH RESORT	801 SEABREEZE BLVD	49
BAHIA MAR MOTOR LODGE	801 SEABREEZE BLVD	49
ILLINI ASSOCIATION INC	545 S FTL BEACH BLVD	49
SUMMIT HOSPITALITY 134 LLC % SUMMIT	440 SEABREEZE BLVD	49
VENETIAN CONDOMINIUM INC	1 LAS OLAS CIR	49

LEISURE BEACH SOUTH INC	2900 BANYAN ST	49
LEISURE BEACH ASSOCIATION INC	200 S BIRCH RD	49
JACKSON TOWER LAS OLAS CONDO ASSN I	100 S BIRCH RD	49
LAS OLAS BEACH CLUB CONDO ASSN	101 S FTL BEACH BLVD	49
PORTOFINO INTRACOASTAL ASSN INC	77 S BIRCH RD	49
RIVIERA TOWERS INC	401 RIVIERA ISLE DR	49
FOUR SEASONS CONDO ASSN INC	333 SUNSET DR	49
ESSEX TOWER CONDO ASSN	340 SUNSET DR	49
1750 LAS OLAS INC% PREMIER ASSOCIAT	1750 E LAS OLAS BLVD	49
LAS OLAS VILLAS CONDO ASSN INC	1770 E LAS OLAS BLVD	49
MAISON BLANC ON LAS OLAS CONDO ASSN	1760 E LAS OLAS BLVD	49
THE VILLAS OF SUNSET LAKES ASSOC IN	321 SUNSET DR	49
FT LAUDERDALE HOSPITAL	1601 E LAS OLAS BLVD	49
MARINE TOWER CONDOMINIUM INC	2500 E LAS OLAS BLVD	49
MERITAGE CONDO ASSN INC	40 HENDRICKS ISLE	49
MERITAGE CONDO ASSN INC	48 HENDRICKS ISLE	49
REFLECTIONS OF LAS OLAS CONDO ASSN	25 HENDRICKS ISLE	49
AQUALUNA LAS OLAS CONDO ASSN INC	20 ISLE OF VENICE DR	49
AQUAMAR LAS OLAS CONDO ASSN INC	21 ISLE OF VENICE DR	49
ISLAND HOUSE EAST INC	40 ISLE OF VENICE DR	49
45 HENDRICKS CONDO ASSN INC	45 HENDRICKS ISLE	49
AQUAVITA LAS OLAS CONDO ASSN INC	70 HENDRICKS ISLE	49
TERRACES OF THE ISLES OWNER ASSN IN	110 HENDRICKS ISLE	49
PLACE DES ARTS HOLDING LLC	301 HENDRICKS ISLE	49
VENICE ISLE TOWER ASSN INC	155 ISLE OF VENICE DR	49
THE OASIS OF NURMI ISLES INC	180 ISLE OF VENICE DR	49
THE CLUB AT HENDRICKS ISLE CONDO AS	444 HENDRICKS ISLE	49
GRAND PALAZZO HENDRICKS LLC	516 HENDRICKS ISLE	49
BROWARD COUNTY BOARD OF COUNTY COMM	2000 EISENHOWER BLVD	49
BROWARD COUNTY BOARD OF COUNTY COMM	1950 EISENHOWER BLVD	49
FT LAUDERDALE ES HOTEL L L C	1100 SE 17 ST	49
THE PORT CONDO ASSN INC	1819 SE 17 ST	49
NF III FT LAUDERDALE LLC	1617 SE 17 ST	49
BSREP III FORT LAUDERDALE LLC % BRO	1881 SE 17 ST	49
BROADSTONE HARBOR BEACH	1721 SE 17 ST	49
ART INSTITUTE INVESTMENT LLC	1799 SE 17 ST	49
ART INSTITUTE INVESTMENT LLC	1799 SE 17 ST	49
MARK I CONDO HOMEOWNERS ASSN INC	1050 SE 15 ST	49
PLAZA 15 CONDO ASSN INC	1600 SE 15 ST	49
PLAZA 15 CONDO ASSN INC	1600 SE 15 ST	49
CARAVEL CONDO ASSN INC	1700 SE 15 ST	49
CORDOVA ARMS LLC	1401 SE 15 ST	49

EMBASSY CONDO APTS ASSN INC	1475 SE 15 ST	49
SOUTHAMPTON APT OWNERS ASSN INC	1617 SE 15 ST	49
CROMWELL WEST INC	1731 SE 15 ST	49
L'HERMITAGE I CONDO ASSN INC	3100 N OCEAN BLVD	54
L'HERMITAGE II CONDO ASSN INC	3200 N OCEAN BLVD	54
THE CONTINENTAL CONDO ASSN INC	3233 NE 32 AVE	54
THE MARACAY ASSN INC	3301 NE 32 AVE	54
IL LUGANO,LLC	3333 NE 32 AVE	54
3400 INVESTMENT PROPERTY LLC	3400 NE 34 ST	54
SOUTHPOINT CONDO ASSN INC	3400 GALT OCEAN DR	54
SOUTHPOINT CONDO ASSN INC	3410 GALT OCEAN DR	54
GALT MILE APARTMENTS INC	3233 NE 34 ST	54
GALT VIEW APARTMENTS INC	3333 NE 34 ST	54
THE COMMODORE CONDO APTS INC	3430 GALT OCEAN DR	54
PLAYA DEL SOL ASSOC INC	3500 GALT OCEAN DR	54
GALT PLAZA APARTMENTS INC	3200 NE 36 ST	54
CORAL RIDGE TOWERS EAST CO-OP	3300 NE 36 ST	54
RIVIERA CONDOMINIUM ASSOCIATION	3550 GALT OCEAN DR	54
EDGEWATER ARMS INC	3600 GALT OCEAN DR	54
ROYAL AMBASSADOR CONDO ASSN INC	3700 GALT OCEAN DR	54
REGENCY TOWERS SOUTH ASSN INC	3750 GALT OCEAN DR	54
GALT OCEAN CLUB CONDO ASSN INC	3800 GALT OCEAN DR	54
REGENCY TOWER ASSOC INC	3850 GALT OCEAN DR	54
PLAYA DEL MAR ASSOC INC	3900 GALT OCEAN DR	54
OCEAN SUMMIT ASSOC INC	4010 GALT OCEAN DR	54
ATLANTIC OCEAN CLUB CONDO APTS INC	4020 GALT OCEAN DR	54
OCEAN MANOR CONDO ASSOC	4040 GALT OCEAN DR	54
PLAZA BEACH HOTEL CORP % TIDAN CONS	4060 GALT OCEAN DR	54
THE GALLEON CONDO APTS INC	4100 GALT OCEAN DR	54
L'AMBIANCE BEACH CONDO ASSN INC	4240 GALT OCEAN DR	54
GALT TOWERS CONDO ASSN INC	4250 GALT OCEAN DR	54
PLAZA SOUTH ASSN INC	4280 GALT OCEAN DR	54
PLAZA EAST ASSOC INC	4300 N OCEAN BLVD	54
SUNNYVALE CORP N V	3000 NE 30 PL	54
SUNNYVALE CORP N V	3000 NE 30 PL	54
BERKLEY GROUP INC	2626 E OAKLAND PARK BLVD	54
BAYVIEW OFFICE PLAZA LLC %JAMES L C	2810 E OAKLAND PARK BLVD	54
L.A.I., INC	2900 E OAKLAND PARK BLVD	54
SYMPHONY AT THE WATERWAYS	3001 E OAKLAND PARK BLVD	54

2601 M L FUND LLC	2601 E OAKLAND PARK BLVD	54
HAWTHORNE MANOR CONDO ASSN INC	2880 NE 33 CT	54
THE CAMBRIDGE INC	2900 NE 33 CT	54
IMPERIAL CONDOMINIUM INC %ON CALL M	2829 NE 33 CT	54
BARCLAY SQUARE CONDO ASSN INC	2841 NE 33 CT	54
CARLYLE ASSOCIATION INC,THE	2881 NE 33 CT	54
LSN PROPERTY GROUP LLC % ASCEDANT R	3600 N FEDERAL HWY	54
VILLA OCTAGON CONDO ASSN INC	1900 N OCEAN BLVD	54
THE SHORE CLUB CONDO ASSN INC	1901 N OCEAN BLVD	54
THE SHORE CLUB CONDO ASSN INC	1901 N OCEAN BLVD	54
JEFAST PELICAN GRAND I LLC	2000 N OCEAN BLVD	54
VUE CONDOMINIUM ASSN INC	2001 N OCEAN BLVD	54
VUE CONDOMINIUM ASSN INC	2011 N OCEAN BLVD	54
SUN TOWER INVESTMENTS INC % BRUSCO	2030 N ATLANTIC BLVD	54
PALMS 2100 MASTER ASSOCIATION INC	2100 N OCEAN BLVD	54
PALMS 2100 TOWER TWO CONDO ASSN IN	2110 N OCEAN BLVD	54
WHITE EGRET CONDOMINIUM ASSN INC	2200 NE 33 AVE	54
EVERGLADES CLUB CONDO ASSN INC	2300 NE 33 AVE	54
THE FOUNTAINS ON OCEAN BLVD CONDO	2401 N OCEAN BLVD	54
THE FOUNTAINS ON OCEAN BLVD CONDO	2409 N OCEAN BLVD	54
THE FOUNTAINS ON OCEAN BLVD CONDO	2501 N OCEAN BLVD	54
THE FOUNTAINS ON OCEAN BLVD CONDO	2509 N OCEAN BLVD	54
THE FOUNTAINS ON OCEAN BLVD CONDO	2401 N OCEAN BLVD	54
EMBASSY TOWER INC	2701 N OCEAN BLVD	54
LE CERCLE BY THE BEACH CONDO A	3250 NE 28 ST	54
EMBASSY TOWER II INC	2715 N OCEAN BLVD	54
ALAGON INC	3100 NE 28 ST	54
SAPPHIRE FT LAUD CONDO ASSN INC	2821 N OCEAN BLVD	54
SAPPHIRE FT LAUD CONDO ASSN INC	2831 N OCEAN BLVD	54
SAPPHIRE FT LAUD CONDO ASSN INC	2821 N OCEAN BLVD	54
SEA TOWER LAND CORPORATION	2840 N OCEAN BLVD	54
MARLIN TOWERS INC	3200 NE 29 ST	54
LEISURE TERRACE ASSN INC	3100 NE 29 ST	54
VANTAGE VIEW INC	2841 N OCEAN BLVD	54
BERKLEY SOUTH CONDO ASSN INC	3015 N OCEAN BLVD	54
THE TIDES AT BRIDGESIDE SQUARE COND	3020 NE 32 AVE	54
GALT OCEAN TERRACE CONDO ASSN INC	3031 N OCEAN BLVD	54
MAINSTREET REAL ESTATE	100 NW 62 ST	88
MAINSTREET REAL ESTATE	100 NW 62 ST	88
G & I VII PINNACLE LLC % DRA ADVISO	550 NW 62 ST	88
G & I VII PINNACLE LLC % DRA ADVISO	500 NW 62 ST	88

200 WEST CYPRESS CREEK LLC	200 NW 62 ST	88
ICM VII CYPRESS LP	1901 NW 62 ST	88
CITRIX SYSTEMS INC	899 NW 62 ST	88
CITRIX SYSTEMS INC	899 NW 62 ST	88
CITRIX SYSTEMS INC	851 NW 62 ST	88
SHERATON SUITES CYPRESS CREEK	555 NW 62 ST	88
FL16 FORT LAUDERDALE LLC	6363 NW 6 WAY	88
DELMA REALTY SERVICES	6301 NW 5 WAY	88
STEELBRIDGE CFC LLC	5900 N ANDREWS AVE	88
6400 BUILDING LLC	6400 N ANDREWS AVE	88
C B RICHARD ELLIS	6600 N ANDREWS AVE	88
TPG FT LAUDERDALE LLC % THE PROCACC	6650 N ANDREWS AVE	88
CPN WEST LLC %CYPRESS PARK WEST I	6750 N ANDREWS AVE	88
CPN WEST LLC %CYPRESS PARK WEST I	6750 N ANDREWS AVE	88
CPN WEST LLC %CYPRESS PARK WEST I	6700 N ANDREWS AVE	88
SPECTRUM 1500 BUILDING ASSOC LTD	1500 NW 49 ST	88
SPECTRUM PARK I JOINT VENTURE % ALA	4901 NW 17 WAY	88
NRNS ACQUISITION 2101 COMMERCIAL LL	2101 W COMMERCIAL BLVD	88

Exhibit 3 – Breakdown of Incident Types and District Responses (2019)

District	Station	EMS or Rescue	False Alarm/Call	Fire	Good Intent	Hazardous Condition	Rupture or Explosion	Service Call	Severe Weather	Special incident	Blank or Invalid	Total
02	2	2617	325	16	211	35	2	251	2	29	19	3507
02A	2	276	38	5	36	9	2	33	1	4	2	406
02B	2	628	173	15	63	25	1	84	0	6	2	997
02C	2	745	68	9	43	15	0	50	0	5	2	937
02D	2	644	29	12	46	8	0	63	0	2	2	806
District	2	4910	633	57	399	92	5	481	3	46	27	6653
03	3	654	33	7	27	6	0	53	0	3	5	788
03A	3	649	79	4	58	23	0	63	0	0	3	879
03B	3	273	22	4	31	13	0	28	0	0	5	376
03C	3	1628	130	18	146	30	0	152	0	4	9	2117
03D	3	79	8	0	6	4	0	8	0	0	1	106
03E	3	6	0	0	1	1	0	0	0	0	0	8
03F	3	262	50	7	20	6	0	36	0	0	0	381
03G	3	100	34	7	5	3	0	14	0	0	0	163
03PE	3	8	0	0	1	0	0	0	0	0	1	10
District	3	3659	356	47	295	86	0	354	0	7	24	4828
08	8	2111	122	25	119	24	1	152	2	5	14	2575
08A	8	598	21	9	34	12	0	64	0	3	2	743
08D	8	1483	76	26	120	21	4	176	1	5	8	1920
District	8	4192	219	60	273	57	5	392	3	13	24	5238
13	13	119	11	1	8	5	0	10	0	2	2	158
13A	13	623	230	5	42	17	2	54	0	6	5	984
13B	13	155	44	3	21	9	0	24	0	1	0	257
13C	13	709	100	8	53	31	0	118	0	0	1	1020
District	13	1606	385	17	124	62	2	206	0	9	8	2419
16	16	914	90	12	66	24	1	121	0	3	11	1242
16A	16	528	59	4	28	7	0	51	0	0	4	681
16B	16	561	38	10	48	22	0	57	0	0	1	737
16C	16	902	53	13	65	24	1	98	0	3	6	1165
District	16	2905	240	39	207	77	2	327	0	6	22	3825
29	29	996	108	16	91	31	0	117	0	3	5	1367
29A	29	85	20	1	9	5	0	28	0	0	0	148
29B	29	479	18	3	34	3	1	49	0	0	1	588
District	29	1560	146	20	134	39	1	194	0	3	6	2103
35	35	979	102	8	50	15	0	93	0	0	5	1252
35A	35	647	110	10	46	16	0	68	0	9	3	909
35B	35	617	61	5	43	11	0	121	1	0	2	861
35C	35	456	51	4	30	10	1	66	0	7	1	626
35D	35	192	30	3	15	1	0	12	0	1	2	256
District	35	2891	354	30	184	53	1	360	1	17	13	3904
46	46	2455	108	43	171	31	2	313	0	2	18	3143
46A	46	351	7	4	28	2	0	40	0	0	2	434
46B	46	1048	48	13	83	16	0	115	0	1	7	1331
46C	46	823	34	9	44	11	1	73	0	14	0	1009
District	46	7568	197	69	326	60	3	541	0	17	27	5917
47	47	1409	86	31	106	23	2	180	0	1	11	1849

47A	47	632	76	13	66	11	2	104	0	2	3	909
47B	47	412	51	14	31	9	0	34	0	0	3	554
47C	47	779	65	15	55	9	1	64	0	0	1	989
47D	47	205	16	1	17	3	1	22	0	0	1	266
District	47	3437	294	74	275	55	6	404	0	3	19	4567
49	49	1218	214	14	121	29	0	127	0	37	7	1767
49A	49	308	86	5	55	29	1	67	0	0	2	553
49B	49	470	107	12	42	17	2	77	0	0	2	729
District	49	1996	407	31	218	75	3	271	0	37	11	3049
53	53	54	11	1	8	116	0	4	0	0	2	196
District	53	4046	11	1	8	116	0	4	0	0	2	196
54	54	833	144	9	56	10	1	178	0	0	4	1235
54A	54	408	60	4	33	10	0	58	0	0	2	575
54B	54	367	107	4	37	15	0	47	0	1	1	579
District	54	1608	311	17	126	35	1	283	0	1	7	2389
88	88	397	102	5	56	11	0	45	0	1	1	618
88A	88	168	28	3	10	1	0	19	0	0	0	229
88B	88	248	39	3	28	2	0	24	0	10	1	355
88C	88	145	9	1	15	2	0	18	0	0	0	190
88D	88	601	66	6	36	8	0	120	0	0	4	841
88E	88	265	31	1	29	5	0	21	0	5	1	358
88F	88	95	4	1	18	0	0	7	0	0	4	129
District	88	1919	279	20	192	29	0	254	0	16	11	2720
OJ	Other	750	22	38	257	31	1	44	0	0	0	1143
Totals	0	36164	3854	520	3018	867	30	4115	7	175	201	48951

Exhibit 4 – Historical Incident Summary (2009-2019)

Calendar Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Incident Count Change from Prior Year	% Change from Prior Year
Incident Type													
Fires	605	564	611	577	530	532	600	598	598	564	523	(41)	-7.27%
Rupture/Explosions	19	27	15	21	21	20	18	19	21	32	30	(2)	-6.25%
EMS/Rescue	28,884	29,521	30,581	31,131	32,392	33,406	36,371	35,306	37,007	37,341	36,346	(995)	-2.66%
Hazardous Conditions	815	730	771	872	723	853	849	910	1,374	853	867	14	1.64%
Service Calls	1,504	1,605	1,636	1,736	2,010	2,455	5,092	5,087	4,935	4,118	4,115	(3)	-0.07%
Good Intent Calls	6,328	5,871	5,326	5,415	5,168	6,950	7,266	6,666	4,589	3,351	3,027	(324)	-9.67%
False Alarm/False Call	3,483	3,433	3,183	3,097	3,238	3,350	3,418	3,530	3,783	3,740	3,861	121	3.24%
Severe Weather/Natural Disaster	5	1	13	3	2	8	4	3	5	8	7	(1)	#####
Special Incident Type/Other	44	36	105	117	313	937	770	695	362	157	175	18	11.46%
Total Incidents	41,687	41,788	42,241	42,969	44,397	48,511	54,388	52,814	52,674	50,164	48,951	(1,213)	-2.42%
Incident Count Change from Prior Year		101	453	728	1,428	4,114	5,877	(1,574)	(140)	(2,510)	(1,213)		
% Change From Prior Year		0.24%	1.08%	1.72%	3.32%	9.27%	12.11%	-2.89%	-0.27%	-4.77%	-2.42%		

Exhibit 5 – Breakdown of NFRS Codes by Incident (2017-2019)

Incident Description	Sub Description	2017	2018	2019	% of Sub-Totals Incidents 3 Yrs	% of Total Incidents 3 Yrs	YOY Chg Previous Yr
1 - Fire		4	2	2	0.47%	0.01%	0
100 - Fire, other		22	19	26	3.98%	0.04%	7
1000 - Fire Call No Hazards Found		17	10	6	1.96%	0.02%	-4
11 - Structure Fire	Structural	1	2	1	0.24%	0.00%	-1
111 - Building fire	Structural	90	107	70	15.85%	0.18%	-37
112 - Fires in structures other than in a building	Structural	5	8	4	1.01%	0.01%	-4
113 - Cooking fire, confined to container		56	54	50	9.50%	0.11%	-4
1131 - Cooking fire, confined to oven		19	24	34	4.57%	0.05%	10
114 - Chimney or flue fire, confined to chimney or flue		1			0.06%	0.00%	0
116 - Fuel burner/boiler malfunction, fire confined				2	0.12%	0.00%	2
117 - Commercial Compactor fire, confined to rubbish		2			0.12%	0.00%	0
118 - Trash or rubbish fire, contained		65	36	32	7.89%	0.09%	-4
121 - Fire in mobile home used as fixed residence	Structural	3		2	0.30%	0.00%	2
122 - Fire in motor home, camper, recreational vehicle	Structural	1	1		0.12%	0.00%	-1
123 - Fire in portable building, fixed location	Structural	4	1		0.30%	0.00%	-1
130 - Mobile property (vehicle) fire, other	Vehicle	14	11	11	2.14%	0.02%	0
131 - Passenger vehicle fire	Vehicle	85	103	93	16.68%	0.19%	-10
132 - Road freight or transport vehicle fire	Vehicle	9	1	6	0.95%	0.01%	5
134 - Water vehicle fire	Vehicle	12	17	14	2.55%	0.03%	-3
135 - Aircraft fire	Vehicle		1		0.06%	0.00%	-1
138 - Off-road vehicle or heavy equipment fire	Vehicle		1	1	0.12%	0.00%	0
140 - Natural vegetation fire, other		17	14	8	2.31%	0.03%	-6
141 - Forest, woods or wildland fire			3	1	0.24%	0.00%	-2
142 - Brush, or brush and grass mixture fire		29	29	23	4.81%	0.05%	-6
143 - Grass fire		11	10	8	1.72%	0.02%	-2
150 - Outside rubbish fire, other	Outside	27	21	17	3.86%	0.04%	-4
151 - Outside rubbish, trash or waste fire	Outside	50	45	49	8.55%	0.09%	4
153 - Construction or demolition landfill fire	Outside	1			0.06%	0.00%	0
154 - Dumpster or other outside trash receptacle fire	Outside	27	24	28	4.69%	0.05%	4

155 - Outside stationary compactor/compacted trash fire	Outside	2		1	0.18%	0.00%	1
160 - Special outside fire, other	Outside	6	2	10	1.07%	0.01%	8
161 - Outside storage fire	Outside	3	3	4	0.59%	0.01%	1
162 - Outside equipment fire	Outside	12	11	19	2.49%	0.03%	8
163 - Outside gas or vapor combustion explosion	Outside	2	1		0.18%	0.00%	-1
170 - Cultivated vegetation, crop fire, other	Outside			1	0.06%	0.00%	1
173 - Cultivated trees or nursery stock fire	Outside	1	3		0.24%	0.00%	-3
Subtotal - Fires		**598**	**564**	**523**	**100%**	**1.11%**	-41
200 - Overpressure rupture, explosion, overheat other				3	3.61%	0.00%	3
210 - Overpressure rupture from steam, other				1	1.20%	0.00%	1
211 - Overpressure rupture of steam pipe or pipeline		1			1.20%	0.00%	0
212 - Overpressure rupture of steam boiler			1		1.20%	0.00%	-1
213 - Steam rupture of pressure or process vessel		1			1.20%	0.00%	0
220 - Overpressure rupture from air or gas, other		1	1	1	3.61%	0.00%	0
221 - Overpressure rupture of air or gas pipe/pipeline		2			2.41%	0.00%	0
240 - Explosion (no fire), other		10	15	16	49.40%	0.02%	1
241 - Munitions or bomb explosion (no fire)			1		1.20%	0.00%	-1
243 - Fireworks explosion (no fire)		1	4	1	7.23%	0.00%	-3
251 - Excessive heat, scorch burns with no ignition		5	10	8	27.71%	0.01%	-2
Subtotal - Overpressure Rupture, Explosion, Overheat - no fire		**21**	**32**	**30**	**100%**	**0.04%**	-2
3 - Rescue		54	398		0.41%	0.30%	-398
300 - Rescue, emergency medical call (EMS) call, other		206	226	216	0.59%	0.43%	-10
3000 - EMS Call No Medical Need		2713	2752	2669	7.35%	5.36%	-83
300H - Assisted Homeless, No Medical Need		684	951	798	2.20%	1.60%	-153
300I - Inter-Facility		46	7	8	0.06%	0.04%	1
300S - Suicide Attempt/Thoughts		3	21	12	0.03%	0.02%	-9
31 - Medical			1	3	0.00%	0.00%	2
311 - Medical assist, assist EMS crew		194	95	123	0.37%	0.27%	28
311M - EMS PCR (Under Separate Cover)		29313	28895	28409	78.25%	57.06%	-486
32 - Emergency medical service, other		14	44	179	0.21%	0.16%	135
320 - Emergency medical service, other		250	186	114	0.50%	0.36%	-72

321 - EMS call, excluding vehicle accident with injury		114	148	266	0.48%	0.35%	118
322 - Vehicle accident with injuries	VA w/o Ex	1224	1259	1146	3.28%	2.39%	-113
322H - Highway Vehicle accident with injuries	VA w/o Ex		45	143	0.17%	0.12%	98
323 - Motor vehicle/Pedistrian	VA w/o Ex	87	83	90	0.23%	0.17%	7
323B - Motor vehicle/Bicycle	VA w/o Ex	62	61	74	0.18%	0.13%	13
324 - Motor vehicle accident with no injuries	VA w/o Ex	1277	1201	985	3.13%	2.28%	-216
324H - Highway Motor vehicle accident with no injuries	VA w/o Ex		35	142	0.16%	0.12%	107
331 - Lock-in (if lock out , use 511)	Other Rescue	10	13	9	0.03%	0.02%	-4
340 - Search, other	Other Rescue	2	4	7	0.01%	0.01%	3
341 - Search for person on land	Other Rescue	7	8	3	0.02%	0.01%	-5
342 - Search for person in water	Other Rescue	19	8	14	0.04%	0.03%	6
350 - Extrication, rescue, other	Other Rescue	3	3	3	0.01%	0.01%	0
350T - TRT Response	Other Rescue	2	5	10	0.02%	0.01%	5
351 - Extrication of victim(s) from building/structure	Other Rescue	3	1	2	0.01%	0.00%	1
352 - Extrication of victim(s) from vehicle	Vehicle Extr	11	18	17	0.04%	0.03%	-1
353 - Removal of victim(s) from stalled elevator	Other Rescue	545	649	688	1.70%	1.24%	39
354 - Trench/below grade rescue	Other Rescue	1			0.00%	0.00%	0
356 - High angle rescue	Other Rescue	2		1	0.00%	0.00%	1
357 - Extrication of victim(s) from machinery	Other Rescue		2		0.00%	0.00%	-2
360 - Marine Rescue Other	Other Rescue	27	44	31	0.09%	0.07%	-13
360D - Dive Rescue	Other Rescue	4	6	5	0.01%	0.01%	-1
361 - Swimming/recreational water areas rescue	Other Rescue	15	11	16	0.04%	0.03%	5
363 - Swift water rescue	Other Rescue	2	3	2	0.01%	0.00%	-1
364 - Surf rescue	Other Rescue	7	5	2	0.01%	0.01%	-3
365 - Watercraft rescue	Other Rescue	38	35	39	0.10%	0.07%	4
370 - Electrical rescue, other	Other Rescue		1	1	0.00%	0.00%	0
371 - Electrocution or potential electrocution	Other Rescue	1	1		0.00%	0.00%	-1
372 - Trapped by power lines	Other Rescue		1	1	0.00%	0.00%	0
381 - Rescue or EMS standby	Other Rescue	67	114	118	0.27%	0.20%	4
Subtotal - Rescue & Emergency Medical Service Incidents		**37007**	**37340**	**36346**	**100%**	**72.93%**	**-994**

400 - Hazardous condition, other		68	55	42	5.33%	0.11%	-13
410 - Flammable gas or liquid condition, other		8	1	9	0.58%	0.01%	8
411 - Gasoline or other flammable liquid spill		60	43	27	4.20%	0.09%	-16
412 - Gas leak (natural gas or LPG)		70	78	107	8.24%	0.17%	29
413 - Oil or other combustible liquid spill		21	15	10	1.49%	0.03%	-5
420 - Toxic condition, other		1	2	5	0.26%	0.01%	3
421 - Chemical hazard (no spill or leak)		4	4	3	0.36%	0.01%	-1
422 - Chemical spill or leak		11	4	5	0.65%	0.01%	1
423 - Refrigeration leak		3		1	0.13%	0.00%	1
424 - Carbon monoxide incident		5	2	6	0.42%	0.01%	4
430 - Radioactive condition, other			1		0.03%	0.00%	-1
440 - Electrical wiring/equipment problem, other		219	159	127	16.32%	0.33%	-32
441 - Heat from short circuit (wiring), defective/worn		21	7	19	1.52%	0.03%	12
442 - Overheated motor		45	42	35	3.94%	0.08%	-7
443 - Light ballast breakdown		4	5	4	0.42%	0.01%	-1
444 - Power line down		450	177	188	26.34%	0.54%	11
445 - Arcing, shorted electrical equipment		235	125	125	15.68%	0.32%	0
451 - Biological hazard, confirmed or suspected		5	1	4	0.32%	0.01%	3
460 - Acident other		6	1	3	0.32%	0.01%	2
461 - Building or structure weakened or collapsed		1	4	7	0.39%	0.01%	3
462 - Aircraft Stand by		3	4	3	0.32%	0.01%	-1
4621 - Aircraft / Alert 1		6	4	1	0.36%	0.01%	-3
4622 - Aircraft / Alert 2		28	21	26	2.42%	0.05%	5
4623 - Aircraft / Alert 3		3	6	4	0.42%	0.01%	-2
4624 - Aircraft / Refueling Standby		79	67	80	7.30%	0.15%	13
463 - Vehicle accident, general cleanup		12	8	15	1.13%	0.02%	7
4631 - Vehicle accident, assisted OJ Agency		3	5	5	0.42%	0.01%	0
471 - Explosive, bomb removal (for bomb scare, use 721)		1	2		0.10%	0.00%	-2
480 - Attempted burning, illegal action, other			4	3	0.23%	0.00%	-1
481 - Attempt to burn		1	5	3	0.29%	0.01%	-2
482 - Threat to burn		1	1		0.06%	0.00%	-1
Subtotal - Hazardous Conditions (No fire)		**1374**	**853**	**867**	**100.00%**	**2.04%**	**14**
500 - Public Serivce Other		1437	1064	821	25.23%	2.19%	-243
510 - Assisted Public		501	650	896	15.55%	1.35%	246
511 - Lock-out		44	36	63	1.09%	0.09%	27

5110 - Lock-in / No medical treatment or need		125	84	59	2.04%	0.18%	-25
512 - Ring or jewelry removal		5	4	5	0.11%	0.01%	1
520 - Water problem, other		98	87	77	1.99%	0.17%	-10
521 - Water evacuation		4	2	2	0.06%	0.01%	0
522 - Water or steam leak		102	110	115	2.48%	0.22%	5
531 - Smoke or odor removal		53	38	43	1.02%	0.09%	5
540 - Animal problem, other		17	18	10	0.34%	0.03%	-8
541 - Animal problem		43	44	29	0.88%	0.08%	-15
542 - Animal rescue		128	165	159	3.43%	0.30%	-6
551 - Assist police or other governmental agency		263	194	174	4.79%	0.42%	-20
551S - Standy for PD No Medical Need		448	471	472	10.56%	0.92%	1
553 - Public Service Other		605			4.59%	0.40%	0
554 - Lift Assist		966	1069	1111	23.89%	2.07%	42
555 - Defective elevator, no occupants		70	67	65	1.53%	0.13%	-2
561 - Unauthorized burning		11	8	5	0.18%	0.02%	-3
571 - Cover assignment, standby, moveup		15	7	8	0.23%	0.02%	1
Subtotal - Service Call		**4935**	**4118**	**4114**	**100%**	**8.67%**	-4
6 - Good intent call, other		2	5	8	0.14%	0.01%	3
611 - Dispatched & cancelled en route		1378	1407	1310	37.34%	2.70%	-97
611A - Dispatched & cancelled en route ARFF		4	3		0.06%	0.00%	-3
611B - Called referred to Battalion Chief		218	197	175	5.38%	0.39%	-22
611D - Call Created by Error		636	180	115	8.49%	0.61%	-65
611E - EMS: Dispatched & Cancelled En Route		211			1.92%	0.14%	0
611H - Mutual Aide Haz Mat cancelled en route		5	10	3	0.16%	0.01%	-7
611M - Marine/ Water Incident, Cancelled		31	64	74	1.54%	0.11%	10
611N - Dispatched & cancelled		383	326	248	8.73%	0.63%	-78
611P - Referred to PD		835	515	468	16.58%	1.20%	-47
611S - Suicde Thoughts		7	47	19	0.67%	0.05%	-28
611T - TRT Mutual Aide cancelled en route				1	0.01%	0.00%	1
611W - Water Rescue Cancelled by Ocean Rescue		4	3	1	0.07%	0.01%	-2
621 - Wrong location		482	315	310	10.09%	0.73%	-5
631 - Authorized controlled burning		4	7	4	0.14%	0.01%	-3
641 - Vicinity alarm (incident in other location)		8	2	1	0.10%	0.01%	-1
65 - Steam, other gas mistaken for smoke, other				1	0.01%	0.00%	1
650 - Steam, other gas mistaken for smoke, other		20	16	15	0.47%	0.03%	-1
651 - Smoke scare, odor of smoke		214	186	221	5.66%	0.41%	35

652 - Steam, vapor, fog or dust thought to be smoke		32	28	22	0.75%	0.05%	-6
653 - Barbecue, tar kettle		3	3	2	0.07%	0.01%	-1
661 - EMS call, party transported by non-fire agency		80			0.73%	0.05%	0
671 - Hazmat release investigation w/ no hazmat		29	33	27	0.81%	0.06%	-6
672 - Biological hazard investigation, none found		3	4	2	0.08%	0.01%	-2
Subtotal - Good Intent Call		**4589**	**3351**	**3027**	**100%**	**7.23%**	**-324**
7 - False Alarm/False Call		7	7	7	0.18%	0.01%	0
700 - False alarm or false call, other		426	397	442	11.11%	0.83%	45
7005 - Single-Unit Alarm Response		683	832	1084	22.83%	1.71%	252
710 - Malicious, mischievous false call, other		74	71	64	1.84%	0.14%	-7
711 - Municipal alarm system, malicious false alarm		34	12	16	0.54%	0.04%	4
712 - Direct tie to FD, malicious/false alarm			1	2	0.03%	0.00%	1
713 - Telephone, malicious false alarm			4	1	0.04%	0.00%	-3
714 - Central station, malicious false alarm		9	12	14	0.31%	0.02%	2
715 - Local alarm system, malicious false alarm		15	19	15	0.43%	0.03%	-4
721 - Bomb scare - no bomb		11	11	13	0.31%	0.02%	2
730 - System malfunction, other		100	76	80	2.25%	0.17%	4
731 - Sprinkler activation due to malfunction		12	8	8	0.25%	0.02%	0
732 - Extinguishing system activation due to malfunction		1	2	1	0.04%	0.00%	-1
733 - Smoke detector activation due to malfunction		173	161	143	4.19%	0.31%	-18
734 - Heat detector activation due to malfunction		12	7	14	0.29%	0.02%	7
735 - Alarm system sounded due to malfunction		367	368	320	9.27%	0.70%	-48
736 - CO detector activation due to malfunction		28	24	21	0.64%	0.05%	-3
740 - Unintentional transmission of alarm, other		349	330	276	8.39%	0.63%	-54
741 - Sprinkler activation, no fire - unintentional		37	23	31	0.80%	0.06%	8
742 - Extinguishing system activation		5	2	1	0.07%	0.01%	-1
743 - Smoke detector activation, no fire - unintentional		615	586	519	15.11%	1.13%	-67
744 - Detector activation, no fire - unintentional		249	269	274	6.96%	0.52%	5
745 - Alarm system sounded, no fire - unintentional		562	514	500	13.84%	1.04%	-14
746 - Carbon monoxide detector activation, no CO		14	4	15	0.29%	0.02%	11
Subtotal - False Alarm & False Call		**3783**	**3740**	**3861**	**100%**	**7.50%**	**121**

800 - Severe weather or natural disaster, other		2			10.00%	0.00%	0
812 - Flood assessment		1		5	30.00%	0.00%	5
813 - Wind storm, tornado/hurricane assessment			3		15.00%	0.00%	-3
814 - Lightning strike (no fire)		2	5	2	45.00%	0.01%	-3
Subtotal - Severe Weather & Natural Disaster		5	8	7	100%	0.01%	-1
900 - Special type of incident, other		1			0.14%	0.00%	0
9002 - Community Outreach		5	2	4	1.59%	0.01%	2
9003 - Demo		16	6	2	3.46%	0.02%	-4
9004 - Code no longer in use		138	1	2	20.32%	0.09%	1
9005 - Special Detail		160	124	145	61.82%	0.28%	21
9006 - Baby Sleep Safe		1	1	6	1.15%	0.01%	5
9007 - Tactical Survey		31	15	8	7.78%	0.04%	-7
911 - Citizen complaint		10	8	8	3.75%	0.02%	0
Subtotal - Special Incident Type		362	157	175	100.00%	0.46%	18

Annual Total Incidents from Breakdown		52674	50163	48950	100%	100%	-1213

Subtotal - Fires		598	564	523		1.11%	-41
Subtotal - Overpressure Rupture, Explosion, Overheat - no fire		21	32	30		0.05%	-2
Subtotal - Rescue & Emergency Medical Service Incidents		37007	37340	36346		72.93%	-994
Subtotal - Hazardous Conditions (No fire)		1374	853	867		2.04%	14
Subtotal - Service Call		4935	4118	4114		8.67%	-4
Subtotal - Good Intent Call		4589	3351	3027		7.23%	-324
Subtotal - False Alarm & False Call		3783	3740	3861		7.50%	121
Subtotal - Severe Weather & Natural Disaster		5	8	7		0.01%	-1
Subtotal - Special Incident Type		362	157	175		0.46%	18
Grand Total Incidents Annually from Summary Above		52674	50163	48950		100.00%	-1213

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