2021

Community Risk Assessment & Standards of Cover

MONTGOMERY

FIRE / RESCUE

Fire Chief Miford Jordan

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INTRODUCTION

This report serves as the Montgomery Fire/Rescue (MFR) Community Risk Assessment: Standards of Cover document. The Commission on Fire Accreditation International (CFAI) defines the process known as "deployment analysis" as written policies and procedures that determine the distribution, concentration, and reliability of fixed and mobile response forces for fire, emergency medical services, hazardous materials and other forces of the technical response. This document conforms to the 6th edition of the CFAI Standards of Cover guidelines.

The creation of this Standards of Cover/Community Risk Assessment was a collaboration internally and with external stakeholders and required that a number of key areas be researched, studied, and evaluated. The report begins with an overview of both the community and the fire service. Following this overview, the agency will discuss areas such as risk assessment, critical task analysis, agency service level objectives, and distribution and concentration measures. The MFR will provide documentation of reliability studies and historical performance through charts and graphs. This report concludes with policy recommendations.

Montgomery Fire/Rescue is an "ALL-Hazards" Department providing an emergency medical response, fire suppression, technical rescue, hazardous materials response, fire inspections, public education, investigation, community training, and education. MFR strives to provide the highest quality services to protect the lives, property, and environment of the community.

The command staff of Montgomery Fire/Rescue has reviewed the data that has been collected and has endorsed the plan for maintaining and improving performance. Continuous quality improvement is the cornerstone to providing best practice service delivery to the citizens, and the performance plans will push the organization further to providing those best practices. Many people have contributed their time and talents to this process, which has taken several years to complete. The

Standards of Cover document will be updated on a regular basis as new data is evaluated and plans are put in place to improve performance.

EXECUTIVE SUMMARY

Montgomery Fire/Rescue has been serving the citizens of Montgomery for more than 120 years. MFR is committed to providing the best equipment, expert training, and highly qualified personnel to ensure that the Capital City receives the highest quality service. Our goal is to be the most respected and admired fire department in the entire southeast region by providing excellent fire protection for our citizens, visitors, and the city's vast resources and historical elements. Rapid response times and trained personnel distinguish a great department from one that is mediocre, and we will work tirelessly to maintain our position as a leader in the fire service.

The department has garnered the well-deserved respect of the profession and continues to set the bar as a model agency. The City of Montgomery has been awarded the highest possible rating for fire services, earning a Public Protection Classification of "1" from the Insurance Services Office for providing superior protection. Montgomery joins an elite group of municipalities that have achieved this top rating — less than 1 percent nationwide — and represents the first class "1" rating ever awarded in the state of Alabama. ISO ratings are the nationwide standard by which community fire protective services are evaluated. Virtually all insurance companies in the United States use this data to establish fire insurance premiums. Lower ISO ratings help secure lower fire insurance premiums for both residential and commercial customers. The major portion of the public protection survey is an evaluation of the capabilities of Montgomery Fire/Rescue, including equipment, staffing, training, geographic distribution, community risk reduction and response times. The survey also takes into account the capabilities of the Department of Emergency Communications and Montgomery Water Works, assessing telephone systems, telephone lines, staffing, dispatch systems, and the city's water supply system, including the condition and maintenance of hydrants and the amount of water available and needed to suppress fires. From its Top ISO Rating to its World Champion Combat Challenge Team, Montgomery Fire/Rescue always strives to be the best. MFR has enjoyed a long-standing recognition in the fire service community; recognized nationwide as a leader in aggressive emergency service delivery.

To provide efficient, effective and professional public service to all residents and to those who work in and visit the Capital City, Montgomery Fire/Rescue made the decision to pursue fire service accreditation through the Center for Public Safety Excellence. The accreditation process has allowed the agency to qualify and quantify, with a significant level of confidence, a true measure of the quality of service provided. It also clearly identified areas that needed improvement and programs that needed to be implemented. Accreditation has allowed the classification/analysis of the various other areas of services provided, including emergency medical services, hazardous materials response, technical rescue handling, non-emergent activities, and an in-depth community risk assessment which aids the agency leaders in policy and practices decision making. The process of fire service accreditation continues to guide MFR through a comprehensive assessment that determines an acceptable and

appropriate level of safe and effective performance. This is achieved through an ongoing thorough self-assessment of operations, practices, and policies, which are then reviewed by outside peers in fire service leadership positions. Coupled with the self-assessment process, the comprehensive Strategic Plan is centered on the expectations of MFR as viewed by citizens, business leaders, and internal stakeholders. The final component of the accreditation submission is the Community Risk Assessment and Standards of Cover document. Montgomery Fire/Rescue continues to develop an in-depth Community Risk Assessment of incident types to identify the fire and non-fire risks that are both common and unique to the city, separated into the various territories of each District. The Standards of Cover reviews MFR's level of services and identifies the level of both a qualitative and quantitative nature in the service provided to each of the defined zones. This review permits the application of industry-standard performance levels, as well as permits MFR to establish a level of standard throughout its jurisdiction. Meeting these goals with the Standards of Cover, future station and resource deployment planning will always be enhanced while maintaining an understanding of the workload and unit allocation.

In conclusion, Montgomery Fire/Rescue recognizes the value of the tools the process of accreditation provides. This Standards of Cover is a dynamic document that reflects the changing needs of Montgomery Fire/Rescue. A high level of confidence and pride is gained by the leadership and personnel of MFR that the most effective and efficient emergency service delivery is being provided. MFR holds a significant level of confidence that the industry best-practices, as recognized and expressed by the Commission on Fire Accreditation International, are delivered to the leadership, citizens, business owners, and visitors to the City of Montgomery.

COMMUNITY SERVED

Legal Basis and Local Governance

The City of Montgomery consists of a Mayor-Council system of government. Both the Mayor and Council are elected by the people to a four-year term. The current term is from 2020-2024. Nine Council members represent the nine districts in the city.

From the City Code of Montgomery, Alabama 1914, Governance is defined as the recognition of the authority that allows an organization or agency to legally form and operate. In fulfilling this responsibility, the legal entity that oversees this formation process reflects the public interest, protects the agency from undesirable external interference, determines basic policies for providing services and interprets the agency's activities to its constituency. The administration is defined as the activities that carry out the implementation of the policies established by the authority having jurisdiction. In fulfilling this responsibility, the agency or organization carries out day-to-day operations.

The legal entity and governing authority define the duties and responsibilities of the agency in an official policy statement, which should include a separation of powers between the policy-making function of the boards of directors or other elected officials and the executive and administrative responsibilities of those who carry out those policies. An organization's charter or local or state general statutes likely contain an agency's official policy statement.

The chief executive or chief fire officer should provide staff leadership in developing policy proposals for the legal civil authority having jurisdiction, so those officials can take action to implement public policy based upon knowledgeable input from public safety leadership. It is the primary responsibility of agency leadership that reports to an elected governing board and/or other high-ranking individuals for the execution of policy, to keep that higher authority informed on all matters affecting the agency and delivery of emergency services to the public.

It must be recognized that other organizations participate in the governance of the agency, such as the state/provincial and federal governments through legislation, regulations and funding procedures, and other organizations through associations and bargaining units. The governing board has the responsibility for the administrative activity and coordinates all of these diverse interests in order to set the direction of the agency.

The agency administration exercises responsibility for the quality of the agency through an organized system of planning, staffing, directing, coordinating, and evaluating. The agency administration is entrusted with the assets and charged to uphold its mission and programs, to ensure compliance with laws and regulations, and to provide stability and continuity to the agency.

The City of Montgomery has a mayor – Council form of government. The mayor is the formal representative of the city. Mayor Steven Reed is the current mayor of the City of Montgomery, he became the 57th mayor of the City of Montgomery after being elected on November 12, 2019. The mayor serves as head of the administrative branch of City government and holds the following responsibilities:

- Enforcing all laws and ordinances
- Appointing and removing all officers and employees of the city
- Exercising administrative supervision and control over all departments
- Keeping the Council fully advised of the financial conditions and needs of the City
- Preparing and submitting annual budgets to the Council
- Recommending actions to the Council
- Setting salaries and/or compensations of appointed officers and employees of the city

To accomplish these responsibilities the mayor maintains a cabinet of 14 members listed in the following figure (Figure 1) along with their areas of responsibility.

Staff	Title	Department
Bill Barousse	Director of City Investigations	City Investigations
Stacy Bellinger	City Attorney	Legal
Betty Beville	Finance Director	Finance, Risk Management
Brenda Blalock	City Clerk	City Clerk
Chris Conway	Director of Public Works	311 Customer Service
Carmen Douglas	Personnel Director	Personnel
Ramona Harris	Chief of Police (Interim)	Police
Miford Jordan	Fire Chief	Fire Rescue
Chip Hill	Chief of Staff	Mayor's Office
Ken Nixon	Court Administrator	Municipal Court
Tom Pierce	Director of General Services	General Services
Jamyla Philyaw	Executive Assistant to the Mayor	All
Kay Mccreery	Director of Parks and Recreation	Parks & Recreation
Yvette Jones-Smedley	Director of Cultural Affairs	City Events, Library, Museum

Table 1: Mayor's Cabinet

The nine city council members are elected at-large from the established council districts to four-year terms. The current term is from 2019-2023.

- President & District 9: Charles W. Jinright
- Vice President & District 5: Cornelius “CC” Calhoun
- District 1: Ed Grimes
- District 2: Brantley W. Lyons
- District 3: Marche Johnson
- District 4: Audrey Graham
- District 6: Oronde K. Mitchell
- District 7: Clay Anderson McInnis
- District 8: Glen O. Pruitt, Jr.

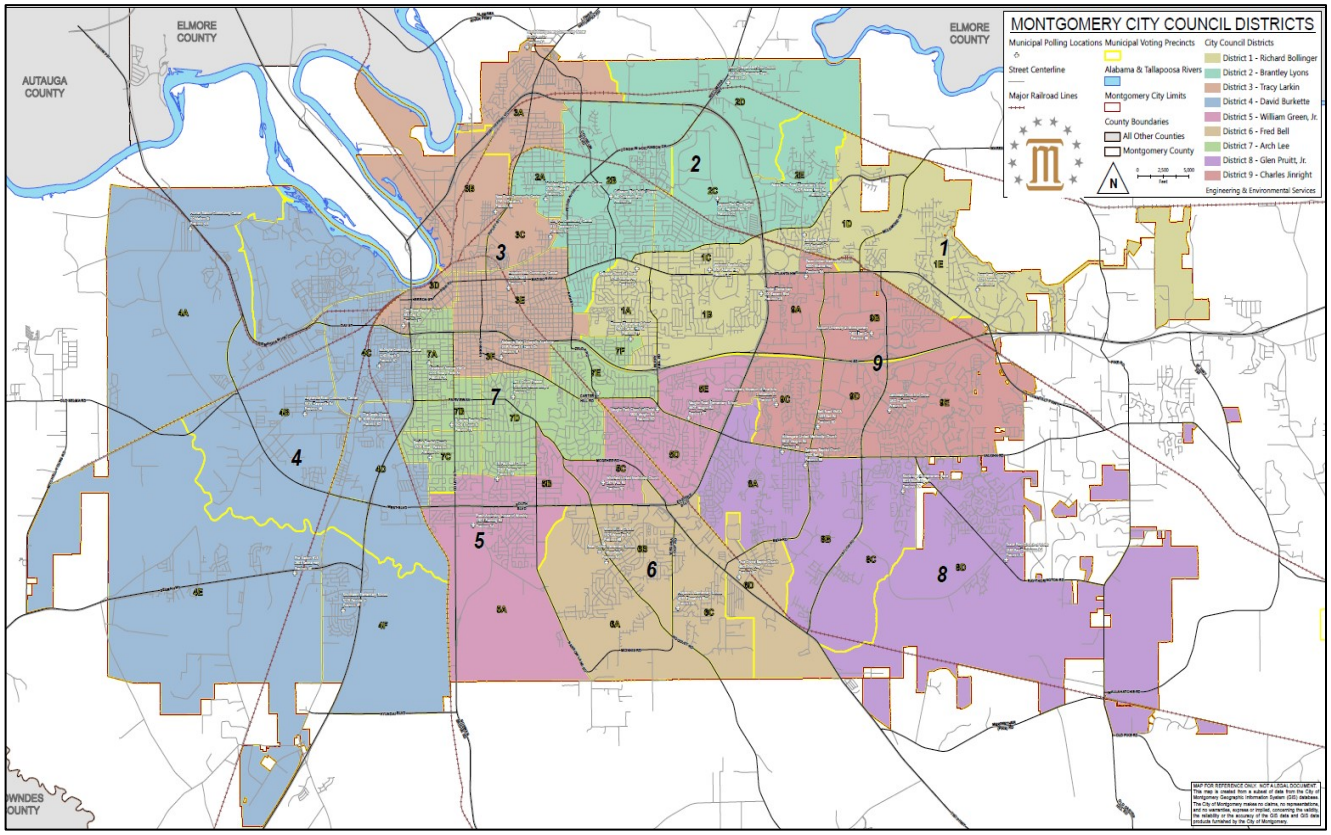


Figure 1: Council Districts

Department History & Timeline

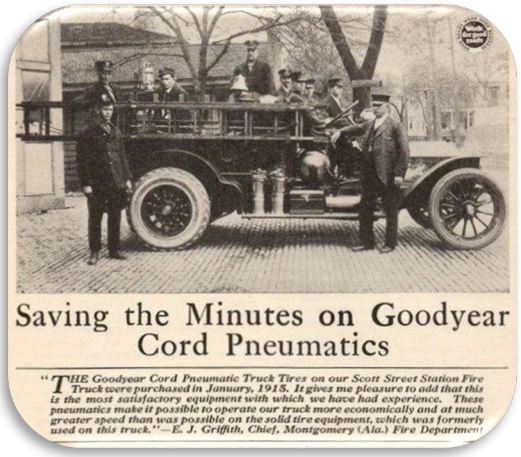
The City of Montgomery was formed in 1819 by the partnering of East Alabama Town and New Philadelphia. In those early years, the City of Montgomery survived fires through the efforts of many dedicated volunteers. These citizens depended on each other to protect their property, and through a system of springs and wells, water was available for quenching these fires.

By the 1830s the city had a wagon equipped with 30 leather buckets and a few wooden ladders that citizens used to set up bucket brigades and rescue trapped citizens. As the City grew, it found the need for a more organized fire protection force and by 1848 recognized its first volunteer fire company. It was called "Dexter Company One". This company operated the city's first fire engine, which they dragged with ropes to the scenes of trouble. It was not long before Montgomery grew beyond the capabilities of a single volunteer company and two more units were formed - the "Alabama Company" and the "Mechanics Hook & Ladder Company".

During the Civil War, much of the City of Montgomery was left unprotected because most of the volunteers had been called into service. By 1865, the Civil War was nearing the end and a Union Cavalry Unit, called "Wilson's Raiders" was quickly approaching Montgomery. It was decided that before the City surrendered, 85,000 bales of cotton and 40,000 bushels of corn would be burned to deny this supply to the Union soldiers. The burning cotton bales and bushels of corn were so intense that embers from the fire threatened to burn the city. IRONICALLY an African-American firefighting company, which later became known as the "Grey Eagles", saved the town from the burning cotton and corn.

In the 1870s the City of Montgomery purchased a used steamer for the "Alabama Company" at a cost of 633 dollars. The steamer was too heavy to be pulled by hand so horses were used to pull the engine from the fire station to scenes of trouble. This is how horses were introduced into the Montgomery fire service and they quickly became a vital part of fire operations. It was not long after the "Alabama Company" received their steamer that the "Dexter One Company" received a steamer of their own. By 1887, the City of Montgomery had five volunteer companies riding out of four fire stations. The "Dexter Company" rode out from Lee Street, the "Grey Eagles" from Dexter Avenue, the "Alabama Company" and "Mechanics Hook and Ladder" rode out of the same station on Madison Avenue, and the newly formed "Lomax Company" rode out of the City's newest fire station on Scott Street.

In 1898 it was decided that Montgomery should have a paid fire department, and on July 14, 1898, Mayor John Hughes Clisby assembled volunteer Chief James H. Screws and 28 of his men at Fire Station #2. It was there that they were sworn in and the next day took active charge of the department. They formed four firefighting companies - two Fire Engine Companies, one Hook and Ladder Company and the fourth was a Hose Company. The first call made by the paid department was on its first day of operation and it was a house fire located on the corner of Jackson and Washington Streets. A total of 144 calls were answered that year with an expense to the department of $20,535.55. Today, Montgomery Fire/Rescue is a 490 member department that responds to over 40,000 calls per year and has an operating budget of over 42 million dollars.


Saving the Minutes on Goodyear Cord Pneumatics

"THE Goodyear Cord Pneumatic Truck Tires on our Scott Street Station Fire Truck were purchased in January, 1913. It gives me pleasure to add that this is the most satisfactory equipment with which we have had experience. These pneumatics make it possible to operate our truck more economically and at much greater speed than was possible on the solid tire equipment, which was formerly used on this truck."—E. J. Griffith, Chief, Montgomery (Ala.) Fire Department

It was also during 1898 that the position of "fire inspector" was created and his job was to inspect buildings for violations of city ordinances and report them to the police department for enforcement. This was the beginning of the modern Bureau of Inspections. That year 7,690 buildings were inspected and over 600 defective flues were found. Since the creation of the City's first fire inspector, the Bureau of Inspections has grown to over 15 members and performs more than 12,000 inspections each year. During the early 1900's three more fire stations were opened and two chemical wagons with hose beds and 40-gallon tanks were purchased. Also, during that time, the City of Montgomery purchased the Fire Department's first motorized pumper that was capable of delivering 900 gallons of water per minute.

In 1932, an intense Fire Prevention Program was started by then Fire Chief C. E. Ingram, which was aimed at making the citizens of Montgomery more "fire conscious". The Fire Prevention Program was a big hit and has been credited with greatly reducing the frequency of fires. Just three years after the program's inception, the lowest fire loss in Montgomery Fire/Rescue history was recorded at $21,720. The Fire Prevention Program is still being conducted today by the Public Education Department.

In 1935, the Montgomery Fire/Rescue went to two shifts, which brought the number of paid Fire Department personnel from 29 to 59 members. By 1938 a new fire station was added and in the early 1940's a ladder truck with a 65' aerial ladder was purchased. In 1947, the Montgomery Fire Department had been a paid department for almost 50 years and a firefighter's annual salary came to about $1,860. Now, a little over 60 years later a firefighter starts out making $46,575.

During the late 1960's, the Division of Training was established at 1001 North Court Street. Since then it has grown from an academy of a few weeks that taught basic firefighting skills to a twenty-two-week academy that covers basic and advanced firefighting operations, hazardous material certifications, as well as Emergency Medical Technician training.

In 1974 the paramedic program was introduced and two medic units were placed into service. That year they answered 3,841 calls. Today, the Medic Division operates 10 Medic Units and 5 Advanced Life Support Pumpers that answer the bulk of all of the emergency calls for the city at over 35,000 calls per year. It is the large volume of EMS responses that caused the department in 2007 to change its name to Montgomery Fire/Rescue. The Medic Division responds to all kinds of emergencies such as strokes, heart attacks and vehicle accidents, and contributes to countless lives saved each year. There is also an incentive for those in the department that have continued their education and received their paramedic certification. Firefighters who have received their paramedic certification, and who are working in a Medical Unit, receive an additional $8,500 per year.

It was also in the 1970's that the Bureau of Investigations was formed. This bureau was then and is now dedicated to providing the citizens and business owners of Montgomery with a full investigation of suspicious fires and vigorous prosecution of those who commit arson in Montgomery. Today eight fire investigators are assigned to investigating suspicious fires. Five of the members of the Bureau of Investigations also have arrest powers due to their APOST certification, having graduated from the City of Montgomery's Fire and Police Academies.

In 1978, the Special Operations Division started with a single Hazardous Materials Unit consisting of an old bread van and donated chemical and proximity suits donated by Maxwell Air Force. Special Operations has since grown into one Hazardous Materials Unit, two Heavy-Rescue Units and one Dive Team. The Hazardous Materials Team is located at Station #3 on Carmichael Rd. The team consists of 24 members and all are certified Haz-Mat Technicians, trained to mitigate any chemical emergencies, whether they be manmade or caused by natural disaster.

The Heavy Rescue Teams are located at Station #4 on Airbase Blvd. and Station #15 on Taylor Road. Heavy Rescue members are trained to respond to technical rescue situations, such as Vehicle and Machinery Extrication, High Angle Rope Rescue, Confined Space Rescue, Trench Rescue, and Structural collapse Rescue. The Dive Team is currently located at Station #2 on South Holt Street. They are capable of handling responses from Victim Rescue to Evidence Recovery to Swift Water Rescue. The Hazardous Materials Unit and the Heavy Rescue Unit have been assigned duties as Regional Response Teams as a part of the Alabama Mutual Aid System. These special operations teams are capable of handling the most complex of emergencies.

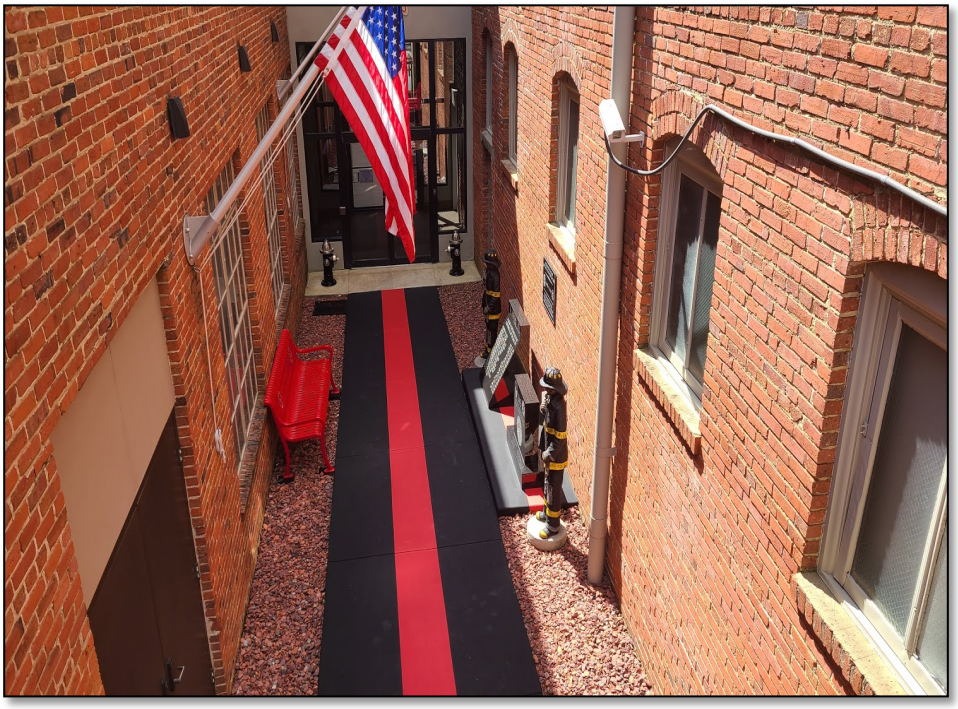
In the late 1980's the Montgomery Fire/Rescue began to modernize its fleet of Fire Engines and purchased its first enclosed-cab fire truck. This greatly increased the safety of the firefighters riding on these trucks. In 1986 Montgomery Fire/Rescue transitioned from all American LaFrance engines and ladders to all Emergency One apparatus.

The Montgomery Fire/Rescue continued to grow during the 80's and 90's. The City added more stations (for a total of 16), updated apparatus, provided more advanced training and purchased more versatile equipment that was needed to meet the challenges of fighting fire in a growing city.

Throughout the City of Montgomery Fire/Rescue's history, it has been heavily involved in the community that it serves. The Fire Department's members participate in events such as the Jubilee run, the Heart Walk and the Christmas Parade. Probably the biggest event the Fire Department members participate in is raising money for the Muscular Dystrophy Association' annual fill the boot drive.

In a little more than a century, the Montgomery Fire/Rescue has gone from a few volunteers carrying buckets and ladders, to a large paid department that employs up to 490 members and protects its citizens with 15 Pumpers, 6 Ladder Trucks, 10 Paramedic Units, 1 Hazardous Materials Unit, 2 Heavy Rescue Units and a Dive Team.

The ongoing story of Montgomery Fire/Rescue will never be complete without remembering those who gave their lives in service to this great city. Since 1901, 15 Montgomery firefighters have lost their lives in the line of duty. On the anniversary of these firefighter's deaths every year a moment of silence is conducted during the morning radio test to honor their sacrifice. A memorial plaque was placed at MFR fire headquarters to further ensure these brave firefighters will never be forgotten. Because many of MFR's line of duty deaths occurred before the creation of the Fallen Firefighters Memorial in Emmitsburg, MD., 14 were not enshrined at that now famous memorial. In February of 2020, the Montgomery Fire/Rescue and City of Montgomery presented a check to Project Roll Call to ensure that those 14 are added to the wall of honor. In 2020, the MFR completed a project in the alleyway at MFR Headquarters. This area, named "Hero Walk," is open to anyone who wants to take a moment and honor those who sacrificed all in the line of duty. This memorial ensures that all of our lost brothers and sisters are never forgotten.



Insurance Services Office Rating

The Insurance Services Office (ISO) rates departments nationwide through a comprehensive review of the fire department's personnel and equipment, the water system & needed fire flow, as well as the emergency communication system. In the most recent ISO review the Montgomery Fire/Rescue received a Public Protection Classification (PPC) of "Class-1." The PPC ratings for departments nationwide were published in 2020 and show that 39,850 departments received a rating between one and ten. Only 411 departments nationwide received the ISO PPC "Class-1" rating, representing the top 1% of departments nationwide.

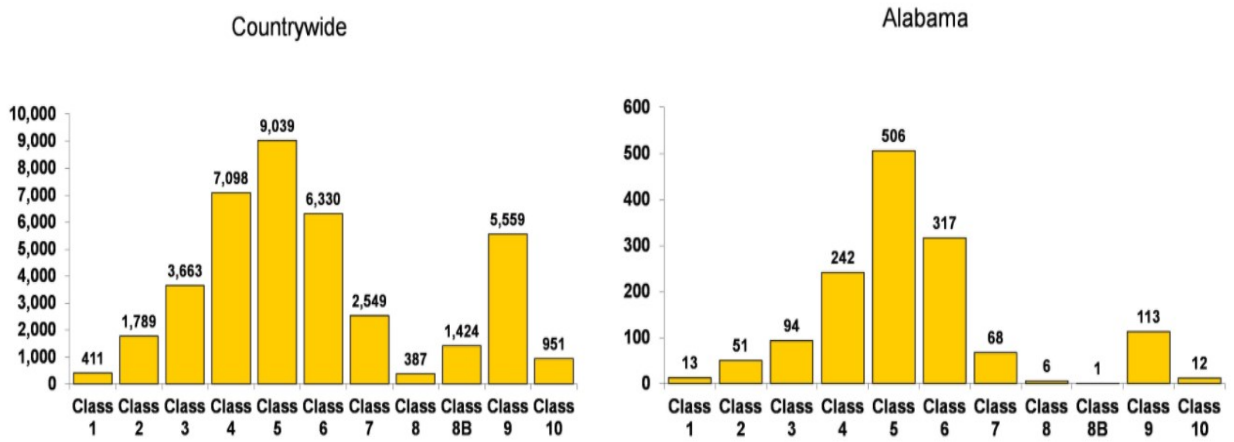


Figure 2: ISO PPC Rating Distribution

The PPC rating from ISO not only helps homeowners by reducing the cost of home insurance it also helps departments plan for, budget, and justify improvements to services offered. The Montgomery Fire/Rescue is proud of the fact that it was the first "ISO Class-1" department in the State of Alabama.

The Montgomery Fire/Rescue Office of Standards and Compliance is responsible for ensuring that the department maintains and exceeds all requirements of ISO. Not satisfied with excellence in fire protection alone Chief Jordan tasked this office with the research and development needed to seek accreditation through the internationally recognized Commission on Fire Accreditation International (CFAI). After several years of training, data analyzing, policy creation/implementation, and document creation Montgomery Fire/Rescue is poised to submit the department for evaluation and hopes to achieve accreditation in March 2022. If fortunate enough to become accredited, MFR will join the ranks of 101 of the departments nationwide (0.25%) that are both ISO and internationally accredited. This process is not easy nor is it meant to be a feather in the hat. CFAI accreditation is a process of organizational self-reflection and quality improvement that will steer Montgomery Fire/Rescue's continued march towards excellence in all areas of public service.

Mission

Montgomery Fire/Rescue is a team of dedicated public safety professionals that are committed to providing the highest quality service to our community through prevention, preparedness, and effective emergency response. We are proud to be committed to the safety of the citizens and visitors of Montgomery through the delivery of public education, code enforcement, fire investigation, fire suppression, emergency medical service, and technical rescue. Through professional training, physical fitness, and utilization of cutting-edge technology, Montgomery Fire/Rescue helps to promote a safer, vibrant, and growing community that everyone is proud to visit, work in, or call home.

Vision

Montgomery Fire/Rescue strives to maintain the highest quality of service in everything we do. We will continue to move forward in leadership, innovation, professional development, and service so that we are always ready to adapt to the ever-changing needs of our city. We will seek to expand our membership by recruiting quality and diverse candidates. We shall ensure our members are highly trained, well equipped, and highly motivated. We will not waiver on maintaining the level of excellence we are known for. We will continue to honor those that have come before us and laid the foundation on which we stand. We will accomplish our mission with respect and integrity and through selfless service to those that live in or visit the great city of Montgomery.

Purpose

The purpose of the Montgomery Fire/Rescue is to protect and enhance the safety and well-being of those in our community.

Core Values

The values of the organization are the most important component in terms of membership buy-in. The members of the Montgomery Fire/Rescue understand and embrace these values.

- **Professionalism** - At the core of MFR is a promise to provide the citizens of Montgomery with a professional responder in appearance, attitude, standards, and values
- **Integrity** - Incorruptible in thought and action, always holding the moral values in the highest regard
- **Honesty** - MFR members are honest at all times. Trust is built in the public and with our peers through honesty, that trust must never be violated
- **Compassion** - Demonstrate kindness & empathy when dealing with the public and coworkers. MFR members support and encourage one another especially in their time(s) of need
- **Responsibility & accountability** - Professionally, personally, and fiscally responsible for our actions
- **Respect** - Treat everyone with respect regardless of his or her social status, appearance, or condition of the moment. The MFR member maintains respect even when the same is not reciprocated
- **Servant Leadership** - While serving Montgomery, we have a duty to be leaders in the community. We have the knowledge, training, experience, and a duty to bring order to chaos
- **Embrace Diversity** - Be open-minded and responsive to the uniqueness of our community without regard to age, gender, religion, or ethnic origin. Encourage and support a diverse and inclusive workplace
- **Commitment** - In all department endeavors
- **Teamwork** - At all times fostering an environment of unity and cooperation
- **Health & Safety** - Health and safety is paramount in fulfilling the department's mission. The MFR member takes pride in his or her physical fitness and is always prepared to respond when called to do so

Funding

Montgomery Fire/Rescue (MFR) is funded through the City of Montgomery's General Fund Budget. MFR's fiscal year 2022 approved budget including both operational cost and salary and benefits is $42,877,616. The city's total operating and debt service budget is $263,539,575 for fiscal year 2022. The figures below illustrate the MFR budget and how it is applied. The city also committed to the safety of the citizens by allocating additional money to MFR through a multi-million dollar capital improvement plan, of which approximately 14 million dollars was allocated to MFR for the purchase of 5 pumpers, 2 ladder trucks, and construction of a new fire station with a community engagement focus that will combine stations 10 & 7 but expand services. This additional funding is not reflected in the MFR budget.

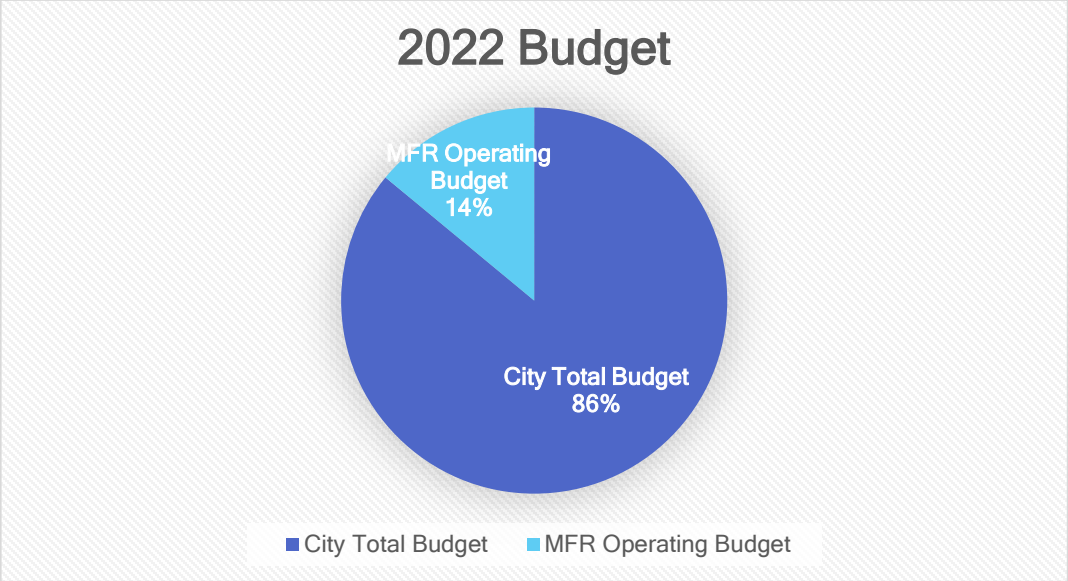


Figure 3: MFR Budget Compared to MPD and the General Fund

EXPENSE	2022 BUDGET	2021 BUDGET	2020 BUDGET
SALARIES	$25,781,817	$21,918,510	$24,002,543
BENEFITS	$10,121,072	$8,172,185	$8,456,440
TRAVEL AND TRAINING	$377,216	$138,258	$175,000
OFFICE SUPPLIES	$42,400	$43,894	$44,025
OPERATING SUPPLIES	$942,515	$1,060,581	$853,014
REPAIRS & MAINTENANCE	$82,884	$474,500	$96,545
GARAGE EXPENSE	$610,945	$554,390	$646,804
PROFESSIONAL SERVICES	$196,370	$204,370	$139,170
NON-PROFESSIONAL SERVICES	$127,650	$184,282	$118,750
DUES & SUBSCRIPTIONS	$16,500	$8,675	$7,675
UTILITIES	$653,576	$607,460	$600,664
RENTAL AND LEASE EXPENSE	$3,900	$4,341	$12,350
LAND AND BUILDING IMPROVEMENT	$0.00	$0.00	$40,000
EQUIPMENT – CAPITALIZED	$887,100	$36,098	$191,050
EQUIPMENT – NON-CAPITALIZED	$1,122,455	$10,875	$643,011
INSURANCE	$0.00	$264,300	$19,600

Table 2: MFR Funded Expenses

Area Served

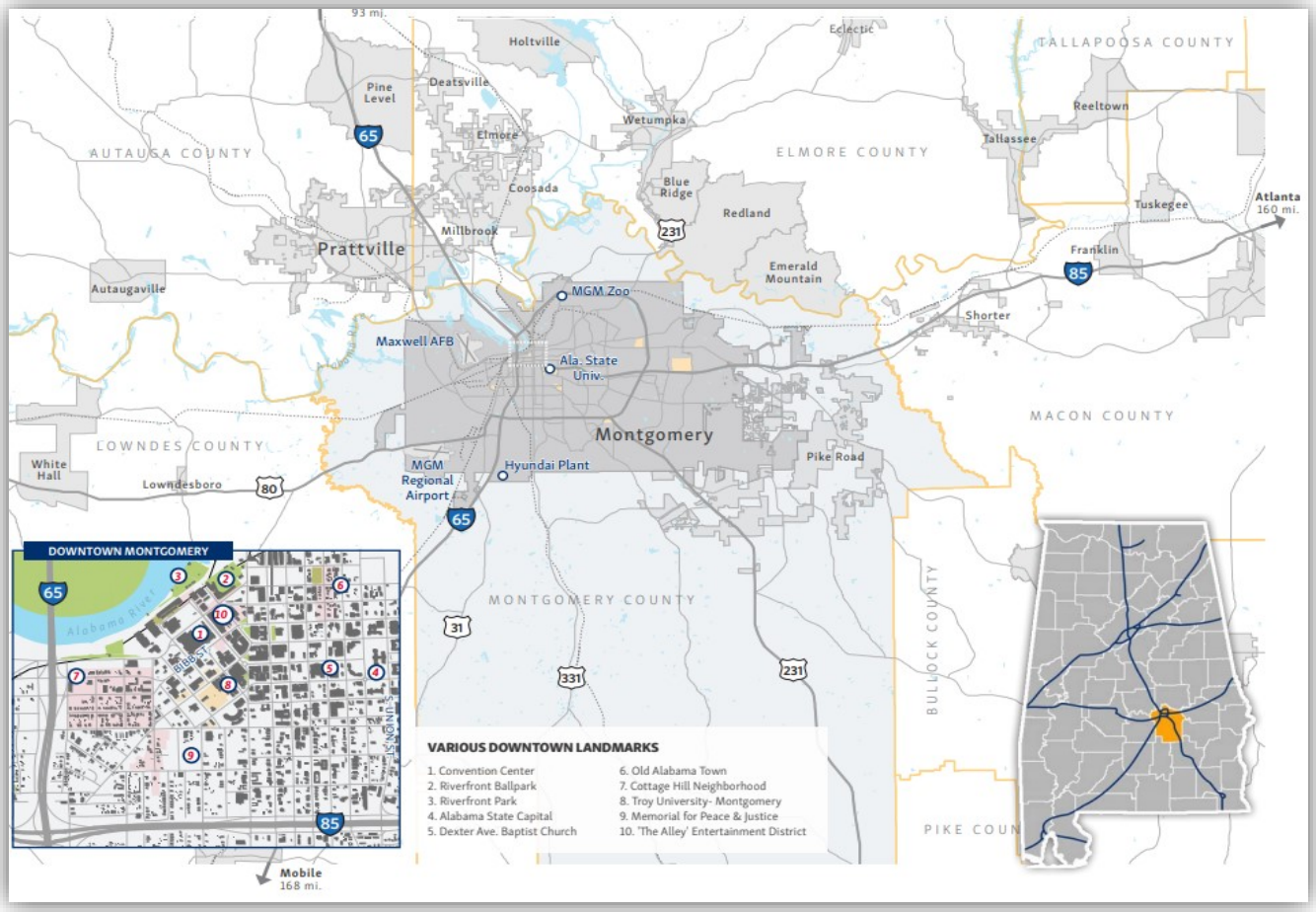


Figure 4: Montgomery Alabama Map

The City of Montgomery is situated in northern Montgomery County in central Alabama. It stands beside the Alabama River, on the coastal Plain of the Gulf of Mexico. Montgomery was incorporated in the 19th century and became the state capital in 1846. Over the past decade, the City has revitalized the riverfront and downtown area with the construction of the Montgomery Biscuits minor league baseball stadium and Riverfront Park. The demand for downtown living space has risen as people want to have walkable, lively neighborhoods.

Topography

Montgomery is located at 32°21′42″N 86°16′45″W, in a gently rolling area of Alabama with no local topographic features which appreciably influence weather and climate. The surrounding terrain is rather level with long gentle slopes toward the northeast and east. The Alabama River bends along the northwest side of the city. The terrain of the City of Montgomery varies from 100 feet above sea level on the eastern side to 300 feet in the central area of the city.

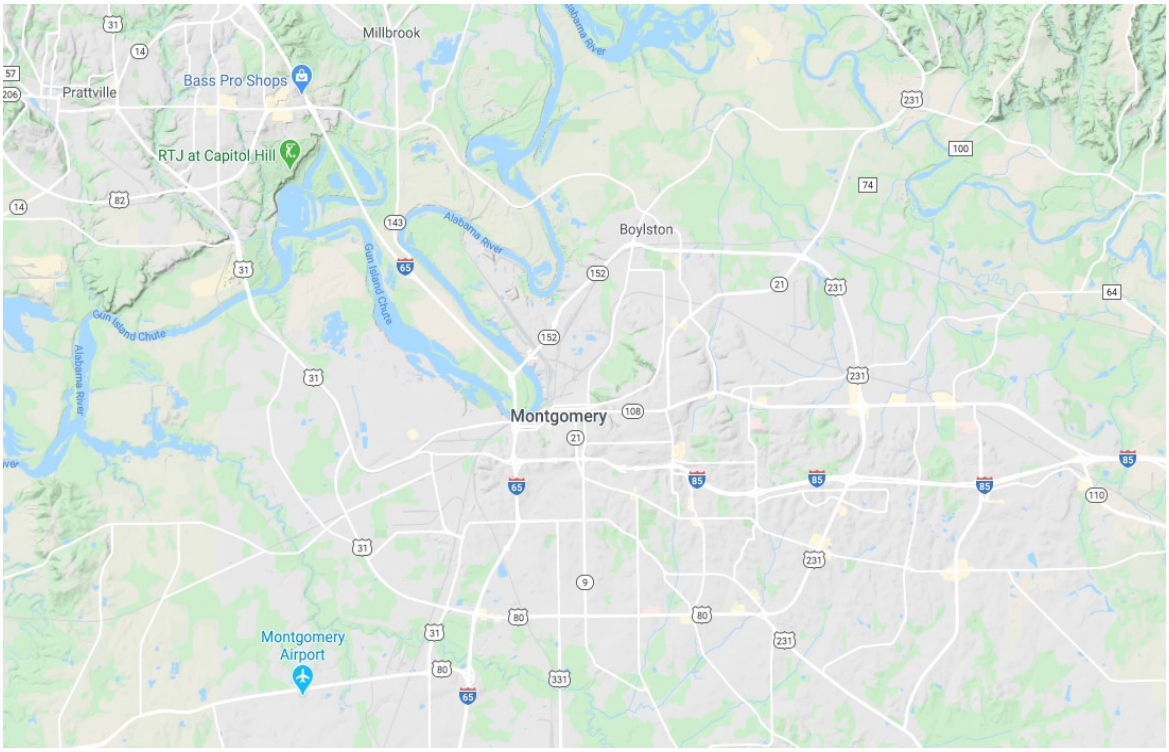


Figure 5: Topography of Montgomery, AL.

Climate

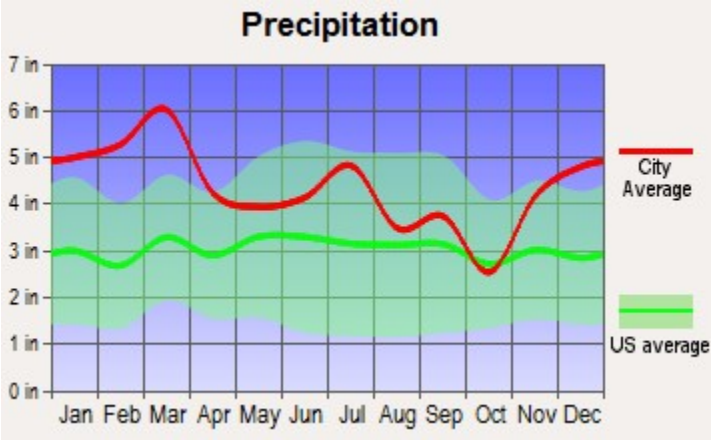
According to the National Weather Service Köppen-Geiger Climate Subdivisions, Montgomery's climate can be described as humid subtropical. During the months of June through September temperature and humidity conditions generally show little change from day-to-day. During the coldest months, December, January, and February, there are frequent shifts between mild and moist air from the Gulf of Mexico and dry, cool continental air. The daily average temperature in January is 46.6 °F (8.1 °C), and there are 3.4 days of sub 20 °F (−7 °C) lows; 10 °F (−12 °C) and below are extremely rare. The daily average in July is 81.8 °F (27.7 °C), with highs exceeding 90 °F (32.2 °C) on 86 days per year and 100 °F (37.8 °C) on 3.9 days. Summer afternoon heat indices, much more often than the actual air temperature, are frequently at or above 100 °F.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record high °F (°C)	83 (28)	86 (30)	90 (32)	94 (34)	99 (37)	106 (41)	107 (42)	106 (41)	106 (41)	102 (39)	91 (33)	85 (29)	107 (42)
Mean maximum °F (°C)	75.1 (23.9)	77.9 (25.5)	84.1 (28.9)	87.5 (30.8)	92.3 (33.5)	96.8 (36.0)	98.4 (36.9)	98.6 (37.0)	95.2 (35.1)	89.6 (32.0)	82.8 (28.2)	77.4 (25.2)	99.8 (37.7)
Average high °F (°C)	57.4 (14.1)	61.8 (16.6)	69.7 (20.9)	76.6 (24.8)	84.0 (28.9)	89.8 (32.1)	92.1 (33.4)	91.9 (33.3)	87.3 (30.7)	78.3 (25.7)	69.0 (20.6)	59.6 (15.3)	76.5 (24.7)
Average low °F (°C)	35.7 (2.1)	39.2 (4.0)	45.3 (7.4)	51.6 (10.9)	60.7 (15.9)	68.1 (20.1)	71.5 (21.9)	71.0 (21.7)	65.2 (18.4)	53.5 (11.9)	43.9 (6.6)	37.4 (3.0)	53.7 (12.1)
Mean minimum °F (°C)	18.3 (−7.6)	22.6 (−5.2)	28.3 (−2.1)	36.3 (2.4)	47.6 (8.7)	58.5 (14.7)	66.2 (19.0)	64.2 (17.9)	51.2 (10.7)	36.5 (2.5)	27.9 (−2.3)	20.7 (−6.3)	15.1 (−9.4)
Record low °F (°C)	0 (−18)	−5 (−21)	17 (−8)	28 (−2)	40 (4)	48 (9)	59 (15)	56 (13)	39 (4)	26 (−3)	13 (−11)	5 (−15)	−5 (−21)
Average precipitation inches (mm)	4.65 (118)	5.28 (134)	5.95 (151)	4.02 (102)	3.54 (90)	4.07 (103)	5.24 (133)	3.96 (101)	3.97 (101)	2.92 (74)	4.61 (117)	4.86 (123)	53.07 (1,348)
Average snowfall inches (cm)	—	0.0 (0.0)	0.3 (0.76)	—	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.1 (0.25)	0.4 (1.0)
Average precipitation days (≥ 0.01 in)	10.1	8.9	8.7	7.7	7.6	9.7	11.5	9.1	6.9	6.7	7.5	9.8	104.2
Average snowy days (≥ 0.1 in)	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4
Average relative humidity (%)	69.8	66.5	66.0	66.8	70.6	71.7	75.7	76.0	73.9	71.1	71.7	70.9	70.9
Mean monthly sunshine hours	153.1	166.0	219.4	250.8	267.4	261.8	262.1	251.9	226.4	228.3	171.4	153.1	2,611.7
Percent possible sunshine	48	54	59	64	62	61	60	61	61	65	54	49	59

Table 3: Climate Averages

Precipitation

From late June through the first half of August, nearly all precipitation is from local, mostly afternoon, thunderstorms, and there are apt to be considerable differences in day-to-day amounts of rainfall in different parts of the Montgomery area. In late August and in September, summer conditions of temperature and humidity persist as the air continues to drift in from the Gulf, but local thunderstorms become less frequent because of the shortening of the days and the decrease in the heat received from the sun. As this late summer season progresses, the local thunderstorms give way to thunderstorms which occur with cold fronts and occasional general rains associated with storms on the Gulf. All types and intensities of rain, except the local thunderstorms of summer, may occur at any time from December through March or early April. Floods in the rivers are correspondingly most frequent during this period. Most rain from late April through early June is in the form of showers or thunderstorms occurring in advance of approaching cool fronts, which become weaker and less frequent as summer approaches. It is during this spring season, and during the late summer and early autumn, that droughts sometimes occur.



(Source: city-data.com)

Population

The City of Montgomery is the capital of the State of Alabama and was incorporated on December 3, 1819. Home to 199,582 permanent residents spread across 160 square miles, the city is small in terms of population, when compared to other cities, but large in terms of land area. For perspective, Montgomery is only slightly smaller in terms of square miles than New Orleans, Louisiana and larger than Denver, Colorado. The population density is 1,262 per square mile. Montgomery's population has decreased by 2.9% from the 2010 estimate while the United States population increased 5.5% during the same period. The City of Montgomery is a very diverse community. The demographic make-up of Montgomery is 59.2% Black, 33.1% White, and 3.47 % Hispanic. In Montgomery, 18.9% of the residents are 60 years of age or older. Those under 18 years of age represent 24.2%. The 19-59 years olds make up the remaining 56.9%, with the median age being 35 years old. There are 88.9 males for every 100 females in the City of Montgomery. The poverty rate is always a concern when considering the vulnerability of the populace; census data indicates that 22.1% of the population of Montgomery can be described as living in poverty, which is 9.8% higher than the national average. Median household and per capita income are both significantly less than the national average.

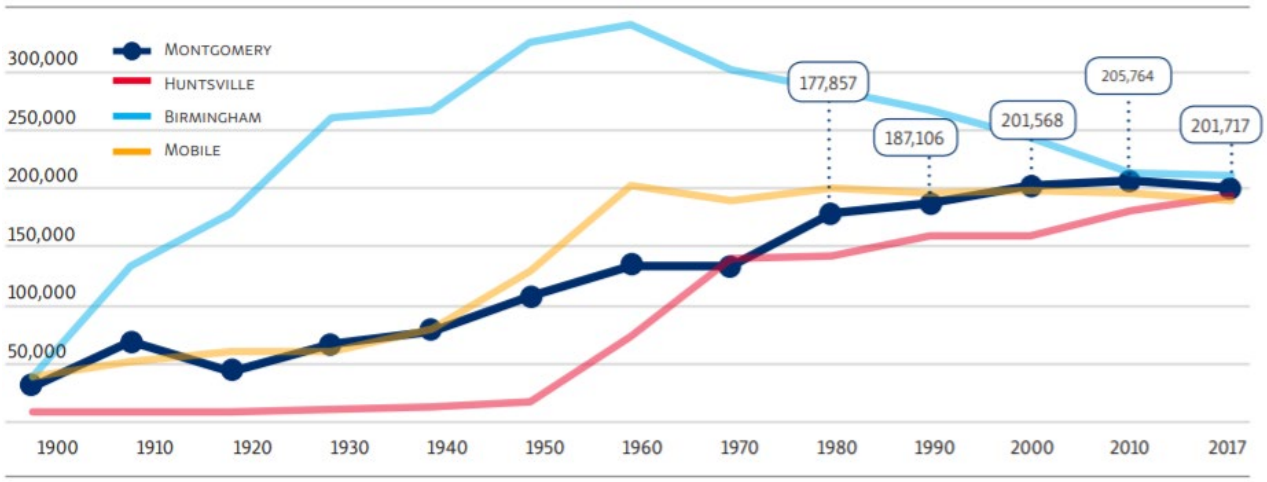


Figure 6: Population Change 1960-2010 Source: Envision Montgomery 2040

Land Use

Montgomery has a variety of land uses and building types. From the handsome homes overlooking the river along Clay Street to the handcrafted main street buildings on Commerce Street, from Alabama Steel Supply industrial factory to the Georgian style campus of Alabama State University, Montgomery neighborhoods encompass a wide range of spatial characters.

A character analysis conducted as a part of Montgomery's comprehensive vision 2040 plan identified 10 different character types; the classification is based on the spatial attributes, street pattern, zoning and land use. Spatial attributes include the height, sizes of buildings and lot, also the relationship between the buildings and street. The street pattern greatly influences the connectivity, and major modes of transportation.

Urban Core

The downtown core of Montgomery lies along the southern bank of the Alabama River. The land use has a mix of civic, commercial, office and residential. Most buildings in the urban core are around 3 to 12 stories tall, the tallest building, RSA Tower, has 22 stories. The setback from civic buildings, such as the capitol building create public green spaces for downtown residents.

Traditional Neighborhood

In the traditional neighborhood of Montgomery, a large portion is dedicated to single family housing and has amenities such as corner store grocery, schools and religious places etc. The street networks are well connected, creating a pattern that is pedestrian friendly.

Early Suburban

Early suburban neighborhoods are predominantly single-family housing, and the streets form a grid pattern. Compared to a traditional neighborhood, it has larger blocks and the buildings more sparsely distributed. The buildings are also set back further from the street.

Suburban

Suburban neighborhoods were developed mostly after World War II, the neighborhoods are predominantly single-family residences, design centered on the use of automobile. The streets are often curvilinear, with long blocks, fewer connections and cul-de-sacs.

Suburban Commercial

Retail and office use generally concentrated around major roads and highways. The buildings are designed to be car friendly, usually set back from the street with large surface parking area. It is typically not connected to other character areas.

Institutional

The institutional use includes civic and military space such as Alabama State University, Maxwell Airforce base campuses, as well as schools and community colleges.

Natural Preserve

The land in natural preserves is conserved for ecological services, such as protecting biodiversity and water resources. The land is often not suitable for development due to steep slope and frequent flooding. Human activities are limited in those areas.

Emerging Suburban

Emerging suburban area is composed of mostly agricultural land, and sometimes with single family development that is set back far away from the road. The size of the lot is bigger than typical suburban development, sometimes over an acre.

Light Industrial

Light industrial uses produce smaller consumer goods. It has less environmental impact than heavy industry. Factories tend to cluster together to form a bigger light industrial zone. They are usually separated from the residential area.

Heavy Industrial

Companies such as Alabama Steel Supply and metal works are located in heavy industrial areas. The factories tend to take a bigger area of space and often have direct access to major roadways.

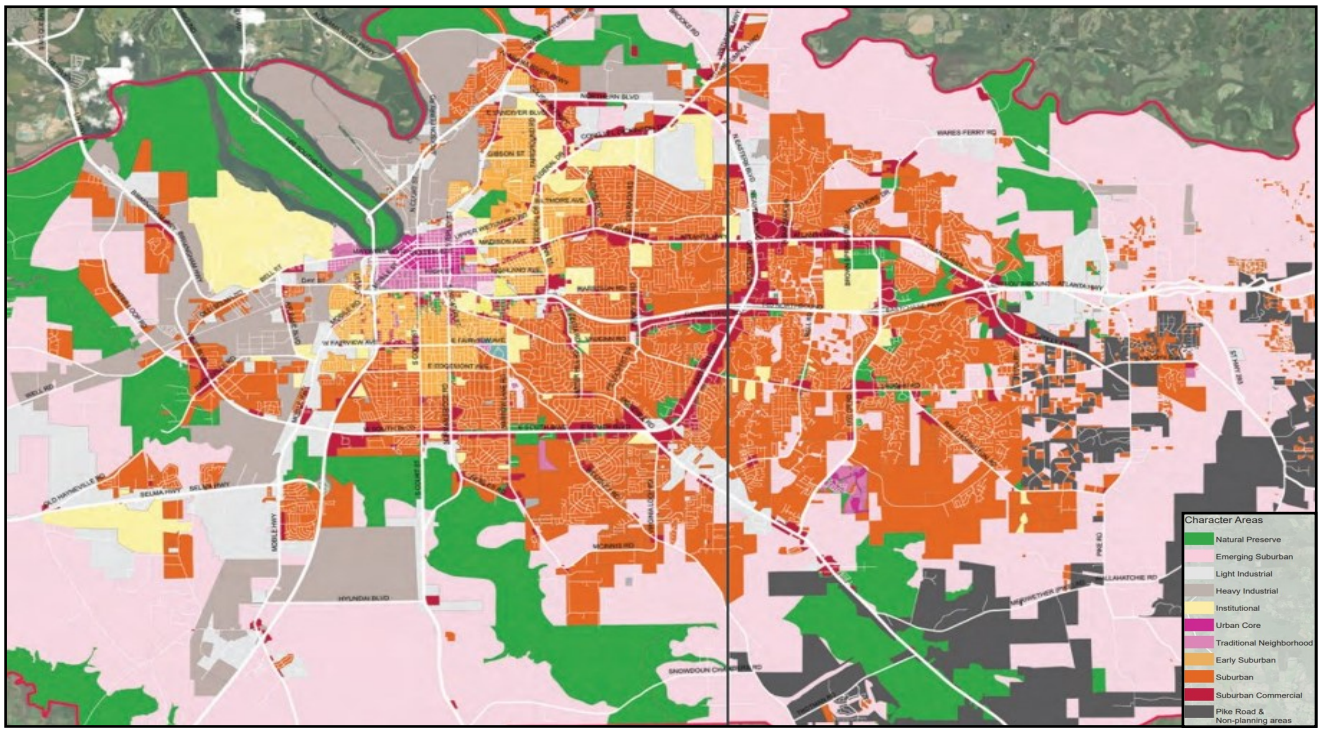


Figure 7: Montgomery Character Area Map

Development

Downtown Montgomery lies along the southern bank of the Alabama River, about 6 miles downstream from the confluence of the Coosa and Tallapoosa rivers. The most prominent feature of Montgomery's skyline is the 375ft, RSA Tower, built in 1996 by the Retirement Systems of Alabama. Other prominent buildings include 60 Commerce Street, 8 Commerce Street, and the RSA Dexter Avenue Building. Downtown also contains many state and local government buildings, including the Alabama State Capitol. The Capitol is located atop a hill at one end of Dexter Avenue, along which also lies the Dexter Avenue Baptist Church, where Martin Luther King Jr. was pastor. Both the Capitol and Dexter Baptist Church are recognized as National Historic Landmarks by the U.S. Department of the Interior. Other notable buildings include RSA Dexter Avenue, RSA Headquarters, and Alabama Center for Commerce, RSA Union, and the Renaissance Hotel and Spa.

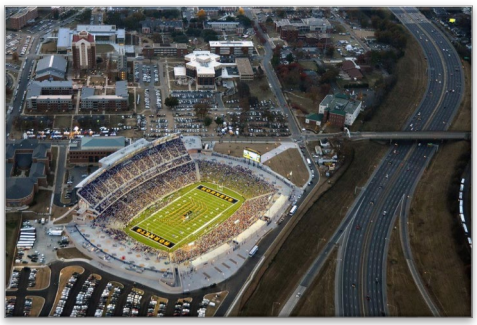
One block south of the Capitol is the First White House of the Confederacy, the 1835 Italianate-style house in which President Jefferson Davis and family lived while the Confederate capital was in Montgomery. Montgomery's third National Historic Landmark is Union Station. Passenger train service to Montgomery ceased in 1989. Today Union Station is part of the Riverfront Park development, which includes an amphitheater, a riverboat dock, a river walk, and Riverwalk Stadium.

Montgomery has been recognized nationally for its continuing downtown revitalization. In the early 2000s, the city constructed the Montgomery Biscuits minor league baseball stadium and Riverfront Park. Three blocks east of the Convention Center, Old Alabama Town showcases more than 50 restored buildings from the 19th century. The Riverwalk is part of a larger plan to revitalize the downtown area and connect it to the waterfront. The plan includes urban forestry, infill development, and façade renovation to encourage business and residential growth. The Convention Center, completed in 2007, has encouraged growth and activity in the downtown area and attracted more high-end retail and restaurants.

Other downtown developments include historic Dexter Avenue, which will be the center of a Market District. A $6 million streetscape project is improving its design. Maxwell Boulevard is home to the newly built Wright Brothers Park. High-end apartments are planned for this area. The Bell Building, located across from the Rosa Parks Library and Museum is being redeveloped for mixed-use retail and residential space. In 2021, the ground was broken on a 120-acre 50 million dollar whitewater park. When completed Whitewater Montgomery is expected to employ 125 and generate an estimated 35 million annually in revenue.

The National Memorial for Peace and Justice opened in downtown Montgomery on April 26, 2018. Founded by the Equal Justice Initiative, it acknowledges the historic past of racial terrorism and lynching in America.

South of downtown, across Interstate 85, lies Alabama State University. ASU's campus was built in Colonial Revival architectural style from 1906 until the beginning of World War II. Surrounding ASU is the Garden District and Cloverdale Historic District. Houses in these areas date from around 1875 until 1949 and are in Late Victorian and Gothic Revival styles. Huntingdon College is on the southwestern edge of Cloverdale. The campus was built in the 1900s in Tudor Revival and Gothic Revival styles. ASU, the Garden District, Cloverdale, and Huntingdon are all listed on the National Register of Historic Places as historic districts.



Montgomery's east side is the fastest-growing part of the city. Development of the Dalraida neighborhood, along Atlanta Highway, began in 1909 when developers Cook and Laurie bought land from the Ware plantation. The first lots were sold in 1914. The city's two largest shopping malls (Eastdale Mall and The Shoppes at Eastchase), as well as many big-box stores and residential developments, are on the east side. The area is also home to the Wynton M. Blount Cultural Park. This 240-acre park contains the Alabama Shakespeare Festival and Montgomery Museum of Fine Arts.

Following those developments, hundreds of millions of dollars have been invested by private companies that have adapted old warehouses and office buildings into loft apartments, restaurants, retail, hotels, and businesses. More than 500 apartment units are under construction, including The Heights on Maxwell Boulevard, The Market District on Dexter Avenue, the Kress Building on Dexter Avenue, The Bell Building on Montgomery Street, and a new complex by the convention center.

Layout

Two interstate highways run through Montgomery. Interstate 65 is the primary north–south freeway through the city leading between Birmingham and Huntsville to the north and Mobile to the south. Montgomery is the southern terminus of Interstate 85, another north–south freeway (though running east–west in the city), which leads northeast to Atlanta. The major surface street thoroughfare is a loop consisting of State Route 152 in the north, U.S. Highway 231 and U.S. Highway 80 in the east, U.S. Highway 82 in the south, and U.S. Highway 31 along the west of the city. The Alabama Department of Transportation is planning the Outer Montgomery Loop to ease traffic congestion in the city. It is planned to connect Interstate 85 near Mt. Meigs to U.S. Highway 80 southwest of the city. Upon completion of the loop, it will carry the I-85 designation while the original I-85 into the city center will be re-designated I-685. Montgomery Transit (The M) provides public transportation with buses serving the city. The system has 32 buses providing an average of 4500 passenger trips daily. The M's ridership has shown steady growth since

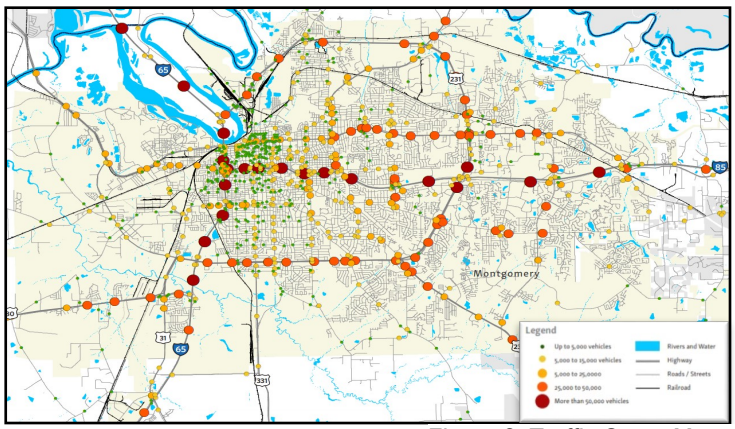


Figure 8: Traffic Count Map

the system was revamped in 2000. The system served over 1 million passenger trips in 2007. Greyhound Lines operates a terminal in Montgomery for intercity bus travel. Megabus (North America) also operates in the city out of the downtown Intermodal Transit Facility. Traffic counts from the Alabama Department of Transportation provide a high-level understanding of the relative traffic distribution throughout the city's network. The highest traffic volumes in 2016 were found on the stretch of I-85 between I-65 and US 231. Traffic counts in this area averaged between 90,000 and 110,000 vehicles per day.

These numbers have mostly held steady for the past decade. The city's other most heavily traveled corridors include I-65, Atlanta Highway, and the beltway, all of which serve as major gateways to downtown, the local universities, and the major employment centers.

Montgomery Regional Airport, also known as Dannelly Field, is the major airport serving Montgomery. It serves primarily as an Air National Guard base and for general aviation, but commercial airlines fly to regional connections to Atlanta, Dallas-Fort Worth and Charlotte. In 2017, the airport operated an average of 199 flights per day, of which 48% were military, and 39% were general aviation.

Passenger rail service to Montgomery was enhanced in 1898 with the opening of Union Station. Service continued until 1979 when Amtrak terminated its Floridian route. Amtrak returned from 1989 until 1995 with the Gulf Breeze, an extension of the Crescent line.

According to the 2016 American Community Survey, 84.3% of the working city of Montgomery residents commuted by driving alone, 8.8% carpooled, 0.4% used public transportation, and 0.6% walked. About 3.5% used all other forms of transportation, including taxicabs, motorcycles, and bicycles. About 5.9% of the working city of Montgomery residents worked at home. Despite the high level of commuting by automobile, 8.5% of the city of Montgomery households were without a car in 2015, which increased to 11% in 2016. The national average was 8.7 percent in 2016. Montgomery averaged 1.62 cars per household in 2016, compared to a national average of 1.8 per household.

Business and Industry

The city of Montgomery host a variety of business and industry that support the city's residents. Many manufacturing facilities including the large Hyundai automotive plant, aerospace plants, government and medical facilities produce quality employment opportunities. The largest employer in Montgomery is Maxell Air Force Base which employees 12,280 civilian and military personnel.

Employer	Product	Employees
Maxwell Gunter Air Force Base	Federal Government	12280
State of Alabama	State Government	11639
Montgomery Public Schools	Public School System	4524
Baptist Health	Hospitals/Clinics	4300
Hyundai Motor Manufacturing Alabama	Automobile Manufacturing	3100
ALFA Insurance Companies	Insurance Services	2568
City of Montgomery	Local Government	2500
MOBIS Alabama	Automobile Parts Manufacturing	1400
Jackson Hospital & Clinic	Hospitals/Clinics	1300
Koch Foods	Poultry Processing	1250
Wind Creek Casino & Hotel Wetumpka	Casino/Hotel	1200
Rheem Water Heaters	Water Heater Manufacturing	1147
GKN Aerospace	Aircraft Parts Manufacturing	1000
Baptist Medical Center South	Hospital	980
Regions Bank	Banks	977
U.S. Postal Service	Shipping Services	900
Creek Casino Montgomery	Casino	850
Glovis Alabama	Warehousing/Logistics	832
Alabama State University	University	792
Montgomery County Commission	Local Government	700
Alabama Power Company	Utility	660
Alorica	Call Center	660

Table 4: Montgomery Largest employers

COMMUNITY EXPECTATIONS & PERFORMANCE GOALS

As part of the Standards of cover and Strategic plan development, a meeting was held with local community leaders and stakeholders. The purpose of the meeting was to gather feedback from community leaders as to what kind of service they expect and what is important to them. The people that live and visit Montgomery deserve the highest level of customer service possible. It is difficult to provide the best service if you do not understand what is important to those you serve. In order to focus resources and effort on the programs most important to the community a survey was completed by the focus group that helped to build the community priorities. To further validate the results an open survey was issued through MFR social media outlets to ensure as many citizens as possible were reached. Qualifying questions were asked to ensure that the results of the survey only included the thoughts of those that live or work in the City of Montgomery.

Community Priorities

MFR Services in Community Ranked Order of Importance		
Service	**Rank**	**Score**
Fire Suppression	1	122
Emergency Medical Service	1	122
Fire Investigation	3	102
Hazardous Material Mitigation	4	101
Technical Rescue	5	97
Fire Safety Management (Building Inspections)	6	96
Domestic Preparedness, Planning and Response	6	96
Public Education	8	88

Table 5: MFR services ranked by community

Aspects of Firefighters that are most Important		
Service	**Rank**	**Score**
Technical Expertise	1	77
Education Level	2	73
Courteous and caring when interacting with the public	3	66
Physical fitness	4	65
Diversity	5	60

Table 6: Aspects of firefighters ranked by community

Investments in Order of Importance		
Service	Rank	Score
Equipping the department with the best firefighter workforce	1	74
Equipping the department with the newest technologies	2	70
Equipping the department with more EMS units	3	69
Equipping the department with more fire apparatus	4	63
Equipping the department with more fire stations	5	60

Table 7: MFR equipment importance ranked by community

Community Expectations

Most Important Department Responsibilities		
Service	**Rank**	**Score**
Response time to emergency incidents	1	82
Ability to conduct fire inspections quickly, efficiently, and accurately	2	65
Fiscal Responsibility	3	63
Emergency Preparedness/preparing the community for emergencies	4	61
Community outreach (i.e. safety education for residents)	5	56

Table 8: Most important MFR responsibilities ranked by community

Most Important Type of Community Involvement		
Service	**Rank**	**Score**
Public education programs and training.	1	71
Outreach in local neighborhoods (i.e. Open house at fire stations).	2	70
Community service programs (i.e. blood pressure checks).	2	70
Outreach to local schools.	4	66
Joint outreach with MPD and other city organizations.	5	62

Table 9: Types of community involvement ranked by community

Most Important Fiscal Responsibilities		
Service	**Rank**	**Score**
Additional personnel, including firefighters and paramedics	1	74
Additional stations to ensure future coverage	2	71
Additional community education programs	3	63
Ability to provide tuition reimbursement for firefighters	4	59
Hire recruitment officer to recruit and increase diversity	5	55

Table 10: MFR most important fiscal responsibilities ranked by community

Current Level of Service

Montgomery Fire/Rescue is a career organization that serves the public from fifteen fire stations, staffed 24 hours a day, 7 days a week. Current department staffing stands at 407 (funded) full-time personnel, seven civilian staff members and a volunteer chaplain. Montgomery Fire/Rescue protects the life and property of all residents and businesses in a 162 square mile area.

Montgomery Fire/Rescue is led by an appointed Fire Chief. Supporting executive staff includes a Chief of Staff, Chief of Operations, Chief Executive Officer and six Assistant Fire Chiefs. MFR operates three shifts with minimum staffing requirements of 108-line personnel. Each station is strategically located throughout the four service districts of the city. Each service district is supervised by a District Fire Chief, who also works a 24-hours on and 48-hours off schedule. Every station is led by a Station Captain who also operates as the suppression or ALS unit company officer. When the Captain is off-duty a Lieutenant fills the company officer role at the station ensuring adequate supervision and experience.

MFR responds to a broad range of emergency incidents as well as provides many specialized services for the City of Montgomery and surrounding areas including fire suppression services, emergency medical services, fire prevention inspections and education, life safety codes enforcement, post-fire investigations, plans review, public fire and life safety education, hazardous materials response, vehicle extrication, technical rescue services, and dive rescue/recovery. Services that Montgomery Fire/Rescue provide to the City of Montgomery are outlined in this section.

Figure 9: MFR Command Structure

Services Provided

Fire Suppression Division

The Montgomery Fire/Rescue Fire Suppression Division responds to a wide range of emergency incidents. The type of incidents commonly encountered include; structure fires, vehicle & rubbish fires, grass & wild land fires, vehicle accidents, and commercial and residential fire alarms. The fire suppression division is always prepared to and is frequently called to, assist the Special Operation Division and Emergency Medical Service Division in providing their specialized service. The MFR staffs 15 engine companies, 6 Ladder trucks, 10 paramedic medic companies, a 24-hour fire investigator, and 4 district fire chief units that handle the day-to-day protection needs of Montgomery's citizens and visitors. These units are supported by support personnel and reserve apparatus. The station personnel work 24 hours on and 48 hours off schedule with three shifts. Every day there is at least 108 personnel manning the MFR apparatus and stations. Recall procedures are well established should the need to man reserve apparatus arise.

EMS Division

The Montgomery Fire/Rescue (MFR) EMS Division responds to a wide range of emergency incidents. This division and its service is arguably the greatest public relations tool due to it constant visibility and engagement with the public. MFR responds to emergency medical services (EMS) situations with ten engine companies' apparatus equipped at the basic life support (BLS) level, five advanced life support (ALS) engine companies, ten ALS ambulances, four BLS district fire chief cars, and six truck companies equipped with BLS gear. Montgomery Fire/Rescue is readily equipped with five reserve rescue units, and seven rescue detail units. MFR Rescue units are staffed with three or a minimum two personnel. Staffing includes a nationally registered and state licensed firefighter/emt-basic and licensed paramedic. The five ALS engines are staffed with at minimum four personnel with at least one licensed paramedic. The advanced life support units carry both ALS and BLS equipment and provide a high level of emergency medical care. Items carried on the ALS engine companies and ambulances include: advanced airway and ventilation equipment, vascular therapy supplies, and portable battery-operated monitor/ defibrillators. The MFR officer/firefighter paramedics can supply immediate life saving measures and can transport patients to the appropriate facilities if the private transport is delayed or it is the best interest of the patient.

The type of incidents commonly encountered include: cardiac arrest, chest pain, stroke, patient unresponsive, seizure, child birth, overdose, suicides, and other general medical calls. The personnel that respond to EMS calls work 24 hours on and 48 hours off in a three-shift rotation. Recall procedures are well established should the need to man reserve apparatus arise.

Special Operations Division

Montgomery Fire/Rescue provides a proactive rapid response and highly trained professional emergency service for the City of Montgomery with the utilization of its Special Operations Teams. These teams are specifically skilled and trained in the mitigation of hazardous material incidents, Technical Rescues, and Dive/Swift Water Events.

Special Operations Teams consists of approximately 110 highly trained members responding to Technical and Non-Technical emergency situations. Teams include a Hazardous Material Team, Technical Rescue Team, Dive/Swift Water Rescue Team and a vast arsenal of specialized tools and equipment. They have the responsibility to mitigate Hazardous Materials and/or Rescue Incidents within the city limits of Montgomery; they are also assigned the duties of the Regional Response Teams for the South-Central Region via the Alabama Mutual Aid System (AMAS) along with the Alabama Department of Homeland Security (ALDHS) Division Delta Rescue and Recovery Dive Team. The teams are on duty and ready to respond 24 hours a day, 7 days a week.

Montgomery Fire/Rescue currently has a multitude of personnel that have Special Operations related certifications through the Alabama Fire College and Dive Rescue International Inc. Some of those personnel and certifications are including, but not limited to: 243 certified personnel in Hazmat A&O, 221 in Hazmat Tech, 53 in Hazmat Incident Command, 188 in Rapid Intervention Crews, 2 in Cave Rescue I/II, 48 in Confined Space Rescue I/II, 89 in Rope I, 59 in Rope II, 37 in Structural Collapse I/II, 39 in Trench Rescue I/II, 45 in Vehicle and Machinery Extrication, 22 in Wilderness I/II, 9 in Wildland Firefighting Training, 39 in Dive Rescue Specialist, 9 in Medical Dive Operations and 59 in Swift Water Rescue I/II.

Specialized Services

- Fire Prevention Services
- Building Plan Check Services
    - Fire alarm panels
    - Fire sprinkler plans
    - Structural plans
    - Site Plans
- Permits or approvals
    - Filming
    - Tents or air-supported structures
    - Special events
    - Pyrotechnics
    - Day care centers
- Inspections
    - Fire hydrants

  - Businesses
  - Existing buildings, new constructions and renovations
  - Fire sprinkler systems
  - Hazardous materials storage
  - Fire alarm systems
- Fire Investigation Services
- Life Safety Inspections
- Emergency Preparedness
  - Montgomery Regional Airport Disaster Drill
  - U.S. Foods Ammonia Drill
  - Local Emergency Preparedness Committee (LEPC)
  - Dignitary Protection Unit (DPU)
- Public Education Services
  - School tours
  - Fire safety education
  - CPR training

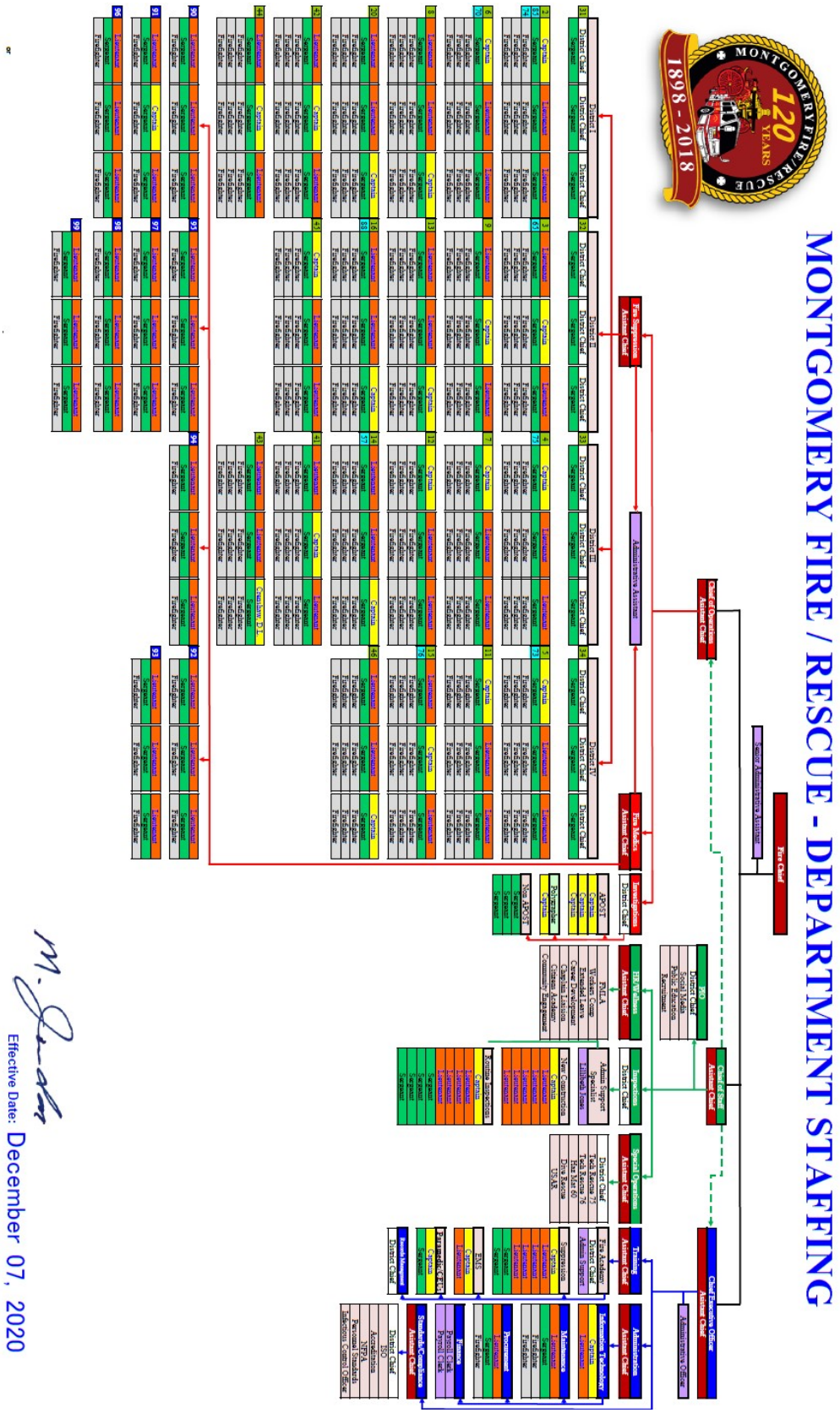


Figure 10: MFR Organization Chart

Community Risk Assessment

Risk Assessment Model

The Center of Public Safety Excellence (CPSE) defines a community risk assessment as an evaluation of a community's fire and non-fire hazards and threats, taking into account all pertinent facts that increase or decrease risk in order to define standards of cover. A risk is defined by CPSE as "the exposure or chance of injury or loss." Montgomery Fire/Rescue (MFR) uses a combination of models in the risk assessment process. The MFR utilizes a two-axis risk assessment to assess fire probability and consequence for every building in the City of Montgomery, with the exception of single or dual family residential and duplexes. This two-axis analysis allows the MFR to identify the low, medium, high, and maximum risk structures in each zone. This risk assessment is combined with a comprehensive annual pre-plan and building familiarization program that is led by the company captains in each planning zone. A three-axis model is used to analyze risk types by service classification including fire, EMS, technical rescue, and HazMat call types.

Risk Assessment Methodology

Two Axis Model

The two-axis methodology considers probability and consequence simultaneously. When a particular risk moves up vertically along the y-axis a risk has a greater probability of occurrence. Moving to the right parallel to the x-axis demonstrates that the threat has a higher consequence to the community. When the two considerations are plotted on the graph illustrated in Figure 9, then a relative values us given for the level of the risk.

Y Axis (Probability)

Low probability means that a significant loss fire is less likely to occur in this structure. Structures that meet this criteria are Type I or Type II structures. Additionally, buildings equipped with fire suppression systems are rated as a low probability. Examples of low probability structures include hospitals, fire stations, most schools, fast food restaurants with fire-resistive construction, and big box stores with suppression systems.

High probability means that there is a higher probability of a significant loss fire at the location. A Type III, IV, and V structure that is not protected by a suppression system would fall into this category. Examples include many ordinary construction buildings downtown, all apartments without suppression systems, and many churches.

X Axis (consequence)

The consequence has to do with how a significant fire would affect a community. When referring to the consequence the model doesn't mean one family. This criterion refers to a neighborhood, block, a group of people, or everyone. Most fires will be of low consequence to the community. Examples of low consequence include fires in residential structures, small restaurants, gas stations, most retail shops. Examples of high community consequences include significant fires in churches, grocery stores, important government officers, buildings with historical significance, and ALL target hazards.

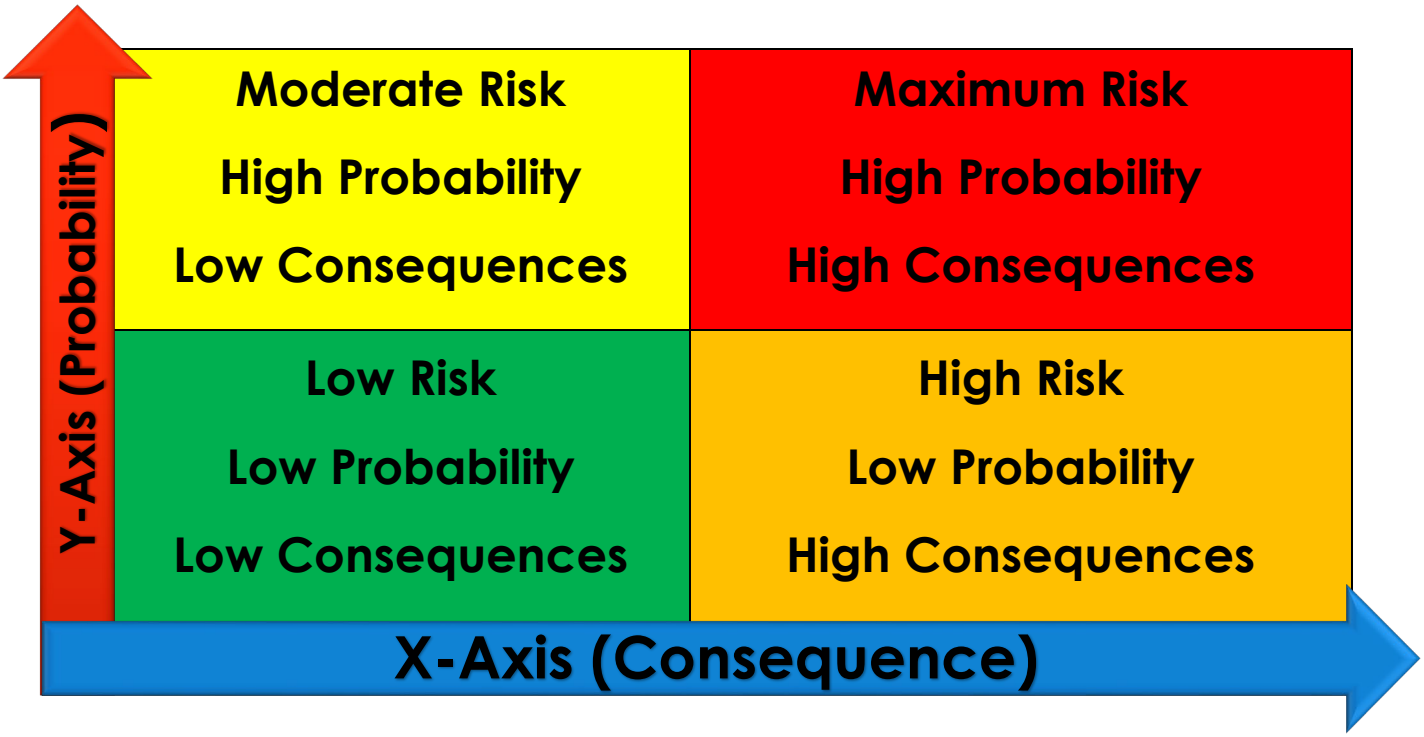


Figure 11: Two Axis Risk Categorization

Three Axis Model

The three-axis model adds an additional risk area for consideration. Included is the probability and consequence like the two-axis method and agency impact is added. Each axis is scored from 2 to 10 with 2 representing the lowest risk and 10 representing the maximum possible risk. All three of the scores are then calculated using Heron's formula and the result is the risk rating for the particular risk area. The tetrahedron creates a visualization of the risk, while Heron's formula measures the volume of the tetrahedron and produced a rating of low, moderate, high, or maximum based on the measured volume. For this analysis both the Y & Z Axis were built using historical data and critical tasking. The X Axis was the product of the subjective opinion of each staff member as to the consequence to the affected community.

$$\sqrt{\frac{(PC)^2}{2} + \frac{(CI)^2}{2} + \frac{(IP)^2}{2}}$$

Figure 12: Heron's Formula

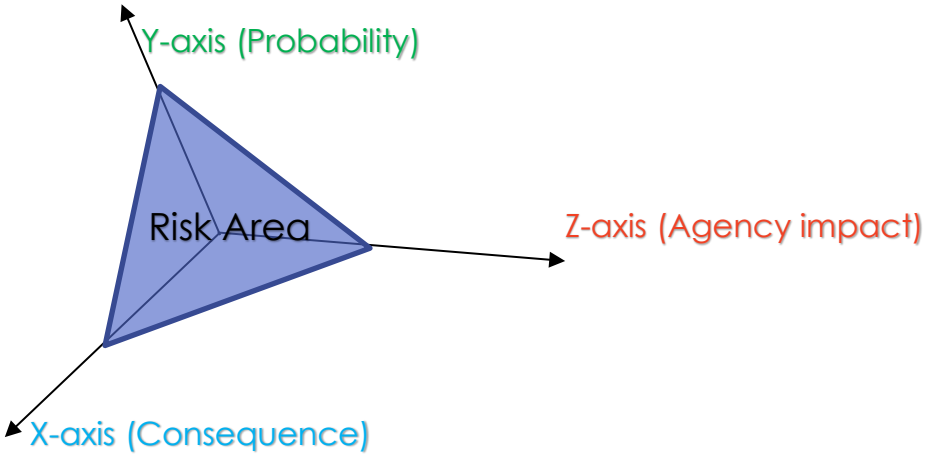


Figure 13: Three-Axis Tetrahedron

Y Axis

In the three-axis model, the Y-axis gauges probability. CPSE defines probability as "the likelihood an emergency situation will occur in a given period of time." To determine probability the MFR analyzed each of the incident types using data of occurrence from the preceding three years 2018, 2019, and 2020. A score was assigned from 2 to 10 with 2 indicating the lowest probability and 10 being the most likely to occur.

X Axis

The X-Axis examines community consequence. CPSE defines community consequence as the impact or magnitude or expected loss that will be experienced by the response area, community, and citizenry of the area." Economic loss, historical or cultural importance, and potential injury or loss of life is considered when determining the community consequence. The X-axis is again rated from 2 to 10 with two being of the lowest consequence and ten indicating major community consequence.

Z Axis

The Z-axis evaluates Agency impact which is what separates the two and three axis methodologies. CPSE defines agency impact as "the drain effect on the community's standard of deployment and coverage capacity when an emergency occurs. This axis uses the Effective response force that is based on the critical task for a particular incident type to determine the impact to the agency. Some incidents will require a large amount of personnel and apparatus and this will have a negative impact on the MFRs ability to cover the city. Again, this axis is scored 2 to 10 with incidents having very little impact rating a two, while the largest scale incidents will rate a score of 10.

Fire Risk Assessment

Two Axis Model

The MFR took the added step of looking at each building in the City of Montgomery and giving that building a score using the two-axis fire risk assessment. This risk assessment excluded single- and two-family residential structures because, with the exception of extreme cases, all of these structures score a moderate risk. During the risk assessment these structures were counted for comparison between the planning zones. A comprehensive list of structures with risk assessment data including location, construction type, target hazards, high rises, square footage with fire flow calculations, suppression system availability, GPS coordinates, and a risk classification was developed. The information harvested from that risk assessment is contained in a second document available to all members of the MFR, but the data can be found cited throughout this standards of cover and community risk assessment document. The following table illustrates what types of classification were given to the assessed structures in the planning zones. Maps showing the location of critical facilities, target hazards, maximum, and high risk occupancies is available in Appendix E & F.

Planning Zone	Low	Moderate	High	Maximum
Planning Zone 2	298	219	71	78
Planning Zone 3	164	387	74	23
Planning Zone 4	316	57	62	19
Planning Zone 5	410	170	75	49
Planning Zone 6	221	479	89	30
Planning Zone 7	81	150	7	15
Planning Zone 8	78	71	23	33
Planning Zone 9	167	281	22	12
Planning Zone 11	186	143	42	8
Planning Zone 12	46	123	17	56
Planning Zone 13	140	206	72	16
Planning Zone 14	117	5	33	3
Planning Zone 15	298	159	89	13
Planning Zone 16	4	51	8	6
Totals	**2526**	**2501**	**684**	**361**
Total Structures Assessed	**6072**			

Table 11: Planning Zone Two-Axis Risk Assessments

Fire Suppression Risk Assessment

Y Axis (Probability)

The y-axis measures the likelihood of an incident using the preceding three years of data. The more the incident type has occurred historically the higher the score.

Risk Score	2	4	6	8	10
Average Incidents (2018-2020)	0-500	501-1000	1001-1500	1500-2000	>2000

Table 12: Fire Y-Axis Scores

X Axis (Community Consequence)

The x-axis measures the magnitude of impact that the incident will have on the community or residents of a particular area. Factors considered include economic loss, potential loss of life or serious injury.

Z Axis

The Z-axis examines the impact on the MFR's ability to continue to provide service to others. The more firefighters required to mitigate an incident the less are available to respond to other community needs. Some incidents only require one company and, in most cases, will rate at least a 4 because the MFR suppression minimum staffing is 4 personnel on the suppression apparatus. As the incident type requires additional units the impact score increases.

Risk Score	2	4	6	8	10
Personnel Needed for ERF	1-2 F/F	3-4 F/F	5-11 F/F	12-18 F/F	>19 F/F

Table 13: Fire Z Axis Scores

Incident Type	Probability	Consequence	Impact	Risk Score	Risk Category
Private Fire Alarm	10	2	4	32	Low
Private Alarm High Risk	2	4	6	20	Moderate
Trash/Dumpster Fire	4	2	4	14	Low
Grass/Brush Fire	4	4	4	20	Moderate
Pass. Vehicle Fire	4	2	4	14	Low
Large vehicle Fire	2	4	6	20	Moderate
Structure Fire	2	6	8	37	High
Aircraft Emergency	2	6	10	46	Maximum

Table 14: Fire Three-Axis Risk Assessment

Emergency Medical Service Risk Assessment

Y Axis

The y-axis measures the likelihood of an incident using the preceding three years of data. The more the incident type has occurred historically the higher the score.

Risk Score	2	4	6	8	10
Average Incidents (2018-2020)	0-500	501-1000	1001-1500	1500-2000	>2000

Table 15: EMS Y-Axis Scores

X Axis

The x-axis measures the magnitude of impact that the incident will have on the community or residents of a particular area. Factors considered include economic loss, potential for loss of life or serious injury.

Z Axis

The Z-axis examines the impact on the MFR's ability to continue to provide service to others. The more EMS providers required to mitigate an incident the less are available to respond to other community needs. Some incidents only require one medic company and, in most case, will rate a 2 on impact. As the incident type requires additional units for assistance or command the impact score increases.

Risk Score	2	4	6	8	10
Personnel Needed for ERF	1-2 F/F	3 F/F	4-11 F/F	12-18 F/F	> 19 F/F

Table 16: EMS Z-Axis Scores

Incident Type	Probability	Consequence	Impact	Risk Score	Risk Category
General Illness	10	2	2	20	Moderate
Vehicle Accident	4	2	6	20	Moderate
Subject shot	4	6	6	35	High
Possible Suicide	6	4	4	27	High
Stroke	8	4	4	34	High
Cardiac Arrest	4	6	6	35	High
Patient Assist	2	2	2	5	Low

Table 17: EMS Three Axis Risk Assessment

Hazardous Materials Risk Assessment

Y Axis

The y-axis measures the likelihood of an incident using the preceding three years of data. The more the incident type has occurred historically the higher the score.

Risk Score	2	4	6	8	10
Average Incidents (2018-2020)	0-500	501-1000	1001-1500	1500-2000	>2000

Table 18: HazMat Y Axis Scores

X Axis

The x-axis measures the magnitude of impact that the incident will have on the community or residents of a particular area. Factors considered include economic loss, potential for loss of life or serious injury.

Z Axis

The Z-axis examines the impact on the MFR's ability to continue to provide service to others. The more firefighters required to mitigate an incident the less are available to respond to other community needs. Some incidents only require one company and, in most case, will rate a 4 on impact because the minimum suppression response involves 4 personnel. As the incident type requires additional units for assistance or command the impact score increases.

Risk Score	2	4	6	8	10
Personnel Needed for ERF	1-2 F/F	3-4 F/F	5-11 F/F	12-18 F/F	>19 F/F

Table 19: HazMat Z-Axis Scores

Incident Type	Probability	Consequence	Impact	Risk Score	Risk Category
Fuel Spill	2	2	2	5	Low
Propane Incident	2	2	6	12	Low
Gas Odor	2	2	6	12	Low
CO Detector	2	2	6	12	Low
HazMat Incident	2	6	10	46	Maximum

Table 20: HazMat Three Axis Risk Assessment

Technical Rescue Risk Assessment

Y Axis

The y-axis measures the likelihood of an incident using the preceding three years of data. The more the incident type has occurred historically the higher the score.

Risk Score	2	4	6	8	10
Average Incidents (2018-2020)	0-500	501-1000	1001-1500	1500-2000	>2000

Table 21: Technical Rescue Y-Axis Scores

X Axis

The x-axis measures the magnitude of impact that the incident will have on the community or residents of a particular area. Factors considered include economic loss, potential for loss of life or serious injury.

Z Axis

The Z-axis examines the impact on the MFR's ability to continue to provide service to others. The more firefighters required to mitigate an incident the less are available to respond to other community needs. The least impactful technical rescue incident will require a minimum of one company and an incident commander; therefore a 6 would be the minimum impact rating for a technical rescue. As the incident type requires additional units for assistance or command the impact score increases.

Risk Score	2	4	6	8	10
Personnel Needed for ERF	1-2 F/F	3-4 F/F	5-11 F/F	12-18 F/F	>19 F/F

Table 22: Technical Rescue Z-Axis Scores

Incident Type	Probability	Consequence	Impact	Risk Score	Risk Category
MVC entrapment	2	4	8	26	High
Elevator Rescue	2	2	6	12	Low
Industrial Accident	2	4	8	26	High
High Angle Rescue	2	6	8	37	High
Water Rescue	2	4	8	26	High
Trench/Confine Space	2	6	8	37	High
Structural Collapse	2	8	8	48	Maximum
Dive Recovery	2	4	8	26	High

Table 23: Technical Rescue Three Axis Risk Assessment

Natural Disaster Risk Assessment

To assess the risk posed by natural disasters the same three axis methodology is applied to each incident type. NOAA's National Centers for Environmental Information is the source of incident data type that will provide the incident needed for the probability (Y) axis which is developed by dividing the total number of incidents by the 10 years of study time. The data shows that there were 9 tornados in Montgomery County from 2010 to 2020. These tornados were responsible for $500,000 in property damage but no deaths or injuries. There were 48 thunderstorms that produced significant damage during the study period with no reported deaths or injuries; however, there was $53,000 in property damage. There were zero earthquake events in the study period with the most recent being reported in 2004 according to city-data.com. Montgomery County had 175 reported wildland fires according to the Alabama Forestry Commission with a total of 1,715 acres burned over the study period.

An in-depth analysis of the City of Montgomery's natural disaster was not performed by MFR because a comprehensive threat analysis was conducted in 2019-2020 by several regional EMA offices. The plan, the East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is an in-depth look at the natural disaster threat in Montgomery and surrounding jurisdictions and looks at historical events and predicts the probability of occurrence in all locations. The EMA plan is complete and at the time of this documents publishing was awaiting state approval before publishing. Once published, it will stand alongside this CRA/SOC providing further analysis of the natural threats to the City of Montgomery.

Y Axis

The y-axis measures the likelihood of an incident using the preceding three years of data. The probability of future occurrence represents incidents divided by 10 years and assigned a number 2-10.

Risk Score	2	4	6	8	10
Average Incidents (2010-2020)	20% or less	40%	60%	80%	100%

Table 24: Natural Events Y-Axis Scores

X Axis

The x-axis measures the magnitude of impact that the incident will have on the community or residents of a particular area. Factors considered include economic loss, potential for loss of life or serious injury. This axis is subjective and numbers were developed through MFR staff input.

Z Axis

The Z-axis examines the impact on the MFR's ability to continue to provide service to others. The more firefighters required to mitigate an incident the less are available to respond to other community needs. The least impactful technical rescue incident will require a minimum of one company and an incident commander; therefore a 6 would be the minimum impact rating for a technical rescue. As the incident type requires additional units for assistance or command the impact score increases.

Risk Score	2	4	6	8	10
Personnel Needed for ERF	1-2 F/F	3-4 F/F	5-11 F/F	12-18 F/F	>19 F/F

Table 25: Natural Events Z-Axis Scores

Incident Type	Probability	Consequence	Impact	Risk Score	Risk Category
Thunderstorm	6	4	6	17	Moderate
Lightning	2	2	4	8	Low
Hail	2	2	4	8	Low
Tornado	2	8	10	59	Maximum
Flood/Flash Flood	2	4	8	26	Moderate
Extreme Winter Weather	2	6	8	37	High
Drought / Extreme Heat	4	4	4	20	Moderate
Tropical Storm/Hurricane	2	6	8	37	High
Sinkhole	2	2	4	8	Low
Landslide	2	2	4	8	Low
Earthquake	2	2	4	8	Low
Dam/Levee Failure	2	6	8	37	High
Brush Fire	2	2	4	8	Low

Table 26: Natural Events Risk Assessment

MFR Community Risk Reduction Activities

MFR has long been in the business of fire prevention. A considerable amount of the department's personnel and resources are directed at preventing the emergency from happening rather than response and event mitigation. This is especially true in the area of fire prevention. The community risk reduction model currently deployed by the MFR incorporates prevention strategies spread across several functional divisions of the MFR. The vision going forward is that those activities will remain in the functional divisions but will be formalized under one community risk reduction umbrella with a more formal process of applying targeted strategies and measuring inputs and outputs.

Public Education

Public education in Montgomery is primarily driven by the Division of Training (DOT). In addition to their responsibility for training new recruits, conducting probationary exams, administering monthly drills, and ensure the certifications remain current the DOT staff conducts frequent public education activities. Often DOT receives request for a public education activity at a school or community center an assigns that activity to a suppression company to conduct. They also frequently engage the community themselves often at city or community events. Training operates "Freddy the Fire Truck" a remote controlled fire vehicle and "Sparky the Fire Dog" both targeting kids with fire safety education. The division also deploys a mobile fire safety education house that helps to teach kids about fire safety and how to escape in the event of a fire. DOT serves as a training center for The American Heart Association and MFR personnel can be found daily teaching CPR, first aid, or AED somewhere in the city. This team of professionals also works diligently to keep the city protected by recruiting new members to the force. The table below demonstrates the public education activity of DOT on 2020.

MFR Public Education Activities	2020	2019	2018
Sparky The Fire Dog (Hours)	212	210	0
Fire Station Tours (Number)	140	177	257
Firefighter Career Recruiting (Hours)	319	304	54
Civilian Fire Safety Class (Hours)	112	935	861
Civilian Fire Extinguisher Class (Hours)	0	27	19
Civilian CPR/First Aid/ AED Class (Hours)	1064	282	920

Table 27: MFR public education activities

Code Enforcement

In order to ensure compliance with all applicable codes and standards for fire and life safety, Montgomery Fire/Rescue has trained and certified Fire Inspectors that conduct more than thousands of inspections annually to include: installation of fire protection systems, new construction, ongoing compliance of existing commercial buildings and re-inspections of noted violations. The lead for the department's community risk reduction efforts is the Inspections Bureau led by the fire marshal. This inspection lead will continue to be as these efforts become increasingly intertwined and targeted into one CRR process. This bureau was challenged by the COVID-19 pandemic and found maintaining the normal inspections frequency difficult. The division adapted and found creative ways including virtual inspections to ensure the citizens of Montgomery continued to receive the best protection possible. The table below details the Inspections bureau risk reduction activities for the last three years.

MFR Codes Inspection and Enforcement Activities	2020	2019	2018
Total Inspections	8,455	14,239	10,731
New Construction Inspections	1,167	1,288	1,090
Routine Inspections	2,238	7,115	3,993
Apartment Inspections	1,008	5,085	2,283
Tier Two Inspections	74	86	54
Day Care Inspections	72	189	164
School Inspections	50	56	60
Nursing Home / Domiciliary	4	45	50
Hotel / Motel Inspections	0	87	100
Night Club Inspections	4	18	37
Re-Inspections	665	952	1,099
Plan Reviews	598	653	668
Permits	294	326	256
Firework Permits	3	34	33
Miscellaneous Inspection	3,077	3,517	3,292
Fees Collected (Dollar Amount)	$200,891.52	$207,891.43	$203,977.40

Table 28: Codes inspection and enforcement activities

Fire Investigation

MFR employees its own fire investigators utilizing law enforcement officers certified through the Alabama Peace Officers Standards and Training Commission certification, therefore giving them the authority to make arrests. Fire investigators strive to accurately determine the exact cause and origin of

both accidental and incendiary fires. Determining the cause and origin for fires that meet specified criteria is an integral part of Montgomery Fire/Rescue's commitment to public safety and community risk reduction plan. The activity of the Fire Investigation Bureau is detailed in the table below.

MFR Fire Investigation Activities	2020	2019	2018
Total Investigations	361	300	284
Accidental Fires	171	147	116
Electrical Fires	41	36	37
Cooking Fires	87	34	44
Smoking	13	9	3
Children Playing with Matches	5	2	6
Candle Fires	3	8	2
Combustibles too Close	13	3	3
Undetermined Cause	52	43	42
Other Cause	104	49	23
Fire Fatalities	7	3	5
Active Investigations	80	61	73
Arrests	15	10	11
Trial Cases	0	10	1
Convictions	Unknown	1	Unknown
Night Club Occupancy Check	208	329	208

Table 29: Fire Investigation activities

Pre-planning and building familiarization

In addition to the risk reduction activities discussed each station captain is tasked with ensuring that every occupancy in his or her territory receives either a building familiarization or fire pre-plan every year. This can sometimes be a daunting task, but ensures that company officers are familiar with the structures that they respond to. The Inspections Bureau is also aided by the updates that are added to the department's records management system as to building occupancy and other important changes. For 2020 and 2021 the CPSE accreditation process has led to an enhancement of this review whereas the officers are now tasked with using a two-axis method to assign a risk classification to and identify structures that are particularly hazardous. Going forward MFR fire inspectors will use this information to prioritize inspections.

Planning Zones

The City of Montgomery Communications Center dispatches Montgomery Fire/Rescue units to all calls for service using the Tyler Solution© Aegis computer aided dispatch system (CAD). The system dispatches the closest appropriate units for the call type based on programmed incident criteria and location within one of the 14 planning zones illustrated below. To further ensure that the closest unit is dispatched each of the 14 planning zones are broken into quadrants (i.e. 6A, 6B, 6C, 6D).

Because the MFR response data is based upon these zones and quadrants the 14 planning zones are the natural choice for planning zones for community risk assessment purposes. In this section each of the planning zones is introduced along with hazards that were identified during the 2021 risk assessment. Planning Zones 4, 14, and 16 have population densities of less than 560 and are classified as rural zones in the assessment and when determining baseline and benchmark performance measures. Montgomery's population density is illustrated in Appendix J.

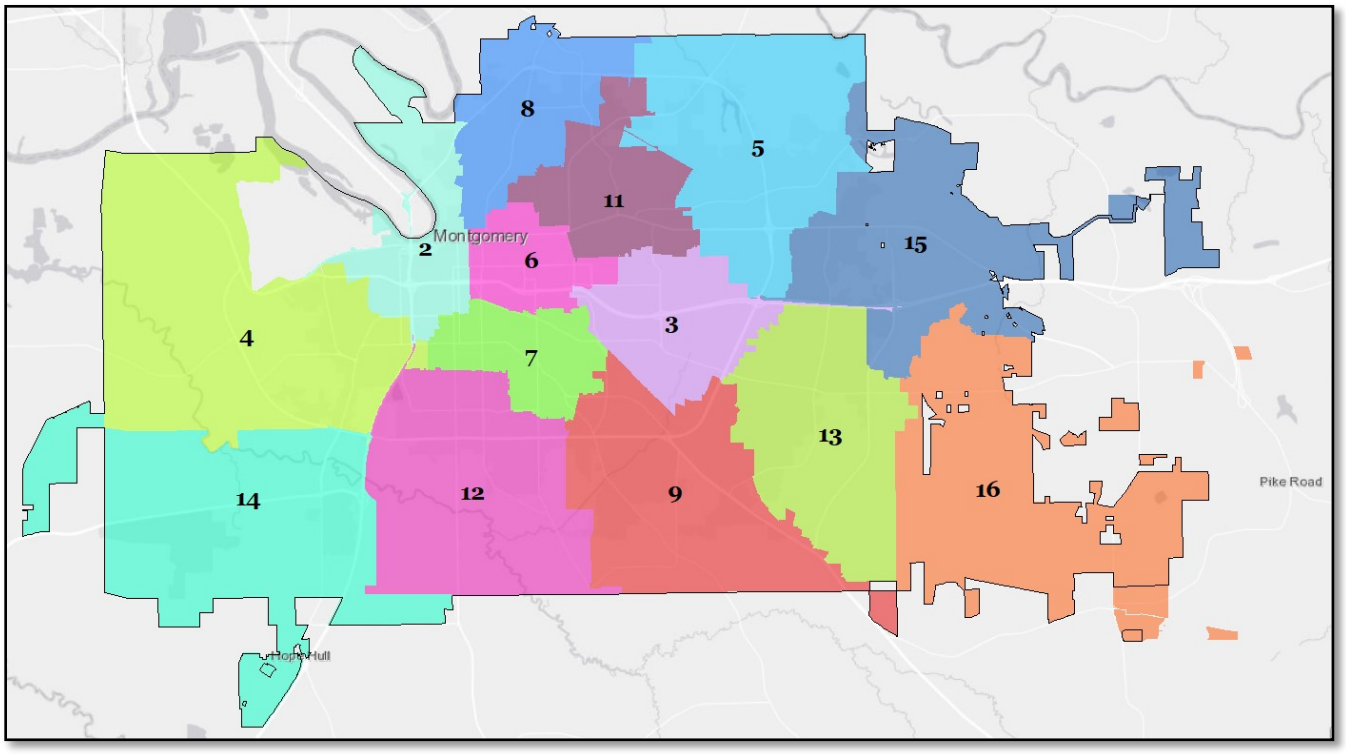
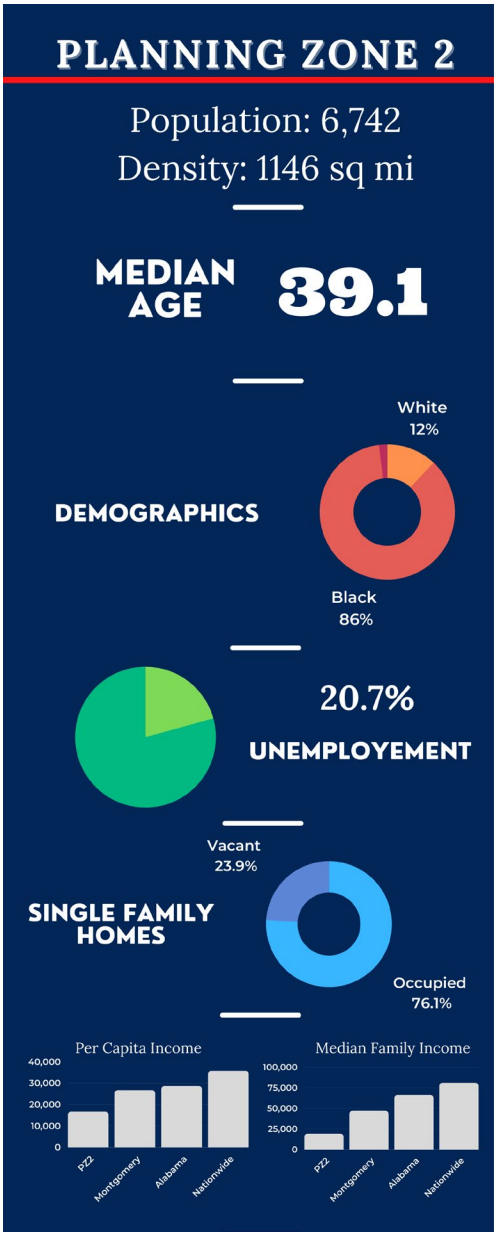


Figure 14: Map of Planning Zones

Planning Zone 2

Planning Zone 2 is in the northern part of the city and covers the majority of the downtown portion of the city. This area at first glance would appear to be the most densely populated zone because of its bustling daytime activity, but it is actually ranked near the bottom of the planning zones in terms of population density. As the capital of Alabama Montgomery host many state government offices and workforce. The city itself has an employee base of over 4000 many of whom work in planning zone two during the daytime hours. This zone holds Fire Station 2, and MFR Headquarters.



An analysis using ArcGIS and the latest census data reveals that the median age is 39.1 in this zone which ranks 10th out of the 14 zones. The demographics of this zone are made up of an 86% black population followed by a 12% white population, with the remaining 2% made up of people of Hispanic, Asian, or other descents. Many of the residents of this zone are challenged economically, and this is reflected in the unemployment at 20.7% and both per capita and median family income. Sadly, the median family income in this area is 61,884 dollars below the national average. There are 3,492 single-family structures in this planning zone of which 836 are vacant.

MFR developed a social vulnerability scoring system as part of this community risk assessment. The system rates five factors including a divergence from median age high or low, unemployment percentage, percent of homes vacant, per capita income, and median family income. The race is indicated for informational purposes but was not considered in the score. The complete scoring system can be found in Appendix C.

Planning Zone 2 is home to a significant portion of the Alabama River and as a result, the lower-lying northern portion of Planning Zone 2 has a high-risk flood potential. This can be visualized on the flood map in Appendix D. Planning Zone 2 has 3492 single-family homes, 142 target hazards, 46 high-rise structures, and 253 buildings greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 22% of PZ2's commercial occupancies were sprinkled.

PZ2 is a particularly high-risk area for transportation due to the connection of Interstates 65 & 85 and a major CSX rail yard.

PZ2 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	81	41	-49%	64	56%	49	-23%
Structure Fire (W-3)	26	16	-38%	21	31%	24	14%
Multi-Alarm Fires	59	59	0%	18	-69%	0	-100%
Vehicle Fires	43	34	-21%	29	-15%	32	10%
False Alarms	312	393	26%	459	17%	375	-18%
HazMat Incident	42	30	-29%	33	10%	23	-30%
Dive Rescue Incident	0	0	null	5	null	0	-100%
Technical Rescue Incident	19	37	95%	25	-32%	14	-44%
Other Suppression	403	325	-19%	271	-17%	337	24%
Total Suppression:	985	935	-5%	925	-1%	854	-8%

Table 30: PZ2 Suppression Data

PZ2 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	1,173	983	-19%	1,202	22%	1,021	-15%
Vehicle Accident	265	308	14%	260	-16%	275	6%
Subject Shot	40	38	-5%	40	5%	51	28%
Possible Suicide	18	26	31%	22	-15%	22	0%
Nonemergency assist	5	6	17%	102	1600%	92	-10%
Cancelled enroute	111	116	4%	94	-19%	129	37%
Other EMS	1,772	1,847	4%	1,805	-2%	1,804	0%
Total EMS:	3,384	3,324	-2%	3,525	6%	3,394	-4%

Table 31: PZ2 EMS Data

Planning Zone 2 Special Considerations	
Single Family Residential	3,492
Target Hazards	142
High Rise Structures	46
> 10,000 Square Feet	253
Percent sprinkled	22%

Table 32: PZ2 Special Considerations

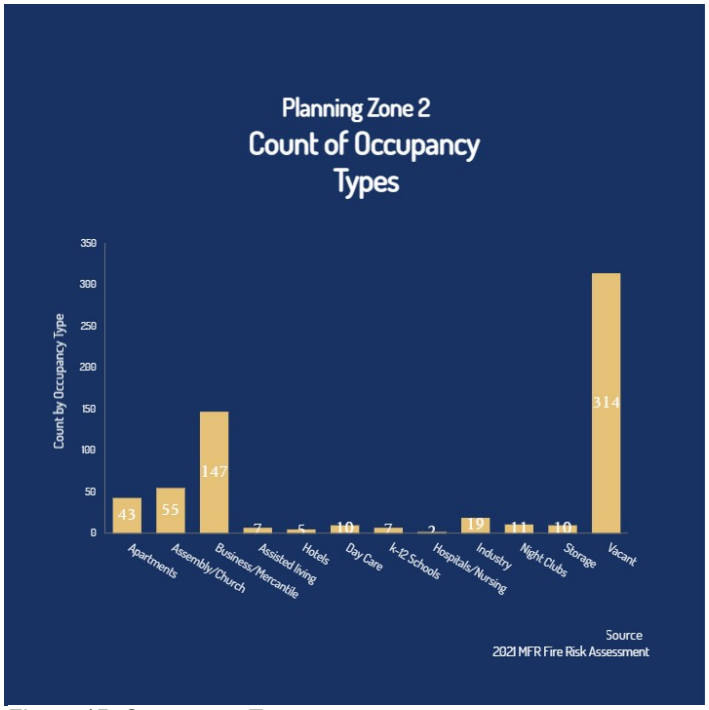


Figure 15: Occupancy Types

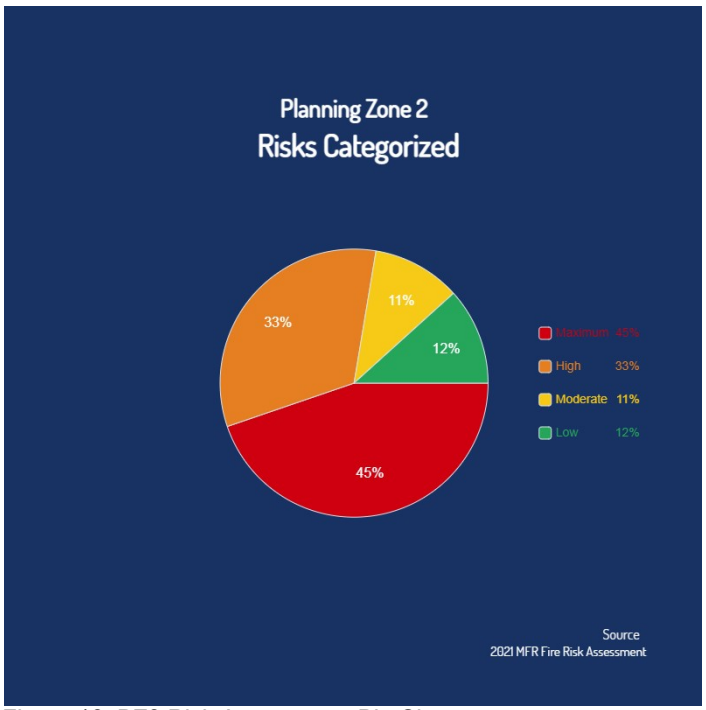


Figure 16: PZ3 Risk Assessment Pie Chart

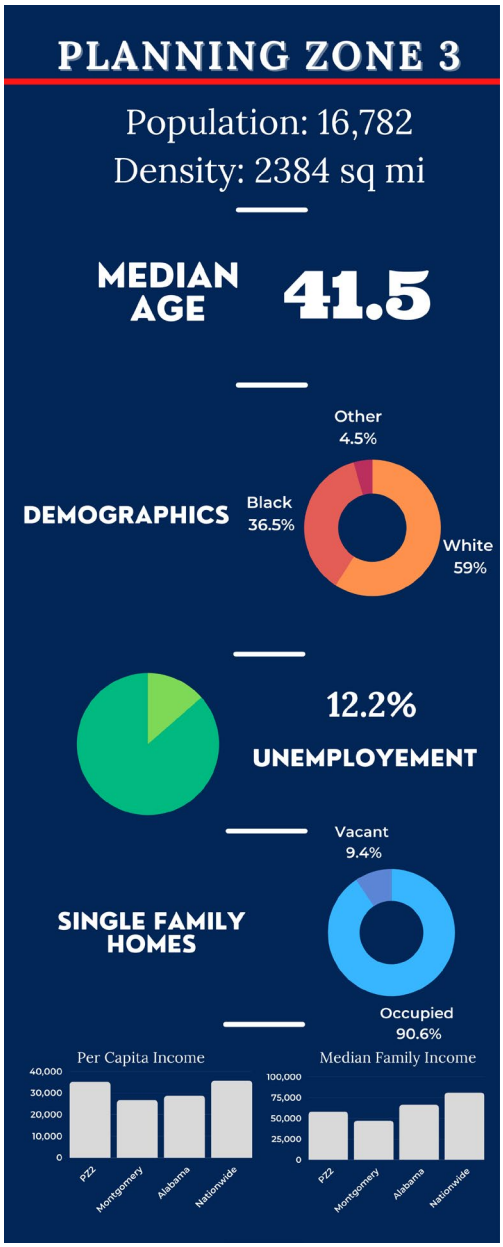
Planning Zone 2 Incidents by time of day

Table 33: PZ2 Incidents by Time of Day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	44	34	36	36	35	44	48	277
1	23	33	28	24	35	49	54	246
2	26	36	22	24	37	41	32	218
3	24	23	29	34	19	32	34	195
4	25	27	28	27	26	27	30	190
5	29	23	24	36	27	29	31	199
6	36	39	34	41	33	33	43	259
7	76	45	53	55	58	35	35	357
8	80	82	71	52	78	59	55	477
9	73	58	72	81	80	76	49	489
10	66	73	82	72	74	68	73	508
11	62	85	75	66	92	54	68	502
12	58	85	52	75	74	75	66	485
13	70	67	67	63	71	65	58	461
14	65	63	60	75	77	74	61	475
15	64	66	71	65	66	67	59	458
16	64	77	89	81	87	72	70	540
17	95	84	69	77	79	79	67	550
18	68	65	72	78	78	52	58	471
19	60	73	70	68	86	72	56	485
20	71	59	69	59	73	69	67	467
21	49	40	40	56	43	60	46	334
22	56	55	40	68	67	58	54	398
23	33	28	51	35	58	46	37	288
Grand Total	**1,317**	**1,320**	**1,304**	**1,348**	**1,453**	**1,336**	**1,251**	**9,329**

Planning Zone 3

Planning Zone 3 is in the central portion of the city and covers a mix of residential neighborhoods and commercial business occupancies. The planning zone is traversed at its midline by Interstate 85 significantly increasing the risk associated with interstate transportation. Planning Zone 3 ranks 3rd in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 3 and the city's hazardous materials team due to its centralized location and access to the interstate and the city's major highway loop.



An analysis using ArcGIS and the latest census data reveals that the median age is 41.5 in this zone ranking 2nd amongst the 14 planning zone which suggests a much older population resides in this area. The demographics of this zone are made up of a 59% white population followed by a 36.5% black population, with a remaining 4.5% made of Hispanic, Asian, and other descents. This zone is less challenged economically than the other zones. The per capita income in this zone, at 35,164, outpaces the city and state average. The zone's median family income, at 57,796 outpaces the city's average. The employment rate of 12.2% ranks 5th best of the 14 planning zones. The social vulnerability score for this zone is 14 which is the 6th lowest of the 14 assessed zones.

There is no significant flood risk in this zone. There are 7,424 single-family residential structures of which 768 (9.4%) were vacant according to the most recent census data. There are 19 structures identified as target hazards, 7 high-rises, and 287 identified as being greater than 10,000 square feet on a single floor. The 2021 CRA indicated that 34% of PZ3's commercial occupancies were sprinkled. PZ3 is a particularly high-risk area for transportation due to the presence of Interstates 85 and the heavily used East South Blvd.

PZ2 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	81	41	-49%	64	56%	49	-23%
Structure Fire (W-3)	26	16	-38%	21	31%	24	14%
Multi-Alarm Fires	59	59	0%	18	-69%	0	-100%
Vehicle Fires	43	34	-21%	29	-15%	32	10%
False Alarms	312	393	26%	459	17%	375	-18%
HazMat Incident	42	30	-29%	33	10%	23	-30%
Dive Rescue Incident	0	0	null	5	null	0	-100%
Technical Rescue Incident	19	37	95%	25	-32%	14	-44%
Other Suppression	403	325	-19%	271	-17%	337	24%
Total Suppression:	985	935	-5%	925	-1%	854	-8%

Table 34: PZ3 Suppression Data

PZ2 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	1,173	983	-19%	1,202	22%	1,021	-15%
Vehicle Accident	265	308	14%	260	-16%	275	6%
Subject Shot	40	38	-5%	40	5%	51	28%
Possible Suicide	18	26	31%	22	-15%	22	0%
Nonemergency assist	5	6	17%	102	1600%	92	-10%
Cancelled enroute	111	116	4%	94	-19%	129	37%
Other EMS	1,772	1,847	4%	1,805	-2%	1,804	0%
Total EMS:	3,384	3,324	-2%	3,525	6%	3,394	-4%

Table 35: PZ3 EMS Data

Planning Zone 3 Special Considerations	
Single Family Residential	7424
Target Hazards	19
High Rise Structures	7
> 10,000 Square Feet	287
Percent sprinkled	34 %

Table 36: PZ3 Special Considerations

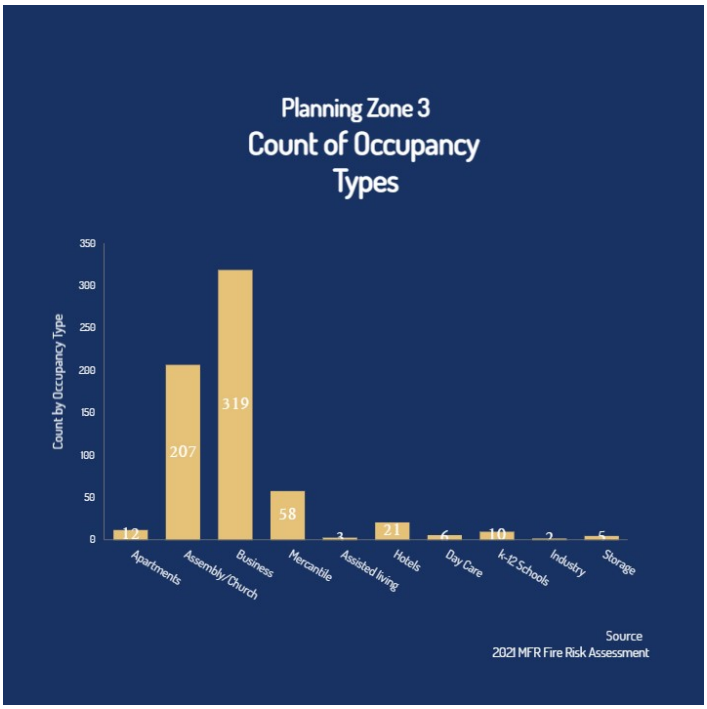


Figure 17: PZ3 Occupancy Types

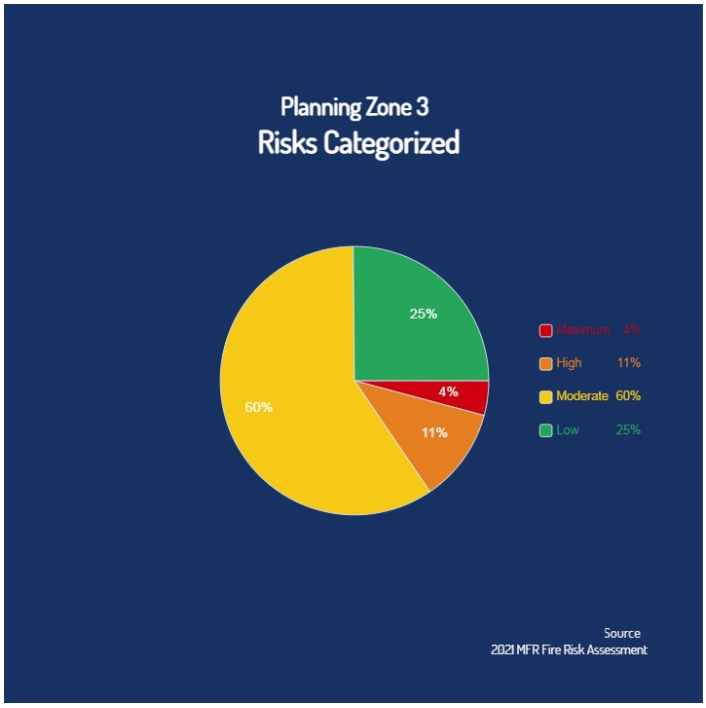


Figure 18: PZ3 Risk Assessment Pie Chart

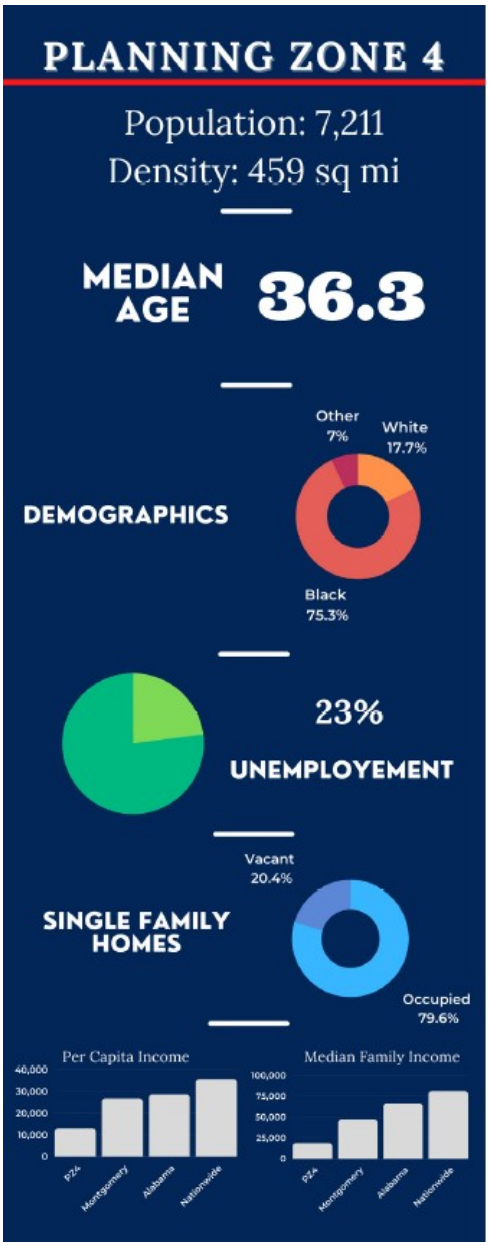
Planning Zone 3 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	39	41	33	46	26	53	53	291
1	29	39	22	34	17	38	29	208
2	31	26	33	28	33	32	33	216
3	24	18	19	17	26	38	35	177
4	27	20	25	20	29	25	31	177
5	37	22	16	27	36	40	33	211
6	35	32	32	36	36	32	41	244
7	49	64	66	52	69	31	28	359
8	64	63	80	70	68	61	49	455
9	83	76	64	60	70	75	43	471
10	85	90	80	84	68	62	55	524
11	76	72	71	65	80	67	59	490
12	70	89	89	81	82	76	60	547
13	80	65	83	85	76	66	88	543
14	81	70	93	73	71	71	57	516
15	80	89	88	78	79	71	68	553
16	79	76	92	77	85	59	68	536
17	84	85	81	93	83	79	84	589
18	80	80	72	72	82	78	52	516
19	65	74	56	67	65	71	56	454
20	47	61	63	54	62	69	51	407
21	58	53	49	43	50	71	36	360
22	39	40	37	40	59	59	41	315
23	48	34	45	40	57	60	54	338
Grand Total	**1,390**	**1,379**	**1,389**	**1,342**	**1,409**	**1,384**	**1,204**	**9,497**

Table 37: PZ3 Incidents by Time of Day

Planning Zone 4

Planning Zone 4 is in the western portion of the city of Montgomery and protects a mix of residential neighborhoods, some sparsely populated wooded areas, and a heavy presence of industrial/commercial occupancies. This planning zone is traversed at its eastern flank by Interstate 65. US Hwy 31 and Montgomery's heavily traveled West Boulevard also cut through the planning zone increasing transportation-related risks. Planning Zone 4 ranks 13th in the city's 14 planning zones in terms of population density at 459 people per square mile. Because the population density is less than 500 per square mile Planning Zone 4 is classified as a rural zone for the purpose of analyzing response time components later in this document. This zone is home to Fire Station 4, and the city's western heavy rescue team because of its location and quick access to the interstate.



An analysis using ArcGIS and the latest census data reveals that the median age is 36.3 in this zone ranking 8th amongst the 14 planning zone which suggests a mix of young and older people reside in this area. The demographics of this zone are made up of a 17.7% white population followed by a 75.3% black population, with a remaining 7% made of Hispanic, Asian, and other descents. This zone is challenged economically. The per capita income in this zone, at 12,850, is well below the city and state average. The zone's median family income, at 18,411 is also well below the city and state average. The employment rate at 23% ranks 13th of the 14 planning zones. The social vulnerability score for this zone is 20 which is the 4th highest of the 14 assessed zones.

There is a significant flood risk in this zone, as this zone borders the Alabama River and is crossed by the large Catoma Creek an Alabama River tributary. The flooding hazard can be visualized on the flood map in Appendix D. There are 3,347 single-family residential structures of which 768 (6.9%) were vacant according to the most recent census data. There are 41 structures identified as target hazards, 5 high rises, and 176 identified as being greater than 10,000 square feet on a single floor. The 2021 CRA indicated that 23% of PZ4's commercial occupancies were sprinkled. PZ4 is a particularly high-risk area for transportation due to the presence of Interstates 865 and the heavily used West Blvd. This zone has particularly high calls for non-emergency patient assists and structure fires, illustrated on the heat map in Appendix L & K.

PZ4 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	44	105	139%	88	-16%	54	-39%
Structure Fire (W-3)	21	31	48%	10	-68%	15	50%
Multi-Alarm Fires	0	0	null	0	null	0	null
Vehicle Fires	41	28	-32%	47	68%	45	-4%
False Alarms	200	205	3%	206	0%	228	11%
HazMat Incident	35	32	-9%	15	-53%	25	67%
Dive Rescue Incident	0	0	N/A	0	N/A	0	null
Technical Rescue Incident	0	1	100%	4	300%	2	-50%
Other Suppression	382	539	41%	447	-17%	319	-29%
Total Suppression:	723	941	30%	817	-13%	688	-16%

Table 38: PZ4 Suppression Data

PZ4 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	1,477	1,080	-37%	1,188	10%	1,093	-8%
Vehicle Accident	177	137	-29%	207	51%	149	-28%
Subject Shot	46	69	33%	66	-4%	79	20%
Possible Suicide	57	33	-73%	28	-15%	24	-14%
Nonemergency assist	26	12	-117%	59	null	137	132%
Cancelled enroute	111	127	13%	123	-3%	105	-15%
Other EMS	2,054	1,970	-4%	1,668	-15%	1,819	9%
Total EMS:	3,948	3,428	-15%	3,339	-3%	3,406	2%

Table 39: PZ4 EMS Data

Planning Zone 4 Special Considerations	
Single Family Residential	3,347
Target Hazards	41
High Rise Structures	5
> 10,000 Square Feet	176
Percent sprinkled	23 %

Table 40: PZ4 Special Considerations

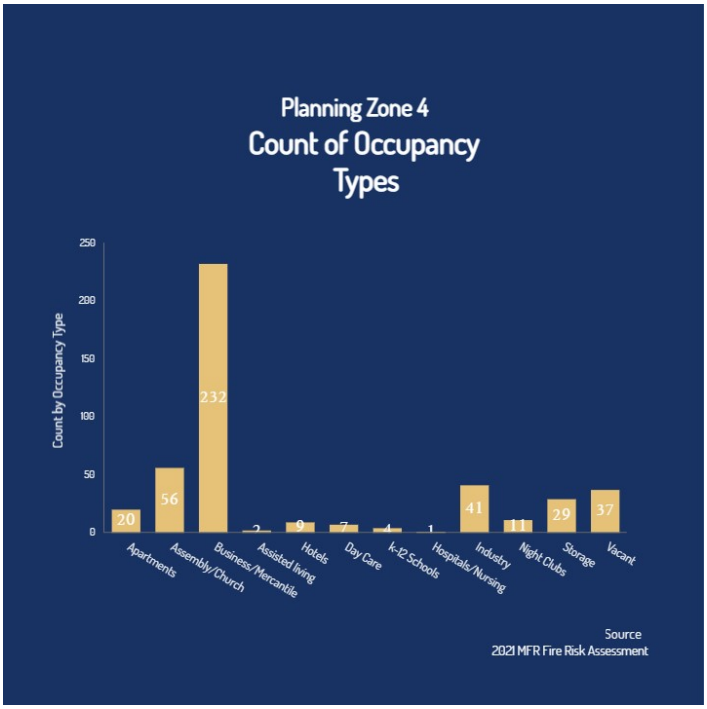


Figure 19: PZ4 Occupancy Types

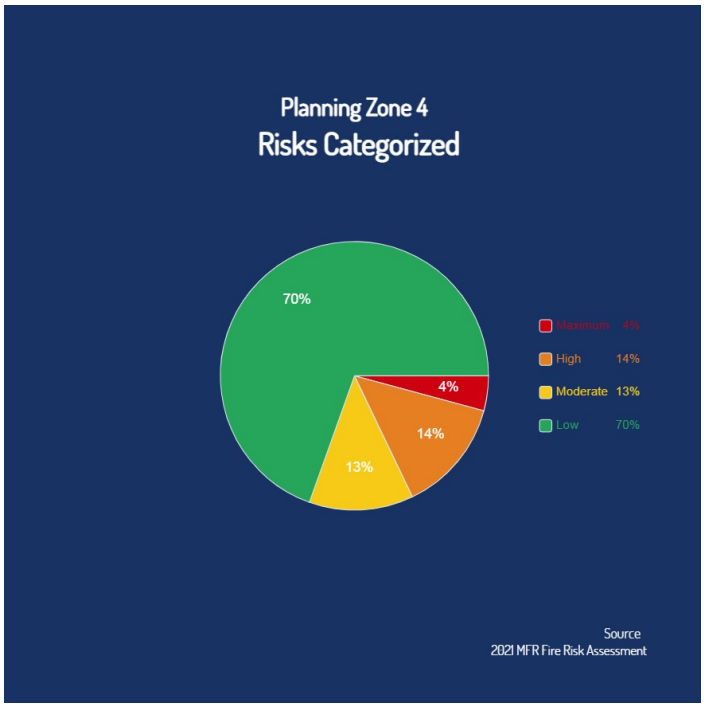


Figure 20: PZ4 Risk Assessment Pie Chart

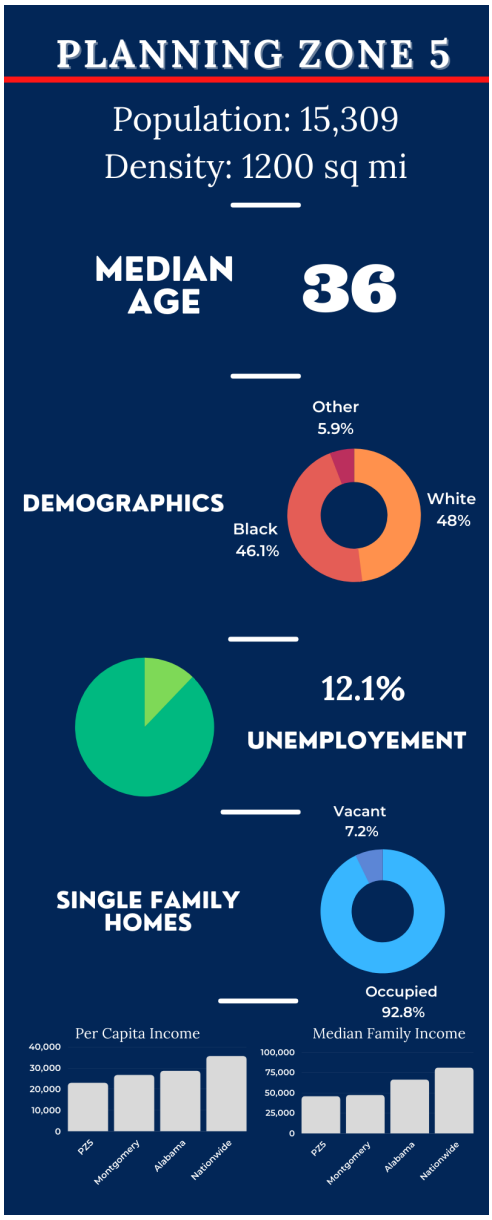
Planning Zone 4 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	36	39	40	55	48	44	51	313
1	42	37	37	31	37	49	49	282
2	34	30	24	25	30	38	50	231
3	21	31	32	23	30	44	47	228
4	21	31	25	30	32	29	32	200
5	31	28	26	31	33	28	30	207
6	48	49	43	40	43	38	39	300
7	52	46	59	58	50	40	41	346
8	50	66	68	59	71	65	57	436
9	56	63	69	67	72	65	76	468
10	82	87	81	72	64	63	68	517
11	64	94	75	72	70	71	80	526
12	67	83	66	73	75	62	80	506
13	70	73	59	70	61	81	74	488
14	63	65	71	78	58	57	63	455
15	82	72	69	60	79	75	58	495
16	91	64	60	65	66	71	66	483
17	67	57	63	74	72	79	68	480
18	67	84	68	64	74	82	79	518
19	81	69	83	81	80	78	85	557
20	66	76	62	62	66	80	57	469
21	62	50	54	61	58	69	74	428
22	59	61	65	71	58	64	46	424
23	40	43	38	42	48	46	45	302
Grand Total	**1,181**	**1,199**	**1,105**	**1,195**	**1,261**	**1,204**	**1,174**	**8,319**

Figure 21: PZ4 Incidents by Time of Day

Planning Zone 5

Planning Zone 5 is in the northern portion of the city and covers a mix of residential neighborhoods and a large industrial sector in the immediate vicinity of the zone's fire station. The zone is bordered on its northwest by Gunter Air Force Base an axillary of Maxwell AFB. Maxwell AFB provides its own fire protection and is a CFAI accredited agency. Maxwell Fire and Montgomery Fire/Rescue maintain a strong mutual aid agreement. Planning Zone 5 is traversed by two heavily traveled U.S. Highways, and two railroads, one of which is private and no longer operated. Planning Zone 5 ranks 10th in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 5.



An analysis using ArcGIS and the latest census data reveals that the median age is 36 in this zone ranking 9 amongst the 14 planning zone which suggests a younger population resides in this area. The demographics of this zone are made up of a 48% white population followed by a 46.1% black population, with a remaining 5.9% made of Hispanic, Asian, and other descents. This zone is in the middle of the planning zones economically. The per capita income in this zone, at 22,995, which lags behind the city and state average. The zone's median family income, at 45,608 similarly lags behind the city's average. The employment rate of 12.1% ranks 4th best of the 14 planning zones. The social vulnerability score for this zone is 11 which is the 4th lowest of the 14 assessed zones.

There is a moderate flood risk in the northern part of this zone illustrated in Appendix D. There are 6,336 single-family residential structures of which 458 (7.2%) were vacant according to the most recent census data. There are 56 structures identified as target hazards, 2 high rise, and 359 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 44% of PZ5's commercial occupancies were sprinkled. This zone has particularly high calls for non-emergency patient assists, illustrated on the heat map in Appendix L.

PZ5 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	51	71	39%	60	-15%	55	-8%
Structure Fire (W-3)	5	7	40%	22	214%	18	-18%
Multi-Alarm Fires	0	0	null	20	null	0	-100%
Vehicle Fires	25	42	68%	16	-62%	28	75%
False Alarms	197	267	36%	290	9%	297	2%
HazMat Incident	12	3	-75%	47	1467%	18	-62%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	0	2	100%	2	0%	14	600%
Other Suppression	357	269	-25%	307	14%	319	4%
Total Suppression:	647	661	2%	764	16%	749	-2%

Table 41: PZ5 Suppression Data

PZ5 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	799	722	-11%	766	6%	722	-6%
Vehicle Accident	345	292	-18%	284	-3%	279	-2%
Subject Shot	14	16	13%	27	69%	32	19%
Possible Suicide	25	32	22%	32	0%	30	-6%
Nonemergency assist	121	104	-16%	210	Null	312	49%
Cancelled enroute	84	79	-6%	99	25%	114	15%
Other EMS	1,507	1,497	-1%	1,531	2%	1,530	0%
Total EMS:	2,895	2,742	-6%	2,949	8%	3,019	2%

Table 42: PZ5 EMS Data

Planning Zone 5 Special Considerations	
Single Family Residential	6,336
Target Hazards	56
High Rise Structures	2
> 10,000 Square Feet	359
Percent sprinkled	44 %

Table 43: PZ5 Special Considerations

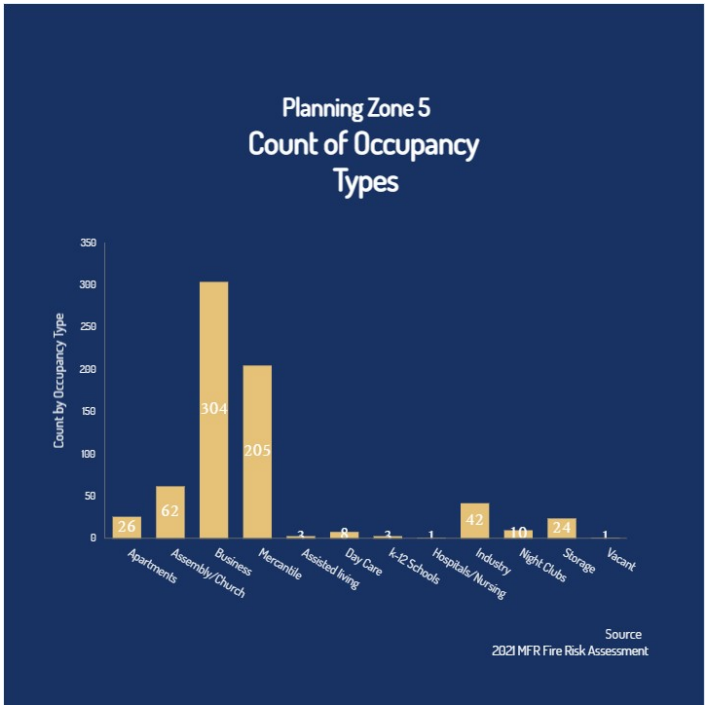


Figure 22: PZ5 Occupancy Types

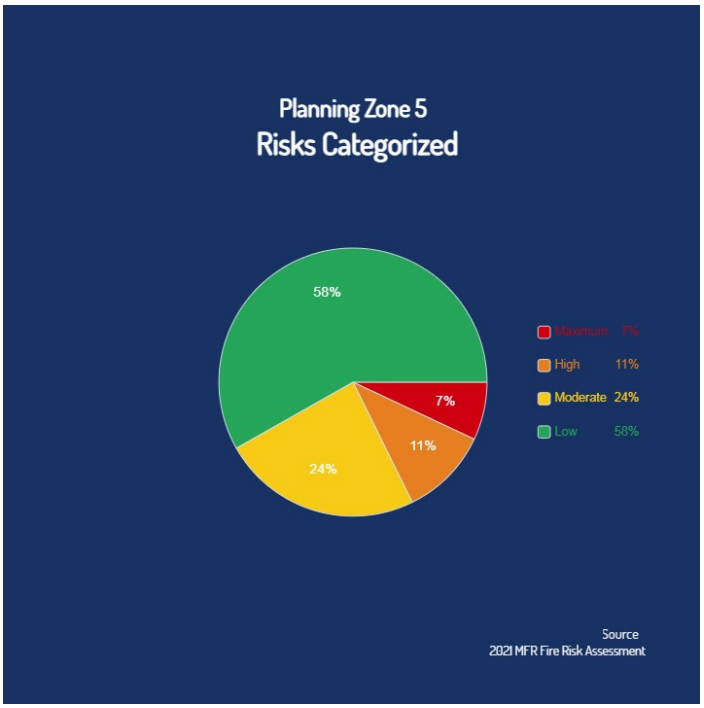


Figure 23: PZ5 Risk Assessment Pie Chart

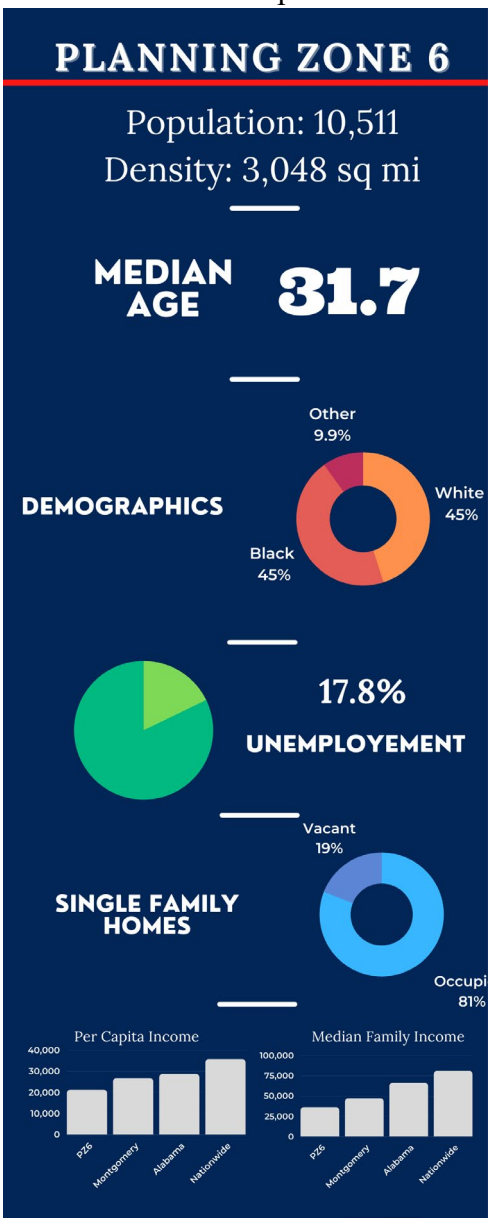
Planning Zone 5 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	31	37	22	35	18	34	47	224
1	26	22	23	29	17	29	37	183
2	20	18	16	24	34	42	38	192
3	26	26	20	22	21	22	38	175
4	29	17	17	24	25	27	28	167
5	29	31	39	29	32	24	30	214
6	44	46	32	37	43	33	46	281
7	51	46	57	61	56	37	38	346
8	49	50	57	53	56	39	49	353
9	58	50	48	58	56	51	46	367
10	55	72	64	56	75	58	59	439
11	74	57	60	81	63	67	72	474
12	52	80	66	68	73	71	54	464
13	70	74	64	80	68	70	62	488
14	58	55	71	57	82	75	67	465
15	62	65	66	65	65	62	54	439
16	69	66	77	65	69	75	53	474
17	77	57	55	59	84	56	60	448
18	59	63	56	52	69	56	57	412
19	55	72	43	52	60	63	65	410
20	60	59	53	64	57	57	56	406
21	42	52	39	51	48	48	49	329
22	41	39	27	38	47	49	35	276
23	44	45	33	35	43	59	34	293
Grand Total	**1,181**	**1,199**	**1,105**	**1,195**	**1,261**	**1,204**	**1,174**	**8,319**

Table 44: PZ5 Incidents by Time of Day

Planning Zone 6

Planning Zone 6 is in the central portion of the city and covers a mix of mainly residential with commercial business occupancies, and government office spaces. The planning zone is traversed at its midline by Interstate 85 significantly increasing the risk associated with interstate transportation. Planning Zone 6 ranks 1st in the city's planning zones in terms of population density. With a density of greater than 2048 per square mile, this zone is classified as a dense urban area and was assessed as an urban planning zone. This zone is home to Fire Station 6 and houses the department's rehab apparatus due to its centralized location and access to the interstate.



An analysis using ArcGIS and the latest census data reveals that the median age is 31.7 in this zone ranking 13th amongst the 14 planning zone which suggests a much younger population resides in this area. The demographics of this zone are made up of a 45% white population and a 45% black population, with a remaining 9.9% made of Hispanic, Asian, and other descents. This zone is in the middle of the planning zones economically. The per capita income in this zone, at 21,140, lags behind the city and state average. The zone's median family income, at 36,046 similarly lags behind the city's average. The employment rate of 17.8% ranks 11th of the 14 planning zones. The social vulnerability score for this zone is 21 which is tied for 12th highest of the 14 assessed zones.

There is no significant flood risk in this zone. There are 4,346 single-family residential structures of which 827 (19%) were vacant according to the most recent census data. There are 121 structures identified as target hazards, 45 high rises, and 212 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 42.69% of PZ6's commercial occupancies were sprinkled. PZ6 is home to one of the City's three large hospitals. It is also home to Alabama State University. This zone has particularly high calls for non-emergency patient assists and structure fires, illustrated on the heat map in Appendix L & K.

PZ6 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	65	87	34%	47	-46%	63	34%
Structure Fire (W-3)	12	4	-67%	14	250%	17	21%
Multi-Alarm Fires	0	87	null	0	-100%	77	null
Vehicle Fires	29	29	0%	26	-10%	28	8%
False Alarms	330	306	-7%	252	-18%	310	23%
HazMat Incident	36	49	36%	35	-29%	43	23%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	21	24	100%	34	42%	15	-56%
Other Suppression	345	339	-2%	360	6%	437	21%
Total Suppression:	838	925	10%	768	-17%	990	29%

Table 45: PZ6 Suppression Data

PZ6 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	1,166	1,203	3%	1,286	7%	1,049	-18%
Vehicle Accident	303	306	1%	293	-4%	275	-6%
Subject Shot	43	39	-10%	36	-8%	57	58%
Possible Suicide	32	23	-39%	22	-4%	31	41%
Nonemergency assist	70	70	0%	94	34%	172	83%
Cancelled enroute	90	120	25%	123	3%	127	3%
Other EMS	2,229	2,130	-5%	2,123	0%	1,988	-6%
Total EMS:	3,933	3,891	-1%	3,977	2%	3,699	-7%

Table 46: PZ6 EMS Data

Planning Zone 6 Special Considerations	
Single Family Residential	4,346
Target Hazards	121
High Rise Structures	45
> 10,000 Square Feet	212
Percent sprinkled	24 %

Table 47: PZ6 Special Considerations

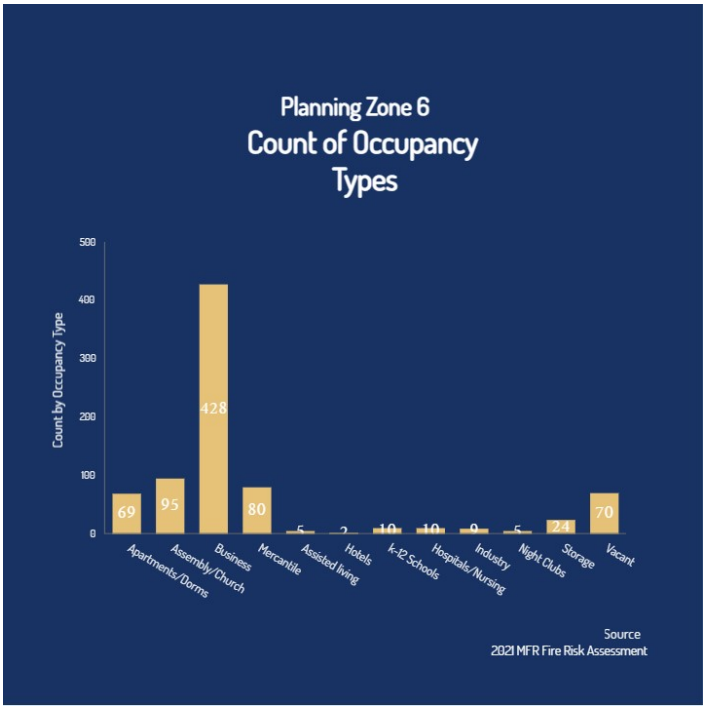


Figure 24: PZ6 Occupancy Types

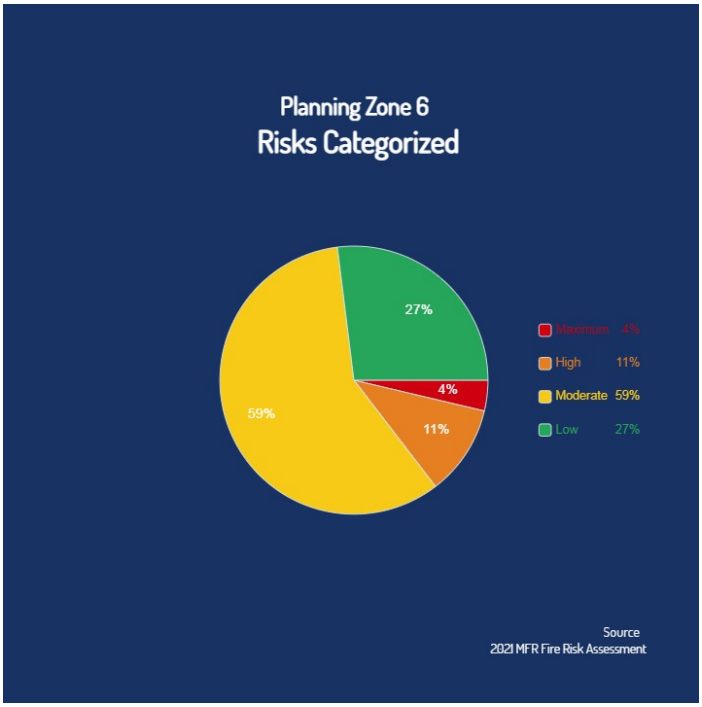


Figure 25: PZ6 Risk Assessment Pie Chart

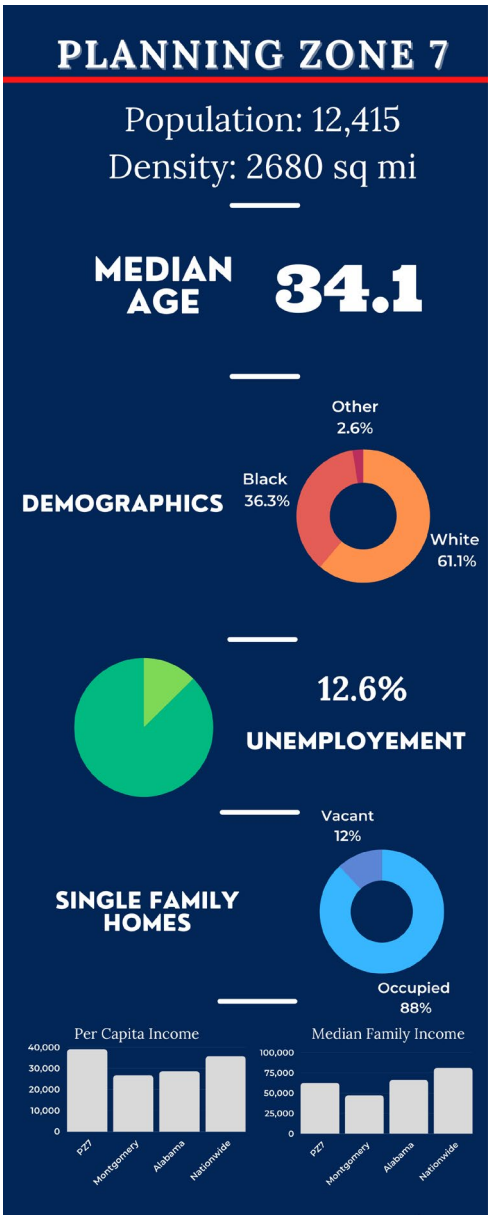
Planning Zone 6 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	43	45	49	43	39	57	73	349
1	38	40	26	35	42	56	42	279
2	24	45	36	31	42	43	42	263
3	34	27	36	31	37	46	40	251
4	35	27	33	38	43	28	28	232
5	27	25	31	35	19	25	33	195
6	48	37	42	42	32	34	36	271
7	55	57	57	57	49	43	48	366
8	94	71	65	71	71	52	52	476
9	73	93	96	78	80	64	51	535
10	92	104	100	98	83	71	75	623
11	79	84	97	92	81	83	68	584
12	72	93	99	86	82	75	75	582
13	78	93	94	112	77	70	85	609
14	91	91	90	90	85	70	68	585
15	93	112	102	107	93	104	68	679
16	95	71	76	110	78	88	80	598
17	106	102	81	87	79	91	69	615
18	84	83	83	76	73	79	58	536
19	92	67	74	73	75	85	80	546
20	51	70	95	67	88	74	77	522
21	55	83	60	83	69	63	60	473
22	57	55	60	74	70	73	63	452
23	47	56	57	50	68	59	51	388
Grand Total	**1,563**	**1,631**	**1,639**	**1,666**	**1,555**	**1,533**	**1,422**	**11,009**

Table 48: PZ6 Incidents by Time of Day

Planning Zone 7

Planning Zone 7 is in the central portion of the city and covers a mix of residential neighborhoods, commercial business occupancies, and educational institutions. Planning Zone 7 ranks 2nd in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 7 and Huntington College.



An analysis using ArcGIS and the latest census data reveals that the median age is 34.1 in this zone ranking 11th amongst the 14 planning zones which suggests a much older population resides in this area. The demographics of this zone are made up of a 61.1% white population followed by a 36.3% black population, with a remaining 2.6% made of Hispanic, Asian, and other descents. This zone is less challenged economically than the other zones. The per capita income in this zone, at 39,074, outpaces the city and state average. The zone's median family income, at 62,422 outpaces the city's average. The employment rate of 12.6% ranks 6th best of the 14 planning zones. The social vulnerability score for this zone is 12 which is the 5th lowest of the 14 assessed zones.

There is no significant flood risk in this zone. There are 6,004 single-family residential structures of which 719 (12%) were vacant according to the most recent census data. There are 24 structures identified as target hazards, 2 high rise, and 65 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 20% of PZ7's commercial occupancies were sprinkled. PZ7 is home to a large number of older large square footage high-value homes. The overwhelming majority of these homes do not have fire suppression systems putting this zone at a particularly high risk for high fire-flow required residential structure fires.

PZ7 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	39	40	3%	48	20%	45	-6%
Structure Fire (W-3)	11	13	18%	1	-92%	13	1200%
Multi-Alarm Fires	16	19	19%	18	-5%	0	-100%
Vehicle Fires	27	13	-52%	14	8%	10	-29%
False Alarms	226	209	-8%	265	27%	225	-15%
HazMat Incident	18	23	28%	16	-30%	23	44%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	1	0	100%	1	null	3	200%
Other Suppression	232	203	-13%	326	61%	234	-28%
Total Suppression:	570	520	-9%	689	33%	553	-20%

Table 49: PZ7 Suppression Data

PZ7 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	587	509	-15%	607	19%	542	-11%
Vehicle Accident	178	137	-30%	149	9%	170	14%
Subject Shot	14	18	22%	22	22%	19	-14%
Possible Suicide	37	16	-131%	23	44%	17	-26%
Nonemergency assist	38	43	12%	84	95%	122	45%
Cancelled enroute	53	70	24%	65	-7%	82	26%
Other EMS	1,104	1,205	8%	978	-19%	1,100	12%
Total EMS:	2,011	1,998	-1%	1,928	-4%	2,052	6%

Table 50: PZ7 EMS Data

Planning Zone 7 Special Considerations	
Single Family Residential	4,617
Target Hazards	24
High Rise Structures	2
> 10,000 Square Feet	65
Percent sprinkled	20 %

Table 51: PZ7 Special Considerations

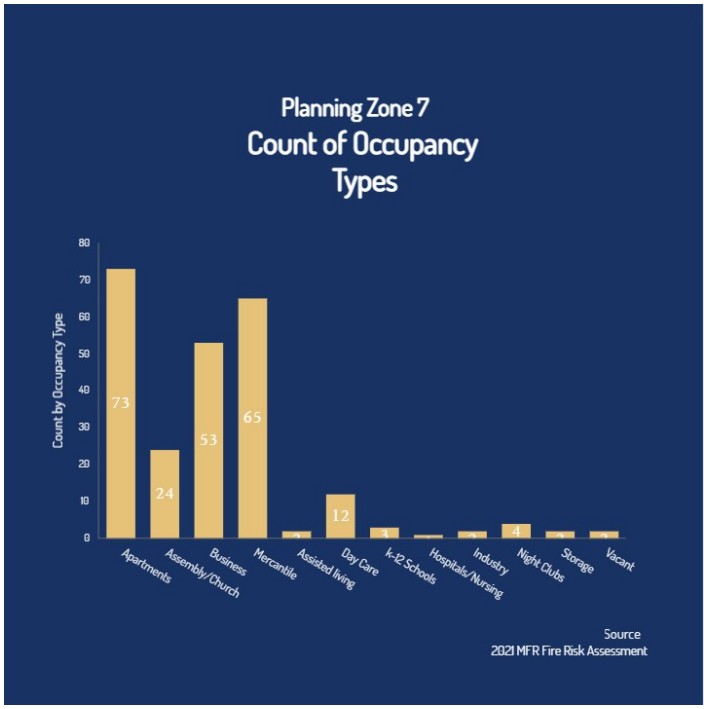


Figure 26: PZ7 Occupancy Types

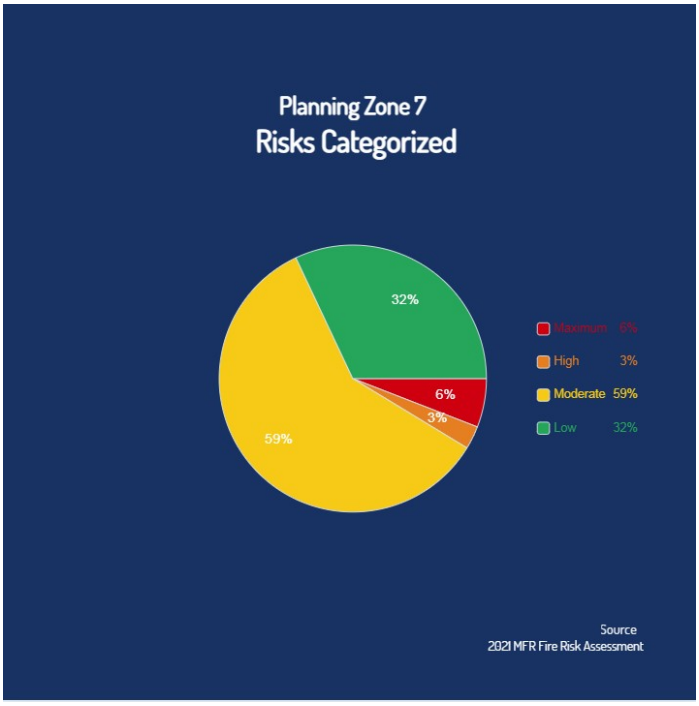


Figure 27: PZ7 Risk Assessment Pie Chart

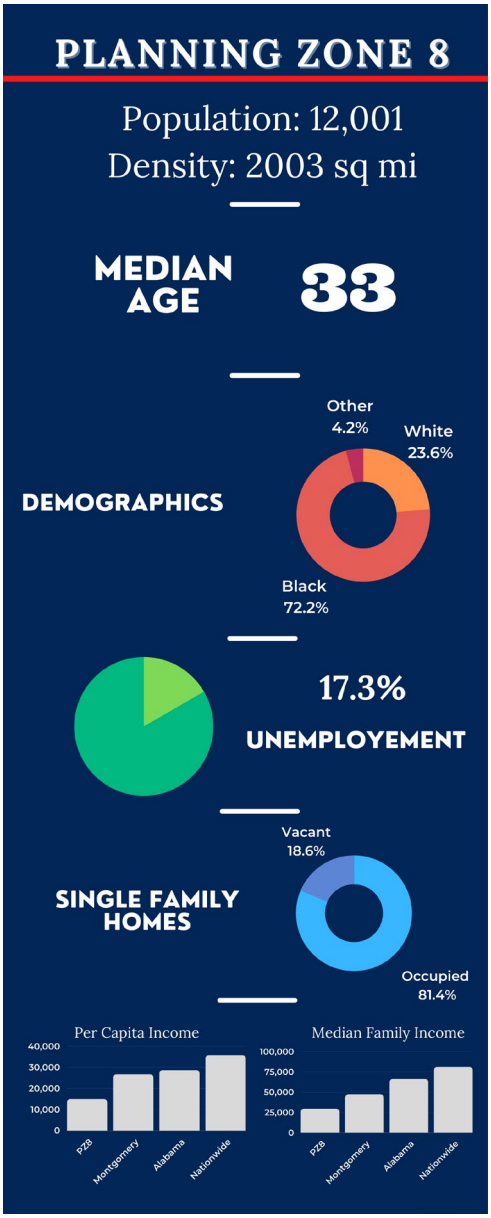
Planning Zone 7 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	25	26	16	27	27	31	37	189
1	14	17	20	19	20	30	19	139
2	16	18	16	15	21	18	17	121
3	20	20	14	19	11	13	24	121
4	10	18	18	15	12	17	13	103
5	15	17	18	18	16	16	17	117
6	21	22	22	22	26	21	13	147
7	25	40	34	24	34	24	31	212
8	39	40	39	32	34	43	30	257
9	36	33	43	33	50	43	34	272
10	46	58	52	51	39	44	38	328
11	58	44	37	39	55	48	40	321
12	49	40	44	46	49	45	53	326
13	44	39	42	43	40	41	46	295
14	55	41	45	42	52	50	47	332
15	51	60	40	50	55	47	50	353
16	55	33	46	41	62	45	37	319
17	50	51	51	42	40	37	39	310
18	39	35	42	49	44	47	51	307
19	25	48	44	44	54	44	44	303
20	44	40	39	37	40	35	55	290
21	42	30	41	40	44	42	40	279
22	32	32	22	34	39	36	30	225
23	24	30	26	22	31	33	32	198
Grand Total	**835**	**832**	**811**	**804**	**895**	**850**	**837**	**5,864**

Table 52: PZ7 Incidents by Time of Day

Planning Zone 8

Planning Zone 8 is in the northern portion of the city and covers a mix of residential neighborhoods industry and few commercial business occupancies. The planning zone is traversed at its northern end by a heavily traveled U. S. highway, and a railroad. Planning Zone 8 ranks 6th in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 8 which houses a ladder and advance life support engine company. This area is one of three where the need for additional ambulance capability has been identified.



An analysis using ArcGIS and the latest census data reveals that the median age is 33 in this zone ranking 12th amongst the 14 planning zone which suggests a much younger population resides in this area. The demographics of this zone are made up of a 36.5% black population followed by a 23.6% white population, with a remaining 4.2% made of Hispanic, Asian, and other descents. This zone is challenged economically. The per capita income in this zone, at 14,881, is well below the city and state average. The zone's median family income, at 29,427 is also well below the city and state average. The employment rate at 17.3% ranks 10h of the 14 planning zones. The social vulnerability score for this zone is 20 which is tied for the 4th highest of the 14 assessed zones.

There is a moderate flood risk in the northern part of this zone illustrated in Appendix D. There are 5,391 single-family residential structures of which 1,001 (18.6%) were vacant according to the most recent census data. There are 51 structures identified as target hazards, no high rise, and 75 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 78% of PZ8's commercial occupancies were sprinkled. This zone has particularly high calls for non-emergency patient assists and structure fires, illustrated on the heat map in Appendix L & K.

PZ8 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	81	55	-32%	44	-20%	100	127%
Structure Fire (W-3)	18	34	89%	10	-71%	22	120%
Multi-Alarm Fires	0	0	null	0	null	43	null
Vehicle Fires	14	19	36%	45	137%	36	-20%
False Alarms	128	173	35%	164	-5%	223	36%
HazMat Incident	34	33	-3%	24	-27%	22	-8%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	2	0	-100%	1	null	0	-100%
Other Suppression	300	385	28%	355	-8%	367	3%
Total Suppression:	577	699	21%	643	-8%	813	26%

Table 53: PZ8 Suppression Data

PZ8 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	1,113	1,010	-10%	1,108	10%	927	-16%
Vehicle Accident	119	98	-21%	108	10%	91	-16%
Subject Shot	75	37	-103%	49	32%	54	10%
Possible Suicide	38	36	-6%	28	-22%	34	21%
Nonemergency assist	42	84	50%	48	-43%	121	152%
Cancelled enroute	83	71	-17%	69	-3%	89	29%
Other EMS	1,491	1,523	2%	1,322	-13%	1,516	15%
Total EMS:	2,961	2,859	-4%	2,732	-4%	2,832	4%

Table 54: PZ8 EMS Data

Planning Zone 8 Special Considerations	
Single Family Residential	5,391
Target Hazards	51
High Rise Structures	0
> 10,000 Square Feet	78
Percent sprinkled	78 %

Table 55: PZ8 Special Considerations

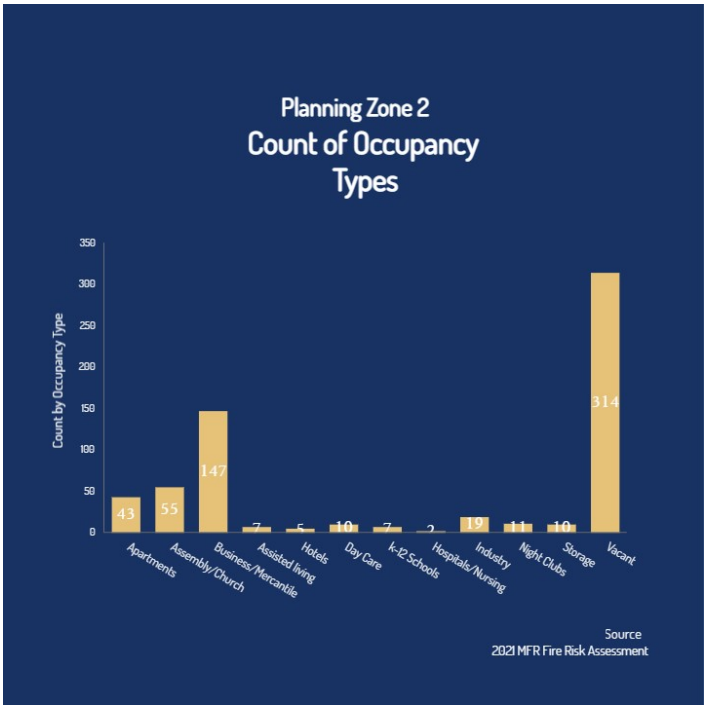


Figure 28: PZ8 Occupancy Types

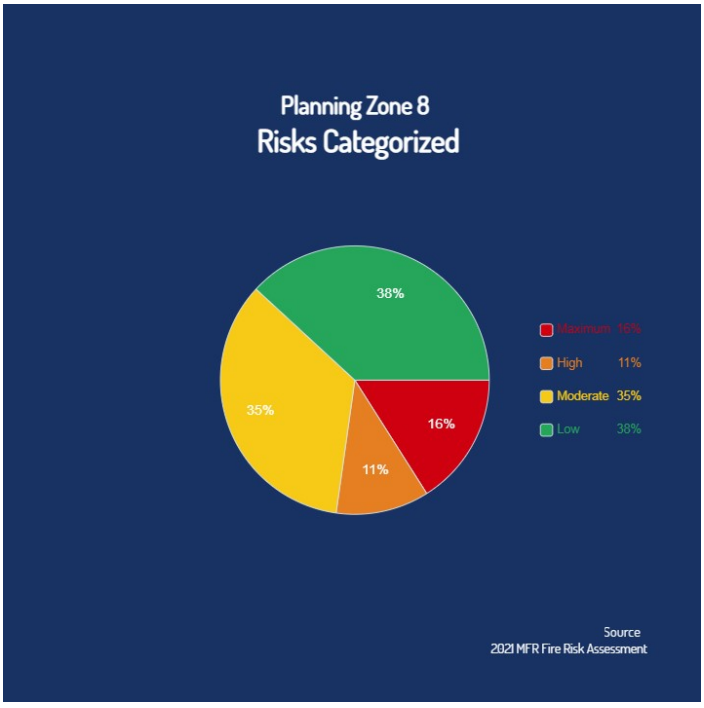


Figure 29: PZ8 Risk Assessment Pie Chart

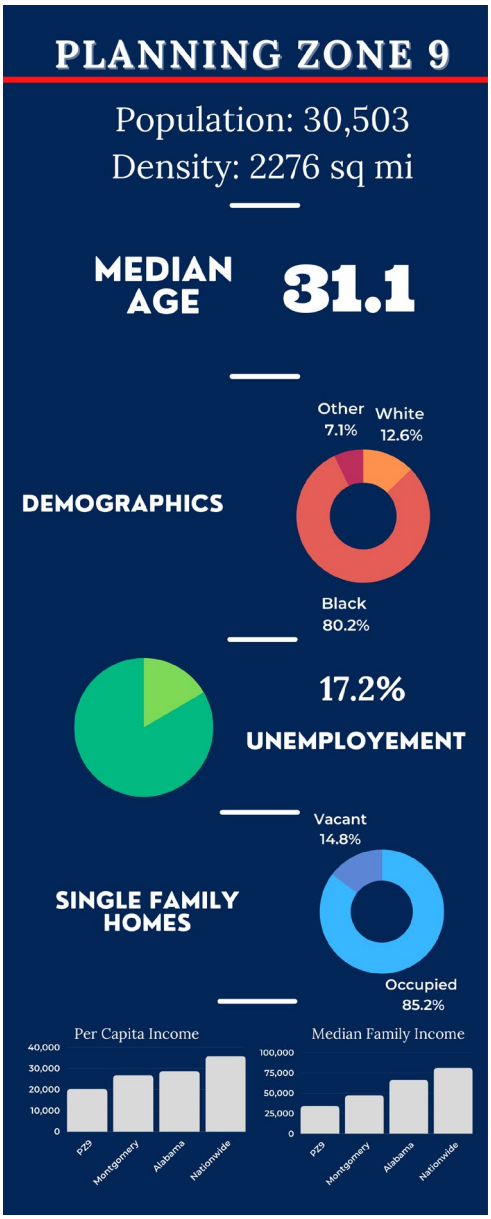
Planning Zone 8 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	43	41	26	40	38	43	40	271
1	25	25	18	33	43	37	38	219
2	30	27	34	41	28	33	23	216
3	26	34	27	19	20	18	26	170
4	24	25	22	29	18	31	19	168
5	25	25	27	22	30	18	30	177
6	24	28	32	43	25	18	33	203
7	43	39	41	34	38	41	44	280
8	61	48	53	60	48	36	46	352
9	50	52	59	58	52	50	52	373
10	60	59	69	57	63	51	67	426
11	78	61	68	70	59	51	71	458
12	65	67	59	45	59	71	76	442
13	70	68	74	61	53	61	68	455
14	63	50	44	47	55	72	67	398
15	67	63	74	74	59	63	82	482
16	69	53	58	48	67	65	79	439
17	56	71	70	69	55	63	57	441
18	73	70	68	68	74	72	65	490
19	65	60	70	60	64	77	66	462
20	54	68	62	42	70	67	81	444
21	57	71	64	60	67	63	50	432
22	57	39	50	52	46	60	44	348
23	34	40	44	39	46	53	47	303
Grand Total	**1,219**	**1,184**	**1,213**	**1,171**	**1,177**	**1,214**	**1,271**	**8,449**

Table 56: PZ8 Incidents by Time of Day

Planning Zone 9

Planning Zone 9 is in the southern portion of the city and covers a mix of residential neighborhoods and commercial business occupancies. The planning zone is traversed at its midline by the South-Eastern Blvd. and north and south by Troy Hwy both heavily traveled U.S. Highways. These routes are frequent routes for travelers to and from the eastern Florida panhandle significantly increasing the risk associated with transportation. Planning Zone 9 ranks 4th in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 9 and its advanced life support (ALS) engine company and two ALS ambulances. There is a heavy EMS concentration at Station 9 due to the zones historical EMS demand.



An analysis using ArcGIS and the latest census data reveals that the median age is 31.1 in this zone suggesting that this zone has the youngest population in the city. The demographics of this zone are made up of an 80.2% black population followed by a 12.6% white population, with a remaining 7% made of Hispanic, Asian, and other descents. The per capita income in this zone, at 20,128, lags behind the city and state average. The zone's median family income, at 33,872 similarly lags behind the city's average. The employment rate of 17.2% ranks 8th of the 14 planning zones. The social vulnerability score for this zone is 20 which is tied for 10th highest of the 14 assessed zones.

There is a significant flood risk in this zone in the south of this zone and associated with the city's storm drainage system which culminates in this zone and often produces a heavy river-like flow and has in the past resulted in flash flood deaths. There are 13,613 single-family residential structures of which 2,008 (14.8%) were vacant according to the most recent census data. There are 37 structures identified as target hazards, 1 high rise, and 149 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 26% of PZ9's commercial occupancies were sprinkled. This zone has particularly high calls for non-emergency patient assists and structure fires, illustrated on the heat map in Appendix L & K.

PZ9 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	229	206	-10%	178	-14%	201	13%
Structure Fire (W-3)	48	50	4%	19	-62%	17	-11%
Multi-Alarm Fires	0	86	null	42	-51%	24	-43%
Vehicle Fires	52	62	19%	68	10%	50	-26%
False Alarms	332	397	20%	470	18%	423	-10%
HazMat Incident	40	45	13%	27	-40%	44	63%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	28	6	-79%	14	133%	8	-43%
Other Suppression	595	643	8%	708	10%	828	17%
Total Suppression:	1,324	1,495	13%	1,526	2%	1,595	5%

Table 57: PZ9 Suppression Data

PZ9 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	1,815	1,855	2%	2,012	8%	1,798	-11%
Vehicle Accident	457	401	-14%	505	26%	509	1%
Subject Shot	104	128	19%	111	-13%	149	34%
Possible Suicide	59	57	-4%	57	0%	61	7%
Nonemergency assist	89	86	-3%	135	57%	185	37%
Cancelled enroute	180	263	32%	234	-11%	245	5%
Other EMS	2,774	2,898	4%	2,627	-9%	3,069	17%
Total EMS:	5,478	5,688	4%	5,681	0%	6,016	6%

Table 58: PZ9 EMS Data

Planning Zone 9 Special Considerations	
Single Family Residential	13,613
Target Hazards	37
High Rise Structures	1
> 10,000 Square Feet	149
Percent sprinkled	26 %

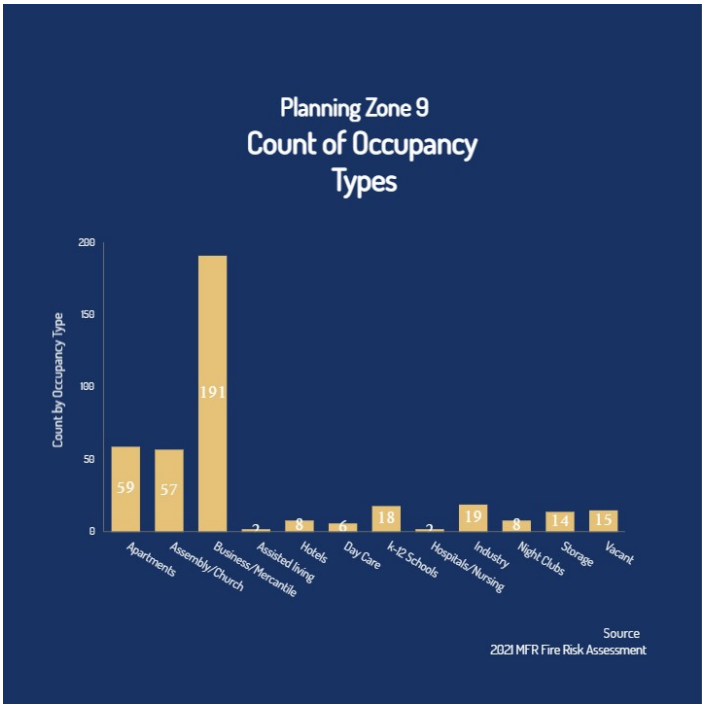


Figure 30: PZ9 Occupancy Types

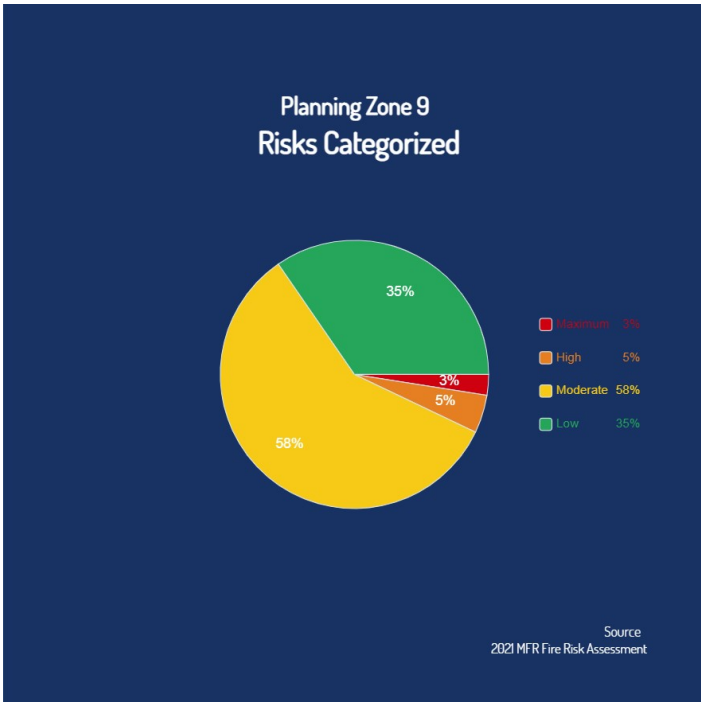


Figure 31: PZ9 Risk Assessment Pie Chart

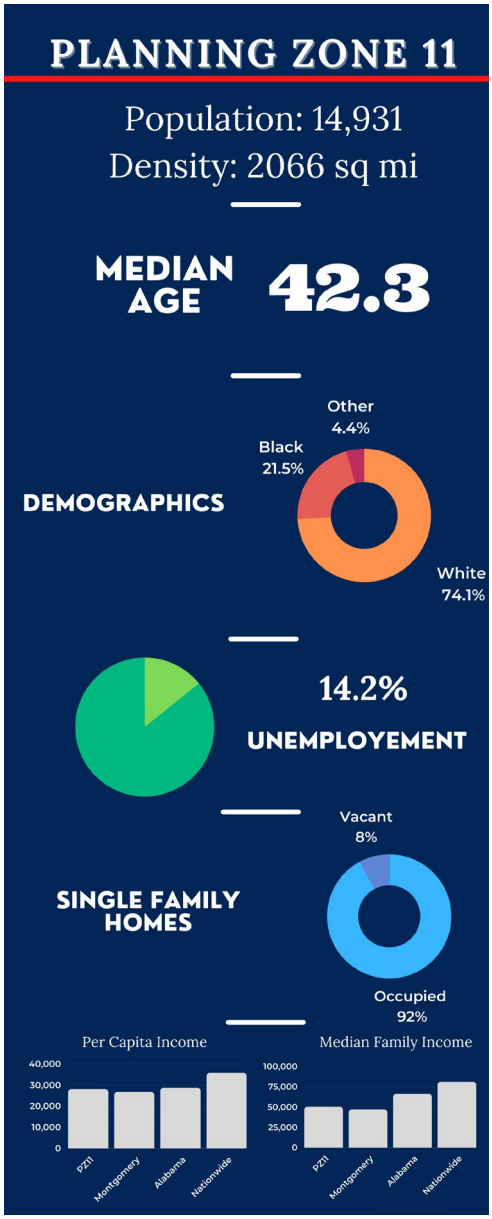
Planning Zone 9 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	82	64	69	64	56	82	78	495
1	54	62	58	52	56	66	99	447
2	58	43	49	34	41	71	71	367
3	34	49	53	49	47	54	80	366
4	50	42	45	43	58	62	51	351
5	44	50	44	57	51	49	55	350
6	63	62	67	64	66	64	53	439
7	81	74	85	74	97	77	59	547
8	121	95	88	100	100	70	62	636
9	122	98	106	116	97	88	94	721
10	117	98	117	122	113	104	104	775
11	115	108	108	118	119	132	95	795
12	116	120	127	111	112	108	115	809
13	137	126	114	146	112	168	110	913
14	124	116	107	133	109	109	118	816
15	127	131	131	138	113	136	95	871
16	147	121	115	115	119	132	108	857
17	113	122	126	119	125	115	119	839
18	123	105	133	131	126	111	96	825
19	101	131	121	109	100	128	119	809
20	111	109	108	106	112	117	121	784
21	114	117	118	96	112	116	117	790
22	89	89	100	94	96	133	88	689
23	68	75	86	79	86	117	88	599
Grand Total	**2,311**	**2,207**	**2,275**	**2,270**	**2,223**	**2,409**	**2,195**	**15,890**

Table 60: PZ9 Incidents by Time of Day

Planning Zone 11

Planning Zone 11 is in the north-central portion of the city and covers a mix of residential neighborhoods and commercial business occupancies. The planning zone is traversed at its southern end by heavily traveled Atlanta Hwy. Planning Zone 11 ranks 10th in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 11.



An analysis using ArcGIS and the latest census data reveals that the median age is 42.3 in this zone ranking 1st amongst the 14 planning zone which suggests a much older population resides in this area. The demographics of this zone are made up of a 74.1% white population followed by a 21.5% black population, with a remaining 4.4% made of Hispanic, Asian, and other descents. This zone is just above the median economically compared to the other zones. The per capita income in this zone, at 27,949, outpaces the city and lags behind the state average. The zone's median family income, at 50,219 outpaces the city's average. The employment rate of 14.2% ranks 7th of the 14 planning zones. The social vulnerability score for this zone is 16 which ranks 8th of the 14 assessed zones.

There are moderate flood risks in this zone related to drainage infrastructure this can be visualized on the flood map in Appendix D. There are 6,892 single-family residential structures of which 549 (8%) were vacant according to the most recent census data. There are 49 structures identified as target hazards, 1 high rise, and 170 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 34.3% of PZ11's commercial occupancies were sprinkled.

PZ11 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	43	37	-14%	48	30%	53	10%
Structure Fire (W-3)	21	8	-62%	8	0%	6	-25%
Multi-Alarm Fires	0	0	null	0	null	21	null
Vehicle Fires	14	11	-21%	21	91%	7	-67%
False Alarms	171	231	35%	198	-14%	235	19%
HazMat Incident	33	34	3%	12	-65%	22	83%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	2	11	450%	7	-36%	6	-14%
Other Suppression	275	216	-21%	268	24%	248	-7%
Total Suppression:	559	548	-2%	562	3%	598	6%

Table 61: PZ11 Suppression Data

PZ11 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	825	904	9%	897	-1%	787	-12%
Vehicle Accident	190	143	-33%	161	13%	151	-6%
Subject Shot	22	22	0%	30	36%	8	-73%
Possible Suicide	28	48	42%	30	-38%	26	-13%
Nonemergency assist	114	221	48%	219	-1%	292	33%
Cancelled enroute	80	61	-31%	70	15%	73	4%
Other EMS	1,534	1,544	1%	1,450	-6%	1,791	24%
Total EMS:	2,793	2,943	5%	2,857	-3%	3,128	9%

Table 62: PZ11 EMS Data

Planning Zone 11 Special Considerations	
Single Family Residential	6,892
Target Hazards	49
High Rise Structures	1
> 10,000 Square Feet	170
Percent sprinkled	34.3 %

Table 63: PZ11 Special Considerations

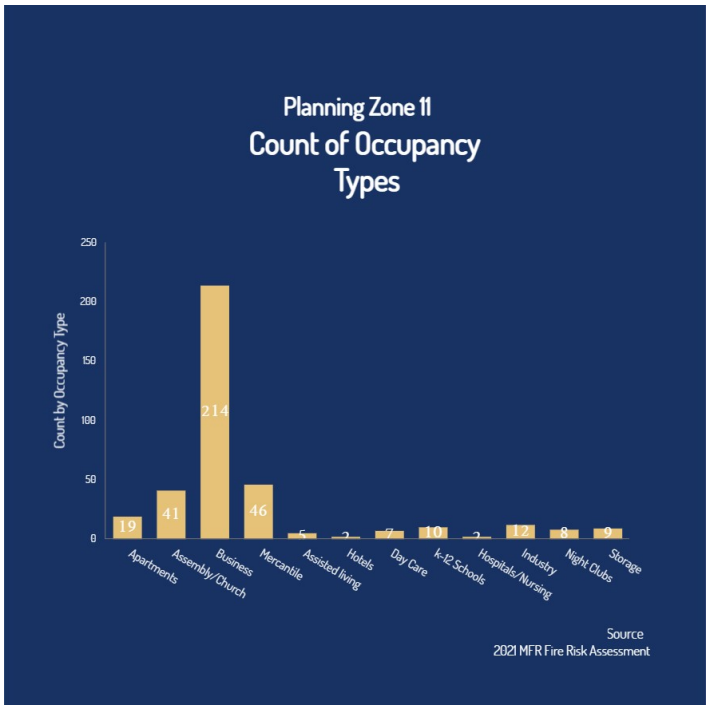


Figure 32: PZ11 Occupancy Types

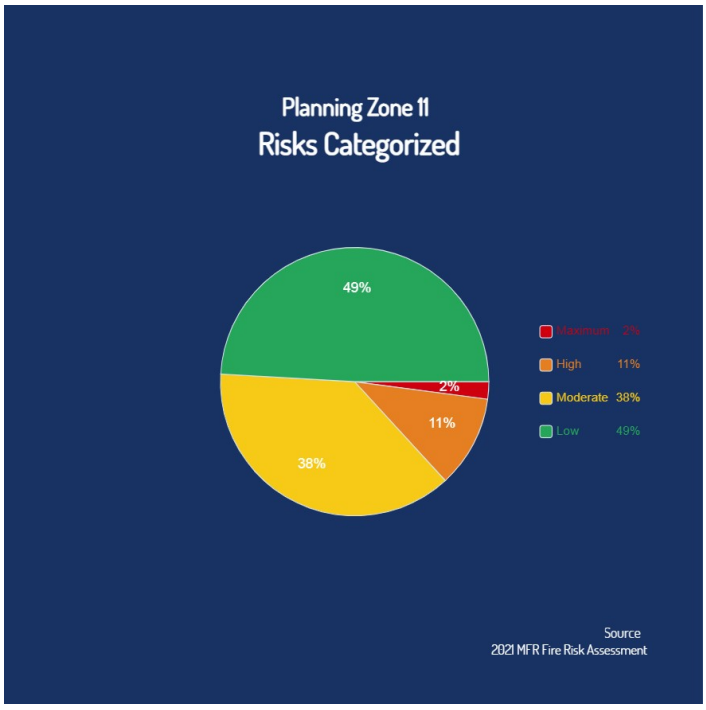


Figure 33: PZ11 Risk Assessment Pie Chart

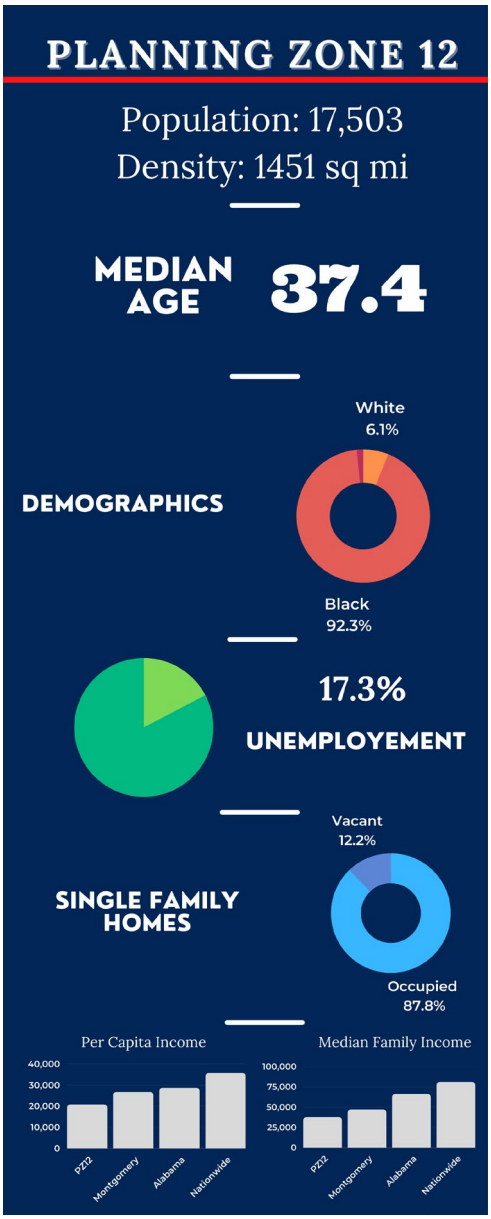
Planning Zone 11 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	28	21	29	29	31	36	45	219
1	23	30	27	31	22	40	37	210
2	28	20	30	29	30	32	27	196
3	22	24	18	23	37	37	24	185
4	16	22	21	18	26	22	29	154
5	23	24	35	26	27	24	26	185
6	33	39	29	38	41	39	41	260
7	48	43	52	52	47	42	52	336
8	40	52	54	54	52	36	48	336
9	52	61	54	57	56	48	54	382
10	52	59	64	66	81	65	52	439
11	68	69	51	66	63	46	65	428
12	69	73	80	71	71	51	51	466
13	56	79	56	56	68	54	40	409
14	49	68	73	62	73	59	53	437
15	61	57	77	78	83	50	48	454
16	79	82	69	65	58	52	39	444
17	76	80	78	76	62	66	51	489
18	54	59	62	62	66	47	59	409
19	66	45	56	71	61	51	59	409
20	59	51	39	48	58	62	40	357
21	41	46	52	59	58	49	37	342
22	35	45	32	43	40	45	45	285
23	28	39	42	29	37	41	38	254
Grand Total	**1,106**	**1,188**	**1,180**	**1,209**	**1,248**	**1,094**	**1,060**	**8,085**

Table 64: PZ11 Incidents by Time of Day

Planning Zone 12

Planning Zone 12 is in the southwest portion of the city and covers a mix of residential neighborhoods and some commercial business occupancies. The planning zone is traversed at its midline by the Southern Blvd. a heavily traveled U.S. highway. Planning Zone 12 ranks 9th in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 12 and the city's largest hospital Baptist Medical Center South which is the area's level II trauma center.



An analysis using ArcGIS and the latest census data reveals that the median age is 37.4 in this zone ranking in the middle of the 14 planning zone which suggests a much older population resides in this area. The demographics of this zone are made up of a 92.3% black population followed by a 6.1% white population, with a remaining 1.6% made of Hispanic, Asian, and other descents. The per capita income in this zone, at 20,777, is below the city and state average. The zone's median family income, at 37,482 is also below the city and state average. The employment rate at 17.3% ranks 9th of the 14 planning zones. The social vulnerability score for this zone is 15 which ranks 8th out of the 14 assessed zones.

There is a significant flood risk in the southern part of this zone which is illustrated in Appendix D. There are 7,297 single-family residential structures of which 892 (12.2%) were vacant according to the most recent census data. There are 41 structures identified as target hazards, 3 high rise, and 57 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 16% of PZ12's commercial occupancies were sprinkled. This zone has particularly high calls for non-emergency patient assists and structure fires, illustrated on the heat map in Appendix L & K.

PZ12 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	108	87	-19%	102	17%	106	4%
Structure Fire (W-3)	26	20	-23%	25	25%	17	-32%
Multi-Alarm Fires	21	0	null	40	null	21	-48%
Vehicle Fires	59	56	-5%	54	-4%	67	24%
False Alarms	241	336	39%	335	0%	347	4%
HazMat Incident	38	43	13%	45	5%	37	-18%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	0	0	null	0	null	0	null
Other Suppression	502	521	4%	574	10%	503	-12%
Total Suppression:	995	1,063	7%	1,175	11%	1,098	-7%

Table 65: PZ12 Suppression Data

PZ12 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	1,586	1,018	-56%	1,488	46%	1,404	-6%
Vehicle Accident	341	200	-71%	275	38%	389	41%
Subject Shot	88	79	-11%	80	1%	92	15%
Possible Suicide	42	38	-11%	22	-42%	26	18%
Nonemergency assist	179	103	-74%	180	75%	291	62%
Cancelled enroute	126	126	0%	169	34%	154	-9%
Other EMS	2,536	3,186	20%	2,236	-30%	2,469	10%
Total EMS:	4,898	4,750	-3%	4,450	-6%	4,825	8%

Table 66: PZ12 EMS Data

Planning Zone 12 Special Considerations	
Single Family Residential	7,297
Target Hazards	41
High Rise Structures	3
> 10,000 Square Feet	57
Percent sprinkled	16 %

Table 67: PZ12 Special Considerations

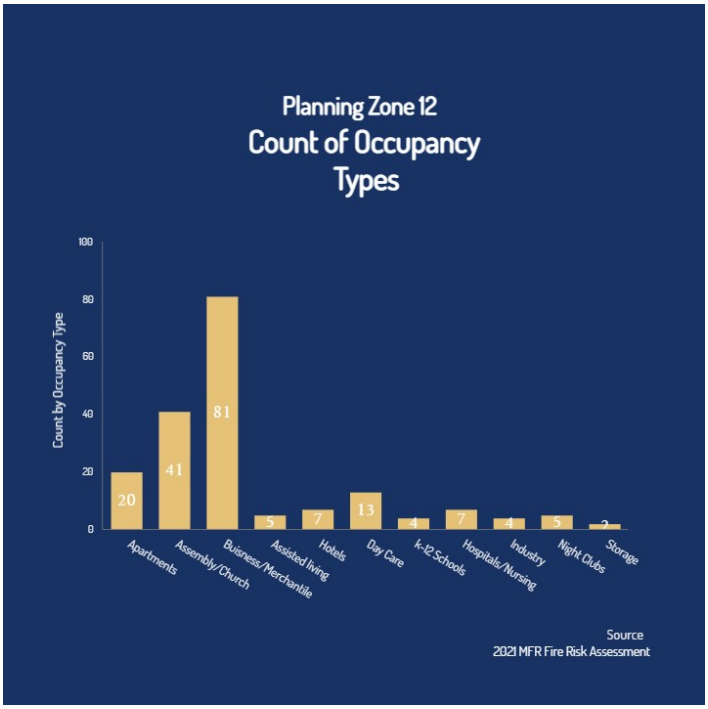


Figure 34: PZ12 Occupancy Types

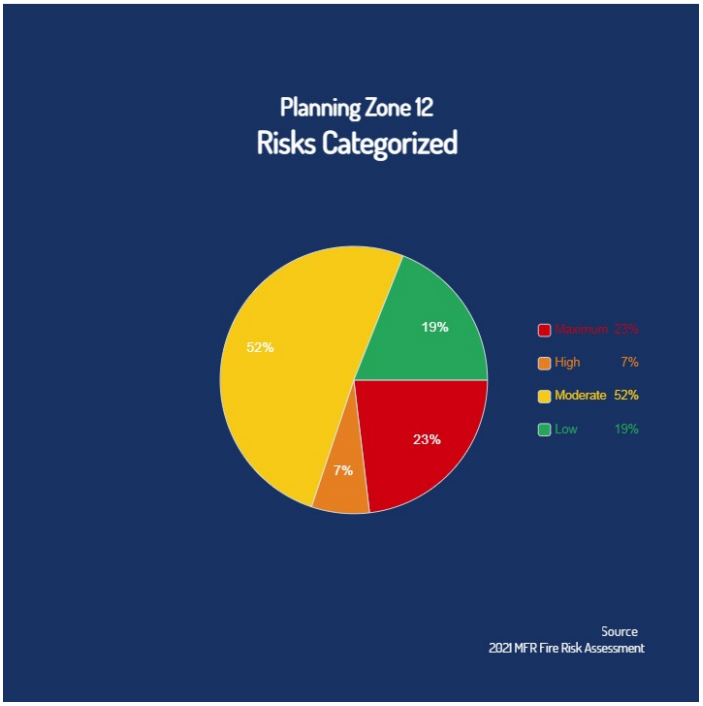


Figure 35: PZ12 Risk Assessment Pie Chart

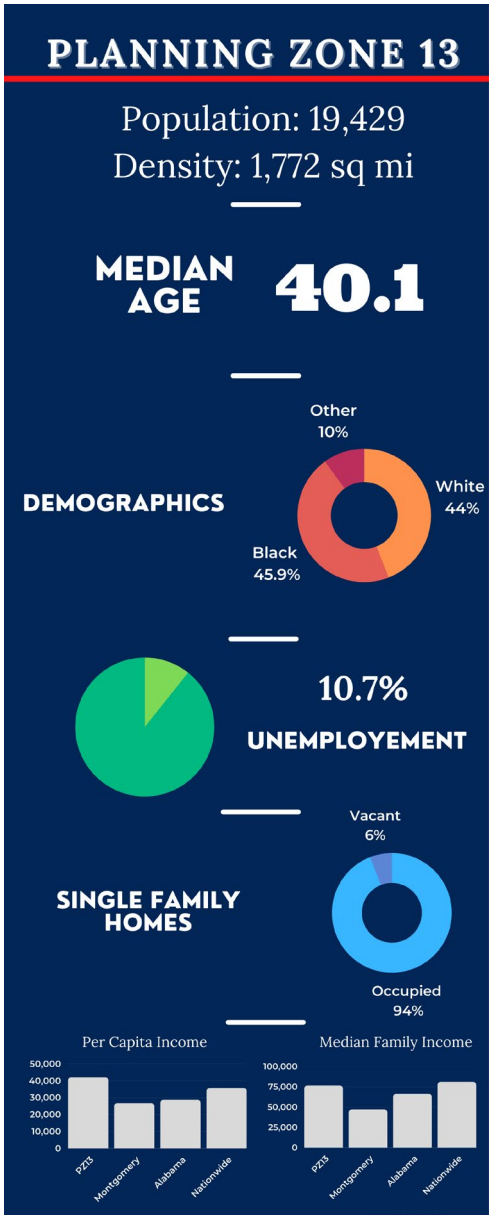
Planning Zone 12 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	50	48	49	56	54	67	76	400
1	41	43	50	58	48	75	67	382
2	50	53	38	54	33	49	75	352
3	35	47	34	40	36	45	53	290
4	43	42	46	50	37	43	48	309
5	29	45	28	46	36	35	47	266
6	41	56	49	61	45	61	44	357
7	85	69	66	72	62	58	64	476
8	92	74	84	88	73	71	84	566
9	82	90	101	95	95	86	84	633
10	104	88	105	89	100	82	97	665
11	104	85	98	87	75	94	107	650
12	89	94	94	92	93	95	105	662
13	95	81	97	82	96	83	85	619
14	94	101	87	83	96	82	93	636
15	102	95	98	92	106	68	94	655
16	84	94	126	96	96	85	101	682
17	99	93	103	98	104	92	95	684
18	90	82	94	95	98	108	109	676
19	72	88	88	97	89	96	99	629
20	85	79	87	86	100	127	105	669
21	69	81	96	81	102	89	91	609
22	79	68	63	69	80	84	71	514
23	75	51	57	59	78	79	66	465
Grand Total	**1,789**	**1,747**	**1,838**	**1,826**	**1,832**	**1,854**	**1,960**	**12,846**

Table 68: PZ12 Incidents by Time of Day

Planning Zone 13

Planning Zone 13 is located in the eastern portion of the city and covers a mix of residential neighborhoods and commercial occupancies. There are no major arteries in this planning zone but there are three moderately traveled highways that present a transportation risk. Planning Zone 13 ranks 7th in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 13.



An analysis using ArcGIS and the latest census data reveals that the median age is 40.1 in this zone ranking 3rd amongst the 14 planning zone which suggests a much older population resides in this area. The demographics of this zone are made up of a 44% white population followed by a 45.9% black population, with a remaining 10% made of Hispanic, Asian, and other descents. This zone is less challenged economically than the other zones. The per capita income in this zone, at 42,080, outpaces the city and state average. The zone's median family income, at 76,419 outpaces the city's average. The employment rate of 10.7% ranks 3rd best of the 14 planning zones. The social vulnerability score for this zone is 9 which is the 3rd lowest of the 14 assessed zones.

There is no significant flood risk in this zone. There are 9,196 single-family residential structures of which 548 (6%) were vacant according to the most recent census data. There are 49 structures identified as target hazards, 1 high rise, and 216 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 42.4% of PZ13's commercial occupancies were sprinkled.

PZ13 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	33	59	79%	76	29%	57	-25%
Structure Fire (W-3)	9	7	-22%	36	414%	2	-94%
Multi-Alarm Fires	0	0	null	0	null	22	null
Vehicle Fires	4	15	275%	24	60%	20	-17%
False Alarms	178	257	44%	251	-2%	233	-7%
HazMat Incident	17	11	-35%	14	27%	15	7%
Dive Rescue Incident	1	0	null	0	null	0	null
Technical Rescue Incident	0	2	null	4	null	0	null
Other Suppression	235	228	-3%	205	-10%	200	-2%
Total Suppression:	477	579	21%	610	5%	549	-10%

Table 69: PZ13 Suppression Data

PZ13 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	439	451	3%	526	17%	416	-21%
Vehicle Accident	175	154	-14%	183	19%	141	-23%
Subject Shot	15	13	-15%	11	-15%	20	82%
Possible Suicide	16	21	24%	15	-29%	16	7%
Nonemergency assist	59	58	-2%	109	88%	157	44%
Cancelled enroute	54	42	-29%	55	31%	55	0%
Other EMS	852	1,062	20%	1,000	-6%	1,036	4%
Total EMS:	1,610	1,801	11%	1,899	5%	1,841	-3%

Table 70: PZ13 EMS Data

Planning Zone 13 Special Considerations	
Single Family Residential	9,196
Target Hazards	49
High Rise Structures	1
> 10,000 Square Feet	216
Percent sprinkled	42.4 %

Table 71: PZ13 Special Considerations

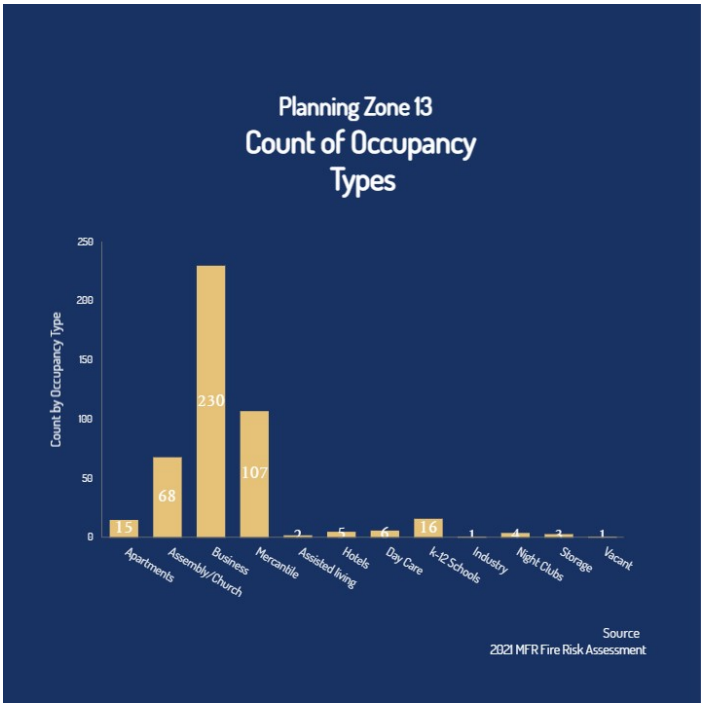


Figure 36: PZ13 Occupancy Types

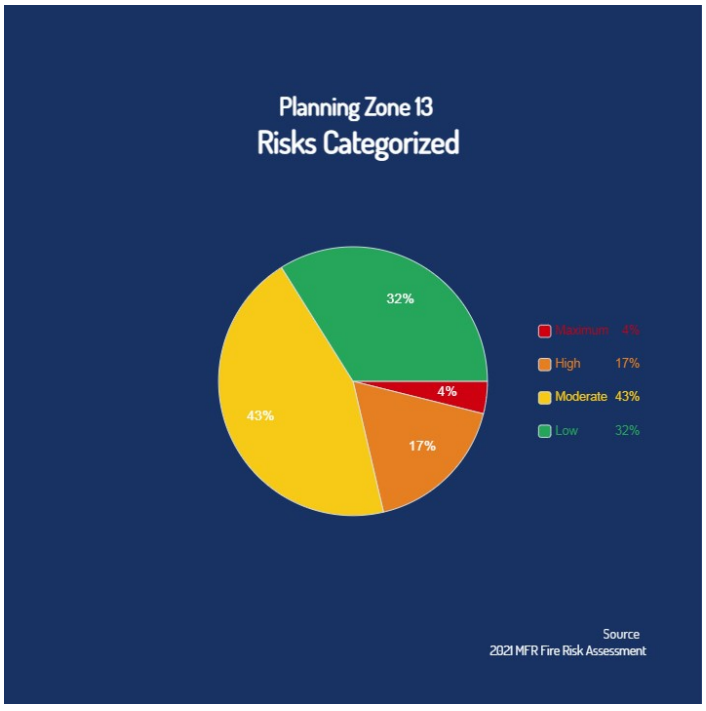


Figure 37: PZ13 Risk Assessment Pie Chart

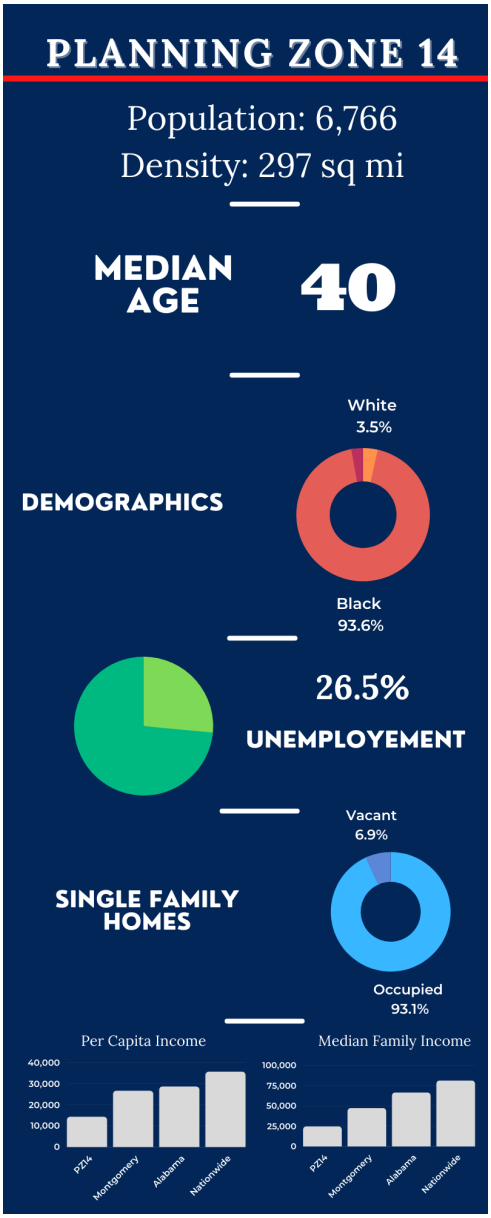
Planning Zone 13 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	13	20	19	19	17	27	23	138
1	15	13	17	10	17	20	14	106
2	20	10	14	13	17	21	21	116
3	14	14	16	11	14	15	16	100
4	13	9	13	11	13	11	16	86
5	15	8	13	11	22	13	11	93
6	16	8	18	15	21	17	26	121
7	35	36	34	31	28	22	24	210
8	41	28	46	30	37	29	33	244
9	33	49	39	25	35	35	30	246
10	28	44	35	38	44	34	38	261
11	47	47	51	44	36	38	50	313
12	38	55	51	41	47	50	53	335
13	40	43	28	38	43	41	42	275
14	41	44	42	45	48	44	50	314
15	51	41	42	46	40	40	47	307
16	49	37	61	46	41	43	28	305
17	38	42	51	43	46	31	27	278
18	36	40	34	35	43	38	44	270
19	33	48	42	40	46	56	30	295
20	31	34	44	36	29	39	26	239
21	51	29	35	29	43	35	25	247
22	27	27	14	29	22	37	20	176
23	32	15	21	22	33	31	14	168
Grand Total	**757**	**741**	**780**	**708**	**782**	**767**	**708**	**5,243**

Table 72: PZ13 Incidents by Time of Day

Planning Zone 14

Planning Zone 14 is in the southwest portion of the city and covers a mix of residential neighborhoods, few commercial business occupancies, and industry. The City's regional airport borders this zone but is protected by its own professional fire department. The planning zone is traversed on its eastern side by Interstate 65 and at its midline by heavily traveled U.S. Hwy 80 significantly increasing the risk associated with interstate transportation. Planning Zone 14 ranks last in the city's planning zones in terms of population density. With a density of less than 500 per square mile, this zone is classified as a rural planning zone. This zone is home to Fire Station 14.



An analysis using ArcGIS and the latest census data reveals that the median age is 40 in this zone ranking 4th amongst the 14 planning zone which suggests an older population resides in this area. The demographics of this zone are made up of a 93.6% black population followed by a 3.5% white population, with a remaining 2.9% made of Hispanic, Asian, and other descents. This zone is challenged economically. The per capita income in this zone, at 14,284, is well below the city and state average. The zone's median family income, at 24,399 is also well below the city and state average. The employment rate at 26.5% is the highest in the city. The social vulnerability score for this zone is 19 which is the 6th highest of the 14 assessed zones.

There is a significant flood risk in this zone which is illustrated in Appendix D. There are 2,699 single-family residential structures of which 187 (6.9%) were vacant according to the most recent census data. There are 16 structures identified as target hazards, no high rises, and 84 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk assessment indicated that 44% of PZ14's commercial occupancies were sprinkled. PZ14 is a particularly high-risk area for transportation due to the presence of Interstates 65 and US Hwy 80.

PZ14 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	17	41	141%	48	17%	46	-4%
Structure Fire (W-3)	0	24	null	12	-50%	27	125%
Multi-Alarm Fires	0	0	null	17	null	0	null
Vehicle Fires	13	13	0%	29	123%	3	-90%
False Alarms	167	197	18%	180	-9%	256	42%
HazMat Incident	22	9	-59%	22	144%	16	-27%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	0	3	null	0	null	0	null
Other Suppression	175	95	-46%	256	169%	123	-52%
Total Suppression:	394	382	-3%	564	48%	471	-16%

Table 73: PZ14 Suppression Data

PZ14 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	552	500	-10%	567	13%	495	-13%
Vehicle Accident	158	111	-42%	184	66%	169	-8%
Subject Shot	21	16	-31%	22	38%	16	-27%
Possible Suicide	19	16	-19%	8	-50%	2	-75%
Nonemergency assist	19	6	-217%	27	350%	51	89%
Cancelled enroute	58	52	-12%	76	46%	70	-8%
Other EMS	910	896	-2%	848	-5%	958	13%
Total EMS:	1,737	1,597	-9%	1,732	8%	1,761	2%

Table 74: PZ14 EMS Data

Planning Zone 14 Special Considerations	
Single Family Residential	2,699
Target Hazards	16
High Rise Structures	0
> 10,000 Square Feet	84
Percent sprinkled	44 %

Table 75: PZ14 Special Considerations

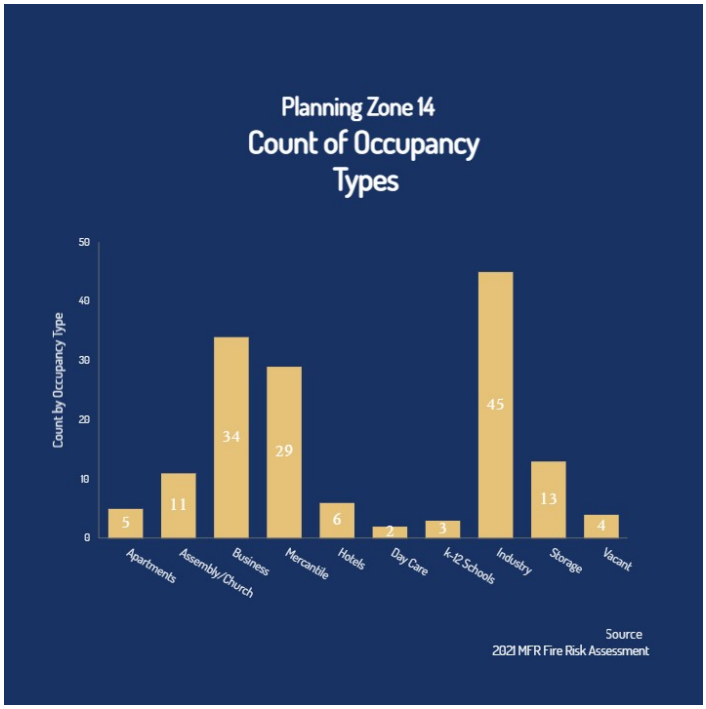


Figure 38: PZ14 Occupancy Types

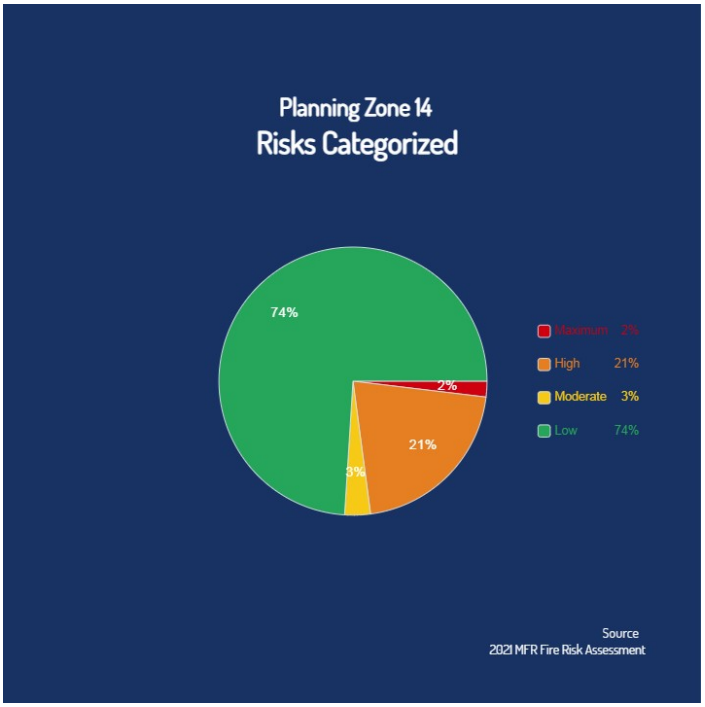


Figure 39: PZ14 Risk Assessment Pie Chart

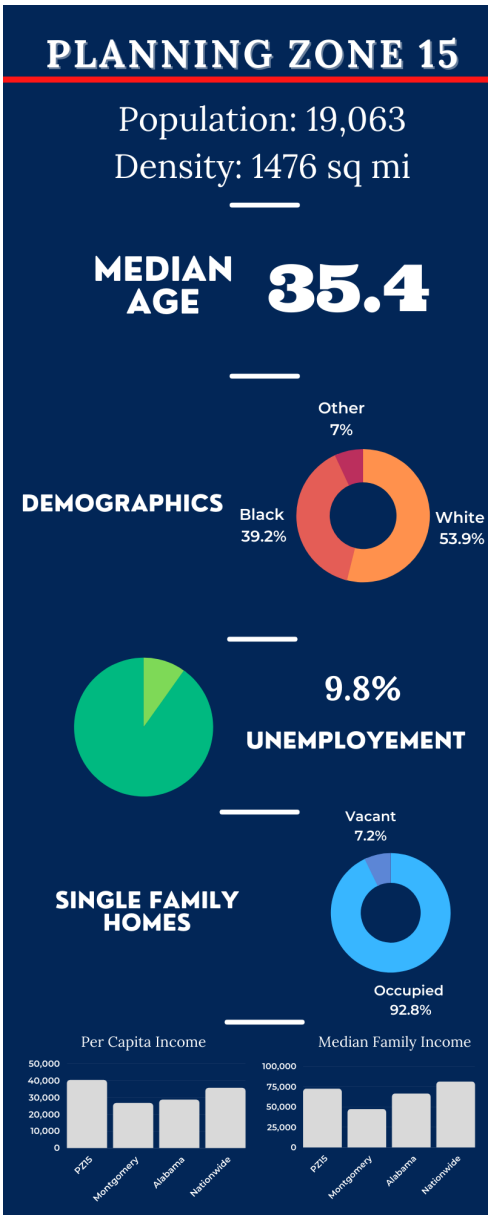
Planning Zone 14 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	22	10	13	16	20	17	23	121
1	13	14	16	22	11	20	22	118
2	17	22	11	16	15	18	19	118
3	14	19	9	12	14	18	22	108
4	12	20	13	15	15	17	25	117
5	16	22	20	16	21	11	9	115
6	23	19	23	24	20	13	18	140
7	39	35	32	32	37	19	18	212
8	40	43	41	36	41	26	31	258
9	50	39	34	45	40	25	37	270
10	38	39	38	47	40	31	36	269
11	43	40	34	36	31	42	33	259
12	39	40	45	53	33	33	39	282
13	37	39	33	36	39	43	46	273
14	31	34	34	35	41	40	41	256
15	44	46	41	40	43	33	33	280
16	47	45	41	38	43	37	33	284
17	36	54	40	38	26	21	23	238
18	42	38	35	41	36	36	41	269
19	34	27	39	39	37	24	37	237
20	37	43	27	26	23	35	41	232
21	37	24	22	29	30	36	28	206
22	21	24	25	31	31	26	38	196
23	21	27	17	25	28	29	22	169
Grand Total	**753**	**763**	**683**	**748**	**715**	**650**	**715**	**5,027**

Table 76: PZ14 Incidents by Time of Day

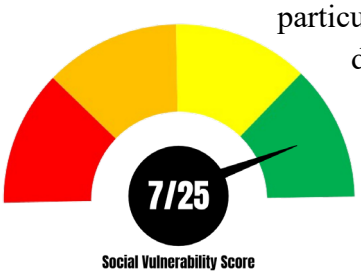
Planning Zone 15

Planning Zone 15 is in the eastern portion of the city and covers a mix of residential neighborhoods and commercial business occupancies. The planning zone is traversed at its south end by Interstate 85 significantly increasing the risk associated with interstate transportation. Planning Zone 15 ranks 8th in the city's planning zones in terms of population density. With a density of greater than 1000 per square mile, this zone is classified as an urban planning zone. This zone is home to Fire Station 15 and one of the city's two heavy rescue teams due to its location and access to the interstate and the city's major highway loop.



An analysis using ArcGIS and the latest census data reveals that the median age is 35.4 in this zone ranking 2 amongst the 14 planning zone which suggests a much older population resides in this area. The demographics of this zone are made up of a 53.9% white population followed by a 39.2% black population, with a remaining 7% made of Hispanic, Asian, and other descents. This zone is less challenged economically than the other zones. The per capita income in this zone, at 40,348, outpaces the city and state average. The zone's median family income, at 72,233 outpaces the city's average. The employment rate of 9.8% ranks 2nd best of the 14 planning zones. The social vulnerability score for this zone is 7 which is the 2nd lowest of the 14 assessed zones.

There is a significant flood risk in the northern portion of this zone and can be visualized in Appendix D. There are 9,135 single-family residential structures of which 656 (7.2%) were vacant according to the most recent census data. There are 63 structures identified as target hazards, 1 high rise, and 162 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 58.3% of PZ15's commercial occupancies were sprinkled. PZ15 is a particularly high-risk area for transportation due to the presence of Interstates 85 and the heavily Taylor Road. One of the City's three large hospitals is located in this planning zone. This zone has particularly high calls for non-emergency patient assists, illustrated on the heat map in Appendix L.



PZ15 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	51	63	24%	48	-24%	53	10%
Structure Fire (W-3)	6	1	-83%	5	400%	11	120%
Multi-Alarm Fires	18	19	6%	16	-16%	0	-100%
Vehicle Fires	31	12	-61%	25	108%	10	-60%
False Alarms	406	409	1%	450	10%	415	-8%
HazMat Incident	17	50	194%	24	-52%	16	-33%
Dive Rescue Incident	0	0	null	0	null	4	null
Technical Rescue Incident	2	13	550%	6	-54%	2	-67%
Other Suppression	215	183	-15%	195	7%	220	13%
Total Suppression:	746	750	1%	769	3%	731	-5%

Table 77: PZ15 Suppression Data

PZ15 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	730	781	7%	841	8%	661	-21%
Vehicle Accident	368	438	16%	330	-25%	380	15%
Subject Shot	21	4	-425%	11	175%	11	0%
Possible Suicide	22	32	31%	21	-34%	19	-10%
Nonemergency assist	90	60	-50%	210	250%	246	17%
Cancelled enroute	63	91	31%	94	3%	95	1%
Other EMS	1,733	1,764	2%	1,636	-7%	1,533	-6%
Total EMS:	3,027	3,170	5%	3,143	-1%	2,945	-6%

Table 78: PZ15 EMS Data

Planning Zone 15 Special Considerations	
Single Family Residential	9,135
Target Hazards	63
High Rise Structures	1
> 10,000 Square Feet	162
Percent sprinkled	58.3%

Table 79: PZ15 Special Considerations

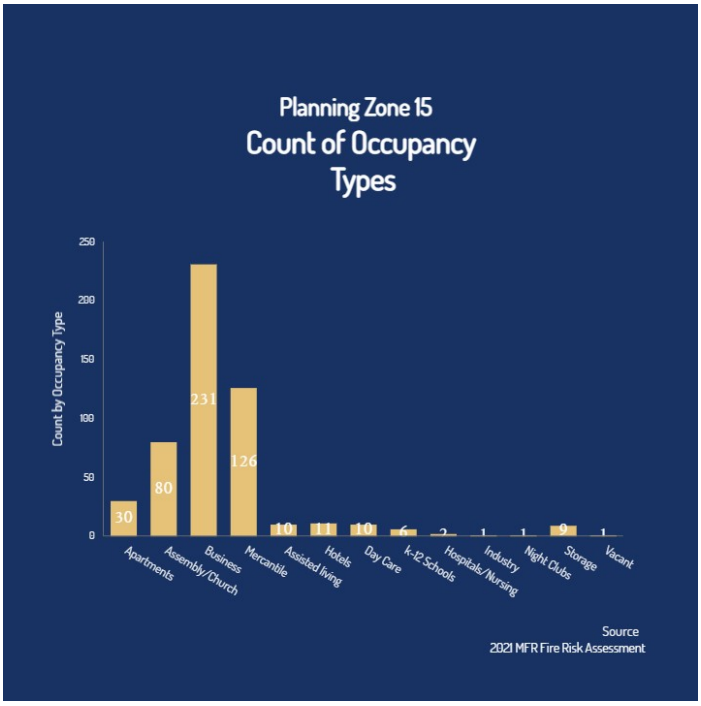


Figure 40: PZ15 Occupancy Types

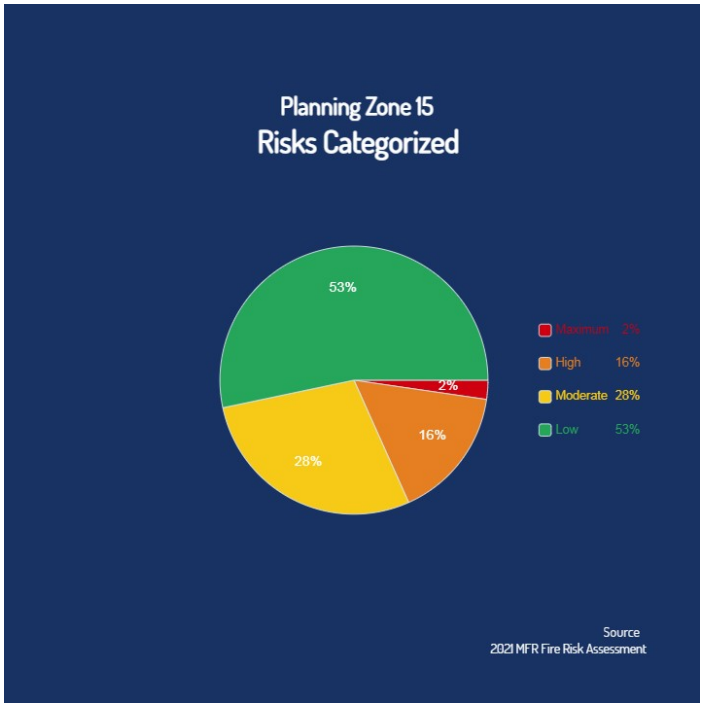


Figure 41: PZ15 Risk Assessment Pie Chart

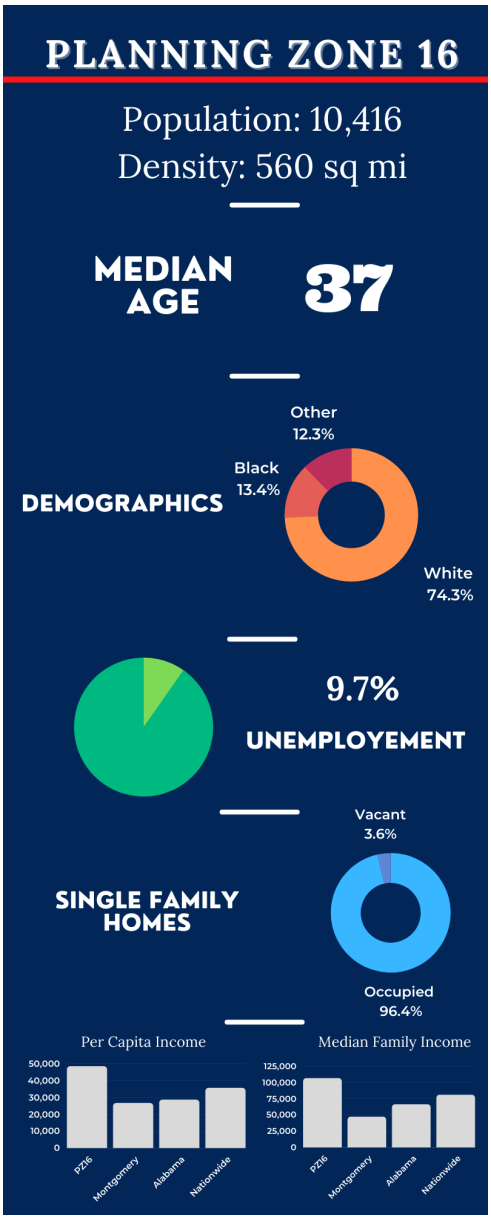
Planning Zone 15 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	24	27	25	27	31	27	41	202
1	31	23	21	19	25	34	23	176
2	15	25	19	17	20	26	29	151
3	19	21	15	16	25	25	27	148
4	22	22	21	23	27	27	28	170
5	23	31	27	36	31	17	17	182
6	40	37	41	43	31	33	34	259
7	54	50	61	65	54	45	53	382
8	54	56	68	64	62	68	50	422
9	76	53	75	74	61	40	46	425
10	75	77	90	58	65	73	45	483
11	72	85	88	77	74	71	59	526
12	71	83	80	89	73	79	54	529
13	71	78	80	87	78	75	63	532
14	84	91	67	73	86	61	47	509
15	72	81	67	66	88	73	58	505
16	88	64	74	90	84	72	54	526
17	81	81	76	80	62	65	64	509
18	62	69	60	75	67	67	50	450
19	57	57	55	54	72	58	59	412
20	56	42	48	44	45	59	54	348
21	43	57	51	41	58	57	41	348
22	50	47	44	39	48	47	37	312
23	25	30	29	28	32	29	31	204
Grand Total	**1,265**	**1,287**	**1,282**	**1,285**	**1,299**	**1,228**	**1,064**	**8,710**

Table 80: PZ15 Incidents by Time of Day

Planning Zone 16

Planning Zone 16 is in the far eastern portion of the city and covers a mix of mostly residential neighborhoods and few commercial business occupancies. The planning zone has no major transportation arteries. Planning Zone 16 ranks 12th in the city's planning zones in terms of population density. With a density between 500 & 1000 per square mile, this zone is classified as a suburban zone; however, for the purposes of MFR's risk assessment, this zone was classified as rural due to its low density and similarity with the other two rural zones. This zone is home to Fire Station 16.



An analysis using ArcGIS and the latest census data reveals that the median age is 37 in this zone ranking in the middle of the 14 planning zones. The demographics of this zone are made up of a 74.3% white population followed by a 13.4% black population, with a remaining 12.3% made of Hispanic, Asian, and other descents. This zone is less challenged economically than the other zones. The per capita income in this zone, at 47,485, outpaces the city and state average. The zone's median family income, at 106,586 outpaces the city's average. The employment rate at 9.7% is the City's lowest. The social vulnerability score for this zone is 5 meaning that this planning zone has the lowest social vulnerability risk.

There are moderate flood risks in this zone which are illustrated in Appendix D. There are 4,057 single-family residential structures of which 148 (3.6%) were vacant according to the most recent census data. There are 15 structures identified as target hazards, no high rise, and 16 identified as being greater than 10,000 square feet on a single floor. The 2021 Fire Risk Assessment indicated that 19% of PZ16's commercial occupancies were sprinkled. This zone has particularly high calls for non-emergency patient assists, illustrated on the heat map in Appendix L.

PZ16 Suppression Data	2017	2018	%	2019	%	2020	%
Structure Fire (W-1/2)	16	7	-56%	5	-29%	6	20%
Structure Fire (W-3)	0	2	null	0	-100%	6	null
Multi-Alarm Fires	0	0	null	0	null	0	null
Vehicle Fires	1	0	-100%	3	null	3	0%
False Alarms	119	114	-4%	113	-1%	112	-1%
HazMat Incident	14	14	0%	17	21%	10	-41%
Dive Rescue Incident	0	0	null	0	null	0	null
Technical Rescue Incident	2	0	-100%	0	null	0	null
Other Suppression	41	86	110%	84	-2%	99	18%
Total Suppression:	193	223	16%	222	0%	236	6%

Table 81: PZ16 Suppression Data

PZ16 EMS/Rescue Data	2017	2018	%	2019	%	2020	%
General Illness	132	145	9%	152	5%	147	-3%
Vehicle Accident	30	25	-20%	46	84%	28	-39%
Subject Shot	0	0	null	2	null	2	0%
Possible Suicide	4	7	43%	12	71%	3	-75%
Nonemergency assist	50	70	29%	108	54%	148	37%
Cancelled enroute	20	18	-11%	25	39%	19	-24%
Other EMS	341	350	3%	323	-8%	328	2%
Total EMS:	577	615	6%	668	9%	675	1%

Table 82: PZ16 EMS Data

Planning Zone 16 Special Considerations	
Single Family Residential	4,057
Target Hazards	15
High Rise Structures	0
> 10,000 Square Feet	16
Percent sprinkled	18.6%

Table 83: Planning Zone 16 Special Considerations

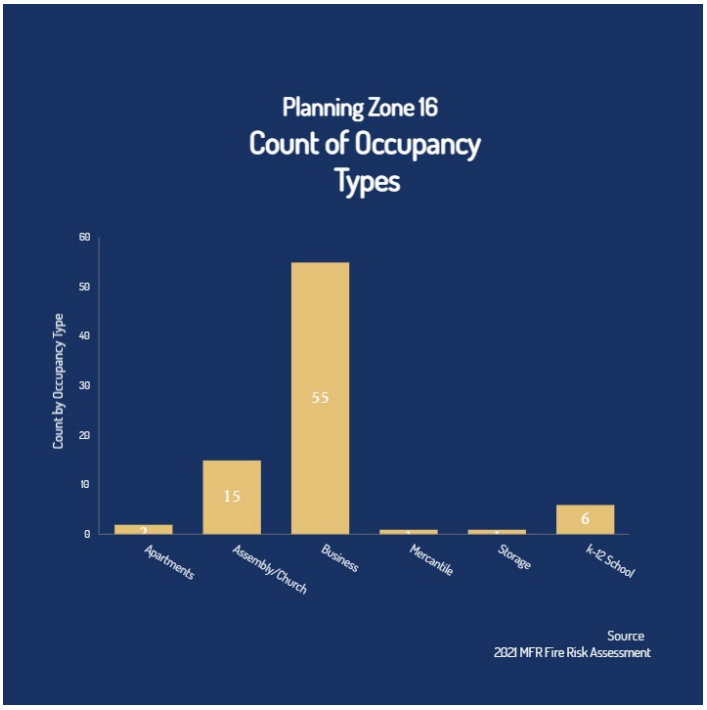


Figure 42: PZ16 Occupancy Types

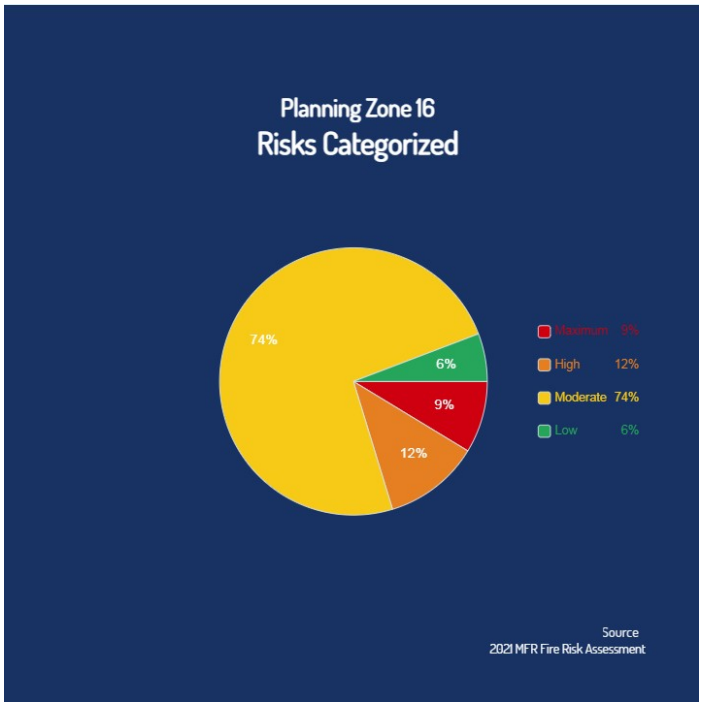


Figure 43: PZ16 Risk Assessment Pie Chart

Planning Zone 16 Incidents by time of day

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Grand Total
0	8	11	8	6	13	6	8	60
1	8	6	10	12	7	10	7	60
2	14	8	3	7	8	15	13	68
3	11	6	5	9	5	8	14	58
4	8	10	7	2	5	5	5	42
5	6	2	3	6	7	4	8	36
6	7	10	13	11	12	9	8	70
7	11	12	13	15	16	8	6	81
8	16	10	16	8	14	11	10	85
9	17	11	27	13	16	14	13	111
10	25	13	15	15	9	9	24	110
11	20	19	12	10	17	21	12	111
12	17	19	16	14	18	13	9	106
13	20	16	17	16	10	7	13	99
14	19	18	19	27	14	10	16	123
15	12	15	13	15	15	10	20	100
16	21	19	13	18	27	16	25	139
17	19	22	13	19	20	17	16	126
18	24	20	26	22	23	15	12	142
19	17	19	14	14	14	7	14	99
20	18	12	9	10	14	11	20	94
21	8	9	14	8	13	12	9	73
22	14	13	12	14	10	11	17	91
23	11	12	6	10	7	14	6	66
Grand Total	**351**	**312**	**304**	**301**	**314**	**263**	**305**	**2,150**

Figure 44: PZ16 Incidents by Time of Day

Risk Assessment Data Summaries

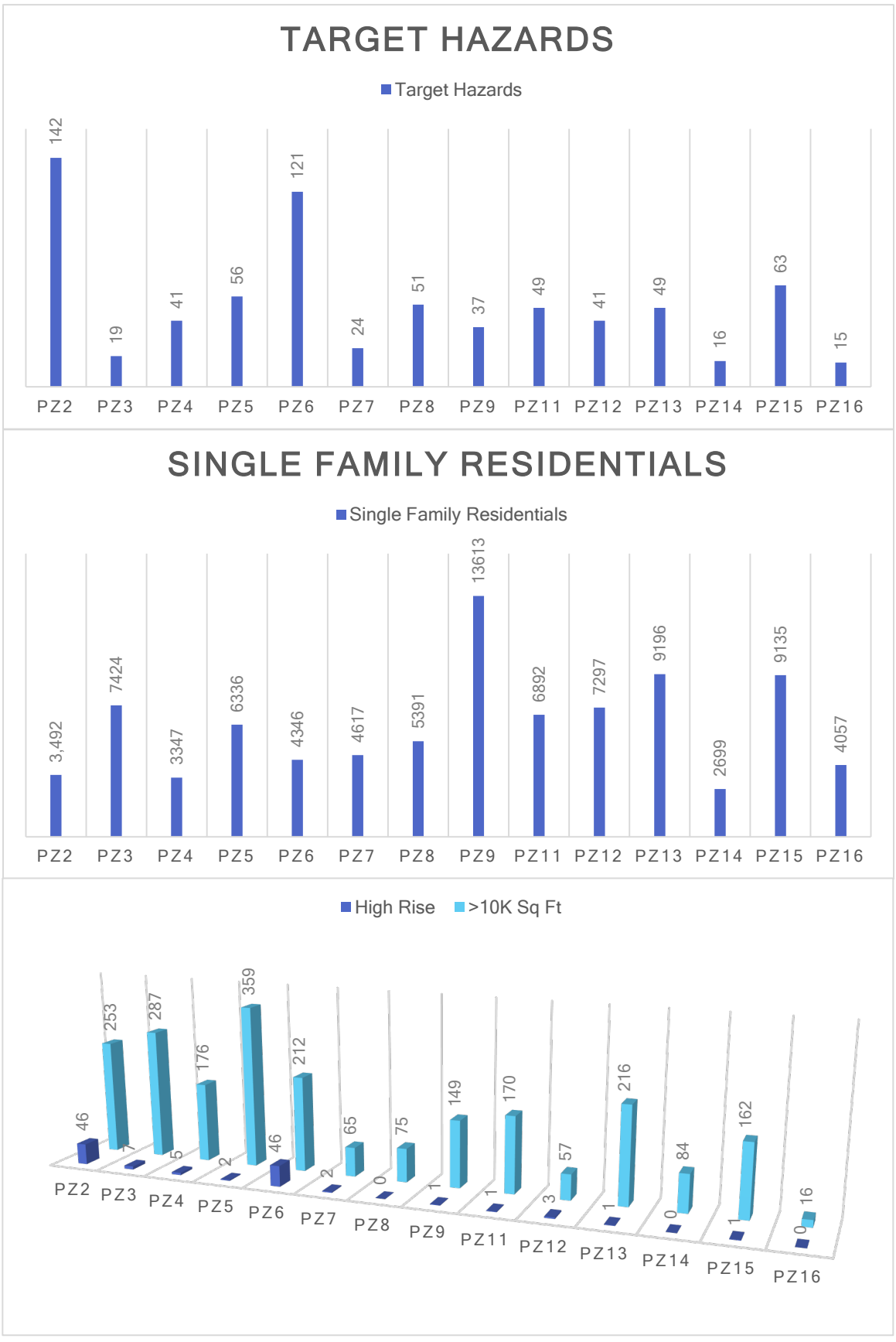


Figure 45: PZ Assessment Summary Data

Historical Data

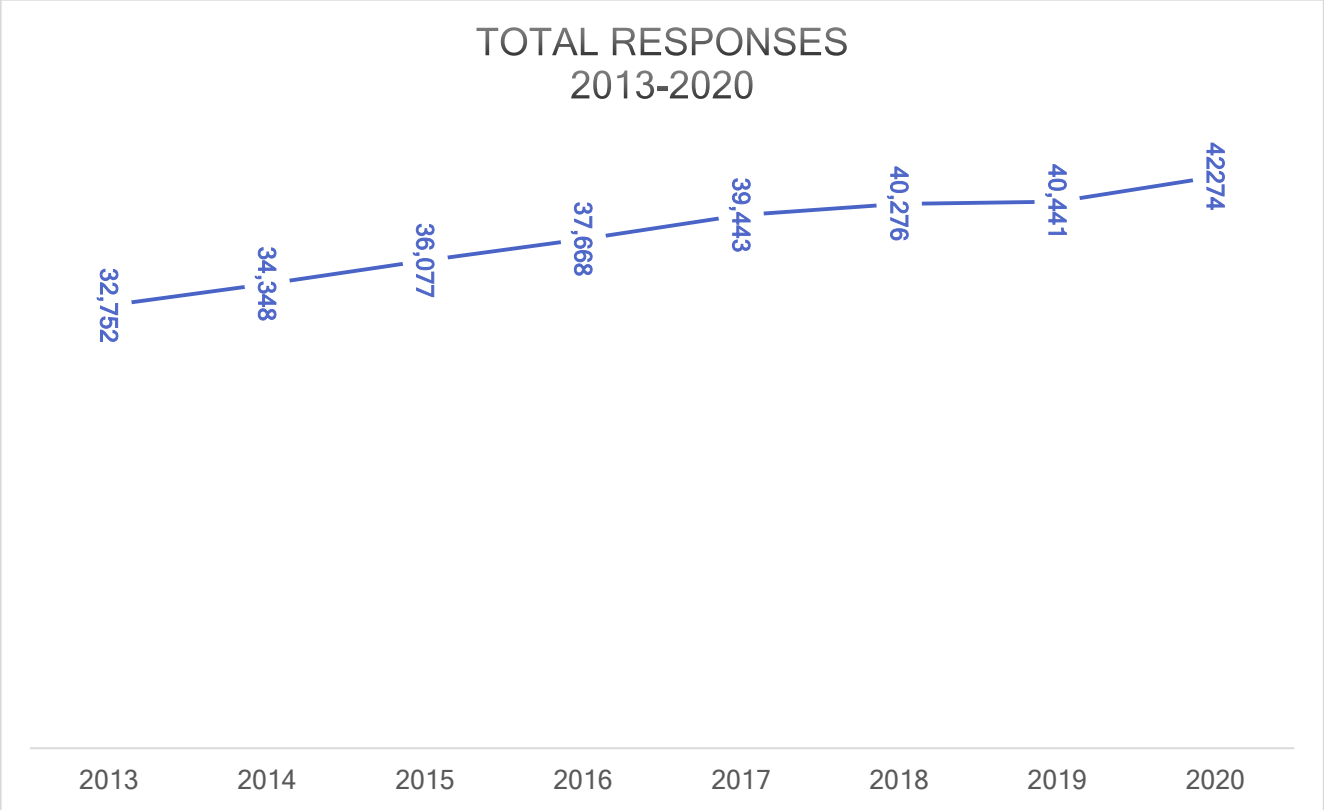


Figure 46: Total response data

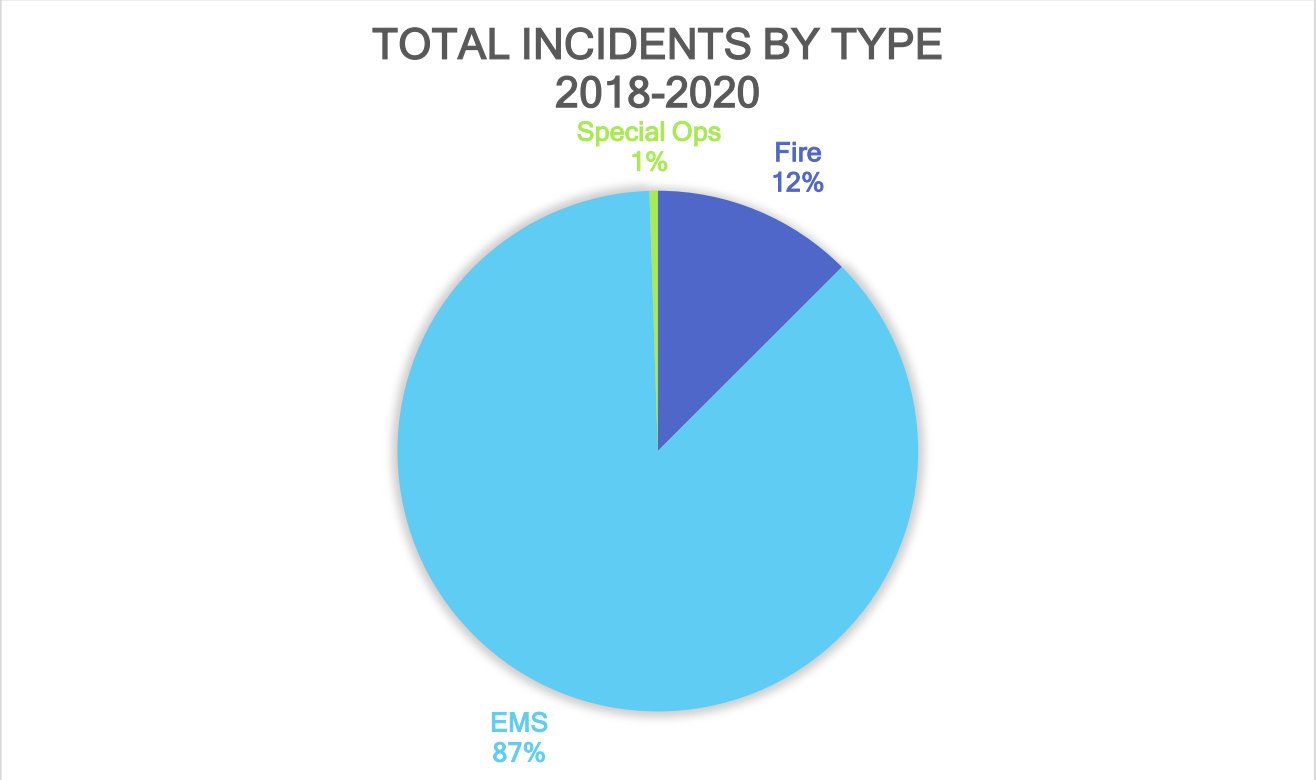


Figure 47: Total incidents by type

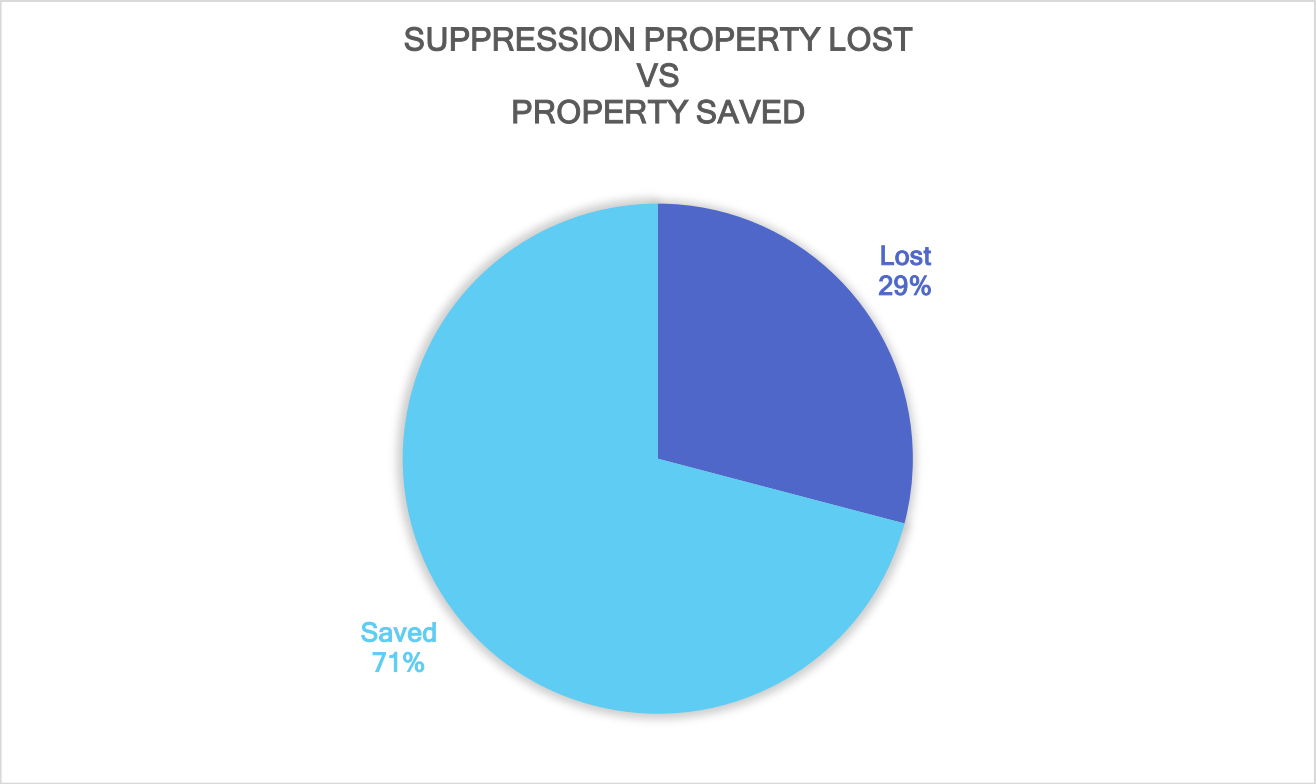


Figure 48: Property lost versus saved

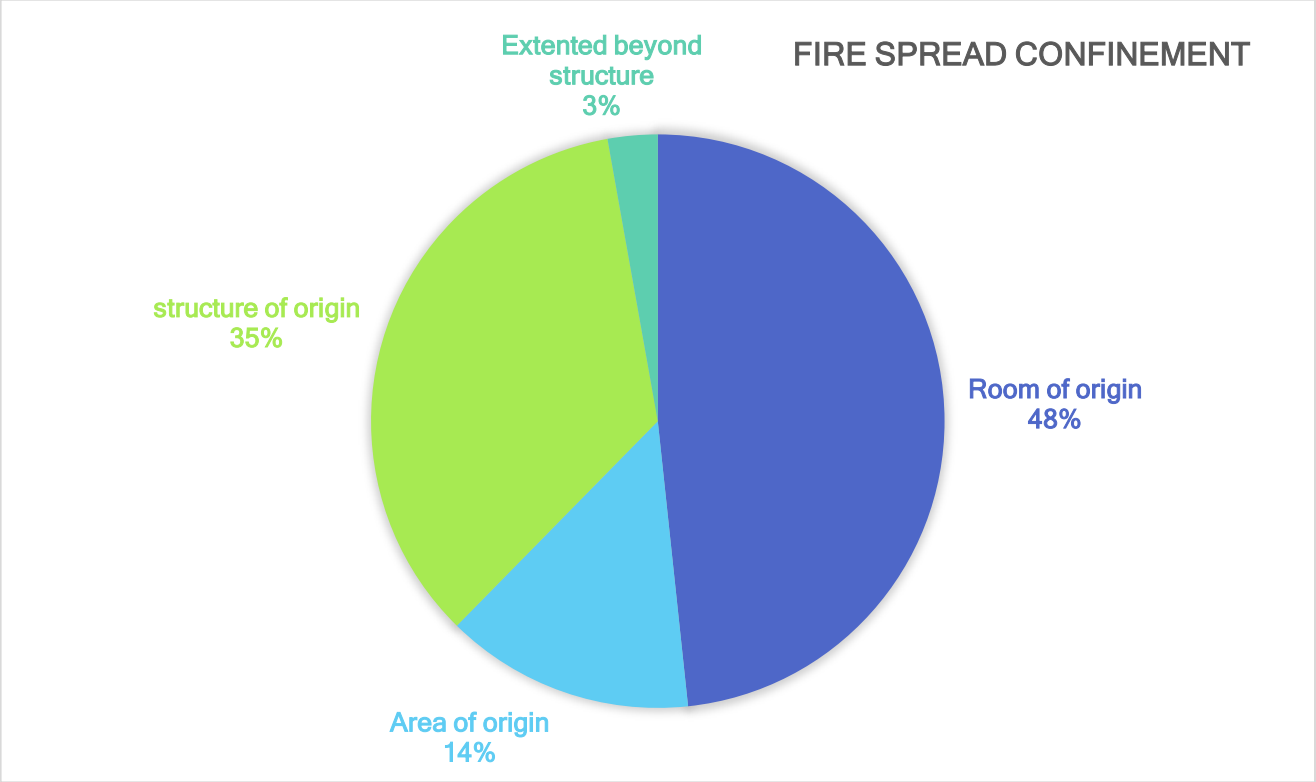


Figure 49: Fire spread confinement

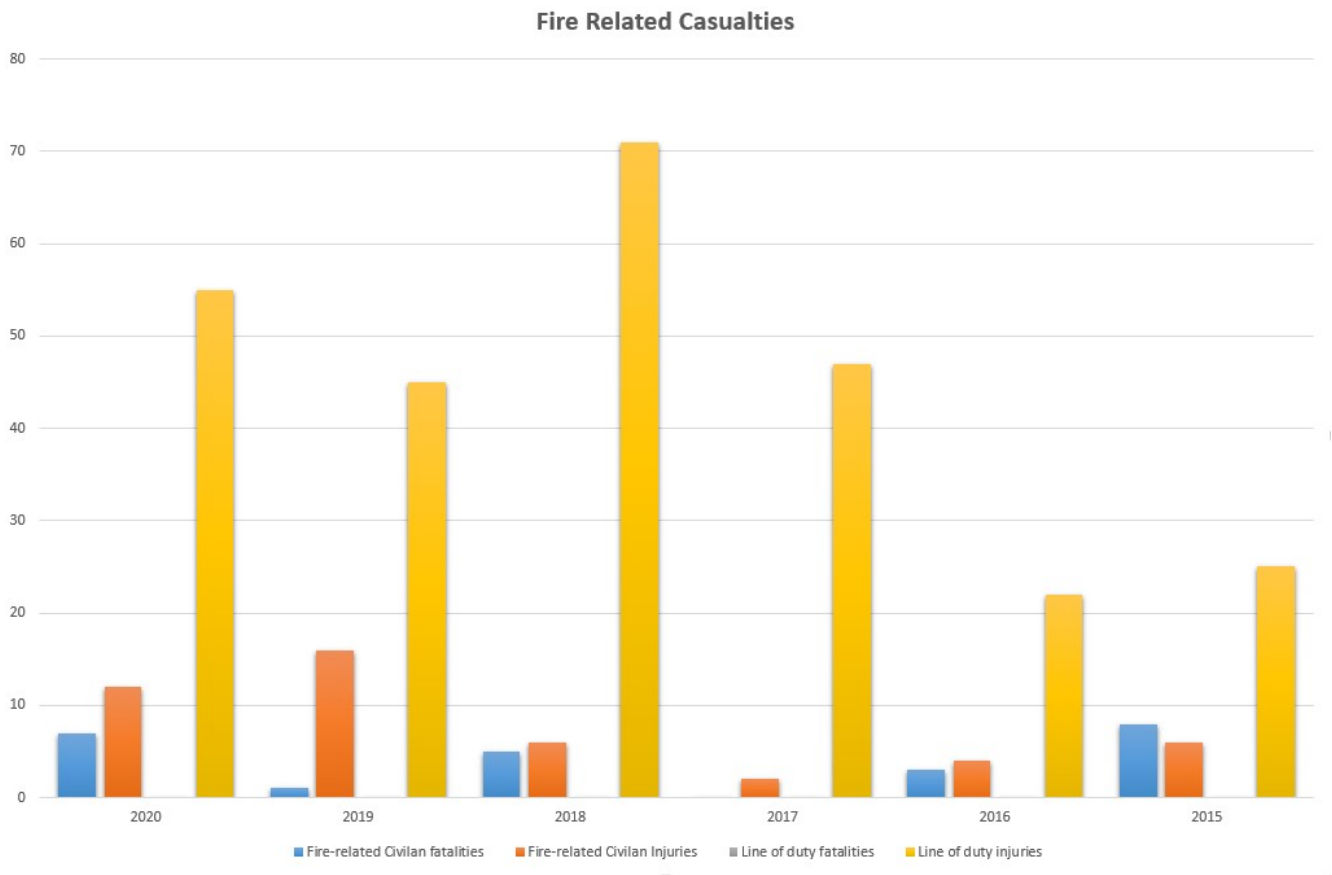


Figure 50: Fire related casualties

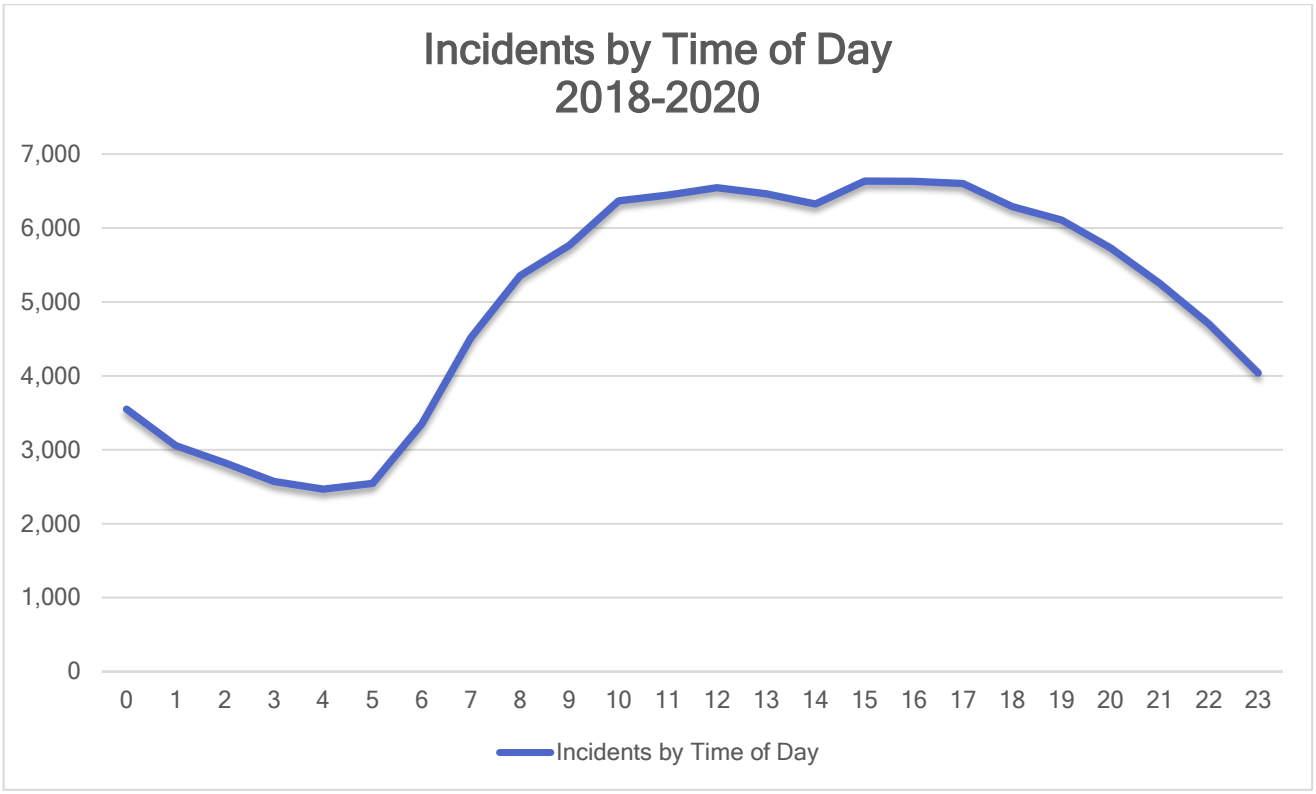


Figure 51: Total incidents by time of day

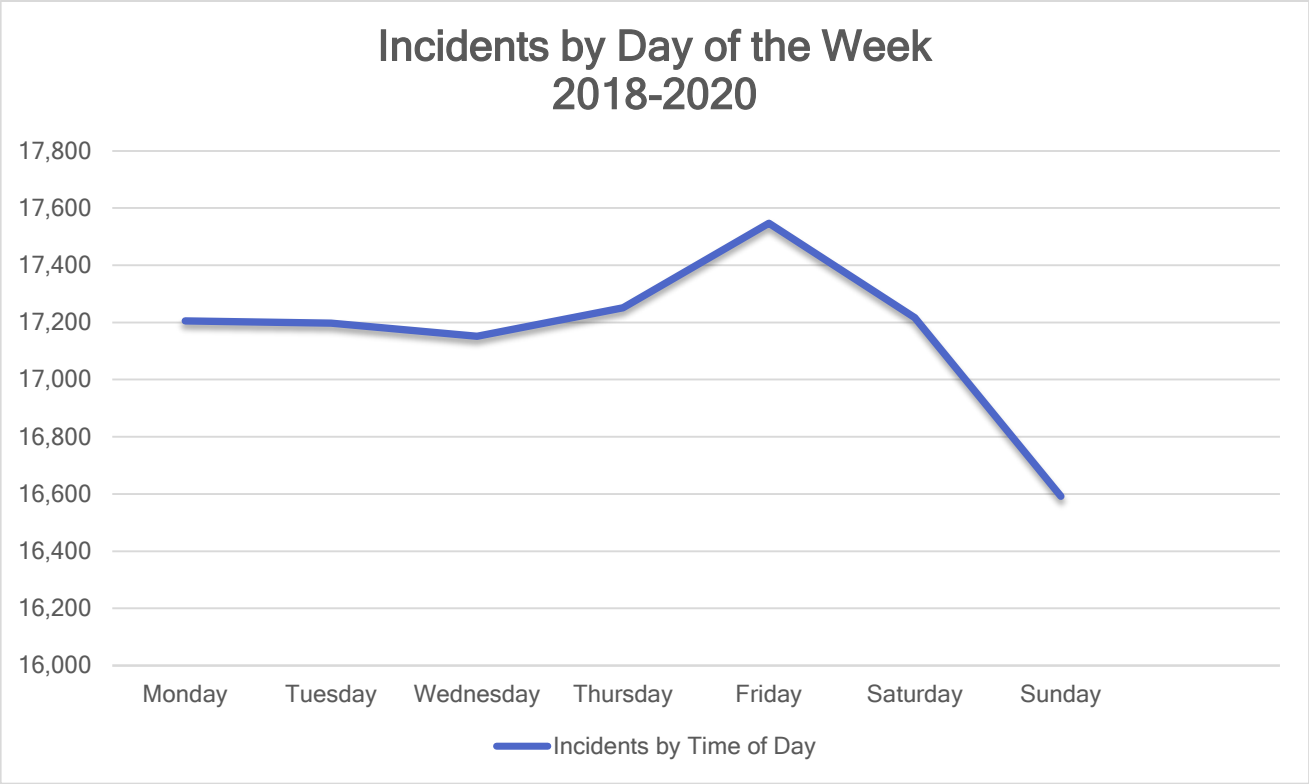


Figure 52: Total incidents by day of the week

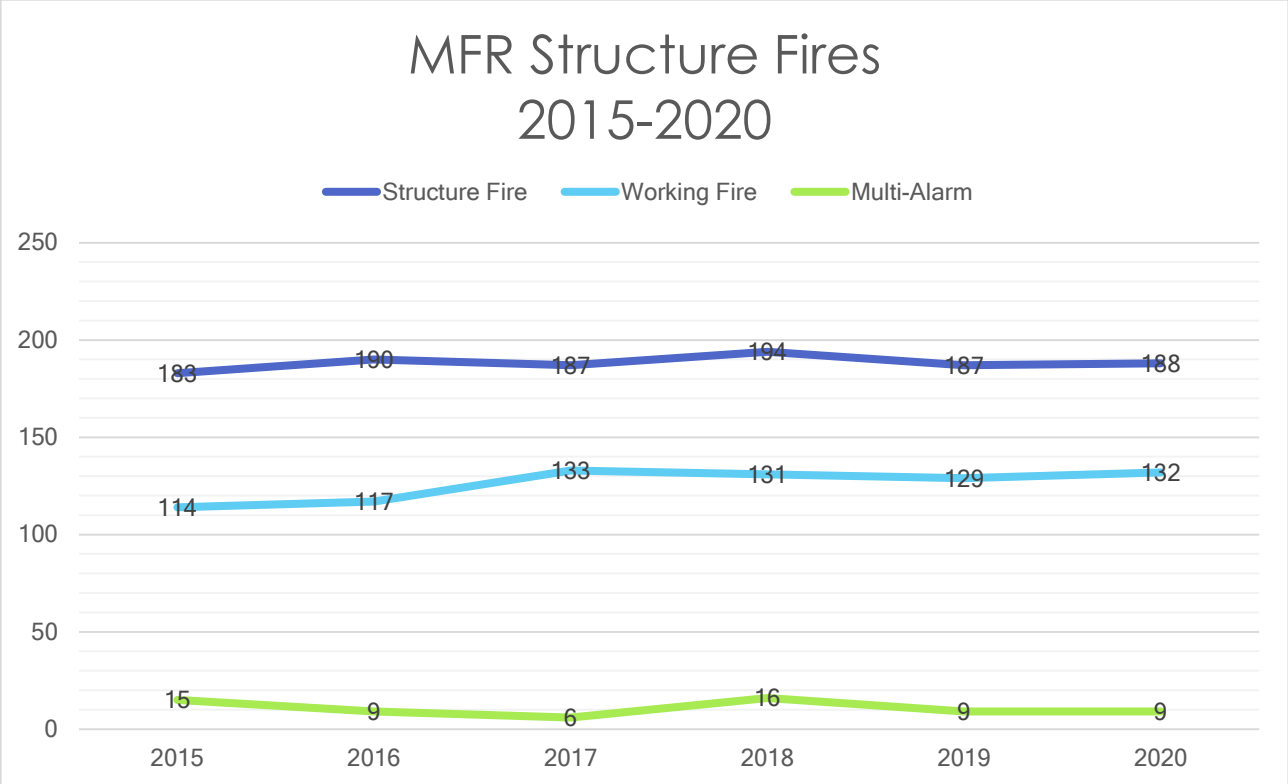


Figure 53: MFR structure fires 2015-2020

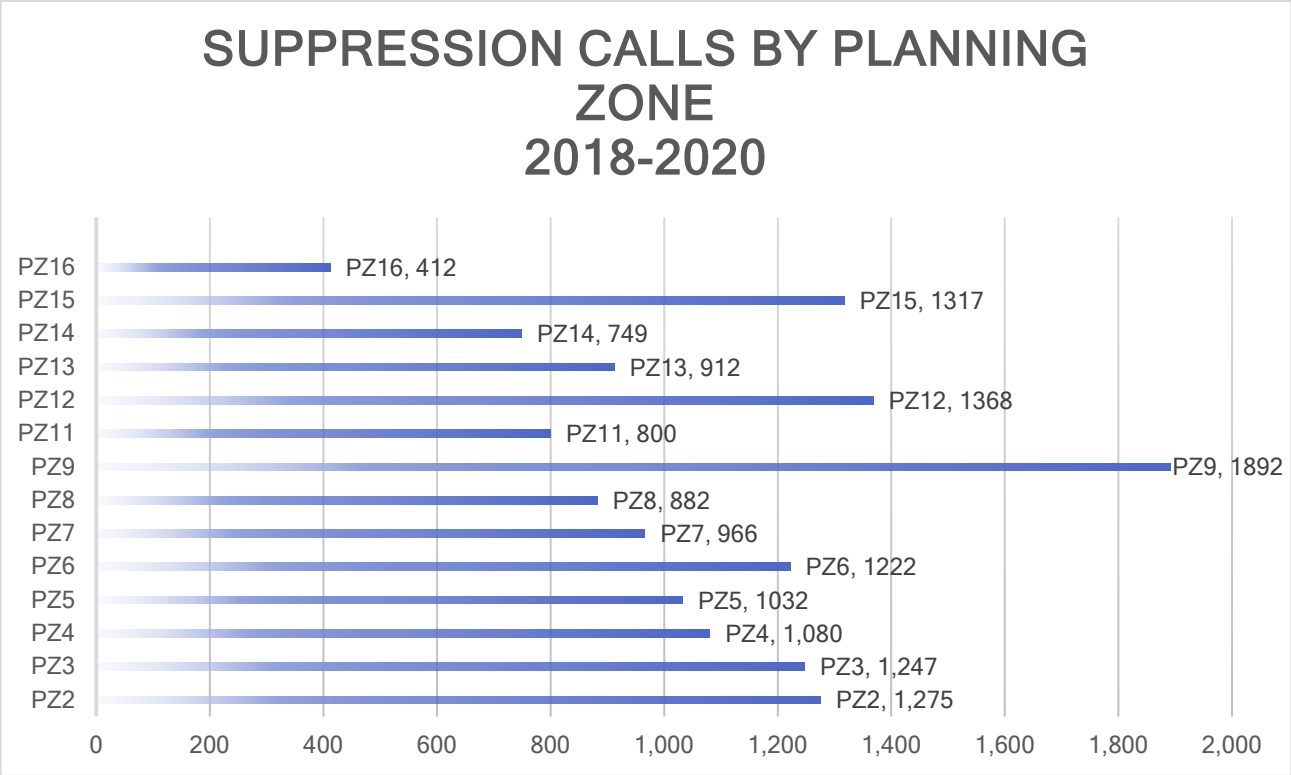


Figure 54: Suppression calls by PZ 2018-2020

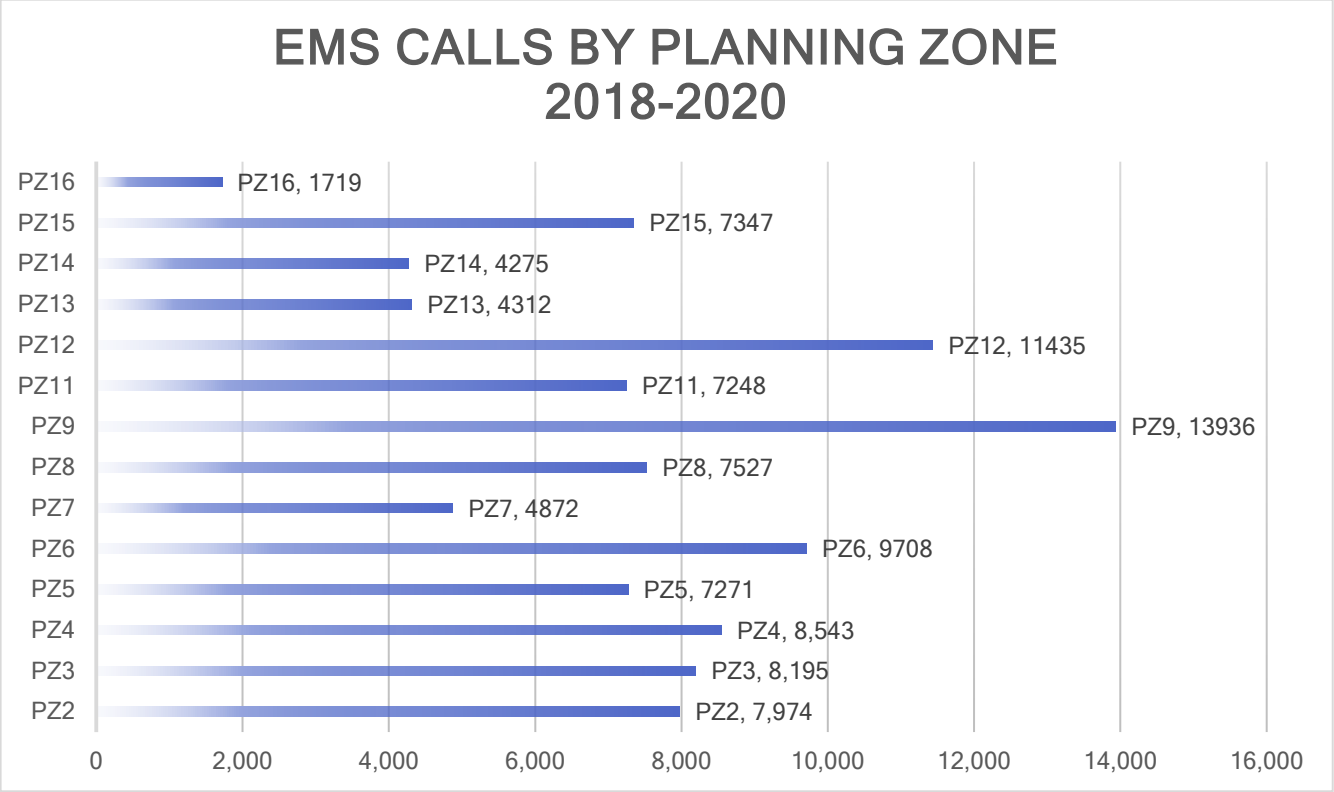


Figure 55: EMS calls by planning zone 2018-2020

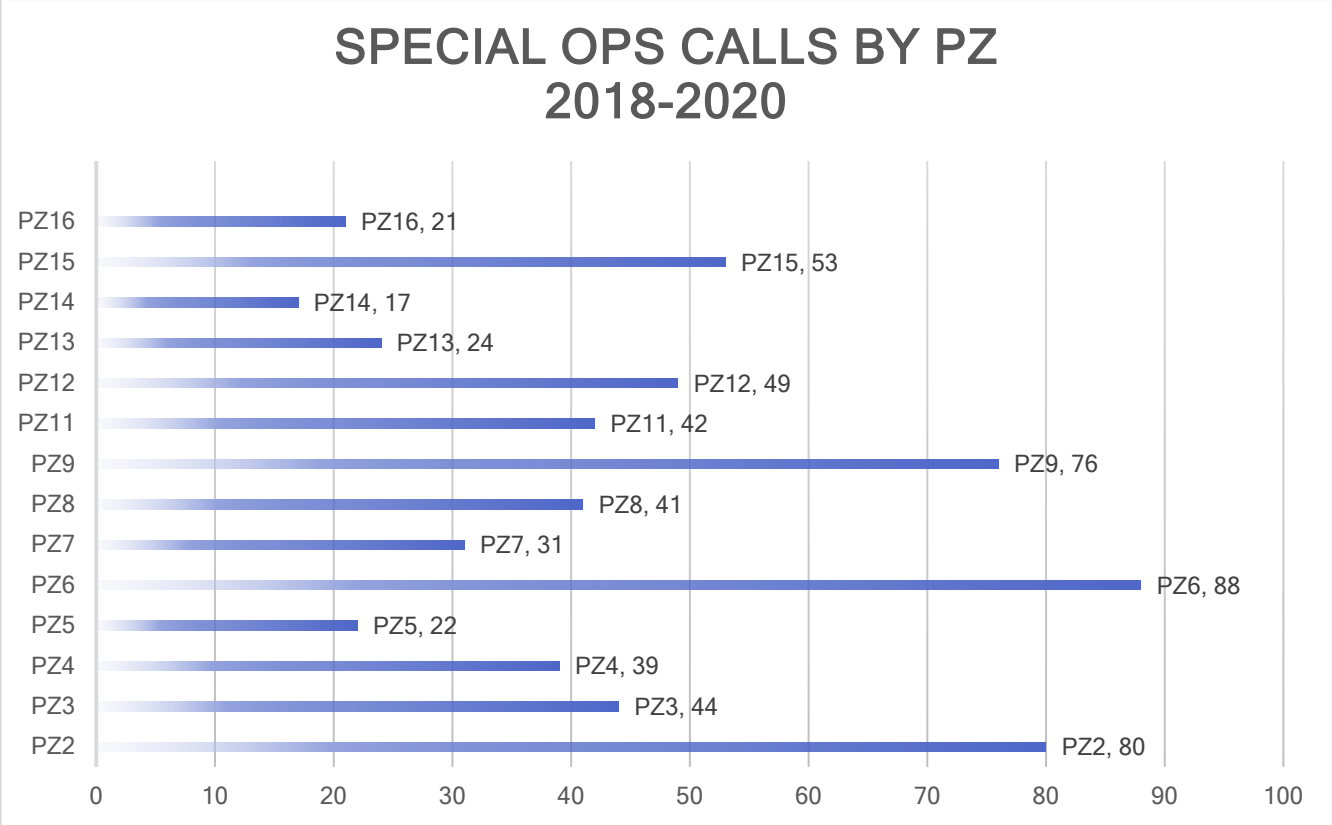


Figure 56: Special ops calls by planning zone 2018-2020

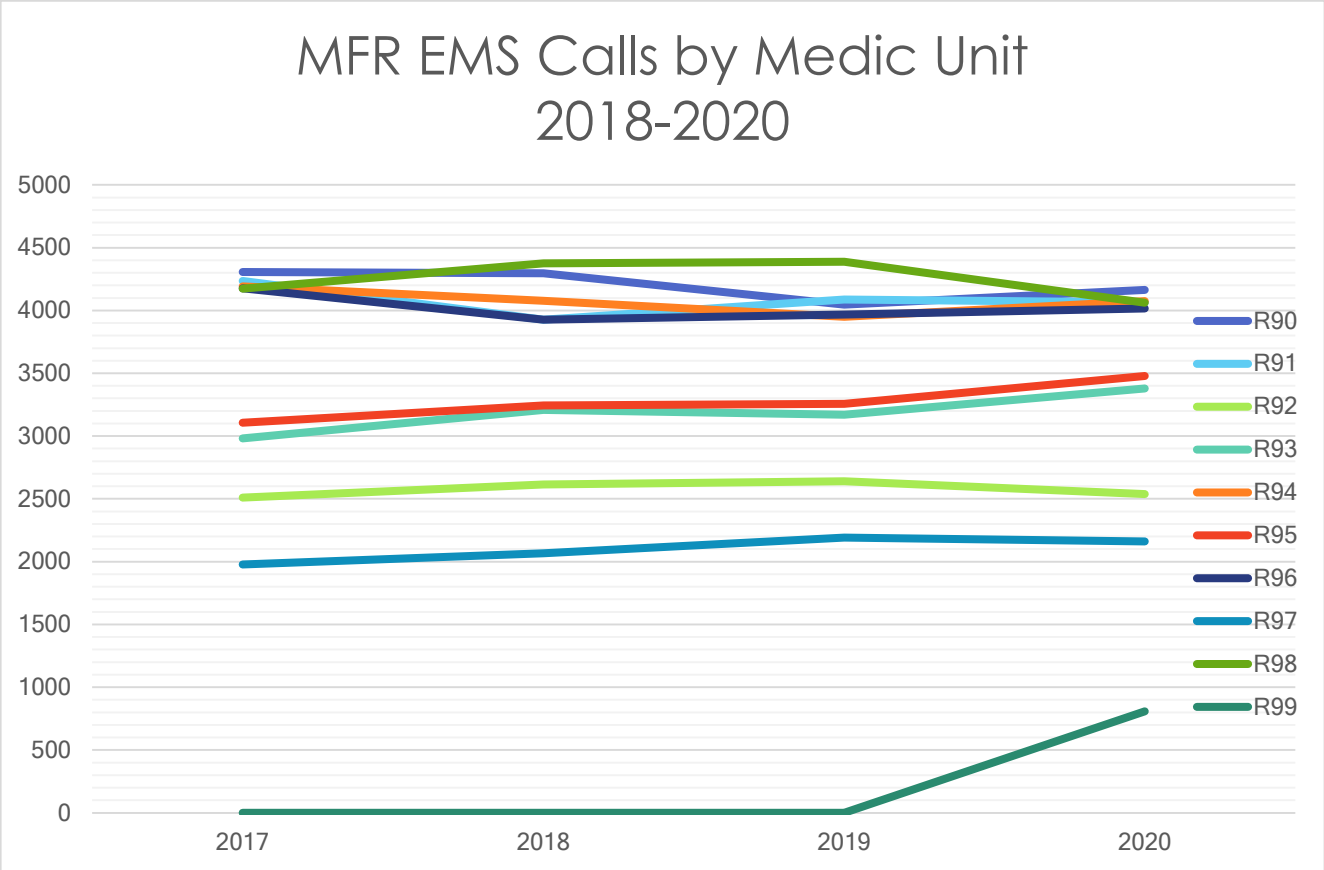


Figure 57: EMS calls by planning zone 2018-2020

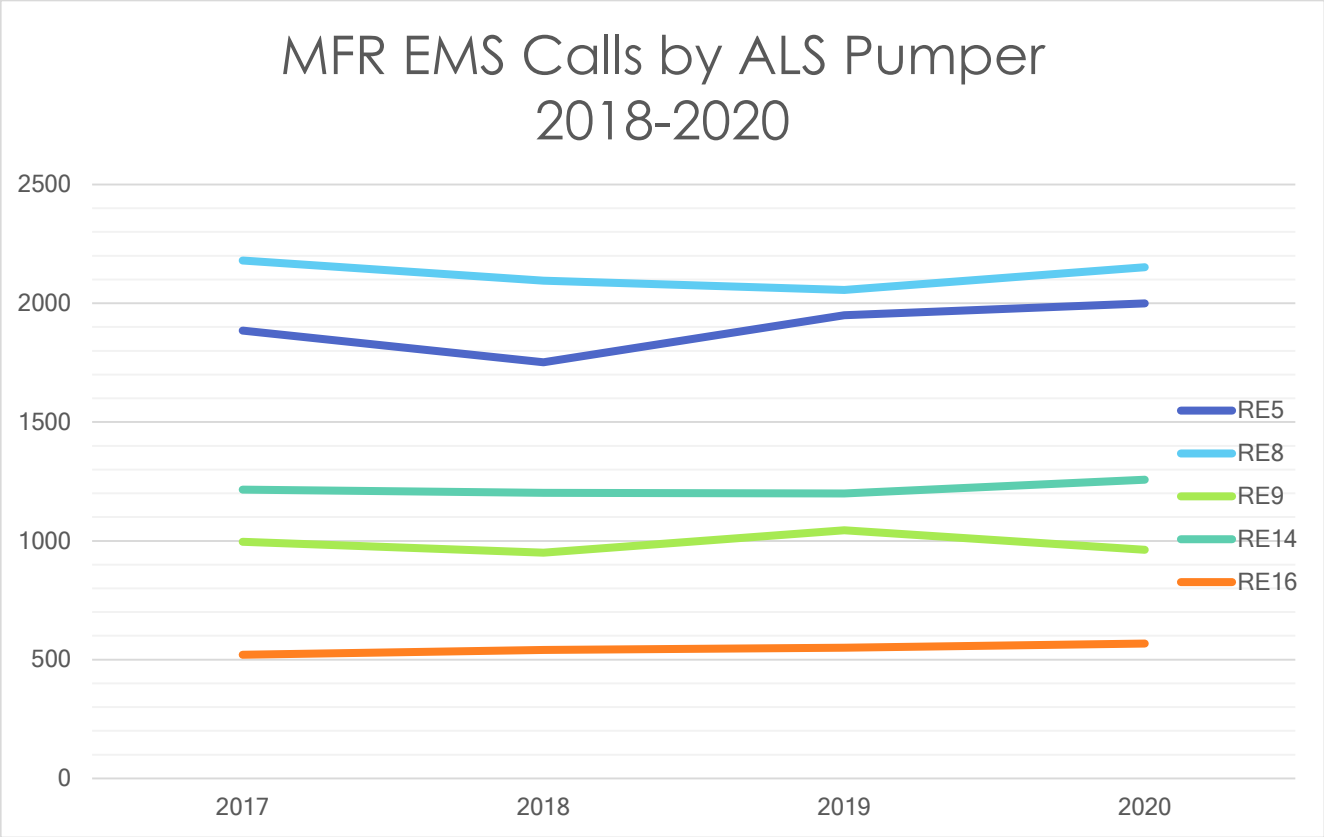


Figure 58: EMS calls by ALS pumper 2018-2020

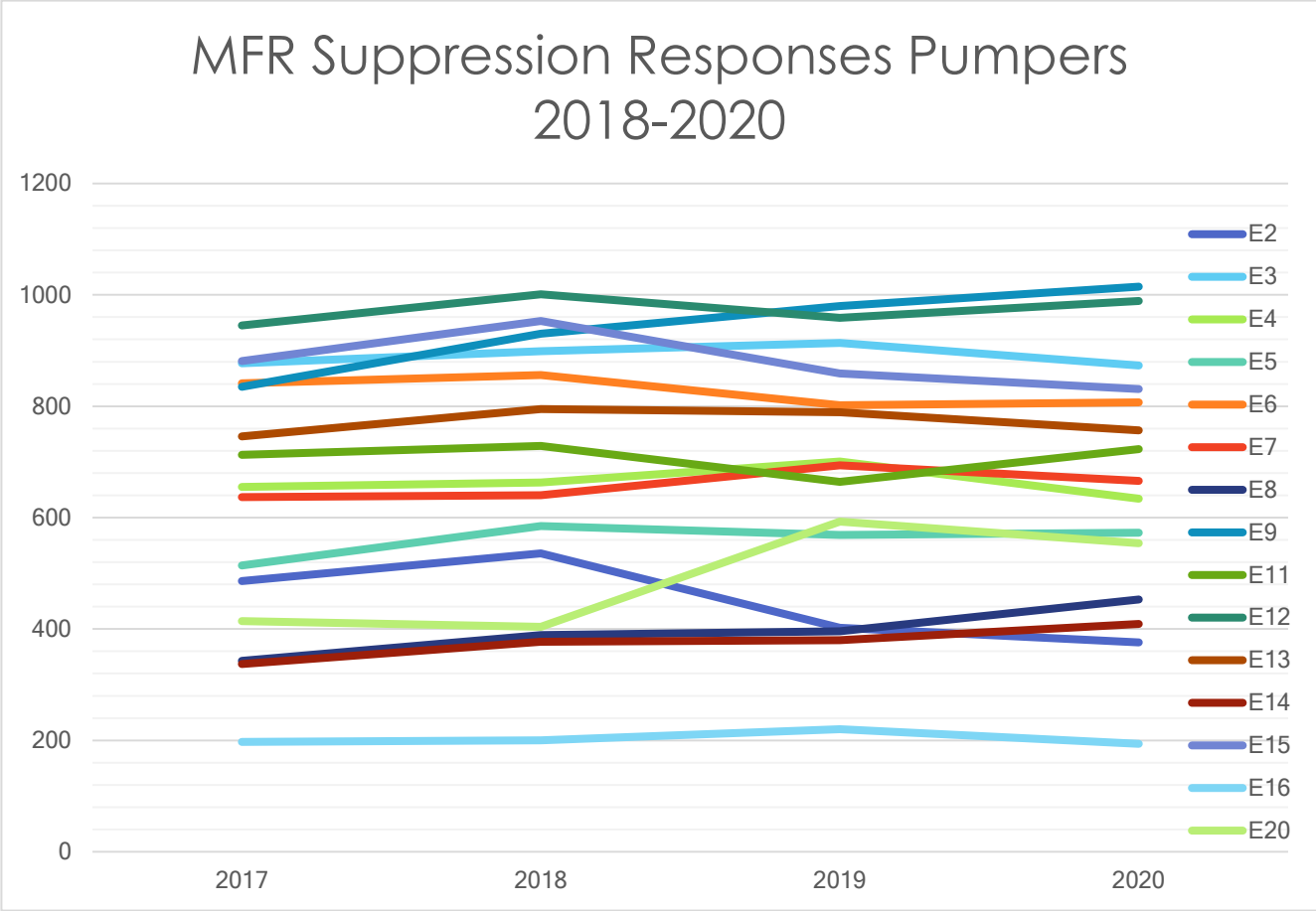


Figure 59: MFR Suppression calls by pumper 2018-2020

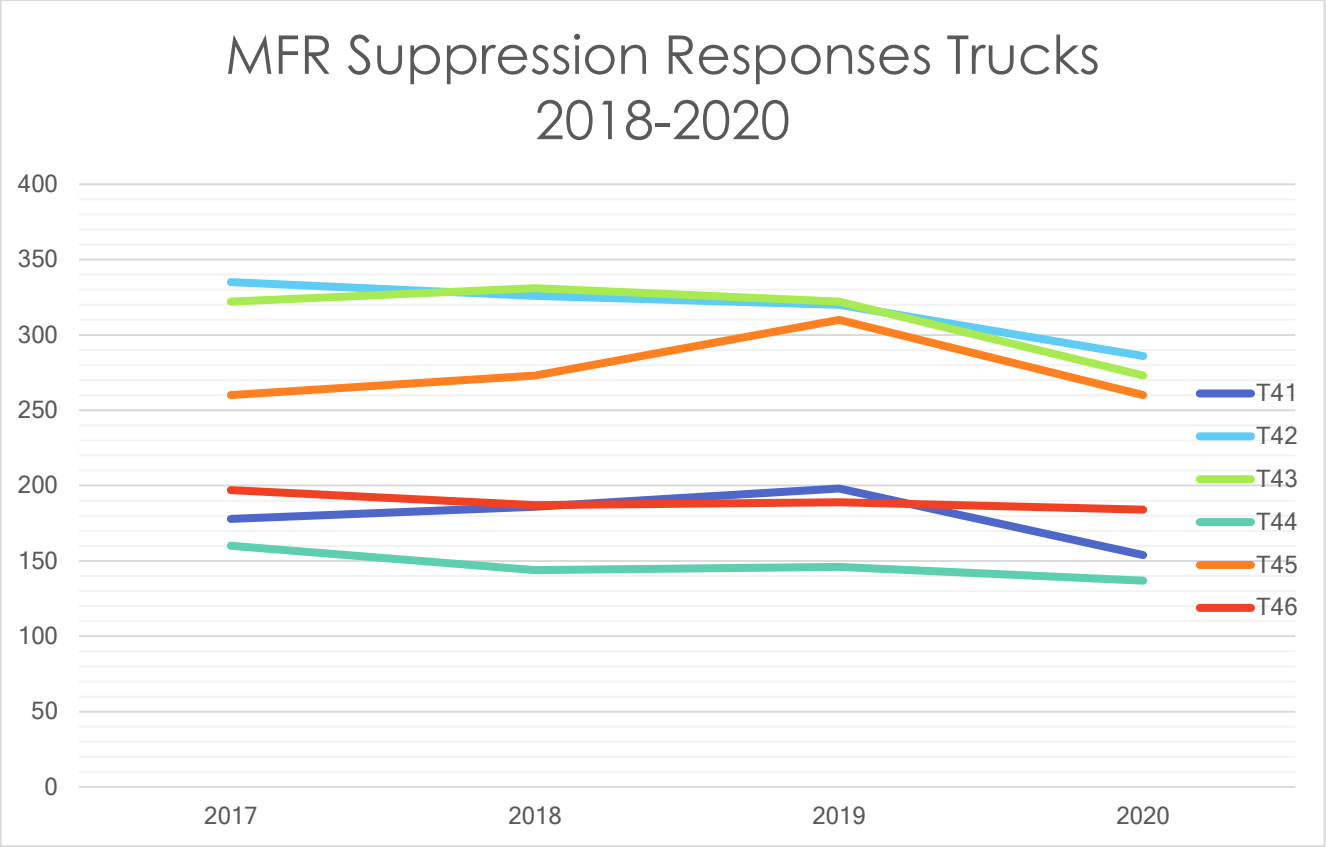


Figure 60: Suppression response by ladder truck 2018-2020

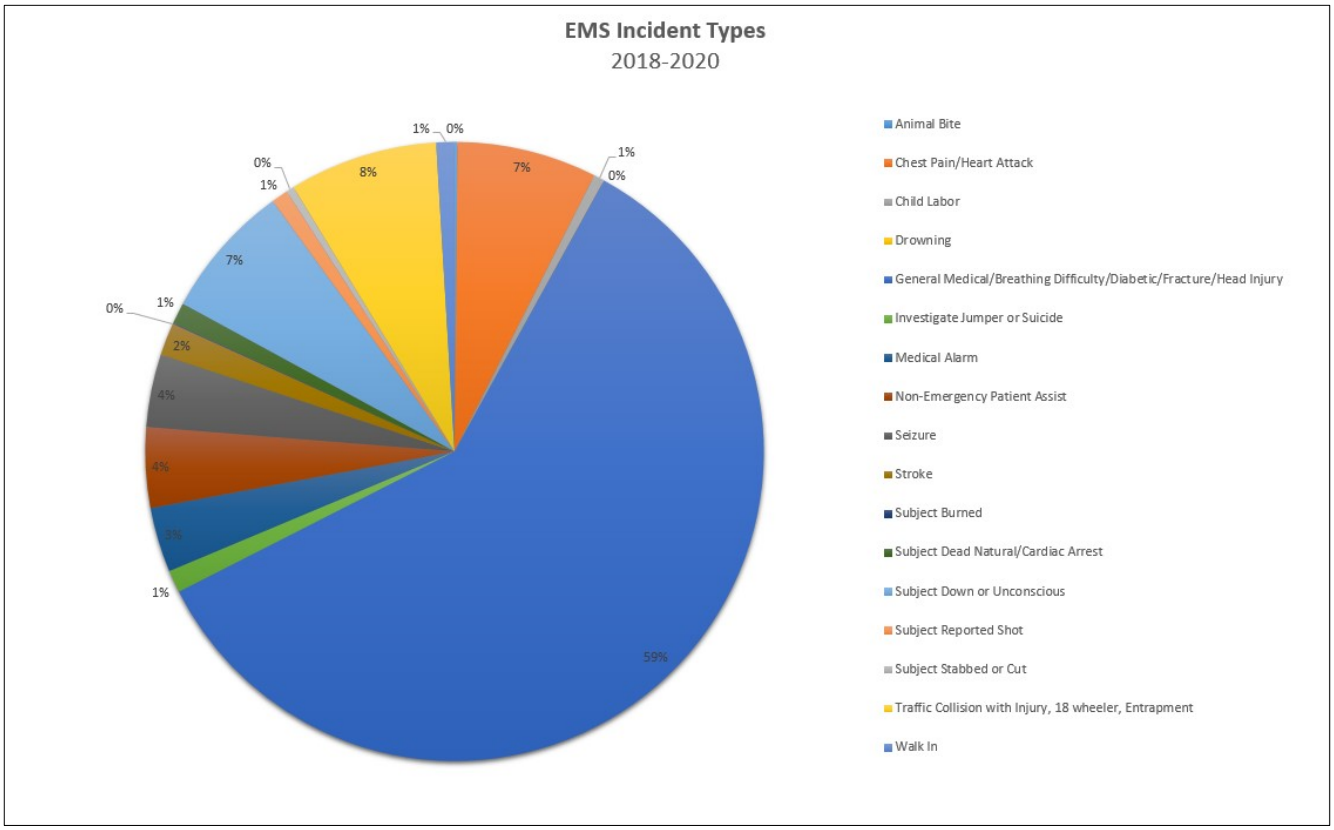


Figure 61:EMS Incident Types

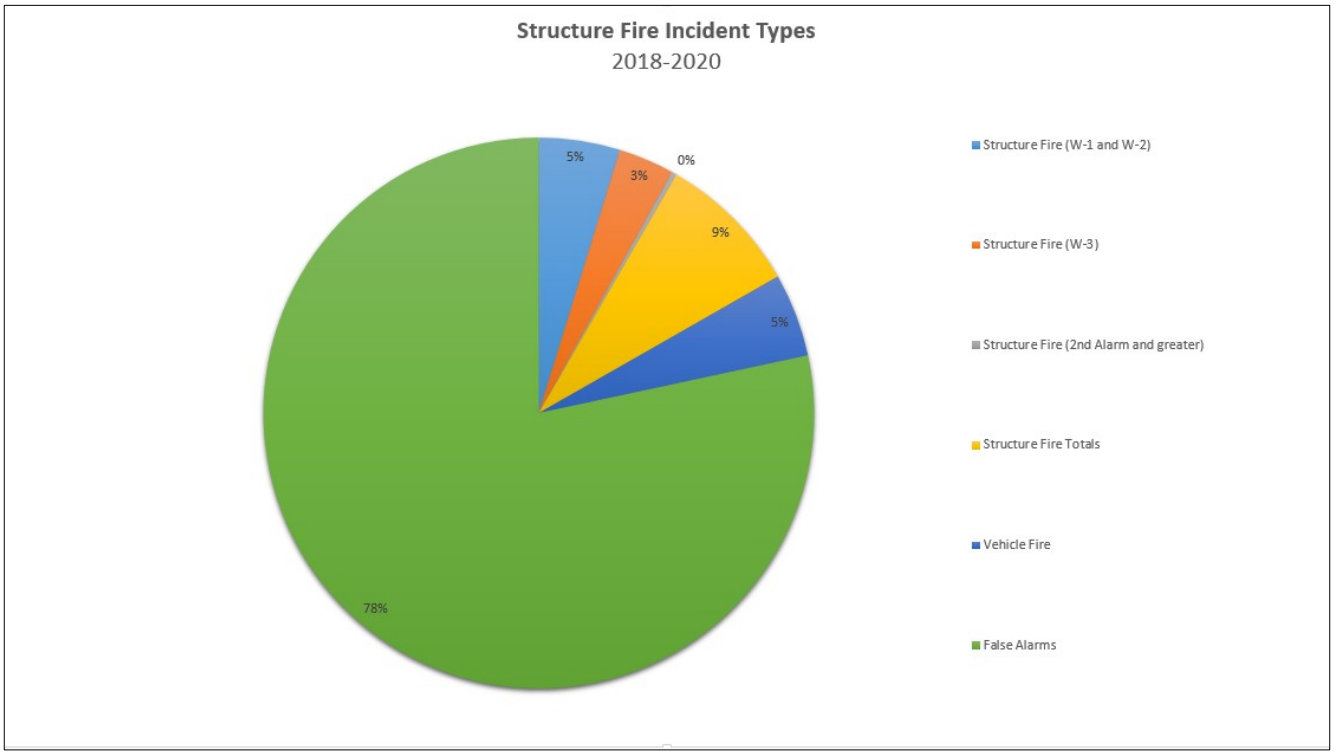


Figure 62: Fire Incident Types

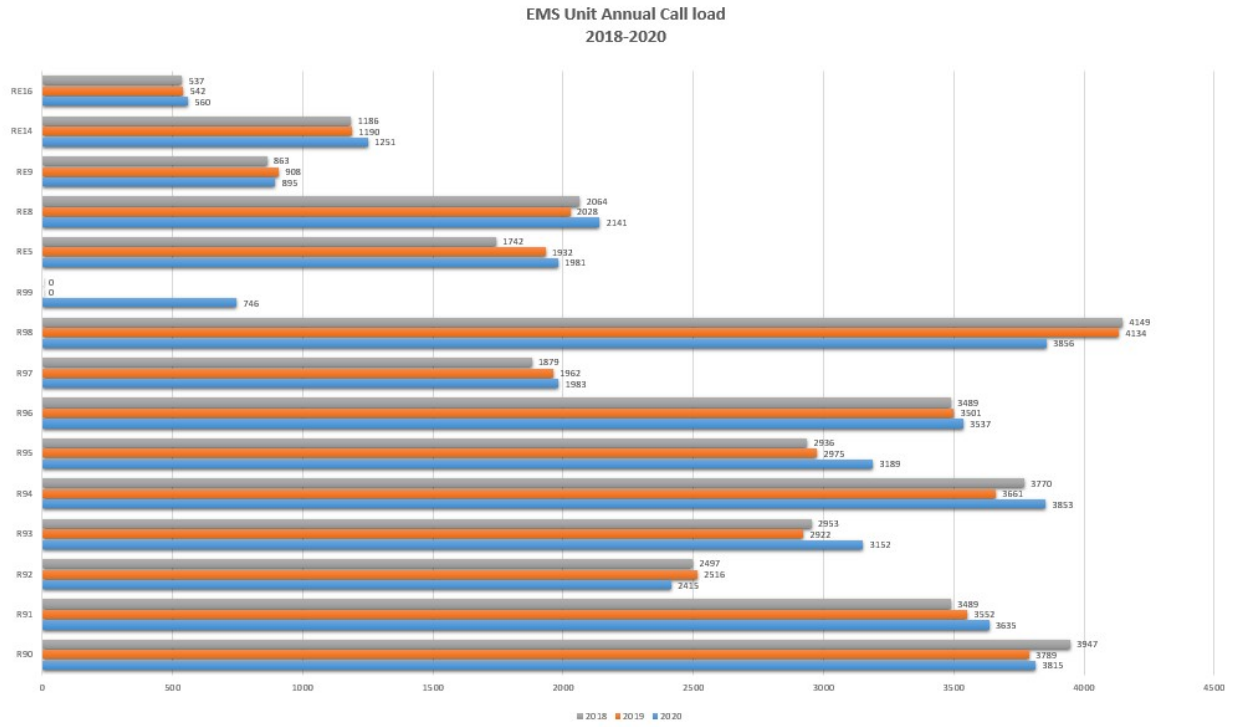


Figure 63: EMS unit call load

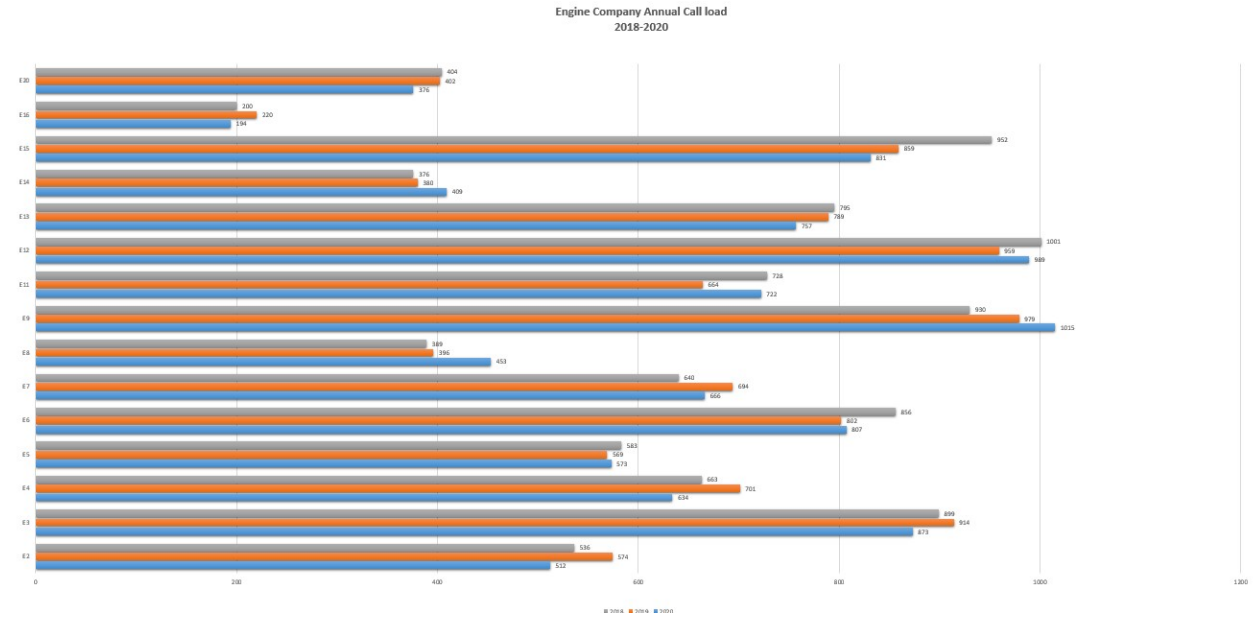


Figure 64: Engine company call load

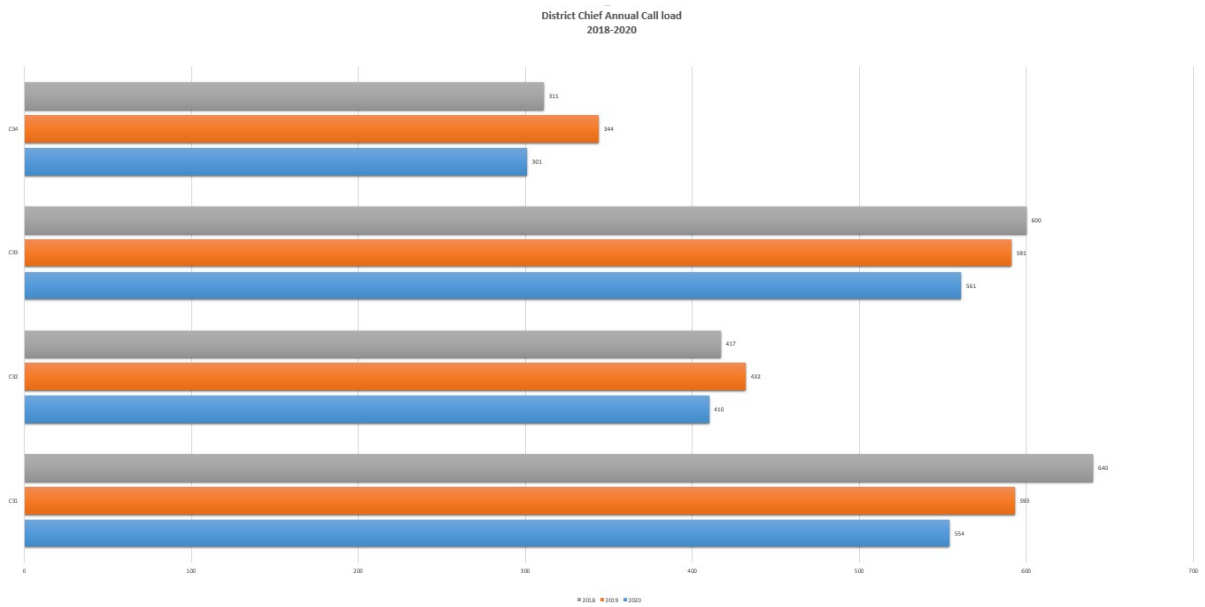


Figure 65: District supervisor call load

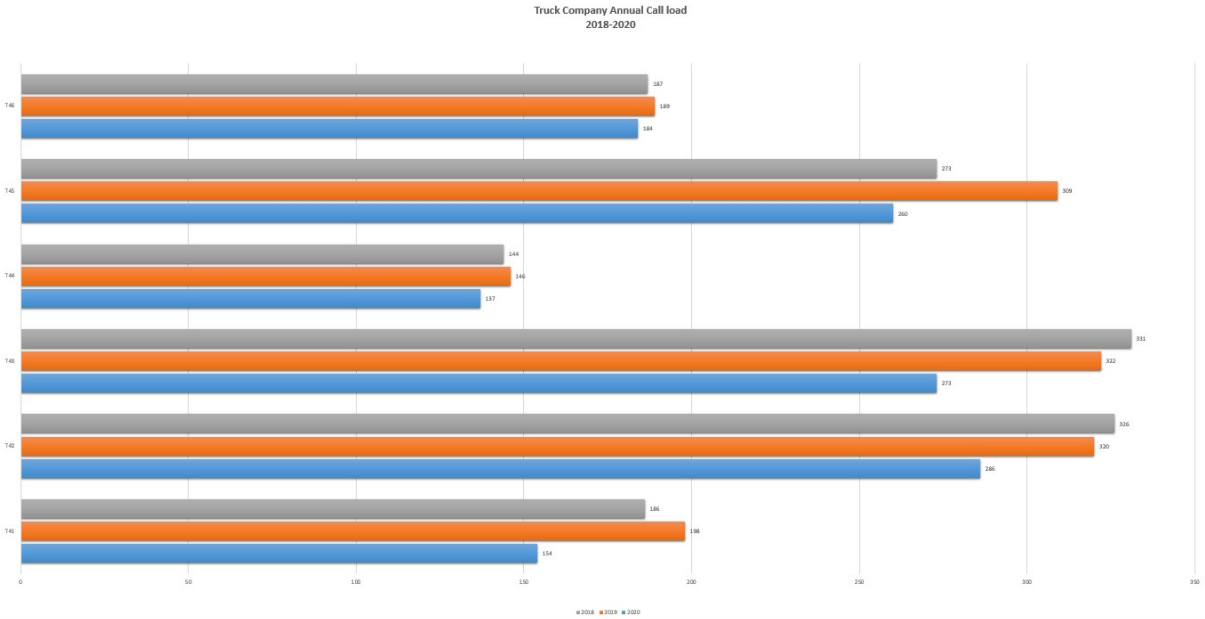


Figure 66: Truck company call load

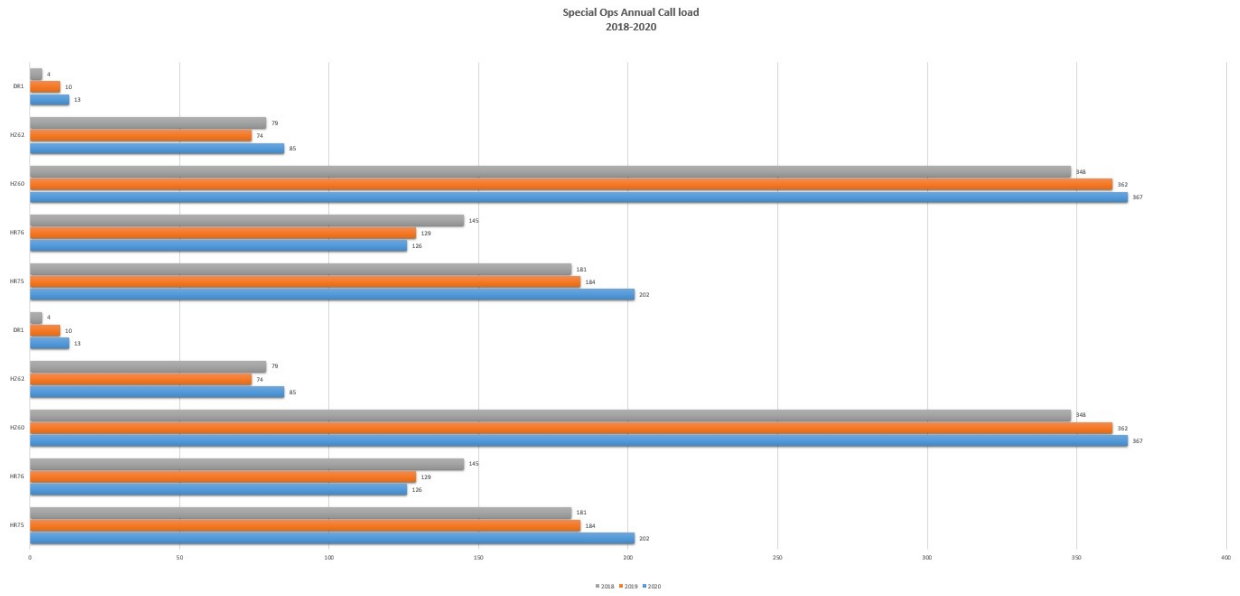


Figure 67: Special ops companies call load

Data Analysis and Future Probability of Service Demands

A strong and reliable data set provides Montgomery Fire/Rescue with the tools it needs to anticipate future service demands. As one can see in the preceding data, the service demand trends relatively consistently. Despite stagnant population growth, the total annual calls for MFR has increased 22.5% over the last 7 years. Knowing this MFR leadership will plan for an approximate 3% in call volume annually. This same process is applied to each type of service demand so that MFR is focused on its response and posturing towards expected demand. Inputs such as targeted public education, codes enforcement, fire investigation, etc., are measured by outputs. The output data herein is reported at least the preceding 3 years and will serve as an output baseline going forward. Through this community risk assessment, MFR now knows who is most vulnerable by type. MFR has begun the process of targeting actions based on these findings and these data points will tell the story as to the effectiveness so the efforts.

Response Concurrency, Resiliency, and Reliability

The examination of concurrency brings a different perspective to the workload of a particular asset or resource. Call data from 2020 was evaluated to determine the number of like incidents that occurred in each response time at the same time versus the number of runs that occurred without a concurrent call. This analysis is important because it directly relates to the reliability of prepositioned resources.

Reliability in this case refers to the availability of units to respond to calls for service in their respective response areas. The total response times are improved if the units are more often available for the calls in their own geographic areas. The MFR stages units in 15 different locations within the 14 planning zones to allow for quick access to emergency responders. ISO evaluated the MFR through a deployment analysis in 2020 examining 1.5 mile service areas for engine companies and 2.5 mile services areas for ladder companies. ISO rated the MFR deployment of MFR assets an 8.98 out of a possible 10.

ALS EMS units are staged throughout the city to answer calls for service and locations for units are determined by need when examining data trends. The MFR has long used data when making informed decisions on deployment and staffing, though sometimes less progressive than our emerging data solutions, the results have produced a reliable service. For example, in 2010, the data showed a decrease in reliability for the EMS unit at fire station 10. The station included an engine company and an EMS company. The engine company was very near other engine companies at neighboring stations and was determined to exceed concentration needs of the area. The data showed that the citizens were better served by placing two medic companies in Station 10 and as a result the area's citizens are now better protected by a reliable EMS availability without a noticeable decline in fire protections when compared to other portions of the city.

MFR has well established plans to ensure that the department maintains effective resiliency. Whenever 5 or more EMS units are out of service dispatchers will relocated the appropriate EMS unit to either Station 6 or 3. The Emergency Communication Center will make the determination based on the area of the city with the highest EMS demand at the moment. The senior district supervisor in Car 31 is notified and has the authority to adjust the relocation as needed. During second alarm activities there is an established and documented plan for apparatus relocation to ensure adequate coverage. Due to MFR's capability a call-in or reserve deployment is not needed in the case of a second alarm assignment. If there is a three alarm assignment the 36 off-duty personnel will be recalled and man two district supervisor reserve apparatus, two reserve engine companies, and one reserve ladder company,

and two reserve ems units. The remaining recalled personnel will report to the staging area at the fire scene and await assignment. The Fire Marshal is tasked with reporting to the communication center and organizing the recall assignments immediately upon notification of a third alarm.

MFR will continue to improve the quality of data and look for ways to make similar improvements in the near future while also being good stewards of the tax payer's funds. The figures below illustrate the current MFR reliability for calls in each unit's service area, by examining the percent of the day each unit is in/out of service, and how many times concurrent calls occurred in each planning zone requiring a unit from another location.

	Responded into														
Unit	E2	E3	E4	E5	E6	E7	E8	E9	E11	E12	E13	E14	E15	E16	Grand Total
C31	169	4	74		156	24	100		11	6		8			552
C32	4	101		8	3	2		140	3	1	56	1	68	18	405
C33	13	4	58	2	11	46	2	158		198	5	62			559
C34	1	27		122	9		27	1	73		8		28	3	299
E2	418	1	11	2	36	5	31		1	1					506
E3	2	734		21	7	4		56	27		17		4	1	873
E4	22		467			9				57		78			633
E5		2		2522			2		15		3		20		2564
E6	12	68	4	2	663	29	8		18	2					806
E7	6	2	3		61	456	1	34		101	1				665
E8	15	1	1	10	2		2549	1	24			1			2604
E9	1	29		1		8		1906		18	13				1976
E11	2	20	1	77	33		103		482				4		722
E12	4		5		3	26		126		811		13			988
E13		87		7	1			112	1		450		77	22	757
E14	1		29							6		1618			1654
E15		7		74					1		20		711	10	823
E16								1			37		17	705	760
E20	274	2	60		6	4	3					6			355
T41	35		69			5				11		33			153
T42	91	4	10	2	122	25	4	1	21	2	1	2	1		286
T43	1	1	6		2	16		89		147	1	10			273
T44	8	1		15	7		83		21		1		1		137
T45	1	82		10	2	2		103	27	1	26		3	3	260
T46		3		59			1				24		81	15	183
R90	178	203	134	4	2577	561	121	12	263	92	5	6	5		4161
R91	1379	10	1448	1	242	382	50	3	19	472	1	46			4053
R92	3	22	1	273	4	2	1	7	21	2	95	1	2076	21	2529
R93	30	85	8	285	220	3	348	4	2340	1			53		3377
R94	39	1	123	1	18	306		176	1	3184	5	215			4069
R95	30	2486	27	149	93	99	11	127	248	14	97	6	84	6	3477
R96	1355	11	1431		220	359	49	4	19	511		47			4006
R97	2	127		43	6	1	1	164	12	4	1355		367	71	2153
R98	6	271	5		4	133	1	3449	1	88	85		17	2	4062
R99	3	62	1		3	23		671	2	15	24		2		806
HZ60	28	25	30	21	28	21	16	48	22	40	21	24	25	13	362
HR75	21	8	11	7	24	15	26	22	6	31	3	20	3	3	200
HR76	8	19	9	13		3	2	34	12	2	6	3	10	2	123
R70	12	6	12	7	15	8	21	34	7	20	6	3	5	4	160
Grand Total	4174	4516	4038	3738	4578	2577	3561	7483	3698	5838	2366	2203	3662	899	53331

	# IN PLZ	% IN PLZ	# OUT PLZ	% OUT PLZ
C31	436	79.0%	116	21.0%
C32	315	77.8%	90	22.2%
C33	522	93.4%	37	6.6%
C34	250	83.6%	49	16.4%
E2	418	82.6%	88	17.4%
E3	734	84.1%	139	15.9%
E4	467	73.8%	166	26.2%
E5	2522	98.4%	42	1.6%
E6	663	82.3%	143	17.7%
E7	456	68.6%	209	31.4%
E8	2549	97.9%	55	2.1%
E9	1906	96.5%	70	3.5%
E11	482	66.8%	240	33.2%
E12	811	82.1%	177	17.9%
E13	450	59.4%	307	40.6%
E14	1618	97.8%	36	2.2%
E15	711	86.4%	112	13.6%
E16	705	92.8%	55	7.2%
E20	274	77.2%	81	22.8%
T41	153	100.0%	0	0.0%
T42	259	90.6%	27	9.4%
T43	262	96.0%	11	4.0%
T44	104	75.9%	33	24.1%
T45	248	95.4%	12	4.6%
T46	179	97.8%	4	2.2%
R90	2577	61.9%	1584	38.1%
R91	2827	69.8%	1226	30.2%
R92	2076	82.1%	453	17.9%
R93	2340	69.3%	1037	30.7%
R94	3184	78.3%	885	21.7%
R95	2486	71.5%	991	28.5%
R96	2786	69.5%	1220	30.5%
R97	1355	62.9%	798	37.1%
R98	3449	84.9%	613	15.1%
R99	671	83.3%	135	16.7%
HZ60	362	100.0%	0	0.0%
HR75	148	74.0%	52	26.0%
HR76	96	78.0%	27	22.0%

Figure 68: MFR unit reliability

The above data indicates shows that MFR's ambulances answer an average of 73% of their calls in their own planning zone. The engine companies answer an average of 83% of their calls in their own assigned planning zones. The truck companies answer 93% of their calls in their assigned planning zones. The companies that answer the largest percent of calls in their assigned planning zone include; Engine 5 (98.4%), Truck 41 (100%), and Rescue 98 (84.9%). The companies that have the lowest number of calls in their own zones include; Engine 13 (59.4%), Truck 44 (75.9%), and Rescue 90 (61.9%). An established goal for the 2022-2025 planning period is for MFR to use this and other data to definitively identify areas that are most vulnerable due to response capability and produce a plan for resolution where possible.

Delivery System

To accomplish the mission of Montgomery Fire/Rescue, units are assigned to one of 15 active fire stations placed strategically throughout the city. Each station is assigned at least one supervisor holding the rank of Captain who is responsible for the management of the day-to-day operations of his or her assigned station. Stations with multiple units or special operations companies may have two captains assigned with specific areas of responsibility. When the captain is off-duty a Lieutenant fills the company officer role at the station ensuring adequate supervision and experience. Each of these stations is assigned to one of the Montgomery Fire/Rescue's four service districts. Each district is supervised by a district fire chief. Like the rest of the 24-hour personnel, the district fire chief works a 24-hours on and 48-hours off schedule. To accomplish this each district has three district chiefs that share the responsibility of the management of their district.

Fire Rescue District Supervisors

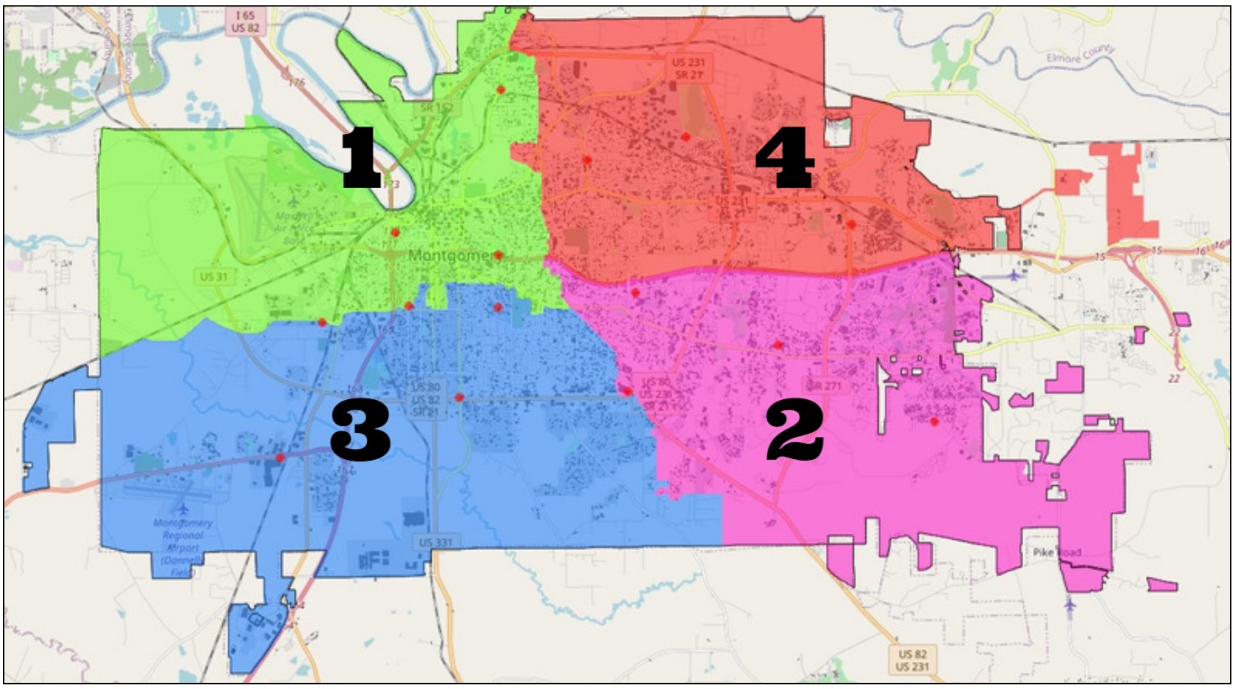
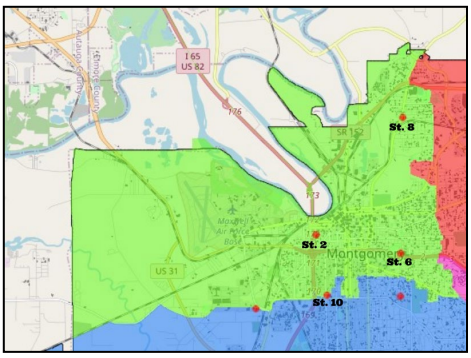
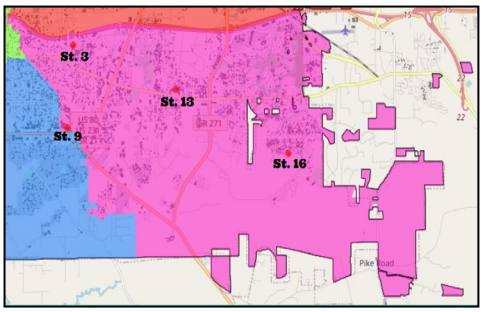


Figure 69: MFR District Map

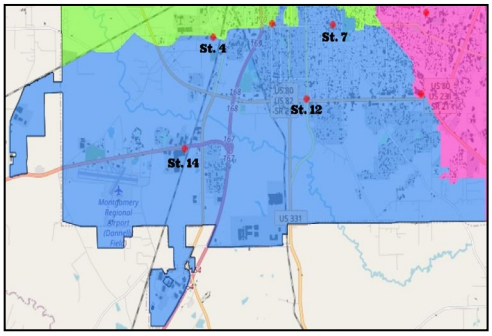
District I (Car 31) covers the northwestern portion of the city and the majority portion of the traditional downtown. District I also covers a large stretch of the Alabama River and for this reason the Special Operation Division houses its dive team, and watercraft in this district. The City of Montgomery is Alabama's state capital and because of this, a large number of state buildings and associated transient workforce occupy District I's response area. The historical and cultural value of this area cannot be understated and because of this fire protection is even more essential. Fire Station 2, 6, 8, and 10 make up this district.



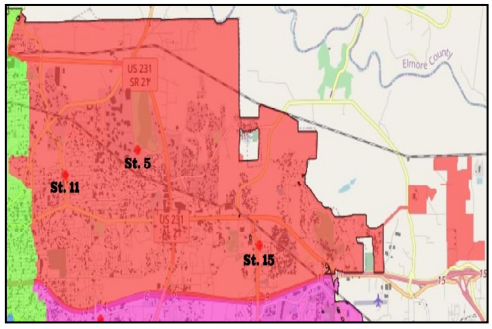
District II (Car 32) covers the southeastern quarter of the city. The majority of this district is residential, because of this the territory is larger due to the lower population density, as compared to District I. Several major thoroughfares traverse and retail and commercial shops make this area very heavily traveled. Because of its proximity to Interstate 85, and centralized location Fire Station 3 houses the Hazardous Materials Team, and its apparatus. Fire Stations 3, 9, 13, and 16 make up this district.



District III (Car 33) covers the southwestern quarter of the city. Like District II, a lower population density creates a very large coverage area. There are many aging neighborhoods in district III that present unique challenges. Interstate 65 and the Southern and Western Boulevard traverse this territory both of which are heavily traveled. There are many major manufacturing facilities, including a Coca-Cola bottling center, food and retail distribution warehouses, and Hyundai Motors North American assembly plant and its supporting facilities. The Montgomery Regional Airport resides in District III, and while they maintain a capable airport fire service District III is expected to support the airport fire department should an incident occur. Heavy Rescue 75, one of MFR's two heavy rescue units is housed at Station 4 in this district. Fire Stations 4, 7, 12, and 14 make up this district.



District IV (Car 34) covers the Northeastern portion of the city. The outer edge of District IV's boundary touches both Interstate 85, Interstate 65. Additionally, the Eastern and Northern Boulevard, and U.S. Highway 231 North are in this district, all of which are used by tens of thousands of commuters daily. Like District III, there are major manufacturing areas in this district. Gunter Air Force Base is in the middle of District IV and while it has its own fire service, the MFR provides mutual aid as needed. Heavy Rescue 76, one of MFR's two heavy rescue units is housed at Station 15 in this district. Fire Stations 5, 11, and 15 make up this district.



Engine Companies

The engine company is a versatile service deployment asset in the Montgomery Fire/Rescue. There is at least one engine company at all but 1 of the 15 stations. The MFR engine company is staffed with no more than 5 crew members and no less than 4 daily. There is 1 company officer, 1 sergeant (apparatus operator), and 2-3 firefighters. MFR firefighters are at least certified as an EMT basic, but many hold EMT advanced or paramedic licenses. Nearly all of the company officers in the MFR hold paramedic licenses and can function as the supervisor of both suppression and EMS companies as needed.

All of MFR's pumpers are manufactured by E-One. They are all triple-combination-pumpers meaning they are equipped with a water tank, a fire pump, and a delivery method (hose, nozzles, and deck guns). All have at least 500-gallon water tanks and pumps capable of delivering a minimum of 1500 gallons of water per minute. The newer pumpers have even stronger pumps that can deliver as much as 2000 GPMs. All of the MFR apparatus are equipped with foam tanks of varying capacity for rapid deployment of Class A firefighting foam. The engine companies all have a minimum of 700 feet of 5 inch supply hose, 700 feet of 3 inch supply hose, which are connected with a reducer if needed in the case of a long lay. Additionally, there are 700 feet of 2 ½ inch hose that can be used for both supply lines or attack lines. The pumpers also have a preconnected 200 feet of 2 ½ inch hand-line for rapid deployment. All of the engine companies have at least two 200 foot sections of 1 ¾" hand lines that are the primary attack lines, one of which is always connected to the foam hopper. Many apparatus maintain a 3rd 1 ¾" hand line of varying lengths for quick deployment in the case of rubbish or small vegetation fires.

The engine companies primary mission is to provide for life safety and property conservation through the rapid application of water through a frequently trained upon initial attack method. The engine company is the primary response unit for all fires in the city including brush fires though they can be supported by the brush trucks if needed. The engine companies are also equipped with basic medical equipment and can respond to calls for EMS service as requested by the MFR's EMS units. The BLS units also carry an Automated External Defibrillator. The MFR also maintains 5 Advance Life Support engine companies, the ALS-pumpers operate fully as both paramedic units and suppression companies and are licensed by the State of Alabama Department of Public Health EMS Division. The engine companies also maintain an abundance of equipment to provide basic emergency service for nearly all scenarios. The equipment includes, but is not limited to ground ladders, plug-n-dike, a multitude of hand tools, lights, and self-contained breathing apparatus. All engine companies meet or exceed the equipment requirements establishes in NFPA 1901. Engine company deployment is illustrated in Appendix H.

Rescue Companies

Eight stations are equipped with Rescue Companies—Station 3, 6, 9(2), 10(2), 11, 12, 13, and 15. Each rescue is staffed with a minimum of two firefighters, one paramedic and one EMT Basic or higher

level. The rescue units carry both ALS and BLS equipment and provide a high level of emergency medical care. Some of the items carried on the rescue units are: advanced airway and ventilation equipment, vascular therapy supplies, and portable battery operated monitor/defibrillators. Firefighter/paramedics can supply immediate life saving measures. MFR is not a transport provider; however, if there is a need and the provate transport agency is delayed or unavailable MFR is capable and licenced to transport as a last resort. From routine medical problems to the most critically ill or injured patient, rescue units fill a significant role in the City of Montgomery, especially considering the high frequency of EMS service demands in the area. Though their primary role is EMS, these units are staffed by firefighters equipped with structural firefighting protective equipment, extrication equipment, and self-contained breathing apparatus (SCBA). Ambulance deployment is illustrated in Appendix G, but the referenced map does not included the centrally located private ambulance company.

Truck Companies

The Montgomery Fire/Rescue purposefully and strategically positions 6 truck companies throughout the City of Montgomery. Stations 3, 4, 6, 8, 12, and 15 all house truck companies. Because of how the MFR has strategically placed these ladder trucks they can provide very fast response times. This is particularly important in Montgomery as the truck companies primary fire ground mission is to search and rescue. The truck company in the MFR is manned by a minimum of 3 personnel including a company officer, a sergeant (apparatus operator), and a firefighter. The truck companies that are staged with special ops or support vehicles are manned with a minimum of 4 personnel by adding a firefighter.

All of the MFR's truck companies are manufactured by E-One. They are also all equipped with rear mount aerial ladders. The rear mount system lessens the length and reach of aerial ladder systems as compared to a mid-mount aerial ladder, but that disadvantage is countered by the much higher water flow capabilities of a rear mount system. None of the MFR ladders are equipped with fire pumps, but all are equipped with intakes and high GPM aerial water towers. Like the engine companies, all truck companies maintain basic life support medical supplies and can augment medical responses when required. The truck companies are equipped with a minimum of 115 feet of ground ladders. Normally these include two folding ladders, one 14 foot combination ladder, and a 16 foot & 18-foot roof ladder, one 28 foot extension ladder, one 35 foot, and a 40-foot extension ladder. All personnel receive training annually so that any MFR firefighter can be called upon to assist deploying large ground ladders. Truck company deployment is illustrated in a map in Appendix I.

Reserve and Specialty Apparatus

The Fire Department maintains a fleet of reserve apparatus. Reserve apparatus are utilized to accommodate periodic maintenance and repair of front-line apparatus, to staff additional units during large scale emergencies and to replace front-line units when they are called outside the City to assist other agencies. Fire Department specialty apparatus are comprised of gasoline-powered utility vehicles, mobile command vehicle and a separate mobile command trailer, mass casualty trailer, mobile cascade trailer, and a salvage and water removal trailer. To support the engine companies on wildland fires the MFR maintains two brush trucks. These trucks are large four-wheel drive retrofitted

utility pick-ups that are equipped with a water tank a small fire pump and a booster line. These trucks are invaluable when grass/brush fires push into areas that are out of the reach of the engine company.

Dive Team & Water Ops

Montgomery Fire/Rescue's Dive/Swift Water Team is strategically located at Fire Station #2 on South Holt Street in Downtown Montgomery and is less than a mile away from the Alabama River. This specialized unit is capable of handling responses from victim rescue recovery to evidence recovery to localized flooding and swift water rescues. The Dive/Swift Water Team currently consists of 39 certified Dive Rescue Specialists that have extensive dive and swiftwater training through Dive Rescue International, Inc.

Engine 2 and Engine 20 are housed at Station 2 and are staffed with four personnel on each apparatus on any given day. During normal Fire/Rescue operations, Engine 2 & 20's personnel are prepared to staff the Dive/Rescue boat, the RescueONE connector boats, the Yamaha Personal Watercrafts (PWC) or the inflatable Mercury boats depending on the needs of the particular incident. The dive team members take an annual watermanship test to make sure they stay physically fit for different water-based operations. They regularly conduct numerous hours of training to keep their skills up and are required by Dive Rescue International to log a total of 18 training dives per person, per year, just to stay current and up to date on their Dive Rescue Specialist certification.

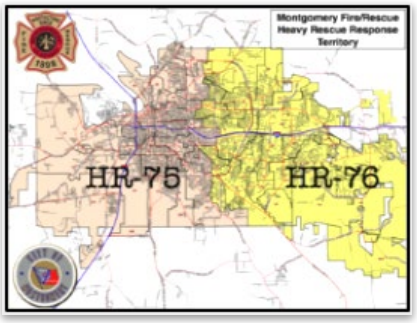
Among Station 2's apparatus and equipment cache is a 28' Dive/Rescue Van, two RescueONE Connector Boats, two Yamaha Wave Runners (PWC), one inflatable boat with a Mercury outboard motor, Boat 86 which is a 27' Boston Whaler Guardian Fire Boat, and Boat 87 a 2010 25' Boston Whaler. Boat 96 is powered by two Mercury 250HP 2-Stroke Optimax engines. Boat 86 is equipped with a Darley LSE1250 fire pump that is rated at 1250 GPM and is matched with an Elkhart 1250GPM Stingray Monitor and an Elkhart SM-1250 X-Stream Nozzle. This boat is also setup for diving operations 34" Dive/Rescue Door, Aluminum Outboard Engine Bracket with an 82" Swim Platform and a Removeable Track Style Divers Tank Rack for 6 SCUBA Tanks. Boat 87 is powered by a yamaha 250HP motor and has a solex 12 side and down imaging sonar system. Boat 87 is also equiped with a dive door and ladder, and a track style diver tank rack for 6 SCUBA tanks. Montgomery Fire/Rescue's Dive Team is also a participating agency in the Alabama Department of Homeland Security (ALDHS) Division Delta Rescue and Recovery Dive Team. The ALDHS Team has 12 Counties that they cover and is also recognized nationally with Dive Rescue International. Elmore County is one of the twelve counties covered by the ALDHS Division

Delta Rescue and Recovery Dive Team and is very unique in that it boasts an impressive 1000 miles of shoreline with waterways which include Lake Martin, Lake Jordan, and the Coosa River.

Technical Rescue

Montgomery Fire/Rescue has two Heavy Rescue Units that are equally trained in technical rescue. They provide a wide variety of complex technical rescue services such as high or low angle rope rescue, confined space rescue, rapid intervention crew (RIC), trench rescue, vehicle and machinery extrication, structural collapse rescue and swift water rescue. Heavy Rescue personnel are trained to the technician level in all of its seven disciplines and utilizes in house training for RIC and swiftwater rescue. All other Alabama Fire College classes are taken at regional training facilities throughout the state.

The Heavy Rescue units are divided into an eastside (Heavy Rescue 76) and a westside (Heavy Rescue 75) unit and are purposefully located on opposite ends of the city and with easy access to Interstate 65 and 85 for optimal response coverage. Ladder Truck Companies 41 and 46 are designated as the technical heavy rescue units that operate Heavy Rescue 75 and Heavy Rescue 76 and are staffed with personnel twenty-four hours a day, seven days a week. These units serve serve as RIC on all working fires.



The Heavy Rescue units utilize a daily training regimen to aid in maintaining a high skill-set as well as staying up to date on the latest technical rescue techniques. Montgomery Fire/Rescue also provides Technical Heavy Rescue support to the Alabama Mutual Aid System (AMAS) by being one of their fifty-two organized regional response teams throughout the state operating out of the Delta Division. They are readily available to employ services and resources in response to a major disaster with the capabilities of being a self-sustaining, stand-alone unit for up to seventy-two hours.

Heavy Rescue 75 and 76 both have an extensive cache of tools and equipment on their E-ONE apparatuses that can be used to mitigate many technical rescue situations. In addition to the tools and equipment that their apparatus carries they also have the following support resources to aid in and expand their heavy rescue capabilities: Fully equipped custom 8'x28' enclosed Trench Trailer, 8'x16' cribbing trailer with uncut 4'x 4' and 6'x 6' posts that are ready to be cut to length on-site, two Kawasaki Mules in 6'x 12' enclosed trailers, one Ford F-350 & one F-450 Dually Crew Cab Diesel's, two inflatable boats and one motorized inflatable boat. Heavy Rescue Units are dispatched along with a District Fire Chief to incidents that may require any aspect of technical rescue services. The specifics of the incident will dictate the need for any additional responses from other fire suppression or medical apparatuses not already on the scene.

Hazardous Materials Team

Montgomery Fire/Rescue's Hazardous Materials Response Team (HMRT) is a well-organized group of hazardous materials technicians that are centrally located in Montgomery at Fire Station 3.

Montgomery Fire/Rescue's career fire personnel are all trained to the Hazmat Awareness & Operations level. Currently, MFR has approximately 221 Hazmat Technicians, and 53 Hazmat Incident Commanders certified through the Alabama Fire College.

The HMRT personnel also actively seek out other local and national training certification classes such as Federal Emergency Management Agency's (FEMA) Chemical, Ordinance, Biological, and Radiological (COBRA) Training in Anniston, AL, Bomb Tech classes from New Mexico Institute of Mining and Technology, and other numerous classes that are put on by local suppliers. The HMRT members are also required to complete yearly hazmat refreshers and the yearly hazmat physicals to stay National Fire Protection Associations (NFPA) compliant.

The HMRT is operational twenty-four hours a day, seven days a week and is one of seven Alabama Mutual Aid System's (AMAS) hazardous materials regional response teams throughout the state operating out of the Delta Division. The HMRT is readily available with the equipment, training, and capabilities to not only employ their hazmat services locally within the City of Montgomery but they also have the capability to respond State-wide when activated by AMAS.

The HMRT consists of twenty-four firefighters that specialize in mitigating a very vast array of hazardous materials incidents, from basic tasks such as decontamination with little to no contact with unknown substances or hazardous materials all the way up to incidents involving the use of Weapons of Mass Destruction (WMD). When not responding to or actively training for hazmat emergencies, the members of the HMRT staff Engine 3 and Truck Company 45 at Fire Station 3 and respond to typical fire and medical emergencies.

The HMRT has several options when it comes to their apparatuses and deployment capabilities. Hazmat 60 is an E-ONE apparatus that is heavily equipped with their initial entry and operations equipment along with some basic decontamination equipment. Hazmat 62 is a truck and enclosed trailer with all of its decontamination equipment all the way up to the level of technical decontamination along with diesel pumps and other equipment utilized for on-scene product removal and transfers. They also have some support apparatus and equipment to include a Ford F350 and foam trailer with a large cache of different type foams for the mitigation of hydrocarbon and polar solvent fires or spills.

Daily Minimum Staffing

Type	*Apparatus*	*Staff per Apparatus*	*Total Staff*
Engine Company	15	4	60
Truck (Basic)	3	3	9
Truck (With specialty)	3	4	12
Rescue Unit	10	2	21
Investigator	1	1	1
Rehabilitation Unit	1	1	1
District Fire Chief	4	1	4
Total			*108*

Table 84: Daily Minimum Staffing

MFR Fire Stations

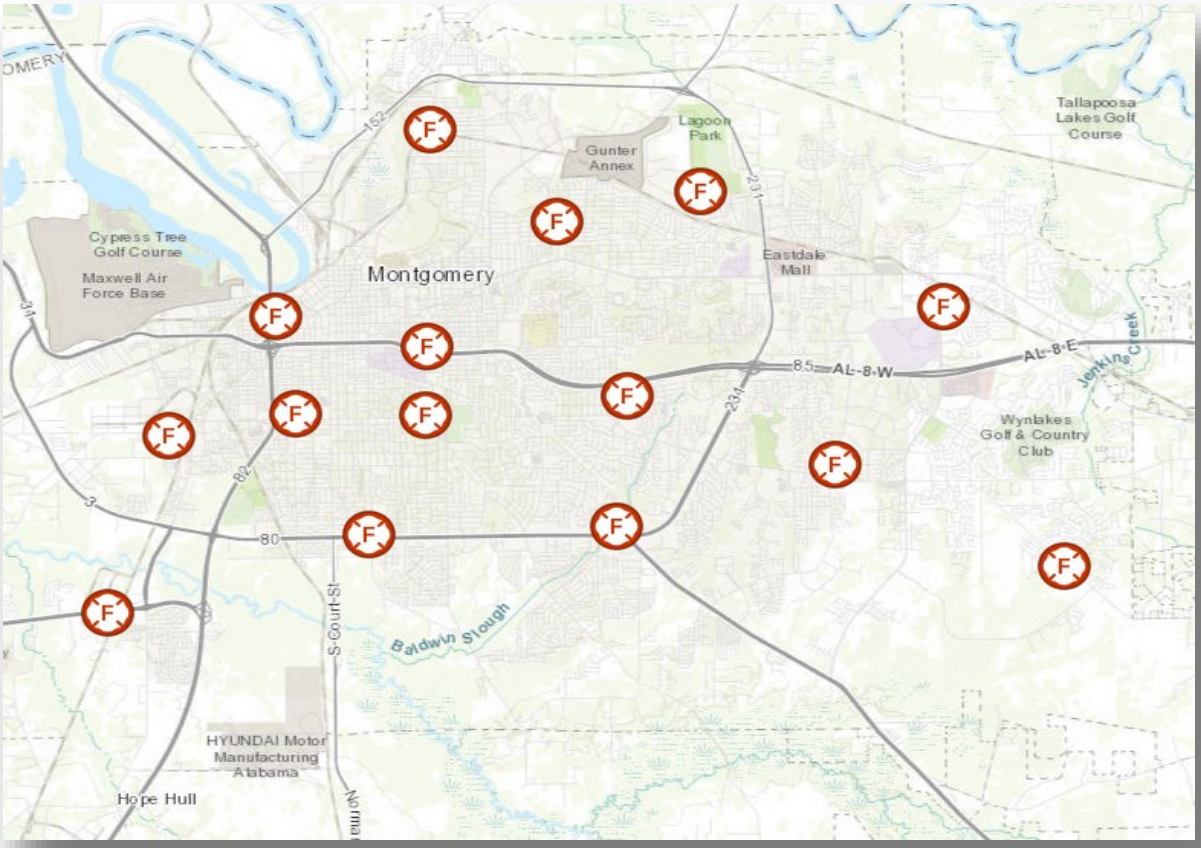


Figure 70: MFR Station Locations

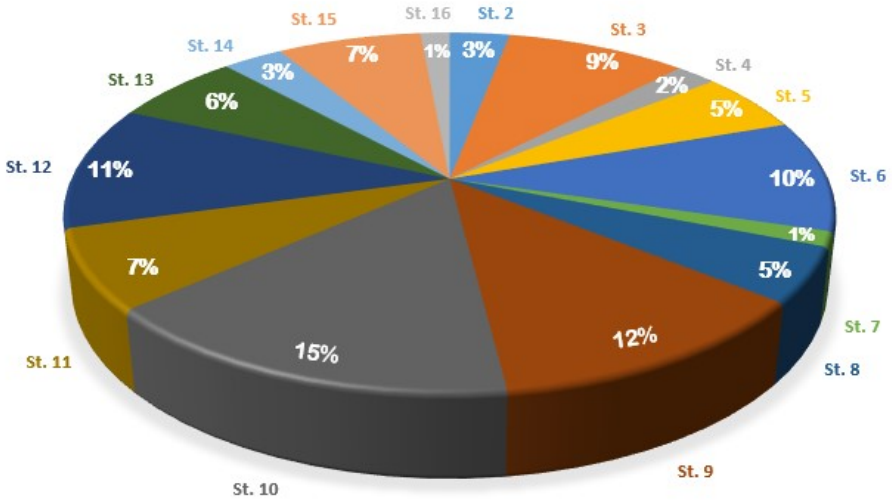


Figure 71: Distribution of total calls by station

Fire Station 2 405 South Holt Street

Station 2, also known as Hamner Hall, is located at 405 South Holt Street and answers the downtown area. Engine 2, Engine 20, The Dive Team and Car 31 ride out of Station 2. Engine 2 and Engine 20 are staffed with four personnel each. Car 31 is staffed with 2 personnel for a total of ten personnel on shift each day. The on-duty personnel staff the dive team when responding to a dive run. Hamner Hall gets its namesake from the property it was built upon. The property was the location of Hamner Hall, an Episcopal school for girls opened in 1860. It caught on fire and burned in 1909 destroying all of the college's property. The school was never reopened. What remained of Hamner Hall was torn down in 1915. The city purchased the property in 1917. In 1965, the current Station 2 was built at 405 South Holt Street. Station 2 was relocated from its location on Scott Street and was then called Hamner Hall.

Apparatus Type	*Year*	*Make*
Engine 2	2016	E-One 2000 GPM Pumper
Engine 20	2001	E-One 1500 GPM Pumper
Car 31	2017	F-250 District Chief Truck
Boat 86	2010	Boston Whaler 27'
Boat 87	2010	Boston Whaler 25'
Reserve Car 39	2010	Dodge 2500 District Chief Truck
Brush Truck 73	2004	Dodge Ram 2500 Pickup
Dive Van	2016	LDV Panel Van
Dive Rescue Truck	2011	Ford F450 Crew Cab
Jet Ski (2)	*2012*	Yamaha (Stored at California St. Storage)

Table 85: Station 2 Apparatus

Fire Station 3 4110 Carmichael Road

Fire Station 3 is centrally located in Montgomery Alabama at 411 Carmichael Road, 36106. This Fire Station houses multiple fire apparatus and equipment trailers, which are listed below. Mayor Earl D. James and Fire Chief J. A. Odom devised this station and it was built in 1970 by Hightower Schmidt and Company. Station 3 is a multi-company station with Fire, Medical, and Special Operations response capabilities. The station houses the only Hazardous Material response vehicle and team within Montgomery Fire/Rescue. The HazMat Team is a Regional Response Team which covers 12 surrounding counties under the Alabama Mutual Aid System.

Apparatus Type	Year	Make
Engine 3	2019	E-One 1500 GPM Pumper
Truck 45	1997	E-One 110' Aerial Ladder Truck
Rescue 95	2019	Ford with Braun Ambulance Body
Hazmat 60	2006	E-One Custom HazMat Response
Hazmat 62	2011	Ford F-350 Crew Cab Pickup + Decon Trailer
Cascade Trailer	2003	Haulmark Enclosed Trailer
Foam Trailer	2006	Flatbed Utility Trailer

Table 86: Station 3 Apparatus

Fire Station 4 1300 Air Base Blvd

Fire Station 4 is located at 1304 Air Base Boulevard which is on the West side of Montgomery. The current building was built in 1977 and is located at the corner of Hayneville Road and Air Base Boulevard. The building was constructed by Architects Pearson, Humphries, Jones, and Associates along with Still Construction Company. The previous Station 4 was located down the street in an old building on Kershaw Street in H&R Point. That building is still standing today and a business is operating out of it. Station 4 houses Engine 4, Truck 41, Heavy Rescue 75, Heavy Rescue UTV and trailer. Before Heavy Rescue 75, Station 4 was home to the Hazardous Materials team which has now been relocated to Station 3. The station was dedicated to James M. McLeod who was killed in the Line of Duty on April 26, 1975, and on July 6, 2009, it was dedicated to Captain J. W. Skyes who died in the Line of Duty on March 26, 1901. Each shift is staffed with eight personnel. The personnel assigned to Truck 41 each shift respond in either Truck 41 or Heavy Rescue 75 depending on the incident. The apparatus assigned to Station 4 responds to many different types of structures including large heavy timber warehouses, single-story residential structures, hotels, apartment buildings and mobile homes.

Apparatus Type	*Year*	*Make*
Engine 4	2020	E-One 2000 GPM Pumper
Truck 41	2011	E-One 110' Aerial Ladder
Heavy Rescue 75	2003	E-One Cab-over
Heavy Rescue UTV	2004	Kawasaki Mule
Heavy Rescue Trailer	2006	Pace American

Table 87: Station 4 Apparatus

Fire Station 4 2710 Lagoon Park

Nestled in the city's north side is Fire Station 5 located at 2710 Lagoon Park Drive. The station was built in 1977 on a 4-acre plot of land that was donated to the City of Montgomery by Cadell Construction company. The station was placed in this location to help protect the growing Gunter Industrial Park and has since been surrounded by several neighborhoods, a busy boulevard that encircles the entire city, a golf course, and the city's newest nature trail. Engine 5 is also unique in that they answer calls on Gunter Air Force Base. Station 5 originally a quiet station has become one of the city's busiest ALS pumpers and houses 15 firefighters, a fully stocked reserve ladder truck and a stocked reserve rescue unit.

Fire Station 5 houses Engine 5 and in 2012 a fourth district was added to the city and the District Supervisor is housed at Station 5 as well. In 2008 a large two-story annex building was constructed behind Sation 5. The Department's maintenance division works out of the annex daily.

In 2015 the department erected a second physical fitness course by placing a Combat Challenge course behind Station 5 also. The course is open to the entire department to practice anytime.

Apparatus Type	*Year*	*Make*
Engine 5	2010	E-One 1500 gpm Rescue/Pumper
Car 34	2011	GM G4500 Rescue Module
Reserve Truck 50	1995	E-One 110' Aerial Reserve Ladder Truck

Table 88: Station 5 Apparatus

Fire Station 6 . 1250 Forest Avenue

Fire Station 6 is located at 1250 Forest Avenue, which provides quick access to Interstate 85 and rapid response to multiple locations in the city including Montgomery's downtown area. The current building was constructed in 1987 and was dedicated to Firefighter Herchel O'Roy who lost his life while involved in fire fighting activities on July 7, 1967. The original location for Station 6 was constructed in 1906 at 1514 Highland Avenue. At that time, the Highland Avenue Station was the oldest fire station in Montgomery before the current Station 6 was erected and dated back to the era when firefighters used horse-drawn carriages to respond to emergency incidents. The current station covers a diverse range of territory, including multiple highrise buildings in the downtown area and numerous residential structures that were constructed in the early to mid 1900s. Station 6 houses several units that include Engine 6 which is the only pumper in Montgomery equipped with an aerial ladder, Truck 42, Rescue 90, and Rehab 70.

Apparatus Type	*Year*	*Make*
Engine 6	1999	E-One 1500 GPM Pumper
Truck 42	2012	E-One 110' Aerial Ladder
Rescue 90	2017	E-450 Rescue Module
Rehab 70	2012	International Custom Box
Cascade Trailer	2003	Horton Hauler Trailer

Table 89: Station 6 Apparatus

Fire Station 7 — 1329 East Fairview Avenue

Fire Station 7 is located at 1329 East Fairview Avenue, just outside the campus of Huntingdon College, right in the middle of Montgomery's historical district of Old Cloverdale. Station 7 was built in 1929. The station was developed to "fit-in" with the local houses to blend in with the neighborhood. Station 7 is the oldest active fire station in the city of Montgomery. It is the only station that resembles a residential structure and has a fireplace that has been used many times throughout the years. Station 7 is a single company station that houses one engine company "Ole Rose". The 1996 E-ONE pumper received her name (Ole Rose) from a 2nd alarm residential structure fire on Rose Lane in 1997. Although Engine 7 is not the most active company in the city, it does have the responsibility for the territory with some of the largest residential structures in the city.

Apparatus Type	*Year*	*Make*
Engine 7	1996	E-One 1500 GPM Pumper

Table 90: Station 7 Apparatus

Fire Station 8 2700 Lower Wetumpka Rd

The original location of Fire Station #8 was located at 507 N. California St. in 1948. The construction of that location was a 3200 Sq. Ft. block building that housed a single pumper. The station was later relocated to a temporary station at 535 Vandiver Blvd on December 15, 1973, due to the expansion of the city. The temporary structure put in service was a single wide mobile home with a metal butler building housing a single pumper. In 1975 the city was awarded a grant from The Department of Housing and Urban Development to build a permanent fire station within Engine 8's territory. The land was purchased at 2700 Lower Wetumpka Rd for this construction to take place. The station was built by Still Construction Company and was completed on November 11, 1977. It was put in service by Mayor Emory M. Folmar and Fire Chief James A Odom. The station was dedicated to Retired Fire Chief Robert L. Lampley for his 37 years and 10 months of service to the citizens of Montgomery. Today it houses Engine 8 (Pumper), Truck 44 (Aerial Ladder), and Reserve Engine 29 (Pumper). It is staffed with 7 personnel on 3 shifts dedicated to serving the citizens of Montgomery. Within the territory of Fire Station 8, there are many large commercial buildings, residential areas, and railways.

Apparatus Type	*Year*	*Make*
Engine 8	2010	E-One 1500 GPM Rescue Pumper
Truck 44	2000	E-One 110' Aerial Ladder
Reserve 29	1992	E-One 1500 GPM Pumper

Table 91: Station 8 Apparatus

Fire Station 9 3003 East South Blvd

Fire Station 9 originally opened in April 1948 and operated out of a station located at 1164 South McDonough Street. As the City grew, a firm was hired to study City services and make recommendations for improvements. One of the recommendations was to build a Fire Station in the area of Carterhill Road and McGehee Road. Therefore, the Department looked for a way to temporarily locate in the southeastern portion of the city until a Station could be built. In September 1973, the City of Montgomery signed a two-year lease with Trenholm to place a temporary fire station on campus property. On December 16, 1973, Engine 9 moved into a 12' x 60' trailer on the property. This temporary arrangement would allow time to construct a permanent fire station.

In the summer of 1975, Engine 9 moved from the original trailer, on the campus of Trenholm into a new single-wide trailer located on the property neighboring Trenholm purchased from the Alabama Board of Education in 1974. This too was meant to be a temporary location until a permanent Fire Station could be constructed. It appeared as though there was to be no permanent structure for the personnel of Station 9, but they were excited when they were upgraded to a doublewide trailer in 1984.

On February 7, 2013, Construction began on a Montgomery Department of Public Safety facility designed to house both Fire and Police at 3003 East South Blvd. Finally, a permanent station was established for Station 9 personnel.This station houses Engine 9, Rescue 98, Rescue 99. Fire Investigator 57 and Truck 47. The station was opened on January 9, 2014.

Apparatus Type	*Year*	*Make*
Engine 9	2005	E-One Quest 1500 GPM Rescue/Pumper
Rescue 98	2018	Ford E-450 Rescue Module
Unit 57	2013	Ford F-250 Crew Cab
Reserve Truck 47	1994	E-One 110' Aerial Reserve Ladder Truck
Reserve Engine 26	1989	E-One 1500 GPM Reserve Pumper
Reserve Rescue 99	2020	Ford E-450 Rescue Module
Pub Ed Safety Trailer	2011	Lincoln Fire Safety Custom Trailer

Table 92: Station 9 Apparatus

Fire Station 10 1931 Rosa L. Parks Ave

Fire Station 10 is located at 1931 Rosa L Parks Blvd near the intersection of W. Fairview and Rosa L. Parks Blvd. The first station in this area, construction on the station began in the fall of 1951 in order to provide better service for the citizens of south-west Montgomery. The station opened officially on February 2, 1951. Originally, only the second station in the city with two suppression companies, Truck 43 and Engine 10 were housed here. Now two rescue units provide much-needed assistance to the local residents, with a reserve unit also stored at this location.

Apparatus Type	*Year*	*Make*
Rescue 91	2015	Chevrolet G4500 Rescue Module
Rescue 96	2018	Ford E-450 Rescue Module
Reserve Rescue 81	2013	GMC C4500 Rescue Module

Table 93: Station 10 Apparatus

Fire Station 11 3305 Biltmore Ave.

Fire Station 11 is located at 3305 Biltmore Ave. in Montgomery Alabama. The building was erected in 1959. It was put in service by then-Mayor Clyde C. Sellers and Fire Chief R. L. Lampley. This station was also the result of the eastward growth of Montgomery. This historic station is in the heart of Dailrada, a community that continues to flourish. The station houses a pumper, an ALS rescue ambulance, and a Reserve Rescue ambulance. Station 11 once housed a District Chief Car but was moved as the city grew and more fire service units were added to the Montgomery Fire/Rescue team. Truck company 44 also responded out of this station until 1977 and then was relocated to fire station #8. The units at Station 11 provide effective emergency response to residential and commercial areas within approximately 96 square miles of our vibrant and growing community in Montgomery Alabama.

Apparatus Type	*Year*	*Make*
Engine 11	2016	E-One 2000 GPM Pumper
Rescue 93	2019	Ford E-450 Rescue Module
Reserve Rescue 82	2008	GMC C4500 Rescue Module

Table 94: Station 11 Apparatus

Fire Station 12 3950 Norman Bridge Road

Fire Station 12 is located on the West side of Montgomery at 3950 Norman Bridge Road. It is known as "The Rock" for being one of the busiest stations in Montgomery, and because in the past the department would send employees with discipline issues here for close supervision by the District III chief. The station was constructed in 1959 by Architect Samuel D. Collier and Bear Brother's Incorporated Construction Company. It was put in service by then-Mayor Clyde C. Sellers and Fire Chief R. L. Lampley. The station is dedicated in remembrance of Lieutenant Will Walker Howard who died in the line of duty on October 27, 1958. The station houses Engine 12, Truck 43, Rescue 94, and Car 33. The station is staffed with 10 personnel each shift dedicated to serving the surrounding community. The territory in which Station 12 responds is very diverse including high rise buildings, large apartment Complexes, multi-occupancy businesses, and residential structures.

Apparatus Type	*Year*	*Make*
Car 33	2016	Ford F-250 Crew, District Chief Car
Engine 12	2014	E-One 2000 GPM Pumper
Truck 43	2010	E-One 110' Aerial
Rescue 94	2019	Ford E-350 Rescue Module

Table 95: Station 12 Apparatus

Fire Station 13 2685 Bell Road

Fire Station 13 is located at 2685 Bell Road. The building was constructed in 1984, at the time of construction it was the outermost East side of the city. As a result of the growth of our city, today in 2020, the station sits in a more central location in Montgomery. Station 13 houses a District Fire Chief who is over District II. Engine 13 still answers calls from this station and Rescue 97 was added to the station in temporarily 2012 while waiting for Station 9 to built. Call volume increases resulted in Rescue 97 remaining at Station 13 and Rescue 98 standing up at Station 9. Station 13 also has a unique decoration in its engine room. It is a rubber tree plant that was given to the station at the opening ceremony by Anita Folmar. Mrs. Folmer is the wife of Emory Folmer, the Mayor of the City of Montgomery at the time. The plant still sits in our engine room today.

Apparatus Type	*Year*	*Make*
Car 32	2019	Ford F-250 XLT District Chief Truck
Engine 13	1999	E-One 1500 GPM Pumper
Rescue 97	2017	Ford F-450 Rescue Module
Reserve Engine 25	1996	E-One 1500 GPM Reserve Pumper
Reserve Car 40	2010	Dodge Crew 2500 District Chief Truck
Reserve Rescue 85	*2013*	*GM G4500 Rescue Module*
Brush Truck 74	2017	Ford F-250 Crew District Chief Truck

Table 96: Station 13 Apparatus

Fire Station 14 2801 Selma Highway

Fire Station 14 is located at 2801 Selma Highway on the outer west side of the city. Fire Station 14 is known as "The Hive," because of the multiple busy modes of transportation surrounding the area. The station was built in 1986 under the leadership of Fire Chief R. W. Grier and Mayor Emory Folmar. Station 14 was assigned to this area in response to the multiple industrial businesses that made West Montgomery their preferred home, along with the expanding airport and growing need for a residential response. The station houses up to 12 personnel, one advanced life support pumper, a reserve pumper, a reserve ladder truck, two connector boats, and one inflatable boat. This station originally housed the fire investigators, however they moved to the newer Station 9 for a more centralized response in 2014.

Apparatus Type	*Year*	*Make*
Engine 14	2007	E-One 1500 GPM Rescue/Pumper
Reserve Engine 27	1991	E-One 1500 GPM Reserve Pumper
Reserve Truck 49	1990	E-One 110' Aerial Ladder Truck
Reserve Pick-up		Ford F-250 Pick-up
Inflatable Boat W/Motor	2010	Zodiac Boat W/Motor
Connector Boat	2016	Rescue One
Connector Boat	2016	Rescue One

Table 97: Station 14 Apparatus

Fire Station 15 — 441 Taylor Road

Fire Station 15 is located at 441 Taylor Rd and was constructed in 1990 by Barganier/Mckee/Sims Architects Association. A site was needed on the eastern side of the city due to expanded city limits in the mid-1980s. What better site than across from Montgomery's fourth hospital at the time of construction. Station 15 was constructed on the former site of a local farmer's cotton field. Because of the residential and economic growth in this area of the city, the location of the fire station was chosen due to the close proximity of the interstate, I-85, as well as other main thoroughfares such as Atlanta Highway and Taylor Road. Fire Station 15 was originally opened with one Engine Company, within 3 years a rescue company was added. Then a ladder company was added within 5 years. In 2005 one of the two Hazardous Material Companies was assigned there. In 2015 the Hazardous Material Company was decommissioned and one of two of the Heavy Rescue units was added to the assigned fleet. Fire Station 15 is home to over 10 assigned apparatuses and 30 plus personnel.

Apparatus Type	*Year*	*Make*
Engine 15	2018	E-One 1500 GPM Pumper
Truck 46	2005	E-One 110' Aerial Ladder truck
Rescue 92	2016	Ford with Braun Ambulance body
Heavy Rescue 76	2005	E-One Custom Heavy Rescue Response
HR-F450	2013	Ford F-450 Crew Cab Pickup

Table 98: Station 15 Apparatus

Fire Station 16 820 Ray Thorington Road

Station 16 sits at 820 Ray Thorngton Rd. on the outer portion of city limits of the east side of Montgomery. It was the latest addition of fire stations to the city and was added to accommodate the future of east montgomery. Construction began in 1998 by the Architectural Firm of Barganier/DavisSims and was completed in 1999. The station was built in the area to keep up with the expansion of the city limits moving east and several new large neighborhoods in the area. In 2008 Engine 16 took delivery of a new apparatus adding EMS calls to its response. Station 16 is currently a single company station and houses several reserve and support units, boats, and a Mass Casualty Trailer.

Apparatus Type	*Year*	*Make*
Engine 16	2008	E-ONE Quest 1500 GPM Rescue/Pumper
Reserve 83	2013	GMC C4500 Rescue Module
Reserve 38	2010	Dodge Ram 2500 Crew/ District Chief Truck
Boat 88	2010	Mercury Zodiac inflatable boat 14 ft.w/t 30hp Evinrude outboard motor
Mass Casualty Trailer	2004	Pace Cargo enclosed trailer 20 ft.
Connector Boat (2)	2017	Rescue One

Table 18: Station 16 Apparatus

MFR Apparatus Totals	
Number Available	Apparatus Type
10	BLS Engine (1500 GPM or more)
5	ALS Engine (1500 GPM or more)
4	Reserve Engine
6	Aerial Truck (110' piped ladder)
3	Reserve Aerial Truck (110' piped ladder)
4	Incident Command Vehicle
3	Reserve Incident Command Vehicle
10	ALS EMS Module
6	Reserve EMS Module
1	HazMat Apparatus
2	Heavy Rescue Apparatus
2	HazMat / Heavy Rescue support vehicles
8	Arson Investigation Vehicles
1	Rehab
1	Mobile Command Apparatus
1	Mobile Command Trailer
2	Large Boat
6	Small Boats and watercrafts
2	Brush Fire Apparatus
11	ATV (Rescue Detail Vehicles EMS & Support)
6	Foam/Cascade/Hazmat/Supplied Air/Light/Salvage Trailer
1	Public Education Trailer
14	Command Staff
2	Dignitary Protection Unit
16	Inspections
18	Training / Supply / Maintenance / Tech Support

Table 99: MFR Apparatus Totals

CRITICAL TASK ANALYSIS

To efficiently mitigate an incident personnel and resources must be properly staged, assigned, and equipped. It is also wise to scale the response to the incident type based on the risk posed. To operate in a process like manner, each member of the team needs a critical task to complete. Some tasks will require more than one responder. When all of the critical tasks and the minimum number of personnel required for a particular incident are grouped, an effective response force (ERF) is established. The National Fire Protection Association (NFPA) defines an ERF as, "the minimum number of firefighters and equipment that must reach a specific emergency incident location within the maximum prescribed travel time." Within this Standards of Cover, Montgomery Fire/Rescue establishes it's ERF for a variety of incident types and using that standard, historical data is analyzed to evaluate reliability, distribution, and concentration. During the development of critical tasks, safety of personnel should always be the first consideration. A command structure should also be established to ensure that all critical tasks are accomplished on any and all emergency incidents.

Fire Critical Task

Critical tasks on the fire ground must be conducted in an expeditious fashion to ensure the quickest mitigation with the least amount of life and property loss. Whenever operating with speed in mind safety must be considered. Safety is provided for by the establishment of a command structure that includes an incident commander and a safety officer on all incidents. In low and moderate risk fires an incident command may conduct both command and safety functions, though it is wise to delegate safety to an experienced officer where practical. Montgomery Fire/Rescue also reinforces safe practices by establishing a dedicated rapid intervention team (RIT) on all fires of moderate or greater risk, as well as, always practicing two-in/two-out IDLH entry and exit.

For the MFR, low-risk fire incidents include those that can normally be handled by a single company response. Examples of these incidents include passenger vehicle fires, grass or small brush fires, rubbish fires, residential alarms, vehicle accidents without injury, electrical problems, etc.

Low-Risk Fire Critical Tasks	
Incident Command/ Safety/Attack line	2
Apparatus Operator	1
Attack line back up and support	1
Total Firefighters Required (ERF)	4

Table 100: Critical Task - Low Risk Fire

A moderate-risk fire for the MFR includes, working incidents involving structures that require more than one company, but not more than the usual single alarm response. Companies assigned to these incidents include two engine companies, a ladder company, an incident commander, and a RIT company. These incidents usually encompass fires in a residential occupancy or business not of excessive size, or smaller low-risk fires as described above that threaten a structure. Apartment buildings that contain 4-8 units in each building are assigned a moderate risk.

Moderate-Risk Fire Critical Tasks	
Fire Attack 1	2
Fire Attack 2	2
Primary/Secondary Search & Rescue	2
Water Supply/RIT	2
Apparatus Operator / Ventilation	3
Medical	2
Command / Safety / Accountability / EMS	2
Total Firefighters Required (ERF)	15

Table 101: Critical Task - Moderate Risk Fire

A high-risk fire for the MFR includes, any fire in a structure greater than 3 floors or a building with excessive square footage. Also included is, any structure or facility identified as a target hazard. Buildings that fall into this category include schools, hospitals, nursing facilities, plants, refineries, large warehouses, or any structure identified as having a high potential for high life hazard or a large fire potential. It is important to consider that the numbers indicated in Table 21 represent the minimum amount needed to establish an ERF, it is likely that more resources will be deployed to mitigate incidents of this type.

High-Risk Fire Critical Tasks	
Fire Attack 1	2
Fire Attack 2	2
Suppression System Supply	2
Primary/Secondary Search & Rescue	2
Lobby Control / Ventilation	2
Apparatus Operator	5
Water Supply	3
Rapid Intervention Team	4
Medical	2
Command / Safety / Accountability	2
Total Firefighters Required (ERF)	26

Table 102: Critical Task - High Risk Fire

Emergency Medical Service Critical Task

As is the case in most agencies that provide emergency medical service (EMS), the overwhelming majority of the MFR's call volume is EMS in nature. In 2020, the MFR responded to 36,432 EMS calls for service representing 86.18% of the department's responses. There are many critical tasks that are routine for the EMS provider, in almost all cases the providers will share multiple critical tasks each while providing patient care on the scene and subsequently enroute to the emergency department if necessary. Below are common critical tasks performed by MFR's paramedics and emergency medical technicians.

EMS Critical Responsibilities	
Scene size-up and safety consideration	Medical Equipment set up and use
Triage and resource need determination	IV access and monitoring
Primary and secondary assessment	ECG Application
ECG interpretation	Vital sign assessment and monitoring
Medication administration	Radio communications
EMS protocol interpretation/application	Emergency vehicle operation
Communication with medical direction	Patient packaging for transport
Written EMR documentation	Vehicle check off stocking/restocking
ALS procedures that may be required	Post-incident electronic reporting

Table 103: EMS Critical Responsibilities

Initial EMS response is determined by Montgomery Department of Communications dispatchers who use an approved Emergency Medical Dispatch system approved and provided by MFR. The ERFs listed below do not include the minimum of two personnel that respond to all emergency EMS calls in the City of Montgomery.

A low-risk EMS incident would include routine calls, such as general medicals, patient assists, trauma, and possible strokes or heart attacks. If needed, transport is provided by private ambulance company. MFR ambulances remain licensed to and prepared for transport as needed in the event that private EMS is unavailable, delayed or overwhelmed. The MFR does not bill for treatment or transport and does not provide transport unless necessary.

Low-Risk EMS Critical Tasks	
BLS or ALS Assessment / Care	1
Incident Command	1
Total Required (ERF)	2

Table 104: Critical Tasks EMS Low-Risk

A medium-risk EMS incident involves any call for service that requires a more active role by the officer or acting officer in charge of the EMS unit. These are calls-for-service such as single victim shootings, threats or acts of violence, calls involving a possible weapon on scene, etc. These calls require a district supervisor who will be dispatched to provide the incident command function freeing the officer-in-charge to provide care.

Moderate-Risk EMS Critical Tasks	
ALS Assessment / treatment	2-3
Incident Command	1
Total Required (ERF)	3-4

Table 105: Critical Tasks EMS Medium-Risk

A high-risk EMS incident for the MFR includes calls where assistance is needed beyond what can be handled by more than the two providers normally dispatched to an EMS call-for-service. These calls normally include vehicle accidents with injury, cardiac arrests, multiple victim calls, and drowning. In these incidents an engine company responds freeing one EMS provider up from IC duties and providing additional personnel to aid in accomplishing critical tasks.

High-Risk EMS Critical Tasks	
ALS Assessment / treatment	3-5
Incident Command	1
Total Required (ERF)	4-6

Table 106: Critical Tasks EMS High-Risk

Technical Rescue Critical Tasks

A low-risk technical rescue involves an incident that requires a technical rescue response but is able to be quickly mitigated. These events are rather routine for the technical rescue crews involving mostly vehicle accidents with entrapment.

Low-Risk Technical Rescue Critical Tasks	
Extrication / Hazard mitigation	4
ALS Patient Care	2
Incident Command	1
Total Required (ERF)	7

Table 107: Critical Tasks Technical Rescue Low-Risk

For the MFR nearly all technical rescue tasks in the city limits will be categorized as either a low or high-risk incident. The MFR technical rescue teams Heavy Rescue 75 & 76 often respond to calls outside of the MFR jurisdiction to assist other communities. In these cases there is no support from MFR suppression units that would assist inside the city limits. In these cases, a medic unit and an incident commander will respond to support the technical rescue team. A medium-risk technical rescue may also include the water rescue operations performed by the MFR dive team. This team would also respond with the same ERF as the heavy rescue units for a moderate-risk technical rescue.

Moderate-Risk Technical Rescue Critical Tasks	
Rescue group	8
ALS Patient Care	2
Safety	1
Incident Command	1
Total Required (ERF)	10

Table 108: Critical Tasks Technical Rescue Moderate-Risk

In the MFR a high-risk technical rescue involves responses such as building collapse, train derailment, explosions, confined space rescue, etc. All of these response will receive a full assignment including two pumpers, a truck company, an ALS EMS unit, and an incident commander to support the rescue.

High-Risk Technical Rescue Critical Tasks	
Rescue Group	6
Technical Specialist	1
Rescue Group Supervisor	1
Support	10
Medical	2
Safety	2
Incident Command	2
Total Required (ERF)	24

Table 109: Critical Tasks Technical Rescue High-Risk

Hazardous Material Critical Tasks

A low risk hazardous materials incident for the MFR would involve small incidents that only require investigation or minor mitigation steps. Incidents such as fuel or oil leaks less than 5 gallons. These incidents can be handled with a single company response.

Low-Risk HazMat Critical Tasks	
Investigation / mitigation	3
Command & Safety	1
Total Required (ERF)	4

Table 110: Critical Tasks HazMat Low-Risk

A moderate-risk hazardous materials incident includes events that don't require a full decontamination level operation, but may require more technical skills such as gas monitoring and ventilation. Incidents such as carbon monoxide detector activations, and gas/chemical odors are moderate-risk hazmat incidents and are normally handled by two companies with one being HazMat 60.

Moderate-Risk HazMat Critical Tasks	
Fire Suppression standby	4
Air/Gas monitoring	2
Ventilation	1
Incident Command & Safety	1
Total Required (ERF)	8

Table 111: Critical Tasks HazMat Moderate-Risk

A high-risk hazardous materials event involves one that involves a full decon level operation. These events require a lot of resources and are normally quite lengthy and involved. In addition to HazMat 60 & 62, a full assignment which includes two pumpers, a ladder, and an ALS EMS unit, and an incident commander is dispatched to support the operation and fill the ERF. Incidents that would require this type of response include large hazmat leaks, train derailments, tractor trailer accidents involving hazardous or unknown contents, and suspected terrorist incidents.

High-Risk HazMat Critical Tasks	
Entry Team	2
Back-up Team	2
Entry Team Supervisor	1
Technical Specialist	1
HazMat Group Supervisor	1
Decon Officer	1
Medical	2
Decon	4
Support	8
Safety	1
Incident Command	1
Total Required (ERF)	24

Table 112: Critical Tasks HazMat High-Risk

Fire growth stages rate of spread factors

Fire will grow and spread at a rate determined by factors such as material involved, available oxygen, among others. Changes in the modern home size, floor plans, introduction of new construction materials, and synthetic fuel loads have changed the game in fire spread. Today's firefighter has tremendously less time to respond and suppress fire growth. The figure below is from Underwriters Laboratory study on residential fire growth and it really illustrates clearly the difference in time when comparing legacy and modern structure fires.

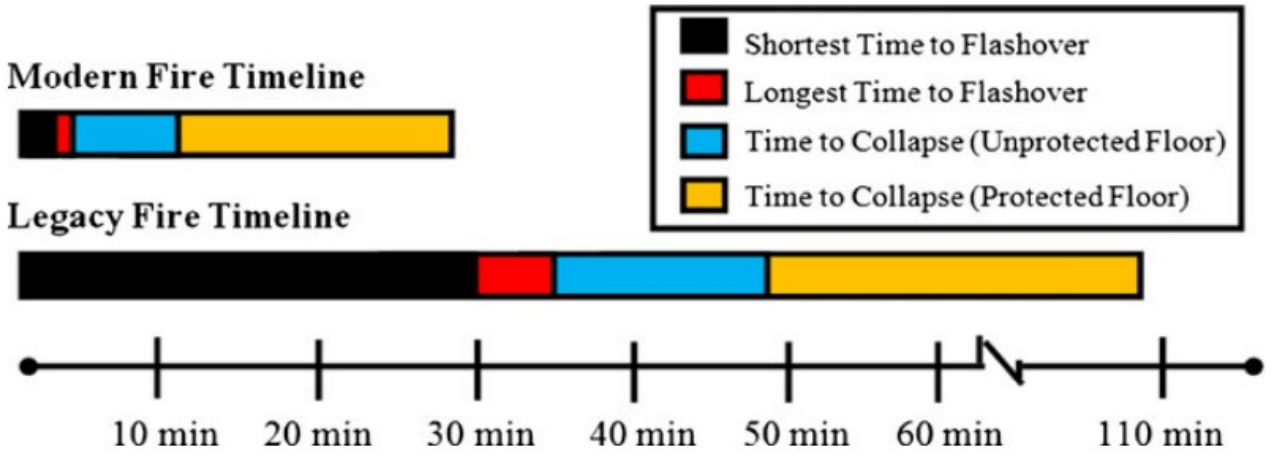


Figure 72: UL Legacy versus Modern Fire Spread

Regardless of the speed that a fire grows all fire follows the same standard stages of growth. The stages include Incipient, growth, fully developed and decay. In the incipient phase the ignition occurs and the fuel, heat, oxygen, come together and the chemical chain reaction begins. As the fire begins to generate heat and break down available fuel it will soon reach the point where burning is fully established and transition to the fire growth stage. As the heat increases in this phase and if not acted upon externally, the space will eventually reach flashover where all unprotected contents of the space reach their ignition temperatures. After flashover occurs the fire is now fully developed and will continue to burn uncontrolled until acted upon with sufficient cooling. If the fire is left unchecked it will continue to burn until the available fuel or oxygen is depleted and at this point is in the decay stage. An oxygen starved fuel rich fire in the decay stage is a particularly dangerous scenario for fire crews. The figure below illustrates the stages of fire growth.

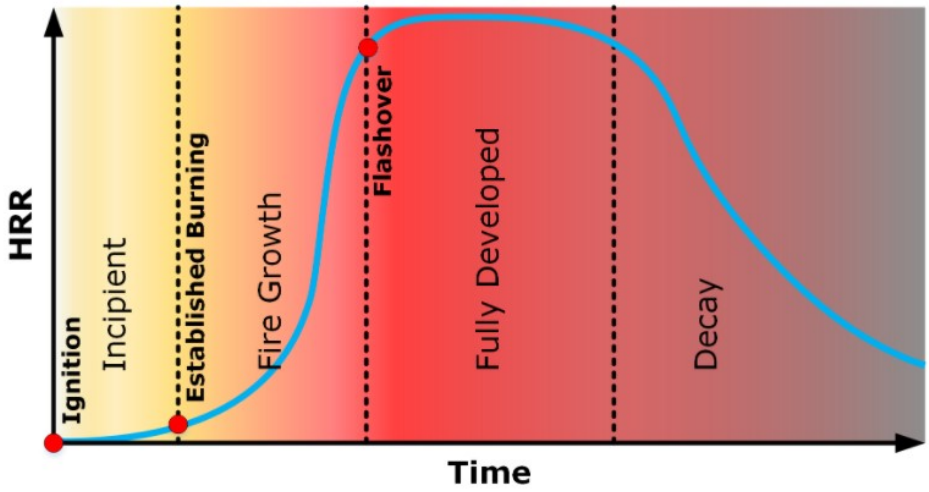


Figure 73: Fire Life Cycle

The goal for any fire service agency should be to quickly dispatch a fire response, quickly respond out of the station, and arrive while the fire has not become fully developed. Obviously to accomplish this there are many factors some of which we have limited ability to control. Detection and reporting are examples of external factors. Because external factors exist the department must focus on the internal factors that can be controlled. The figure below illustrates the difference between fire growth with and without some sort of influence.

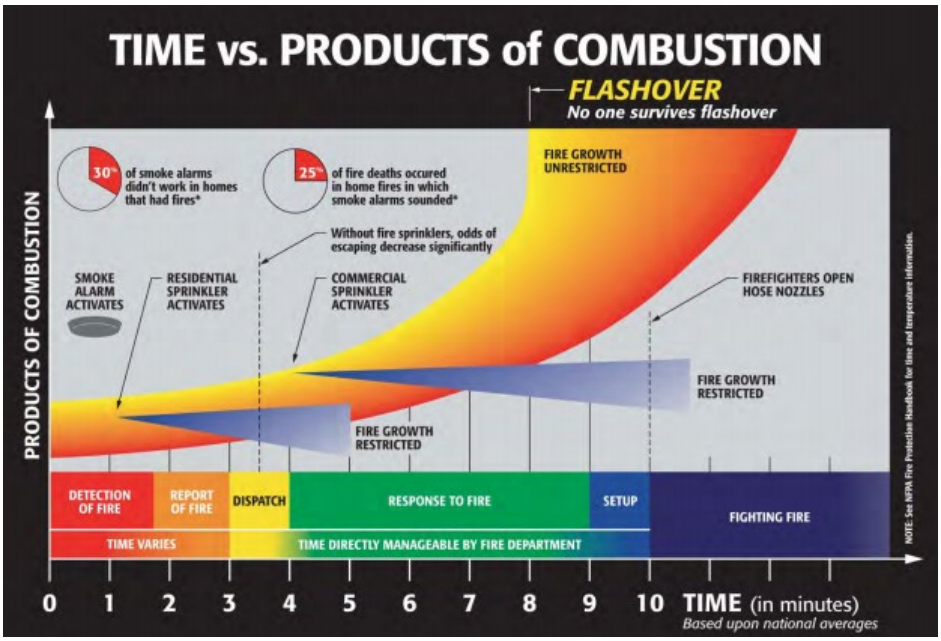


Figure 74: Time versus Products of Combustion

EMS Response Factors

Time is critical when responding to a medical call for service which makes up more than 85% of the MFR's call volume every year. The MFR provides the citizens and visitors of Montgomery with a non-transport advanced life support (ALS) service with time in mind. The city has two private EMS agencies that provide ALS service and transport; however those units are centrally located and not strategically located as are the MFR units. Montgomery city ordinance requires that these agencies arrive on scene within 11 minutes of the call to assist the MFR unit and provide transport if needed. Despite this requirement MFR EMS units arrive with an ERF for all emergency medical calls in a consistently timelier manner.

Medical emergencies such as cardiac arrest, stroke, traumatic injury, and hypoxia require rapid emergency treatment and transport to definitive care. The brain tissue begins to damage at 4-6 minutes without oxygen and without intervention this damage quickly becomes irreversible. In the cardiac arrest scenario early CPR and defibrillation is the key to survival. Study after study have demonstrated the effectiveness of early defibrillation and it is only possible if an EMS provider can arrive on scene quickly with either an AED or a cardiac monitor. The figure below illustrates how a person in a VF/VT arrest chance of survival decreases without defibrillation.

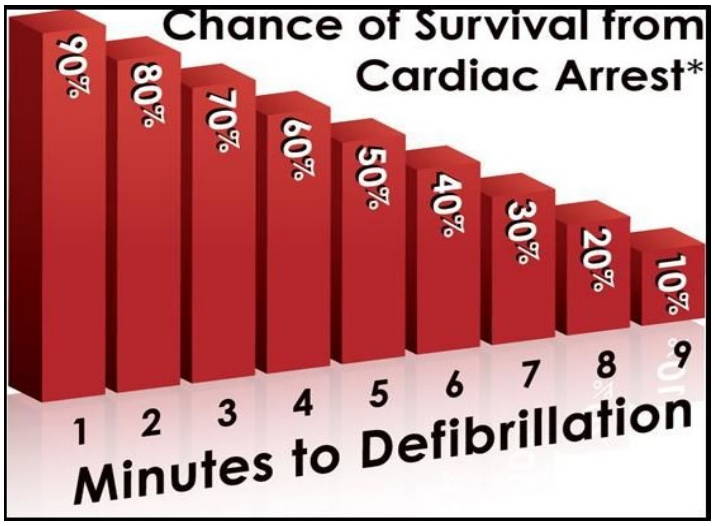


Figure 75: Chance of Survival Cardiac Arrest with Defibrillation

While the MFR can directly affect the chance of successful patient care through a rapid response. There will be times when access to a patient is difficult, such as in high rise locations, and large warehouses, among others. A person affected by these types of obstacles would be aided by a community CPR training program and AED access.

NFPA Standard for Response

The NFPA sets a standard set of performance objectives in the 1710 standard. The standard suggests that a fire department should establish performance objectives of the following times.

1. Alarm answering: 90% of calls should be answered in 15 seconds or less, and 95% should be answered in less than 20 seconds. This requirement is also stated in NFPA 1221: *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.* Note: In the 2019 edition of NFPA 1221 the answering time for 95% was decreased from 40 to 20 seconds.
2. Alarm processing: 90% of high priority emergency calls for service should be processed in less than 60 seconds. This time also reflects a change to the 2019 edition of NFPA 1221.
    a. EMS High priority calls include trauma, neurologic emergencies, cardiac events, and unresponsive persons, and allergic reactions, patients not breathing, and choking.
    b. Suppression EMS calls include fires involving or extending to a structure, and explosions.
    c. HazMat, technical rescue, and joint responses with law enforcement to violent incidents are not held to the above standard due to information collection requirements.
    d. Other situations including language barrier issues, disability services, text messages request, calls from other areas or unknown locations, and calls received during a disaster are exempt from this call processing requirement.
3. Turnout EMS: Units dispatched to an EMS call for service should take no longer than 60 seconds to begin travel to the location of the emergency. In the MFR this is recorded when the company officer states over the radio that the unit is responding or acknowledges the dispatch on the apparatus' MDT.
4. Turnout suppression/technical rescue: Units dispatched to suppression and technical rescue incidents should begin travel to the emergency location in no more than 80 seconds.
5. Travel time first arriving engine company: The first arriving engine company should arrive on the suppression scene in 240 seconds or 4 minutes travel time.
6. Travel time for second arriving engine company: The second arriving engine company should arrive in less than 360 seconds or 6 minutes travel time.
7. Travel time for suppression incidents to locations other than high-rise: The ERF or the complement of the initial first alarm assignment should arrive within 480 seconds or 8 minutes travel time.

8. Travel time for suppression incidents at high-rise locations: Suppression response ERF or the compliment of the initial alarm to a high rise location should arrive in less than 610 seconds or 10 minutes and 10 seconds travel time.
9. Travel time EMS BLS: A BLS provider with AED should arrive in less than 240 seconds or 4 minutes of travel time. For the MFR this would only apply to incidents where the ALS unit was out of the normal response area and dispatched a BLS suppression unit to respond for response time.
10. Travel time ALS ERF: An ALS provider should have a travel time of less than 480 seconds or 8 minutes.

Response Time

The response time as the firefighter or EMS provider understands it does not tell the whole story. The firefighter's perspective includes the station tones and dispatch, the time to get to the apparatus, and the travel time to the location of the emergency. It is a much different perspective when you consider the public perspective. For a person experiencing an emergency everything is normal, then something happens. That person at some point discovers the event and then calls for help. The call takes time, then the call is answered and that takes time, then the call is processed and more time goes by. Finally, the call is dispatched to the fire or EMS crew(s). The crew hurriedly gets to the truck and out of the station, but this also takes time. At this point the time it takes to travel from the station to the scene occurs which more than likely took the most time in this series. Now the crew arrives on scene and intervention is initiated, followed by mitigation or control and recovery and finally the return of normalcy. When you consider this perspective it is easier to understand the excitement and even frustration sometimes displayed by citizens seeking emergency aid. The figure below is from NFPA 1710 and illustrates the complete cascade of events.

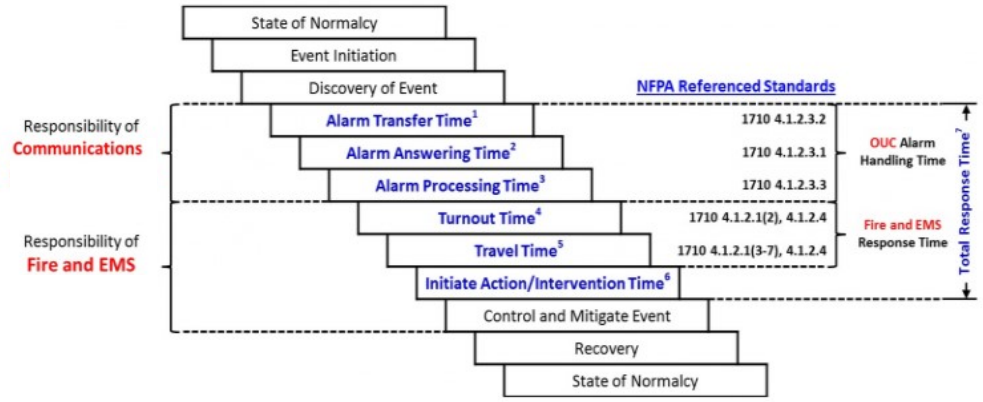


Figure 76: Components of total response time

Call Processing Time

The call processing time refers to the time that occurs from the time a 911 call is answered until the station tones are given and a dispatch transmitted. NFPA 1221 suggest that this should occur for fire departments in less than 15 seconds on 90% of calls and less than 20 seconds on 95% of calls received. Some call types will require more investigation for safety or to get the appropriate resources to the scene. The Montgomery Department of Communication is a standalone department in the city government. The department handles all 911 calls for the City of Montgomery and dispatches fire, police, animal control, and routes other calls for non-emergency service. The NFPA suggests that alarm processing should be as follows: 90% of high priority emergency calls for service should be processed in less than 60 seconds, and no more than 106 seconds 95% of the time.

Turnout Time

Turnout time involves the time it takes to receive and acknowledge a dispatch, get to and prepare the apparatus and equipment, board the apparatus, and notify the dispatcher that the unit is responding. Sometimes the unit is already in operation for one reason or another. In these cases turnout time is only the time it takes the crew to acknowledge the dispatch by indicating that they are responding.

There are factors that affect turnout time. Daily training, public education, pre-plans and building familiarizations, exercise, and sleeping are examples of activities that can slow a rapid turnout. Depending on the type of incident crews may need to don appropriate PPE in the form of gloves, eye protection, body armor, or structural firefighting gear. This can also slow turnout time and if not done efficiently when combined with other challenges can quickly delay a response beyond the established guidelines. The MFR has adopted the NFPA 1710 guidelines for turnout time, which states that suppression and special operation calls should have a turnout of 80 seconds and EMS calls a turnout of 60 seconds. This standard is mandated for all MFR members in MFR Master Letter File 4-11.

Travel Time

Travel time is a factor in the total response but is determined by a number of factors outside of the responding crew's control. When responding emergency an emergency vehicle operator is allowed to disregard the traffic laws only when absolutely safe to do so. The time of day, weather, and traffic conditions are just a few of the many factors that can affect travel time. In most cases travel time will make up the majority of the total response time, but there is very little that the individual apparatus

operator or officer can do to decrease this time while operating safely. Focus on response time improvement should occur in the different components and unit reliability.

Reponses Matrix

The first in unit (distribution) is the first in unit to arrive on the scene. This unit assumes initial command, sizes up the scene, and begins to triage or give assignments based on the incident type found. Depending on the type of emergency incident found this unit will also simultaneously begin the mitigation steps outlined in the critical tasking section of this text. The Effective Response Force (ERF) is the concentration factor that floods the scene with enough personnel and resources to engage the emergency by meeting the ERF appropriate for the incident type encountered.

Components of the Total Response Time

MFR measures the baseline performance in terms of total response time (TRT). TRT includes elements outside of the direct control of MFR and its responders. The TRT begins that the time the call is received at the Public Safety Answering Point (PSAP) and includes call processing time, turnout time, and travel time. Call processing time is the time from when the call is first received until the first unit is dispatched. The turnout time is the time from dispatch until the unit acknowledges the call and indicates that they are responding wither by radio or by computer entry. The travel time is the time that elapses from the time the unit(s) is enroute until the unit arrives on scene. This calculated for both distribution (first-in) and concentration (ERF).

This document represents the first time that MFR has measured response data by 90th percentile rather than averages. Community members and other readers will see exactly what kind of response they would receive most of the time (90%). The times presented are the 90th time if the data set was 1 to 100. This method also makes performance improvement or regression tracking easier, in that more movement is scene at the 90th percentile mark from year to year than the movement associated with average response times.

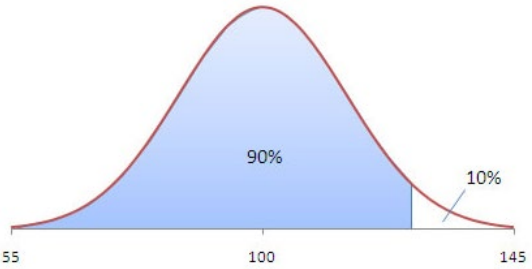


Figure 78: 90th percentile illustrated

Population Categories

The City of Montgomery is mostly consistent in terms of population density made up of overwhelmingly urban areas, and a medium sized downtown area made up of mostly government offices due to Montgomery being the state capital of Alabama. There is very little open space or wilderness inside of Montgomery's well defined municipal boundary. For the purposes of baseline performance analysis Planning Zones 4, 14, and 16 will be reported at rural because their population density qualifies as rural according to NFPA 1710. Station 16 is actually classified as suburban but at a population density of 560 per square mile and similar response areas to PZ's 14 & 4 MFR decided to include 16 in the rural zones. The remaining 11 planning zones are calculated as urban areas with population densities ranging from 1146 to 3048 residents per square mile.

Hazard Types

The hazard types identified and analyzed in this CRA/SOC follow the guidance outlined in the Center for Public Safety Excellence (CPSE) CRA/SOC 6th edition manual. The four primary service types examined are Emergency Medical Service, Fire Suppression, Hazardous Materials, and Technical Rescue. The analysis was done based on a type dispatched rather than a type found because of limitations of the MFR records management system, NewWorld by Tyler Technologies. Numerous qualifiers and disqualifiers were added to the data by MFR IT specialist in close consultation with Tyler Technologies software engineers to ensure that the data was accurate, reliable and consistent. Risk levels for each incident type are outlined in the critical tasks portion of this text. Risk levels include low, moderate, and high risk categories.

Baseline Performance Statements

The baseline performance statements below represent the 2018, 2019, and 2020 90th percentile times for each response time component, service type, and associated level of risk. The total data broken down by year and the total can be found in Appendix A. Again, the times below are 90th percentile fractal reporting. To better illustrate what this means examine the figure below showing a simulated data set of 20 times; as you can see, the average is between 8 & 9 and the 90th percentile time is 18. In other words, if these 20 times represented all of the agencies times than 90% of their times would be better than 5 minutes. The baseline times listed in this section refer to the total response area, baseline data by planning zone is examined in Appendix B.

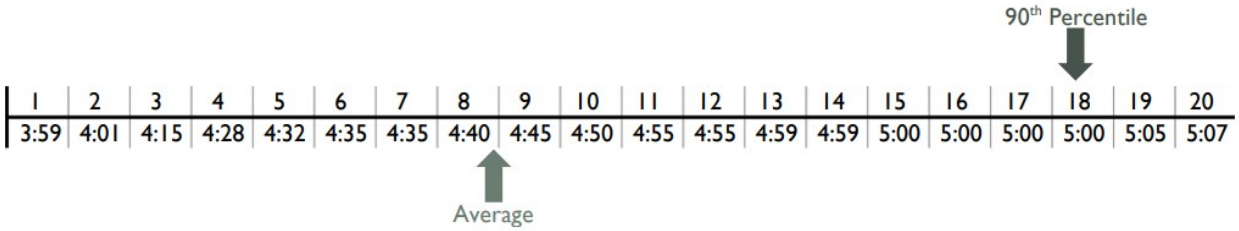


Figure 79: 90th percentile example (source Tualatin Valley Fire & Rescue)

Alarm Processing

Emergency Medical Service Low-Risk

For 90% of all emergency calls the baseline performance for the alarm processing time is 2:54 in all urban planning zones and 2:53 in all rural planning zones.

Emergency Medical Service Moderate/High Risk

For 90% of all emergency calls the baseline performance for the alarm processing time is 3:13 in all urban planning zones and 3:02 in all rural planning zones.

Fire Suppression Low-Risk

For 90% of all structure fire calls the baseline performance for the alarm processing time is 2:33 in all urban planning zones and 2:29 in all rural planning zones.

Fire Suppression Medium-Risk

For 90% of all structure fire calls the baseline performance for the alarm processing time is 2:17 in all urban planning zones and 2:55 in all rural planning zones.

Fire Suppression High-Risk

For 90% of all structure fire calls the baseline performance for the alarm processing time is 2:19 in all urban planning zones and 2:24 in all rural planning zones.

Hazardous Materials Low-Risk

For 90% of all emergency calls the baseline performance for the alarm processing time is 3:05 in all urban planning zones and 4:53 in all rural planning zones.

Hazardous Materials Moderate-Risk

For 90% of all emergency calls the baseline performance for the alarm processing time is 2:58 in all urban planning zones and 4:19 in all rural planning zones.

Hazardous Materials High-Risk

For 90% of all emergency calls the baseline performance for the alarm processing time is 5:59 in all urban planning zones and 4:58 in all rural planning zones.

Technical Rescue Low-Risk

For 90% of all technical rescue calls the baseline performance for the alarm processing time is 5:07 in all urban planning zones. Alarm processing times for low risk technical rescue incidents in rural planning zones were statistically insignificant.

Technical Rescue Moderate/High-Risk

For 90% of all technical rescue calls the baseline performance for the alarm processing time is 3:35 in all urban planning zones. Alarm processing times for low risk technical rescue incidents in rural planning zones were statistically insignificant.

Turnout

Emergency Medical Service Low-Risk

For 90% of all EMS calls the baseline performance for the turnout time is 1:39 in all urban planning zones and 1:37 in all rural planning zones.

Emergency Medical Service Moderate/High Risk

For 90% of all emergency calls the baseline performance for the turnout time is 1:36 in all urban planning zones and 1:27 in all rural planning zones.

Fire Suppression Low-Risk

For 90% of all structure fire calls the baseline performance for turnout time is 1:40 in all urban planning zones and 1:35 in all rural planning zones.

Fire Suppression Medium-Risk

For 90% of all structure fire calls the baseline performance for turnout time is 1:04 in all urban planning zones and 1:14 in all rural planning zones.

Fire Suppression High-Risk

For 90% of all structure fire calls the baseline performance for turnout time is 0:49 in all urban planning zones and statistically insignificant in all rural planning zones.

Hazardous Materials Low-Risk

For 90% of all emergency calls the baseline performance for turnout time is 1:49 in all urban planning zones and 1:28 in all rural planning zones.

Hazardous Materials Moderate-Risk

For 90% of all emergency calls the baseline performance for turnout time is 1:56 in all urban planning zones and 1:36 in all rural planning zones.

Hazardous Materials High-Risk

For 90% of all emergency calls the baseline performance for turnout time is 1:03 in all urban planning zones and 1:14 in all rural planning zones.

Technical Rescue Low-Risk

For 90% of all technical rescue calls the baseline performance for turnout time is 0:31 in all urban planning zones and statistically insignificant in all rural planning zones.

Technical Rescue Moderate/High-Risk

For 90% of all technical rescue calls the baseline performance for turnout time is 0:30 in all urban planning zones and statistically insignificant in all rural planning zones.

DISTRIBUTION (FIRST-ARRIVING)

Emergency Medical Service Low-Risk

For 90% of all emergency EMS urban responses the baseline performance for the first unit to arrive is 8:46 total response time in urban planning zones and 10:01 in rural planning zones. The first-arriving unit is staffed with two personnel, capable of providing basic or advanced life support and treatment for a single-patient medical incident.

Emergency Medical Service Medium/High-Risk

For 90% of all emergency EMS urban responses the baseline performance for the first unit to arrive is 9:00 total response time in urban planning zones and 9:39 in rural planning zones. The first-arriving unit is staffed with two personnel, capable of providing basic or advanced life support and treatment for a single-patient medical incident. A medium-risk EMS incident involves any call for service that requires a more active role by the officer or acting officer in charge of the EMS unit. This creates the

need for additional personnel that depending on the incident type may be an engine company or a district chief.

Fire Suppression Low-Risk

For 90% of all urban fire suppression responses in the baseline performance for the first unit to arrive is 8:35 total response time in urban planning zones and 9:20 in rural planning zones. The first arriving engine company is staffed with four personnel and capable of securing a water supply, initiating incident command and identifying the need for initial resources, and laying the initial attack line.

Fire Suppression Moderate-Risk

For 90% of all urban fire suppression responses in the baseline performance for the first unit to arrive is 7:28 total response time in urban planning zones and 8:33 in rural planning zones. The first arriving engine company is staffed with four personnel and capable of securing a water supply, initiating incident command and identifying the need for initial resources, and laying the initial attack line.

Fire Suppression High-Risk

For 90% of all urban fire suppression responses in the baseline performance for the first unit to arrive is 4:18 total response time in urban planning zones and 8:36 in rural planning zones. The first arriving engine company is staffed with four personnel and capable of securing a water supply, initiating incident command and identifying the need for initial resources, and laying the initial attack line.

Hazardous Materials Low-Risk

For 90% of Hazardous Materials urban responses the baseline performance for the first unit to arrive is 8:03 in urban planning zones and 8:33 in rural planning zones. The first arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines.

Hazardous Materials Moderate-Risk

For 90% of Hazardous Materials urban responses the baseline performance for the first unit to arrive is 10:02 in urban planning zones and 11:58 in rural planning zones. The first arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines.

Hazardous Materials High-Risk

For 90% of Hazardous Materials urban responses the baseline performance for the first unit to arrive is 10:03 in urban planning zones and 12:52 in rural planning zones. The first arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines.

Technical Rescue Low-Risk

For 90% of Technical Rescue urban responses the baseline performance for the first unit to arrive is 8:57 total response time in urban planning zones and statistically insignificant in rural planning zones. The first-arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines.

Technical Rescue Moderate/High Risk

For 90% of Technical Rescue urban responses the baseline performance for the first unit to arrive is 8:39 total response time in urban planning zones and statistically insignificant in rural planning zones. The first-arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines.

CONCENTRATION (EFFECTIVE RESPONSE FORCE)

Emergency Medical Service Moderate/High Risk

For 90% of moderate/high risk EMS responses the baseline performance for establishing an ERF consisting of 4-6 personnel is to arrive within 9:09 total response time in urban planning zones and 9:41 in rural planning zones. The multi company response assignment is capable of conducting a patient assessment, cardiac monitoring and interpretation, IV access, medication administration, and documentation, and incident command while providing for the safety of EMS providers.

Fire Suppression Moderate Risk

For 90% of Structure Fire responses the baseline performance for establishing an ERF consisting of a minimum of 17 personnel is to arrive within 11:58 total response time in urban planning zones and 13:38 in rural planning zones. The response assignment is capable of implementing command and control firefighting operations to include establishing water supply, two-in/two-out, search and rescue, fire attack, ventilation, and an established Safety Officer while providing for the safety of the responders.

Fire Suppression High Risk

For 90% of Structure Fire responses the baseline performance for establishing an ERF consisting of a minimum of 24 personnel is to arrive within 8:38 total response time in urban planning zones and 9:43 in rural planning zones. The response assignment is capable of implementing command and control firefighting operations to include establishing water supply, two-in/two-out, search and rescue, fire attack, ventilation, and an established Safety Officer while providing for the safety of the responders. Additional personnel may be tasked with lobby control and suppression system supply depending on the type of incident.

Hazardous Materials Moderate Risk

For 90% of Hazardous materials incidents requiring a multi-company response the baseline performance for establishing an ERF consisting of a minimum of 8 personnel is to arrive within 17:34 total response time in urban planning zones and 25:48 in rural planning zones. The response assignment is capable of implementing command and control, safety, providing a water supply, a 1500GPM pumper with a minimum of 500 gallon booster tank, a fire attack line, and capable of facilitating ventilation and salvage. The HazMat crew will conduct air/gas monitoring, analyze the risk present and develop a plan for mitigating the risk or determine if further action is necessary.

Hazardous Materials High Risk

For 90% of Hazardous materials incidents requiring a multi-company response the baseline performance for establishing an ERF consisting of a minimum of 24 personnel is to arrive within 19:16 total response time in urban planning zones and 19:46 in rural planning zones. The response assignment is capable of implementing command and control, technical specialty, safety, entry and back-up teams, multiple sector officers, support crews, and set-up of decon area(s).

Technical Rescue Low Risk

For 90% of Technical Rescue incidents requiring a single-company response the baseline performance for establishing an ERF consisting of a minimum of 7 personnel is to arrive within 11:52 total response time in urban planning zones and statistically insignificant in rural planning zones. The response assignment is capable of providing for safety, evaluating the incident and determining a need for additional resources, investigating the issue completing extrication/hazard mitigation, and facilitating ALS patient care.

Technical Rescue Moderate/High Risk

For 90% of high-risk technical rescue incidents requiring a multi-company response the baseline performance for establishing an ERF consisting of a minimum of 24 personnel is to arrive within 10:42 total response time in urban planning zones and statistically insignificant in rural planning zones. The response assignment is capable of implementing command and control, technical specialty, safety, entry and back-up teams, multiple sector officers, support crews, and set-up of decon area(s).

Benchmark Performance Statements

Montgomery Fire/Rescue is a proud agency that takes pride in the pursuit of excellence in all services offered by the department. The gap analysis revealed that like many fire service agencies MFR is behind where the department would like to be when compared to industry standards at the 90th percentile mark. The similar-sized agency gap analysis revealed that the department's response components are comparable to other similar-sized accredited agencies. Even though MFR is pleased to find itself not behind these agencies, MFR leadership is focused on continuous improvement and not satisfied. When deciding how to establish performance benchmarks MFR examined many other agencies and found a mix of different methodologies. MFR decided that the best method to ensure that benchmarks are realistic and progress is made is to set the benchmark for each response component at

10% faster than current performance. The goal is to obtain an improvement whereas the current 90th percentile times become the future 80th percentile times which will be built on once achieved.

Alarm Processing

Emergency Medical Service Low-Risk

For 90% of all low-risk emergency calls in all planning zones, the performance objective for the alarm processing time is 2:36 in all urban planning zones and 2:36 in all rural planning zones.

Emergency Medical Service Moderate/High-Risk

For 90% of all moderate/high-risk emergency calls in all planning zones, the performance objective for the alarm processing time is 2:54 in all urban planning zones and 2:44 in all rural planning zones.

Fire Suppression Low-Risk

For 90% of all low-risk structure fire calls in all planning zones, the performance objective for the alarm processing time is 2:18 in all urban planning zones and 2:14 in all rural planning zones.

Fire Suppression Moderate-Risk

For 90% of all moderate-risk structure fire calls in all planning zones, the performance objective for the alarm processing time is 2:03 in all urban planning zones and 2:38 in all rural planning zones.

Fire Suppression High-Risk

For 90% of all high-risk structure fire calls in all planning zones, the performance objective for the alarm processing time is 2:05 in all urban planning zones and 2:10 in all rural planning zones.

Hazardous Materials Low-Risk

For 90% of all low-risk emergency calls in all planning zones, the performance objective for the alarm processing time is 2:47 in all urban planning zones and 3:41 in all rural planning zones.

Hazardous Materials Moderate-Risk

For 90% of all moderate-risk emergency calls in all planning zones, the performance objective for the alarm processing time is 2:40 in all urban planning zones and 5:24 in all rural planning zones.

Hazardous Materials High-Risk

For 90% of all high-risk emergency calls in all planning zones, the performance objective for the alarm processing time is 5:24 in all urban planning zones and 4:30 in all rural planning zones.

Technical Rescue Low-Risk

For 90% of all low-risk technical rescue calls in all planning zones, the performance objective for the alarm processing time is 4:36 in all urban planning zones and 4:36 in all rural planning zones. Because rural data for tech rescue response was statistically insignificant the benchmark was set to match that of the urban calls for service.

Technical Rescue Moderate/High-Risk

For 90% of all moderate/high-risk technical rescue calls in all planning zones, the performance objective for the alarm processing time is 3:14 in all urban planning zones and 3:14 in all rural planning zones. Because rural data for tech rescue response was statistically insignificant the benchmark was set to match that of the urban calls for service.

Turnout

EMS Low-Risk

For 90% of all low-risk EMS calls in all planning zones, the performance objective for turnout time is 1:29 in all urban planning zones and 1:27 in all rural planning zones.

EMS Moderate/High-Risk

For 90% of all moderate/high-risk EMS calls in all planning zones, the performance objective for turnout time is 1:26 in all urban planning zones and 1:18 in all rural planning zones.

Fire Suppression Low-Risk

For 90% of all low-risk fire suppression calls in all planning zones, the performance objective for turnout time is 1:30 in all urban planning zones and 1:26 in all rural planning zones.

Fire Suppression Moderate-Risk

For 90% of all moderate-risk fire suppression calls in all planning zones, the performance objective for turnout time is 1:00 in all urban planning zones and 1:07 in all rural planning zones.

Fire Suppression High-Risk

For 90% of all high-risk fire suppression calls in all planning zones, the performance objective for turnout time is 1:00 in all urban planning zones and 1:00 in all rural planning zones.

Hazardous Materials Low-Risk

For 90% of all low-risk HazMat calls in all planning zones, the performance objective for turnout time is 1:38 in all urban planning zones and 1:19 in all rural planning zones.

Hazardous Materials Moderate-Risk

For 90% of all moderate-risk HazMat calls in all planning zones, the performance objective for turnout time is 1:44 in all urban planning zones and 1:26 in all rural planning zones.

Hazardous Materials High-Risk

For 90% of all high-risk HazMat calls in all planning zones, the performance objective for turnout time is 1:00 in all urban planning zones and 1:07 in all rural planning zones.

Technical Rescue Low-Risk

For 90% of all low-risk technical rescue calls in all planning zones, the performance objective for turnout time is 1:00 in all urban planning zones and 1:20 in all rural planning zones. Due to a small data set turnout time for technical rescue incidents exceeded industry standard, because of this the benchmark was set at the industry standard for turnout. Because rural data for tech rescue response was statistically insignificant the benchmark was set to match that of the urban calls for service.

Technical Rescue Moderate/High-Risk

For 90% of all moderate/high-risk technical rescue calls in all planning zones, the performance objective for turnout time is 1:00 in all urban planning zones and 1:20 in all rural planning zones. Due to a small data set turnout time for technical rescue incidents exceeded industry standard, because of this the benchmark was set at the industry standard for turnout. Because rural data for tech rescue response was statistically insignificant the benchmark was set to match that of the urban calls for service.

DISTRIBUTION (FIRST-ARRIVING)

Rather than setting a benchmark for travel time alone MFR combined the alarm handling, turnout, and travel components to ensure that the benchmark for distribution reflects the true response time.

Emergency Medical Service Low-Risk

For 90% of all low-risk emergency EMS responses the performance objective for the first unit is to arrive within 7:53 total response time in all urban planning zones and 9:00 in all rural planning zones. The first-arriving unit is staffed with two personnel, capable of providing basic or advanced life support and treatment for a single-patient medical incident.

Emergency Medical Service Moderate/High-Risk

For 90% of all moderate/high-risk emergency EMS responses the performance objective for the first unit is to arrive within 8:06 total response time in all urban planning zones and 8:41 in all rural planning zones. The first-arriving unit is staffed with two personnel, capable of providing basic or advanced life support and treatment for a single-patient medical incident, and effective triage and resource need identification for a multi-patient incident.

Fire Suppression Low-Risk

For 90% of all low-risk fire suppression responses in the performance objective for the first unit is to arrive within 7:44 total response time in all urban planning zones and 8:24 in all rural planning zones. The first arriving engine company is staffed with four personnel and capable of securing a water supply, initiating incident command and identifying the need for initial resources, and laying the initial attack line.

Fire Suppression Moderate-Risk

For 90% of all moderate-risk fire suppression responses in the performance objective for the first unit is to arrive within 6:43 total response time in all urban planning zones and 7:42 in all rural planning zones. The first arriving engine company is staffed with four personnel and capable of securing a water supply, initiating incident command and identifying the need for initial resources, and laying the initial attack line.

Fire Suppression High-Risk

For 90% of all high-risk fire suppression responses in the performance objective for the first unit is to arrive within 3:52 total response time in all urban planning zones and 7:44 in all rural planning zones.

The first arriving engine company is staffed with four personnel and capable of securing a water supply, initiating incident command and identifying the need for initial resources, and laying the initial attack line.

Hazardous Materials Low-Risk

For 90% of low-risk hazardous materials responses the performance objective is for the first unit is to arrive within 7:15 in all urban planning zones and 7:42 in all rural planning zones. The first arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines.

Hazardous Materials Moderate-Risk

For 90% of moderate-risk hazardous materials responses the performance objective is for the first unit is to arrive within 9:01 in all urban planning zones and 10:46 in all rural planning zones. The first arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines.

Hazardous Materials High-Risk

For 90% of high-risk hazardous materials responses the performance objective is for the first unit is to arrive within 9:02 in all urban planning zones and 11:53 in all rural planning zones. The first arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines.

Technical Rescue Low-Risk

For 90% of low-risk technical rescue responses the performance objective for the first unit is to arrive within 8:03 total response time in all urban planning zones and 8:03 in all rural planning zones. The first-arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines. Because rural data for tech rescue response was statistically insignificant the benchmark was set to match that of the urban calls for service.

Technical Rescue Moderate/High-Risk

For 90% of moderate/high-risk technical rescue responses the performance objective for the first unit is to arrive within 7:47 total response time in all urban planning zones and 7:47 in all rural planning

zones. The first-arriving unit is staffed with four personnel, capable of providing initial incident command and initial actions in accordance with MFR standard operating guidelines. Because rural data for tech rescue response was statistically insignificant the benchmark was set to match that of the urban calls for service.

CONCENTRATION (EFFECTIVE RESPONSE FORCE)

Emergency Medical Service Low Risk

For 90% of low-risk EMS responses the performance objective for establishing an ERF consisting of 2-4 personnel is 7:53 in all urban planning zones and 9:00 in all rural planning zones. The low risk EMS incident response assignment consist of one company either a two person EMS crew or a four person ALS-capable suppression crew. The response assignment is capable of conducting a patient assessment, cardiac monitoring and interpretation, IV access, medication administration, and documentation, and incident command while providing for the safety of EMS providers.

Emergency Medical Service Moderate/High Risk

For 90% of moderate/high risk EMS responses the performance objective for establishing an ERF consisting of 4-6 personnel is to arrive within 8:14 total response time in all urban planning zones and 8:50 in all rural planning zones. The multi company response assignment is capable of conducting a patient assessment, cardiac monitoring and interpretation, IV access, medication administration, and documentation, and incident command while providing for the safety of EMS providers.

Fire Suppression Low-Risk

For 90% of low-risk structure fire responses the performance objective for establishing an ERF consisting of a minimum of 4 personnel is to arrive within 7:44 total response time in all urban planning zones and 8:24 in all rural planning zones. For a low-risk suppression incident the performance objective for the ERF is the same as the distribution objective. A single company is capable of providing small incident mitigation with at least a 500 gallon booster tank, and minimum of 1500 GPM pumper. All MFR pumpers are staffed with four personnel and capable of laying an attack line, operating the apparatus and pump panel, securing a water supply if needed and providing for safety and incident command. Each unit has an assigned officer who is capable of identifying the need for and calling for additional resources if necessary.

Fire Suppression Moderate Risk

For 90% of moderate risk structure fire responses the performance objective for establishing an ERF consisting of a minimum of 15 personnel is to arrive within 10:46 total response time in all urban planning zones and 12:16 in all rural planning zones. The response assignment is capable of implementing command and control firefighting operations to include establishing water supply, two-in/two-out, search and rescue, fire attack, ventilation, and an established Safety Officer while providing for the safety of the responders.

Fire Suppression High Risk

For 90% of high-risk structure fire responses the performance objective for establishing an ERF consisting of a minimum of 24 personnel is to arrive within 7:46 total response time in all urban planning zones and 8:45 in all rural planning zones. The response assignment is capable of implementing command and control firefighting operations to include establishing water supply, two-in/two-out, search and rescue, fire attack, ventilation, and an established Safety Officer while providing for the safety of the responders. Additional personnel may be tasked with lobby control and suppression system supply depending on the type of incident.

Hazardous Materials Low Risk

For 90% of low-risk hazardous materials incidents requiring a single-company response the performance objective for establishing an ERF consisting of a minimum of 4 personnel is to arrive within 7:15 total response time in all urban planning zones and 7:42 in all rural planning zones. For a low risk HazMat incident the concentration objective is the same as the distribution objective as these scenes are mitigated by a single engine company or hazmat apparatus. The response assignment is capable of providing for safety, evaluating the incident and determining a need for additional resources, investigating the issue and mitigating the small HazMat issue.

Hazardous Materials Moderate-Risk

For 90% of moderate-risk hazardous materials incidents requiring a multi-company response the performance objective for establishing an ERF consisting of a minimum of 8 personnel is to arrive within 15:49 total response time in all urban planning zones and 23:13 in all rural planning zones. The response assignment is capable of implementing command and control, safety, providing a water supply, a 1500 gpm pumper with a minimum of 500 gallon booster tank, a fire attack line, and capable of facilitating ventilation and salvage. The HazMat crew will conduct air/gas monitoring, analyze the risk present and develop a plan for mitigating the risk or determine if further action is necessary.

Hazardous Materials High-Risk

For 90% of high-risk hazardous materials incidents requiring a multi-company response the performance objective for establishing an ERF consisting of a minimum of 24 personnel is to arrive within 17:20 total response time in all urban planning zones and 17:47 in all rural planning zones. The response assignment is capable of implementing command and control, technical specialty, safety, entry and back-up teams, multiple sector officers, support crews, and set-up of decon area(s).

Technical Rescue Low Risk

For 90% of low-risk Technical Rescue incidents requiring a single-company response the performance objective for establishing an ERF consisting of a minimum of 7 personnel is to arrive within 10:41 total response time in all urban planning zones and 10:41 in all rural planning zones. The response assignment is capable of providing for safety, evaluating the incident and determining a need for additional resources, investigating the issue completing extrication/hazard mitigation, and facilitating ALS patient care.

Technical Rescue Moderate Risk

For 90% of moderate-risk technical rescue incidents requiring a multi-company response the performance objective for establishing an ERF consisting of a minimum of 10 personnel is to arrive within 9:48 total response time in all urban planning zones and 9:48 in all rural planning zones. The response assignment is capable of implementing command and control, safety, staffing a rescue group with task dependent on the technical rescue type, and facilitating ALS patient care.

Technical Rescue High Risk

For 90% high-risk technical rescue incidents requiring a multi-company response the performance objective for establishing an ERF consisting of a minimum of 24 personnel is to arrive within 9:48 total response time in all urban planning zones and 9:48 in all rural planning zones. The response assignment is capable of implementing command and control, technical specialty, safety, entry and back-up teams, multiple sector officers, support crews, and set-up of decon area(s).

Comparability - Response Components versus Industry Standard

Call Processing

When compared to the industry standard there are areas identified in the baseline performance data that leave room for improvement. Every incident takes time to be discovered or for a decision to seek emergency help made. Besides education and some other risk reduction methods there is very little that the fire department can do to speed this component. The next component starts when the person seeking help dials 911. We have already determined the industry standard for call processing which begins when the phone rings and ends when the appropriate unit is dispatched to the call. The table below illustrates the gap for the call processing industry-standard versus the Montgomery Department of Communications baseline performance for the preceding three years. This gap analysis examines the two incident categories where speed has the most effect on the incident outcome. Each number represents the 90th percentile meaning that 89% of the call processing times are faster than this number reflects.

Incident Type	Industry Standard	Actual Performance	Service Gap
Structure Fire	1:04	2:17	**1:13**
Emergency Medical Call	1:04	2:54	**1:50**

Table 113: Call processing vs industry standard

Several factors that are challenging the Department of Communications may have impacted the baseline performance. Like most municipalities employee turnover is high, and that means that new dispatchers are near-constantly being trained. Staffing is also an issue, communications have had issues with filling all their available spots which are solved by mandatory and voluntary overtime where longer hours may lead to a reduction in the speed that calls are processed. One often-overlooked factor is the need to "get it right," Montgomery dispatchers have the authority to prioritize quality over quantity if it means getting the accurate location and units assigned. Despite these challenging issues, there is a large gap between Montgomery 911 performance and the industry standard. MFR will work with this department and our public safety partners to identify creative ways to close this gap.

Turnout Time

Turnout time is the time it takes the fire/rescue crew to receive the dispatch make it to the apparatus and begin the response. Knowing that time has been lost in the incident recognition and call processing phases getting to the apparatus and out of the station becomes all the more important. This time is crucial to reducing the total response time. In almost every case the turnout time represents the component where the fire department can shave the most seconds of the total response time without

affecting the safety of the response. As was discussed earlier in this document the industry standard is established in NFPA 1710 and states that 90% of fire and special operation calls should be turned out in less than 80 seconds. The same standard states that 90% of all EMS calls should be turned out in 60 seconds. The table below illustrates MFR's turn-out performance versus the industry standard in the incident types where speed is most important.

Incident Type	Industry Standard	Actual Performance	Service Gap
Structure Fire	1:20	1:04	**0:16**
Emergency Medical Call	1:00	1:39	**0:39**

Table 114: Turnout time versus industry standard

MFR leadership adjusted a policy in 2018 requiring company officers to acknowledge that they are responding to ensure accurate data and in an effort to speed turnout. While there was a decrease in turnout times from 2018 to 2019 most data points show an inverse increase in distribution response. Despite this MFR seems to be meeting the industry standard for structure fire responses. There is a 38-second gap in MFR EMS responses versus the standard. MFR will work to identify ways to close the gap between EMS turnout and the industry standard and continue to improve on the suppression turnout time.

Travel Time - Distribution

Travel time begins at the time that the first arriving company officer informs the dispatcher that the company is responding until the first unit arrives on the scene. While improvements can be made in this component it is important that those improvements are made within the best interest of MFR responders and the public. MFR responders will not increase speed to improve this response component. Seconds can be shaved here through driver training, territory familiarization, and route selection. NFPA 1710 suggests that in 90% of the responses the first arriving unit should have a travel time of not more than 4 minutes. The table below compares MFR performance in the distribution travel time versus the industry standard. Rural areas are left out of this gap analysis because NFPA 1710 does not set a standard for travel time. The total response time gap will be examined for the rural zones in the total response time gap analysis.

Incident Type	Industry Standard	Actual Performance	Service Gap
Structure Fire - Urban	4:00	5:07	**1:07**
EMS - Urban	4:00	6:07	**2:07**

Table 115: Travel time vs industry standard

In both of these distribution areas, MFR is underperforming the industry standard. MFR will continue to work to improve these times by setting attainable benchmarks and ensuring progress through the application of the compliance methodology.

Travel Time - Concentration

The concentration travel time refers to the time from the call turnout to the arrival of the full effective response force. This time includes that of the first unit and necessary responding units that will vary by incident type. The table below compares the typical MFR urban structure fire concentration-response versus the industry standard.

Incident Type	Industry Standard	Actual Performance	Service Gap
Structure Fire - Urban	8:00	9:35	**1:35**

Table 116: TRT concentration vs industry standard

Again, MFR is behind the industry standard for 90th percentile concentration travel time. The causal factors for this are likely similar to the causal factors for the distribution travel time gap. MFR will continue to work to improve these times by setting attainable benchmarks and ensuring progress through the application of the compliance methodology.

Total Response Time

The total response time component is arguably the most important of all of the response components. This time brings together the components that are in the direct control of the fire department and those that are not. The total response time component is the reality of the response and represents the true time that it takes a person needing help to call 911 and then see a responder arrive on the scene. The graph below represents the 90th percentile times for MFR in the two data sets with the most data points and where speed and efficiency make the most difference. Average total response times are added below to help the reader see how the 90th percentile time compares to the average.

Incident Type	Industry Standard	Actual Performance	Service Gap
Structure Fire - Urban	10:24	11:58 (90th)	1:34
	Average	6:39	**3:45**
EMS - Urban	6:04	8:46 (90th)	2:42
	Average	4:52	**1:12**

Table 117: TRT versus industry standard

In both the routine structure fire and emergency medical calls MFR's average response time is faster than the industry standard. However, the industry standard describes a time that outperforms this time at least 90% of the time. The average time simply means that MFR outperformed the standard at least 50% of the time. With a 4:05 gap in EMS time at the 90th percentile and a 2:15 gap in structure fire response at the 90th percentile, there is much room for improvement for MFR's response.

Comparability – Like Sized Departments

With a clear understanding of MFR response performance versus the industry standard, MFR decided to compare MFR response components to accredited like-sized departments. In this section, MFR response is compared to Columbus (GA) Fire and Emergency Medical Services, Savannah (GA) Fire & Emergency Services, and Poudre (CO) Fire Authority. Each of these departments protects a population close to 200,000 and has similar numbers of responders and stations to MFR. Each of these agencies was chosen because of their similarity to MFR and location with two in MFR's region and one out to diversify the comparison. Their response component times were never considered in the selection of these agencies.

In the comparison of liked sized agencies, MFR looked at the two response times with the most reliable data because of incident frequency and where time is essential. For this comparison, the two analyzed incident types were the routine structure fire and emergency medical response where distribution included the arrival of an advanced life support unit. Savannah Fire & Emergency Services does not report times for emergency medical response so a comparison was not possible with their agency. The comparison is illustrated in the table on the following page. Of the data points examined MFR met or outperformed the compared agency 15 times and underperformed 8 times. This analysis suggests that MFR's current performance is comparable to liked-sized agencies. Data on MFR's average time from dispatch to arrival is available in Appendix M.

Incident Type	Response component	Agency Performance	MFR Performance	Gap
Structure Fire - Urban	Call Processing	2:58	2:17	**0:41**
Columbus (GA) Fire & Emergency Services	Turnout	1:41	1:04	**0:37**
	Travel Distribution	5:03	5:19	**0:16**
	Travel Concentration	11:27	10:08	**1:19**
	Total Response Time	14:57	11:58	**2:59**
EMS - Urban	Call Processing	3:43	2:54	**0:49**
Columbus (GA) Fire & Emergency Services	Turnout	1:36	1:39	**0:03**
	Travel Distribution	5:57	5:49	**0:08**
	Total Response Time	12:06	8:48	**3:18**
Structure Fire - Urban	Call Processing	3:01	2:17	**0:44**
Savannah (GA) Fire & Emergency Services	Turnout	1:09	1:04	**0:05**
	Travel Distribution	3:59	5:19	**1:20**
	Travel Concentration	8:03	10:08	**2:05**
	Total Response Time	11:59	11:58	**0:01**
EMS - Urban	***Savannah Fire does not provide EMS service***			
Structure Fire - Urban	Call Processing	1:44	2:17	**0:33**
Poudre (CO) Fire Authority	Turnout	2:13	1:04	**1:09**
	Travel Distribution	5:19	5:19	**0:00**
	Travel Concentration	10:41	10:08	**0:33**
	Total Response Time	14:32	11:58	**2:34**
EMS - Urban	Call Processing	2:12	2:54	**0:42**
Poudre (CO) Fire Authority	Turnout	1:49	1:39	**0:10**
	Travel Distribution	5:21	5:49	**0:28**
	Total Response Time	7:59	8:48	**1:49**

Table 118: MFR response components vs like-sized departments

MFR Baseline/Benchmark Gap Analysis 2018-2020

2018-2020 Low Risk EMS				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**8:46**	**7:53**	**0:53**
		n=		
1st Due	Rural	**10:01**	**9:00**	**1:06**
		n=		
ERF	Urban	**8:46**	**7:53**	**0:53**
		n=		
ERF	Rural	**10:06**	**9:00**	**1:06**
		n=		

2018-2020 Moderate/High Risk EMS				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**9:00**	**8:06**	**0:54**
		n=		
1st Due	Rural	**9:39**	**8:41**	**0:40**
		n=		
ERF	Urban	**9:09**	**8:15**	**0:54**
		n=		
ERF	Rural	**9:41**	**8:40**	**1:01**
		n=		

2018-2020 Low Risk Fire Suppression				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**8:35**	**7:44**	**0:51**
		n=		
1st Due	Rural	**9:20**	**8:24**	**0:56**
		n=		
ERF	Urban	**8:35**	**7:44**	**0:51**
		n=		
ERF	Rural	**9:20**	**8:24**	**0:56**
		n=		

2018-2020 Moderate Risk Fire Suppression				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**7:28**	**6:43**	**0:45**
		n=		
1st Due	Rural	**8:33**	**7:42**	**0:51**
		n=		
ERF	Urban	**11:58**	**10:46**	**1:12**
		n=		
ERF	Rural	**13:38**	**12:16**	**1:22**
		n=		

2018-2020 High Risk Fire Suppression				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**4:18**	**3:52**	**0:26**
		n=		
1st Due	Rural	**8:36**	**7:44**	**0:52**
		n=		
ERF	Urban	**8:38**	**7:46**	**0:52**
		n=		
ERF	Rural	**9:43**	**8:45**	**0:58**
		n=		

2018-2020 Low Risk Technical Rescue				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**8:57**	**8:03**	**0:54**
		n=		
1st Due	Rural	**null**	**8:03**	**N/A**
		n=		
ERF	Urban	**11:52**	**10:41**	**1:11**
		n=		
ERF	Rural	**null**	**10:41**	**N/A**
		n=		

2018-2020 Moderate/High Risk Technical Rescue				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**8:39**	**7:47**	**0:56**
		n=		
1st Due	Rural	**null**	**7:47**	**N/A**
		n=		
ERF	Urban	**10:42**	**9:48**	**0:54**
		n=		
ERF	Rural	**null**	**9:48**	**N/A**
		n=		

2018-2020 Low Risk HazMat				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**8:03**	**7:15**	**0:48**
		n=		
1st Due	Rural	**8:33**	**7:42**	**0:51**
		n=		
ERF	Urban	**8:03**	**7:15**	**0:48**
		n=		
ERF	Rural	**8:33**	**7:42**	**0:51**
		n=		

2018-2020 Moderate Risk HazMat				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**10:02**	**9:01**	**1:01**
		n=		
1st Due	Rural	**11:58**	**10:46**	**1:12**
		n=		
ERF	Urban	**17:34**	**15:49**	**1:45**
		n=		
ERF	Rural	**25:48**	**23:13**	**2:35**
		n=		

2018-2020 High Risk HazMat				
1st Due/ERF	**Urban/Rural**	**Baseline**	**Benchmark**	**Gap**
1st Due	Urban	**15:16**	**9:02**	**4:14**
		n=		
1st Due	Rural	**12:52**	**11:53**	**0:59**
		n=		
ERF	Urban	**19:16**	**17:20**	**1:56**
		n=		
ERF	Rural	**19:46**	**17:47**	**1:59**
		n=		

Compliance Methodology

Establish/Review Performance measures

The performance measures that have been developed in this standards of cover have created benchmark targets that will be reviewed on an annual basis by the Division of Standards and Compliance and the accreditation team. While the MFR has long evaluated response time data the benchmarks developed in this document a first of t its kind for the MFR. A frequent review of the performance measures will ensure that useful data that leads to improved service is produced.

Evaluate Performance

The benchmarks and baseline data sets will be compared through a gap analysis on a quarterly and on formally published on annual basis. Evaluating system performance at more frequent intervals will allow department leadership to evaluate weaknesses and make adjustment before the annual review process. The annual process should further focus on future trends and community issues that may affect performance.

A strengths, weaknesses, opportunities, and threats (SWOT) analysis is conducted as a part of the strategic plan and identifies areas where system improvement can be made. An important part of the SWOT analysis for the MFR is to look at areas where the department has limited control so that developed goals are obtainable.

Develop Compliance Strategies

Performance evaluations will set the stage for compliance strategies. With each performance review weakness will be identified and the compliance team will have the information available to take strategic actions on a quarterly and annual basis, as needed.

Communicate Expectations

Identifying a systems strengths and weaknesses is useless if those executing the tasks are not aware of the expectations and performance. Data will be communicated in quarterly findings and published in annual reports, and the standards of cover, the information will be pushed aggressively to the company level regardless of whether the information is positive or negative.

Validate Compliance

Compliance will be ensured through the review processed. Areas that need to be corrected will be addressed early. The process is a continuous quality improvement system. It is expected that once one problem is addressed and corrected than another will present and require the same attention.

Make adjustments and repeat

The need for adjustments to system benchmarks will be a constant, ongoing, and repeating process. Each year goals, funding, staffing and community needs will change and with that adjustments will be needed. The annual review will take a more in depth look at system performance and consider a broader spectrum of considerations such as response to quarterly adjustments, and results of community outreach. Finally, after reporting the process should begin anew with the goal of continuous system improvement.

Figure 80: Cycle of Compliance Review

Plan for maintaining and improving performance

The Montgomery Fire/Rescue (MFR) has been providing fire protection service to the citizens and visitors of the City of Montgomery since 1898. There is no doubt that the MFR is a highly trained and capable fire protection and EMS provider. MFR has demonstrated time and time again that the department desires to be the best in the business. The department has conquered the ISO process with consecutive class-1 ratings and a clear plan for ensuring that classification will remain unchanged and future raw scores improve. As the fire service continues to evolve at a much rapid pace then in the past, the department must find a way to ensure that every opportunity is taken to ensure that the department keeps or exceeds that pace. The CPSE accreditation process has provided us with an effective template to ensure that we accomplish our stated goals and the department's mission.

Correlation to CFAI Accreditation Model

	CFAI 10th Edition Performance Indicator / Core Competency		*CRA-SOC pg.*
	2A.1	Service area boundaries for the agency are identified, documented, and legally adopted by the authority having jurisdiction	Pg. 9
	2A.2	Boundaries for other service responsibility areas, such as automatic aid, mutual aid, and contract areas, are identified, documented, and appropriately approved by the authority having jurisdiction.	N/A
CC	**2A.3**	**The agency has a documented and adopted methodology for organizing the response area(s) into geographical planning zones.**	Pg. 49
CC	**2A.4**	**The agency assesses the community by planning zone and considers the population density within planning zones and population areas, as applicable, for the purpose of developing total response time standards.**	Pg. 50-113
	2A.5	Data that includes property, life, injury, environmental, and other associated losses, as well as the human and physical assets preserved and or saved, are recorded for a minimum of three (initial accreditation agencies) to five (currently accredited agencies) immediately previous years.	Pg. 108
	2A.6	The agency utilizes its adopted planning zone methodology to identify response area characteristics such as population, transportation systems, area land use, topography, geography, geology, physiography, climate, hazards, risks, and service provision capability demands.	Pg. 18-26, Pg. 50-102
	2A.7	Significant socio-economic and demographic characteristics for the response area are identified, such as key employment types and centers, assessed values, blighted areas, and population earning characteristics.	Pg. 50-102
	2A.8	The agency identifies and documents all safety and remediation programs, such as fire prevention, public education, injury prevention, public health, and other similar programs, currently active within the response area.	Pg. 46-48
	2A.9	The agency defines types of infrastructure that are considered critical and identifies such infrastructure within each planning zone.	Pg. 39, Pg 50-102, Appendix E
CC	**2B.1**	**The agency's documented and adopted methodology for identifying, assessing, categorizing, and classifying all risks (fire and non-fire) throughout the community or area of responsibility.**	Pg. 36-45
	2B.2	The historical emergency and non-emergency service demands frequency for a minimum of three immediately previous years and the future probability of emergency and non-emergency service demands, by service type, have been identified and documented by planning zone.	Pg. 50-113
	2B.3	Event outputs and outcomes are assessed for three (initial accrediting agencies) to five (currently accredited agencies) immediately previous years.	Pg. 50-113
CC	**2B.4**	**The agency's risk identification, analysis, categorization, and classification methodology has been utilized to determine and document the different categories and classes of risks within each planning zone.**	Pg. 39-45, Pg. 50-102
	2B.5	Fire protection and detection systems are incorporated into the risk analysis	Pg. 36, Pg. 50-102
	2B.6	The agency assesses critical infrastructure within the planning zones for capabilities and capacities to meet the demands posed by the risks.	Pg. 50-102 Appendix E

	2B.7	The agency engages other disciplines or groups within its community to compare and contrast risk assessments in order to identify gaps or future threats and risks.	Pg. 44, Exhibits
CC	**2C.1**	**Given the levels of risks, area of responsibility, demographics, and socio-economic factors, the agency has determined, documented, and adopted a methodology for the consistent provision of service levels in all service program areas through response coverage strategies.**	Pg. 178-180
CC	**2C.2**	**The agency has a documented and adopted methodology for monitoring its quality of emergency response performance for each service type within each planning zone and total response area.**	Pg. 158-164 Appendix A & B
	2C.3	Fire protection systems and detection systems are identified and considered in the development of appropriate response strategies.	N/A
CC	**2C.4**	**A critical task analysis of each risk category and risk class has been conducted to determine the first-due and effective response force capabilities, and a process is in place to validate and document the results.**	Pg. 141-149
CC	**2C.5**	**The agency has identified the total response time components for delivery of services in each service program area and found those services consistent and reliable within the entire response area and in each planning zone**	Pg. 158, Appendix B
	2C.6	The agency identifies outcomes for its programs and ties them to the community risk assessment during updates and adjustments of its programs, as needed.	Exhibits
	2C.7	The agency has identified efforts to maintain and improve its performance in the delivery of its emergency services for the past three (initial accreditation agencies) to five (currently accredited agencies) immediately previous years.	Exhibits
	2C.8	The agency's resiliency has been assessed through its deployment policies, procedures, and practices.	Pg. 114-115
CC	**2D.1**	**The agency has documented and adopted methodology for assessing performance adequacy, consistency, reliability, resiliency, and opportunities for improvement for the total response area.**	Pg. 114-115 Pg. 150-164, Appendix A & B
	2D.2	The agency continuously monitors, assesses, and internally reports, at least quarterly, on the ability of the existing delivery system to meet expected outcomes and identifies and prioritizes remedial actions.	Exhibits
CC	**2D.3**	**The performance monitoring methodology identifies, at least annually, future external influences, altering conditions, growth and development trends, and new or evolving risks, for purposes of analyzing the balance of service capabilities with new conditions or demands.**	Pg. 21-27, Exhibits
	2D.4	The performance monitoring methodology supports the assessment of the efficiency and effectiveness of each service program at least annually in relation to industry research.	Pg. 150-154, Pg. 173-177
	2D.5	Impacts of incident mitigation program efforts, (such as community risk reduction, public education, and community service programs), are considered and assessed in the monitoring process.	Exhibits
CC	**2D.6**	**Performance gaps for the total response area, such as inadequacies, inconsistencies, and negative trends, are determined at least annually.**	Pg. 173-177, Exhibits

CC	**2D.7**	**The agency has systematically developed a continuous improvement plan that details actions to be taken within an identified timeframe to address existing gaps and variations.**	Pg. 178-180, Pg. 184-185
	2D.8	The agency seeks approval of its standards of cover by the authority having jurisdiction (AHJ).	Exhibits
	2D.9	On at least an annual basis, the agency formally notifies the AHJ of any gaps in current capabilities and capacity, capacity, and the level of service provided within its delivery system to mitigate the identified risks within its service area, as identified in its community risk assessment/standards of cover.	N/A
	2D.10	The agency interacts with external stakeholders and the AHJ at least once every three years, to determine the stakeholders' and AHJ's expectations for types and levels of services provided by the agency.	Pg. 28-30

Table 119: CRA/SOC correlation to CFAI model

Recommendations

Strengths and weakness identified through the standard of cover, review of the performance indicators, and through the SWOT analysis found in the strategic plan the following recommendation are made:

1. The Office of Standards and Compliance should conduct analysis of performance data through a gap analysis informally every quarter and formally annually which will be documented in an annual report submitted to the fire chief, the city administration, and to CPSE.
2. MFR staff will review the strategic plan monthly to ensure that progress towards the stated goals are being made and if not adjustments are made. The goal tracker will be maintained with updates for accountability.
3. The department should expand community outreach conducted at least annually and seek detailed input from community stakeholders. At the same time the MFR should provide feedback from previous engagement sessions detailing efforts to address community concerns. This effort is essential and should not be half-hearted it should be a full scale effort to engage every part of the community and find out what is important from their perspective and educate them on why things are done the way the MFR does them.
4. Discussions with public safety partners should be frequent and identify areas for improvement to meet mutual goals. The MFR goals for service call answering and processing should align with NFPA 1221 & 1710 and these goals should be formally communicated to the Department of Communications at the same quarterly performance analysis conducted by the compliance committee.
5. Issues with recruitment and retention should be analyzed and solutions offered to the issues identified.
6. The department should find creative ways to use data to improve performance. This may involve relocation of and/or stand-up of additional apparatus as allowed inside the department's budget.
7. The department must improve the application of modern technology. Electronic communication should be emphasized, outdated or unsupported software should be eliminated. Every effort should be made to use technological solutions to make the EMS documentation workload less cumbersome.
8. Staffing is and should continue to be constantly evaluated and every available grant opportunity explored to ensure that the MFR continues to provide a high level of service within municipal budget constraints.

9. Funding feasibility and for new station(s) be revaluated with the goal of completion occurring within the next five years.
10. Other facilities should be reviewed for updates and potential relocation considering potential issues NFPA compliance, apparatus size, community needs, and cost.
11. Leadership and communication should be reviewed at every opportunity. In reviewing this the perspective of every member should be taken into account, trends should be identified and corrections made through coaching, education, and accountability. The department leadership should use the Heifetz & Linsky balcony approach to this review to ensure that the complete picture is observed and judgement is not clouded by small sample observations.
12. Develop a company officer leadership program that targets emerging leaders beginning at the rank of firefighter/paramedic and sergeant. This program should be a mix of online and in person instruction and should be in-depth and occur at varying pace over a period of time to allow for leadership development.
13. Improve public education to target the most vulnerable populations using data identified through the CRA/SOC. Further ongoing analysis of hazard types and most affected areas should drive the program. Input/output measurements will be analyzed through the annual program appraisal.
14. Bring Montgomery Fire Rescue's Community Risk Reduction efforts together under one umbrella using Vision 20/20 as a guide for the framework of this initiative.
15. Improve the training environment and capabilities through the addition of a live burn facility.
16. Expand service and protection capabilities for the City of Montgomery by developing and implementing a well-trained and fully equipped Urban Search and Rescue Team.
17. Encourage and promote education focused leadership development at the senior officer level encouraging professional development through the pursuit of professional credentialing.

Appendices

Appendix A – Baseline Performance Data

Fire Suppression Low Risk – 90th Percentile Baseline Performance

Fire Suppression – 90th Percentile Baseline			2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**2:42**	**2:26**	**2:29**	**2:33**
		Rural	**2:45**	**2:21**	**2:20**	**2:29**
Turnout Time	Distribution – 1st Unit	Urban	**2:02**	**1:25**	**1:30**	**1:40**
		Rural	**2:09**	**1:12**	**1:07**	**1:35**
Travel Time	Distribution – 1st Unit	Urban	**5:40**	**5:48**	**5:56**	**5:50**
		Rural	**6:31**	**7:10**	**7:08**	**7:01**
	Concentration ERF	Urban	**5:40**	**5:48**	**5:56**	**5:50**
		Rural	**6:31**	**7:10**	**7:08**	**7:01**
Response Time	Distribution – 1st Unit	Urban	**8:55**	**8:17**	**8:28**	**8:35**
			n=	**n=**	**n=**	**n=**
		Rural	**9:24**	**9:41**	**9:11**	**9:20**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**8:55**	**8:17**	**8:28**	**8:35**
			n=	**n=**	**n=**	**n=**
		Rural	**9:24**	**9:41**	**9:11**	**9:20**
			n=	**n=**	**n=**	**n=**

Fire Suppression Moderate Risk – 90th Percentile Baseline Performance

Fire Suppression – 90th Percentile Baseline			2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**2:16**	**2:25**	**2:11**	**2:17**
		Rural	**2:49**	**3:58**	**2:17**	**2:55**
Turnout Time	Distribution – 1st Unit	Urban	**1:15**	**0:58**	**0:54**	**1:04**
		Rural	**1:33**	**0:45**	**0:51**	**1:14**
Travel Time	Distribution – 1st Unit	Urban	**4:47**	**5:07**	**5:15**	**5:07**
		Rural	**4:49**	**5:37**	**5:43**	**5:19**
	Concentration ERF	Urban	**9:50**	**9:19**	**9:39**	**9:35**
		Rural	**11:15**	**10:05**	**9:34**	**10:08**
Response Time	Distribution – 1st Unit	Urban	**7:18**	**7:28**	**7:48**	**7:28**
			n=	**n=**	**n=**	**n=**
		Rural	**8:17**	**8:59**	**8:07**	**8:33**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**12:16**	**11:50**	**11:42**	**11:58**
			n=	**n=**	**n=**	**n=**
		Rural	**13:55**	**14:26**	**12:07**	**13:38**
			n=	**n=**	**n=**	**n=**

Fire Suppression High Risk – 90th Percentile Baseline Performance

Fire Suppression – 90th Percentile Baseline			2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**2:30**	**1:21**	**null**	**2:19**
		Rural	**null**	**2:24**	**null**	**2:24**
Turnout Time	Distribution – 1st Unit	Urban	**0:32**	**0:52**	**null**	**0:49**
		Rural	**null**	**null**	**null**	**null**
Travel Time	Distribution – 1st Unit	Urban	**1:58**	**2:18**	**null**	**2:18**
		Rural	**null**	**6:06**	**null**	**6:06**
	Concentration ERF	Urban	**5:53**	**6:20**	**null**	**6:21**
		Rural	**null**	**7:13**	**null**	**7:13**
Response Time	Distribution – 1st Unit	Urban	**4:19**	**3:59**	**null**	**4:18**
			n=	**n=**	**n=**	**n=**
		Rural	**null**	**8:36**	**null**	**8:36**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**8:43**	**8:00**	**null**	**8:38**
			n=	**n=**	**n=**	**n=**
		Rural	**null**	**9:43**	**null**	**9:43**
			n=	**n=**	**n=**	**n=**

**There were no fires in 2020 classified high risk.

EMS Low Risk – 90th Percentile Baseline Performance

EMS – 90th Percentile Baseline			2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**3:31**	**2:36**	**2:46**	**2:54**
		Rural	**3:19**	**2:37**	**2:46**	**2:53**
Turnout Time	Distribution – 1st Unit	Urban	**2:02**	**1:25**	**1:23**	**1:39**
		Rural	**2:02**	**1:21**	**1:15**	**1:37**
Travel Time	Distribution – 1st Unit	Urban	**5:31**	**5:47**	**6:07**	**5:49**
		Rural	**6:43**	**6:58**	**7:21**	**7:03**
	Concentration ERF	Urban	**5:31**	**5:47**	**6:07**	**5:49**
		Rural	**6:43**	**6:58**	**7:21**	**7:03**
Response Time	Distribution – 1st Unit	Urban	**9:14**	**8:22**	**8:48**	**8:46**
			n=	**n=**	**n=**	**n=**
		Rural	**10:19**	**9:32**	**10:06**	**10:01**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**9:14**	**8:22**	**8:48**	**8:46**
			n=	**n=**	**n=**	**n=**
		Rural	**10:19**	**9:32**	**10:06**	**10:01**
			n=	**n=**	**n=**	**n=**

EMS Moderate/High Risk – 90th Percentile Baseline Performance

EMS – 90th Percentile Baseline			2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**4:10**	**2:52**	**2:52**	**3:13**
		Rural	**4:17**	**2:19**	**2:52**	**3:02**
Turnout Time	Distribution – 1st Unit	Urban	**1:58**	**1:22**	**1:19**	**1:36**
		Rural	**1:57**	**1:15**	**1:04**	**1:27**
Travel Time	Distribution – 1st Unit	Urban	**5:36**	**5:58**	**5:57**	**5:48**
		Rural	**6:29**	**6:20**	**6:37**	**6:32**
	Concentration ERF	Urban	**5:46**	**6:06**	**6:03**	**5:58**
		Rural	**6:29**	**6:45**	**6:37**	**6:35**
Response Time	Distribution – 1st Unit	Urban	**10:00**	**8:38**	**8:34**	**9:00**
			n=	**n=**	**n=**	**n=**
		Rural	**10:15**	**9:06**	**9:22**	**9:39**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**10:08**	**8:42**	**8:38**	**9:09**
			n=	**n=**	**n=**	**n=**
		Rural	**10:15**	**9:13**	**9:22**	**9:41**
			n=	**n=**	**n=**	**n=**

Technical Rescue Low Risk – 90th Percentile Baseline Performance

Technical Rescue – 90th Percentile Baseline			2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**4:36**	**5:11**	**null**	**5:07**
		Rural	**null**	**null**	**null**	**null**
Turnout Time	Distribution – 1st Unit	Urban	**0:31**	**0:27**	**null**	**0:31**
		Rural	**null**	**null**	**null**	**null**
Travel Time	Distribution – 1st Unit	Urban	**0:59**	**3:40**	**null**	**3:24**
		Rural	**null**	**null**	**null**	**null**
	Concentration ERF	Urban	**7:01**	**4:15**	**null**	**6:44**
		Rural	**null**	**null**	**null**	**null**
Response Time	Distribution – 1st Unit	Urban	**6:04**	**9:16**	**null**	**8:57**
			n=	**n=**	**n=**	**n=**
		Rural	**null**	**null**	**null**	**null**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**12:06**	**9:51**	**null**	**11:52**
			n=	**n=**	**n=**	**n=**
		Rural	**null**	**null**	**null**	**null**
			n=	**n=**	**n=**	**n=**

**The number of calls for Technical rescue low-risk were statistically insignificant in 2020.

Technical Rescue Moderate/High Risk – 90th Percentile Baseline Performance

Technical Rescue – 90th Percentile Baseline			2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**null**	**null**	**3:35**	**3:35**
		Rural	**null**	**null**	**null**	**null**
Turnout Time	Distribution – 1st Unit	Urban	**null**	**null**	**0:30**	**0:30**
		Rural	**null**	**null**	**null**	**null**
Travel Time	Distribution – 1st Unit	Urban	**null**	**null**	**4:36**	**4:36**
		Rural	**null**	**null**	**null**	**null**
	Concentration ERF	Urban	**null**	**null**	**6:39**	**6:39**
		Rural	**null**	**null**	**null**	**null**
Response Time	Distribution – 1st Unit	Urban	**null**	**null**	**8:39**	**8:39**
			n=	**n=**	**n=**	**n=**
		Rural	**null**	**null**	**null**	**null**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**null**	**null**	**10:42**	**10:42**
			n=	**n=**	**n=**	**n=**
		Rural	**null**	**null**	**null**	**null**
			n=	**n=**	**n=**	**n=**

**The number of calls for Technical rescue moderate/high-risk were statistically insignificant in 2018-2019.

HazMat Low Risk – 90th Percentile Baseline Performance

HazMat – 90th Percentile Baseline			2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**3:09**	**null**	**3:01**	**3:05**
		Rural	**4:53**	**null**	**null**	**4:53**
Turnout Time	Distribution – 1st Unit	Urban	**1:20**	**0:51**	**2:02**	**1:49**
		Rural	**1:28**	**null**	**null**	**1:28**
Travel Time	Distribution – 1st Unit	Urban	**2:02**	**6:03**	**2:27**	**5:35**
		Rural	**2:14**	**null**	**null**	**2:14**
	Concentration ERF	Urban	**2:02**	**6:03**	**2:27**	**5:35**
		Rural	**2:14**	**null**	**null**	**2:14**
Response Time	Distribution – 1st Unit	Urban	**6:29**	**15:28**	**6:53**	**8:03**
			n=	**n=**	**n=**	**n=**
		Rural	**8:33**	**null**	**null**	**8:33**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**6:29**	**15:28**	**6:53**	**8:03**
			n=	**n=**	**n=**	**n=**
		Rural	**8:33**	**null**	**null**	**8:33**
			n=	**n=**	**n=**	**n=**

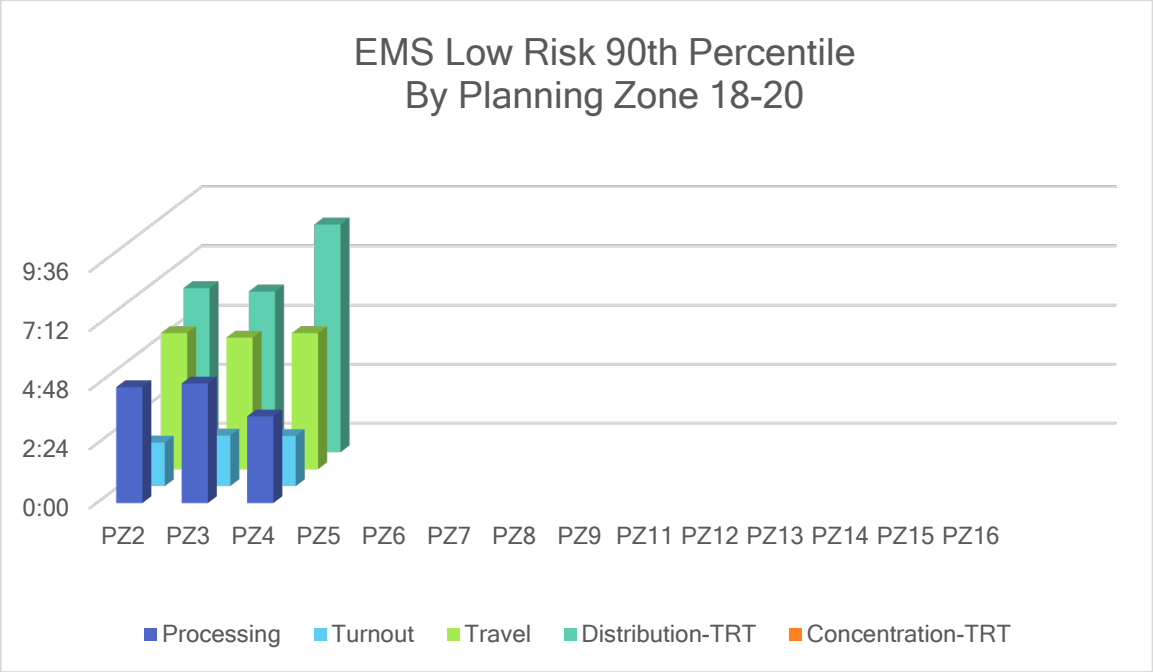
HazMat Moderate Risk – 90th Percentile Baseline Performance

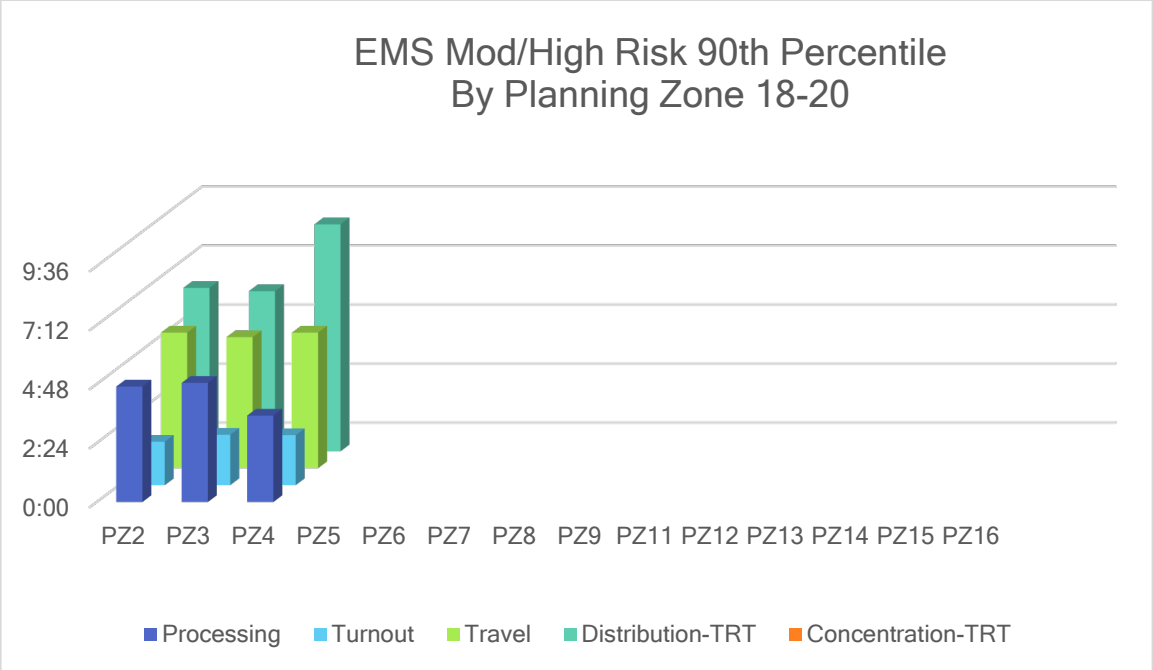
	HazMat – 90th Percentile Baseline		2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**3:43**	**2:48**	**2:25**	**2:58**
		Rural	**null**	**3:25**	**3:22**	**3:24**
Turnout Time	Distribution – 1st Unit	Urban	**2:06**	**2:00**	**1:30**	**1:56**
		Rural	**1:45**	**1:02**	**1:10**	**1:36**
Travel Time	Distribution – 1st Unit	Urban	**6:03**	**6:38**	**6:31**	**6:19**
		Rural	**5:37**	**9:06**	**4:53**	**5:38**
	Concentration ERF	Urban	**14:16**	**15:28**	**13:07**	**14:27**
		Rural	**18:00**	**15:59**	**18:42**	**18:18**
Response Time	Distribution – 1st Unit	Urban	**10:56**	**9:18**	**10:11**	**10:02**
			n=	**n=**	**n=**	**n=**
		Rural	**13:48**	**11:46**	**9:24**	**11:58**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**17:43**	**18:28**	**15:42**	**17:34**
			n=	**n=**	**n=**	**n=**
		Rural	**27:43**	**19:24**	**25:18**	**25:48**
			n=	**n=**	**n=**	**n=**

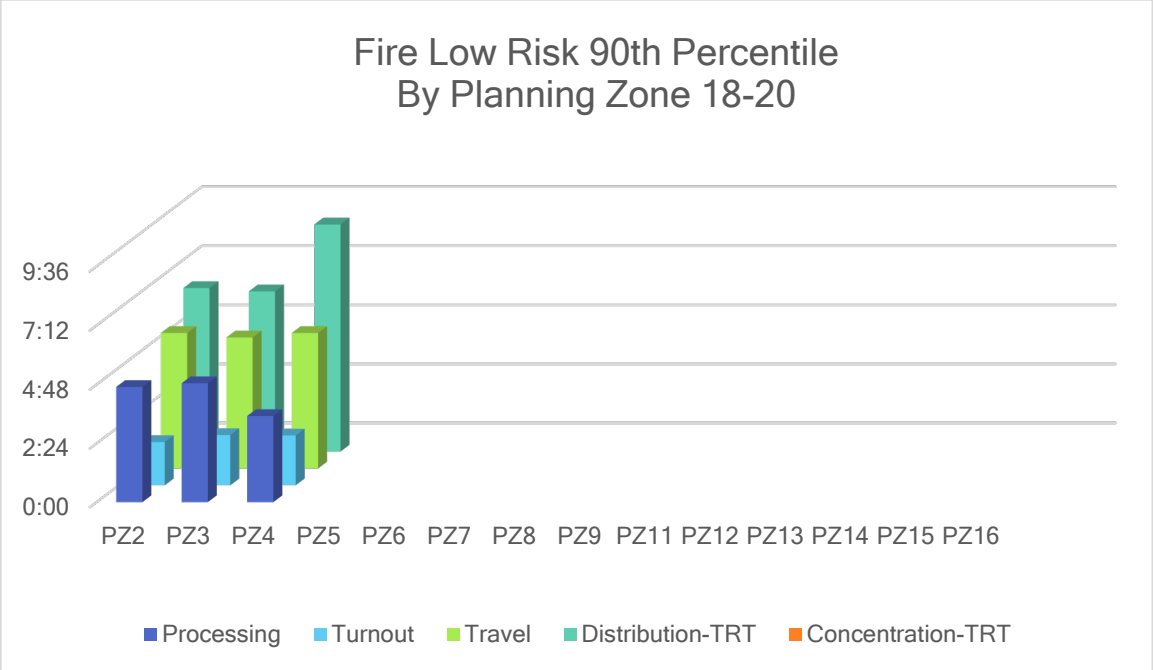
HazMat High Risk – 90th Percentile Baseline Performance

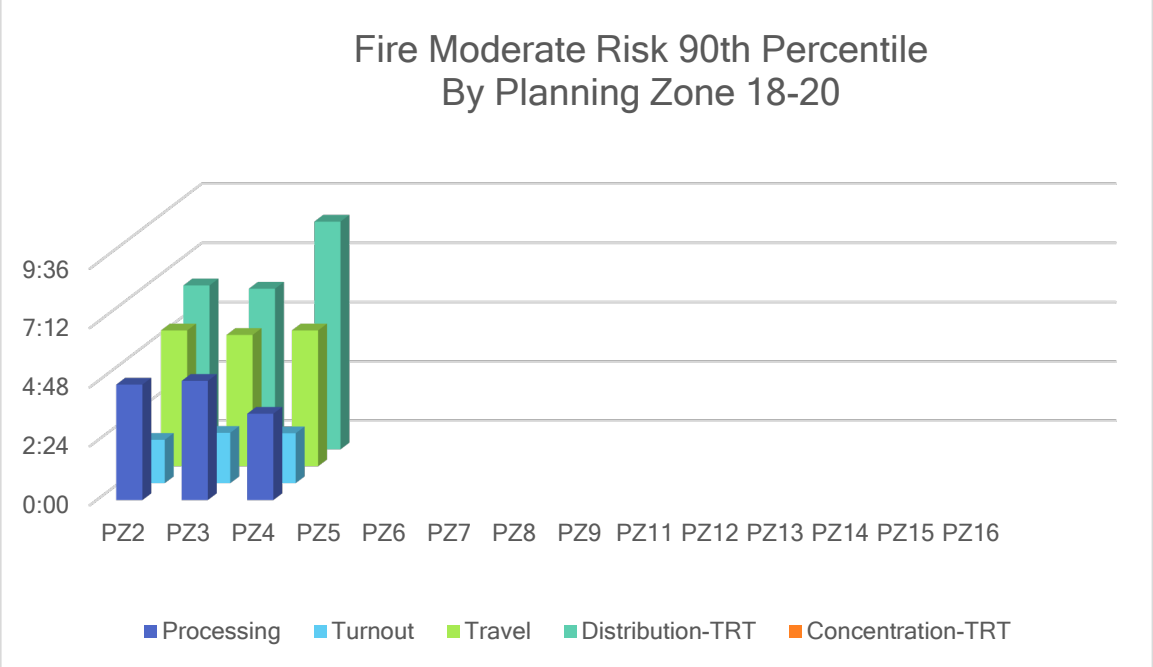
	HazMat – 90th Percentile Baseline		2018	2019	2020	2018-2020
Alarm handling	Call to Dispatch	Urban	**null**	**3:56**	**6:55**	**4:56**
		Rural	**null**	**5:01**	**2:12**	**4:58**
Turnout Time	Distribution – 1st Unit	Urban	**1:00**	**0:55**	**0:26**	**1:03**
		Rural	**null**	**1:23**	**0:05**	**1:14**
Travel Time	Distribution – 1st Unit	Urban	**4:33**	**5:17**	**2:08**	**5:07**
		Rural	**null**	**6:39**	**7:10**	**7:11**
	Concentration ERF	Urban	**12:17**	**18:30**	**8:42**	**14:04**
		Rural	**null**	**13:02**	**15:43**	**15:18**
Response Time	Distribution – 1st Unit	Urban	**null**	**8:01**	**9:09**	**10:03**
			n=	**n=**	**n=**	**n=**
		Rural	**25:16**	**13:00**	**9:25**	**12:52**
			n=	**n=**	**n=**	**n=**
	Concentration ERF	Urban	**31:02**	**20:44**	**15:24**	**19:16**
			n=	**n=**	**n=**	**n=**
		Rural	**null**	**19:23**	**17:58**	**19:46**
			n=	**n=**	**n=**	**n=**

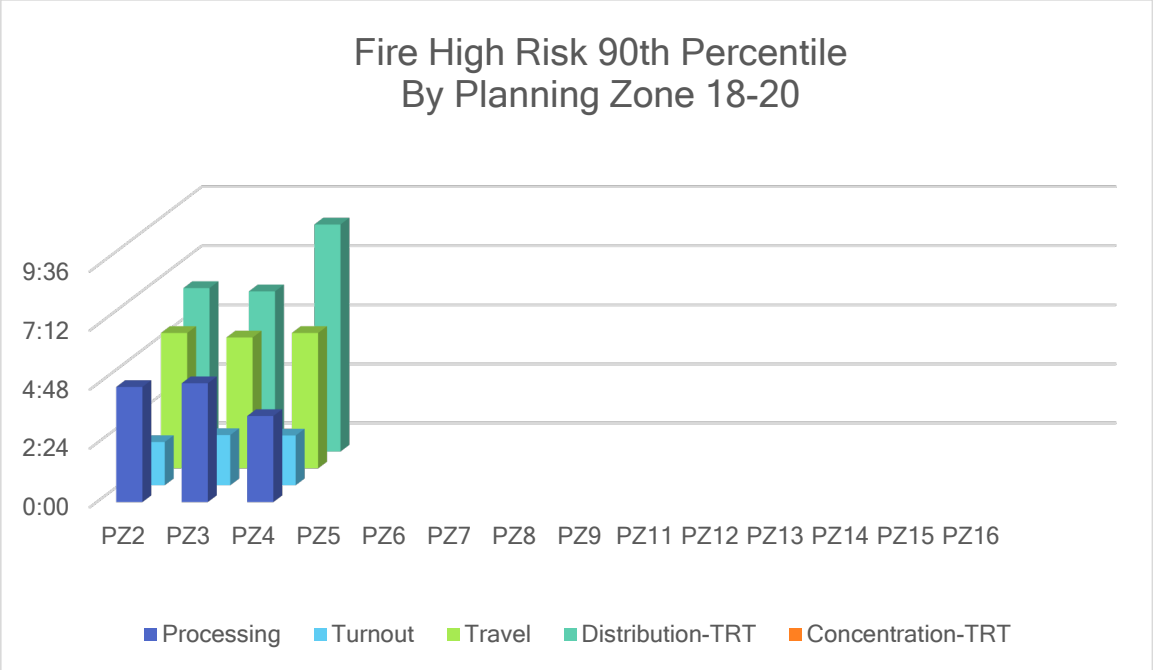
Appendix B – Baseline 90th Percentile Data by Planning Zone

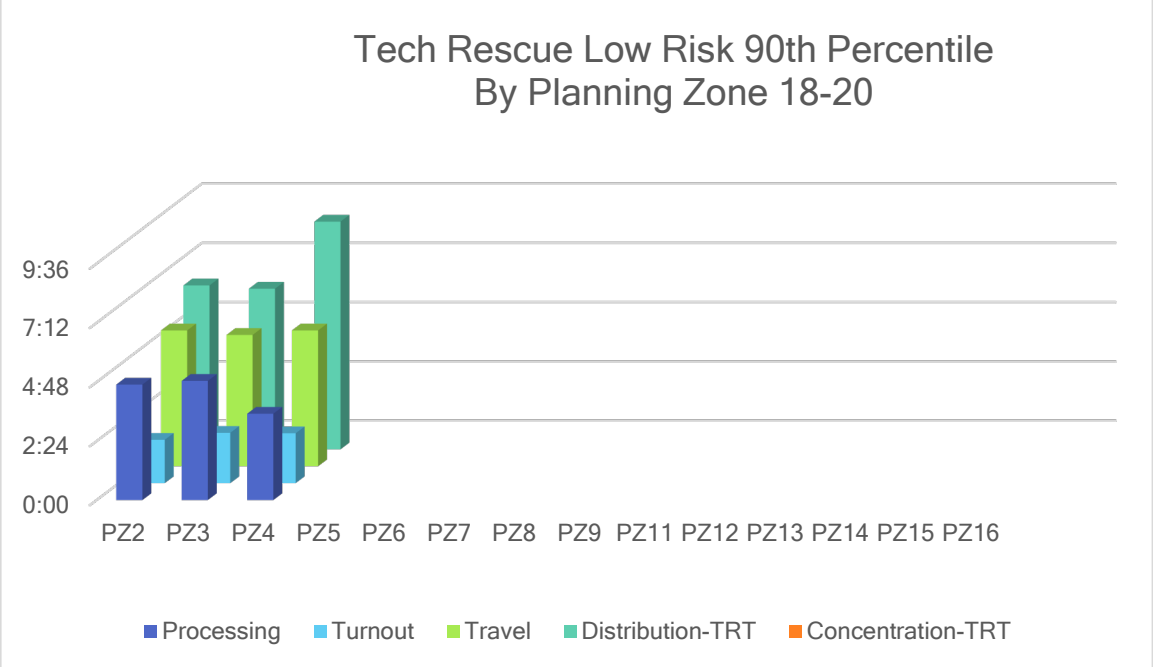


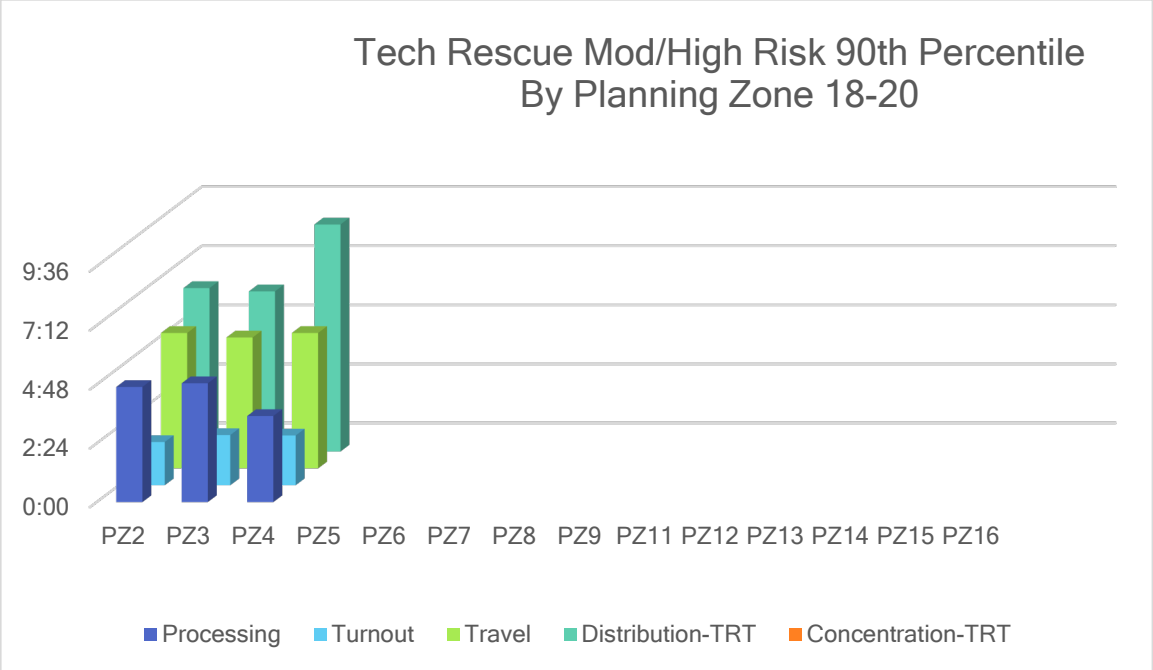


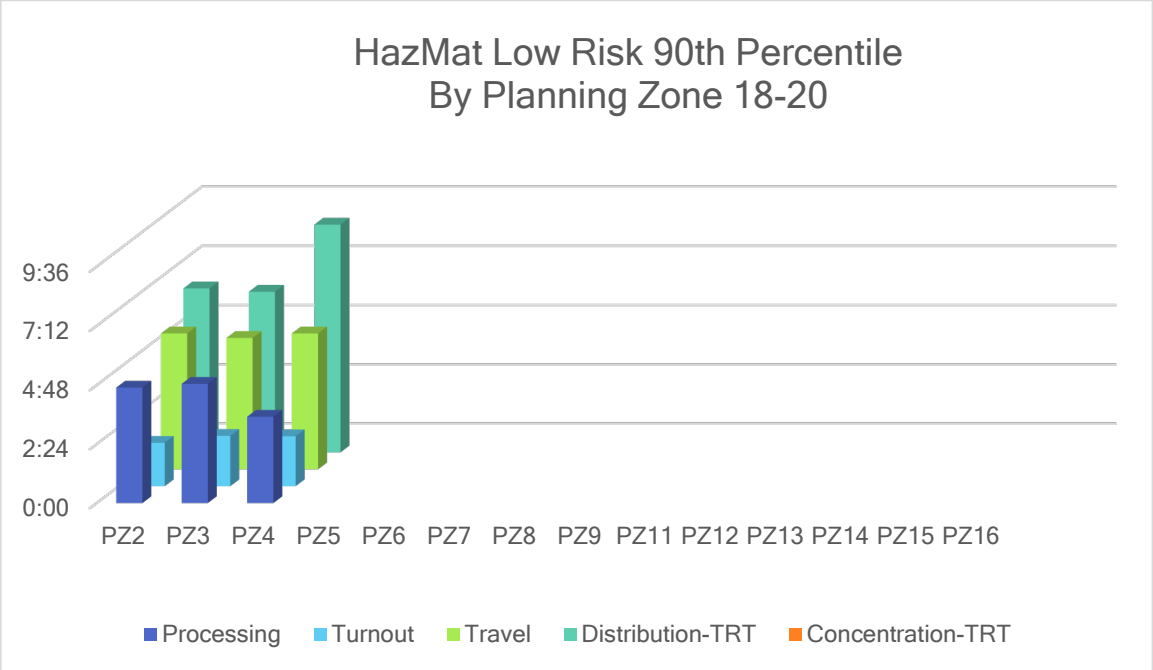

Fire Low Risk 90th Percentile
By Planning Zone 18-20
9:36
7:12
4:48
2:24
0:00
PZ2 PZ3 PZ4 PZ5 PZ6 PZ7 PZ8 PZ9 PZ11 PZ12 PZ13 PZ14 PZ15 PZ16
Processing
Turnout
Travel
Distribution-TRT
Concentration-TRT

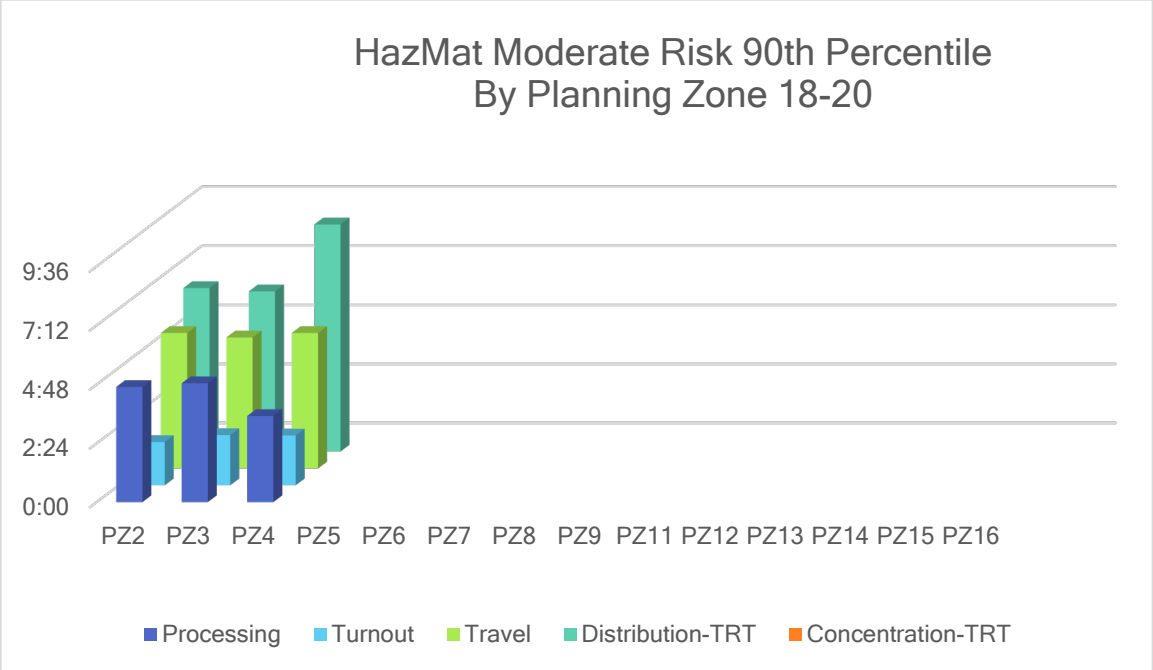

Fire Moderate Risk 90th Percentile
By Planning Zone 18-20
9:36
7:12
4:48
2:24
0:00
PZ2 PZ3 PZ4 PZ5 PZ6 PZ7 PZ8 PZ9 PZ11 PZ12 PZ13 PZ14 PZ15 PZ16
Processing
Turnout
Travel
Distribution-TRT
Concentration-TRT

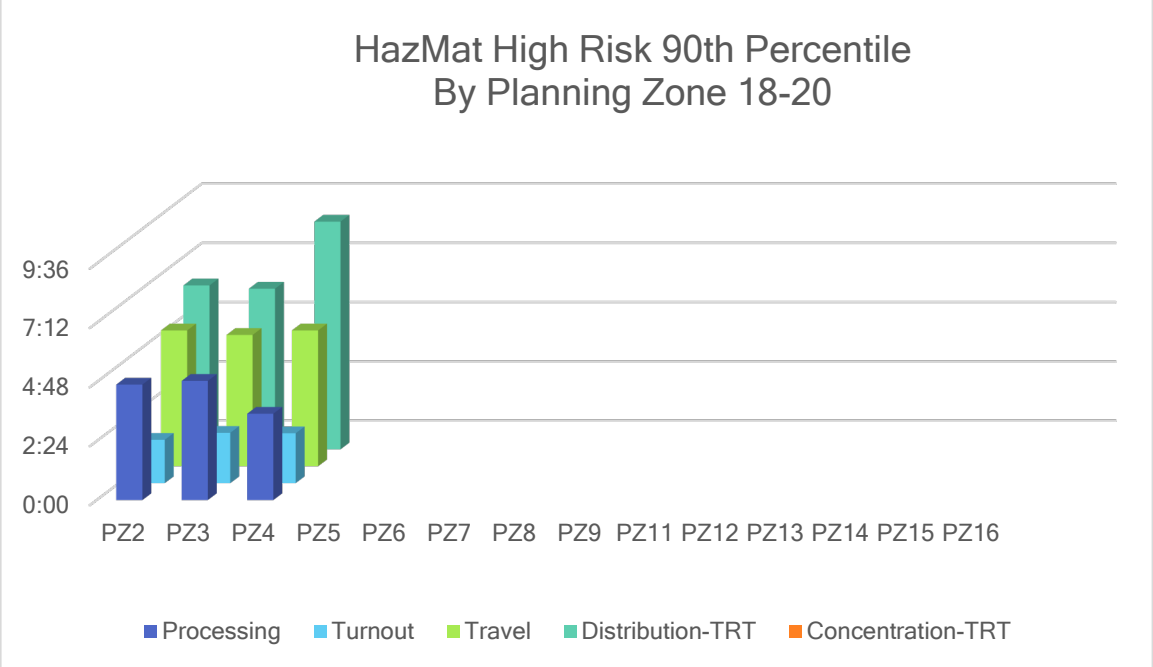

Fire High Risk 90th Percentile
By Planning Zone 18-20
9:36
7:12
4:48
2:24
0:00
PZ2 PZ3 PZ4 PZ5 PZ6 PZ7 PZ8 PZ9 PZ11 PZ12 PZ13 PZ14 PZ15 PZ16
Processing
Turnout
Travel
Distribution-TRT
Concentration-TRT


Tech Rescue Low Risk 90th Percentile
By Planning Zone 18-20
9:36
7:12
4:48
2:24
0:00
PZ2 PZ3 PZ4 PZ5 PZ6 PZ7 PZ8 PZ9 PZ11 PZ12 PZ13 PZ14 PZ15 PZ16
Processing
Turnout
Travel
Distribution-TRT
Concentration-TRT


Tech Rescue Mod/High Risk 90th Percentile
By Planning Zone 18-20
9:36
7:12
4:48
2:24
0:00
PZ2 PZ3 PZ4 PZ5 PZ6 PZ7 PZ8 PZ9 PZ11 PZ12 PZ13 PZ14 PZ15 PZ16
Processing
Turnout
Travel
Distribution-TRT
Concentration-TRT


HazMat Low Risk 90th Percentile
By Planning Zone 18-20
9:36
7:12
4:48
2:24
0:00
PZ2 PZ3 PZ4 PZ5 PZ6 PZ7 PZ8 PZ9 PZ11 PZ12 PZ13 PZ14 PZ15 PZ16
Processing
Turnout
Travel
Distribution-TRT
Concentration-TRT


HazMat Moderate Risk 90th Percentile
By Planning Zone 18-20
9:36
7:12
4:48
2:24
0:00
PZ2 PZ3 PZ4 PZ5 PZ6 PZ7 PZ8 PZ9 PZ11 PZ12 PZ13 PZ14 PZ15 PZ16
Processing
Turnout
Travel
Distribution-TRT
Concentration-TRT

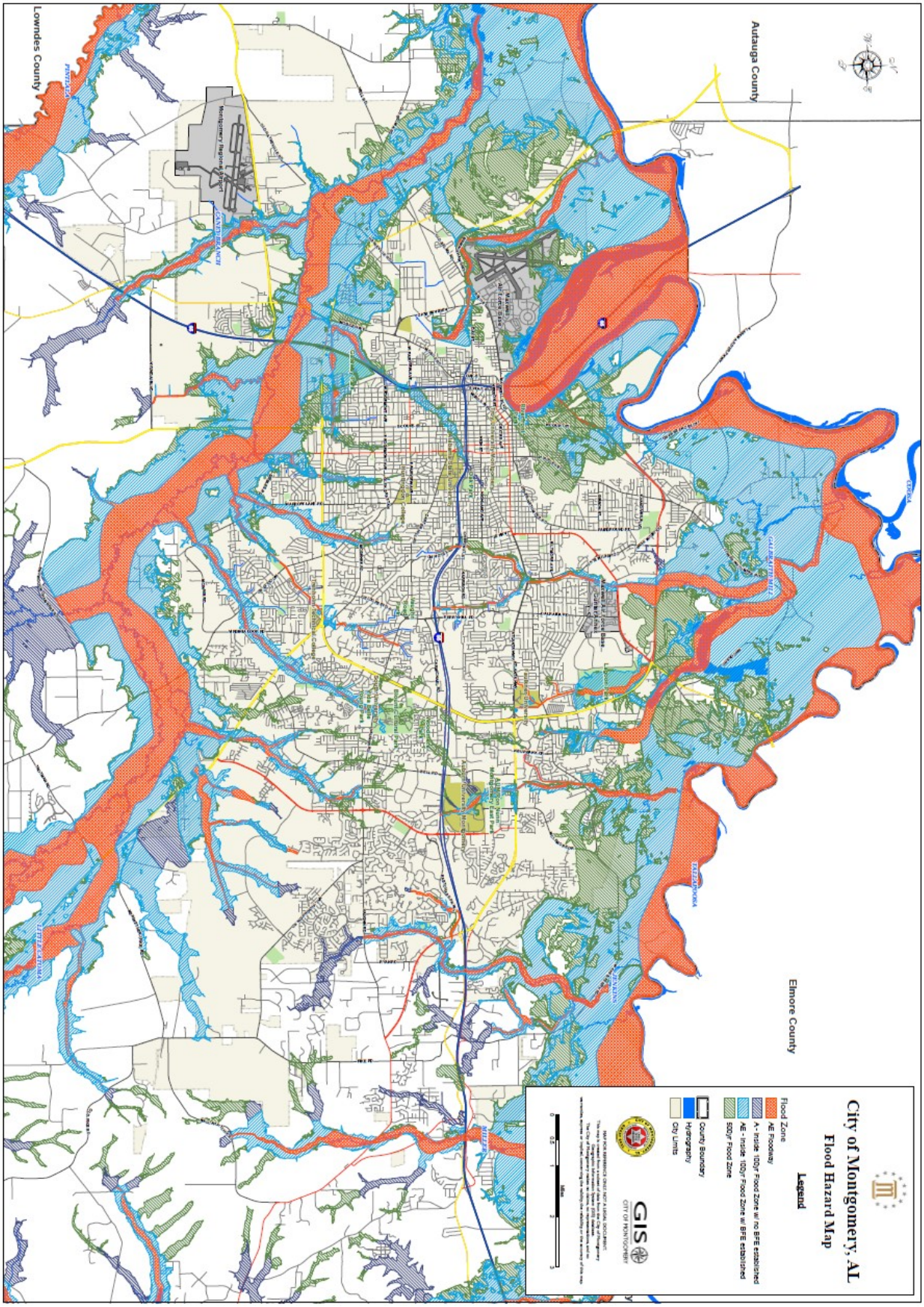

HazMat High Risk 90th Percentile
By Planning Zone 18-20
9:36
7:12
4:48
2:24
0:00
PZ2 PZ3 PZ4 PZ5 PZ6 PZ7 PZ8 PZ9 PZ11 PZ12 PZ13 PZ14 PZ15 PZ16
Processing
Turnout
Travel
Distribution-TRT
Concentration-TRT

Appendix C – Social Vulnerability Scoring System

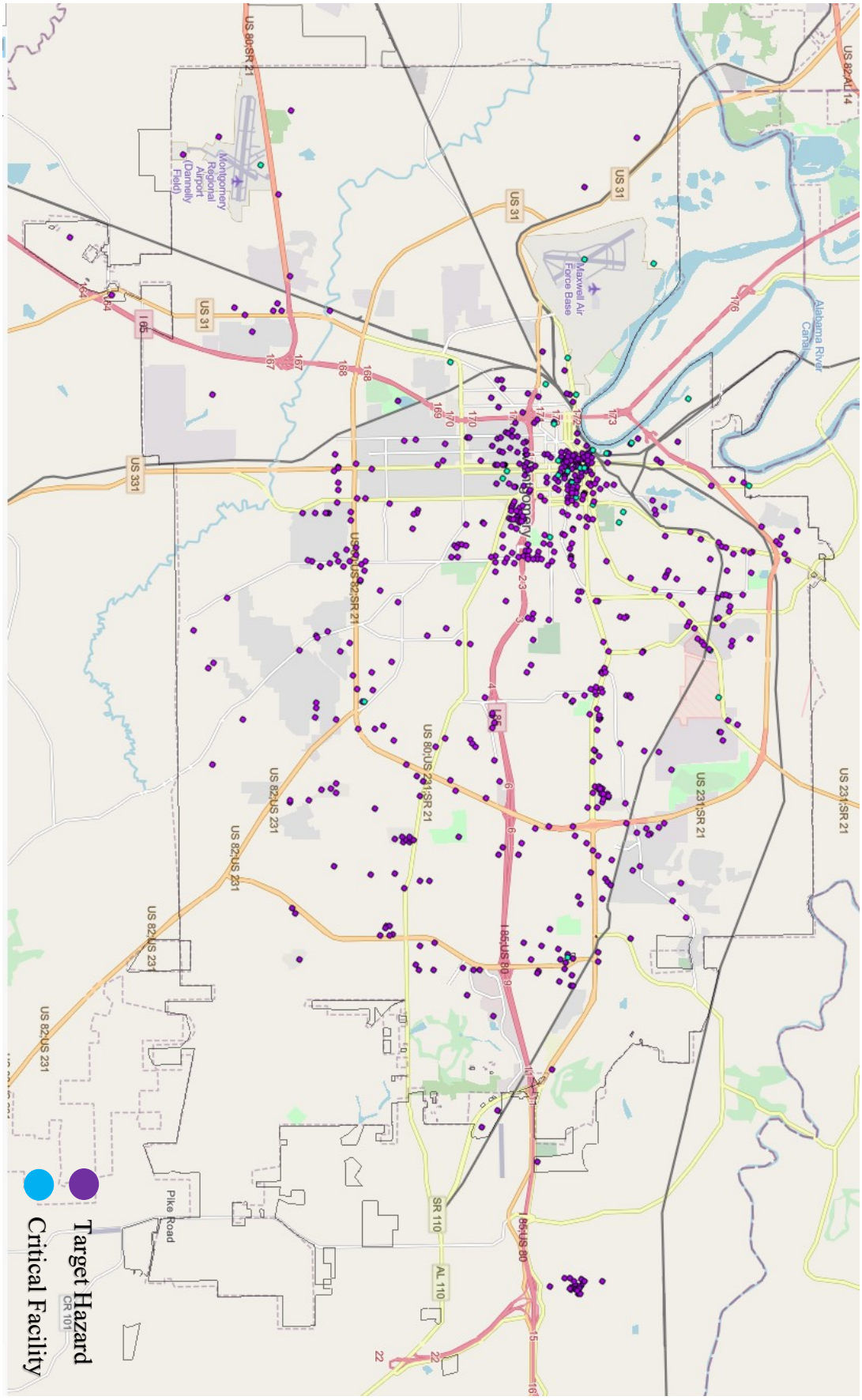
Planning Zone	Population Density	Class	Median Age	Unemployment	Vacant Homes	Per Capita Income	Median Family Income	Social Vunerability Score
2	1146	Urban	39.1	20.7	23.9	16700	19060	22
3	2384	Urban	41.5	12.2	12	35164	57796	14
4	459	Rural	36.3	23	20.4	12850	18411	20
5	1200	Urban	36	12.1	7.2	22995	45608	11
6	3048	Dense Urban	31.7	17.8	19	21140	36046	21
7	2680	Urban	34.1	12.6	12	39074	62422	12
8	2003	Urban	33	17.3	18.6	14881	29427	21
9	2276	Urban	31.1	17.2	14.8	20128	33872	20
11	2066	Urban	42.3	14.2	8	27949	50219	16
12	1451	Urban	37.4	17.3	12.2	20777	37482	15
13	1772	Urban	40.1	10.7	6	42080	76419	9
14	297	Rural	40	26.5	6.9	14284	24399	19
15	1476	Urban	35.4	9.8	7.2	40348	72233	7
16	560	Suburban	37	9.7	3.6	47485	106586	5
		Average	36.78571429	15.79285714	12.27142857	26846.78571	47855.71429	

	MFI	PCI	Vac %	Uneml %	Age %	
	18411	12850	23.9	26.5	31.1	42.3
5	36046	19777	19.84	23.14	32.37	41.2
4	53681	26704	15.78	19.78	33.48	40.09
3	71316	33631	11.72	16.42	34.58	38.99
2	88951	40558	7.66	13.06	35.68	37.89
1	106586	47485	3.6	9.7	36.78	36.78

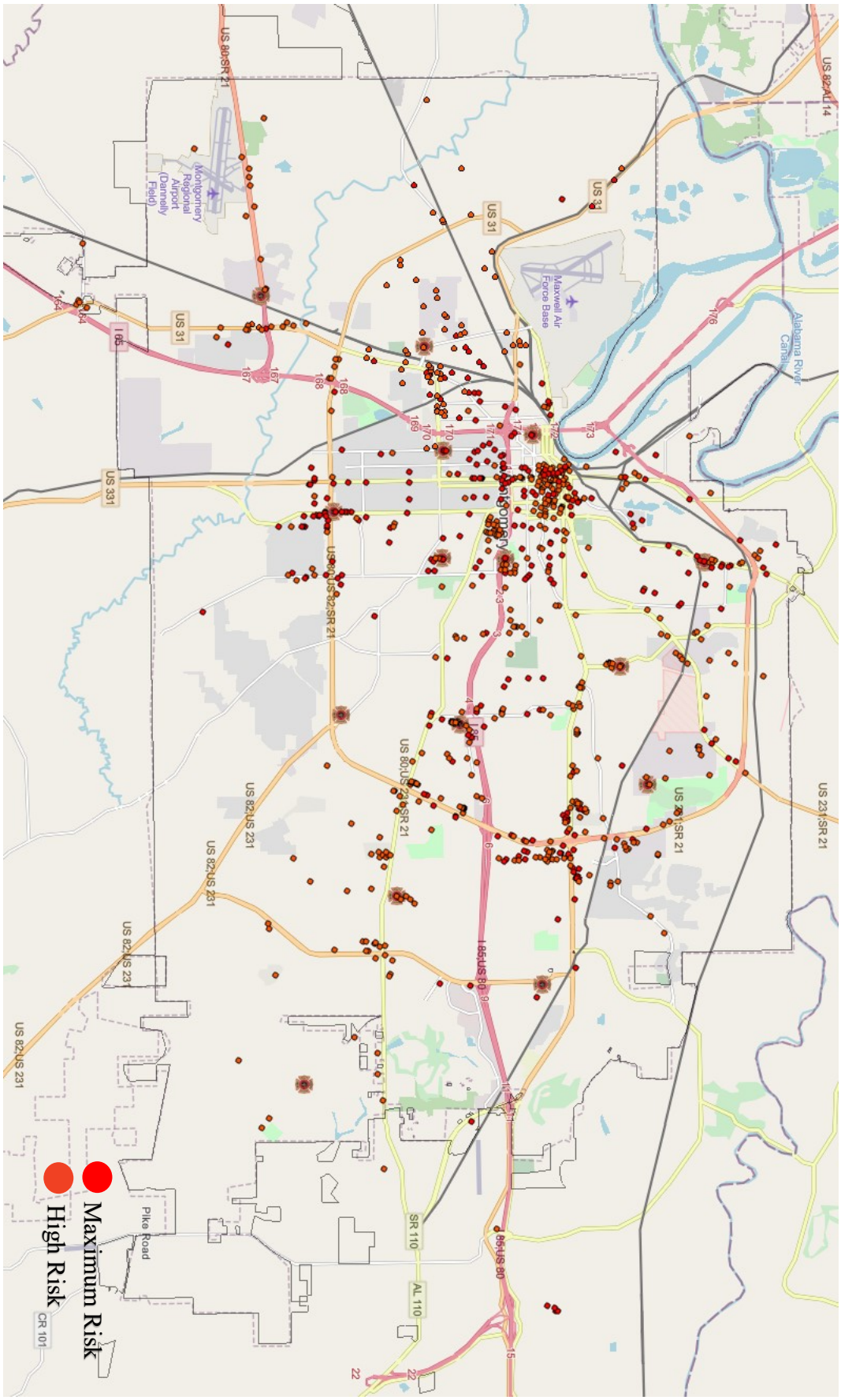
Appendix D – City of Montgomery Flood Map



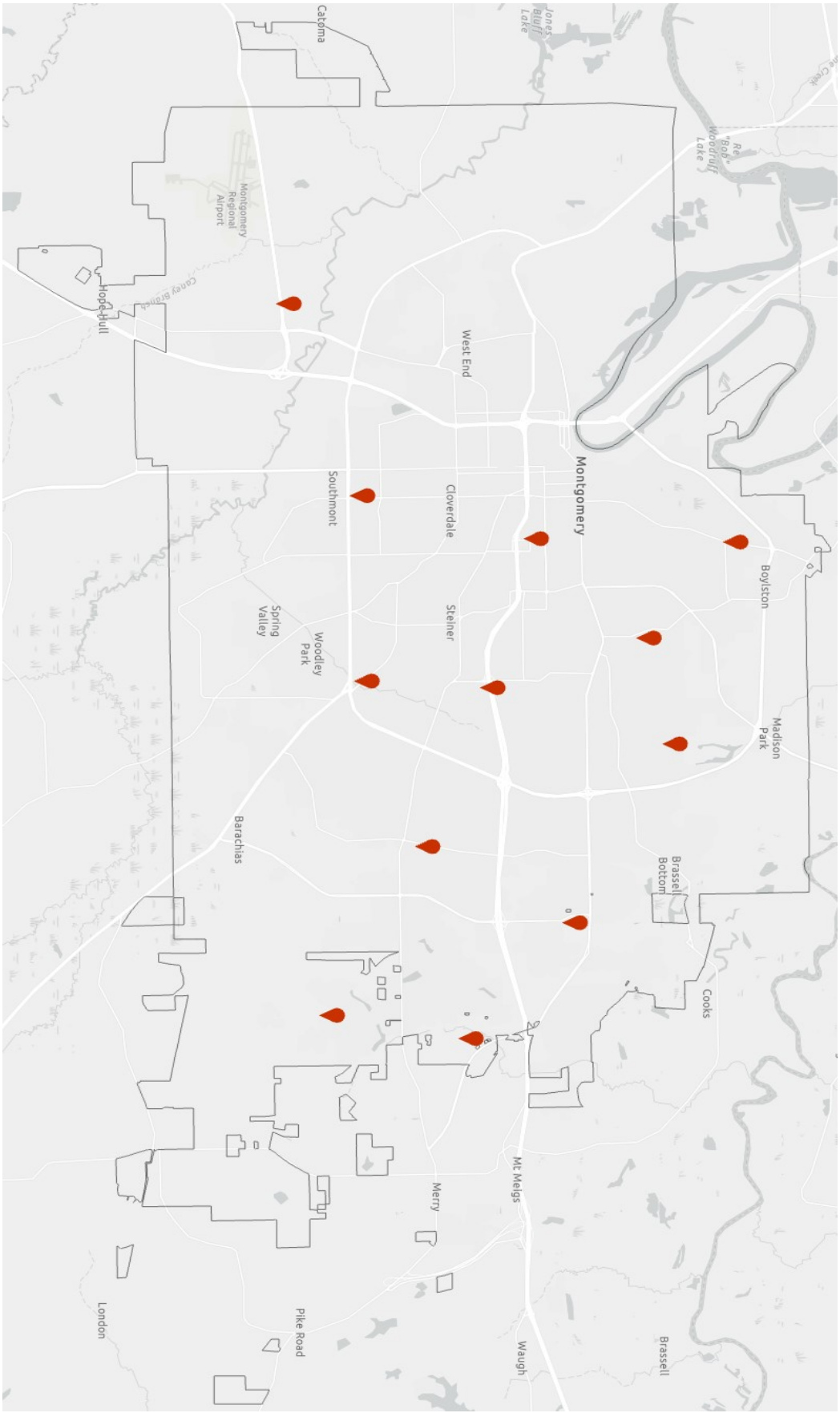
Appendix E – Critical Facilities & Target Hazards



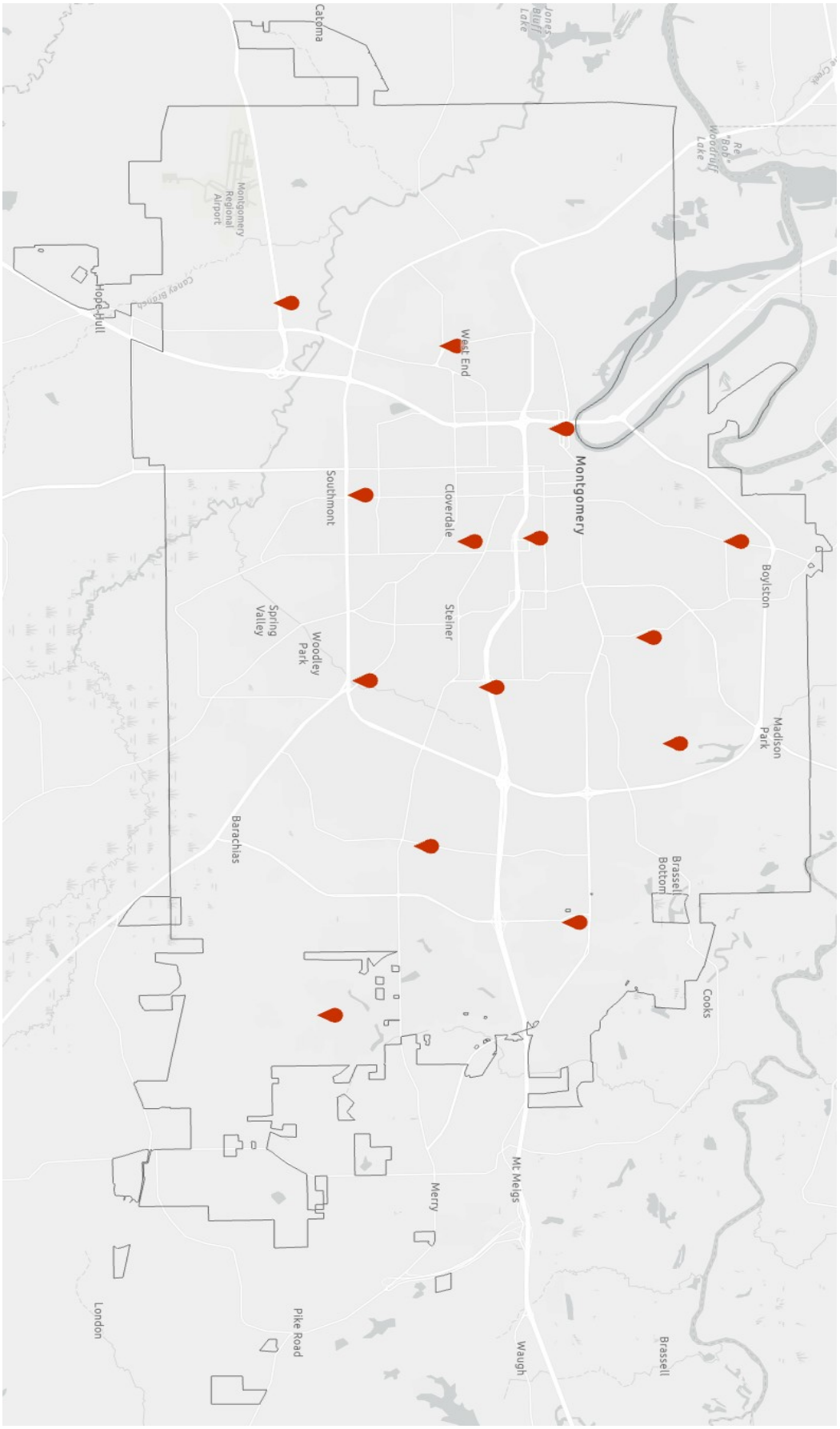
Appendix F – Maximum/High Risk Occupancies



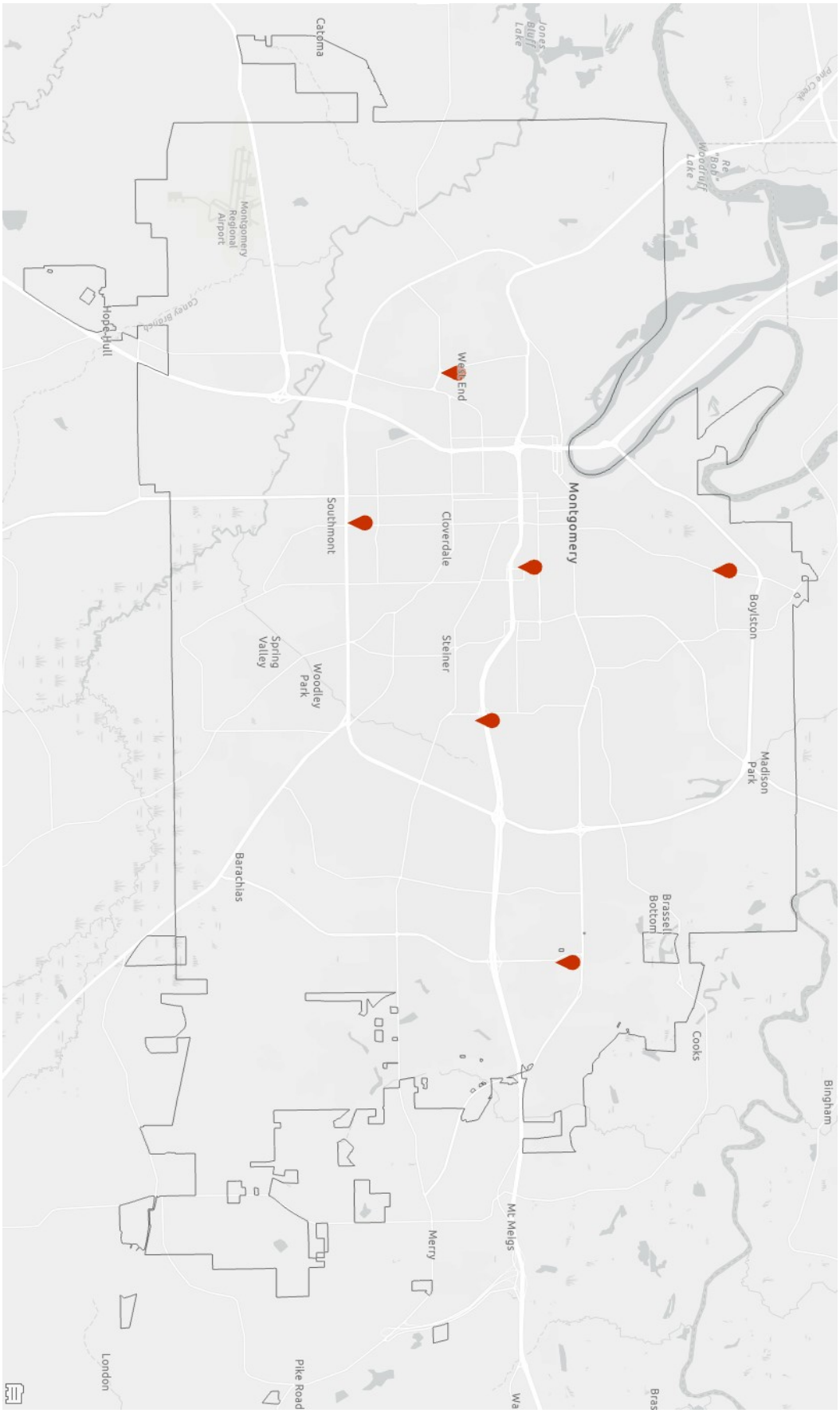
Appendix G – Advanced Life Support Ambulance Deployment



Appendix H – Engine Company Deployment

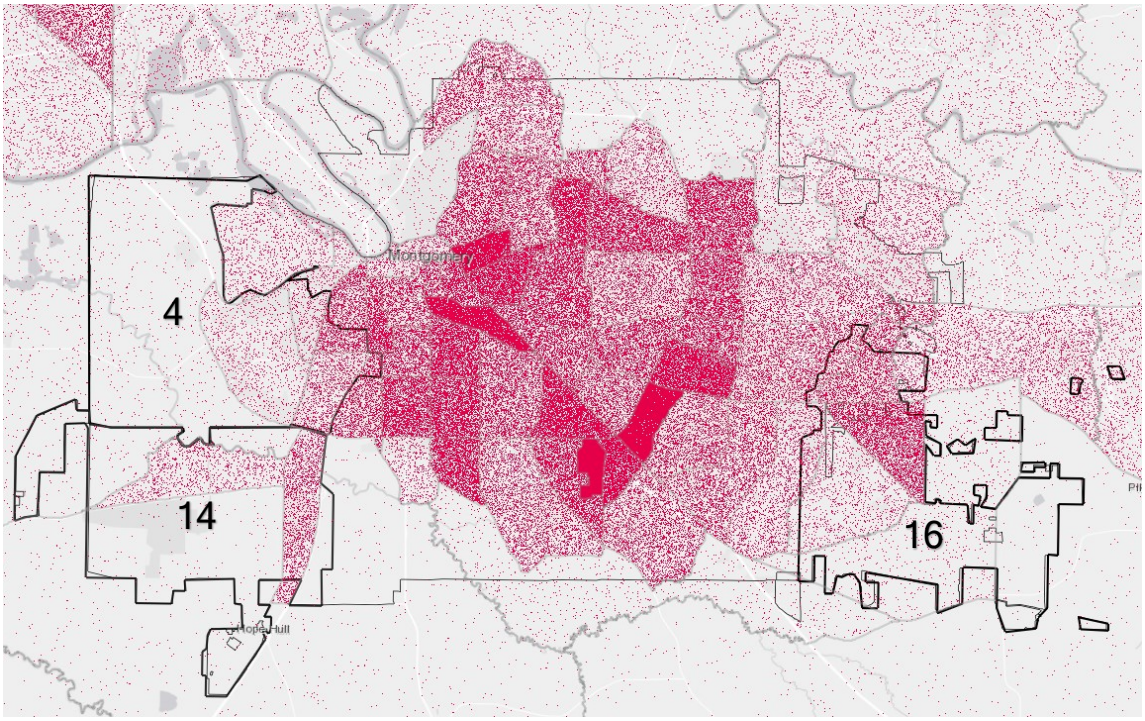


Appendix I – Ladder Truck Deployment

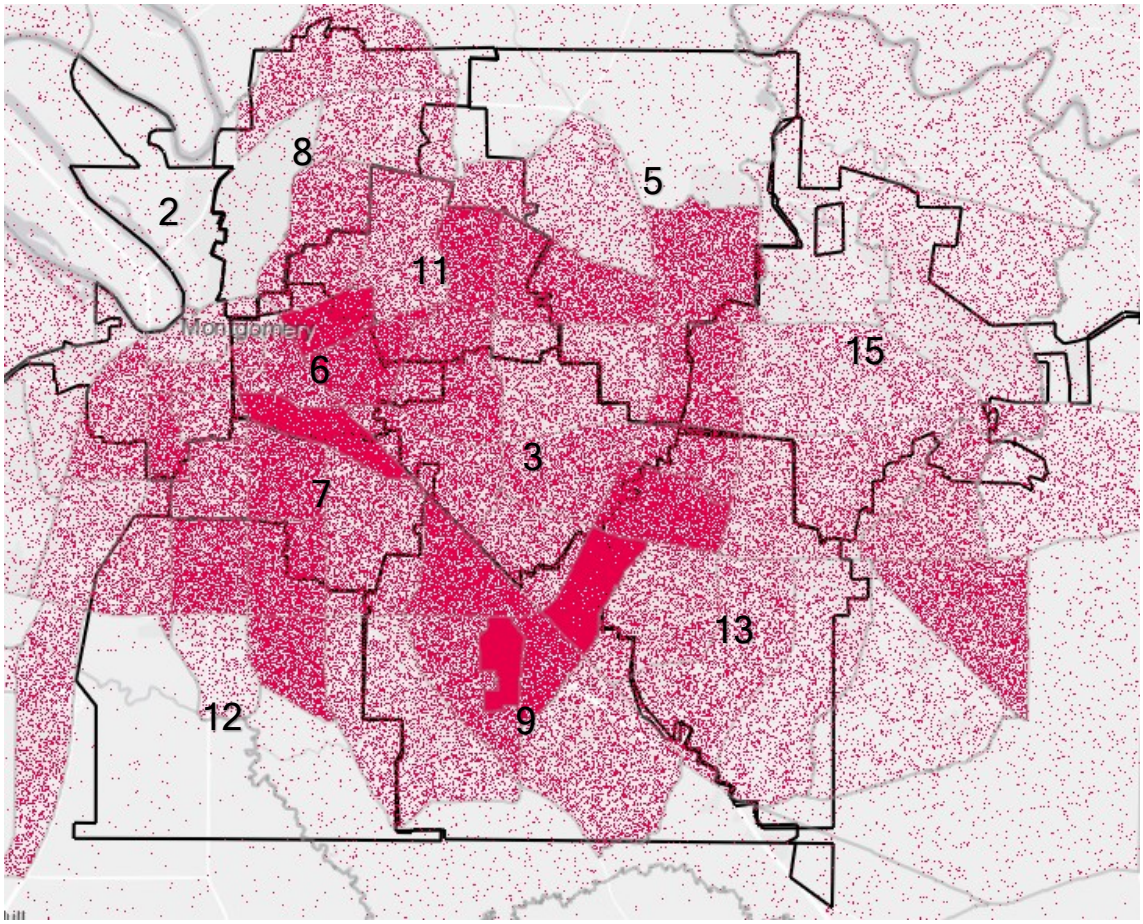


Appendix J – Population Density Dot Map

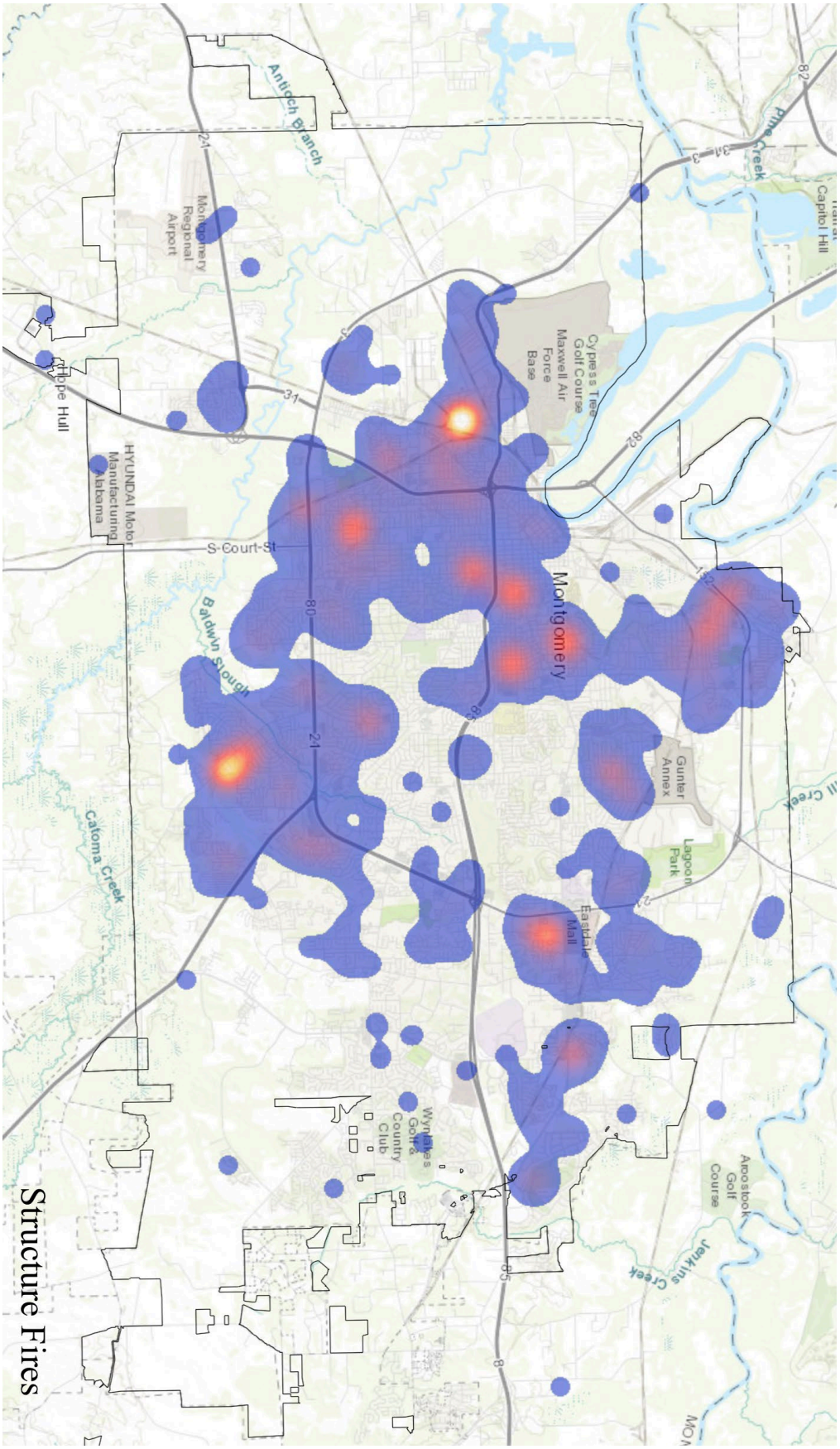
Rural Zones



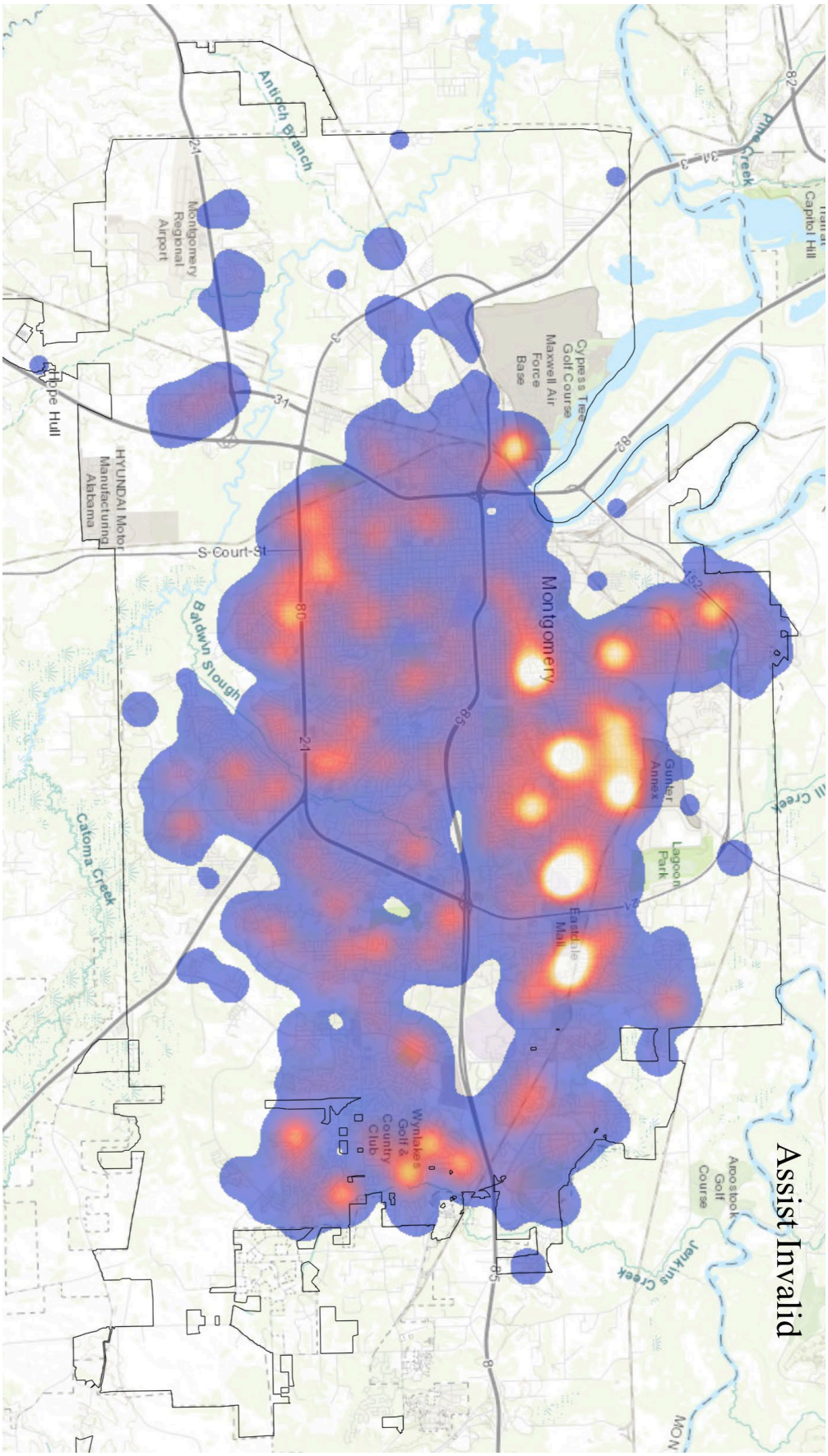
Urban Zones



Appendix K – Structure Fire Heat Map 2018-2020



Appendix L – Patient Assists 2018-2020



Appendix M – Average Dispatch to Arrival by Unit 2018-2020

Montgomery Fire/Rescue

Year 2018

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
E2	03:50	03:25	02:42	03:29	03:23	03:01	03:08	03:34	03:03	02:44	03:12	03:37	03:15
E3	04:22	04:27	04:17	04:32	04:28	05:00	03:58	04:04	04:05	04:28	04:15	04:35	04:22
E4	04:54	04:12	04:41	04:30	04:00	04:32	04:28	04:18	04:33	04:12	04:23	04:45	04:28
E5	05:14	05:25	05:14	05:16	05:10	05:08	05:15	05:09	05:34	05:21	05:11	05:29	05:17
E6	03:36	03:38	03:52	03:48	04:29	04:25	04:19	04:03	04:05	03:53	04:14	04:08	04:03
E7	04:26	04:19	04:16	04:05	03:52	03:40	03:30	04:21	03:53	03:51	04:06	04:23	04:03
E8	03:37	03:36	03:47	03:39	03:39	03:50	03:48	03:45	04:05	03:46	03:49	03:37	03:45
E9	04:35	04:21	04:35	04:20	04:21	04:16	04:42	04:20	04:28	04:46	04:36	04:43	04:30
E11	04:33	04:17	03:56	04:37	04:02	04:31	04:23	03:35	04:09	04:14	04:21	04:06	04:14
E12	03:49	03:17	03:22	04:02	03:10	03:52	03:25	03:27	03:09	03:17	03:45	03:45	03:33
E13	05:00	04:53	05:08	04:30	04:37	05:01	05:15	05:26	04:54	04:52	05:20	04:51	04:58
E14	04:14	04:05	04:17	04:35	04:25	04:39	04:27	04:25	04:21	04:34	04:39	04:28	04:26
E15	05:23	05:38	05:08	04:51	04:50	05:20	05:02	04:46	05:02	05:03	05:17	04:58	05:07
E16	05:26	05:19	05:36	05:37	05:19	05:46	05:16	05:10	05:30	05:38	04:48	05:33	05:26
E20	04:32	03:36	03:20	04:35	03:59	03:19	03:53	03:26	03:36	03:33	03:49	03:59	03:48
Total	04:28	04:19	04:23	04:26	04:17	04:29	04:26	04:19	04:25	04:25	04:26	04:31	04:25

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
T41	05:36	04:14	03:46	04:36	04:42	05:27	06:45	04:14	04:46	04:46	05:39	05:31	04:59
T42	05:27	04:13	04:51	04:32	04:11	04:50	04:29	03:36	04:28	04:08	04:31	04:57	04:32
T43	04:33	03:32	04:34	04:47	03:36	04:29	03:39	04:48	04:35	04:20	04:23	03:39	04:17
T44	04:01	05:11	02:29	04:53	04:24	04:17	04:20	05:53	02:07	05:48	04:46	03:12	04:20
T45	05:30	06:10	06:44	05:11	03:57	05:10	05:36	05:48	04:52	05:38	03:53	05:59	05:28
T46	06:00	08:12	05:30	05:06	07:53	05:38	05:32	07:30	04:05	08:01	05:37	05:36	05:58
T47													
Total	05:18	05:01	04:42	04:51	04:27	04:53	04:51	05:06	04:14	05:03	04:49	04:53	04:52

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
C31	05:40	04:52	05:20	05:06	05:11	05:36	05:48	05:04	05:56	04:28	05:59	04:53	05:18
C32	07:31	05:15	06:14	05:08	06:02	10:06	05:41	06:15	05:55	06:38	07:03	05:18	06:25
C33	05:07	03:23	05:03	05:31	05:32	05:05	04:47	05:09	04:58	04:07	04:29	05:30	04:54
C34	05:30	06:24	06:12	07:35	05:52	06:10	06:22	05:26	06:22	06:16	05:43	06:14	06:07
Total	05:42	04:46	05:31	05:30	05:31	06:28	05:32	05:19	05:39	05:09	05:39	05:19	05:32

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
R90	04:08	04:14	04:16	04:07	04:10	04:13	04:03	04:00	04:07	04:02	04:05	04:01	04:07
R91	05:23	04:56	05:07	04:59	05:07	05:15	05:25	05:10	04:55	04:57	04:56	04:55	05:06
R92	05:05	04:53	05:34	05:16	05:27	05:28	05:03	05:03	04:50	04:56	04:49	05:20	05:09
R93	04:16	04:14	04:12	04:15	04:32	04:19	04:12	04:03	04:22	04:21	04:16	04:23	04:17
R94	03:57	03:45	03:54	04:03	04:00	03:46	03:58	03:54	03:54	04:05	04:00	03:53	03:56
R95	04:42	04:55	04:34	04:48	04:50	05:15	04:49	04:57	04:27	04:26	04:11	04:31	04:42
R96	05:04	04:56	05:05	04:47	04:57	04:49	04:58	04:46	04:41	04:47	04:41	05:02	04:53
R97	05:02	04:51	04:45	04:54	04:52	05:02	04:51	05:20	04:40	04:57	04:47	05:06	04:55
R98	04:23	04:22	04:11	04:10	04:13	04:31	04:13	04:14	04:28	04:41	04:09	04:22	04:20
RE5	05:12	05:20	05:20	05:23	05:10	05:06	05:12	05:12	05:32	05:24	05:10	05:28	05:17
RE8	03:33	03:33	03:49	03:36	03:35	03:42	03:42	03:41	04:05	03:42	03:46	03:38	03:42
RE9	04:44	04:21	04:55	04:08	04:13	04:17	04:38	04:23	04:25	04:50	04:40	04:34	04:29
RE14	04:03	04:05	04:30	04:35	04:17	04:37	04:12	04:17	04:10	04:29	04:47	04:24	04:22
RE16	05:43	05:21	05:26	05:45	05:17	05:46	05:10	05:08	05:18	05:29	05:00	05:17	05:24
Total	04:35	04:29	04:36	04:30	04:33	04:37	04:32	04:29	04:28	04:31	04:25	04:32	04:31

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
Supp	04:36	04:23	04:30	04:32	04:22	04:39	04:32	04:25	04:30	04:30	04:32	04:36	04:31
EMS	04:35	04:29	04:36	04:30	04:33	04:37	04:32	04:29	04:28	04:31	04:25	04:32	04:31
Eng + EMS	04:33	04:26	04:32	04:29	04:28	04:34	04:30	04:26	04:27	04:30	04:25	04:32	04:29
Total	04:35	04:27	04:34	04:31	04:29	04:38	04:32	04:27	04:29	04:31	04:27	04:33	04:31

Montgomery Fire/Rescue

Year 2019

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
E2	03:21	02:58	03:34	03:13	03:20	03:17	03:26	03:05	03:35	03:24	03:15	03:00	03:17
E3	04:54	04:38	04:05	04:23	04:21	04:21	04:37	04:28	04:23	04:31	03:48	04:28	04:24
E4	04:36	04:42	03:58	04:09	04:24	03:50	03:43	04:46	03:34	04:01	04:05	03:50	04:08
E5	05:32	05:36	05:09	05:11	05:08	05:21	05:33	05:05	05:06	05:12	05:22	05:05	05:16
E6	04:09	04:04	03:37	03:59	03:47	03:53	03:54	03:49	03:37	03:37	03:57	04:04	03:52
E7	04:19	04:44	04:17	04:01	03:49	03:58	03:52	03:50	04:14	03:42	03:59	04:14	04:04
E8	03:45	03:39	03:44	03:29	03:38	04:02	03:40	03:49	03:42	03:37	03:50	03:31	03:42
E9	04:47	04:35	04:00	03:54	04:03	04:27	03:53	03:56	04:13	04:21	04:06	04:38	04:14
E11	04:05	04:13	04:04	04:08	04:09	04:07	04:26	04:52	04:40	04:04	04:33	04:45	04:19
E12	04:14	03:37	03:24	05:59	03:29	04:12	03:46	04:11	03:59	03:53	03:51	03:31	04:00
E13	04:29	04:56	04:37	05:04	04:45	04:12	04:13	05:19	03:58	05:10	05:03	04:29	04:42
E14	04:16	04:04	04:15	03:59	04:34	04:22	04:48	04:10	04:14	04:32	04:05	04:35	04:20
E15	04:56	04:35	05:25	05:10	04:43	05:22	04:59	04:53	05:08	04:24	05:18	05:01	05:00
E16	05:30	05:03	05:07	05:11	05:09	05:15	05:12	04:49	04:53	04:23	05:19	04:53	05:02
E20	04:16	04:51	04:26	03:23	03:47	04:08	04:31	04:59	03:30	03:26	03:28	03:42	04:01
Total	04:31	04:27	04:16	04:21	04:15	04:24	04:23	04:22	04:17	04:15	04:19	04:20	04:21

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
T41	05:26	04:26	06:14	04:54	03:47	04:40	05:18	05:33	04:52	03:55	05:18	04:42	04:54
T42	04:10	04:15	04:15	04:03	03:50	05:08	04:26	03:15	03:32	04:09	03:59	04:53	04:09
T43	05:48	04:05	04:35	03:40	04:24	05:21	05:08	04:17	04:17	05:10	04:52	05:03	04:43
T44	03:53	03:17	06:00	03:26	03:33	04:17	04:33	07:17	05:27	03:23	04:36	04:11	04:32
T45	05:08	06:52	06:00	05:33	04:39	04:30	04:56	04:06	05:11	06:22	05:58	05:19	05:24
T46	06:36	05:30	05:45	06:54	04:14	06:10	05:15	05:10	06:41	05:29	05:04	06:19	05:49
T47													
Total	05:09	04:37	05:13	04:49	04:07	05:09	04:55	04:38	04:48	04:46	05:10	05:05	04:53

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
C31	05:41	05:51	05:50	05:30	05:23	04:44	04:41	05:23	05:38	05:23	05:10	04:54	05:24
C32	06:21	06:09	07:10	05:44	05:58	04:05	08:10	06:19	05:04	05:40	05:26	06:42	06:09
C33	06:13	05:01	05:06	05:28	04:41	05:58	04:52	05:20	05:45	05:25	06:23	04:34	05:23
C34	05:59	05:24	05:20	04:58	05:41	05:32	04:53	05:54	06:03	05:54	05:42	04:01	05:27
Total	06:01	05:34	05:42	05:28	05:15	05:17	05:36	05:43	05:40	05:34	05:44	04:54	05:33

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
R90	04:12	04:01	04:24	04:20	04:10	04:09	04:08	04:17	04:00	04:15	04:09	04:27	04:13
R91	05:01	04:54	05:09	04:49	04:55	04:53	04:23	04:45	04:33	04:47	04:28	04:32	04:45
R92	05:12	04:59	04:35	04:37	05:06	05:20	05:00	05:08	05:01	04:51	04:51	05:12	04:59
R93	04:15	04:23	03:46	04:08	04:09	04:17	04:03	04:16	04:09	04:01	04:03	04:09	04:08
R94	04:29	04:05	03:26	03:45	03:49	03:59	04:01	04:00	04:01	04:02	04:07	04:02	03:58
R95	04:41	04:44	04:40	04:44	04:31	04:25	04:47	04:38	04:37	04:23	04:42	04:39	04:38
R96	04:55	05:00	05:04	04:42	04:37	04:42	04:37	04:27	04:21	04:33	04:08	04:14	04:36
R97	05:19	05:24	04:43	04:31	05:05	04:56	05:00	05:01	05:01	04:39	04:49	04:53	04:57
R98	04:34	04:17	04:28	04:28	04:25	04:34	04:24	04:12	04:20	04:16	04:36	04:11	04:24
RE5	05:36	05:38	05:06	05:13	05:07	05:17	05:29	05:01	05:12	05:17	05:16	05:03	05:16
RE8	03:43	03:38	03:41	03:31	03:40	04:00	03:39	03:47	03:42	03:37	03:52	03:35	03:42
RE9	04:43	04:18	03:49	03:37	04:06	04:32	03:49	03:30	04:01	04:18	03:54	04:38	04:06
RE14	04:06	03:57	04:05	03:54	04:22	04:21	04:41	04:08	03:57	04:22	03:56	04:28	04:12
RE16	05:19	05:12	05:19	04:56	04:55	05:27	04:55	04:55	05:00	04:00	05:07	05:16	04:59
Total	04:40	04:32	04:23	04:23	04:28	04:32	04:26	04:25	04:23	04:21	04:23	04:25	04:27

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
Supp	04:41	04:33	04:26	04:28	04:18	04:30	04:30	04:28	04:24	04:21	04:27	04:24	04:27
EMS	04:40	04:32	04:23	04:23	04:28	04:32	04:26	04:25	04:23	04:21	04:23	04:25	04:27
Eng + EMS	04:37	04:30	04:21	04:23	04:24	04:30	04:25	04:24	04:21	04:19	04:22	04:23	04:25
Total	04:40	04:33	04:24	04:25	04:25	04:32	04:27	04:26	04:23	04:21	04:24	04:25	04:27

Montgomery Fire/Rescue

Year 2020

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
E2	03:21	03:17	03:23	04:02	03:46	03:57	03:19	03:41	03:25	03:16	03:34	03:50	03:34
E3	04:13	03:50	04:36	04:19	03:53	04:12	04:16	04:15	04:26	04:28	04:18	03:43	04:13
E4	03:36	03:59	04:13	03:34	03:53	04:38	04:16	04:34	03:56	04:28	04:42	05:02	04:13
E5	05:32	05:18	05:16	05:24	05:08	05:21	05:09	05:16	05:12	05:11	05:13	05:13	05:16
E6	03:39	03:54	03:44	03:49	03:30	04:01	03:51	03:51	04:00	04:20	03:48	04:07	03:54
E7	04:06	03:59	04:10	04:24	03:54	04:28	05:00	04:02	03:58	04:37	04:03	03:49	04:13
E8	03:26	03:30	03:40	03:32	03:36	03:35	03:42	03:46	03:38	03:57	03:58	04:05	03:42
E9	04:19	04:15	04:26	04:36	04:34	04:31	04:17	04:42	04:29	04:20	04:48	04:54	04:30
E11	04:28	04:33	04:25	04:24	05:02	04:17	04:40	04:35	04:52	04:31	04:30	05:32	04:39
E12	03:32	03:29	03:34	03:40	03:48	04:45	04:27	04:19	04:20	04:35	04:19	04:16	04:06
E13	05:18	05:03	04:30	04:54	04:38	05:11	05:11	04:24	04:29	06:00	05:13	04:49	04:59
E14	04:28	04:31	04:28	04:02	04:09	04:17	04:20	04:19	04:18	04:19	04:11	04:19	04:18
E15	04:51	04:27	04:59	04:33	04:58	05:16	05:14	04:38	05:39	05:01	05:12	05:05	04:59
E16	05:04	04:54	05:12	05:15	05:13	05:13	05:10	04:45	05:36	05:38	05:04	05:05	05:12
E20	04:34	03:10	03:20	03:59	04:35	03:50	03:28	04:01	04:22	03:48	04:02	03:16	03:51
Total	04:22	04:13	04:21	04:22	04:18	04:29	04:28	04:24	04:26	04:34	04:30	04:34	04:25

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
T41	04:06	05:53	02:42	05:12	06:19	05:10	04:39	06:21	06:15	04:23	04:14	04:48	04:49
T42	04:28	03:26	04:07	04:21	03:27	03:58	04:57	02:56	04:17	03:46	04:02	03:33	03:56
T43	03:48	03:59	04:52	03:51	04:48	04:17	04:17	06:12	13:04	04:51	05:25	04:41	05:05
T44	04:11	03:53	04:40	06:59	05:53	03:32	03:13	03:37	04:26	03:34	04:56	04:37	04:28
T45	05:22	05:25	05:00	05:05	06:07	05:59	05:37	05:39	05:42	05:18	07:10	05:56	05:39
T46	05:58	05:11	05:58	05:28	05:12	05:38	05:08	04:36	05:03	06:17	07:17	06:22	05:41
T47													
Total	04:41	04:27	04:40	05:01	05:13	04:55	04:47	04:52	06:11	04:56	05:24	04:52	05:00

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
C31	05:11	04:53	04:26	05:16	05:14	06:20	04:52	05:25	04:48	04:49	06:07	04:56	05:08
C32	06:49	06:07	06:11	06:46	05:48	05:57	05:40	08:23	04:57	07:29	07:21	07:01	06:28
C33	05:00	04:56	05:12	05:03	05:20	05:26	05:42	05:51	06:56	05:41	04:49	05:31	05:26
C34	04:56	05:49	04:28	04:48	05:30	06:47	05:54	05:46	05:47	05:09	06:12	05:14	05:27
Total	05:25	05:18	05:02	05:24	05:25	05:54	05:33	06:07	05:29	05:52	05:48	05:43	05:35

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
R90	04:18	04:19	04:45	04:18	04:28	04:32	04:39	04:19	04:27	04:17	04:18	04:21	04:25
R91	04:34	04:59	05:01	04:42	04:49	05:09	04:53	05:27	04:50	05:13	05:01	05:09	04:59
R92	05:05	04:58	05:16	05:04	05:18	05:38	05:37	05:03	05:21	05:07	05:23	05:01	05:14
R93	04:16	04:02	04:13	04:06	04:24	04:33	04:33	04:08	04:11	04:18	04:12	04:41	04:18
R94	04:09	03:52	04:12	03:57	03:55	04:35	04:29	04:15	04:13	04:19	04:21	04:13	04:13
R95	04:34	04:46	04:54	04:26	04:18	04:47	04:35	04:52	04:37	04:35	04:53	04:48	04:41
R96	04:52	04:44	04:42	04:48	04:37	04:51	04:32	04:43	04:40	04:42	04:45	04:31	04:42
R97	05:03	04:54	04:57	04:57	05:07	05:03	05:13	04:59	05:12	05:11	05:18	05:21	05:07
R98	04:27	04:12	04:26	04:30	04:35	04:26	04:40	05:15	05:05	04:58	05:14	05:12	04:44
RE5	05:25	05:07	05:16	05:32	04:57	05:16	05:13	05:10	04:57	05:02	05:07	05:08	05:11
RE8	03:23	03:26	03:43	03:31	03:32	03:31	03:42	03:43	03:36	03:52	04:00	04:13	03:42
RE9	03:57	04:01	04:05	04:21	04:27	04:22	04:07	04:38	04:20	03:54	04:14	05:08	04:16
RE14	04:28	04:24	04:16	03:51	04:08	04:19	04:18	04:13	04:07	04:12	04:12	04:11	04:12
RE16	04:47	04:30	05:11	04:48	04:42	05:11	05:07	04:52	05:27	05:19	05:00	04:56	05:01
Total	04:29	04:26	04:36	04:26	04:29	04:42	04:41	04:42	04:38	04:38	04:43	04:45	04:37

Unit	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
Supp	04:27	04:18	04:25	04:28	04:26	04:35	04:32	04:32	04:35	04:40	04:37	04:41	04:31
EMS	04:29	04:26	04:36	04:26	04:29	04:42	04:41	04:42	04:38	04:38	04:43	04:45	04:37
Eng + EMS	04:27	04:22	04:31	04:25	04:25	04:38	04:37	04:37	04:34	04:37	04:39	04:42	04:33
Total	04:28	04:23	04:32	04:27	04:28	04:40	04:38	04:39	04:37	04:38	04:41	04:44	04:35

Exhibits

Envision 2040 Montgomery's Comprehensive Plan

Montgomery City/County EMA Hazard Mitigation Plan

East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan: Phase Two

Annual Program Apprasials

Council Resolution on Strategic Plan and Community Risk Assessment/Standards of Cover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