Winter Park Fire-Rescue department

Community risk assessment Standards of cover 2016

City of Winter Park Fire Rescue

Winter Park, Florida

Community Risk Assessment and Standards of Cover

Randy B. Knight, City Manager

James E. White, Fire Chief

Dan Hagedorn, Lieutenant - Accreditation Manager

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Introduction

The Commission on Fire Accreditation International (CFAI) defines the Standards of Cover for a fire department as being those "adopted 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 technical types of response" (CFAI, 2015).

For decades, there have been numerous attempts to create a common "standard" for the services provided by firefighters and paramedics without gaining any real national consensus. However, over the past several decades industry standards have been adopted, namely by the National Fire Protection Association (NFPA), which created a consensus standard for the staffing of fire and medical response apparatus in a community. While the benchmarks found in NFPA Standard 1710 are slowly taking hold, many fire chiefs remain skeptical of its need. Some communities have adopted portions of these staffing and response mandates but few communities have the ability to completely comply.

For a local government to have confidence that their fire and emergency services are meeting the needs of the community a complete assessment of the risk must be honestly applied. The application of a tested risk assessment models allow fire chiefs and their elected leaders the ability to make educated decisions on the level of emergency services they desire.

Due to the limited amount of resources available to respond to the vast array of real emergencies, it is best that communities set response standards based on identified risks specific to their area. Fire Chiefs who don't apply a valid risk assessment model to their communities are not able to adequately educate their community's leadership of their true needs. At best, they are basing everything from daily staffing to apparatus deployment on guesswork or potentially failed past practices.

The City of Winter Park initiated the community's first self-assessment process for achieving International Accreditation in 1999. The current fire service accreditation model is supported by the International Associations of Fire Chiefs (IAFC) and the International City / County Managers Association (ICMA) and is awarded by the Commission on Fire Accreditation International (CFAI). As part of the agency self-assessment process, it is paramount that the agency qualify the community mission and vision for services. Therefore, the first comprehensive assessment of risk completed for Winter Park yielded the foundations for the current adopted Standards of Cover (SOC).

In 1999, the developed risk assessment process reviewed each and every property in several key areas of potential risk. One portion of the risk assessment calculated the total square footage for each property which yielded the needed fire flow (water) calculations for 25, 50 and 100 percent of fire involvement of the property. In addition, an assessment was performed on those areas of non-fire related risk as well as hazardous materials and technical rescue situations. While this process was deemed credible at the time, it failed in several ways to completely assess the community's risk.

On December 12, 2000, the Winter Park City Commission accepted the second edition of the agency's comprehensive Community Risk Assessment and Standard of Response Coverage (SOC). The first SOC served as the basis for decisions involving emergency services delivered by the agency throughout the city. On several occasions the document was utilized in making key community decisions by our elected officials on annexations and development.

In 2003, the agency attempted to implement a packaged community risk assessment program from the United States Fire Administration called RHAVE. Standing for Risk Hazard and Value Evaluation, RHAVE was found to be cumbersome and failed to serve as the "end-all" risk hazard tool for our community. The agency identified several factors which made the application of RHAVE in Winter Park ineffective. First, RHAVE seemed to be built for communities who were more diverse in their makeup. Knowing that Winter Park is mostly comprised of residential neighborhoods, RHAVE's scoring matrix considered the entire community to be of a "moderate risk" with scores between 15 and 39. The agency determined that using RHAVE to modify existing response patterns or zones would not be effective. It was decided that a program which would be easier to manage and could produce accurate and timely data for first responders could be developed from the examples of others.

The current method of assessing community's risk was adapted from a program found in use at the Jacksonville Naval Air Station Fire Department, Jacksonville, Florida (NASJAX). While not as detailed as RHAVE, the current Community Risk Assessment (CRA) program allows fire crews to perform specifically designed "windshield" surveys of each property in the community which points out specific areas of risk. Coupled with several other common assumptions and known facts related to a particular property, a very valid risk assessment is now in place. The current CRA gives first responders the ability to regularly review each property in their Geographical Planning Zones and become familiar with the identified levels of "risk". In addition, it provides the community more than adequate information to maintain the current SOC.

Other tools of risk assessment are applied to the community as well. Each type of service provided is reviewed and a critical tasking measurement of each tactical assignment is developed. The application of pertinent geographical informational system (GIS) data is also used to help determine the best possible deployment of fire and EMS assets throughout the city.

The agency is committed to the philosophy of maintaining those policies and procedures needed to maintain International Accreditation. While the label of "Accredited" is important to the community, the practice of risk assessment is more critical to the process of operating the fire department. In addition, the process of performing continuous risk assessment of the community provides vital information for not only our first responders, but for management as well. These important community policy decisions cannot be made without properly and thoroughly assessing the potential risk.

This edition of the Standards of Cover represent the continued commitment to a comprehensive assessment of the community's risk. Because the agency has adopted a formal process of assessing risk as a way of doing business, the city has established expectations and goals for all services provided by the agency. With the application of these policies community leaders and city residents are better informed

and make more educated decisions on the levels of emergency service they can anticipate. This document serves as the fourth such complete review of the community's risk and current deployment of fire and EMS assets. Policies and decisions are regularly made using this data, which includes not only emergency response expectations, but includes those goals the community-driven strategic plan has on every day operations.

The baselines and benchmark statements found in this edition of the SOC are based on those derived from the Commission on Fire Accreditation International's eight edition of the Fire and Emergency Services Self-Assessment Manual (FESSAM). The data included in the FESSAM is based on the work of hundreds of fire agencies worldwide who have provided similar data to the process. The fact that the FESSAM statements are broadly inclusive of all different types of communities, Winter Park's data, when applied to these benchmarks gives the community confidence that the dollars spent on fire and emergency medicine response is best utilized to provide the maximum possible benefit. One of the most important changes in this edition of the SOC is that the city's population density has increased to where the response baseline and benchmark performance goals are now measured against **Urban** communities, verse the Suburban measurements found in previous standards.

As with past documents, this fourth edition of the SOC also includes several key recommendations to offer the agency the opportunity to continuously improve the levels of service. When coupled with the latest version of the strategic plan, the SOC and the agency's responses to the accreditation self-assessment help maintain a course of constant improvement for the community.

The overarching goal of our agency is to improve the outcomes of every event and encounter we have with a resident, business owner, or visitor. This theme has been carried over into this fourth edition of the Standards of Cover. Improving Outcomes … Every Day is not just a saying. Our firefighters are trained, equipped, and staffed so that the expectations of the community are exceeded with every encounter, every day.

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Executive Summary

In the minds of the leadership of the agency it is unconscionable for a provider of emergency services to proclaim to a level of service, or demand more resources from a community, without first conducting a comprehensive and strategic assessment of the risks being faced. Only after the application of a proven and consistent risk assessment model is made by the community can an agency develop what today is referred to as the community's standard of cover performance contract.

It is the responsibility of an agency to provide the community's decision makers an educated calculation of the expected risk, what resources are available to respond to that risk, and what outcomes can be expected. All of these factors should play a role in the provision of the community's emergency services.

In the past it was common for a fire chief to state their agency had a mythical average "four minute" response time. No one questioned this time because after all, it was coming from the fire chief. In all cases, no matter when those fire department resources arrived on the scene, the fire eventually would go out. Unfortunately people also die in fires, but did they have to? How long does it really take from the time a resident calls 9-1-1 until the firefighters arrive at the front door? Many would agree that even the largest departments can't respond within those legendry four minutes.

The city of Winter Park Fire Rescue Department has always been recognized by its peers as a leader in the industry. The community expects and demands the best from all government services and places a tremendous trust and responsibility with the fire department. It was with this in mind that the agency first headed out in 1999 to conduct the first community risk assessment.

From that first assessment the community adopted a standard of cover for fire and non-fire responses. The application of this standard was city-wide and has since served the community well. Since its inception, the SOC has been used to successfully relocate two fire stations, acquire another fire station from a neighboring agency, and annex approximately one square mile of residential and commercially developed property.

In 2004, it became evident that while the existing SOC was meeting the community's expectations, maintaining the methods used to evaluate risk throughout the community was overwhelming. More commercial property was being developed and the firefighters being used to assess these occupancies were not as accurate as they needed to be. A more systematic method was needed which took advantage of available technology.

In the fall of 2004 the agency began a complete review and evaluation of the existing standard of coverage policy. It was determined the most accurate and manageable system of risk assessment for Winter Park would be to implement the system used by the Fire Department, Naval Air Station Jacksonville, Florida. When applied to the Winter Park community it yielded an accurate and manageable calculation of each commercial and major multi-family residential structure in the community.

The Community Risk Assessment (CRA) statistical data was used to support the application of the standard of cover and determine future needs for the agency based on the real risk to the community. The real risk, once assessed, was rated against the available resources and a recommendation was made for a standard of cover which best meets the community's expectations.

As a result of this comprehensive and on-going risk assessment the fire department now provides the community's elected officials detailed and accurate information which help set the current *Standards of Cover*. In this case, the recommended policy for the standard meet all baseline and benchmark measurements within an acceptable level of deviation. These performance measurements are considered aggressive in today's urban environment. However, in order to have the ability to have a chance to use the training and equipment provided them they must arrive within a specific window of time; arrive too late and all the resources in the world won't make a difference in the outcome.

As a result of continued positive community feedback, the agency is confident that the current levels of emergency services being provided are making a positive change in people's lives. Our emergency medical response times assure residents that advanced life support personnel and equipment will arrive in time to have the best chance for survivability. In the case of structure fires, our response time, concentration and deployment of resources allows enough trained and equipped personnel to arrive in time to stop most fires in the area or level of origin, and participation in local and regional joint response agreements allow for unlimited drawdown of all types of resources.

Statistically, our *Standards of Cover* speaks to the community's commitment to the highest levels of public safety. Winter Park's dollar loss from fire is statistically low when compared to the national average and the community has not experienced a fire related fatality in more than two decades. Patient care is provided in such a way that some conditions are stabilized or reversed prior to arrival at local hospitals.

As the agency once again takes a comprehensive assessment of the community's risk, it remains confident that the industry best-practices purported by the Commission on Fire Accreditation International are properly educating the elected officials on the levels of service being delivered by the fire rescue department.

A. Description of the Community

This component of the *Standards of Cover* helps set the stage for all aspects of service delivery and serves to introduce and orient the overall community to the standard. Aspects reviewed include the legal basis for the agency, historical data, major milestones accomplished by the agency, finance and funding of services, topography, climate, population and demographics. In addition, the section looks at the layout of the area served as well as the type and description of the areas served by what type of agency service.

Legal Basis

The city of Winter Park is governed by a Council / Manager form of government. The Winter Park City Commission is comprised of a five member body. All commission seats are elected to three-year alternating terms and are selected at-large by all the residents. The following individuals represent the current elected and appointed officials of the city of Winter Park, Florida.

Steve Leary.....Mayor

Greg Seidel (Seat 1).....Commissioner

Sarah Sprinkel (Seat 2) .....Commissioner / Vice Mayor

Carolyn Cooper (Seat 3).....Commissioner

Tom McMacken (Seat 4) .....Commissioner

Randy B. Knight.....City Manager

Michelle Neuner..... Assistant City Manager

James E. White.....Fire Chief

Chartered: 1887

Incorporated: 1925

Municipal Area in Sq. Miles ..... 9+

Form of Government: .....Commission / Manager

Millage Rate for Fiscal 2015 .....5.25

The city manager appoints all city department heads, subject to City Commission confirmation. The city manager has the ultimate approval of all employees and acts as the Chief Executive Officer of the city.

The city manager is responsible for carrying out commission policies through a professionally trained and experienced staff. The fire department, as well as the police department are directly responsible to and are further governed by the city's Civil Service Code. First adopted into the city charter section 4.07 in 1949, the Civil Service Code outlines the functions and duties of each agency.

As included in Chapter 74 of the City of Winter Park Code of Ordinances (Exhibit A) the Civil Service Board is maintained by the City Commission to operate as an independent board of review for the city's public safety departments. Monthly meetings are conducted to review the operations of the department and approve any and all employee relations' issues. The Civil Service Board includes five civilians in addition to one employee elected each from the police and fire departments.

History of Service

Winter Park is a city of about 28,000 residents located just north of Orlando in Orange County, Florida. One of Florida's finest cities, it is famous for its stately trees, abundant parks, brick-lined streets, spectacular homes, museums, vibrant lakes and fine shops along Park Avenue. The city was originally developed as a winter resort for wealthy northerners seeking refuge from the harsh winters and a tranquil place to rest and relax. Fortunately, the city has maintained its natural beauty for more than 125 years.

Winter Park Fire Department *circa 1960*

Winter Park was originally named Lakeview in 1858 and re-named Osceola in 1870. Eleven years later, the name Winter Park was chosen by its founders. Loring Chase and Oliver Chapman, who during an informal discussion, decided they wanted the name to be something about a park in winter - thus the name change to Winter Park. Tourists came to the city originally to enjoy Winter Park's beautiful lakes, warm temperatures and natural surroundings. Today residents and guests enjoy these same amenities in addition to great restaurants, museums, entertainment, theater, outdoor activities, festivals and much more.

Rollins College, the oldest college in Florida and the nation's premiere liberal arts college, was founded in Winter Park in 1885 by New England Congregationalists who sought to bring their style of liberal arts education to Florida. *Time* Magazine has praised Rollins College, which has produced Rhodes, Fulbright, Goldwater and Truman Scholars, as well as a Nobel laureate. The *U.S. News & World Report* consistently rates Rollins College as one of "America's Best Colleges".

The city's most prominent features include its lakes, tree canopy, bricked streets and the shopping district along Park Avenue. Central Park is a large, open downtown park featuring towering trees and inviting park benches. The Central Park was deeded to the city by one of its most influential early citizens - Charles Hosmer Morse. The city is also famous for the Winter Park Sidewalk Art Festival, which draws over 250,000 visitors each year to Central Park to enjoy some of the best art and music in the United States.

Winter Park was first chartered in 1887 and the present Commissioner-Manager form of government was adopted in 1949. The governing body is comprised of four Commissioners and a Mayor who are elected to three-year terms by a citywide, non-partisan election. The city Commission appoints the City Manager, City Attorney and numerous advisory board members.

Winter Park established its first organized fire protection in 1900. The city's fire limits were set from Lyman Avenue north to Canton Avenue and from New York Avenue east to Interlachen Avenue. Six fire extinguishers were strategically placed throughout the district to extinguish fires.

Several major fires occurred in the early 1900s with the Seminole Hotel fire being the largest in Winter Park's history. This grand hotel burned to the ground in September of 1902. The owner's had only $30,000 of insurance preventing the hotel from being rebuilt on its original site.

On December 1, 1909, Rollins College lost its only classroom building and all of its scientific equipment to fire. Knowles Hall burned to the ground in a dramatic late-night blaze. Limited equipment and resources only enabled the volunteer firefighters to keep the fire from spreading to adjacent buildings.

The Winter Park Fire Department was further established through adoption of the City Charter in 1925 and is recognized in Sections 1.01 and 4.07. The city reaffirmed the existence of the fire department and officially recognized the additional services provided by the agency on December 12, 2000. Adoption of Resolution #1734 made it known that the Winter Park Fire Department may also be officially known as the Winter Park Fire-Rescue Department. Additionally, the State of Florida recognizes the fire organization through Florida Statute Chapter 166 (166.021) and Chapter 633.

Winter Park's fire protection was enhanced over the next several years. In 1915, Fire Chief E.R. Favor purchased a one-horse wagon that carried 500 feet of hose and an extension ladder. By 1916, a motorized vehicle was used to tow the trailer to fire calls. From 1913 through the early 1950s, Winter Park was protected by an all-volunteer fire department. It wasn't until the mid-1950s, that the city hired the first paid firefighters. In 1945, the Winter Park Fire Department answered a total of one hundred twenty-eight calls.

An Easter morning fire on April 6, 1969 placed Winter Park on the map. The *Winter Park Mall* fire was the first major fire incident in the United States involving an enclosed shopping mall. The initial response of one pumper and a rescue truck with four firefighters was small by today's standards. However, a general alarm was sounded and firefighters from five fire departments brought the blaze under control in about four hours.

Another incident again brought notoriety to the city of Winter Park. In May 1981, a large geodetic sinkhole opened up near the intersection of Fairbanks Avenue and Denning Drive . After devouring a home, several cars, parts of several businesses, and a municipal swimming pool, the sinkhole was stabilized.

With the passage of the EMS Act of 1973, the agency took on the additional responsibility of providing emergency medical services to the community. Firefighters were trained and certified as emergency medical technicians and paramedics and the agency provided first responder, non-transport emergency medical service.

During the following three decades, the agency continued to upgrade and maintain a state-of-the-art emergency medical service. Operating within a two-tiered EMS system, the fire department would respond, treat and stabilize the patient and then load the patient into a private ambulance for transport to a medical facility. The fire department's quicker response provided for more timely treatment than the ten-minute response standard that was required of the contractually provided ambulance service.

On Jan. 1, 1997, the Winter Park Fire-Rescue Department implemented the current single-tiered EMS service in the community, becoming the sole provider of emergency medicine. The agency had been providing advanced life support EMS since the early 70's, and the addition of patient transport allowed the agency to provide a more complete level of EMS. Today, the firefighter paramedics transport almost 2000 patients annually generating more than $900,000 for the city's general revenue fund.

To further confirm the city's faith and support for the fire department EMS program in 1997 the City Commission unanimously passed the city's first EMS ordinance (Exhibit B). The Ordinance makes the Winter Park Fire-Rescue Department the "sole provider of emergency medical services within the city".

In December 2014, the agency applied for and received accreditation from the Commission on the Accreditation of Ambulance Services (CAAS). The comprehensive review of the agency's patient care protocols, training, medical direction, and operations, resulted in one of the highest first-time ratings for any CAAS accredited service.

The property insurance industry, through the Insurance Services Office (ISO), rate a community's fire protection capability; this rating helps determine the cost of insurance premiums for both residential and commercial property. Based on a Public Protection Classification scale of 1 to 10 (Class 1 being the best) the ISO surveys and rates more than 35,000 communities throughout the United States; less than one tenth of one percent of these communities are rated at Class 1.

Over the past decade the city of Winter Park and their fire department have improved the communities ISO rating from a 4 to the best available, Class 1. The most recent rating was conducted in January 2014 and resulted in one of the highest ratings seen by the ISO. This resulting score and rating has served to offer those commercial properties who are insured by companies who use the ISO PPC rating a reduction in their annual fire insurance. It also confirmed once again, that the people of Winter Park enjoy the protection and safety of having one of the only twice accredited (CFAI and CAAS), and ISO Class 1 agencies in the United States.

Although the most commonly thought of service that is provided by the agency is fire protection, firefighters routinely provide a variety of other public safety related services. These services include health care, building construction plans review and inspections, environmental conservation, emergency management, public education and risk reduction activities. Emergency services are provided to a specific jurisdictional area from three (3) Fire/EMS service centers. While not ideally located for the strategic delivery of service, Winter Park residents continue to benefit from services far exceeding the national average. In May 2000, the citizens of Winter Park voted to approve the sale of 11 million dollars in municipal bonds for the construction and renovation of two fire stations and the city's law enforcement center. Construction was completed in May 2002 on fire station 62, and in June 2003 on the new Public Safety Complex which included fire station 61.

In what has become a rather innovative agreement between the city of Winter Park and Orange County Fire Rescue the responsibility for operating fire station 64 was transferred from Orange County to Winter Park in January 2000. The plan brought one shift per year on duty from Winter Park, replacing a shift from Orange County over a three year period. While this program was somewhat different, it offered the city of Winter Park an opportunity to assume the additional service delivery area, which had been annexed into the corporate limits, without having to hire the additional firefighters all in one fiscal year. This transfer of service reduced the previous total response time of this unit into Winter Park by approximately two minutes. In July 2015, the city approved funding for the renovation of this aged facility.

Much of the city's growth in the recent past has been internal. While our geographical service area has remained close to the same for the past 50 years, the services provided by the agency have changed dramatically. With more technical responsibilities constantly being placed upon the fire service, the agency stands ready to serve and protect the citizens from all perils.

Today, the agency is formally organized and structured in a traditional style. The fire chief serves as the organization's chief administrative officer and is supported by a command staff management team consisting of a Deputy Chief, one Division Chief, three Battalion Chiefs and one Fire Marshal. A Senior Staff Assistant as well as one part-time Technical Staff Assistant supports the agency's clerical responsibilities.

The Finance and Administration Section Chief oversees the administrative, financial budgeting and purchasing operations of the agency and reports directly to the chief of department.

Managing the needs of the emergency operations staff falls to the deputy fire chief. This position is responsible for supervising the three battalion chiefs as well as the EMS delivery system and all agency training. The battalion chiefs oversee the daily operations of each shift and supervise the Fire-Rescue Division. Shifts operate on a 24-hour on, 48-hour off schedule within a twenty-one day work period. Three engines, one truck company, two advanced life support transport rescues (ambulances), one emergency medical services supervisor, and one battalion chief deliver fire and EMS operational service. The operations division's maximum daily staffing level is twenty-three people, with a minimum staffing of nineteen. Shift personnel maintain facilities and apparatus, conduct safety surveys, public education details and attend training sessions while assigned a duty shift.

The Division Chief of Firefighter Health, Safety and Training position supervises all firefighter health and safety programs. The Division Chief reports directly to the Deputy Chief of the Department and manages all safety and health, as well as firefighter training, for all personnel.

One Emergency Medical Services (EMS) supervisor is assigned to each shift. These individuals work to oversee the entire emergency medical service environment including the maintenance of the medical supply inventory, quality assurance, certification requirements as well as research and development. In addition, these supervisors respond to all technical rescues and structural fires and serve as the scene safety officer.

The fire marshal is responsible for the management and review of all commercial construction plans, fire inspections and public fire education functions for the agency. The fire marshal reports directly to the deputy chief and is responsible for supervising one field inspector as well as the agency's community risk reduction specialist. All positions are clearly outlined in the agency's 2015 organizational chart (Exhibit C).

Service Milestones

The city of Winter Park established its' first fire protection initiatives on April 15, 1900. With the purchase of fire extinguishers and the appointment of residents as firefighters to monitor and gather those extinguishers if a fire broke out, Winter Park was one of the first communities in the area to have organized fire protection.

In the early 1900's Winter Park joined other central Florida communities and purchased motorized fire apparatus with pumps, hose and ladders capable of protecting the growing assets of this new city. Several large building fires occurred in the first several decades of the 20th century that helped to reinforce that the leaders of Winter Park were in fact doing the right thing in building their communities fire protection capabilities.

Fire protection continued to be enhanced as new technology allowed for more aggressive and progressive tactics. The force of personnel within the fire department began to transition from an all-volunteer agency in the mid-1950's when the first career firefighters were hired by the City. These full-time employees were now able to continue to focus on the communities growing fire protection needs as more development and annexations took place.

On Easter morning, April 1, 1969 Winter Park and its fire department made history as the city experienced the nation first significant structure fire involving an enclosed shopping mall. Then referred to as the Winter Park Mall this large expanse of enclosed walkways, shops and large anchor stores really announced the beginning of what would be an architectural and cultural phenomena in the United States over the next three decades. Shopping malls like Winter Park's served as a place for residents to meet, shop and be seen. At the time of its construction no one really knew how fire would behave in these newly designed structures. The fire codes of the day had not addressed issues such as fire separation, smoke handling and exiting.

Fortunately for the mall's owners and occupants the city and its fire department demanded that the shopping mall be protected throughout most of the common areas with fire sprinklers. The fire which took place in 1969 began in a storage area and spread to several stores before the firefighters could bring it completely under control. By today's standards, not nearly enough firefighters (six) were part of the initial assignment and even with calls for mutual aid the Winter Park Mall fire really initiated the communities review of how its effective firefighting force.

The first sub-station was opened in late 1969 on the city's east side. Fire Station 2, now referred to by its regionally assigned number of 62, established a two-person engine company on the communities ever

growing eastside. The original facility was totally renovated in 2001 and remains in operation at the original location today.

In 1971, the city determined the need for providing consistent fire protection to the communities Westside. The main fire station, located close to its original location on Lyman Avenue adjacent to city hall, was also immediately aside the very busy railroad tracks which serve to dissect the city's west side. The community opened Fire Station 3 in a converted trash-transfer station in the same location as the current Headquarters on Canton Avenue. Engine 60 operated at this location until 2001 when construction on the current Public Safety Facility began.

Winter Park's initiation into the provision of emergency medicine began in 1976. With the passage of the State's EMS Statutes in 1973 Winter Park initiated the development of one of the regions first firefighter paramedic programs. A patient transport capable "Rescue" truck was purchased with community donations and staffed a the main fire station. This one unit responded to all medical calls throughout the city with the department's only paramedic. At the time, a private ambulance company was responsible for patient transportation, but Winter Park always maintained the capability to transport patients in those instances when the private company was not available.

In a move to enhance the overall capability of firefighter paramedics in the field Winter Park designed and purchased two of the country's first patient transport capable fire engines in the spring of 1982. These commercial chassis units were built by Florida-based Emergency One, Inc. and marked the beginning of a trend towards more fire-based medical services throughout the area. These fire engines could, if needed, transport patients while maintaining a level of fire protection with the community's cross-trained firefighters. While they were very innovative for their time, their function as both a patient transport unit and fire truck left much to be desired. They were thought by many not to do either functions very well. Both units were refurbished in 1992 and remained in service as reserve apparatus until 2001. Several other communities throughout the country have experimented with these dual-purpose fire engine / ambulances, also being met with mild success. The Winter Park model is often used as an example to these agencies planning the experiment.

Throughout the middle of the 20th century most fire departments in central Florida were very territorial and only called upon each other if really needed under a rather vague mutual-aid agreement. In 1992, Winter Park signed, what was at the time, a five-party aid agreement that progressively removed the jurisdictional boundaries of each community to provide a true "first-response" protocol. Along with this agreement, and after the impacts of Hurricane Andrew in 1992, Winter Park signed the State of Florida's newly developed State-wide Mutual Aid Agreement. These agreements, which remain in effect today, confirms both from a local and regional perspective, Winter Park Fire Rescue participates as a partner in

seeing that the closest appropriate assistance makes it to the scene of an emergency, no matter the jurisdiction or location.

Until January 1, 1997, Winter Park participated under the Orange County agreement for patient transport services. Since its inception, emergency patient transport services had been performed by private ambulance company such as Herndon Ambulance, American Medical Transport (AMT) and finally by Rural Metro, Inc. With approval of the City Commission, Winter Park broke ties with Rural Metro and began patient transport services in January 1997. Over the past seventeen years fire rescue has been the sole provider of patient transport service only receiving assistance from our fire-based partners as needed. This fire-based transport service has not only proven itself as the best for the patient due to exclusive patient care continuity, it has returned more than $900.000 annually to the city's general fund budget.

In late 1999, the city's annexation efforts and Comprehensive Plan development forced the agency to research ways of providing additional fire and EMS services. Recently annexed areas of the city's northeast quadrant drove the agency to enter into a three-year agreement with Orange County Fire Rescue to assume the staffing responsibilities for fire station 64. Located within the annexed area, station 64 was transitioned to Winter Park Fire Rescue utilizing a very unique, one-shift per year, interlocal agreement. In order to lessen the fiscal impact of hiring all the needed firefighters in one fiscal year, the agency added three firefighters per-year for five years and staffed the single resource engine company one shift at a time. The remaining shift periods continued to be staffed by Orange County Fire Rescue. Today, this remains one of the most unique way of transitioning station responsibilities after an agency has annexed or assumed responsibility for another geographical area.

In August 2001, after completing a rigorous self and peer assessment, fire rescue became the first agency in Orange County and only the second in the central Florida region to achieve International Accreditation. This extensive review of the department's entire operation established the means by which the department operates today. From the strategic planning processes and response to each performance measurement to the establishment of the city's risk assessment tool and the first standards of cover, Winter Park has emerged as a model agency for the application of the CFAI accreditation process.

In 2003, the agency moved its' headquarters operation into a new 78,000 square foot facility shared with the city police department and the city's 9-1-1 center. The city's public safety facility houses not only fire headquarters and fire station 61, it is also home to the city's Emergency Management Operations Center (EOC), otherwise referred to as the "Sandbox". This new facility was put to the test during the summer of 2004 when central Florida was hit with four category one or better Atlantic hurricanes over a five week period. These storms tested the young facility and provided valuable insight into later improvements for the EOC.

After seeing the ambulance industry struggle with the aspects of safety and not noting a safe way to properly restrain firefighters while treating ambulatory patients, in 2004 the agency embarked on a two-year quest to make change happen. Working with numerous vendors in the manufacturing industry, Winter Park Fire Rescue found itself in the role as the lead agency advocating for improved firefighter safety and ambulance design.

In 2006, Winter Park took delivery of the industry's first two "Action Safe" ambulances. This new concept incorporated a more ergonomically designed patient compartment, a five-point integrated into all passenger seats and 9g brackets for all equipment. The agency was awarded for their efforts both locally and Internationally by the International Association of Fire Chiefs for their efforts. Today, the Action Safe ideas are finding their way into design standards for ambulances being established by the National Fire Protection Association (NFPA 1917).

In 2006, and once again in 2011, the agency was awarded International Accreditation. Additionally, two Chief Officers and 9 Fire Officers obtained professional designation credentialing with CFAI. With this commitment, and in Adopting the CFAI accreditation process as the agency's business plan helped establish the levels of continuous performance required to maintain accredited status.

The agency has continue to develop its' role as the city's emergency managers. After several key events which highlighted the city's inability to properly warn it's residents of any impending emergency, the agency established the city's "Outreach" Emergency Alert Network. Outreach combines both an outdoor tornado siren and speaker network with a very robust digital electronic warning and information system. Outreach can alert residents through all levels of personal technology including text (SMS), email, calling and messaging. In addition, the agency holds annual emergency management exercises (TTX) and has led the city's National Incident Management System (NIMS) compliance efforts through the adoption of policy, certification and training.

Agency Financial Support

The fire rescue operation is a direct and specific department of the municipal government of the city of Winter Park. The operations of the agency are funded solely through appropriations made by the city through the governmental budgeting process.

Annually, the agency provides a proposed budget document to the city manager based upon the defined community-driven strategic planning process. Specific funding requests are based on the sustainment and advancement of the goals and objectives defined in the plan. The city manager has responsibility for presenting to the City Commission for consideration a balanced budget.

All fiscal plans and policies are set by the City Commission and are monitored by the city's Finance Department. The agency is required to maintain its' annual expenditure processes utilizing the Finance Department's electronic management system (HTE). The HTE system allows input of both personnel and non-personnel expenses. All aspects of the agency's finances and budgeting controls are set to policy made and enforced by the City Commission.

Regular reports are produced which reflect the agency's financial performance. While the agency manages several project accounts, no Enterprise type accounts are currently in place. When required, Budget Adjustments are formally presented to the City Commission for consideration and approval.

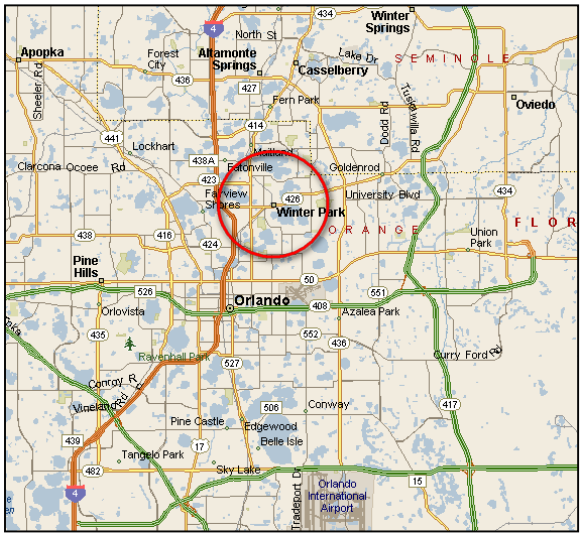
A comprehensive annual financial report (CAFR) is generated in and includes the operations, performance and compliance measurements for the entire city. The city's Finance Department has been awarded the Government Finance Officer's (GFOA) Certificate of Merit for their procedures and practices for the past decade.

Description of Service Area:

The city limits of Winter Park and the fire rescue service area are located within the metropolitan Orlando region of Orange County, Florida. As with most of the municipal developments throughout central Florida, Winter Park was founded by relocated northern industrialist around the turn of the 20th century who were looking for a better climate and an expansion of their business. Winter Park is nestled within a protected area of lakes and a large, mature tree canopy that provides a level of security from most of Florida's troublesome weather phenomena such as tornados and hurricanes.

The Central Florida Region

Winter Park is considered as a suburb of the larger city of Orlando, and is home to some of the regions more prestigious residential addresses. While the city contains a wide-range of both commercial and residential property many of the areas private homes are located along lake-front lots and set far from narrow, brick-paved streets. While the city limits boarder Interstate 4, none of this vital east, west Florida icon is actually within the city's boarder.



The Metro Orlando Area

Located just to the north of and directly adjacent to the city limits of Orlando, while small in comparison, Winter Park contains much of central Florida's core of culture and higher education. Winter Park is also the proud home to Rollins College, the Mores Museum of American Art and Albin Polasek Museum of Art.

With many waterfront properties, Winter Park is home to twenty-one navigable lakes. The lakes and adjacent waterways have a direct impact on both the distribution and concentration of emergency resources as the community's network of roads was not necessarily constructed with either large vehicles or emergency apparatus response in mind.

Economically Winter Park's tax-base is controlled mostly by a large volume of high-end residential property. Helping support the base is the communities crown-jewel, the Park Avenue commercial district and the adjacent Central Park.

Physiography:

Winter Park is located in Orange County, Florida. Overall the Florida peninsula is considered a vast plateau rising above both the Gulf of Mexico and the Atlantic Ocean. Winter Park lies approximately 30 miles from the east coast of Florida rising only 90 feet above sea level. The city is also divided by twenty-one lakes that provide numerous opportunities for recreation and more passive enjoyment.

The landscape is also covered with the a think canopy of trees. For more than three decades Winter Park has been recognized as a *Tree City USA,* living up to being named central *Florida's Premiere Urban Village.* The combination of a heavy tree canopy, low sea level and a predominance of lakes impacts the assessment of community risk when addressing accessibility and the ability to deal with severe weather conditions.

Weather Variables:

Central Florida and the Winter Park area are considered by many people to be a good place to live with its normally moderate, tropical climate. However, regularly high humidity and the continued risk of severe weather events such as tornados and hurricanes leave many to balance the risk of living in a normally sunny and warm climate with risk of these natural disasters.

The annual Atlantic Hurricane season begins annually on June 1 and extends to the end of November. For many decades the threat of damage from a hurricane was considered rather remote for Winter Park. With its land mass being protected by its distance from the east (27 miles) and west (70 miles) from each of Florida's coasts many never worried about the threat, that is until the summer of 2004 when the area was damaged by three hurricanes within a nine week period.

The average annual low temperature occurs in January at 54 degrees, with the average low in July being 74.7 degrees. Precipitation in January is 2.27 inches, while in July rainfall averages 8.4 inches. In the summer the threat of daily thunderstorms exists. The area is also prone to frequent and strong lightning and has been referred to as the lightning capital of the world.

Population:

Winter Park is located in the metro-Orlando area of central Florida. While many associate the Orlando area with vacations and fun, Winter Park does not necessarily consider itself a tourist destination. Winter

Park was established in 1882, and was first settled by northern businessmen who wanted to move their resources to a warmer climate.

As reported in the 2014 United States Census update, the population of Winter Park numbers 29,203 residents with a density of 3,200 persons per square mile. Over the past several decades, Winter Park has continued to evolve into a predominately residential community. The once smaller, concrete block homes of less than 1500 square feet are being slowly replaced by large estate homes easily growing past 6000 square feet. Along with the growth of larger private dwellings, the commercial community has also seen a redevelopment. This section outlines those keys factors continuously considered during the development and maintenance of a community standard.

The entire service area is considered to be **Urban** in nature when compared to the description presented in the eight edition of the Fire and Emergency Services Self-Assessment Manual (FESSAM) published by the Commission on Fire Accreditation International (CFAI). Much, if not all, of the population occupies the community's residential neighborhoods with noted fluctuations in daytime business which don't dramatically impact the agency's coverage. Special events scheduled throughout the year are noted and staffed accordingly with additional assets and resources.

Several small and unique industrial areas dot the community. In most cases, they are identified as moderate and high risk properties with their contents and activities noted in the agency's pre-fire planning efforts. Again, special events and activities are noted and require a Special Event Permit in order to legally take place.

Several key commercial areas are defined within the community. Most notable of these is the Park Avenue shopping district. Established at the turn of the 20th century, *Park Avenue* is known throughout the region as the place to shop for high-end clothes and goods. Due to its rich history as one of the area's first shopping districts the Park Avenue area remains a vital economic engine for the community. In addition, its age, construction type and high risk of conflagration placed Park Avenue assessed as a High Risk property.

Rollins College is also located within the service area. With a total on-campus annual student population of approximately 3,500, Rollins serves the agency as a true partner in providing a safe environment for high education. Call demand on the campus is relatively low when compared to previous periods. In 2011 the college completed a highly aggressive campus-wide fire sprinkler retrofit project.

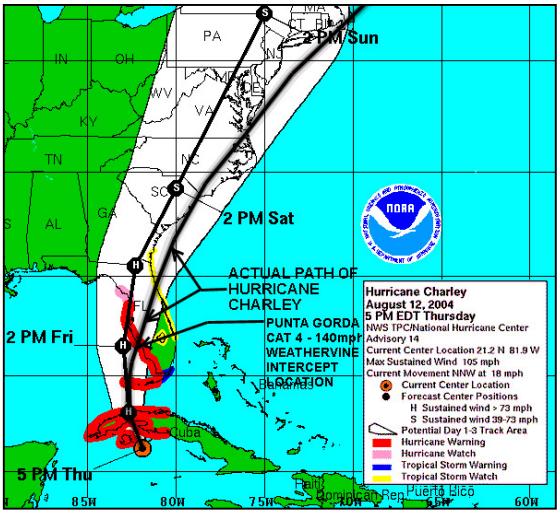
Disaster Potentials:

With its' location in the heart of central Florida, Winter Park's greatest risk for experiencing an event of disastrous proportion remains a natural event involving the impacts of a tropical cyclone or hurricane. For seven months of the year Winter Park and Florida are "under the gun" as targets for these weather events.

Having these events as our primary catastrophic risk, the agency and the community prepares regularly for the impacts of a hurricane. Other related events such as rising water flood and high wind damage to the community force the agency to regularly plan and execute procedures to respond to these events.

The last major disaster to strike the community was in late summer of 2004 when four named hurricanes hit the State of Florida. Three of these weather events directly impacted the Winter Park area with high winds (110mph) driving rain for 12 hours, downed trees and damaged property. The community spent well in excess of 12 million dollars in 2004 dealing with the impacts of these storms.

Another phenomena seen in Winter Park, as well as most of central Florida, are the appearance of large sink holes. These openings in the earth have caused major structural damage to buildings but no loss of life. In 1981, a large sink hole opened in Winter Park that swallowed a large building as well as several vehicles and a municipal swimming pool.



Hurricane Charlie - one of four hurricanes to hit central Florida in 2004

In addition to hurricanes, Winter Park is host to other strategically significant properties which may be targets for both domestic and international terrorist. These potential targets are monitored by the Central Florida Regional Domestic Security Task Force as well as the Central Florida Intelligence Exchange (CFIX) fusion center for activity.

Boundaries:

The city limits of Winter Park are basically stagnant between the cities of Orlando and Maitland and the boarders with Orange and Seminole Counties. With this locked geographical definition, the city has limited opportunities to expand its' boundaries to spawn new development. This inability to annex or grow geographically has not stopped the city from developing and redefining itself.

The popularity of the Winter Park label as the quintessential "urban village" has caused many communities to attempt to copy the city's development model. Redevelopment has taken place in many of the defined Geographical Planning Zones (GPZ). Much of the commercial areas have remained commercial while some of the areas west of the downtown core have transitioned from single family residential properties to mostly mixed-use commercial and multi-family residential. The largest

redevelopment project in this area involved the Winter Park Village location. Most, if not all of the redeveloped commercial or mixed-use property is protected by fire sprinklers.

Fire Rescue is invited to participate in all planned unit developments including those mixed-use and multi-family residential projects. Construction plans are reviewed, pre-fire plans are developed and the Community Risk Assessment is amended as necessary.

Population and Densities:

The 2014 census report indicated that 89% of Winter Park's population was white, 7.6% African American, 7% Hispanic, 2.3% Asian, 0.3% Native American, and 0.2% from other races. The population distribution by sex is, 47% male and 53% female. No major changes are anticipated with the 2015 census update.

Winter Park City Population..... 29,203 (2014 US Census)

Median Family Household Income $73,697

Median Household Income..... $48,884

Median Age..... 43

% of High School Graduates..... 94%

% of College Graduates..... 54.2%

Regional Demographic Features:

The 2014 census shows the total population of **Orange County** at 1,253,001 people. A breakdown of the county indicated that 69.4% of the population was white, 22% African American, 28.7% Hispanic of any race, 5.4% Asian, 0.6% Native American, and 2.4% from other races.[1] The population distribution by sex is almost equal, 49.7% male and 50.7% female.

[1] Demographic information provided by Orange County, Florida Government. Totals do not equal 100% as some people claim more than one demographic group.

B. Fire and Emergency Programs and Services Provided

This component provides a summary of the services and programs provided by the agency, the levels of each service and the present deployment of both physical and human resources deployed throughout the community.

Service Delivery Programs

Fire Suppression

ISO Class 1 fire suppression services are provided from three fixed fire station facilities. Three Class A pumpers (1750gpm) and one 100' tractor-drawn aerial are staffed fulltime. One of the three Class A pumpers is equipped with a Compressed Air Foam System (CAFS) and the two tractor drawn aerials are equipped with small CAFS firefighting delivery systems. All pumpers carry a minimum of 1200' of large diameter hose (4") and are equipped with 750 gallon water tanks. Reserve apparatus are adequate and include 1 pumper, 1 tractor-drawn 100' aerial device, 2 rescue ambulances, and 1 command vehicle.

Emergency Medical Service

Advanced life support (ALS) services are provided from all agency units. Two ALS transport capable units (Rescue) operate from fire stations 61 and 62. A third rescue is placed in service when staffing is above minimum (19). A rescue unit is also specially assigned (detailed) for public events throughout the year. The agency also supports its' own Medical Director and accompanying emergency medical services protocols.

All responses are assigned a minimum of one ALS unit with most qualifying for two units and a total minimum of five personnel. In addition, the agency staffs one EMS supervisor on each shift to serve as the lead medical as well as the incident scene safety officer. The agency is capable of handling incidents of no more than 5 patients, which represents a Level 1 mass casualty incident (MCI). Additional medical assets are available through a very robust regional first-response agreement.

Technical Rescue

The agency maintains a state supported **Light Technical Rescue** team (LTRT). Funded through the state of Florida, the LTRT is made up of trained personnel equipped to immediately respond to requests for activations within the city as well as the Region. The LTRT has the capability of rescuing victims from trench and collapse entrapments. Some equipment is located with the truck company with the reminder stored on the squad unit located at fire station 62. The agency also equips three units with hydraulic rescue tools.

Members of the agency also serve on Florida Task Force 4 Urban Search and Rescue (USAR) team. FLTF 4 is a FEMA Type 3 USAR asset and is housed in Orlando. The USAR team is available to the agency upon request through the State Emergency Operations Center (SEOC).

Hazardous Materials

All agency personnel are trained to the hazardous materials **awareness level**. As a result of the agency's first risk assessment in 2000, it was determined that the community held a very limited amount of exposure to potential hazardous materials events. It was decided at that time to abandon the agency's own technician level team and enter into an Interlocal Agreement with the city of Orlando Fire Department to provide hazardous-materials response. The agreement has worked well for Winter Park in that the agency's personnel are dispatched, arrive and assess the situation. If the event can be secured with the knowledge, skills and abilities of the agency's personnel then action is taken. If the event requires technician level skills then the Orlando fire department is requested and the agency's personnel move into a support services role.

Deployment of Fire and Emergency Services Resources

Deployment Coverage:

The agency currently provides emergency services from three fixed locations. These fire stations serve as logistical storage points for the staging of both physical and human assets. The fire stations were located with the maximum benefit of service delivery in mind. The agency participate in the Orange County Regional Fire and EMS asset numbering system. These numbers assignments are prominent throughout the agency and are noted here (i.e. 61).

Fire Station 1 – (61) 343 W. Canton Avenue
Fire Station 2 – (62) 300 S. Lakemont Avenue
Fire Station 3 – (64) 1439 Howell Branch Road

In addition to these fixed facilities the agency's Headquarters facility is located at 343 W Canton Avenue on the second floor of the city's Public Safety Facility. Numerous offices for the administrative staff, the fire marshal's office as well as the city's Emergency Operations Center are located with this facility.

Resources:

The agency provides emergency services for fire suppression, advanced life support medical patient transport care, technical rescue and hazardous materials service. Physical resources include a modern fleet of fire and emergency medical services apparatus. Resources are stored for responses at one of the three fixed facilities. Reserve apparatus is available so as to assure that the SOC can be maintained when assets are serviced.

The personnel are the most important part of the agency's resources. All operations personnel are certified firefighters and either state Emergency Medical Technicians or Paramedics. **A daily minimum staffing level of nineteen (19) personnel** is maintained to allow the agency to maintain an effective response force for each of the defined response scenarios. Each shift is led by a battalion chief (supervisor) with each company (engine and truck) are led by a lieutenant (company officer). Each fire apparatus is operated by an assigned engineer with all units staffed by a minimum of one certified Paramedic.

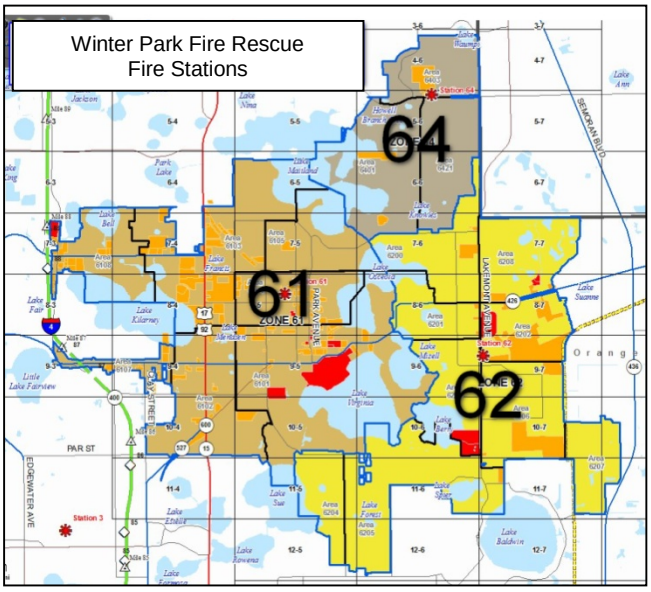
All units are staffed on a 24/7/365 basis under a specific Standard Operating Guideline 100.02 (Exhibit D).

Numbers reflect the minimum/maximum amount of staff.

Number/Unit..... Min/Maximum
1 Battalion Chief 1-1
1 EMS Supervisor 1-1
3 ALS Engine Companies 3-4
1 ALS Truck Company..... 4-5
2/1 ALS Rescue Companies..... 2-2

Daily Staffing Totals 19/23

Response Areas:



Each fire station has a defined first-response area. These areas are based solely on the anticipated emergency drive time for the engine company assigned to the particular fire station. The Computer Aided Dispatching (CAD) system electronically stores the geographically closest assets to any particular area. Assets are managed to the 20th geographically closest company. The establishment of additional response areas is then driven by which asset is next closest. These additional response areas are used to establish the agency's Geographical Planning Zones (GPZ).

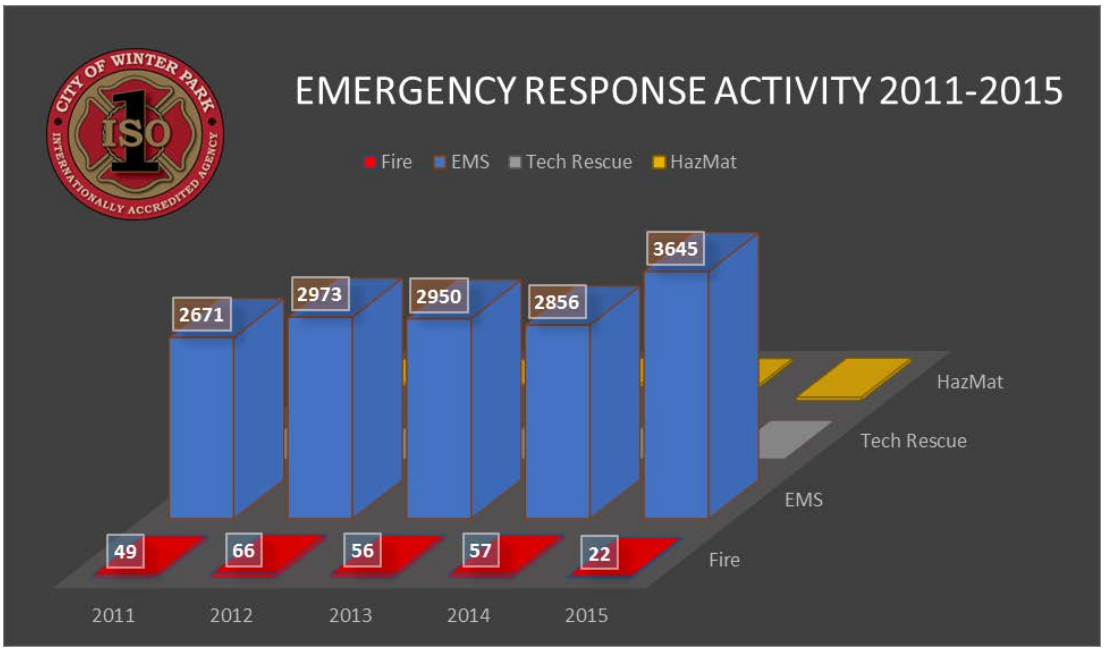
The GPZ areas have within them identified the individual properties who display the different levels of Risk. All roads in Winter Park are paved. Each zone contains the following amount of road miles which when determined by the agency offered an idea of the additional roadway risks posed by each response area.

<u>Road Miles:</u>

Zone 61 .....64.32
Zone 62 .....57.11
Zone 64 .....19.86

The following chart of response activity as noted by call type suggests several trends. First, all responses appear to be consistent over the period without displaying any spikes in any call type. The identified road miles display that zones 61 and 62 are rather close in distance traveled while zone 64 is much smaller with most streets being residential throughout the zone.

These statistics have remained consistent ever since the early 2000's when the agency took over responsibility for Fire Station 64, and when Engine 60 was actually decommissioned and the crews reassigned to Truck 61. The final move of apparatus and staffing with the agency was in 2003 when Station 61 was opened on Canton Avenue moving the remaining assets from Station 61 to the new location.



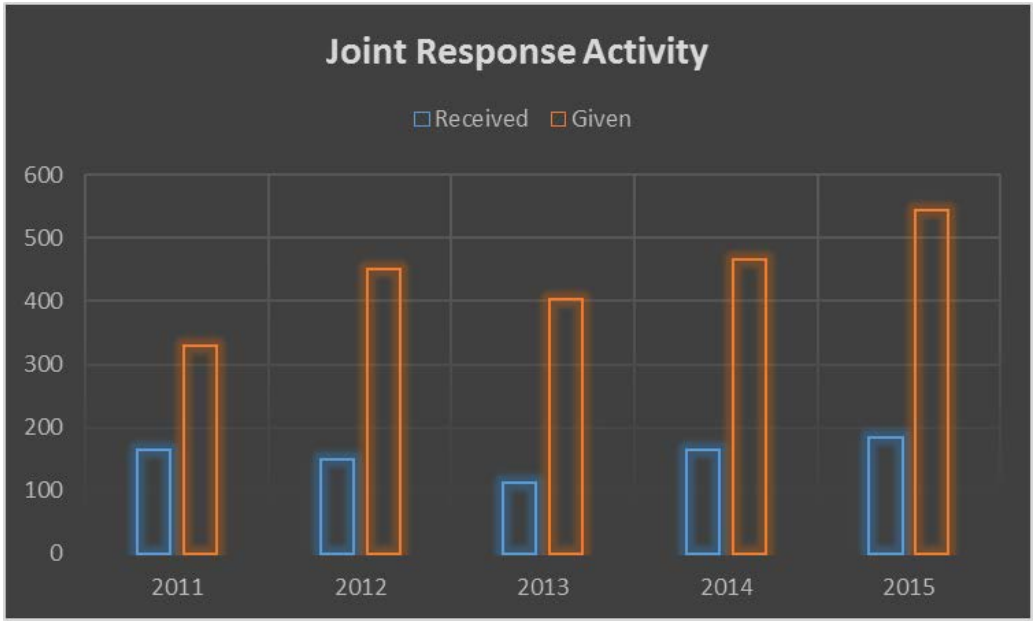
Priority One Responses by Call Type 2011-2015

Joint Response Areas:

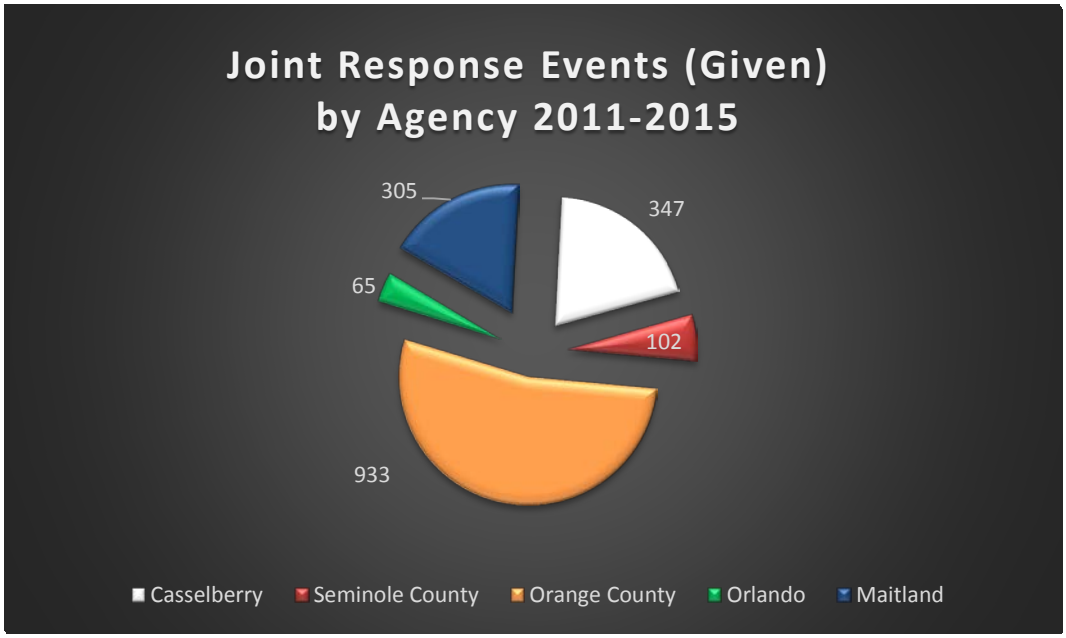
Aside from the areas defined above the agency is party to an active Inter-local Agreement[2] which have units covering areas outside the corporate limits of Winter Park. The only areas where Winter Park units are "first-due" outside of the corporate limits are those streets in Zone 64 which were not annexed. The agency is paid annually by Orange County Fire Rescue for this additional coverage.

The following chart is an annual reflection of all the joint-response alarms outside of the corporate limits. During the past five years we have experienced a use that is reflective of our expectations. The ratio of calls ranges from 2.0 to 3.5 to 1 annually for Winter Park receiving aid, verse giving aid. With the additional assets made available to the city though these long-standing agreements the benefits are equal to all parties. Assets we no longer maintain (Operational Level Hazardous Materials) are provided without cost in exchange for these additional responses.

[2] The current Inter-local Agreements include those in place for first response with Orange and Seminole Counties and the cities of Orlando, Maitland. The city of Casselberry Fire Department was absorbed by Seminole County Fire Rescue in October 2015.



Joint Response Activity 2011-2015



Joint Response Events (Given) by Agency 2011-2015

C. Community Expectations and Performance Goals

This component of the Standards of Cover describes the community's expectations for the agency and the expected levels of performance goals defined by the citizens. This expectation was derived through the community-driven Strategic Planning effort completed in October 2015.

Community Expectations

During the 2015 community-driven Strategic Planning sessions the agency continued to determined what the community expects of its fire and emergency services organization. This knowledge is critically important to the agency's development of long-range goals. With this information emphasis can be placed on those areas of need which have been identified as lacking or weak in the organization. In certain areas, education on the existing levels of service already available helped the external stakeholders understand areas of the organization they may not have been familiar with. The following are the top five expectations identified by the community's external stakeholders. A complete list of the 34 identified expectations can be found in the 2016-2021 Strategic Plan document.

1. Rapid and efficient emergency response.
2. Highly trained and educated staff
3. Professionalism.
4. Helpful and courteous attitude.
5. Competent, well-skilled personnel

In addition to defining their expectations the external stakeholders also offered their areas of concern for the agency. Some areas of concern may in fact be a weakness within the delivery system. However, some weaknesses may also be misperceptions of the customers based upon a lack of, or misinformation. The following are the top five areas of concern as expressed by the external stakeholders.

1. Be a close partner to the healthcare delivery and prevention system.
2. Maintain succession planning and firefighter engagement and retention, e.g. who will take chief's place? Is our department competitive from a wage and benefit standpoint?
3. That our city/region will take for granted the excellent service WPFD provides.
4. Fast responding.
5. With the national and international threat of terrorism in the world I need to be assured that we are prepared to respond.

Looking at both the expectations of the stakeholders as well as their concerns provided the agency a more global look at the community's understanding of what service are offered and how well those expected service are delivered by the agency.

Service Delivery Program Transitions:

The Winter Park Fire Department was first organized in April 1900. Members of the community identified a need to provide fire protection to the ever-growing new city. Fire extinguishers and ladders were among the first fire protection tools purchased to provide a small level of security against the spread of fire. In the early 1920's the city purchased its' first motorized fire apparatus. Several Model "A" pumper trucks were maintained by a group of volunteer firefighters who responded to several hundred calls annually.

In the mid-1950's the first career firefighters were hired by the city to staff the only fire station. As the city expanded to the east, a second fire station was built and staffed in 1969 on Lakemont Avenue, the existing location of Station 62. Two firefighters normally staffed these fire engines, and until the late 1970's, had limited medical training or equipment.

As the department moved into the age of emergency medical response, Winter Park led the region with some of the first cross-trained firefighter paramedics. A special rescue truck which carried all the advanced life support equipment began the agency's increased level of medical service. More advanced medical equipment was added to the newly designed patient-transport capable fire engines in 1986. These engines were a new design and trend for the fire service by truly combining fire apparatus and patient transport capability. After a decade of service the idea never really caught on and was abandoned in 1996 when more conventional fire apparatus was placed in service.

In an effort to continue to improve patient care outcomes, fire rescue took over patient transport services in 1997 from Rural Metro Ambulance. Two advanced life support rescues were activated in January 1997. Today, an average of 2000 patients are transported to local hospitals. All fire apparatus were licensed by the State of Florida as advanced life support units in 1996. This commitment to patient care has worked to improve patient outcomes in Winter Park over the past decade.

Fire protection has also been improved. Since 1980, the city's Insurance Services Office (ISO) has improved from a rating of 4 to today's rating of 1. The community's goal is to maintain this high rating to the best of our ability. In addition, the agency has maintained CFAI Accreditation since 2001 and was accredited in December 2014 by the Commission for the Accreditation of Ambulance Services (CAAS).

New and remodeled facilities, maintenance of a vigorous vehicle replacement schedule and adopting the CFAI Accreditation model as a process of doing the business of the agency has improved the service delivery to the community.

Performance Expectation Goals

Mission Statement:

The current Mission Statement of the Winter Park Fire Rescue Department was generated during the 2015 community-driven Strategic Planning sessions. The internal stakeholders examined the information provided by the community stakeholders, examined all the previous mission statements and determined the follow would best serve the agency going forward:

The Mission of the Winter Park Fire-Rescue Department is to protect and preserve our community through the prompt and professional delivery of service.

In addition to defining the agency's Mission Statement, the community–driven planning sessions the Values of the agency were also examined and discussed.

We ***CARE*** for our community and each other with compassion, accountability, respect, and empathy. We encourage all department members to embark on a quest for personal excellence by being responsible for their actions, practicing the highest degree of ethical behavior, and to use their best judgment in making decisions. We do this because we ***CARE***.

Compassion

We value a compassionate environment in which the needs of our community and co-workers are a top priority. This environment will be fostered by enthusiastic members who diligently adhere to a sound code of moral and ethical conduct, thereby delivering the utmost attention and care to all parties.

Accountability

We value accountability by being responsible for our performance in light of our community's expectations. Our demonstration of reliable and professional behaviors earns the trust of our community and promotes personal integrity and empowerment.

Respect

We value respect for ourselves and every individual, and recognize the worth of others while consistently exhibiting professionalism and compassion for those in need. Non-prejudicial and conscientious service results in individual, agency, and community pride in all services delivered.

Empathy

We value an empathetic workforce that seeks to support, understand, and meet the needs of the community and each other in a compassionate and non-judgmental manner. Services will always be delivered free of bias, as we recognize and appreciate the diversity within the community and our workforce.

The agency's Strategic Planning (2016-2021) also developed what is considered the ***Vision*** for the organization for the next five years. The definition of agency's ***Vision*** to includes the following statements:

Our vision is that by the end of year 2021, the Winter Park Fire Rescue Department will be widely recognized as an organization which utilizes best practices in the delivery of services to our community. Our International Accreditation will promote continuous improvement and validate the consistent, timely, and quality services our community trusts us to provide.

*In honoring our community's trust, we are committed to providing effective, efficient, fiscally-responsible service while presenting **compassion** and **empathy** as we perform our duties. We will expand our internal and external communications and information dissemination initiatives so that our priorities, philosophy and operations are clearly understood by our community members. By proactively identifying our community's evolving risks, and the dynamic demands of those risks, we will improve our response capabilities while implementing resource and deployment strategies carrying the best interest of our community in accomplishing our mission.*

*Our internal culture will reflect a **respect**ful team atmosphere nurtured by open internal communication processes providing greater information sharing and involvement in decisions to accomplish our mission. Our workforce planning efforts will embrace the diversity reflected by our community, improve the quality recruitment and retention, and promote career development for the future success of our members and our agency. Our dedicated members will convey integrity in our commitment to excellence by demonstrating professional and courteous delivery of services to all those living, working, or visiting in our community.*

*Our leadership and workforce will be **accountable** to one another in applying our organizational mission and values, while continuously striving to reach our goals. Emphasis will be placed upon gaining consensus and ownership with organizational issues thereby assuring continued job satisfaction and excellent customer service. Employee safety and preparation will be a priority accomplished through our community hazard and risk preplanning efforts.*

We will expend time and energy towards developing the best strategies for service delivery while enhancing programs through training and personnel development. The effective management of our physical resources will allow us to explore all opportunities to implement new and better utilized technology to improve the quality of support and operational services. Our vision, through these efforts, is that our CARE values will be demonstrated as an integral part of our organizational culture and that we will consistently meet or exceed the expectations of the community and members of Winter Park[3].

[3] Winter Park Fire Rescue 2016-2021 Strategic Plan

Performance Goals:

In order to achieve the mission of agency, realistic performance goals and objectives must be established. Goals and objectives are imperative to enhance strengths, to address identified weaknesses, to provide the individual members with clear direction and to address the concerns of the citizens. In order to establish the goals and objectives, the Internal Stakeholders .

As goals and objectives are management tools, they should be updated on an on-going basis to identify what has been accomplished and to note changes within the organization and the community. The attainment of a performance target should be recognized and celebrated to provide a sense of organizational accomplishment.

The goals and objectives should now become the focus of the efforts of the agency. Care was taken by the staff of the Center for Public Safety Excellence to ensure that the critical needs and areas of needed enhancement previously identified were addressed within the goals and objectives.

By following these goals and objectives carefully, the organization can be directed into their desired future. These established goals and objectives should also greatly reduce the number of obstacles and distractions for the organization and its members.

The following specific goals for the agency were developed and are currently in process of execution. Each goal has an established set of objectives, is assigned to a member of the agency who is responsible for seeing the goal to completion. These goals are monitored by the fire chief and are discussed as necessary during each senior staff meeting.

1. Evaluate and/or improve internal and external communication practices with a comprehensive strategy for better organizational understanding throughout the agency along with procedures to ensure departmental consistency and accountability with organizational values.
2. Develop, implement, and maintain a comprehensive all hazards training and education program that meets the needs of the agency and its members.
3. Evaluate and improve how we use technology for daily operations, efficiency, and consistent internal communications.
4. Develop a performance improvement process to increase reliability and consistency of the emergency communications center.
5. Develop and implement a community medical services outreach program to address the needs and expectations of the community and staff programs appropriately.
6. Create a checks and balance system of annual budgeting for the department that incorporates a cooperative relationships with the other city managers to fund the fire department accounts so that what is approved is actually funded.

7. Refine the organizational culture to embrace, enhance, and ensure accountability to all levels in order to preserve our positive presence in our community.

In addition to these overall agency goals for 2016-2021, it was evident that through the community-driven strategic planning process the residents and business owners also have an expectation of performance for the agency's emergency response functions as well. In fact, most of the eight specific agency goals are related to non-emergency performance. To better understand the expected performance measurements for the agency's more expected and anticipated services a review of the external stakeholder comments and expectations is more revealing.

Community Service Expectations:

For more than 115 years the fire service in Winter Park has offered the community the highest possible level of service. The agency has created an expected level of service that has served to establish an aggressive performance standard. This community-driven expectation for service was first formally developed during the agency's 2001 adaptation of the SOC and their responses to the performance measurements found in the fire accreditation process.

These community expectations were and are continuously monitored through regular performance reports, strategic plans and the city's strategic plan "Roadmap" document. Further development and broadening of the community's expectations were supported during the 2009 community-driven strategic planning process as members continually mentioned the importance of rapid response time and a high level of professional service. These community expectations are found in the agency's goals and objectives for 2015-2020.

Community Service Priorities:

The community-driven strategic planning process implemented by the Center for Public Safety Excellence has, to this point, dealt with establishing the *Mission, Values, Critical Issues and Service Gaps* of the agency. In addition, the identification of internal strengths and weaknesses, as well as external opportunities and threats was accomplished.

The internal stakeholders set priorities for the accomplishment of specific objectives. Those objectives that carry higher priorities have been identified for completion first and those objectives with a lower priority can be accomplished later. Overall, these goals and objectives may provide very specific timelines within the next two years or more general timelines beyond that period of time.

Since 2010 the agency's leadership has establish workgroups and identified individuals who review the progress toward the goals and objectives and adjust timelines and specific targets as needs and the environment change. The agency considers the application of the communities goals and objectives critical to their overall success. While the environment changes and the needs of the agency and the community also adjust with time, it is important that the agency and its' members participate and are educated on the intent and anticipated outcomes of the goals and objectives.

D. Community Risk Assessment and Risk Levels

The only true way to adequately and properly provide services to a community is to assess the risk being protected. Unfortunately many communities across the country never actually assess the risks they are assigned to protect; they base their levels of protection on past-practice or common expectations. Unfortunately these communities have spent dollars and wasted resources on uneducated decisions about public safety services. In the case of fire services, a community must assess the risk it protects to be able to educate their elected officials and decision makers on what resources are needed to protect the community.

One reason communities struggle with the development of a usable risk assessment tool is that most of the tools currently available are difficult to use and fail to be very locally definable. While most fire chiefs and firefighters can tell you what structures in their community cause them the greatest concern for risk from fire they cannot tell you why; consistently.

What it appears they cannot do is place an educated answer as to *why* they need the resources they ask for each and every year. Community budgets are growing ever smaller and each tax dollar must be supported by accurate data. A community must demand that their fire officials conduct ongoing risk assessment and apply that data to the delivery of emergency services.

Winter Park is located in the metro-Orlando area of central Florida. While many associate the Orlando area with vacations and fun, Winter Park does not necessarily consider itself a primary tourist destination. With this in mind, the agency looks at the service area more as a permanent, residential suburban community with a more stable residential make-up.

The current population of Winter Park is richly diverse. Over the past several decades, Winter Park has continued to evolve into a predominately residential community. The once smaller, concrete block homes of less than 1500 square feet are being replaced by large estate homes easily growing past 6000 square feet in size. Along with this growth of single family dwellings, since 2012 the commercial community has

seen strong redevelopment. This section outlines those keys factors continuously considered during the development and maintenance of a community standard.

The fire department formally assessed the community's risk from both fire and non-fire related emergencies in 2000. A system utilizing key components of firefighting such as knowing the needed fire flow, pre-fire planning models and other non-fire related activities has served the community each year since then. An attempt to utilize the nationally offered RHAVE program was initiated in 2004. While certainly a better organizational tool, RHAVE failed to properly analyze known risk. It was felt that a more detailed and community oriented program would be easier to implement and maintain.

Community Risk Assessment Model:

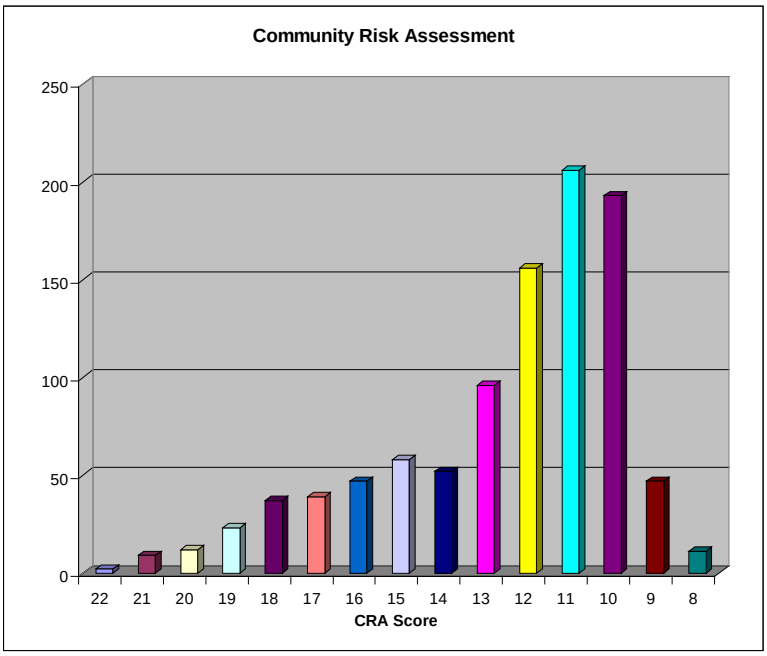
Risk Assessment Methodology:

For a community to appropriately provide for and understand the need for emergency services a coordinated and comprehensive assessment must be maintained. If a community fails to assess the risks it faces they with either fail to properly respond to the risk when needed, or will expend valuable resources in the wrong areas.

The city of Winter Park completed its' initial Community Risk Assessment in 2000. The process used was a combination of those methods offered by the Commission on Fire Accreditation International and those created from within the agency. To establish our initial standard of coverage each demand (response) zone was evaluated for the risk of fire and some non-fire risk. A strategic recommendation was made during the 2001 CFAI site visit for the agency to further detail those non-fire risks faced. The tool originally engaged by the agency in 2004 has continued to address the need.

The agency initiated the use of the United States Fire Administrations Risk Hazard and Value Evaluation tool referred to as RHAVE in order to begin organizing the levels of risk. This tool was completed on approximately 50% of the community when a management decision was made to scrap the project and create a more applicable tool for the Winter Park community. The results experienced from RHAVE were not coinciding with the known risk in the community.

The Community Risk Assessment (CRA) tool finally implemented by the agency was a hybrid of RHAVE and that offered and used by the Naval Air Station Fire Department in Jacksonville, Florida (NASJAX). Our community was able to completely implement this tool and use it as intended, to assess risk and deploy resources. The CRA process was first coordinated through the agency's Fire Marshal's Office, and involved performing a coordinated survey of every commercial property in the city. The Master Inspection File was, and is still used, to assign the crews to survey and document the risk posed by each property.



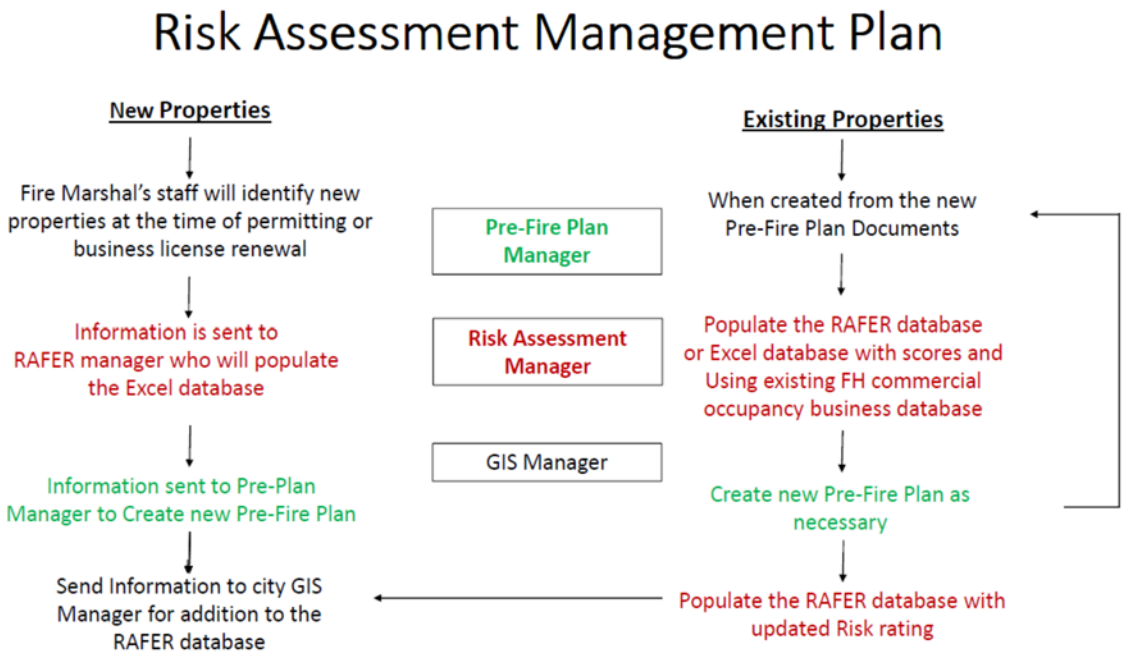
Completed Assessment Scores

Each property is assessed for the risk posed by the following items:

- Life Hazard
- Community Impact
- Life Impact
- Water Impact
- Building Usage
- Building Construction
- Number of Stories
- Square Footage

Each area receives a rating score from one to three with one equating to low risk and three being high. The simplicity of this system allows for the evaluation of approximately 2,250 properties on a routine and as needed basis. Each address is provided with a final rating ranging from 9 for the lowest risk to 24 for the highest. Upon completion of the field work the data is processed into a spreadsheet which yields a final score. The final data is loaded into the Arcview® GIS program which plots each property by CRA rating number.

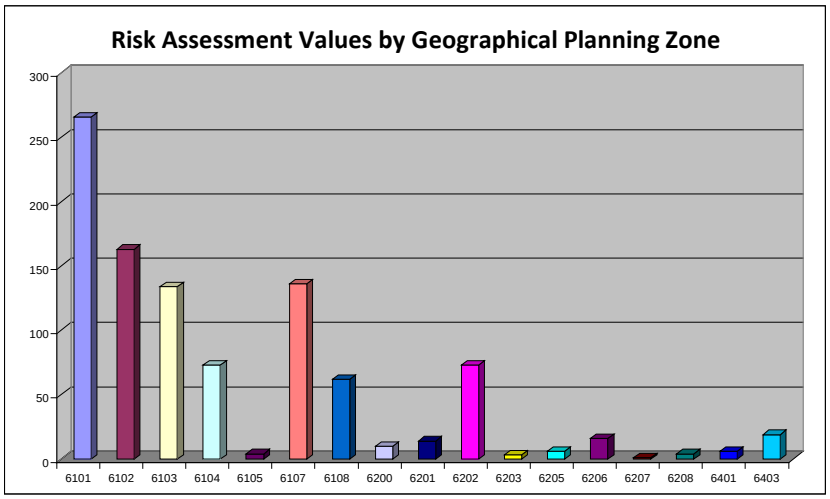
Maintenance of the risk assessment system, now referred to as RAFER, is accomplished through a combination of the regular visual visits (inspections) and when the city fire marshal performs the initial fire code compliance review of the construction plans for each new commercial property. This process, along with a full scale review of the CRA properties in 2015, help to maintain the risk assessment data. This review allows the agency to make any needed adjustments to the response assignments



Flow Chart – Management of Risk Assessment Program

As the data is processed for each of the property a risk score is awarded. The chart below illustrates that a majority of the properties range from 10 to 12, with none of the properties receiving the highest rating of 24. Properties with the following CRA scores were classified with the associated risk level classifications:

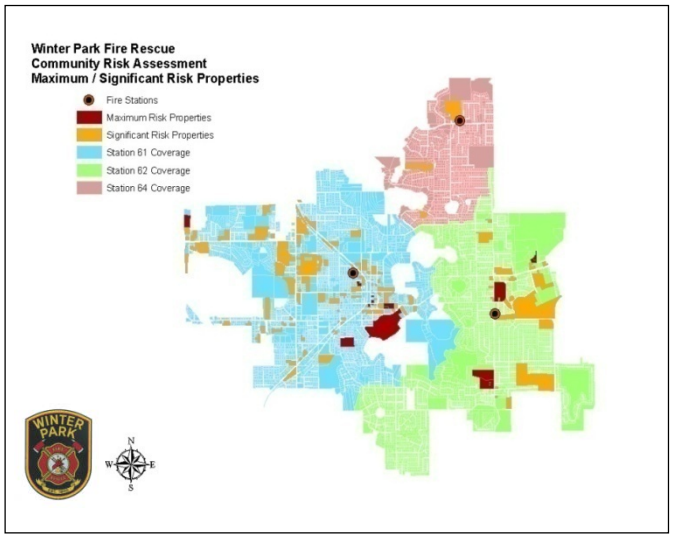
Risk Classification	Score
High	21-24
Special	16-20
Medium /Average	10-15
Low	0-9



The risk scores are assessed by the Geographical Planning Zone to help target locations or areas of risk so that the placement of resources can best be defined. The figures represented visualize that by zone; fire station 61 has the most rated occupancies, with zones 6101, 6102 and 6107 rating the most properties.

In addition to the risk data several other valuable pieces of important information are monitored as part of the overall community-wide assessment of risk. These other assessments are directed at specific functions of the operation which impact both fire and non-fire risks. Each property assessed as part of the risk assessment program is identified and plotted in the city's GIS system. This additional process allows for a real visualization of where the "at risk" properties are within the city. An example of the Maximum and Significant Risk property map has been included in this document.

One critical resource which must be assessed as part of the community's ability to fight fire is its water supply. As a built upon, suburban community with an established water supply, available water to fight fire is not normally an issue in Winter Park. The issue for our community is what can actually burn therefore an assessment of the needed fire flow is applicable. This Needed Fire Flow (NFF) analysis was first completed in 2000 and has been updated regularly throughout the period as changes are identified.



Risk Assignments / Fire Station Locations

The chart here represents a sample of the Community Fire Flow Analysis. It calculates the amount of water needed to control the emergency based on the structure, contents and exposures using the fire flow calculation model offered by the National Fire Academy. The flow calculations were made considering 25, 50 and 100 percent of fire involvement for each of the addressed structures. The advantage of this calculation is that it considers all structures including single family residential as well as multi-family and commercial structures.

Water supplies are critical to a successful fire ground operation. Knowing the capabilities of the municipal water system at any particular time is an advantage Winter Park Fire Rescue enjoys due to the direct relationship the agency has with the city's municipal Utility Department. Personnel from the Utility Department actually work alongside Fire Rescue personnel to flow and maintain all hydrants. Testing personnel from the city's water utility department have access to the Firehouse® RMS data system and maintain these important data points.

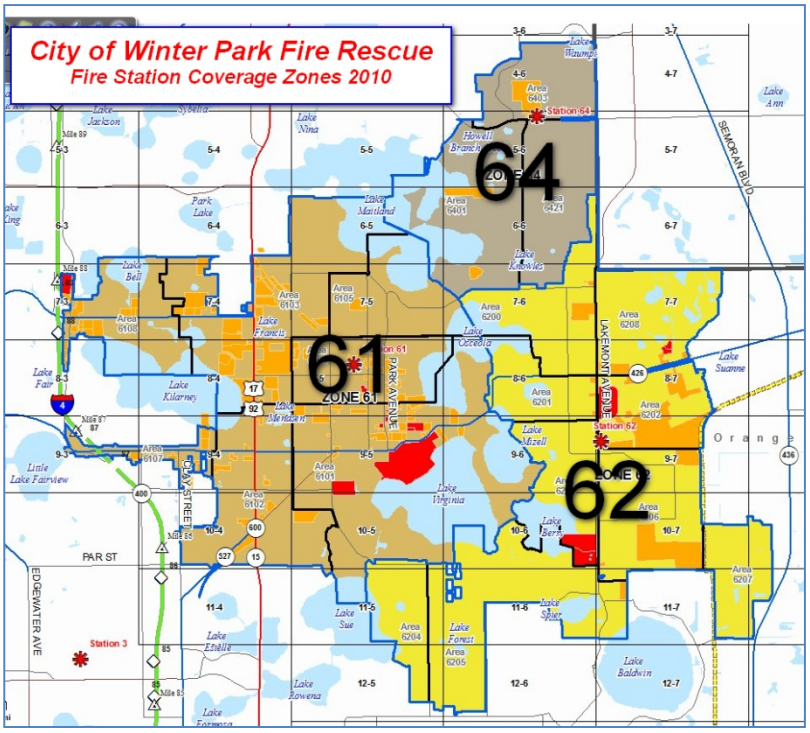
ARAGON AV			Fire Flow	Fire Flow	Fire Flow	Available	Hydrant	Test	Test	Test
Numerical	Type	Gross Sq. Ft.	GPM[1]	GPM[2]	GPM[3]	Water	No.	GPM[1]	GPM[2]	GPM[3]
800	C	1652	138	275	551	3003	448	YES	YES	YES
808	C	1030	86	172	343	3003	448	YES	YES	YES
808	C	1430	119	238	477	3003	448	YES	YES	YES

Sample - Needed Fire Flow Analysis

Geographical Planning Zones

The city of Winter Park corporate limits are comprised of a an area that is land-locked by its physical relationship to the cities of Maitland and Orlando and well as the unincorporated areas of both Orange and Seminole Counties.

For the purposes of developing specific planning zones the corporate limits of the city were first divided into the first due coverage areas for each of the three fire stations. This use of the fire station first response areas allows for the consistent review of emergency responses so that accurate comparisons can be made to both the distribution and concentration of resources.



Fire Station Response Areas

Each Station Response Area was then divided into **Geographical Planning Zones** (GPZ) based upon the sequence of remaining fire stations as fixed into the Fire Run Card response system. This system geographically divides the community and allows for common and consistent tracking of all data and responses.

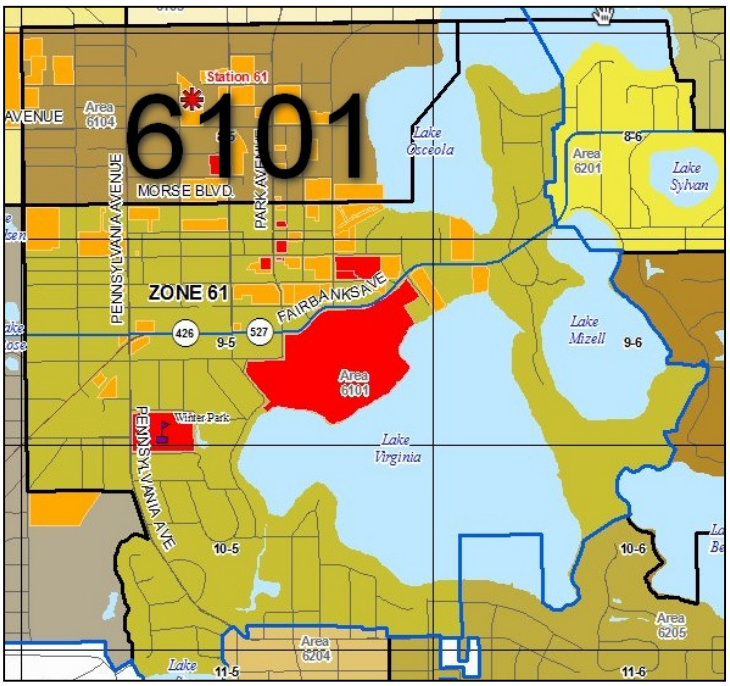
All commercial properties within each specific GPZ were assessed utilizing the agency's risk assessment tool.

The risk assessment process placed on each identified property a rating number based on the identified level of risk posed to firefighters or other first responders. This analysis yielded properties with ratings defined as having either a **Low, Medium, Special and High** risks. These properties are plotted into the GIS system for display within the GPZ areas. On this map, the maximum risk properties are noted in red and those significant risk properties are in gold. Each GPZ is also evaluated based on historical response data, needed fire flow as well as any significant non-fire risk events and responses.

Geographical Planning Zone 6101

Hannibal Square - Business District South – Rollins College – College Quarter – South Pennsylvania Avenue

AREA PROFILE:



This area encompasses what is known as the Hannibal Square business district, as well as many of the city's main service operations including the Winter Park City Hall Complex. The main railroad right-of-way cuts through this zone including the SunRail Regional commuter rail stop.

Numerous shopping and professional offices dot the area including those along the city's main street, Park Avenue. The Winter Park Community Center along with several small churches and schools are also in this zone.

The city's one major "downtown" high-rise structure is also located in this zone at the corner of Park and New England Avenues. The Bank of America Building houses 6 floors of professional offices with the bank branch taking in the first floor. The building is protected with automatic fire detection and sprinklers.

The business and residential areas contained within the central business district (CDB) remains one of the city's crown jewels. Providing shopping from the quaint, small specialty shops to major chain-stores; Park Avenue attracts thousands of visitors each day. The agency recognizes this fact and performs annual fire prevention inspections of these properties. In addition, the Hannibal Square Business District has been recognized by ordinance as requiring fire sprinklers in all commercial new construction. Any new construction within this zone also requires fire sprinkler protection.

Equally as important are the residential neighborhoods located to the west of New York Avenue, continuing to Denning Drive. This area is rich in historical structures including several turn of the century homes and churches. The area is part of the city's designated Community Redevelopment Area (CRA). The most prominent real estate in this zone is on the campus of Rollins College. The main campus is a 67-acre

lakefront setting two blocks from downtown. The campus is dotted with numerous buildings including a library, museum, classrooms and dormitories. As a result of an aggressive reconstruction and renovation program, all of the buildings on the main campus are fire sprinkler protected in addition to 24-hour campus security surveillance. The Campus Safety Department of the College has direct radio access to agency as well. In 2015, the Rollins College campus was recognized as one of the most beautiful college campuses in America.

Several other significant, historical structures also exist within this zone. Most of the remaining area is residential with the exception of the Winter Park Public Library, the Alfond Inn at Rollins College, and the Albin Polasek Museum and Sculpture Gardens and historical Capen House.

The incident history for this zone indicates a higher than normal number of fire related alarms. Many of these are reflective of the high number of monitored alarm systems on the Rollins Campus and in the central business district.

LOCATION FACTORS:

This area is comprised of 18.4 miles of mostly residential streets. The major roadways in this zone include Fairbanks Avenue, South New York and Park Avenues. South Park and Pennsylvania Avenues have been treated with brick pavers as a traffic calming measure. Additional four-way stop intersections do exist along major run routes within this zone. No other significant traffic calming measures are utilized in this zone.

The campus of Rollins College is located within this zone as well as the (two tracks) rail line. The area is considered to be densely populated with most of the area commercial and residential in nature. Three major lakes (Osceola, Virginia and Mizell) are also located with this zone.

RISK ASSESSMENT RATINGS:

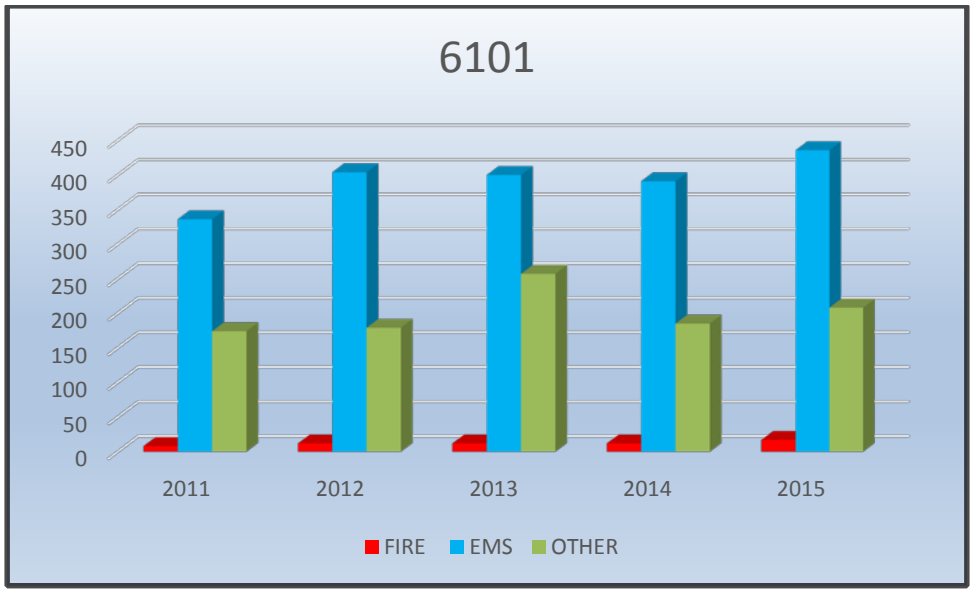
When the agency's community risk assessment process is applied to the commercial properties within this zone the determined ratings assist the agency in making response deployment decisions based on the identified level of risk. Eight specific areas of risk were assessed to determine the demand being placed on fire and EMS emergency services. This area of the community contained the following levels of demand for fire and non-fire risk.

Total Properties Assessed 579
Properties Posing Above average risk 277

While a rather large percentage of properties in this zone rated above the average city-wide several of the maximum and significant risk properties also reside in this zone. In addition to the noted risks, the zone also contains Central Park, City Hall and the Winter Park Farmer's Market. While not noted as above average risk for fire, these locations also host numerous gatherings which pose significant non-fire related risks as well.

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

A review of the response patterns over the past five years in this zone demonstrates the most significant call demand remains emergency medical responses. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $283.522.00 in fire loss over the period.



CONSEQUENCE FACTORS:

Numerous unprotected properties exist in this zone which could pose a significant loss of life if exposed to fire. Most of these properties are located in the residential area and along the older sections of South Park Avenue. Included in the Moderate Risk area would be the Winter Park City Hall Complex. A loss of this structure to fire would be significant to the city's ability to operate due to the fact that City Hall contains many of the land records and legal documents housed by the city. The building is protected by

automatic notification only and no fire sprinklers. The agency has done pre-planning and training to respond to emergencies involving these areas will continue and work on securing fire sprinklers where applicable. A school is located at the intersection of Pennsylvania and Huntington Avenues. The Winter Park High School Ninth Grade Center operates in structure originally constructed in the early 1940s. The building operates as the ninth grade annex for the city's high school and was completely renovated in 2011.

The agency is well aware of the risks that exist on the Rollins College campus. The Office of the Fire Marshal conducts annual fire inspections of each building on campus. Additionally, Fire-Rescue crews spend time conducting pre-fire planning on property. The agency is constantly working with campus administration regarding the upgrading of existing dormitories and any new construction that takes place. Vehicle access remains an important concern of the agency. Regular patrols of both Campus Safety officers and agency supervisors help to ensure adequate fire apparatus access. The agency has performed event pre-planning and training to respond to emergencies involving these areas and will continue and work with campus staff to improve the fire safety of each structure. Many of the buildings on the Rollins College campus are of a historical nature. Additionally, a number of historical buildings owned by the College are located off-campus as well.

NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was originally generated in the city's Master Fire Flow Analysis. In this zone, residential dwellings ranged from slightly over 500 square feet to slightly less than 3000 square feet. Required fire flow for 100% involvement was met with the available water in the area.

The largest commercial structure is located at 400 Park Avenue South, The Sun Trust Plaza / Rollins College Parking Facility is over 370,000 square feet. Both the parking structure and commercial office and retail structure is sprinkler protected. Required fire flow for 100% involvement is 8500 gpm and the available water is rated at 2,828 gpm. The other areas located along South Park Avenue have available water to effectively attack only 25 to 50% involvement of any one structure. Maximum available water in this area is 3,589 gpm. The largest structure on the Rollins College campus is the new Bush Science Center. The building contains the college science department and is fully sprinkler protected. All other structures fell within acceptable fire flow limits.

Geographical Planning Zone 6102

South Pennsylvania Avenue West – South Orlando Ave / South of Morse Blvd.

COMMUNITY PROFILE:

This area is best described as light commercial with smaller strip type shopping and professional malls and small to moderate residential and townhouse properties. The water system is adequate to meet fire flows for the area described to a 50% fire involvement. A large park area exists at the corner of Morse Blvd and Denning Drive. Lake Island Park hosts a number of small to moderately sized events each year. Many of the city's soccer and youth football teams use the fields at Lake Island for practice and games. The city has two main structures on the property. The Winter Park Civic Center is an 11,970 square feet multi-purpose facility located at 1050 W. Morse Boulevard. Numerous wedding receptions and meetings are held in the facility on a regular basis. The Lake Island Recreation Center is a small structure with a meeting room facility and restrooms.

A large shopping and light commercial area exists in the 800 block of South Orlando Avenue. The Holiana Shopping Center and the Winter Park Business Center are approximately 150,000 square feet combined. The shopping area, including the Publix grocery store is sprinkler protected.

LOCATION FACTORS:

This area is comprised of 11.92 road miles of mostly streets. The major roadways in this zone include Fairbanks and Orlando Avenues as well as portions of Denning Drive and Orange Avenue. Several four-way stop intersections do exist along major run routes within this zone. No other traffic calming measures are utilized in this zone.

RISK ASSESSMENT RATINGS:

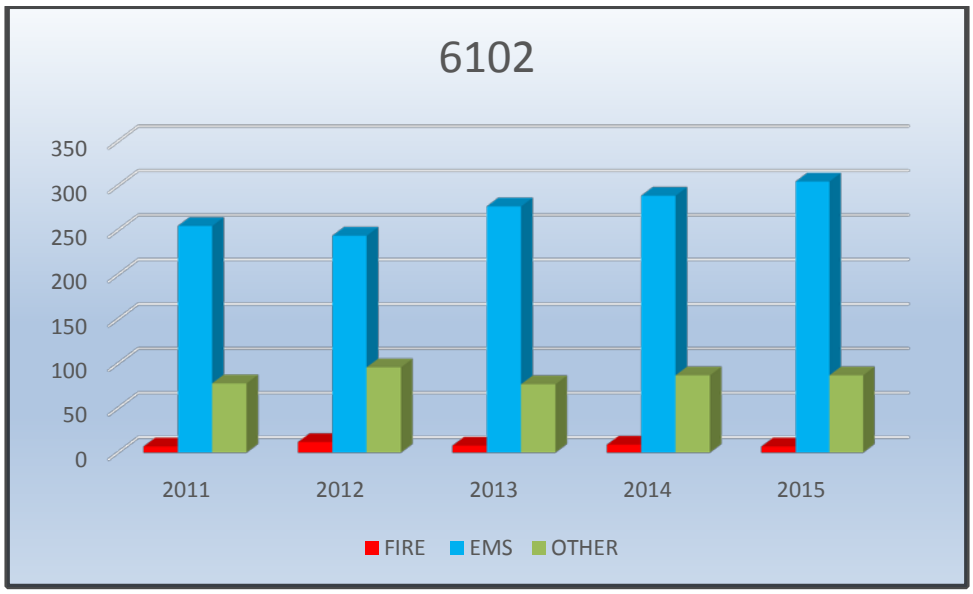
A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage.

This area of the community contained the following levels of demand.

Total Properties Assessed 361
Properties Posing Above Average Risk 12

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

The total number of priority one alarms for this zone are charted below. A review of the response patterns over the past five years it appears the most significant call demand in this zone remains EMS responses. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $207,800.00 in fire loss over the period.



CONSEQUENCE FACTORS:

The only significant unprotected properties in this zone, which would pose a large loss of life, and property are the Winter Park Vocational School (OCPS) and the industrial warehouses on Solana Avenue. The agency has done pre-planning and training to respond to emergencies involving these areas will continue and work with the railroad line owners and the State road department.

NEEDED FIRE FLOW FACTORS:

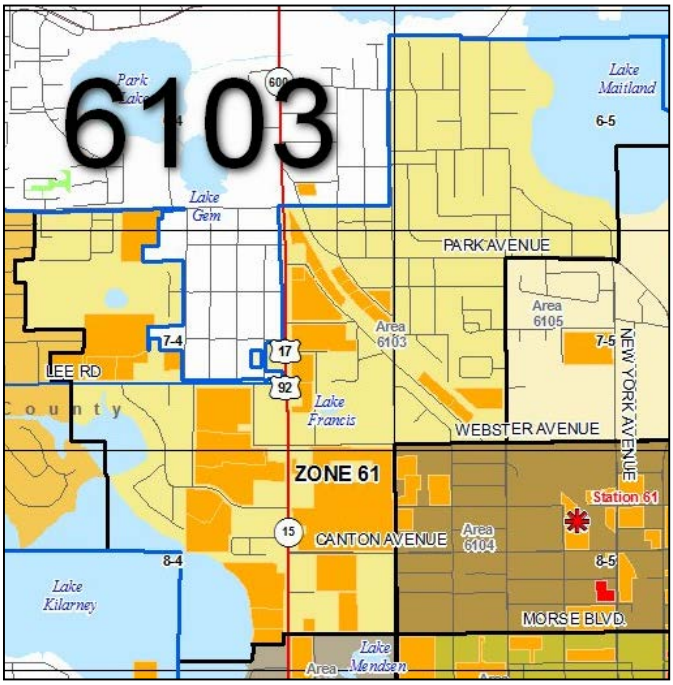
A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, residential dwellings range from slightly over 500 square feet to slightly less than 3,000 square feet. Required fire flow for 100% involvement is met with the available water in the area. Maximum available water in this area is 3,589 gpm. All other structures currently fall within acceptable fire flow limits.

Geographical Planning Zone 6103

North Park and Orlando Avenues, Lee Road and the Winter Park Village Complex

COMMUNITY PROFILE:

This area is can best be described as a predominately high-end residential area with some light commercial and industrial structures. Some of the residential structures range in size from a little over 1000 to over 12,000 square feet. This zone contains a portion of the city owned golf course and cemetery.



The eastern section of the zone is bordered by Lake Maitland. Only private boat access is available in this area. The First Baptist Church of Winter Park is also located within this zone. This is a full-service church including a fully operational day-care operated five days a week. The Twelve Oaks subdivision is located off North Park Ave in this zone. This residential areas contain estate homes ranging in size from 4,000 to 9,000 square feet.

This Geographical Planning Zone also contains light commercial with smaller strip type wholesale occupancies. Over the past several years many have been renovated or are fairly new with fire protection features applicable to current adopted fire, and building codes. The water system is adequate to meet fire flows for the area described. A light industrial area does exist along Solana Avenue. Much of the industry is automotive related occupying several large warehouse type structures, which are not protected. A bulk fuel storage facility is also located in this zone. The CSX right-of-way cuts through this zone. No regular stopping points are located along the track area. Winter Park Vocational School is located at the corner of Denning Drive and Webster Avenue. This is an adult educational facility and has a large number of re-locatable classroom structures, which are all unprotected.

The Winter Park Village shopping complex is also located in this demand zone. The current configuration replaced the Winter Park Mall; a common 70's generation fully enclosed shopping facility. The new layout lends itself more to a "village" type commercial concept with individual structures mixed with strip-shop

style clusters of buildings. The largest structure in the complex is the 21-screen Regal Cinema. This is a modern movie viewing facility with stadium seating. All structures in the complex are protected with fixed systems and alarms. A large strip-style shopping complex is located across US 17-92 from the Winter Park Village. The K-Mart Shopping Center housed a B-Class K-Mart facility with a multitude of other shops located north and south of the main structure. This site is mostly vacant at the time of this report and is scheduled for renovations in 2016. All facilities on this site are fire protected with automatic sprinklers and alarms.

Also located in this zone are two large apartment complexes and an assisted living facility (ALF). The Hidden Pond and Highland Breeze Apartments also generate a great deal of alarm activity. Both complexes are unprotected but do have monitored alarm systems. One complex experienced a large dollar loss fire in 2009. However, entire units have been lost to fire since their construction in the late 1960's. Also located in this zone is the Margaret Square Complex, a facility operated by the Winter Park Housing Authority. Low to middle income families occupy the eight unit buildings, which are unprotected and have only local fire alarm capabilities. One of the cities true high-rise structures is also located in this zone. The Plymouth Apartments, located at 1550 Gay Road, houses mostly elderly residents in a seven story, mid 60's style apartment building. The structure was retrofitted with fire protection in the 1980's. The water system in the area is adequate to meet required fire flows.

LOCATIONS FACTORS:

This area is comprised of several major arterials running north and south. Orlando Avenue (US 17-92) runs from Morse Blvd to the north city limits and intersects with Lee Road. Pedestrian traffic is heavy in this zone due to the abundant shopping areas as well as being directly adjacent to the Center for Independent Living. The zone contains 14.09 miles of roadways.

Several residential streets have been treated with brick pavers as a traffic calming measure. No other traffic calming measures are utilized in this zone.

RISK ASSESSMENT RATINGS

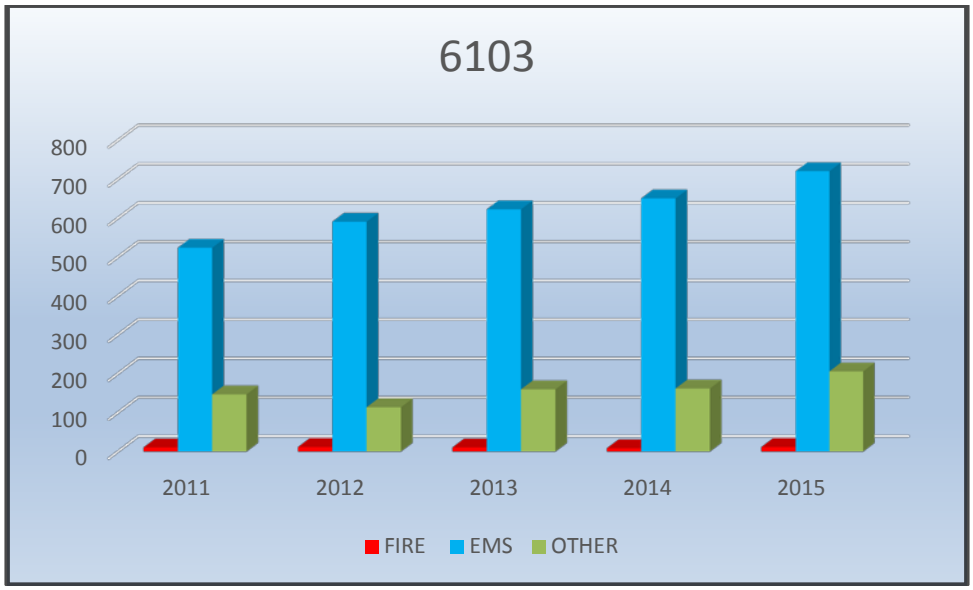
A risk assessment was completed on the commercial properties within this demand zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage.

Total Properties Assessed 134
Properties Posing Above Average Risk 26

Several concerns exist in this zone. First, the ALF facility located on Monroe Avenue while protected and monitored generates a large concern for loss of life in a fire situation. The four major apartment complexes require constant monitoring by the fire department. Three of these complexes are unprotected properties and have a somewhat transient population. These facilities pose a large loss of life, and property In addition, two major state roads run both east to west (Lee Road) and north and south (US 17-92). The agency has done pre-planning and training to respond to emergencies involving these areas will continue and work with the apartment complex owners in the area of fire prevention. (Unprotected properties) There exists a church and church school in this zone. Several significant residential areas do exist include those located along Lake Maitland and in the Twelve Oaks Subdivision. No overnight parking of over-the-road transportation vehicles carrying hazardous materials is allowed in the city of Winter Park.

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

A review of the response patterns over the past five years shows the most significant call demand in this Zone is for medical services. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $120,155.00 in fire loss over the period.



NEEDED FIRE FLOW FACTORS:

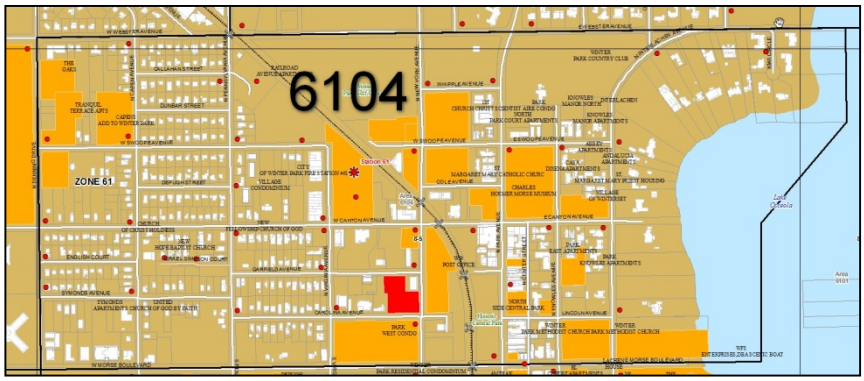
A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwellings are located at 1695 and 1701 Lee Road. These are unprotected, multi-family apartment dwellings ranging in size from 36,248 to 54,174 square feet. The hydrant system in this area can only generate what is required to meet a 25% involvement.

Available water in the complexes ranges from 3,065 to 3,252 gpm. This is a large life hazard area and is so recognized by the agency. Two large commercial occupancies are located in this zone. The K-Mart plaza at 501 N. Orlando Avenue at 105,050 square feet and the old Dillard's Structure at 490 N. Orlando at 101,230 square feet is among the largest in the community. Both structures are sprinkler protected. All other structures fall within acceptable fire flow limits.

Geographical Planning Zone 6104

Central Business District / North Park Avenue

COMMUNITY PROFILE:



This zone is reflective of old Winter Park. Many of the original residential areas of the city still remain. In 1992, most of this zone was designated by the city of Winter Park and Orange County a Community Redevelopment Area (CRA). Since then, the city has worked with developers to rebuild much of the neighborhood. Residential housing from less than 900 square feet to over 10,000 square foot estates located along Lake Osceola. Fire Station 61, along with the Public Safety Complex is located in this zone.

The city's central business district is contained within this zone. The Park Avenue shops and restaurant district in found in both this zone and in zone 6101. This area is a key economic generator for the community. A major fire in this key area would have a large economic impact. Some of the structures along the "Avenue" are sprinklered, but more are not. A working fire has the potential to move along the block with disastrous implications.

Saint Margaret Mary Catholic Church and School (K-8) along with First United Methodist Church of Winter Park and the First Church of Christ Scientist operate facilities in this zone. Many of the buildings in both of these facilities are sprinkler protected. Population in this zone can be very heavy during Sunday services and around the holidays.

Several residential properties of significant historical value are located in this zone. The historical *Casa Feliz* home located at 656 N. Interlachen Avenue was designed by architect George Gamble Rogers in the 1920s. The house was saved from demolition several years ago and was after relocated to its present location saving it for its historical value.

Two major condominium complexes are located along Interlachen Avenue which pose a potential problem for the fire department. Whispering Waters and the Cloisters are located at the intersection of

Morse Blvd and Interlachen. These are multi-story buildings with mostly an elderly population. Each facility being located along Lake Osceola, poses an access problem. Fire apparatus only have access to three sides of either building making rescues from upper floors difficult. In addition, Whispering Waters has a below-grade parking garage facility.

The CSX right-of-way cuts through this zone. The Winter Park Train Station services both Sun Rail and Amtrak passengers is also located in this zone. The Station generates few calls however the potential for an incident involving suspicious packages and cargo does exist. Sun Rail is a daily commuter service running five days a week while Amtrak runs approximately six trains per day.

LOCATION FACTORS:

This area is comprised of 7.19 miles of mostly residential and secondary streets. The major roadways in this zone include North New York and North Park Avenues.

North Park Avenue has been treated with brick pavers as a traffic calming measure. Additional four-way stop intersections do exist along major run routes within this zone. No other traffic calming measures are utilized in this zone.

RISK ASSESSMENT RATINGS:

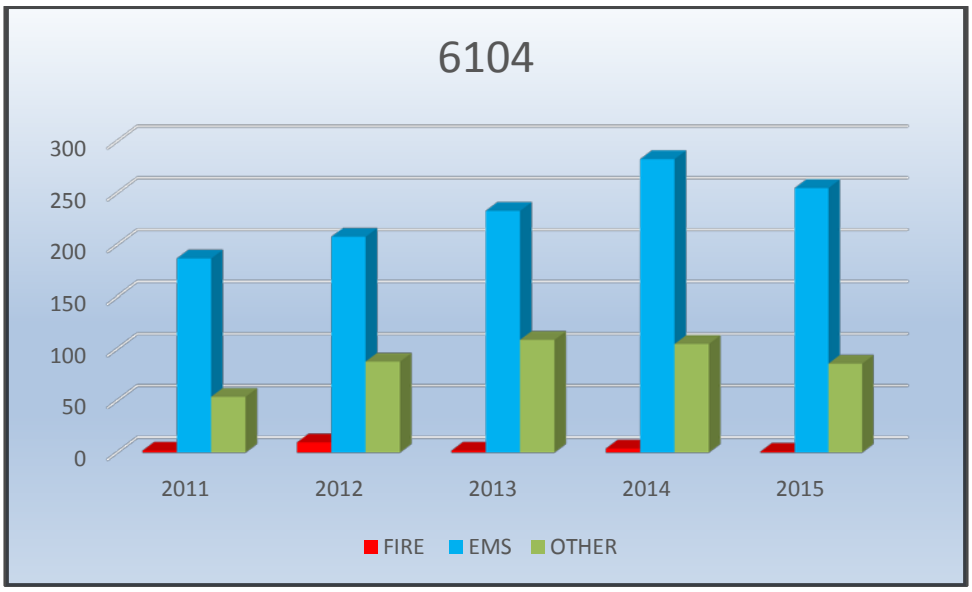
A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 73
Properties Posing Above Average Risk 18

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

A review of the response patterns over the past five years in this zone it appears the most significant call demand remains medical responses. Overall, it appears that a slight downward trend in calls in this Zone is occurring. No significant fires have occurred over the past five years. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $109,340.00 in fire loss over the period.



Several significant unprotected properties are found in this zone which would pose a large loss of life, and property. The agency performs pre-planning and training to respond to emergencies involving these areas.

NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 15,810 square feet and is located at 700 N. Interlachen Avenue. Required fire flow for 100% involvement of this structure is 5270 gpm and the available water is rated at 3268 gpm. Also located in this zone is a multi-family structure at 857 W. Swoop Avenue measuring 20,385 square feet. Required fire flow for 100% involvement of this structure is estimated at 6775 gpm and the available water is rated at 3140 gpm. The largest commercial structure is located at 400 Park Avenue South, The Sun Trust Plaza / Rollins College Parking Facility is over 370,000 square feet. Both the parking structure and commercial office and retail structure is sprinkler protected. Required fire flow for 100% involvement is 8500 gpm and the available water is rated at 2828 gpm.

The other areas located along Park Avenue South have available water to effectively attack only 25 to 50% involvement of any one structure. Another large commercial occupancy is located at 500 N. New York Avenue and is 56,361 square feet. This building is sprinkler protected. Not necessarily the largest in size but certainly in economic impact, the commercial shopping area on N. Park Avenue is

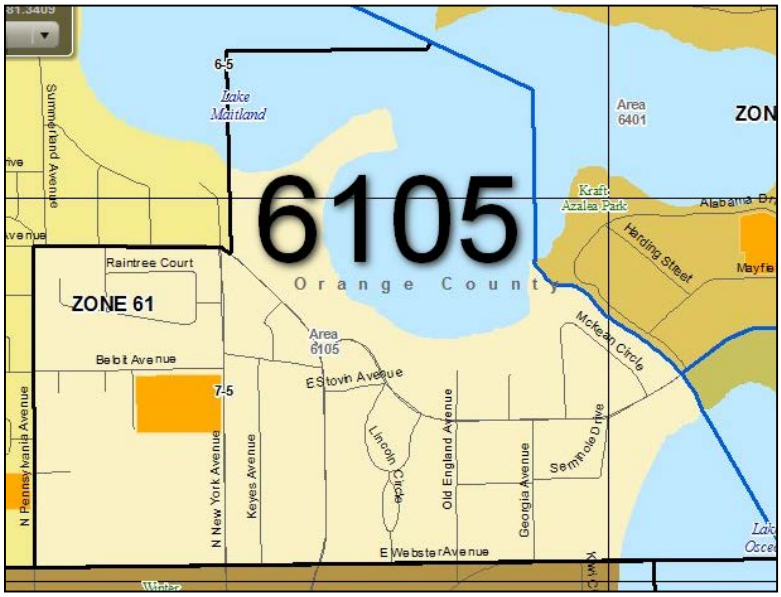
located within this zone. It has been designated as a moderate risk due to the potential economic loss due to fire. The largest single structure in this zone is located at 200 N. Park Avenue and is 26,267 square feet. Required fire flow for 100% involvement is 8,876 gpm and the available water is rated at 2,876 gpm. All other structures fall within acceptable fire flow limits and are identified in the Fire Flow Analysis.

Geographical Planning Zone 6105

Palmer / Alabama Avenue

AREA PROFILE:

This area contains numerous high-end residential estate properties. Some of the residential structures range in size from a little over 1000 to over 12,000 square feet. The zone contains one small assisted living center with less than 20 residents. Roadway access to many of the properties is limited forcing some extensive pre-fire planning for the estate-size single family dwellings. The area is bordered on the east by the canal between Lakes Osceola and Maitland.



LOCATION FACTORS:

This area is comprised of 4.85 miles of mostly residential streets. The major roadways in this zone include Palmer Avenue, North New York and North Park Avenues. North Park Avenue has been treated with brick pavers as a traffic calming measure. Additional four-way stop intersections do exist along major run routes within this zone. No other traffic calming measures are utilized in this zone.

RISK ASSESSMENT RATINGS

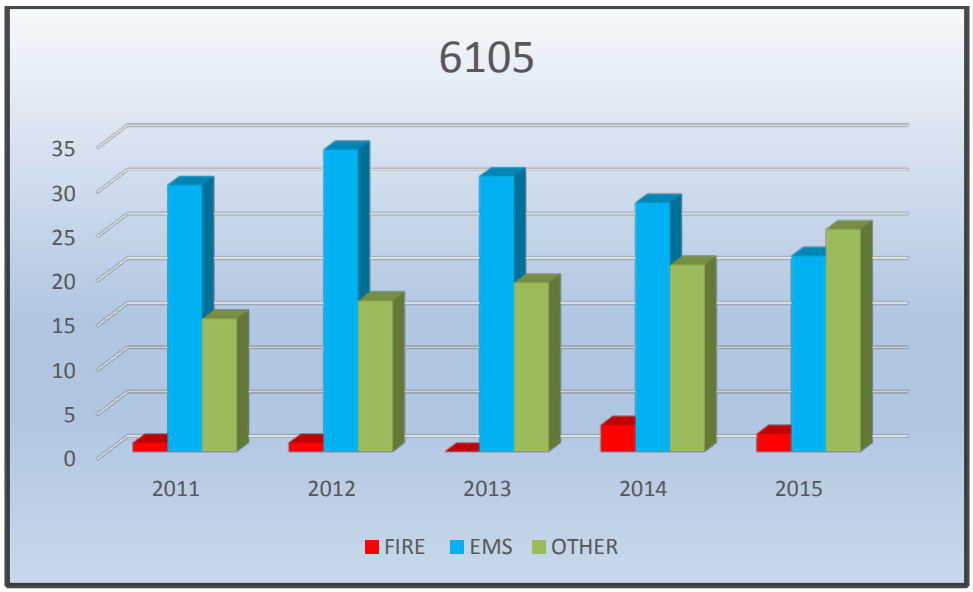
A risk assessment was completed on the commercial properties within this demand zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 4
Properties Posing Above Average Risk 0

There are no significant unprotected properties in this zone, which would pose a large loss of life, and property other than the large estate residential structures. The agency has done pre-planning and training to respond to emergencies involving these areas. Kraft Azalea Gardens, a city of Winter Park owned property is located in the northern section of this zone and offers access to Lake Maitland.

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this zone reported during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $55,850.00 in fire loss over the period.



NEEDED FIRE FLOW FACTORS:

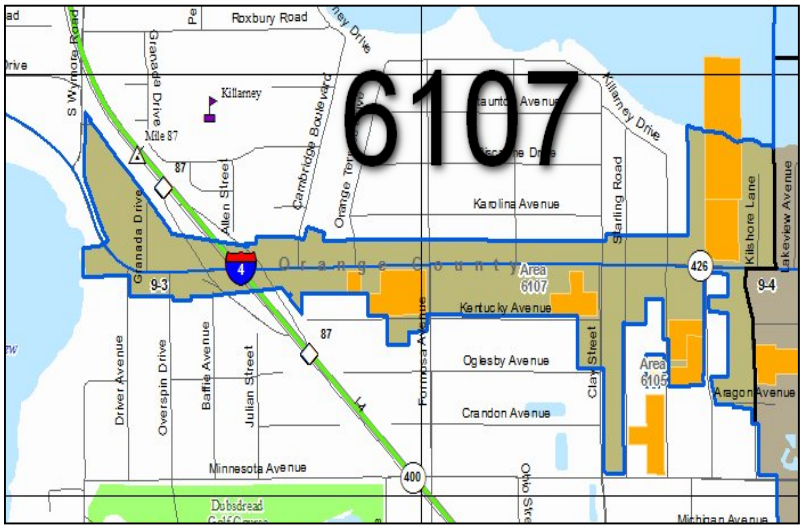
A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 11,665 square feet. Required fire flow for 100% involvement is 3,888 gpm; available water is rated at 2,535 gpm. The largest commercial occupancy is 147,672 square feet and is sprinkler protected. All other structures fall within acceptable fire flow limits and are identified in the Fire Flow Analysis.

Geographical Planning Zone 6107

Fairbanks Avenue westward to Interstate 4

AREA PROFILE:

This area was originally annexed by the city in 2004 and includes all the commercial properties along the Fairbanks Avenue corridor from 17-92, west to Interstate 4 and Wymore Road. It is best described as a light commercial and warehouse district. A number of small to medium sized commercial office complexes are located along the Fairbanks Avenue corridor. The only sprinkler protected property is an office and medical complex in the 1500 block of Fairbanks Avenue.



LOCATION FACTORS:

This area is comprised of 2.33 miles of mostly residential and secondary streets. The major roadways in this zone include Fairbanks Avenue west to the city limits at Wymore Road and the interchange with Interstate 4 (I-4). No traffic calming measures are utilized in this zone.

RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

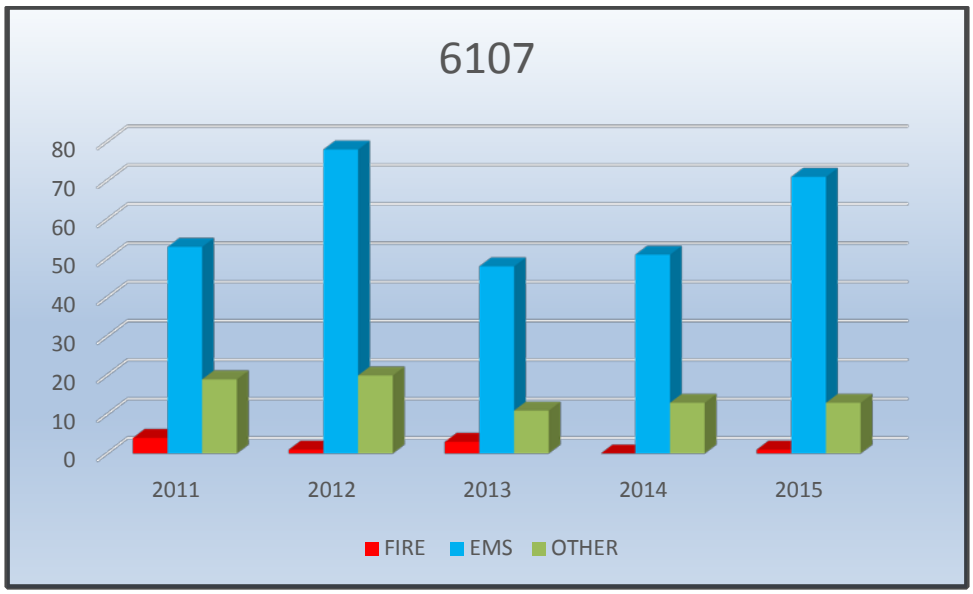
Total Properties Assessed 136

CONSEQUENCE FACTORS:

The agency has done pre-planning and training to respond to emergencies involving these areas. There are several private schools and churches in this zone. A large medical cancer and pain treatment facility generates an above average number of medical and fire alarm related responses.

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large dollar loss fires or loss of life from fire in this zone reported during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $5,200.00 in fire loss over the period.



NEEDED FIRE FLOW FACTORS:

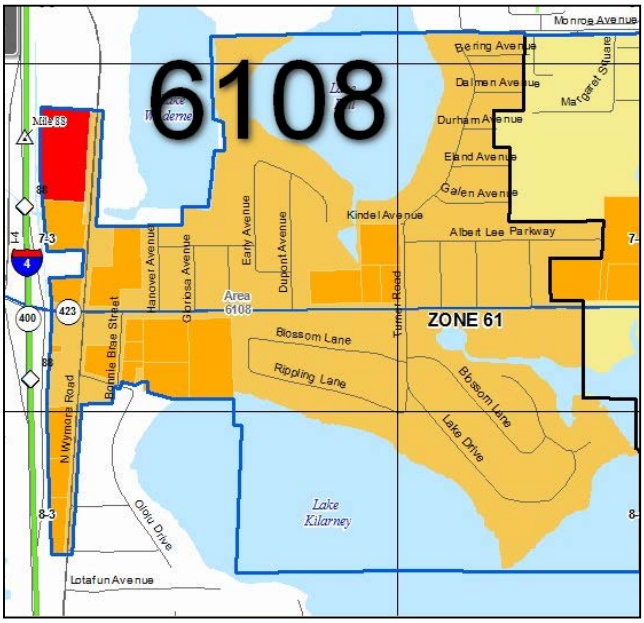
A calculation for needed fire flow on every commercial structure was generated in the city's Fire Flow Analysis. In this zone, the largest commercial property is a church complex. A large number of commercial properties are located along the side streets off Fairbanks Avenue. More commercial properties are located off Wymore Road. All structures fall within acceptable fire flow limits and are identified in the Fire Flow Analysis.

Geographical Planning Zone 6108

Lee Road westward to Interstate 4 / Lake Bell

AREA PROFILE:

This area was annexed into the city in 2003 and 2004. It contains mostly light commercial and several multi-family and single family residential neighborhoods. The area connects the downtown areas to Interstate 4 and to the light commercial areas along Wymore Road. The area along I-4 contains a large car dealership and a local TV station (WESH) and their facilities.



LOCATION FACTORS:

This area is comprised of 5.51 miles of mostly residential streets. The major roadways in this zone include Lee Road and Wymore Avenue and the intersections with Interstate 4. No traffic calming measures are utilized in this zone.

RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

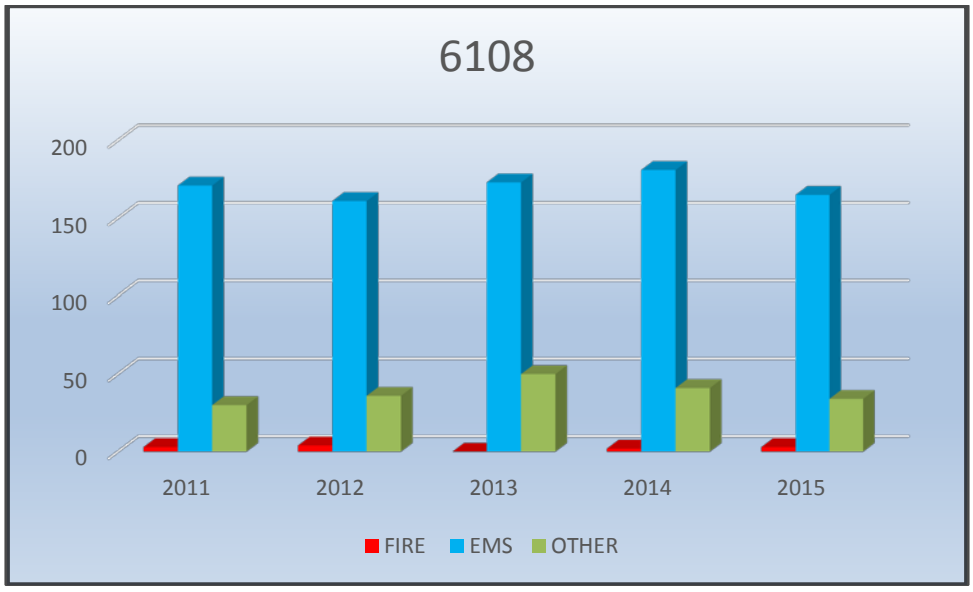
Total Properties Assessed 62
Properties Posing Above Average Risk 16

CONSEQUENCE FACTORS:

There are a number of unprotected properties in this zone which would pose a large loss of life, and property. Large two-story apartment complexes are located along Lee Road. The agency has done pre-planning and training to respond to emergencies involving these areas. There are no schools, churches, or libraries in this zone.

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

No loss of life was recorded from fire. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $3,500.00 in fire loss over the period.



NEEDED FIRE FLOW FACTORS:

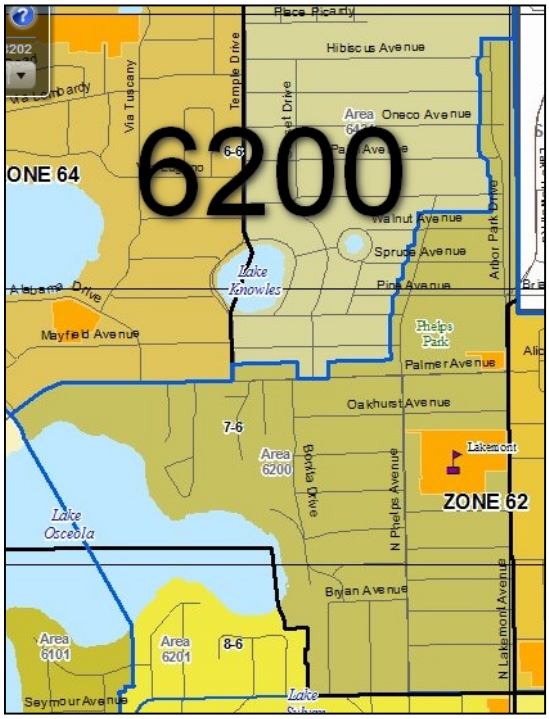
A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 11,665 square feet. Required fire flow for 100% involvement is 3,888 gpm; available water is rated at 2,535 gpm. The largest commercial occupancy is 147,672 square feet and is sprinkler protected. All other structures fall within acceptable fire flow limits and are identified in the Fire Flow Analysis.

Geographical Planning Zone 6200

Lakemont Avenue - North

AREA PROFILE:

This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Homes on the western area of this zone border Lake Osceola and have limited roadway access. Lakemont Elementary School (K-5) is located in this zone and has structures up to 22,000 square feet. It is operated by the Orange County School System and offers a normal 9-month school schedule. A local fire alarm system is monitored on campus. A school resource police officer is on campus at all times. The entire campus was rebuilt in 2009.



LOCATION FACTORS:

This area is comprised of 7.42 miles of mostly residential streets. The major roadways in this zone include Phelps Avenue, North Lakemont Avenue and Temple Drive. While the streets are mostly residential in nature, no specific traffic calming measures are utilized in this zone.

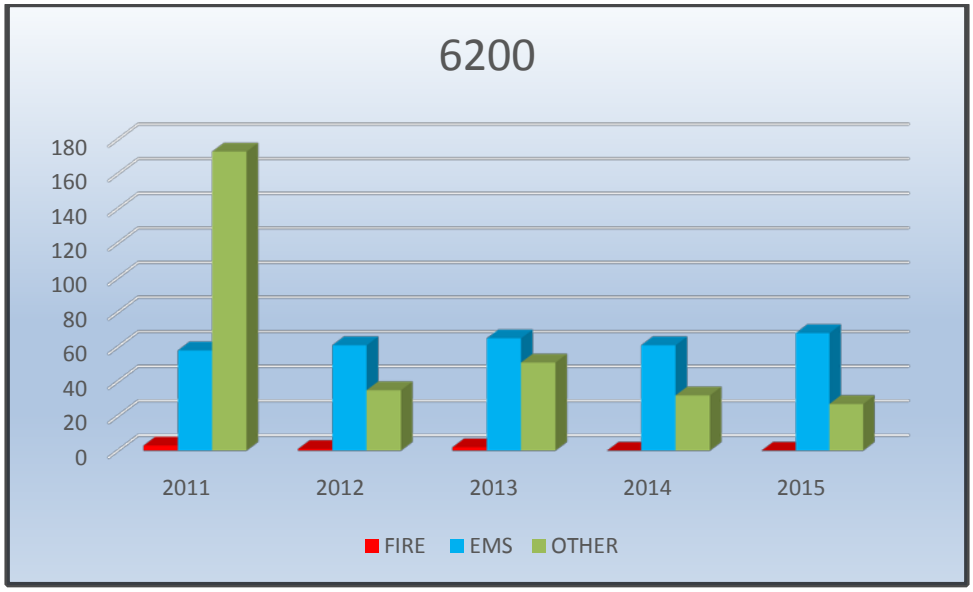
RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 10
Properties Posing Above Average Risk 5

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this zone reported during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $7,500.00 in fire loss over the period.



CONSEQUENCE FACTORS:

The Lakemont Elementary School campus was completely rebuilt in 2009. All structures are now protected with a fire sprinkler system. The facility has been pre-fire planned. There are buildings of historical value in this zone most of which are residential. In addition, the community YMCA facility is located in this zone. It is also sprinkler protected.

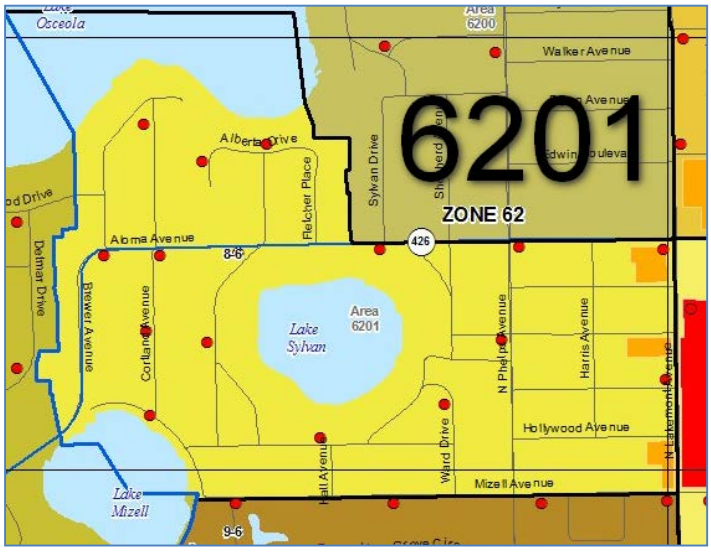
NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 6,606 square feet. Required fire flow for 100% involvement is 2,202 gpm and the available water is rated at 2,759 gpm. The largest commercial occupancy is 21,947 square feet and is not protected. Fire flow in the area is limited and is shown to be at 3,120 gpm.

Geographical Planning Zone 6201

Lake Sylvan Area

AREA PROFILE:



This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Homes on the western area of this zone border Lake Osceola and have limited roadway access. Lake Sylvan is a prominent feature of this area.

Two residential streets border the lake and a number of larger homes front the lake directly. Several commercial properties front Lakemont Avenue and Aloma Avenue. A three-story professional office structure, including a bank is located on this busy corner, also located on the eastern edge of this area is the Florida Hospital / Winter Park campus. The emergency entrance and physician parking area enter off of North Lakemont Avenue. The complete hospital campus is sprinkler protected. Traffic is a major concern of this area as Aloma Avenue is the main east-west thoroughfare in the city. At peak hour, traffic is brought to a complete standstill. This often requires emergency vehicles go into oncoming traffic or choose another route.

LOCATION FACTORS:

This area is comprised of 5.08 miles of mostly residential streets. The major roadways in this zone include Phelps Avenue, North Lakemont Avenue and Temple Drive. While the streets are mostly residential in nature, no specific traffic calming measures are utilized in this zone.

RISK ASSESSMENT RATINGS:

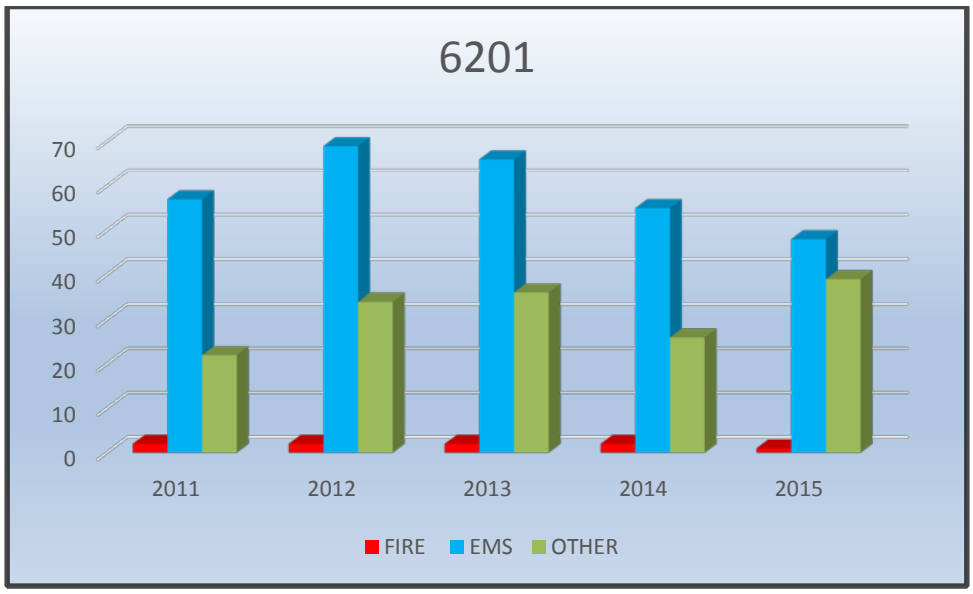
An assessment was completed on the residential and commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels

of risk.

Total Properties Assessed 14
Properties Posing Above Average Risk 4

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this zone reported during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $63,550.00 in fire loss over the period.



CONSEQUENCE FACTORS:

There is no significant commercial property in this zone. There are no schools, churches, libraries, or buildings of historical value in this zone.

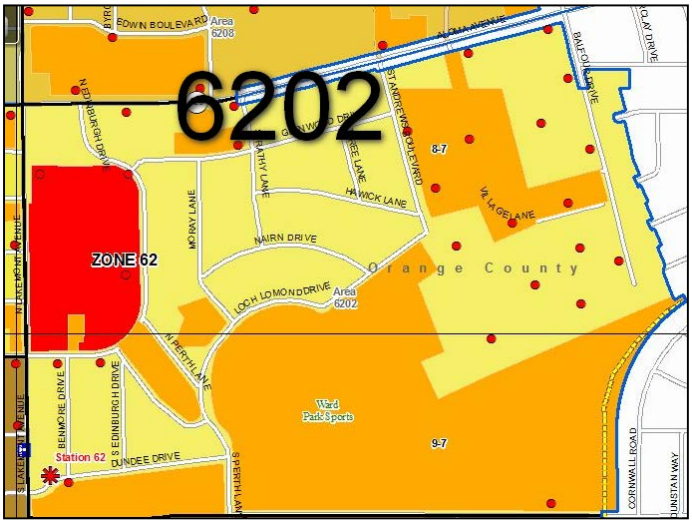
NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 7,367 square feet. Required fire flow for 100% involvement is 1,210 gpm and the available water is rated at 2,456 gpm. The largest commercial occupancy is 266,806 square feet and is protected with fire sprinklers. Fire flow in the area is shown to be at 4,303 gpm.

Geographical Planning Zone 6202

Loch Lomond Drive

AREA PROFILE:



This area is best described as light commercial with smaller strip type malls with a limited residential area. A majority of the commercial property in the zone is designated for medical or professional use, the exception being the light commercial areas adjacent to Aloma Avenue. Two large condominium projects are located on the eastern border of this zone in addition to a large housing authority project on Balfour Road. Neither the condominiums nor the apartment project is sprinkler protected. Many of the residents of these complexes are elderly and have specialized medical needs.

The city's only true stadium and sports complex are located along Cady Way in the southeastern portion of this zone. The stadium is used for high school athletics such as football and track. A community swimming pool operated by the YMCA is adjacent to the stadium. A church campus is located at the corner of South Lakemont Avenue and Dundee Drive. Several smaller offices and a daycare facility are also in this area. None of these facilities are sprinkler protected.

An Assisted Living Facility ALF is also located in this zone at 2075 Loch Lomond Drive. *Manor Care* houses several hundred patients of varying stages of health and recovery. This is a 40,825 square feet facility and is sprinkler protected.

LOCATION FACTORS:

This area is comprised of 4.40 miles of mostly residential streets. The major roadways in this zone include North Lakemont and Aloma Avenues. While the streets are mostly residential in nature, no specific traffic calming measures are utilized in this zone.

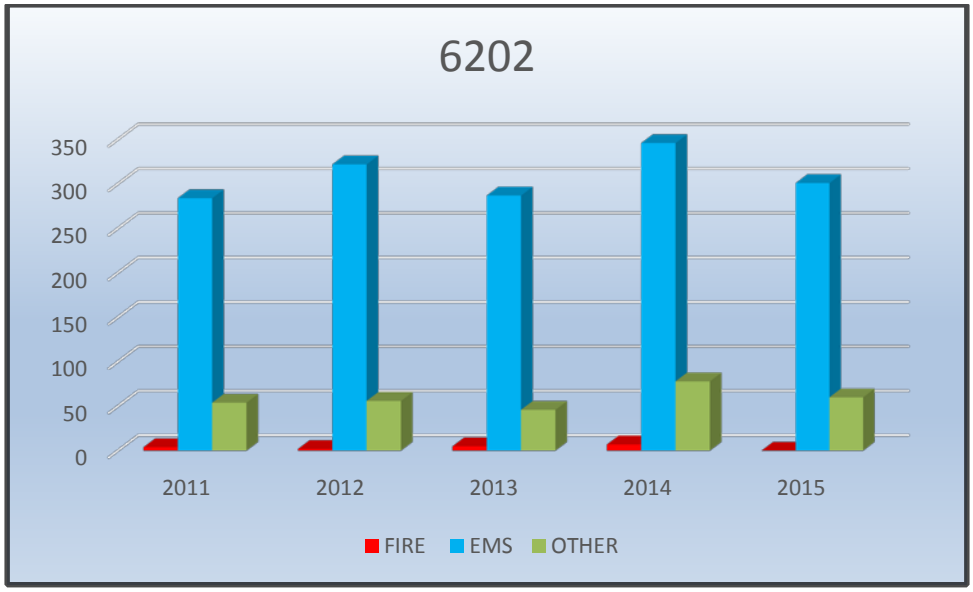
RISK ASSESSMENT FACTORS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of identified risk.

Total Properties Assessed 74
Properties Posing Above Average Risk 13

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this zone reported in this Geographical Planning Zone during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $191,420.00 in fire loss over the period.



CONSEQUENCE FACTORS:

This Geographical Planning Zone contains the Florida Hospital / Winter Park campus. Most of the structures on the hospital campus are fully sprinklered. The only significant unprotected properties in this

zone which would pose a large loss of life, and property are a large church campus and any incidents involving the Cady Way Park & Stadium complex. The agency has done pre-planning and training to respond to emergencies involving these areas. No overnight parking of over-the-road transportation vehicles carrying hazardous materials is allowed in the City of Winter Park. There are no schools, libraries, or buildings of historical value in this zone.

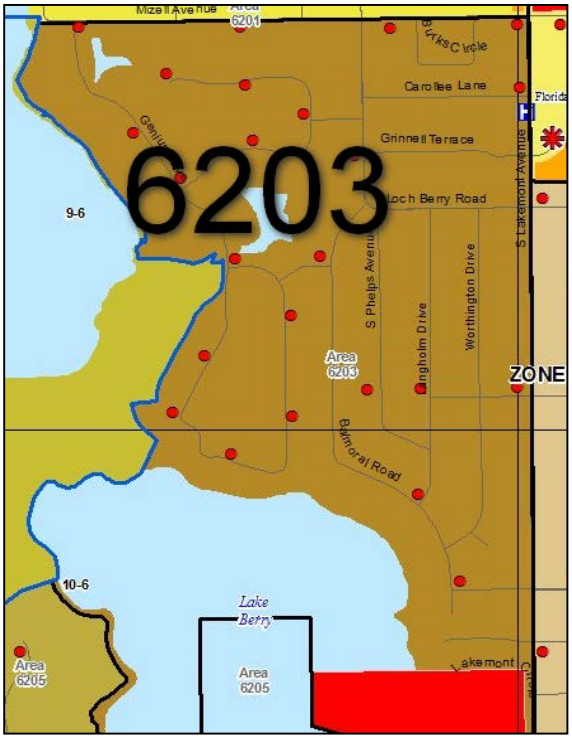
NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 2,837square feet. Required fire flow for 100% involvement is 946 gpm and the available water is rated at 4,610 gpm. The four buildings located at 303 Balfour Drive average 23,000 square feet in size and are not sprinkler protected. The largest commercial occupancy is 40,825square feet and is sprinkler protected. Fire flow in the area is shown to be at 3,925 gpm.

Geographical Planning Zone 6203

Windsong / South Phelps Avenue

AREA PROFILE:



This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Homes on the western area of this zone border Lake Mizell, Berry and Virginia and have limited roadway access. The northern area of the Windsong residential development is located in this zone. Many of the homes being built in this area will be estate size of 3,000 square feet and above.

The only other significant structure in this area is the Winter Park Towers complex located at 1111 South Lakemont Avenue. This is a high-rise adult assisted living center. Many of the occupants are independent and live on their own. A medical care wing does operate at the site and can handle up to 30 patients. Also located on the campus are numerous individual housing units. The main building is sprinkler protected and monitored for fire and smoke detection throughout. This location generates a great deal of EMS requests during the year. Total call time is not adversely impacted due to the facilities close proximity to Florida Hospital Winter Park.

LOCATION FACTORS:

This area is comprised of 5.66 miles of older residential streets. The major roadways in this zone include South Lakemont Avenue and Glenridge Drive. While the streets are mostly residential in nature, no specific traffic calming measures are utilized in this zone. The nature of the street system being rather hilly for Florida shows a difference in the normal nature of the Winter Park roadways. This has little or no impact on any response factor.

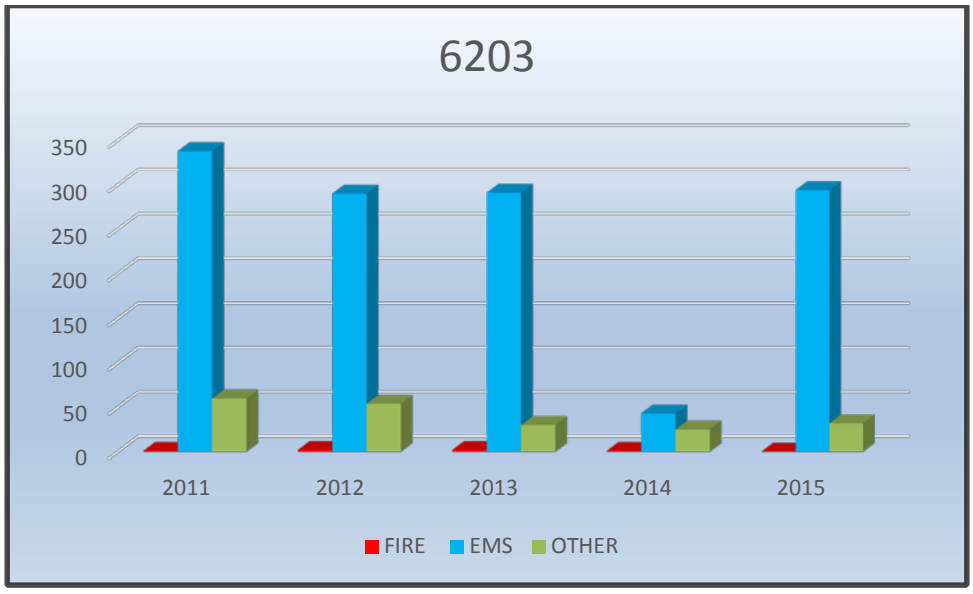
RISK ASSESSMENT FACTORS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 3
Properties Posing Above Average Risk 2

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this zone reported during the reporting period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $3,953.00 in fire loss over the period.



CONSEQUENCE FACTORS:

The only significant property in this zone which would pose a large loss of life, and property is the Winter Park Towers complex. The main high-rise structure is of particular concern due to the level of mobility of the occupants. Should an emergency evacuation be needed, numerous additional resources would be

needed. There are no schools, churches, libraries, or buildings of historical value in this zone.

NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 6,650 square feet. Required fire flow for 100% involvement is 2,217 gpm and the available water is rated at 3,798 gpm. The largest commercial occupancy is 312,723 square feet and is sprinkler protected. Fire flow in the area is shown to be at 2,242 gpm.

Geographical Planning Zone 6204

North Phelps Avenue

AREA PROFILE:

This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Homes in the zone range in size from slightly over 1000 to almost 10,000 square feet.

LOCATION FACTORS:

This area is comprised of 5.34 miles of residential streets. The major roadways in this zone include Lake Sue Avenue and Winter Park Road. All roads are two lane in design and contain several different forms of the community's traffic calming measures. Several main routes are surfaced in brick causing vehicles to travel slower. Other streets feature center dividers and circles designed to slow or stop vehicles.

RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Zone as a part of the Community Risk Assessment (CRA) program of the city.

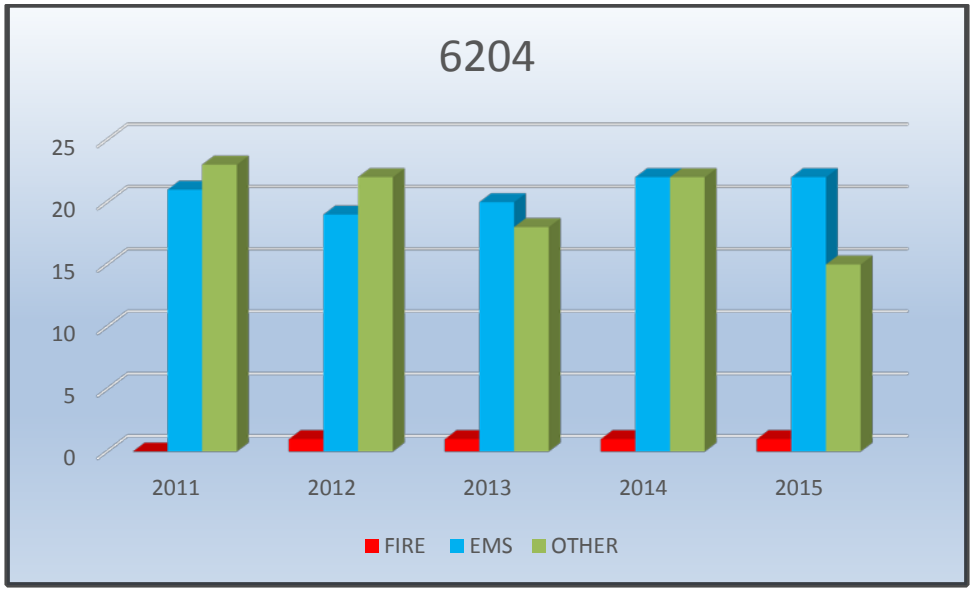
Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 1
Properties Posing Above Average Risk 1

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this Geographical Planning Zone reported for the period. The total number of responses for all alarms for the previous five years has been

charted below. This zone generated an estimated $4,000.00 in fire loss over the period.



CONSEQUENSE FACTORS:

This Geographical Planning Zone contains numerous estate size houses, some with very limited access. There are no schools, churches, libraries, or public buildings of historical value in this zone.

NEEDED FIRE FLOW FACTORS:

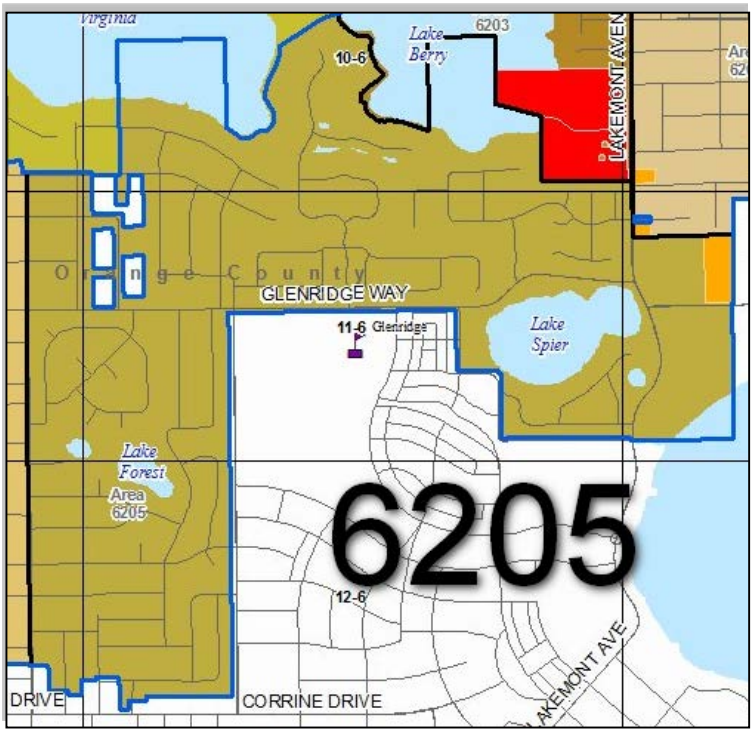
A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 9,959 square feet. Required fire flow for 100% involvement is 3,320 gpm and the available water is rated at 2,771 gpm. Fire flow in the area is shown to be at 6,859 gpm.

Geographical Planning Zone 6205

Lake Sue /Glenridge / Preserve Point / Windsong

AREA PROFILE:

This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Lakes Virginia and Berry border the zone on the north. Many of the residential properties located along the lakes offer limited access for fire attack. A small apartment complex is located on the eastern border of this zone. The Tara House Apartments on Glenridge Way is a complex of two-story buildings, which are unprotected by sprinklers. Response load in this area is very limited.



This zone also includes the southern portion of the residential development at *Windsong*. These home sites are large enough to provide estate size dwellings. The water system was developed with these structures in mind and will provide adequate flow to meet the agency's needs.

An area immediately adjacent to the southern portions of this zone includes several streets not within the corporate limits of Winter Park. Through participation in the six-party Joint Response Agreement, Winter Park covers these areas for all hazards. All areas are residential and pose no significant level of risk beyond those encountered in the remainder of the zone.

Additionally, the agency participates in an inter-local agreement with the city of Orlando to provide fire-response service to the Veteran's Administration Hospital complex located at the end of Glenridge Way. The facility includes a multi-story, sprinkler protected structure.

LOCATION FACTORS:

This area is comprised of 13.56 miles of mostly residential streets. The major roadways in this zone include South Lakemont Avenue and Glenridge Drive. While the streets are mostly residential in nature, no specific traffic calming measures are utilized in this zone.

RISK ASSESSMENT RATINGS:

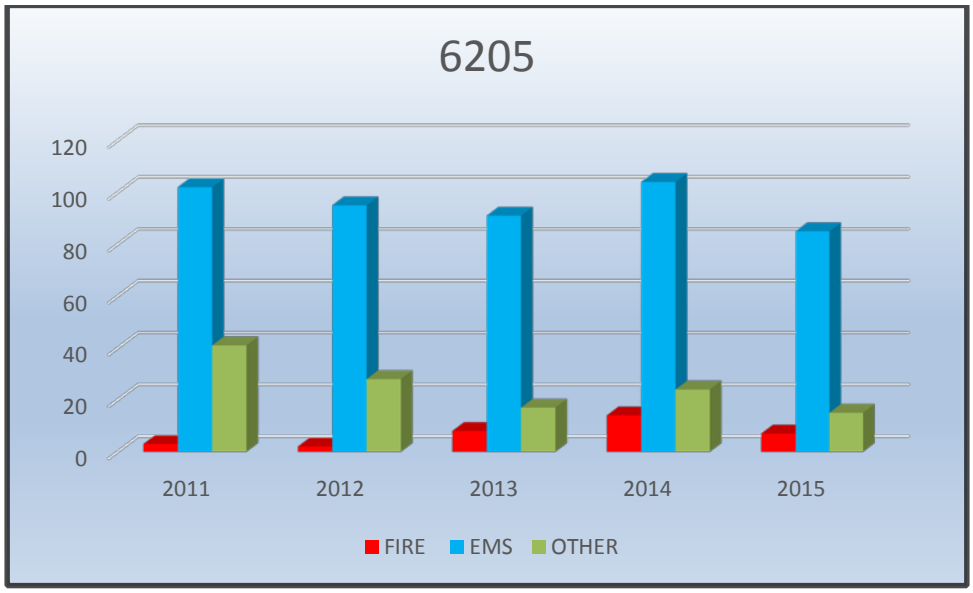
A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 7
Properties Posing Above Average Risk 3

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

The only significant fire occurred in a single family dwelling in this Zone during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $105,000 in fire loss over the period.



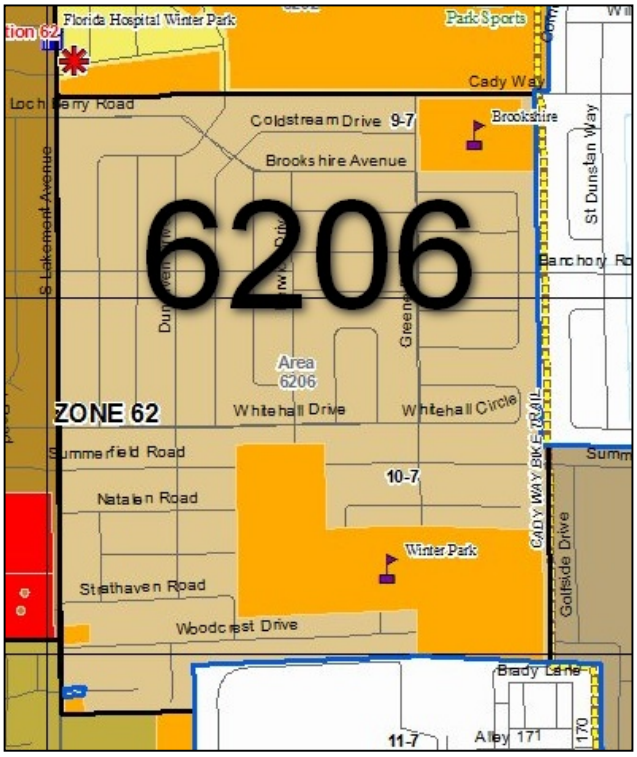
CONSEQUENCE FACTORS:

The only significant unprotected property in this zone is the Tara House Apartment complex. There are several small churches located in this zone. No libraries or public buildings of historical value in this zone.

Geographical Planning Zone 6206

Summerfield Road / WPHS

AREA PROFILE:



This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Two schools are located within this zone. Brookshire Elementary School (K-5) is located on Cady Way at Green Drive and the Winter Park High School campus is located on Summerfield Road. Both facilities are operated by the Orange County School System and offer a normal 9-month school schedule.

Brookshire Elementary was completely rebuilt in 2013 and is now protected with full fire alarm and fire sprinkler systems. A school resource police officer is on campus at all times.

Winter Park High School houses over 3,000 students annually and offers the full range of high school related activities. Several structures on campus are standpipes and only the newer buildings are protected with fire sprinklers. Small, residential roadways limit access to the campus. Only two regular means of entry and egress are available. Others are gated and locked at all times. The building has been extensively pre-incident planned. A school resource police officer is assigned to this campus.

Included in this zone is the Cady Way exercise trail. The paved path runs from Winter Park into the city of Orlando at the Fashion Square Mall. A 9-1-1 access phone is located along the path on Summerfield Road. Access points for vehicles exist at each street grade crossing. While this is a heavily traveled trail, call generation has been limited.

LOCATION FACTORS:

This area is comprised of 9.59 miles of mostly residential streets. The major roadways in this zone include

Lakemont Avenue and Greene Drive. While the streets are mostly residential in nature, several specific traffic calming measures are utilized in this zone. Two round-a-bouts and several bump outs are used along Green Drive to slow traffic associated with the high school.

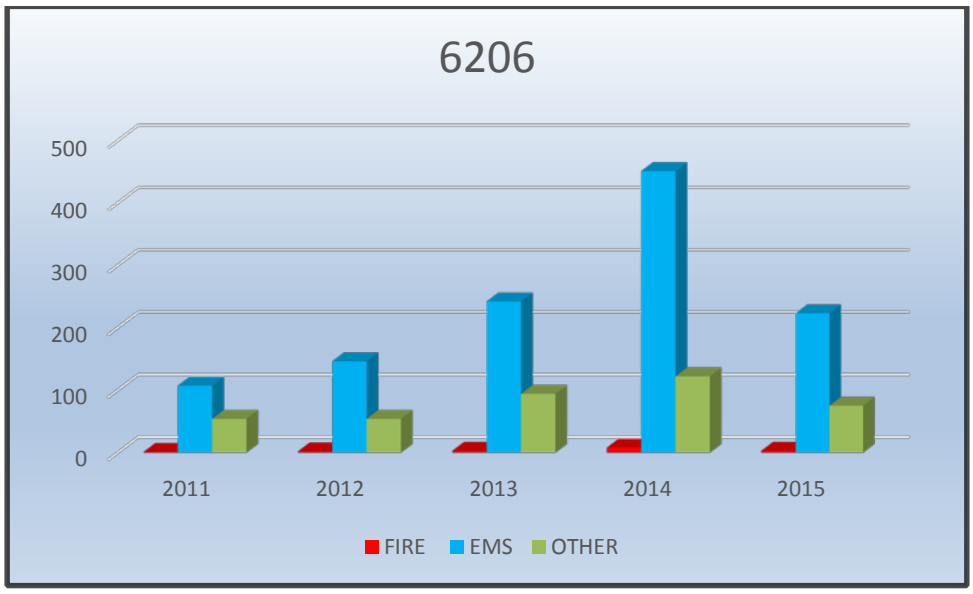
RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 14
Properties Posing Above Average Risk 2

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this zone reported during the season. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $55,621.00 in fire loss over the period.



CONSEQUENCE FACTORS:

The only significant unprotected properties in this zone, which would pose a large loss of life, and property are the two public school complexes. The agency has done pre-planning and training to respond to emergencies. There are several larger church complexes in this zone; however there are no libraries, or public buildings of historical value located in the area.

NEEDED FIRE FLOW FACTORS:

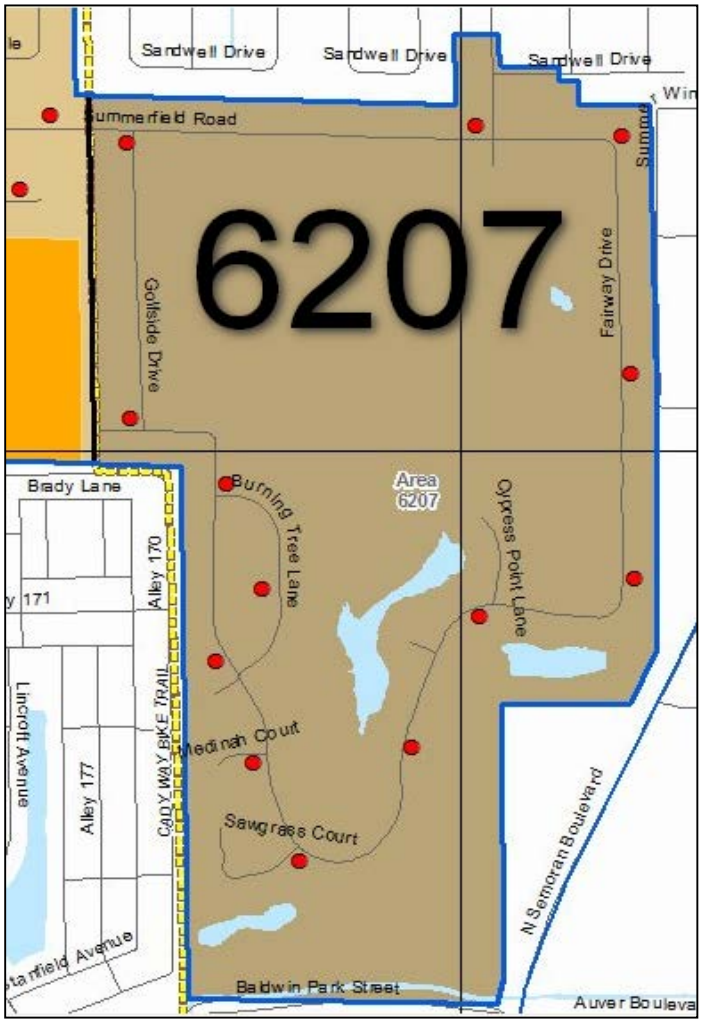
A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 5,557 square feet. Required fire flow for 100% involvement is 1,852 gpm and the available water is rated at 3,523 gpm. The largest commercial occupancy is 85,350 square feet and is standpipe served with only limited sprinkler protection. Fire flow in the area is shown to be at 3,217 gpm.

Geographical Planning Zone 6207

Golfside Drive Community

AREA PROFILE:

This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Homes in the zone range in size from slightly over 1,000 to almost 4,200 square feet. The only commercial structure is located at the Winter Pines Golf Course off Golfside Drive. The clubhouse is not protected by any fire suppression systems. The issue of most concern for services in this area is the driving distance for first and second due units. The area is outside the 1.5 driving distance for the engine company located at fire station 62.



LOCATION FACTORS:

This area is comprised of 2.61 miles of mostly residential streets. The major roadways in this zone include Phelps Avenue, North Lakemont Avenue and Temple Drive. While the streets are mostly residential in nature, no specific traffic calming measures are utilized in this zone.

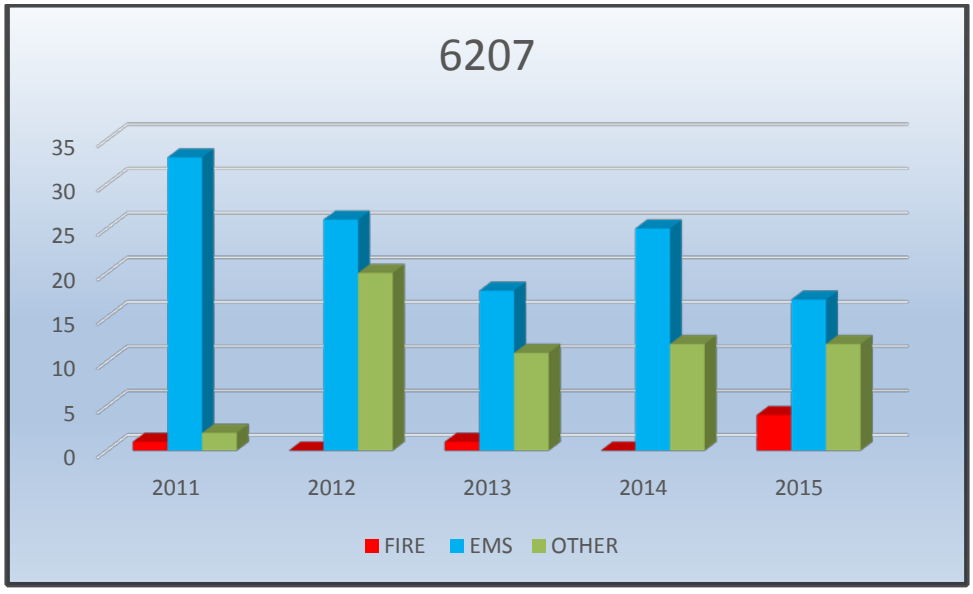
RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 1
Properties Posing Above Average Risk 0

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

A large single family house fire occurred in this zone in August of 2015. The fire was detected early with smoke detection devices and no loss of life or injury was reported. Otherwise no other significant events has occurred in this in this Geographical Planning Zone during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $216,200.00 in fire loss over the period.



CONSEQUENCE FACTORS:

The agency has done pre-planning and training to respond to emergencies involving these areas. There are no schools, churches, libraries, or commercial buildings of historical value in this zone.

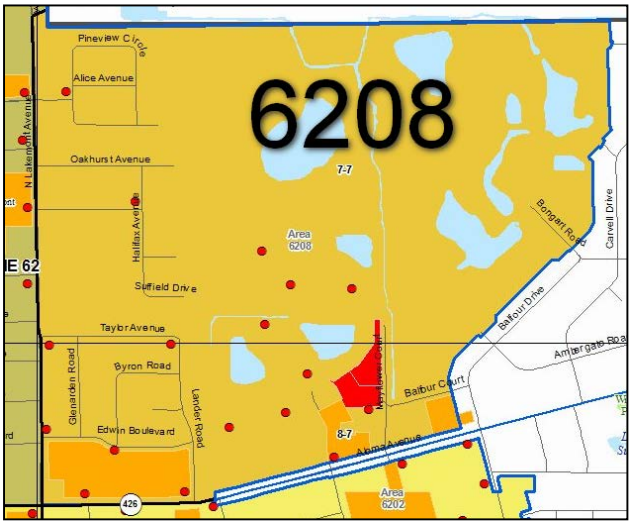
NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 4,168 square feet. Required fire flow for 100% involvement is 1,389 gpm and the available water is rated at 3,056 gpm.

Geographical Planning Zone 6208

Palmer East

AREA PROFILE:



This area is best described as light commercial and residential with small strip type shopping centers along Aloma Avenue. Additionally, an Assisted Living Center is located on Mayflower Court, which includes a low-rise structure, and individual, independent living centers. Two structures total 162,897 square feet while two others are 83,035 and 49,207 respectfully. All properties at the Mayflower Retirement Community are protected with fire sprinklers with the exception of the independent living homes.

Aloma Avenue transverses this zone from east to west and carries a tremendous amount of daily traffic. The shopping areas and professional offices line the roadway and, in some cases, for several blocks off the highway. A small area of residential streets runs directly behind the retail centers. Homes in this neighborhood do not exceed 3400 square feet. A small seven-unit apartment complex with units equaling 13,524 square feet in size is located on Gallery View Drive; these are two-story, unprotected structures of ordinary construction.

LOCATION FACTORS:

This area is comprised of 3.44 miles of mostly residential streets. The major roadways in this zone include Aloma Avenue and North Lakemont Avenue While the streets are mostly residential in nature, no specific traffic calming measures are utilized in this zone.

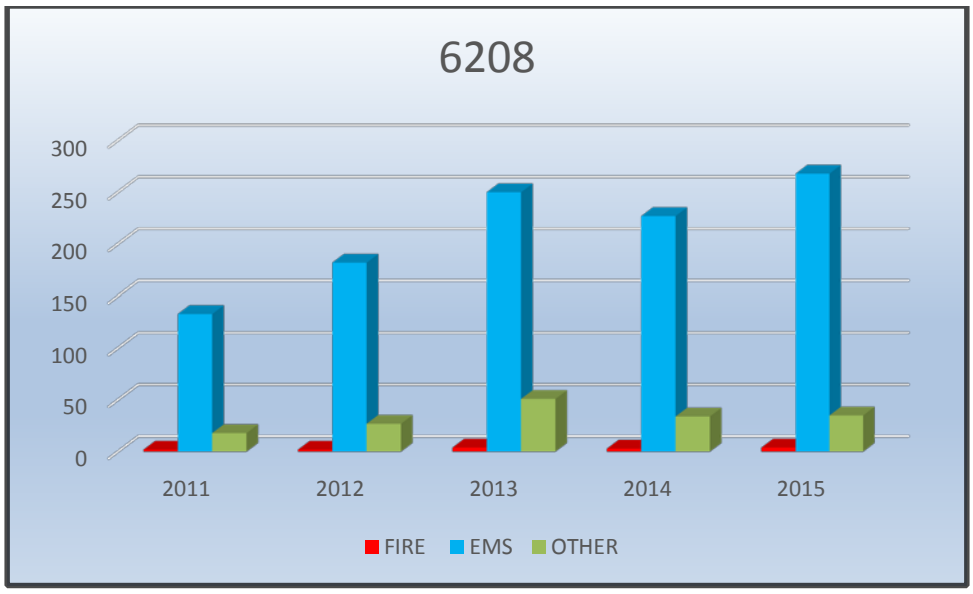
RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 4
Properties Posing Above Average Risk 3

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this Geographical Planning Zone reported during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $34,300.00 in fire loss over the period.



CONSEQUENCE FACTORS:

The only significant unprotected properties in this zone which would pose a large loss of life or property are the independent living structures at the Mayflower Retirement Center. The four retail shopping centers along Aloma Avenue are independent of each other. However, should any one receive major damage from fire or other emergency it would have an economic impact on the community. Additionally, the Gallery View Apartments are of a concern due to their construction type and occupancy load. There is a large church complex located on north Lakemont Avenue in this zone. No libraries or other commercial buildings of historical value are located in this zone.

NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this

zone, the largest single-family residential dwelling is 3,308 square feet. Required fire flow for 100% involvement is 1,103 gpm and the available water is rated at 4,501 gpm. The largest multi-family residential occupancy is 162,897square feet and is sprinkler protected. Fire flow in the area is shown to be at 2,563 gpm. The largest individual commercial occupancy is 48,221 square feet and is sprinkler protected. Fire flow in the area is shown to be at 2,820 gpm.

Geographical Planning Zone 6401

Temple Drive West / Via Tuscany / Isle of Sicily

AREA PROFILE:

This area is best described as residential in nature. Most of the homes in the zone range in size from slightly over 2,000 to almost 10,000 square feet and would qualify in the estate category of residential property. In most cases, the water system is adequate to meet fire flows for the area described. The only commercial structure is located at the Winter Park Racquet Club located on Temple Drive. The clubhouse is not protected by any fire suppression systems.

LOCATION FACTORS:

This area is comprised of 8.59 miles of mostly residential streets. The major roadways include Temple Drive to the west and Howell Branch Road to the north. Temple Drive has been treated with brick pavers as a traffic calming measure.

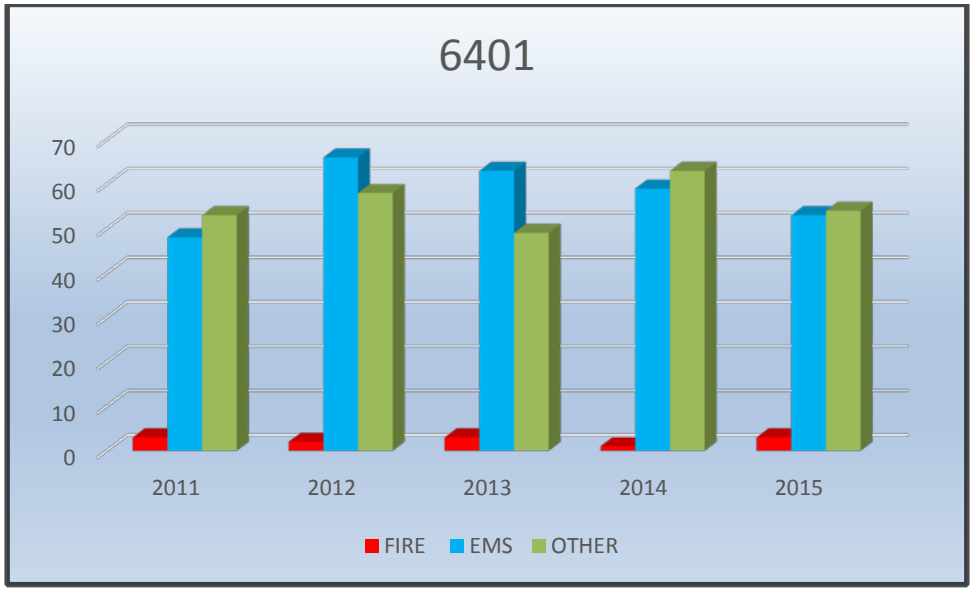
RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 6
Properties Posing Above Average Risk 1

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this Geographical Planning Zone reported during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $74,000.00 in fire loss over the period.



CONSEQUENCE FACTORS:

The only significant unprotected commercial property in this zone, which would pose a large loss of life, and property is the Winter Park Racquet Club main clubhouse structure. Narrow roadways and lake front access to Lake Maitland limit access. The main structure is 12,505 square feet and is not protected by automatic fire sprinklers. Another area of concern in this zone is the residential properties on the Isle of Sicily. This exclusive area is accessible by a one-lane bridge. The rated capacity of the bridge is currently 40,000lb. The 10 homes on the island range in size from 4,800 to 12,000 square feet. There are no schools, churches, or libraries in this zone.

NEEDED FIRE FLOW FACTORS:

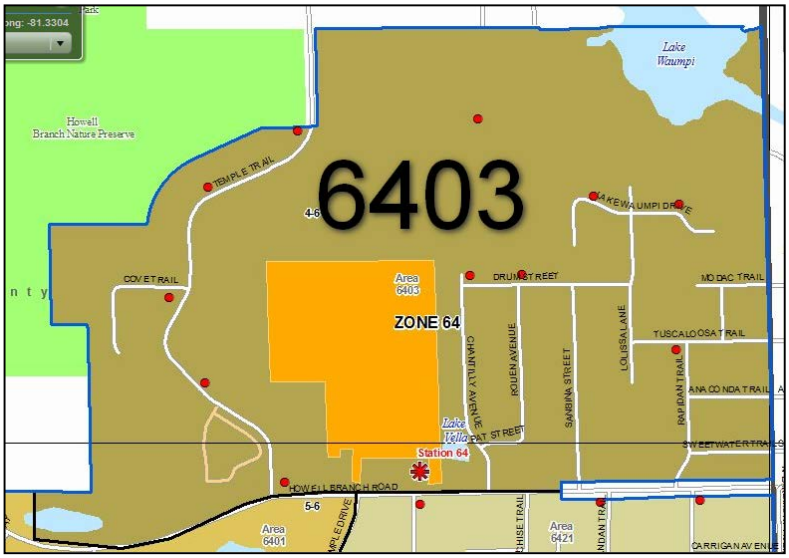
A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 12,745 square feet. Required fire flow for 100% involvement is 4,284 gpm and the available water is rated at 2,888 gpm. The largest commercial occupancy is 12,505 square feet and is not protected. Fire flow in the area is limited and is shown to be at 1,414 gpm.

Geographical Planning Zone 6403

Temple Trail North

AREA PROFILE:

This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Homes in the zone range in size from slightly over 2,000 to almost 10,000 square feet in size. A small commercial area exists at the intersection of Temple Trail and Howell Branch Road. These are typical in nature and contain both retail and professional occupancies. An unprotected apartment complex is located on Temple Trail, which has structures ranging in size from 6,000 to 12,000 square feet. Available water supply in the area does not make this a target hazard for 100% involvement. Fire Station 64 is located within this zone as well as the city's Public Works Compound and Maintenance Facility.



LOCATION FACTORS:

This area is comprised of 2.92 miles of mostly residential streets. The major roadways include Temple Drive to the west and Howell Branch Road to the north. No other special traffic calming measures are utilized in this zone.

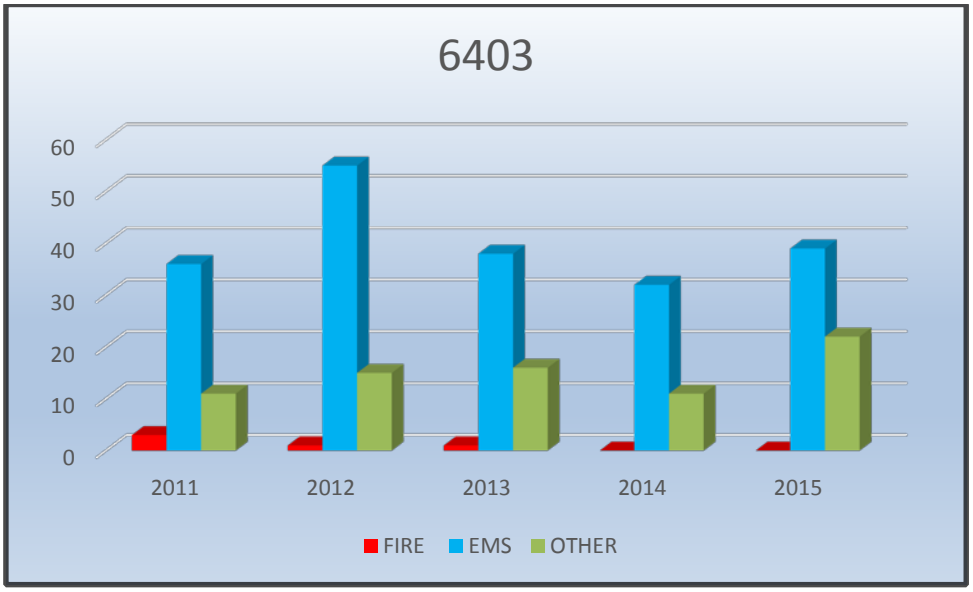
RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 19
Properties Posing Above Average Risk 3

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this Geographical Planning Zone reported for during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $400.00 in fire loss over the period.



CONSEQUENCE FACTORS:

The only significant unprotected property in this zone, which would pose a large loss of life, and property is the unprotected condominium complex located on Sandlewood Trail. The Sandlewood Trail Condominiums are comprised of 11 two-story, structures of ordinary construction ranging in size from 6,000 to 12,000 square feet. The complex has local alarms that are tied to the 9-1-1 system through an independent dialer system.

Also located within this zone is the Winter Park Police Department Training Facility and Weapons Range. Located at 2555 Temple Trail, the main facility is 18,950 square feet and is sprinkler protected throughout. No overnight parking of over-the-road transportation vehicles carrying hazardous materials is allowed in the city of Winter Park. There are no schools, churches, libraries, or buildings of historical value in this zone.

NEEDED FIRE FLOW FACTORS:

A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 2,945 square feet. Required fire flow for 100% involvement is 982 gpm and the available water is rated at 1,618 gpm. The largest commercial occupancy is 31,407 square feet and is not protected. Fire flow in the area is limited and is shown to be at 1503 gpm.

Geographical Planning Zone 6421

Temple Drive East

AREA PROFILE:

This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. Homes in the zone range in size from slightly over 1,000 to 10,000 square feet in size. There are few commercial structures or multi-family residential units located within this zone.

LOCATION FACTORS:

This area is comprised of 8.35 miles of mostly residential streets. The major roadways include Temple Drive to the west and Howell Branch Road to the north. Temple Drive has been treated with brick pavers as a traffic calming measure. No other traffic calming measures are utilized in this zone.

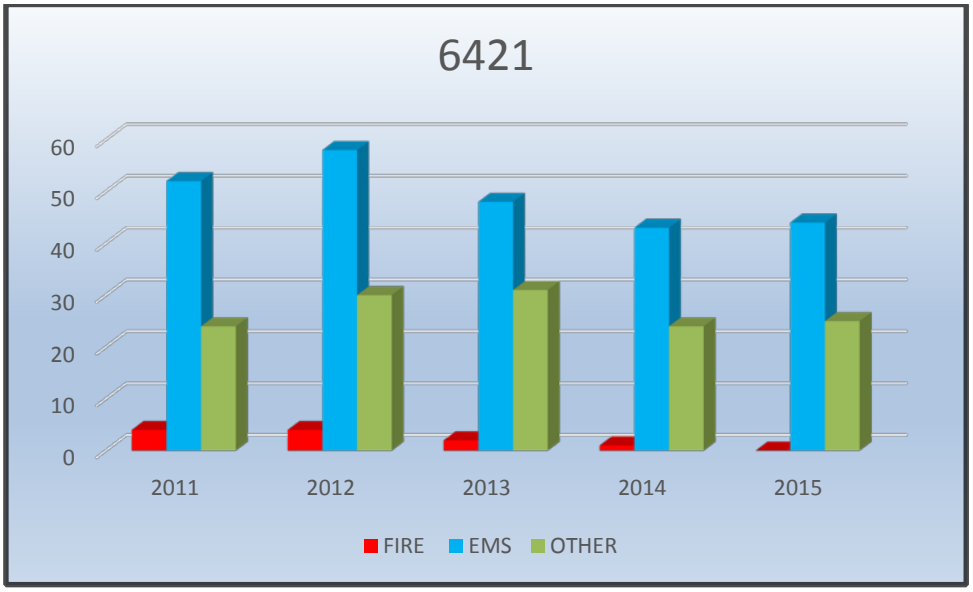
RISK ASSESSMENT RATINGS:

A risk assessment was completed on the commercial properties within this Geographical Planning Zone as a part of the Community Risk Assessment (CRA) program of the city. Eight specific areas of risk were assessed to determine the demand placed on fire and EMS emergency services to assist in the determination of a standard of coverage. This area of the community contained the following levels of demand.

Total Properties Assessed 0
Properties Posing Above Average Risk 0

EVENT PROBABILITY and IMPACT FACTORS CY 2011-2015:

There were no major incidents of large loss of dollars and or life in this Geographical Planning Zone reported for during the period. The total number of responses for all alarms for the previous five years has been charted below. This zone generated an estimated $4,500.00 in fire loss over the period.



CONSEQUENCE FACTORS:

There are no significant unprotected structures in this coverage area. All of the structures are residential and pose no more than an ordinary threat from fire. There are no schools, churches, libraries, or buildings of historical value in this zone. Important to the community is the Glen Haven Memorial Gardens cemetery located in this zone.

NEEDED FIRE FLOW FACTORS:

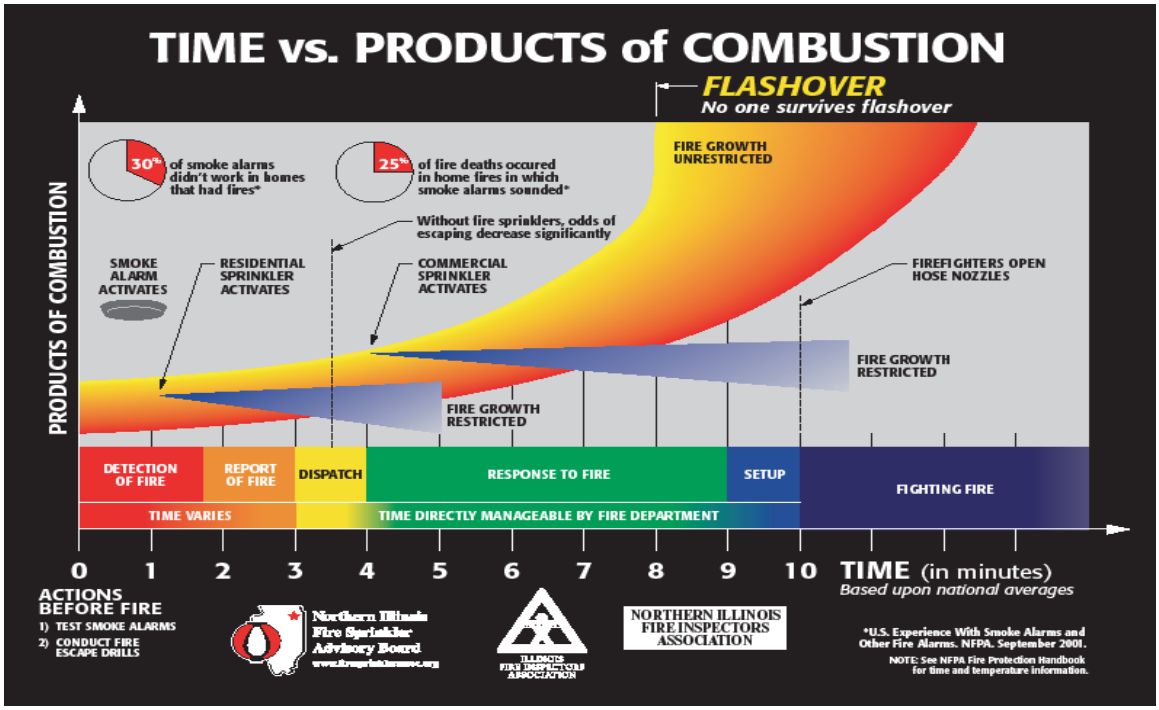
A calculation for needed fire flow on every structure was generated in the city's Fire Flow Analysis. In this zone, the largest residential dwelling is 4,869 square feet. Required fire flow for 100% involvement is 1,597 gpm and the available water is rated at 2,349 gpm. There are very few commercial structures in this zone.

Risk Assessment

Fire Suppression Services:

*Those factors impacting the ability to fight fire include the **Science of Fire** and the need for **Rapid Response** and **Adequate Personnel** to **Intervene** and **Affect Positive Change to Improve Outcomes:***

According to the National Fire Protection Association (NFPA), the leading cause of fires in homes and garages is cooking equipment, followed by heating equipment. Smoking materials is the leading cause of civilian fire deaths, accounting for nearly 25%. Most smoking related deaths occur with the ignition of upholstered furniture, mattresses or bedding. Nearly half of all people arrested for arson are juveniles. Cooking equipment is the leading cause of home fires and home fire injuries. Unattended cooking is the principal behavior factor. Heating equipment is the second leading cause of home fire incidents, most involving portable or space heaters. Child fire play, typically with matches or lighters accounts for one of every ten fire deaths, and accounts for the leading cause of preschooler fire deaths."[4] (Exhibit L)



[4]Arthur E. Cote, PE, "Section 1, "Fire Protection Handbook, Eighteenth Edition, (Quincy, MA: NFPA, 1997 1-3.)

A fire within a structure has been classified into three defined growth stages. The first is the incipient phase and occurs from ignition to open flame. The second phase of fire is the free burning stage and is characterized by rapid growth and heat production. During this phase of fire growth the fire can reach the point of flashover.

Flashover is the point when the fire dramatically grows from burning the initial contents to all of the contents in the space. The final phase of the fire growth is the smoldering phase, which occurs when the available oxygen is consumed by the fire. At this stage, a rapid introduction of oxygen into the room can lead to a back draft.[5] Flash over is likely to occur if the temperature of the upper gas layer in an enclosure reaches approximately 1,100 degrees Fahrenheit.

It has long been known that the real killer in structure fires is smoke, not the flame or heat. Smoke contains many toxic gases released as byproducts of the combustion process. Carbon monoxide is one of these gases. Test fires in furnished residential structures have demonstrated the production of carbon monoxide in measurable amounts after three and one half minutes from the ignition of the fire.

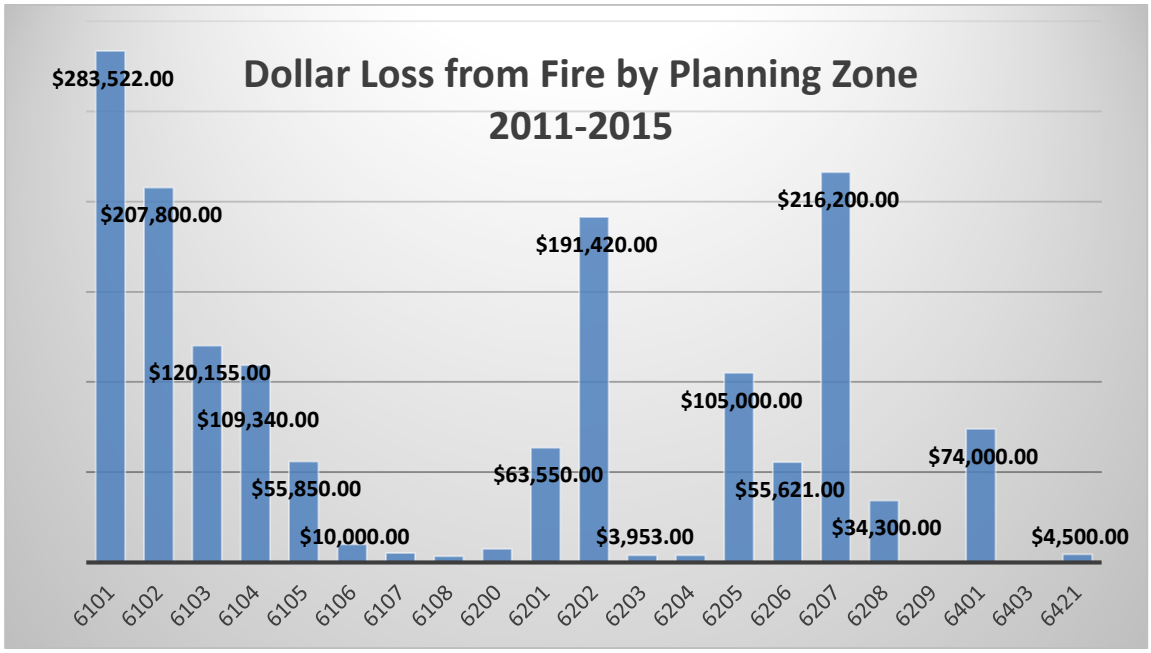
The city of Winter Park is comprised of approximately **9 square miles** and **141.29 miles of paved roadways**. The Winter Park Fire-Rescue Department provides service to the city as well as neighboring cities and surrounding areas of Orange and Seminole County.

During the last five years (2011-2015) the city of Winter Park experienced 35 damaging structural fires. The **total dollar loss** of these fires has been estimated at **$1,555,811** which is a slight increase (7%) from the $1,447,100 reported during previous five year period. These statistics show that while the city is experiencing fewer fire events, the cost in lost property from each continues to increase.

During a similar period of time, the National Fire Protection Association (NFPA) identified the national average for dollar loss from structural fires at $8,936.00 per event. The city of Winter Park's average loss of $44,451.00 during same the five-year time-period (2011-2015) while significantly higher when compared to the property values in the protection area, this suggests that while fewer structure fires have occurred, the dollar loss from these fires has continued to increase.

One could summarize that in Winter Park over the past five years the impact of increased enforcement and improved fire code application has reduced the frequency of structure fires, while the damage in dollars lost has increased. This is in large part to the decisions made to right the fire damaged properties off as total losses rather than perform a repair or reconstruction. In addition, Winter Park's residential and commercial property is valued higher than that of the national average.

[5]Arthur E. Cote, PE," Section 1, "Fire Protection Handbook, Eighteenth Edition, (Quincy, MA: NFPA, 1997 1-55.)



2011-2015 – Total Reported Dollar Loss from FIRE by Planning Zone

In Winter Park, the relationship of dollar loss from fire to the actual number of fires is deceiving. In any one year, typically one to two structure fires account for 90% - 95% of the city of Winter Park annual fire loss. The majority of structure fires in the city of Winter Park occur in single-family residential structures followed by the multifamily residential structures and then commercial structures.

The number of structure fires and the dollar loss associated from those fires are only a part of the impact from fire. Loss of life has a much greater impact. Over the past ten years the city of Winter Park has received the *Life Safety Achievement Award* from the International Association of Fire Chiefs (IAFC). This award is presented to those communities who have through their efforts experienced no fire related fatalities. According to the NFPA, 3,275 civilians died in the United States in all types fires in 2014. Nationwide, there was a fire related death every 2 hours and 41 minutes. While it may be obvious to most, the best way to survive a fire is to prevent it from starting in the first place. The NFPA continues by stating, "early detection and alarm to occupants are vital in keeping small fires from becoming big fires, as well as

reducing the risk of dying in home fires." The NFPA continues by stating, "fire sprinkler systems could easily have controlled most of the catastrophic fires in the incipient stage."[6]

As an urban area with over 9,226 single family/residential units and 9.3 million square feet of commercial property, the city experiences a significantly low structure fire loss. What has worked in Winter Park has been a balanced approach to fire protection through public education, early detection, and built in fire suppression. With the proven advantage of fire sprinklers, it has been proven that this technology can have a positive impact on the number of fire deaths and injuries in this country. It also appears that in the last few years, the traditional fire service has become more willing to embrace this technology.

Fire Preventions Effect on Fire in Winter Park:

The city of Winter Park enforces the 2004 Florida Fire Prevention Code, 2007 NFPA Life Safety, and the 2007 NFPA 1 Uniform Code for all structures within its corporate limits. In addition to the Life Safety Code, the city has enacted numerous ordinances further requiring the installation fire sprinklers in specific occupancies. The ordinances defines that mercantile structures of more than 5,000 square feet, structures within the city's defined central business district of more than 3,000 square feet, and any storage structure over 2,000 square feet shall be protected with automatic fire sprinklers. In addition, Florida Statutes require any structure three stories in height or over to be sprinklered. From the inception of these ordinances, the city has enjoyed a continued below average structural fire loss figure. More importantly, no one has lost his or her life in a sprinklered occupancy in the city's history. Current records indicate there are approximately 1,482 buildings within the city of Winter Park; of this number, there are 235 buildings, (15.8%) have built-in fire protection.

Education plays a role in the ability of our residents to recognize hazards and respond appropriately to safety concerns. Winter Park's population falls above the average for residents with at least some college education or advanced degrees. This combination of technology, enforcement and education has served to improve the fire prevention efforts in Winter Park. The citizenry has responded by creating safer environments at home and work which has continued to reduce the overall loss from fire.

The agency provides fire suppression services from three fixed locations. The primary focus of the fire suppression service is structural protection with trained and equipped firefighters to perform both aggressive interior as well as large stream defensive and protective firefighting activities.

[6] Kenneth J. Tremblay, "1996 Catastrophic Fire." NFPA Journal 91/5 (September/October 1997): 46-56.

Fire suppression engine companies are staffed with a minimum of three firefighters and the agency's truck company is staffed with a minimum of four firefighters. All companies are led by a State Certified company officer. Interior attack crews are equipped with high-gallonage fire attack lines so as to maximize their effect on interior fire conditions. Each fire apparatus is equipped with at least one thermal imaging camera and other special tools and training afforded all personnel in those skills required to establish an effective firefighter rapid intervention team (RIT).

All engine companies carry a minimum of 750 gallons of on-board water and 1200 feet of four inch, large diameter (LDH), supply hose. One of the agency's three Class A pumpers is equipped with a Class A Compressed Air Foam System (CAFS) while the others have Class A only foam capability. The agency does not support any wildland interface or brush fire apparatus or capability.

The following criteria were used in part to help define the **Risk Categories** for fire suppression services.

- **Low Risk** - Automobile fires, fires in detached outbuildings, rubbish or brush.
- **Medium Risk** - Single use occupancy structures with needed fire flows of up to 3,000 gpm.
- **Special Risk** – Multiple-Use occupancy structures with needed fire flows above 3,000 gpm but less than 4,500 gpm and more than three stories in height.
- **High Risk** – Typical targeted type hazards posing the highest risk to life. Multiple occupancy, high-rise, college campus, technical or high economic value to the community.

Fire Suppression Critical Tasking Analysis – Effective Response Force (ERF)

The agency responds to Low and Medium Risk structure fires with 3 Engines, 1 Truck, 1 Rescue, 1 EMS Supervisor and 1 Battalion Chief or an effective response force of 17 people. Special and High Risk events can present a greater workload than the identified and have an increased ERF of 20 responders. The assigned Incident Commander may, at their discretion, call for any additional units needed to bring more personnel and resources to the scene.

The specific response assignments are loaded into the CAD system, which is designed to deliver a response recommendation for each emergency based upon the information entered. A particular call type demands a particular assignment of resources.

Operations at emergency scenes are accomplished systematically. The success of each response is gauged on the resolution of the emergency and the safe return of each firefighter to ready status.

Tasks are assigned to both individuals and crews and are based on the knowledge, skills, abilities and resources of that particular unit. Examples of these task assignments may include:

Critical Task Assignments for **Low or Medium Risk** Fire Suppression Responses:

- Establishment of correct response assignment

- Establishment of Incident Command
- Determination of fire attack type and location
- Establishment of attack lines / water supply / back-up and exposure lines
- Performing a primary and secondary search of the structure
- Providing for 2 in 2 out crew for interior attack
- Providing for Rapid Intervention Team (RIT)
- Providing for proper ventilation of structure
- Establishment of Safety Officer / Sector

Assigning personnel to each of these tasks allows the agency to deploy the proper amount of personnel within a period of time to effect change. With the assigned personnel to structural fires (17) the agency offers the following critical task guide:

Task	Firefighters
Attack Hose Line	2
Back-Up Hose Line	2
Water Supply Support	2
Search and Rescue / Inside Truck Operations	2
Ventilation / Outside Truck Operations	2
RIT Team	2
Pump Operator	1
Firefighter Rehabilitation / Patient / Victim Care	2
Safety Officer	1
Command	1
Total Effective Response Force (ERF)	**17**

Critical Task Assignments for **Special or High Risk** Fire Suppression Responses:

- Establishment of correct response assignment
- Establishment of Incident Command
- Determination of fire attack type and location
- Establishment of attack lines / water supply / back-up and exposure lines
- Performing a primary and secondary search of the structure

- Providing for 2 in 2 out crew for interior attack
- Providing for Rapid Intervention Team (RIT)
- Providing for proper ventilation of structure
- Establishment of Safety Officer / Sector
- Establishment of Lobby Control
- Establishment of Large Flow Fire Lines and Water Supplies

Assigning personnel to each of these tasks allows the agency to deploy the proper amount of personnel within a period of time to effect change. With the assigned personnel to structural fires (20) the agency offers the following critical task guide:

Task	Firefighters
Attack Hose Line	2
Back-Up Hose Line	2
Water Supply Support	2
Search and Rescue / Inside Truck Operations	2
Ventilation / Outside Truck Operations	2
RIT Team	2
Pump Operator	1
Firefighter Rehabilitation / Patient / Victim Care	2
Safety Officer	1
Lobby Control (High Rise)	1
Additional Hose Lines (Large Flow Monitors)	2
Command	1
Total Effective Response Force (ERF)	**20**

Emergency Medical Services:

*The **Human Factor** and Medical **Response Time***

Emergency Medical Service related incidents have benchmarks in time in which critically ill or injured patients need to be stabilized and enroute to a medical facility in order to offer them the best chance for survival. A key component must be in place for this stabilization to take place. Spontaneous circulation can cease in almost every type of medical emergency whether it is an injury or illness related problem.

Physiologically, brain death begins four (4) to six (6) minutes after the cessation of circulation. After ten (10) minutes, based on research, the survivability outcome of a patient who suffers from the loss of spontaneous circulation is considered unlikely. There is a direct impact on the survival rates of patients in cardiac arrest (ventricular fibrillation) to the promptness of CPR and the availability of advanced cardiac life support (ACLS) care.

There are other time sensitive medical incidents such as trauma, acute myocardial infarction and stroke that require treatment at a medical facility as rapidly as possible. The following are significant emergency medical services that have an impact on the quality of life in our community:

- **Aggressive CPR training** in the community and local businesses. This longstanding endeavor the Agency provides many CPR trained individuals throughout the community, neighbors, etc.
- **Staffing of all apparatus with ALS equipment** and paramedic personnel improves ALS initiation times.
- **Automatic External Defibrillator (AED)** technology intervention strategically located within the City. The training is provided by the Fire-Rescue Department. Use of AED technology shortens the time even further for cardiac arrest patients receiving advanced treatment before arrival EMS Fire Rescue units.
- **Special EMS details** at large mass gatherings to provide adequate response to critical patients when conditions are congested improves response times and increases the patients chance of survival.

The agency has adopted a more coordinated yet aggressive approach to the treatment of cardiac patients. The “Pit Crew” concept grew from the auto racing world where each first responder has an assigned task to perform and be responsible for during the patient care process. Depending on the treatment, each responder has a designated task to perform. This organized practice of emergency medicine, along with the application of more aggressive treatment protocols has led to improved patient outcomes. More patients today found in cardiac arrest are presenting at the hospital emergency department with spontaneous respirations than ever before. The pit crew concept, improved training and intense one-on-one medical direction, along with tools like the Lucas © Automated CPR device continue to drive us towards further improved patient outcomes.

The following criteria were used in part to help define the Risk Categories for emergency medical services:

- **Low Risk** - Single Patient Basic Life Support (BLS) designated incidents.
- **Medium Risk** - Single Patient Advanced Life Support (ALS) designated incidents.
- **Special Risk** – Single Patient ALS / Special Circumstances
- **High Risk –** Level 1 Mass Casualty Incident with more than Five (5) patients

Emergency Medical Critical Tasking Analysis – Effective Response Force (ERF)

The agency is the primary responder for all emergency medical incidents. The Winter Park Emergency Communications Center maintains personnel trained in medical pre-arrival instructions. The agency is licensed in the Priority Medical Dispatching system and prioritizes medical incidents accordingly. The agency does not CODE medical calls through this system, rather it uses medical typing through predetermined call types in the Computer Aided Dispatching (CAD) system. The CAD recommends a number of resources based on the call type entered by the operator.

Tasks are assigned to both individuals and crews and are based on the knowledge, skills, abilities and resources of that particular unit. Examples of these task assignments may include:

Critical Task Assignments for Low/Medium/Special/High Emergency Medical Responses:

- Establishment of correct response assignment
- Establishment of Incident Command as needed
- Determination of patient, critical, unstable, potentially stable or unstable
- Perform Primary and Secondary assessment
- Establishment of treatment modality
- Provide a minimum of 5 personnel for critical or unstable patients
- Provide on scene EMS Supervision
- Providing personal protective equipment, policies and procedures to minimize risk and reduce exposure

Tasks for **Low and Medium** Risk EMS Incidents	Firefighters
Patient Assessment/ Interview	1-Paramedic
Patient Care/ Airway control	1-Paramedic
Scene Control/Safety	1-EMT
Patient Handling and equipment	1-EMT
Patient Handling and information gathering	1-EMT

Effective Response Force (ERF) for Low and Medium Risk EMS 5

Special Risk EMS Incidents	Firefighters
EMS Supervisor	1

Effective Response Force for Special Risk EMS 6

Special or High Risk EMS Incidents	Firefighters
Per Patient Tasking	3 Additional
Safety Officer	1 Additional
Command	1

Effective Response Force (ERF) for High Risk EMS 17

Hazardous Materials Services:

*The **management** of **chemical** emergencies*

The agency currently has an Interlocal agreement with the City of Orlando for Special Services to respond to any moderate or significant risk hazardous materials incident in the city. The agency is also prepared to have their assets respond to these events in conjunction and cooperation with the city of Orlando assets.

The agency responds to identified minor (small) hazardous materials events with a single engine company. Significant or maximum (large) hazardous materials events can present a much greater workload and demand a more demanding response. Assets are assigned to work in concert with the Technician Level response from the city of Orlando. The assigned incident commander may, at their discretion, call for any additional units needed to bring more personnel and resources to the scene.

The specific response assignments to all events are loaded into the CAD system which is designed to deliver a response recommendation based upon the information entered.

Operations at hazardous materials scenes are accomplished slowly, methodically and systematically. The success of each event is gauged on the resolution of the emergency and the safe return of each firefighter to ready status. Specific tasks are assigned to both individuals and crews and are based on the knowledge, skills, abilities and resources of that particular unit.

Examples of these task assignments may include:

Critical Task Assignments for Low/Medium/Special/High Hazardous Materials Responses:

- Establishment of correct response assignment
- Establishment of Incident Command
- Determination of hazardous situation
- Establishment of safe zones / denial of entry
- Performing reconnaissance as necessary

- Providing for 2 in 2 out crew
- Providing for Rapid Intervention Team (RIT)
- Assisting OFD Technicians as necessary
- Establishment of Safety Officer / Sector

Assigning personnel to each of these tasks allows the agency to deploy the proper amount of personnel within a period of time to effect change. With the assigned personnel **to low, medium, special and high risk** hazardous materials incidents (14/23) the agency offers the following critical task guide:

Task	Firefighters
Attack Hose Line as Necessary	2
Back-Up Hose Line as Necessary	2
Water Supply Support	1
Scene Perimeter identification and Security (Deny Entry)	2
Decontamination Team to Assist Technicians	2
Pump Operator	1
Firefighter Rehabilitation / Patient / Victim Care	2
Safety / EMS	1
Command	1
Technician Level Response (OFD)	9
Effective Response Force (ERF)	**14/23**

Technician Level Hazardous Materials Deployments:

The assets defined above are supplemented by and will assist with the assets provided by the City of Orlando under a specific Interlocal Agreement stating that any needed Technician Level actions can be provided by supplemental assets from the city of Orlando. In these identified hazardous materials events, the agency's assets will serve in support positions and will work with the assets deployed by the city of Orlando Hazardous Materials Team.

Technical Rescue Services:

*Creating **safe rescue** environments*

The agency is prepared to respond to and operates rescues of a defined technical nature. These technical rescues require an expertise in both the personnel and equipment. The agency is identified as a **State of Florida Light Technical Rescue Team** (#539) and receive training and equipment to respond as a State asset. The agency staffs and equips several apparatus (Engine/Truck) with specific technical rescue tools including hydraulic as well specialized hard rescue tools.

The first unit in shall be staffed with three (3) firefighters and capable of assessing the situation to determine if a technical rescue response is required, request additional resources, control the hazards, and provide basic life support to any victim without endangering personnel. A Rescue unit will also be dispatched to all identified technical rescues along with an EMS supervisor. A total of 6 people will comprise the initial assignment to all technical rescues.

Additional assets can be secured from the city of Orlando under the previously mentioned Special Operations Agreement. Also, the agency staffs positions on Central Florida Urban Search and Rescue Task Force (4).

Assigning personnel to each of these tasks allows the agency to deploy the proper amount of personnel within a period of time to effect change.

With the assigned personnel to technical rescue events (6) the agency offers the following critical task guide:

Task	Firefighters
Patient Care / Assessment	2
Scene Assessment / Technical Rescue	3
Command	1
Effective Response Force (ERF) for Low and Medium Risk Tech	**6**

The incident commander always has the option of requesting additional resources. It is anticipated that any moderate to significant technical rescue will develop additional on-scene resources the agency will also utilize the assets afforded under the Special Operations Agreement with the city of Orlando to further build the needed on-scene resources.

Task	Firefighters
Patient Care / Assessment	2
Scene Assessment / Technical Rescue	3
Command	1
Initial Effective Response Force (ERF)	6
Special Operations (OFD)	9
Effective Response Force (ERF) Special or High Risk Tech	**15**

E. Historical Perspective and Summary of System Performance

Distribution Factors:

*The **Speed** at which the **First Resources** arrive*

The *Standard of Cover* for the city of Winter Park Fire-Rescue Department has been derived from, and influenced by, two specific concepts, distribution of emergency resources and the concentration of those resources throughout the community. Distribution of response resources defines the specific geographical location for each resource. Resources change locations at any one point in time. These estimates are based upon what is considered first due or closest resources under normal response situations.

Most often fire station locations are driven by a number of factors the least of which is delivery of quality service. Stations are usually located where they are most tolerated by the residents and where the city owns land. It takes extraordinary requirements for an agency to locate a service facility exactly where it is needed. Never realized is that several blocks in either direction sometimes makes a serious change in regular response patterns and the ability to meet the SOC policy. In the case of Winter Park, the city currently operates three response facilities from which both fire and emergency medical services are delivered.

In the past twenty years, the city has worked to annex portions of the northeast residential area. A result of this annexation push is that a Fire Station once operated by Orange County Fire Rescue is now staffed and operated by the agency. This station served Winter Park residents since the signing of the Interlocal Joint-Response Agreement in 1994. In August 2000, Winter Park and Orange County continued their long-standing relationship by agreeing to transfer responsibility for operating the facility to Winter Park. A three-year transition began in August 2000 that placed a Winter Park engine company in the station on every third shift, leaving Orange County to cover the station the other two shifts. On July 1, 2001 Winter Park provided the second shift with the third coming the following year. This unique means of transitioning responsibility served to lessen the impact on each other's personnel allowing Winter Park to "gear-up" fiscally to accept the additional personnel and other related costs.

The two agencies continue to work with each other in areas of response and coverage. The transition model used in this case was unique and has served as a model for other communities faced with similar jurisdictional issues.

Concentration Factors:

Concentration of resources is the measure of how responding resources included in the balance of the first alarm assignment can arrive into a given area to mitigate the emergency within adopted benchmark performance with the defined effective response force (ERF). This defined concentration of assets allows emergency response personnel to arrive in the pre-flashover phase of a fire and to affect positive change in emergency medical calls for service or aside a patient in time to change the outcome of their medical emergency.

The concentration of emergency response units in Winter Park is a reflection of the demand for high quality service. Fire and emergency medical services are delivered from three fixed locations. Two of the three facilities, Stations 61 and 62 operate patient transport capable "Rescue" units. An additional Rescue is available at Station 62 and operates on an as needed basis, or in full-staffing situations.

The focus of providing an initial effective response force is that it will most likely stop the escalation of the emergency, be it fire or increased illness in the case of a medical emergency. Concentration of service delivery is best measured by risk/category type where higher risk areas would require second and third due units in shorter time frames than typical or low risk areas. The agency handles responses to all hazards in a similar manor.

Services concentration measures are considered in:

- % of square miles, or
- % of equally sized analysis areas, or
- % of total road miles in jurisdiction for the number of total units in the initial effective response force.

Service concentrations often pull on distribution of resources making evaluating these impacts on service delivery almost impossible. There is no one perfect solution to this complex decision. The fire chief and staff have developed what is considered to be the best placement of resources and staffing based upon what is known, what is anticipated and what is possible.

Reliability Factors:

It remains a goal of the agency to maintain, or otherwise reduce, the community's risk from peril to the lowest possible level. This goal is achieved by balancing the distribution and concentration of assets and the overall reliability of resources, both personnel and apparatus. In order to accomplish this goal, an

understanding as to what duties and assignments emergency response crews are responsible for and how they should be deployed was developed.

For firefighting, the standard factor is to measure the fire flow potential of a specific building and from that figure, the number of hose lines, apparatus and personnel necessary to mitigate a fire within the building. For Emergency Medical Services, the standard factor is to provide the medical care before permanent brain death begins.

Reliability factors of the SOC examine the agency's reliability to place those assets in place to meet the stated SOC. The SOC assesses the availability of resources, both apparatus and personnel available to respond when needed to incidents within the jurisdiction. Calculations such as asset drawdown, exhaustion and historical performance are considered.

During the past five years (2011-2015), the agency's assets (Engine, Rescue, Truck) **responded to 96.2%** of those incidents within their first due area and that at any one time, less than 1% of the incidents cause total drawdown of all agency assets.

Comparability Factors:

The community's fire and emergency services are assessed against several different industry standards. Aside from being twice Accredited by the Commission on Fire Accreditation International, the agency uses standards such as NFPA 1710 to benchmark the staffing and performance of all emergency services. Presently, the only aspect of the operation not currently meeting the NFAP 1710 standard is the minimum staffing of Engine 64. Currently only three firefighters staff this engine.

The agency also participates in the Florida Benchmarking Consortium (FBC). The FBC monitors many of the local governments throughout Florida reporting on all aspects of government performance. Winter Park was a charter member of the FBC and assisted with the development of both the fire and EMS baselines currently used to benchmark communities against each other.

The **Insurance Services Office (ISO)** rates the fire protection provided by the city of Winter Park. During its' last evaluation in 2013, the city was awarded a **Fire Suppression Rating of 1**. This rating was an improvement from the previous rating of 2 which had been in place since 2006. The ISO rates more than 40,000 fire departments across America with this 1-10 rating schedule (1 being the best) and as of December 2015 has awarded only 125 Class 1 ratings to these high performing communities.

F. Performance Objectives and Measurement

Performance Objectives – Benchmarks:

The agency's Community Risk Assessment and Standard of Cover document is comprehensive and contained all necessary data by which to validate the performance of each program. The following **Benchmark and Baseline** measurements are reflective of the statements made in the eighth edition of the Fire and Emergency Services Self-Assessment Manual (FESSAM) produced by the Commission on Fire Accreditation International. Winter Park's entire service area is considered to be **URBAN** as described on page 71 of CFAI's 8th edition FESSAM.

The following time and performance objectives for emergency response have been reviewed and adopted by the fire department with acceptance by the Winter Park Civil Service Board, City Commission and City Manager and are stated for the service years 2011-2015.

Cascade of Events:

In any emergency time is an issue. The longer it takes to get trained assistance to the scene the less likely it is that a positive outcome is going to be achieved. Each event carries its' own timelines.

Each event begins with a change in what is considered normal. At the point in time when the event initiates the clock or cascade of events begins until the state of normal is returned. In order to get the needed assets to the emergency in time to make a positive impact those assets need to be properly distributed as well as concentrated within the community. Enough assets, including emergency communications operators, are needed to handle the volume of alarms. Each time stamp included in the cascade of events allows the agency the opportunity to assess and benchmark its performance. Most data points within the cascade are monitored within the CAD system. While human intervention is required for all hard data calculations, the data that is collected can be considered accurate and valid. The following sections assess each hard data point monitored on the cascade of events.

Alarm Handling Performance:

Alarm Handling Time is a part of the Total Response Time measurement and is tracked within the Computer Aided Dispatching (CAD) software. All time measurements are digitally added to the CAD by human action and are directed by the emergency communications operators at the time of the event.

The agency has established the alarm handling benchmark at 60 seconds for 90% of all alarms. To assess current performance an alarm handling baseline performance measurement is assessed on a quarterly basis.

The following represents the agency's baseline performance for alarm handling time for the period (2011-2015):

Fire - :55 seconds

EMS - :54 seconds

Technical Rescue - :50 seconds

Hazardous Materials - :57 seconds

The data indicates measurable continuous improvement in the alarm handling time over the past five years with overall performance in this measure being consistent.

Firefighter Turnout Time Performance:

The agency has an established the turnout time benchmark for all EMS responses at 60 seconds and 120 seconds for fire, Haz-mat or technical rescue responses. The performance for all objectives is measured at 90%.

"Turn-Out timers" are installed in each apparatus bay to remind responders of their performance.

The following represents the agency's baseline performance for turn-out time for the period (2011-2015):

Fire – 1:14

EMS - :58

Technical Rescue – 1:30

Hazardous Materials – 1:13

Within the current system of assessment the tracking turnout time is inherently difficult. Turnout time is measured in the CAD and is time stamped by human interaction caused by the input from the communications operators. Time stamps are entered at the time the incident is dispatched and when the unit verbally denotes it is responding. This action happens at different intervals depending on individual stations and units therefore the accuracy of the turnout time calculation as it stands alone is not consistent.

After determining the ability to assess the available data from the current CAD related specifically to turn out times, a report was created representing these times. The agency's data reflected the stated baseline at the 90% performance measurement.

Fire Suppression Services Program Benchmarks:

For 90% of all **low and medium risk** structure fire responses the first assigned apparatus shall arrive within 7 minutes 20 seconds (7:20), total response time.

The first arriving engine company shall be capable of pumping 1500 gallons of water per minute and shall be staffed with a minimum of three (3) personnel capable of establishing command and a defensive, or initiating a transitional, fire attack operation as outlined in Standard Operating Guideline 210.03.03.

The balance of the first alarm assignment containing an effective response force (ERF) of 17 personnel will arrive within 12 minutes 20 seconds (12:20), total response time.

The ERF assignment shall be capable of assuming command, initiating an uninterrupted water supply, advancing of multiple fire attack and back-up lines designed to complete safe and effective fire control, ventilation, forcible entry, victim search & rescue and control of utilities. The effective response force will be able to control the progress of the fire, holding fire damage to the areas discovered upon their arrival, 90% of the time.

For 90% of all **special and high risk** structure fires, an effective response force of 20 personnel shall arrive within 15 minutes (15:00) total response time.

The ERF assignment for a special and high risk assignment shall be capable of assuming command, initiating an uninterrupted water supply, advancing of multiple fire attack lines and back-up lines, ground and aerial master stream operations, ventilation, forcible entry, victim search & rescue and control of utilities.

Emergency Medical Services Program Benchmarks:

For 90% of all **low and medium risk** EMS incidents, the first assigned unit shall arrive within 7 minutes (7:00), total response time. The balance of the assignment containing an effective response force of 5 personnel will arrive within 12 minutes (12:00), total response time.

The first arriving unit will be staffed with a minimum of two (2) personnel, one being a paramedic, and be capable of providing advanced life support. For **special risk** EMS events an EMS Supervisor is added to the ERF to assume command of the event and manage overall patient care. Once a medical scene has been identified as **high risk** (Level 1 Mass Casualty Incident (MCI) with five or more patients) additional resources will be requested. It is anticipated that in cases where a

witnessed cardiac arrest has occurred and by-stander CPR is initiated that 30% of patients receiving ALS care will experience a return of spontaneous circulation (ROSC) and will ultimately be released from hospital care.

Technical Rescue Services Benchmarks:

For 90% of all **low and medium risk** technical rescue incidents the first assigned unit shall arrive within 7 minutes 20 seconds (7:20) total response time. The first assigned unit shall be staffed with a minimum of three (3) firefighters who are capable of assessing the situation to determine if a technical rescue response is required, request any additional resources, control the hazards, and provide advanced life support to any victim without endangering personnel.

For 90% of all technical rescues deemed **special or high risk** an effective response force of fourteen (14) personnel shall arrive within 12 minutes 20 seconds (12:20) total response time and be capable of providing technical expertise, knowledge, skills and abilities during technical rescue incidents.

Hazardous Materials Services Program Benchmarks:

For 90% of all **low and medium risk** hazardous materials incidents, the first assigned unit shall arrive within 7 minutes and 20 seconds (7:20) total response time.

The first assigned unit shall be staffed with three (3) firefighters and capable of assessing the situation to determine the presence of a potential hazardous material/explosive device; determine the need for additional resources, estimate the potential harm without intervention (utilizing resources such as ERG, FOG, etc.) and begin establishing a hot, warm and cold zone.

For 90% of all **special and high risk** hazardous materials events an effective response force of fourteen (14) personnel shall arrive within 10 minutes 30 seconds (10:30) total response time and be capable of providing the equipment, technical expertise, knowledge, skills and abilities to mitigate a hazardous materials incident. Additional resources will be requested as necessary.

Performance Objectives – Baselines

Baseline performance measures have been established for each area of operation. Baselines represent the current performance of the agency measured at a specific percentage. Measurements are based on both concentration and distribution of resources in all categories.

All Baseline statements are based on what is referred to as Total Response Time for Priority One (1) type incidents[7]. This time reflects the Total time taken from the call receipt at the 9-1-1 center to the arrival of the first agency unit responding emergency (lights & siren) throughout the event. While all aspects of the response time continuum are assessed, alarm handling time and turnout time are included in this *Total Response Time* measurement. The agency uses the baseline of 90% performance measure as directed by the eight edition of the FESSAM.

Fire Suppression Services Program Baselines:

The following represents the agency's **baseline** performance for the period from 2011-2015:

For 90% of all reported **low and medium** risk fire responses the first assigned unit arrived within 7 minutes and 40 seconds (7:40) total response time and was capable of pumping 1500 gallons of water per minute, and was staffed with a minimum of three (3) personnel capable of establishing a defensive or an initial transitional fire attack operation until "two in-two out" status was initiated. The only exception to this operation is outlined in Standard Operating Guideline 210.03.03 (Exhibit) when a confirmed threat to life exists.

An effective response force (ERF) of 17 personnel arrived within 9 minutes 6 seconds (9:06) total response time and was capable of establishing or assuming command, initiating an uninterrupted water supply, advancing a fire attack, back-up, and exposure line, completing the tactical application of a transitional fire attack, performing forcible entry as needed, securing utilities, performing victim search and rescue; and completing fire building ventilation. The ERF held fire damage to the area of identified fire involvement upon their arrival 98% of the time.

For 90% of all **special and high** risk fires the effective response force of 20 personnel would arrive within 20 minutes 0 seconds (20:00) total response time and be capable of establishing command, initiating an uninterrupted water supply, advancing an attack and back-up line for safe

[7] Priority One (1) alarms are those where units are dispatched to respond in an emergency mode (lights/siren) and arrive in the same mode. Units downgraded or cancelled to an incident are not counted in the ERF demand.

fire control, forcible entry, utility and lobby control, victim search & rescue and ventilation. At no time during the period was this ERF established by the agency.

Emergency Medical Services Program Baselines:

The following represents the agency's **baseline** performance for the period from 2011-2015:

For 90% of all **low and medium** risk EMS incidents the first assigned unit arrived within 7 minutes and 19 seconds (7:19) total response time. The first arriving unit was staffed with a minimum of two (2) personnel, one being a paramedic, and was capable of providing advanced life support and patient transport.

The balance of the ERF totaled five (5) personnel with at least one being a paramedic and was capable of assisting in providing advanced life support within 7 minutes and 22 seconds (7:22) total response time. In cases where the patient or scene is considered **special** the EMS Supervisor arrived within 7 minutes and 18 seconds (7:18) total response time. In those instances where a medical scene was identified as **high** risk (Level 1 Mass Casualty Incident (MCI) with five or more patients) additional resources were requested.

In cases where a witnessed cardiac arrest occurred and by-stander CPR was initiated, 37% of patients receiving advanced life support care experience a return of spontaneous circulation (ROSC) and were ultimately be released from hospital care. Based on the current EMS service delivery and response types, the agency does not have further concentration baseline measurements for EMS response.

Technical Rescue Services Baselines:

The following represents the agency's **baseline** performance for the period from 2011-2015:

For 90% of all **low or medium** technical rescue incidents the first unit arrived within 7 minutes and 44 seconds (7:44) total response time. The first arriving unit was staffed with three (3) firefighters and was capable of assessing the situation to determine if a special or high risk technical rescue response was required, control the hazards, and provide advanced life support to any victim without further endangering personnel.

For 90% of all incidents requiring the **special or high** risk technical rescue of a victim within an effective response force of fourteen (14) personnel with LTRT capabilities arrived within 8 minutes and 33 seconds (8:33) total response time. The LTRT is capable of providing technical expertise, knowledge, skills and abilities during technical rescue incidents.

Hazardous Materials Services Program Baselines:

The following represents the agency's **baseline** performance for the period from 2011-2015:

For 90% of all **low and medium** risk hazardous materials incidents the first arriving unit arrived within 7 minutes and 44 seconds (7:44) total response time. The first arriving unit was staffed with three (3) firefighters and capable of assessing the situation to determine the presence of a potential hazardous material/explosive device; determine the need for additional resources, estimate the potential harm without intervention (utilizing resources such as ERG, FOG, etc.) and begin establishing a hot, warm and cold zone.

The effective response force of 14 personnel arrived within 8 minutes 33 seconds (8:33) total response time and was capable of providing the equipment, technical expertise, knowledge, skills and abilities in order to fully mitigate the hazardous materials incident.

For 90% of all **special and high** risk hazardous materials incidents the agency exercises the Interlocal agreement with the city of Orlando Fire Department who provide technician level response capabilities an effective response force of 9 additional personnel who arrive within 20 minutes (20:00) total response time.

G. Compliance Methodology

This component describes the methodology that is being used by the agency to maintain the many facets of the SOC process. Each component includes determinations with compliance with the performance objectives and measurements previously established. The methodology used by the agency not only meets the compliance measures for the adopted SOC, but meet those established by the CFAI in the eighth edition of the FESSAM. Having a consistent and easily managed compliance method is extremely important. To maintain the community's confidence in the SOC system the methods used to ensure its compliance are critically important.

Compliance Team / Responsibility:

Since the first edition of the agency's SOC, the development and primary responsibility for compliance has been placed with the fire chief. Originally housed in the Operations Division, the agency's second edition SOC moved in importance to the highest level of the agency.

With assistance from Operations Division, the fire chief maintains and reports the agency's compliance to the budget and performance measurement manager, city manager and city commission. The importance of the SOC demands that in the case of Winter Park, the fire chief maintain personal interaction with the direct development and maintenance of the SOC. At present, the fire chief serves as a CFAI Peer Assessor

as well and due to its importance to the overall agency performance is ultimately responsible for the compliance of the SOC.

Others who contribute to the SOC compliance process include the city's Graphical Information Systems GIS technician as well as the Information Technology staff. In addition, the accreditation manager reviews those items related to the SOC and those related FESSAM Performance Indicators.

Performance Evaluation and Compliance Strategy:

During the development and updating of the SOC, the agency assessed the community's risk and applied that to the baseline services currently being provided to the community. The performance measurements contained in the SOC include alarm handling, turnout, and travel culminating in what is commonly referred to as the total response time.

The agency's CAD system initiates all responses. The CAD time stamps all aspects of the alarm but currently includes human intervention. Each action to time stamp a place in time related to the event causes a reaction in that the operator or the company officer must first voice the communications operator and then the operator much interact with the CAD system manually moving the unit from one point on the response continuum to another. Loaded data in the CAD is secured and not available for adjustment. Once the CAD has completed the alarm and a report number is issued, the CAD electronically forwards the response data for the alarm to the agency's records management system (RMS). Currently the agency utilizes the Firehouse ® RMS to store all response data related to all responses. An additional records management software package is used to record and manage all patient medical information.

Once the data is loaded into the Firehouse ® RMS system the SOC compliance team downloads the data into a data analysis program called NFIRS 5 Alive. This software has the capability to analyze all the response data to determine baseline performance with all aspects of the SOC. Reports are generated and analyzed by the agency with recommendations made to the City Commission.

One area of performance identified for improvement is the reliability of the data related to personnel turnout time. Currently the time, while logged in the CAD, has been identified as being "weak" at best because of the human interaction required from the responders who must verbally notify the dispatchers to move the unit in the CAD from "dispatched" to "enroute". While the agency is confident with the reliability of the total response time measurement included in the SOC, the agency has identified the area of turnout time as one which can be improved upon. In addition, reports from the SOC compliance analysis has identified that the time of day of the alarm has an impact on performance.

The agency has installed turnout time clocks in each apparatus bay which trigger once the individual fire station is alerted. The clock acts as a visual reminder that time is important and it gives the company officer an idea how his companies are performing in this area of the SOC.

Compliance Verification Reporting:

To assure overall system compliance, several verification reports are generated on a monthly and quarterly basis. The risk assessment component is continuously updated with information from both the fire marshal's office and those operations crews assigned to assess properties. The Standards of Cover performance measurements are included in the city's strategic plan reports as well what is commonly referred to as the *Strategic Road Map*.

Data used to verify the agency's SOC performance is generated by the city's Computer Aided Dispatching software (CAD), the Firehouse ® software records management system (RMS) and the *NFIRS 5 Alive* software. Reports are developed and reviewed for compliance with the baseline measurements.

Constant Improvement Strategy:

The city of Winter Park has a fully developed strategic planning process which includes the components of the Fire Rescue Department's Standards of Cover. The performance measurements stated in the SOC are reported on each quarter in the city's report to commission referred to as the *Strategic Road Map*.

The measurements of the SOC are included in the city's annual budget and are also included in the Fire Rescue Department's annual budget proposal. This inclusion in both the city's and the fire department's annual strategic plan forces the SOC to be assessed and improved upon regularly. Baselines are routinely assessed with performance headed towards the established benchmarks.

It remains imperative that the agency continues to assess the abilities of all assets to ensure the performance measurements anticipated by the community are met. While continued improvements are anticipated, most of the agency's response activity is fairly stagnant. The continued improvements in total response time noted for all alarms during the five-year period were a result of the increased efforts to improve both alarm handling and turnout times.

H. Conclusion and Recommendations

This component of the SOC provides a summary of the overall system performance, determinations, and conclusions derived from the entire process. Every aspect of the community's risk and the operations of the agency's performance is measured creating the list of recommendations included in this section. These recommendations are considered in the agency's strategic plan.

Evaluation Methodology and Determinations

Evaluation Methodology:

The agency originally developed a methodology to assess its performance in 1999. Until that time response and service performance expectations were based on a very reactionary formula. Concerned about ISO ratings and simply having the attitude of "doing the best we can do" was accepted. With the adoption of the community's first SOC, the attitude changed to we can always do better. To evaluate the overall performance of the agency structured strategic planning has taken place since 1999. At that time, each component of performance is assessed, presented and eventually adopted by the community. Four separate levels of review take place to assess the overall agency performance which lead to a final decision on the SOC. These levels of evaluation include:

1. Technical
2. Operational
3. Financial
4. Policy

Technical Review – This level includes data collection to establish baseline points and the assessment of the current level of ability to collect and analyze the needed data. This level includes various methods of analysis which include the who, what, where, when and why of the agency.

Operational Review – This level includes a review of all aspects of the operation. Areas analyzed include safety, support, impact on other operations, training and assurance of maintaining a balance of service to all operations. Areas evaluated included communications and dispatch operations, fire, EMS, hazardous materials and technical rescue capabilities.

Financial Review – The agency's ability to financially sustain the anticipated demands of providing the levels of service identified in the SOC and Strategic Plan are assessed.

Policy Review – The levels of service provided by the agency are assessed against the community's strategic plan and city's Comprehensive Plan. The SOC is first presented to the city's Civil Service Board for review and adoption, then to the City Commission for final adjustment and adoption. Areas of concern are presented and offered with recommendations for changes to the operation.

A final decision is made based on these four key levels of evaluation. The City Commission has the final opportunity to adjust and recommend changes. The resulting methodology for the development of the SOC allows the community to "buy" a level of service. This level of assessment and education makes these decisions more based on fact than on the ideas of the past, emotion, or any other personal instinct.

Program Performance Evaluation:

To assure compliance with the adopted Standards of Cover it is critical to examine the performance of all aspects of the operation. For the purposes of evaluating and establishing baseline and benchmark performance, the agency measures 90% of the events in each service program. The following data charts depict performance over the previous five years in each program. These measurements are maintained on a quarterly basis and become part of the city's performance measuring and strategic planning processes.

Baseline Measurement (FIRE) @ 90%		Benchmark Goal	Performance Gap	90% 2011-2015	2015 (8)	2014 (11)	2013 (10)	2012 (7)	2011 (3)
Alarm Handling Time	Pick-up to Dispatch (seconds)	:60	:05	:55	:49	:55	:54	:47	:65
Turnout Time	Priority One Calls	1:20	:06	1:14	1:11	1:11	:58	:53	2:07
Travel Time	1st Assigned Unit **Distribution**	5:00	-1:18	6:18	5:52	6:30	7:33	4:09	5:55
	Effective Response Force (17) **Concentration***	10:00	3:03	6:57	6:27	5:33	6:09	5:43	8:38
Total Response Time	1st Unit On Scene **Distribution**	7:20	-:20	7:40	7:52	7:35	7:56	7:38	8:25
	Effective Response Force (17) **Concentration***	12:20	3:14	9:06	8:27	9:41	8:01	9:53	11:33

**Effective Response Force (ERF) represents data for Low, Moderate or Significant FIRE Responses (17 Personnel)*

Baseline Measurement (EMS) @ 90%		Benchmark Goal	Performance Gap	90% 2011-2015	2015 (2497)	2014 (2856)	2013 (2950)	2012 (2973)	2011 (2671)
Alarm Handling Time	Pick-up to Dispatch (seconds)	:60	+:06	:54	:56	:54	:54	:60	:65
Turnout Time	Priority One Calls	:60	+:02	:58	:58	1:14	:58	1:14	2:07
Travel Time	1st Unit **Distribution**	5:00	-:19	5:19	5:14	5:19	5:49	4:07	5:55
	Effective Response Force (5) ***Concentration**	10:00	+4:30	5:30	5:25	5:32	6:01	5:54	8:38
Total Response Time	First Unit On Scene **Distribution**	7:00	-:19	7:19	7:24	7:13	7:13	7:24	8:25
	Effective Response Force (5) ***Concentration**	12:00	+4:38	7:22	8:09	7:40	7:55	9:38	11:33

**Effective Response Force (ERF) represents data for Low and Moderate EMS Responses (5 Personnel)*

Baseline Measurement (Tech Rescue) @ 90%		Benchmark Goal	Performance Gap	90% Performance	2015 (0)	2014 (5)	2013 (2)	2012 (2)	2011 (2)
Alarm Handling Time	Pick-up to Dispatch (seconds)	:60	:10	:50	_	:48	:51	:47	:65
Turnout Time	Priority One Calls	1:20	-:10	1:30	_	:59	:52	:53	2:07
Travel Time	1st Unit **Distribution**	5:00	-1:10	6:10	_	6:31	5:50	4:09	5:08
	Effective Response Force (14) ***Concentration**	10:00	+4:10	5:50	_	_	6:28	5:43	5:28
Total Response Time	Total Response Time 1st Unit On Scene **Distribution**	7:20	-:10	7:30	_	_	6:57	7:38	8:30
	Effective Response Force (14) ***Concentration**	12:20	+3:30	8:50	_	_	8:20	9:53	8:50

**Effective Response Force (ERF) represents data for Moderate Technical Rescue Responses (14 Personnel)*

Baseline Measurement (Hazardous Materials) @ 90%		Benchmark	Performance Gap	90% Performance	2015 (27)	2014 (16)	2013 (37)	2012 (17)	2011 (25)
Alarm Handling Time	Pick-up to Dispatch (seconds)	:60	+:03	:57	:59	:57	:55	:47	:65
Turnout Time	All Priority One Calls	1:20	+:07	1:13	:50	1:06	:55	:53	2:07
Travel Time	First Assigned Unit **Distribution**	5:00	-:37	5:37	5:25	6:46	7:04	4:09	5:08
	Effective Response Force ***Concentration**	10:00	+3:37	6:23	6:49	5:43	6:56	5:43	5:28
Total Response Time	First Unit On Scene **Distribution**	7:20	-:24	7:44	7:54	8:42	7:28	7:38	8:30
	Effective Response Force ***Concentration**	12:20	+3:47	8:33	8:41	7:50	8:46	9:53	8:50

**Effective Response Force (ERF) represents data for Low and Moderate HM Responses (14 Personnel)*

Reliability – Unit Performance:

One key to assuring that the community standard for service is met is to regularly assess the reliability for each of these services. Therefore to know the reliability of each type of unit in each zone is rather critical to meeting goals.

During the review period (2011-2015) the overall performance reliability (where the assigned first due unit responded to incidents in their assigned first-due area was 96.2%. This suggests that a vast majority of incidents are handled by the closest units and that in each GPZ, the event receives the closest assets. This calculation also takes into account the assets available through the agency's current Inter-local agreements. While the agency meets the baseline SOC statements without considering the assets of any other agency, those assets are regularly included in meeting the effective response force for particular types of responses.

Performance Determinations:

This section includes a summary of any identified gaps between the agency's performance baselines and those defined industry benchmarks noted by in the eight edition of the FESSAM (p.71). Causal factors based on community or regional conditions as well as other determining factors that may contribute to the performance gaps are noted with their impact and magnitude explained.

Alarm Handling Time – Those noted deviations are less than 5 seconds over the period. The agency considers this an acceptable standard deviation and can be attributed to the data gathering processes and human intervention. No noted changes are anticipated in this alarm handling systems.

Turn Out Time - The agency continues to struggle with the capturing of accurate data in this area. The CAD does log this time period and a calculation is attainable, however the accuracy of this data is low because of the continued human intervention required with the dispatch operators and the field crews. It was determined through evaluation and personal assessment that many times the verbal commands of the crews are not immediately noted in the CAD. This is a point of improvement explained in more detail in the Conclusions section of the SOC. The agency notes a deviation of more than 1:00 in calculated turnout time.

Fire, EMS, Technical Rescue and Hazardous Materials Distribution and Concentration Calculations identified gaps between current performance baselines and stated benchmarks which include:

- FIRE - Distribution < 1:18 in 2011-2015 in travel time from the benchmark. The data showed some vacillation in years 2013 (7:33) to an improved 5:52 in 2015. The agency

has thoughts as to why this improvement was seen, but is clearly attempting to discover the reason for this change and to see it become a trend.

- FIRE - Concentration > 3:14 from the benchmark for the period 2011-2015. We again have seen an overall improvement in times from 2011 (11:33) to (8:27) in 2015.

Conclusions

The city of Winter Park and its Fire Rescue Department have completed the fourth such comprehensive assessment of community risk review yielding an adopted Standards of Cover. Since 2001, the Fire Rescue Department has been recognized for its' performance and professionalism by the Commission on Fire Accreditation International by maintaining International Accreditation. This document reflects the agency's most recent effort in documenting performance of both emergency and non-emergency services and compares the agency's baseline performance to that stated in the eighth edition of the *Fire and Emergency Services Self-Assessment Manual* (FESSAM) and the fifth edition of the CFAI *Standards of Cover Manual.*

Winter Park Fire Rescue has continued to assess and evaluate the communities risk to both fire and non-fire risk through the application of a comprehensive and organized assessment. Surveys are performed on each property including needed fire flow calculations. Risks are identified and ranked from low to significant with those rankings placed into the city's GIS mapping system to allow the agency to better visualize the community-wide levels of risk. This assessment of risk has allowed agency leadership to best prepare for what it may face on not only a regular basis, but when the once in a life time event occurs at a significant property.

To respond to each of these identified risks the agency has conducted examinations which have yielded those critical tasks needed to be accomplished to stop the loss, treat the patient or otherwise change the outcomes of an event. Each event has a generated list of critical tasks which are based not only on the past performance of the agency, but on the performance of similar agencies throughout the world.

Each type of event with the established critical tasking created an expected performance measurement. Each measurement was assessed and the agency's performance baselines were compared to the benchmark's in the FESSAM.

It was evident that the data supported that one of the agency's strengths is that is has continued to improve on the total response time gap between the stated baseline measurements for all types of responses and the adopted benchmark. An identified weakness was that the agency did not exceed the projected benchmarks in all areas. This demonstrated that when compared to the CFAI/NFPA total

response time measures, the agency appears to have the correct amount of assets deployed and does not have excessive resources in any one area of the operation.

The measurements found in the SOC also identified several positive attributes of the agency. Winter Park identified that our communications center regularly processes 9-1-1 calls and dispatches fire units within 60 seconds 90% of the time. This measurement ensures that those in most need for assistance are not delayed by phone transfers and other technology delays found in most fire and EMS agencies who receive their dispatch services from other agencies.

The most noted weakness in the evaluation process was the data points used to assess personnel turnout time. While accurately recorded, the time stamps from the individual units are voiced to the communications center and then manually loaded into the CAD. This "human intervention" required in the time stamping process is a known weakness in the overall accuracy of this individual time interval. While an opportunity was determined to improve the accuracy of the time stamp made for turnout time, overall, the accuracy of these time stamps for the total response time assessment was found to be more than accurate.

While continued funding of all agency services is always in question, no specific threats were identified that would impact the ability to continue to meet or exceed the CFAI baseline measurements for the SOC.

The process of conducting a comprehensive risk assessment which yielded the defined standard of cover baselines has served the agency well over the past fifteen years. Applying the new measurements found in the two defining publications of the CFAI continue to set the bar for performance. Adopting a set plan for the monitoring and maintenance of the risk assessment is a vast improvement and needed to be addressed. The plan explained in this SOC for maintaining the components of the risk assessment should be evaluated after several cycles to assure the plan is effective.

Recommendations

At the conclusion of fourth such comprehensive review of the city of Winter Park's community risk and the services provided by the fire rescue department the following recommendations are appropriately included in this *Standard of Cover* document. It is evident through the noted continued improvements in service provided by the agency that the SOC and accompanying International Accreditation process has been woven into the fabric of the organization. Improved levels of service and in most notably in response time, demands that the administration of the fire rescue department present for adoption this edition of the agency's *Standards of Cover* with the following recommendations for continued improvement:

- Further work should be accomplished to incorporate the CAD into to the internal fire station alerting system. While Alarm Handling Time continues to be consistent at below 60 seconds for all alarms, the Turn Out Time remains a challenge. The CAD product should be further incorporated into the alerting system so that the time wasted between CAD entry and radio alerting can be gained.

- The agency should incorporate in-vehicle status updating through the uses of the existing CAD and in-vehicle computers. This would allow for more accurate capturing of turnout time and arrival times for all assets. This remains a recommendation from previous SOC documents and should be given a trial period to compare data sets.

- The agency should initiate a discussion with the community to re-set the Benchmark performance measurements for those areas where the Baseline Performance has been shown to be exceeding the Benchmark.

- A formal agency SOG should be drafted which explains in detail the SOC and risk assessment process.

I. Glossary, Exhibits, and Attachments

Glossary of Terms

Advanced Life Support (ALS) – A sophisticated level of pre-hospital care that builds life support procedures and includes the use of invasive techniques such as advanced airway management, cardiac monitoring and defibrillation, intravenous therapy and the administration of specified medications. All emergency response units operated by the agency are ALS licensed and capable.

Alarm (Call) Handling Time – The time interval from the time an emergency call is received in the 9-1-1 center until the alarm is transmitted to the fire / ems units in the field.

Asset – A collective description of any equipment operated by the agency. An asset is normally able to respond to an emergency or fill a particular need.

Authority Having Jurisdiction (AHJ) – An acronym used for the Authority Having Jurisdiction. In the case of Winter Park, the Fire Chief is the AHJ for the application of the Civil Service Code and other city laws and ordinances.

Automatic Aid (AA) – Involves the immediate response of non-agency units to an event within another jurisdiction. Automatic Aid is best defined by stating that the protection offered is "boarder-less" in nature with the closest possible unit dispatched to any incident.

Baseline Measurement – The measurement of current performance in the organization. An initial set of critical observations or data used for comparison or to establish a control point for assessment. The activities which are currently in place to achieve the goals of the organization.

Basic Life Support (BLS) – A primary level of pre-hospital care which includes the recognition of life threatening conditions and the application of simple emergency procedures. The agency does not operate any strictly BLS units.

Chief Fire Officer (CFO) – An individual designated by the Center for Public Safety Excellence as a having met the requirements for designation as a Chief Fire Officer.

Critical Tasking – A collective review of a particular activity with the emphasis on how many personnel are required to perform any one critical task on an emergency scene.

Commission on the Accreditation of Ambulance Services (CAAS) – An independent accrediting body who offers an accreditation process for the operations of ambulance services.

Commission on Fire Accreditation International (CFAI) - The Commission on Fire Accreditation International (CFAI) is the governing body for the accreditation of fire agencies. CFAI is committed to

assisting and improving fire and emergency service agencies around the world in achieving organizational and professional excellence through its strategic self-assessment model and accreditation process.

Community Risk Assessment (CRA) – A comprehensive process of community review which combines an assessment of community-wide risk for both fire and non-fire related events.

Concentration Factor – As used in the agency's Standards of Cover (SOC) that factor used to assess the arrival of the balance of the first alarm assignment or the effective response force dispatched to an event. This factor describes where assets are concentrated throughout the jurisdiction. It is the "power" factor used to determine how fast enough assets arrive to any one type of event to meet the needed effective response force.

Distribution Factor – As used in the agency's Standards of Cover (SOC) that factor used to assess the arrival of the first units dispatched to an event. This factor describes where assets are distributed throughout the jurisdiction. It is the "speed" factor used to determine how fast assets arrive to any one type of event.

Drawdown Level – Represents the level of assets the agency will not drop below when asked for automatic or mutual aid from an authorized agency.

Effective Response Force (ERF) – The minimum level of staffing identified by the agency as that being needed to complete the critical tasking for any one particular type of emergency. The ERF is anticipated to arrive with the defined Distribution Factor time benchmark.

Emergency Operations Center (EOC) – A central location to coordinate all aspects of an emergency. The agency operates the city's EOC otherwise known as the Sandbox at Fire Rescue Headquarters.

Fire and Emergency Services Self-Assessment Manual (FESSAM) – A manual produced by the Commission on Fire Accreditation International which describes the self and peer assessment process for those agencies seeking accreditation. The agency applied those processes found in the eight edition of the FESSAM for this edition of the city's standards of cover.

Geographical Planning Zone (GPZ) – A defined geographical area of response based upon the concentration of assets throughout the region.

First Due – A geographical area of service in the community defined as that area of response for the closest fire asset. Basically, it is that area where a particular fire asset can arrive before any other.

Geographical Information Systems (GIS) – A collection of computer-based software used to collect data on events and assets and viewing them on an geographical view platform. The agency utilizes the ESRI software Arcview®.

Insurance Services Office (ISO) – A national organization that evaluates public fire protection and provides rating information to insurance companies. Insurers use this rating to evaluate basic premiums for fire insurance.

National Fire Incident Reporting System (NFIRS) – A unified reporting system for all organized fire departments in the United States operated by the United States Fire Administration. The department is a reporting agency to both the State of Florida and the USFA and uses the Firehouse® software for reporting NFIRS data. The agency also uses the software NFIRS 5 Alive to assess performance and SOC compliance for all assets.

National Fire Protection Association (NFPA) – The National Fire Protection Association is the world's leading advocate of fire prevention and an authoritative source on public safety. The NFPA develops, publishes, and disseminates more than 300 consensus codes and standards intended to minimize the possibility and effects of fire and other risks.

Needed Fire Flow (NFF) – A specifically calculated amount of water flow needed to extinguish a free burning fire. The National Fire Academy defines the NFF for a structure at 25, 50 and 100 percent of involvement.

Risk Hazard and Value Evaluation (RHAVE) – A computer-based community risk assessment program. The program was offered at no charge to agencies several years ago, but is no longer supported or offered by the USFA. It was the first risk assessment model used by the agency to develop the initial standards of cover.

Sinkhole – A natural depression or hole in the earth's surface caused by the karst processes. Sinkholes are common throughout Florida and may vary in size from 1 to 600 meters (3.3 to 2,000 ft.) both in diameter and depth, and vary in form from soil-lined bowls to bedrock-edged chasms. The great Winter Park sinkhole occurred in 1981 and caused structural damage and permanently lost property.

Strategic Road Map – A working document developed by the city of Winter Park to monitor progress on the city’s Strategic Plan goals and objectives.

Exhibits

EXHIBIT A - Winter Park City Charter Chapter 74 Civil Service Code

Sec. 74-52. - Civil service board—Generally.

(a) *Created; composition.* There shall be a civil service board of the city composed of seven members.

(b) *Appointments.* Five of the members of the civil service board shall be appointed by the governing authority, and such appointees shall be persons of different vocations residing in the city who are not employed by the city. The remaining two members shall be chosen, one by the members of the police department and one by the members of the fire department, according to election procedures set out in this article. The chief of police and chief of the fire department shall be ex officio members of the board and shall have a voice in any proceedings but no vote.

(c) *Terms.* The terms of all civilian members of the board shall be three years, and each term shall commence on the third Tuesday in January. The terms of the police and fire department members shall be for one year.

(d) *Officers; compensation.* All members of the board shall, at the meeting held on the third Tuesday of January of each year or as soon thereafter as may be practicable, elect from its civilian members a chairman, a vice-chairman and a chief examiner. The chief examiner shall also serve as secretary. The board may appoint an assistant to the secretary as it may deem necessary. The board may employ an attorney and administrative assistants with the prior approval of the governing authority. The members of the board shall serve without compensation.

(e) *Meetings.* The regular meetings of the board shall be held at 7:30 p.m. on the third Tuesday of each month at city hall or at such other places and times as a majority of the board may agree upon from time to time. Special meetings of the board may be called at any time by the chairman or any member of the board by giving at least 12 hours' personal notice to all members or at least 24 hours' mailed notice to all members or, for an emergency, such notice as may be deemed to be reasonable under the circumstances. Notice of special meetings may be waived by the board members. A majority of the board shall constitute a quorum at any meeting.

(f) *Election of police and fire department members.* The police and fire department members of the board shall be elected by secret ballot at an election conducted by the chief examiner of the board. The election shall be held on the first Monday of December of each year or as soon thereafter as may be practicable, and a notice of such election shall be posted in each department at least two weeks prior to the election date. Voting shall be by written secret ballot and shall be deposited in such a place and in such a manner as the chief examiner may designate. The chief examiner shall maintain possession of the ballots until the ballots shall have been tallied in the presence of either the chairman of the board or the vice-chairman and two other members of the board. Upon completion of the count, the votes given each candidate shall be noted and certified in writing signed by the chief examiner, the chairman or the vice-chairman and one other member of the board, and the certification shall be made a part of the minutes of the next regularly scheduled meeting of the board. A majority shall be necessary for election. An additional copy of the certification shall be posted on the bulletin board of each department. All vacancies shall be filled by same election procedures set forth in this subsection. Such elections shall be held within 30 days from the date the vacancy occurs.

(g) *Vacancies.* Vacancies because of resignations or otherwise in the position of civilian members shall be filled by the governing authority within 30 days.

(h) *Removal.* All members of the civil service board shall be subject to removal by either:

- **(1)** Unanimous vote of the governing authority; or
- **(2)** Majority vote of the governing authority, together with a majority vote of the civil service board.

(Code 1960, § 9-2)

Cross reference— Boards and commissions, § 2-46 et seq.

EXHIBIT B - Winter Park City Charter Chapter 46 EMS Ordinance

Preliminaries

CODE OF ORDINANCES OF THE CITY OF WINTER PARK, FLORIDA

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Published by Order of the City Commission

_____

Adopted March 23, 1993
Effective March 23, 1993

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Published by Municipal Code Corporation
Tallahassee, Florida 1993

OFFICIALS
of the
CITY OF
WINTER PARK, FLORIDA
AT THE TIME OF THIS CODIFICATION

_____

David A. Johnston
Mayor

_____

Gary A. Brewer
Peter K. Gottfried
Rachel D. Murrah
Pamela O. Peters
City Commissioners

_____

Anthony W. Barrett
City Manager

_____

C. Brent McCaghren
City Attorney

_____

Joyce M. Swain
City Clerk

Chapter 46 EMERGENCY SERVICES*

_____

***Charter references:** General powers of city, § 1.01.
Cross references: Buildings and building regulations, ch. 22; businesses, ch. 26.
State law references: Municipal Home Rule Powers Act, F.S. ch. 166.

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ARTICLE I. IN GENERAL

Sec. 46-1. Fire department as provider of emergency medical services.

(a) The city commission does hereby establish, approve, and authorize the city fire department as the primary and sole provider of emergency medical services within the corporate limits of the city, except as otherwise provided by mutual aid or mutual assistance agreement or by law.
(b) The city is authorized to employ or contract with a medical director pursuant to F.S. § 401.265. The medical director shall supervise and assume direct responsibility for the medical performance of the emergency medical technicians and paramedics operating for the city fire department and its emergency medical services system. The medical director shall establish a quality assurance committee to provide for quality assurance review of all emergency medical technicians and paramedics operating under the supervision of such medical director. The medical director may be, but is not required to be, the same individual as the medical director that is employed or contracted by Orange County.
(c) This section shall not operate to prohibit other licensed emergency medical service providers from providing emergency medical services within the corporate limits of the city when responding to a call for assistance under a current, duly authorized interlocal agreement for joint response, automatic aid, or mutual aid.
(Ord. No. 2322, §§ 1--3, 10-12-99)

Secs. 46-2--46-25. Reserved.

*State law references: Electrical and alarm system contracting, F.S. § 489.501 et seq.

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Sec. 46-26. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Alarm means a signal (audio or visual, recorded or live) transmitted to the police or fire department indicating a predetermined condition. The alarm is received via one of the following:

(1) Telephone line to a designated position on an alarm panel.

(2) A private alarm service company relayed to the police or fire department telephone.

(3) An automated telephone alarm system, playing a recorded message when received on the police or fire department telephone.

(4) An audible/visual signal relayed to the police or fire department by a third party.

Burglary alarm means an alarm system designed to indicate a condition of forced entry or attempted forced entry.

False alarm means the activation of a burglary or holdup alarm, fire alarm or medical alarm, by any means, which does not represent the designed condition. A false alarm shall include any alarm system test without prior notification to the police or fire department or to the alarm company that relays the alarm.

Fire alarm means an alarm system designed to indicate the presence of fire and smoke and sprinkler system water flow.

First response means a response to a false alarm to a premises at which no other false alarm has occurred within the preceding six-month period.

General alarm means any alarm bell, light or other signaling device which, when activated, is designed to indicate a burglary or holdup or the presence of fire and smoke or sprinkler system water flow.

Holdup alarm means an alarm system designed to indicate a robbery (holdup) is in progress or over with.

Medical alarm means an alarm system designed to indicate a medical emergency exists.

Telephone alarm device means any service which, when activated, automatically transmits by telephone lines a recorded alarm message or electronic or mechanical alarm signal to any telephone instrument installed in any facility of the police or fire department.

(Code 1960, § 3A-2)

Cross references: Definitions and rules of construction generally, § 1-2.

ARTICLE II. ALARM SYSTEMS*

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Sec. 46-27. Findings of fact.

(a) Malfunctions of privately owned burglary, fire or medical alarm systems are causing substantial misuse of the manpower and resources of the police and fire departments by provoking responses to numerous false alarms.

(b) Telephone devices regulated or programmed to make connection with the police or fire department could seize and hold police and fire department telephone lines to the exclusion of other calls.
(c) Such false alarms and use of such telephone alarm devices create a threat or potential threat to the health, safety and welfare of the people of the city.
(Code 1960, § 3A-1)

Sec. 46-28. Automatic reset devices; names of persons to deactivate alarm.
(a) It shall be the duty of the owner or manager of the premises to ensure that any burglary or holdup alarm installed within the city limits is equipped with an automatic reset device to reset the alarm after 15 minutes, except that, when required for insurance purposes, on Underwriters' Laboratories, Inc., certified systems the maximum time limit before automatic reset shall be 30 minutes.
(b) Prior to the installation or use of any type of burglary or holdup alarm, fire alarm or medical alarm, the owner or manager of the premises shall furnish to the company servicing the alarm system or to the police or fire department, if the system is not serviced by an alarm company, information regarding the full names, addresses and telephone numbers of at least two persons who can be reached at all times and who are authorized to enter the premises and deactivate the alarm system. If any such person shall fail to appear and reset any such alarm within one hour after being notified by the police or fire department to do so, the owner or manager of the premises shall be charged a fee established by the city.
(Code 1960, § 3A-3)
Cross references: User and service fees and charges, § 2-189.

Sec. 46-29. False alarms.
(a) Corrective action and report required. For each response by the police or fire department to a false alarm, the owner or manager of the premises involved shall, within three working days after notice to do so, make a written report to the chief of police or fire chief, on forms provided by him, setting forth the following:
(1) The cause of the false alarm;
(2) The corrective action taken;
(3) The name, address and telephone number of the serviceman, if any, by whom the system has been inspected or repaired; and
(4) Such other information as the department may reasonably require to determine the cause of the false alarm and what corrective action has been taken or may be necessary.
(b) Fees. Fees for false alarms shall be as follows:
(1) Burglary and holdup false alarm. There shall be no fee charged for a first response to a premises or for a second or third response within six months after

a first response involving a burglary or holdup false alarm. For a fourth response to premises within six months after a third response there shall be a fee as established by the city, and for all succeeding responses within six months of the last response a fee as established by the city for each such response shall be

charged. Upon a failure to pay any such fee within ten days after the notification for which it is charged, the chief of police shall be authorized to disconnect or deactivate the alarm system involved.

(2) Fire or medical false alarm. There shall be no fee charged for a first response to a premises or for a second or third response within six months after a first response involving a fire or medical false alarm. For a fourth response to a premises within six months after a third response, there shall be a fee as established by the city, and for all succeeding responses within six months of the last response a fee as established by the city for each such response shall be charged. Upon a failure to pay any such fee within ten days after notification for which it is charged, the fire chief shall be authorized to disconnect or deactivate the alarm system involved.

(c) Authority to disconnect. Upon a failure of an owner or manager of a premises to pay any fee specified in subsection (b) of this section within ten days after the occurrence for which the fee is charged or upon a determination by the chief of police or fire chief that any false alarm, other than a false alarm caused by an act of God, to which a first response is made has resulted from a failure on the part of the owner or manager of the premises to take necessary corrective action, the chief of police or fire chief shall be authorized to disconnect the alarm system, and it shall be unlawful to reconnect such alarm system unless and until appropriate corrective action has been taken and such reconnection is authorized by the chief of police or fire chief; provided, however, that no disconnection or deactivation shall be ordered or made as to any premises required by law to have an alarm system in operation.

(d) Appeal of fee. The owner or manager of a premises having a burglary or fire alarm may appeal the imposition of any fee charged under this section to the city's code enforcement board. Written notice of such appeal shall be filed with the city's code enforcement board and a copy filed with the police chief in the case of a burglary alarm fee or with the fire chief in the case of a fire alarm fee within ten days of imposition of the fee. The code enforcement board shall hear the appeal at its first regular meeting next scheduled 20 days after the filing of the appeal and shall give notice of the hearing to the appellant and the police chief or fire chief. The appellant shall pay to the city a fee prescribed by the city commission to cover the administrative cost of such an appeal. If the appellant demonstrates to the satisfaction of the code enforcement board that the appellant has diligently tried to correct the problem causing the false alarm, the code enforcement board for good cause shown shall have the discretion to reduce or waive the fee. The code enforcement board shall take into consideration the corrective efforts made by the appellant in the past, the number of prior false alarms and any and other extenuating, mitigating or aggravating factors.

(Code 1960, § 3A-4)

Cross references: User and service fees and charges, § 2-189.

Sec. 46-30. Telephone alarm devices.

It shall be unlawful for any person to install, maintain, own, possess, operate or use any telephone alarm device regulated or programmed to make connection with any telephone instrument installed in any facility of the city.
(Code 1960, § 3A-5)

EXHIBIT C - 2010 Winter Park Fire Rescue Organization Chart

City of Winter Park Fire Rescue Department
2014-2015 Organizational Chart

Effective 10-01-14

Fire Chief

Senior Staff Assistant
Part TIme

Deputy Fire Chief

Captain
Fire Marshal

Fire Inspector (3)

Finance and Administration
Section Chief

Administrative
Specialist

Code Compliance
Section Chief

Code Compliance
Officer (3)

Battalion Chief
A -Shift

EMS Captain (1)
Lieutenant (4)

Engineer (4)
Firefighter (13)

23 Total Shift
Personnel

Battalion Chief
B -Shift

EMS Captain (1)
Lieutenant (4)

Engineer (4)
Firefighter (13)

23 Total Shift
Personnel

Battalion Chief
C -Shift

EMS Captain (1)
Lieutenant (4)

Engineer (4)
Firefighter (13)

23 Total Shift
Personnel

Division Chief
Firefighter Health
Safety and Training

Community Risk Reduction
Specialist

Total Strength
Admin = 6
Fire Marshal = 5
Operations = 69
Code Enforcement = 4

Total Approved Positions
81 FT
3 PT
84 Total Personnel

Level 1

Level 2

Level 3

Level 4

EXHIBIT D - Standard Operating Guideline 100.02

City of Winter Park Fire-Rescue
Standard Operating Guideline

100.02

Title: Personnel Assignments / Minimum Staffing / Out of Grade

Date Issued: December 6th, 2005
Date Last Revised: October 5th, 2010
Revision Number: I
Total Pages: 3

Purpose: To establish procedures for the assignment of personnel to the Department's emergency equipment.

Scope: This procedure is to be followed by all members of this department. Authority to deviate from this procedure rests with the Battalion Chief who is solely responsible for the results of any deviation. Any deviation from the staffing levels outlined in this procedure should be reported to the Deputy Fire Chief.

General: The following staffing levels are designed to provide the best utilization of resources for the Department. It is required that certain units be staffed with a minimum number of personnel and a minimum number of certified Paramedics. Shift Commanders should be aware of these requirements and fill the positions as needed.

100.02.01. General Shift Staffing – Fire Rescue:

Beginning October 5th 2010 the following will be the desired staffing levels for all Fire- Rescue equipment. All Engines and Rescues are required to be able to provide Advanced Life Support services at all times. This requires that a minimum of one (1) Paramedic be assigned to each of these units.

Full Staffing = 23 Total

Battalion 61	= 1	1 Battalion Chief
EMS 61	= 1	1 EMS Supervisor
Engine 61	= 4	1 Lieutenant, 1 Engineer, 2 Firefighters
Engine 62	= 4	1 Lieutenant, 1 Engineer, 2 Firefighters
Engine 64	= 3	1 Lieutenant, 1 Engineer, 1 Firefighters
Truck 61	= 4	1 Lieutenant, 1 Engineer, 2 Firefighters
Rescue 61	= 2	2 Firefighters
Rescue 62	= 2	2 Firefighters
Rescue 64	= 2	2 Firefighters

Staffing = 22 Total (1 position off)

Battalion 61	= 1	1 Battalion Chief
EMS 61	= 1	1 EMS Supervisor
Engine 61	= 4	1 Lieutenant, 1 Engineer, 2 Firefighters
Engine 62	= 3	1 Lieutenant, 1 Engineer, 1 Firefighter
Engine 64	= 3	1 Lieutenant, 1 Engineer, 1 Firefighter
Truck 61	= 4	1 Lieutenant, 1 Engineer, 2 Firefighters
Rescue 61	= 2	2 Firefighters
Rescue 62	= 2	2 Firefighters
Rescue 64	= 2	2 Firefighters

Staffing = 21 Total (2 positions off)

Battalion 61	= 1	1 Battalion Chief
EMS 61	= 1	1 EMS Supervisor
Engine 61	= 3	1 Lieutenant, 1 Engineer, 1 Firefighter
Engine 62	= 3	1 Lieutenant, 1 Engineer, 1 Firefighter
Engine 64	= 3	1 Lieutenant, 1 Engineer, 1 Firefighter
Truck 61	= 4	1 Lieutenant, 1 Engineer, 2 Firefighters
Rescue 61	= 2	2 Firefighters
Rescue 62	= 2	2 Firefighters
Rescue 64	= 2	2 Firefighters

Staffing = 20 Total (3 positions off)

Battalion 61	= 1	1 Battalion Chief
EMS 61	= 1	1 EMS Supervisor
Engine 61	= 3	1 Lieutenant, 1 Engineer, 1 Firefighter
Engine 62	= 4	1 Lieutenant, 1 Engineer, 2 Firefighters
Engine 64	= 3	1 Lieutenant, 1 Engineer, 1 Firefighter
Truck 61	= 4	1 Lieutenant, 1 Engineer, 2 Firefighters
Rescue 61	= 2	2 Firefighters
Rescue 62	= 2	2 Firefighters

100.02.02. Paramedic Staffing:

As part of the minimum staffing requirements, the department shall maintain at least 7 paramedics on duty at all times. These paramedics shall be deployed to cover all units currently in-service.

100.02.03. Out-of-Grade fill-in:

A minimum of 4 officers shall be *on duty* at all times. The Battalion Chief or shall constitute as one of the 4 officers. Out-of-Grade personnel may fill in positions on any of the 3 Engine companies or Truck 61. The position of EMS Supervisor will be filled at all times.

The following will be the policy for filling positions with personnel from a lower grade.

- Lieutenants will be the only position to fill the Shift Commander position. i.e.: Battalion Chief.

- A list of qualified Engineers and Firefighters will be approved by the Deputy Fire Chief to fill the Lieutenant positions as needed.

100.02.04 Minimum Staffing Limits:

The Shift Commander shall staff each shift as indicated in this SOG. Understanding that on each assigned duty day personnel shall be assigned off-duty leave such as vacation, medical absence, approved training, Kelly-days it may become necessary to work individuals from off-duty shifts to fill the minimum staffing assignments.

Authorization for shift level staffing to drop below minimum rests solely with the Deputy Fire Chief and or the Fire Chief. It is the agency's goal to never drop below minimum staffing levels indicated in this guideline.

James E. White
Chief of Department

EXHIBIT E - Risk Assessment Database Sample

	NAME	ADDRESS	Life Hazards	Community Impact	Hazard Impact	Water Impact	Building Usage	Building Construction	Number of Stories	Square Footage	Total CRA Score	Demand Zone	
1	First Congregational Church	225 S. Interlachen Avenue	3	3	3	1	3	3	3	3	22		6101
2	Winter Park Towers	1111 S. Lakemont Avenue	3	3	3	1	3	3	3	3	22		6203
3	Broad Street Partners LLC	250 S. Park Avenue Ste. 200	3	3	3	3	3	1	3	3	22		6101
1	CFAM	1000 Holt Avenue	3	3	3	1	3	2	3	3	21		6101
2	Winter Park Jr. High - 9th Grade Center	528 Huntington Avenue	3	3	3	1	3	3	2	3	21		6101
3	Winter Park Memorial Hospital	200 N. Lakemont Avenue	3	3	3	1	3	2	3	3	21		6201
4	Mayflower Retirement Community(67)(145)(387)	1620 Mayflower Court	3	3	3	1	3	2	3	3	21		6208
5	Coldwell Banker	201 N. New York Avenue	3	3	3	1	3	2	3	3	21		6104
6	Synergy Sports Wear	202 S. Park Avenue Ste. B	3	3	3	1	3	3	2	3	21		6101
7	Matthew Realty	300 S. Park Avenue # 200	3	3	3	1	3	3	2	3	21		6101
8	Tuni's	301 S. Park Avenue	3	3	3	1	3	3	2	3	21		6101
9	Park Inn	951 N Wymore Rd	3	2	3	1	3	3	3	3	21		6108
1	Law Office of Tom Brown	1030 W. Canton Avenue # 110	3	3	3	1	3	2	2	3	20		6103
2	First United Methodist Church	125 N. Interlachen Avenue	3	3	3	1	3	2	2	3	20		6104
3	Advantis Proffessional Building	2699 Lee Rd	3	2	3	1	3	2	3	3	20		6108
4	Physician's Office Building	1925 Mizell Avenue	3	2	3	1	3	2	3	3	20		6202
5	U.T.F. Toll Center	500 N. New York Avenue	3	2	3	1	3	2	3	3	20		6104
6	Alfond Stadium	801 Orange Avenue	3	2	3	1	3	2	3	3	20		6101
7	VACANT	1245 Orange Avenue	3	3	3	1	3	2	2	3	20		6102
8	Mercantile Bank	1560 Orange Avenue # 100	3	2	3	1	3	2	3	3	20		6102
9	Fairy Tales	102 N. Park Avenue	3	3	3	1	3	2	2	3	20		6101
10	Douglas Cosmetics	200 N. Park Avenue	3	3	3	1	3	2	2	3	20		6101
11	Barnie's Tea and Coffee	118 S. Park Avenue	2	3	3	1	3	3	2	3	20		6101
12	St. Margaret Mary School (see file # 746)	142 E. Swoope Avenue	3	3	3	1	3	2	2	3	20		6104
13	Tranquil Terrace Apartments	845 W. Swoope Avenue	3	2	3	1	3	2	3	3	20		6104
1	Alabama Condo's	1600 Alabama Drive	2	2	2	2	2	3	3	3	19		6401
2	Crealde Mall - Auditorium	2431 Aloma Avenue	3	2	2	1	3	3	2	3	19		6202
3	Mead Garden Condo's	1250 S. Denning Drive	3	2	3	1	2	3	2	3	19		6101
4	Killarney Baptist Church	701 Formosa Ave	3	1	3	1	3	3	2	3	19		6107
5	Lakemont Elementary School	901 N. Lakemont Avenue	3	3	3	1	3	2	1	3	19		6200
6	Winter Park Presbyterian Preschool	400 S. Lakemont Avenue	3	2	2	1	3	3	2	3	19		6203
7	One Winter Park	1801 Lee Road	3	2	2	1	3	2	3	3	19		6108
8	Manor Care Nursing & Rehab. Center (49) (76)	2075 Loch Lomond Drive	3	2	3	1	3	2	2	3	19		6202
9	RE Pender Inc	1133 Louisiana Avenue # 106	2	2	2	2	3	3	2	3	19		6101
10	Judy Galloway	1155 Louisiana Avenue # 101	2	2	2	2	3	3	2	3	19		6101
11	Emerson International, Inc.	1177 Louisiana Avenue	2	2	2	2	3	3	2	3	19		6101
12	Bank First Building	1031 W. Morse Blvd.	2	2	3	1	3	2	3	3	19		6102
13		433 E. New England Avenue	2	2	3	1	3	2	3	3	19		6101
14	1st National Bank of Central Florida	369 N. New York Avenue	2	2	3	1	3	2	3	3	19		6104
15	First Baptist Church	1021 N. New York Avenue	3	2	3	1	3	2	2	3	19		6104
16	Hollieana Garden Apartments	708-712 Nicolet Avenue	3	2	3	1	3	2	2	3	19		6101
17	Winter Park Family Practice	1355 Orange Avenue # 1	2	2	3	1	3	2	3	3	19		6102
18	Florida Hospital-Adventist Health Systems	111 N. Orlando Avenue	3	2	2	1	3	2	3	3	19		6103
19	Lake Virginia Condo's	690 Osceola Avenue	3	2	3	1	2	2	3	3	19		6101
20	St. Margaret Mary Rectory	526 N. Park Avenue	3	2	3	1	3	2	2	3	19		6101
21	CWP- Public Safety police Department	500 N. Virginia Avenue	2	3	3	1	3	2	2	3	19		6104
22	Devereux Foundation	501 N Wymore Rd	3	2	3	1	3	2	2	3	19		6108
23	Field's BMW	963 N Wymore Rd	3	2	3	1	3	2	2	3	19		6108
1	Bank of America	1905 Aloma Avenue	3	2	3	1	3	2	1	3	18		6202
2	Health South	2056 Aloma Avenue #100	2	2	3	1	3	2	2	3	18		6202
3	Fed-Ex Kinko;s	2145 Aloma Avenue	3	2	2	1	3	3	1	3	18		6202
4	Showalter Field	2527 Cady Way	3	2	3	1	3	1	2	3	18		6202
5	CWP- Public Safety Building & St. # 61	343 W Canton Ave	1	3	3	1	3	2	2	3	18		6104
6	Park West Condo's	200-250-300 Carolina Avenue	3	2	1	2	2	2	3	3	18		6104
7	Uricchio Bldg/Fairbanks Professional Bldg	1400 W. Fairbanks Avenue	3	2	2	1	3	2	2	3	18		6102
8	Brookshire Elementary	400 Greene Drive	3	3	2	1	3	2	1	3	18		6206
9	CWP- Building #10 Utilities Building	1409 Howell Branch Road	3	2	2	1	3	2	2	3	18		6403
10	HTH	711 Jackson St	2	2	3	1	3	3	2	2	18		6107
11	Clerk of Circuit Court/Central Fl. School of Massage	450 N. Lakemont Avenue	2	2	2	2	3	2	2	3	18		6200
12	Skyline Building	1936 Lee Rd	3	2	2	1	3	1	3	3	18		6108
13	Gaertners Jewelers Supply	1950 Lee Rd # 100	3	2	2	1	3	2	2	3	18		6108
14	Metric Engineering Inc	2265 Lee Rd	3	2	2	1	3	2	2	3	18		6108
15	Moreland Building	1150 Louisiana Avenue	2	2	2	2	3	2	2	3	18		6101
16	W.P. Hosp. Wellness Center (49)(21)(116)(66)(31)(53)(	2005 Mizell Avenue	3	2	2	1	3	2	2	3	18		6202
17	El Cortez Apartments	210 E. Morse Blvd.	3	2	3	1	2	2	3	2	18		6101
18	Whispering Waters	311 E. Morse Blvd.	3	1	3	1	2	2	3	3	18		6101
19	Valencia Community College	850 W. Morse Blvd.	3	2	2	1	3	2	2	3	18		6101
20	Sesco Lighting	1133 W. Morse Blvd. # 100	2	2	3	1	3	2	2	3	18		6102
21	Lawrence Building	200 E. New England Avenue	3	2	2	1	3	1	3	3	18		6101
22	U. S. Post Office	300 N. New York Avenue	2	3	3	1	3	2	1	3	18		6104
23	First Church of Christ. Scientist (164)(400)	650 N. New York Avenue	3	2	2	1	3	2	2	3	18		6104
24	U.T.F. Dial Exchange	151 S. New York Avenue	2	2	3	1	3	2	2	3	18		6101

EXHIBIT F - Needed Fire Flow Calculations Spreadsheet Sample

ALABAMA DR

Numerical	Type	Gross Sq. Ft.	Fire Flow GPM[1]	Fire Flow GPM[2]	Fire Flow GPM[3]	Available Water	Hydrant No.	Test GPM[1]	Test GPM[2]	Test GPM[3]
1110	R	3401	283	567	1134	1352	050	YES	YES	YES
1129	R	0	0	0	0	1352	050	YES	YES	YES
1130	R	0	0	0	0	1352	050	YES	YES	YES
1169	R	0	0	0	0	1352	050	YES	YES	YES
1189	R	0	0	0	0	1352	050	YES	YES	YES
1207	R	0	0	0	0	1352	050	YES	YES	YES
1218	R	4662	389	777	1554	1352	050	YES	YES	NO
1230	R	4384	365	731	1461	1352	050	YES	YES	NO
1246	R	6460	538	1077	2153	1352	050	YES	YES	NO
1249	R	0	0	0	0	1352	050	YES	YES	YES
1260	R	7864	655	1311	2621	1352	050	YES	YES	NO
1288	R	4883	407	814	1628	1352	050	YES	YES	NO
1292	R	1969	164	328	656	1352	050	YES	YES	YES
1292	R	4789	399	798	1596	1352	050	YES	YES	NO
1295	R	5690	474	948	1897	1352	050	YES	YES	NO
1360	R	6357	530	1060	2119	1452	049	YES	YES	NO
1400	R	0	0	0	0	1452	049	YES	YES	YES
1400	R	8818	735	1470	2939	1452	049	YES	NO	NO
1429	R	0	0	0	0	1452	049	YES	YES	YES
1450	R	6101	508	1017	2034	1452	049	YES	YES	NO
1466	R	4302	359	717	1434	1452	049	YES	YES	YES
1477	R	0	0	0	0	1452	049	YES	YES	YES
1486	R	4061	338	677	1354	1452	049	YES	YES	YES
1500	R	4727	394	788	1576	1452	049	YES	YES	NO
1510	R	5045	420	841	1682	1452	049	YES	YES	NO
1520	R	5741	478	957	1914	1452	049	YES	YES	NO
1529	R	0	0	0	0	3801	048	YES	YES	YES
1530	R	4678	390	780	1559	3801	048	YES	YES	YES
1539	R	0	0	0	0	3801	048	YES	YES	YES
1600	MFR	147672	12306	24612	49224	3801	048	NO	NO	NO
1700	R	0	0	0	0	3801	048	YES	YES	YES
1710	R	5006	417	834	1669	3801	048	YES	YES	YES
1726	R	2221	185	370	740	3801	048	YES	YES	YES

EXHIBIT G - GIS Maximum / Significant Risk Properties Mapping

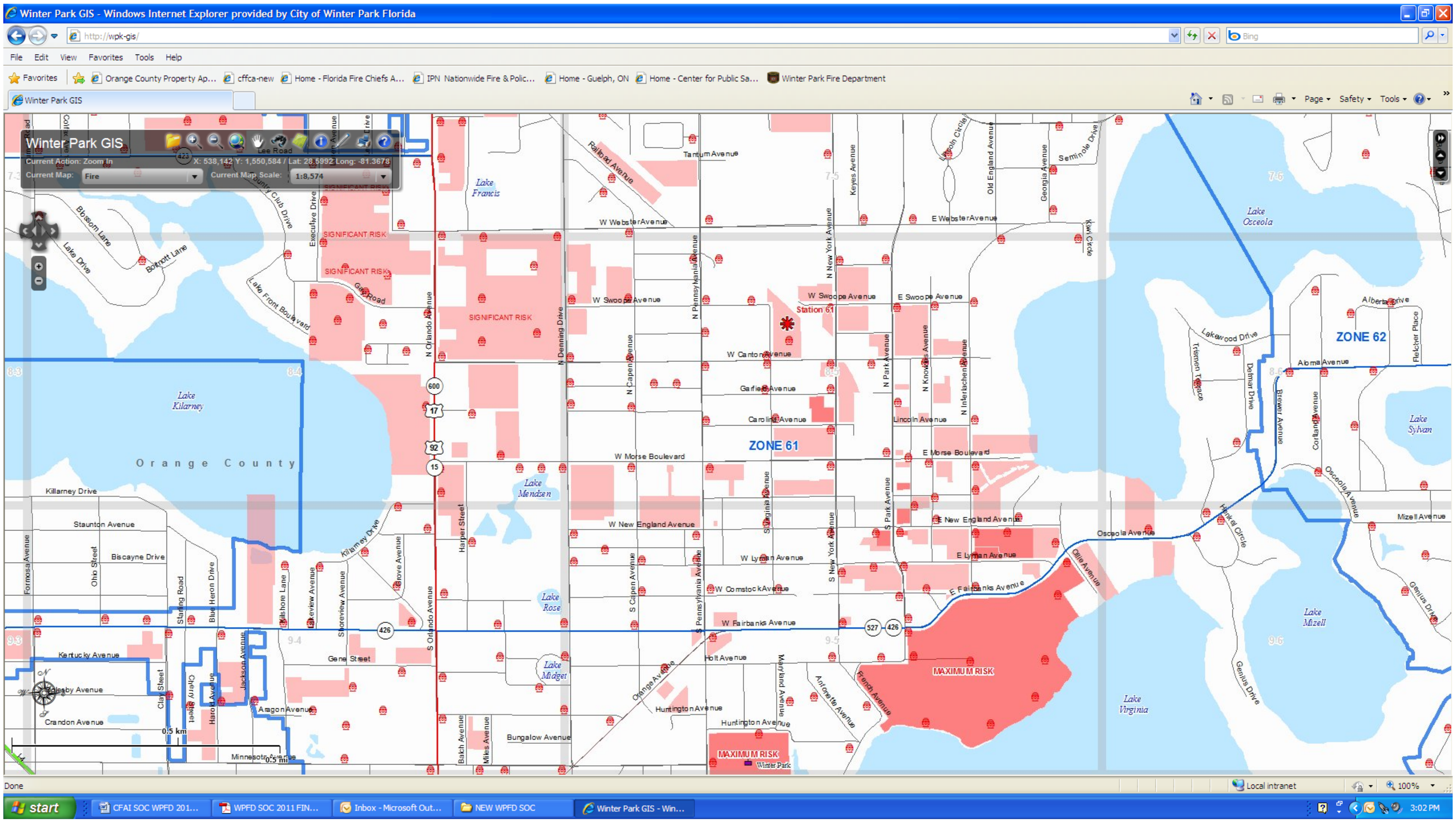

Winter Park GIS - Windows Internet Explorer provided by City of Winter Park Florida
Winter Park GIS
Current Action: Zoom In
Current Map: Fire
Current Map Scale: 1:8,574
Orange County
Lake Killarney
Lake Francis
Lake Mendsen
Lake Rose
Lake Midget
Lake Virginia
Lake Mizell
Lake Osceola
Lake Sylvan
SIGNIFICANT RISK
SIGNIFICANT RISK
SIGNIFICANT RISK
MAXIMUM RISK
MAXIMUM RISK
ZONE 61
ZONE 62
Station 61
N Orlando Avenue
W Morse Boulevard
W Fairbanks Avenue
N Park Avenue
S Park Avenue
Osceola Avenue
Done
Local intranet

EXHIBIT H - Risk Assessment Field Assessment Sheet

EMERGENCY RESPONSE RISK ASSESSMENT FORM

Building Address:_____

Property Name:_____

Person Making Assessment:_____ Date:_____

Life Hazard	(circle one from each group)
High Life Hazard (100 or more occupants)	3
Medium Life Hazard (25 to 99 occupants)	2
Low Life Hazard (less than 25 occupants)	1

Community Impact	
Severe Impact (irreplaceable/historical/hospital)	3
Moderate Impact (high casualty/job loss/tax/food store)	2
Minor Impact (minor casualty/family loss)	1

Hazard Index	
Complex/Multiple/Industrial/Special	3
Simple/Moderate/Business	2
Limited/Common/Residential	1

Water Supply(within 800') 2 Closest Hydrant #'s_____, _____	
0 or 1 Hydrant (with less than 1000 GPM)	3
1 at 1000 GPM or over, and 1 less than 1000 GPM	2
2 Hydrants at 1000 GPM or over	1

Building Usage	
Industrial/High Life Hazard/Large Business	3
Residential	2
Office/Small Business	1

Building Construction	
Combustible	3
Limited Combustibility	2
Non-Combustible	1

Number of Stories	
3 or More Stories (or 40 feet high or more)	3
2 Story Building	2
Single Story Building	1

Square Footage	
15,000 Square Feet or More	3
7,501 to 14,999 Square Feet	2
7,500 Square Feet or Less	1

_____' X _____' X ____(# stories) =_____ Square Feet

TOTAL SCORE_____


WINTER
PARK
FIRE
RESCUE
EST. 1900

Metropolitan-an incorporated or unincorporated area with a population of over 200,000 people and/or a population density over 3,000 people per square mile.

	1st Unit	2nd Unit	Balance of a 1st Alarm	Performance
Benchmark	4 minutes	8 minutes	8 minutes	90%
Baseline	5 minutes/12 seconds	10 minutes/24 seconds	10 minutes/24 seconds	90%

Urban-an incorporated or unincorporated area with a population of over 30,000 people and/or a population density over 2,000 people per square mile.

	1st Unit	2nd Unit	Balance of a 1st Alarm	Performance
BeBenchmark	4 minutes	8 minutes	8 minutes	90%
Baseline	5 minutes/12 seconds	10 minutes/24 seconds	10 minutes/24 seconds	90%

Suburban-an incorporated or unincorporated area with a population of 10,000 to 29,999 and/or any area with a population density of 1,000 to 2,000 people per square mile.

	1st Unit	2nd Unit	Balance of a 1st Alarm	Performance
BBenchmark	5 minutes	8 minutes	10 minutes	90%
Baseline	6 minutes/ 30 seconds	10 minutes/ 24 seconds	13 minutes	90%

Rural- an incorporated or unincorporated area with total population less than 10,000 people, or with a population density of less than 1,000 people per square mile.

	1st Unit	2nd Unit	Balance of a 1st Alarm	Performance
BBenchmark	10 minutes	14 minutes	14 minutes	90%
Baseline -	13 minutes	18 minutes/ 12 seconds	18 minutes/12 seconds	90%

Wilderness-any rural area not readily accessible by public or private maintained road.

	1st Unit	2nd Unit	Balance of a 1st Alarm	Performance
Benchmark	N/A	N/A	N/A	N/A
Baseline	N/A	N/A	N/A	70%

The criteria listed above provide a range of performance within each category from the target benchmark to a lesser baseline of 70% of the benchmark for time (Not to be confused with the performance percentage of 90%). For purposes of Fire Department Accreditation, the fractal analysis developed in the three areas of call processing, turnout time, and travel time should demonstrate that the agency's own baseline performance falls within the ranges provided in the chart. If they do not, then is the baseline performance grossly deviating from the best practice? These base lines should be evaluated annually to determine quality of service. Strategies used to reduce each element may well be part of other accreditation criteria.

EXHIBIT J - Standard Operating Guideline 210.03

City of Winter Park Fire-Rescue
Standard Operating Guideline

210.03

Title: Firefighting Practices
Structural / Vehicle / Wildland

Original Date Issued: December 6th, 2005
Date Last Revised: October 5th, 2010
Revision Number: 1
Total Pages: 32

Purpose: To establish the basic tactical guidelines for the operation of all personnel involving live fire situations in occupied and unoccupied structures, motor vehicles and wildland-urban interfaces.

Scope: This guideline will provide the basic benchmarks for field operations at live fire situations. It should be considered the standard for all personnel to follow in situations that require the active fighting of fire. For the purpose of this guideline, structures are considered to be any type of building. In addition, a specific section is dedicated to the specialized tasks of fighting fires involving motor vehicles and wildland interfaces.

General:

210.03.01. Command Responsibilities:

Fireground factors offer a standard list of basic items an Incident Commander (IC) must consider in the evaluation of active fire scene situations.

In critical fire situations, the IC may develop a plan and initiate an attack based on an incomplete evaluation of all the possible fireground factors. In such cases, the IC must continue throughout the operation to improve the information that these decisions are based upon. Information updates may come from several sources including visual, recon, or preplan.

Most tactical situations represent a complex problem with regard to how Command deals with fireground factor information. Fireground intelligence available to the IC is developed using an overlapping variety of information sources.

There are three primary sources of information:

- **Visual** - these include those obvious to visual observation. This visual information is categorized as the type that can normally be gained by actually looking at a tactical situation from the outside.

- **Reconnaissance** - these include information that is not visually available to Command and must be gained by actually sending someone to check-out, go see, look up, research, advise, call, go find, etc. This generally involves Command making a specific assignment and then receiving an information-oriented report.

- **Pre-planning and Familiarity** - these include the intelligence that is gained from formal pre-fire planning and by general familiarization activities

  This information arms the IC with intelligence that would normally not be immediately available.

210.03.02. Basic Fire Ground Factors:

The Building:

- Size
- Interior arrangement/access (stairs, hall, elevators)
- Construction type
- Age
- Condition - faults/weaknesses
- Value
- Compartmentalized/separation
- Vertical/horizontal openings, shafts, channels
- Outside openings - doors and window/degree of security
- Utility characteristics (hazards/controls)
- Concealed spaces/attack characteristics
- Exterior access
- Effect the fire has had on the structure (at this point)
- Time projection on continuing fire effect on building

The Fire:

- Size
- Extent (percent of structure involved)
- Location
- Stage (incipient to flashover)
- Direction of travel (most dangerous)
- Time of involvement
- Type and amount of material involved - structure/interior finish/contents/ everything
- Type and amount of material left to burn
- Product of combustion liberated

The Occupancy:

- Specific Occupancy Type
- Group (business, mercantile, public assembly, school, institutional, residential, hazardous, industrial, storage)
- Value characteristics associated with occupancy
- Fire load (size, nature)
- Status (open, closed, occupied, vacant, abandoned, under construction
- Occupancy associated characteristics/hazards
- Type of contents (based on occupancy)
- Time - as it affects occupancy use

- Property conservation profile/susceptibility of contents to damage/need for salvage

Life Hazards:

- Number of occupants
- Location of occupants (in relation to the fire)
- Condition of occupants (by virtue of fire exposure)
- Incapacities of occupants
- Commitment required for search and rescue (men, equipment, Command)
- Fire control required for search and rescue
- Need for EMS
- Time estimate of fire products effect on victims
- Exposure of spectators/control of spectators
- Hazards to fire personnel
- Access rescue forces have to victims
- Characteristics of escape routes/avenues of escape (type, safety, fire conditions, etc.)

Access / Exposures / Risk:

- Access, arrangement, and distance of external exposure
- Combustibility of exposures
- Access, arrangement, and nature of internal exposures
- Severity and urgency of exposures (fire effect)
- Value of exposures
- Most dangerous direction - avenue of spread
- Time estimate of fire effect on exposures (internal and external)
- Obstructions to operations
- Capability/limitations on apparatus movement and use

Firefighting Resources:

- Personnel and equipment on scene
- Personnel and equipment responding
- Personnel and equipment available in reserve
- Estimate of response time for staff and equipment
- Condition of men and equipment
- Capability and willingness of personnel
- Capability of Commanders
- Nature of Command systems available to Command
- Number and location of hydrants
- Supplemental water sources
- Adequacy of water supply
- Built-in private fire protection (sprinkler, standpipe, alarms)
- Outside agency resource and response time

Other Factors/Conditions:

- Time of day/night, Day of week
- Season, Special hazards by virtue of holidays and special events
- Weather (wind, rain, heat, cold, humidity, visibility)

- Traffic conditions
- Social conditions (strike, riot, mob, rock festival)

210.03.03. Tactical Priorities:

Tactical priorities identify the three separate tactical functions that must be completed in order to stabilize any fire situation - these priorities also establish the order in which these basic fire ground functions must be performed.

These functions should be regarded as separate, yet inter-related, activities, which must be dealt with in order. Basic tactical priorities are as follows:

Rescue:

The activities required to protect occupants, remove those who are threatened and to treat the injured.

Recorded as Benchmark "ALL CLEAR"

Fire Control:

The activities required to stop the forward progress of the fire and to bring the fire under control.

Recorded as Benchmark "UNDER CONTROL"

Property Conservation:

The activities that require the stopping or reducing of additional loss of property.

Recorded as Benchmark "LOSS STOPPED"

Note: All three tactical priorities require somewhat different tactical approaches from both a command and an operational standpoint.

While the objective of each function must be satisfied in its priority order, in many cases the IC must overlap the activities of each to achieve the current benchmark. Notable examples are: the frequent need to achieve interior tenability with active fire control efforts before getting on with primary search, or the need to initiate salvage operations while active fire control efforts are being extended.

Defining the Fire Ground:

The fireground is defined by an imaginary line, which encloses the space where the fire situation creates a potential hazard to personnel. Unless otherwise designated by Command, the fireground will be that area within the perimeter of those vehicles actually operating at the fire scene.

Entering the Fireground:

All personnel (including Command Personnel) crossing the fireground perimeter shall wear full protective gear to include: boots, bunker coat, Nomex hood, helmet, gloves, and SCBA.

210.03.04. Establishment of a Rapid Intervention Team (RIT) *2 in 2 Out*:

The purpose of this section is to establish standard guidelines that will serve to provide a safe working environment for all employees and to reduce the risk of injury or death as a result of operations at emergency incidents. This policy will serve to comply with 2 in / 2 out provisions in the **OSHA Respiratory Protection Final Rule, 29 CFR 1910.134 (g)(4).**

To operate as safely and effectively as possible on emergency scenes, the Department has established the following guidelines, which shall be adhered to by all personnel.

Rapid Intervention Team (RIT): A specifically tasked team (minimum of two members) organized to provide personnel for the rescue of emergency service members, if the need arises, operating at emergency incidents.

2 in 2 out Operational Guidelines

The first arriving company shall determine if the incident involves an IDLH atmosphere. At no time shall individuals enter an IDLH atmosphere independently. Teams of at least two (2) SCBA equipped personnel shall be required for entry into such an atmosphere at any time.

In fire situations, it will be necessary for the incident commander (or first arriving company officer) to determine if the fire is in the incipient stage. A team of two firefighters may take action according to standard operating guidelines to extinguish an incipient fire without the establishment of an initial Rapid Intervention Team.

If the presence of an IDLH atmosphere has been determined and there are less than 4 firefighters on the scene, these firefighters shall not conduct interior operations within the IDLH atmosphere. Once at least 4 firefighters are on the scene two qualified firefighters may begin operating within the IDLH atmosphere as long as two additional firefighters (properly equipped) are outside the IDLH atmosphere to serve as the initial rapid intervention team (RIT).

One of the RIT members must be responsible for maintaining the location of the interior crews. The second RIT member may be assigned other tasks and/or functions so long as these tasks and/or functions can be abandoned without placing any personnel at additional risk if rescue or assistance is needed.

Until four (4) firefighters are assembled, operations outside of the IDLH atmosphere shall commence immediately in accordance with standard operating guidelines. Such operations include, but are not limited to:

establishment of a water supply; exterior fire attack; establishment of a hot zone; utility control; ventilation; placement of ladders; forcible entry; exposure protection, and any other exterior operations deemed appropriate by the incident commander (company officer).

As the incident progresses to the point of more than one interior team, an identified and dedicated RIT shall be established and positioned immediately outside the IDLH atmosphere. This team shall be fully outfitted with protective clothing and SCBA with the air mask in a ready position to don, a portable radio, and other required rescue equipment. Team members will be dedicated to perform rescue and shall not be assigned other duties (except for incident accountability). A charged hose line shall be dedicated to this team.

If the incident is in a high or mid-rise structure, large area facility, or other area with multiple IDLH atmospheres, the incident commander shall establish the necessary number of RIT's so that rescue can be accomplished without a deployment delay. A team should be considered for each remote access point on any large facility. The incident commander will be responsible for determining the number of teams needed based on the specifics of the incident.

As soon as a firefighter becomes trapped, lost, or knows of an entrapped or lost firefighter immediately use the radio to declare a "MAY-DAY" followed by your company identification, location, and situation.

Emergency Radio Traffic

A declaration of "MAY-DAY" will be followed by the emergency traffic **Alert 2 TONE,** followed by a repeated report of the "MAY-DAY" declaration: "MAY-DAY", "MAY-DAY" EMERGENCY TRAFFIC ALERT-2 TONE

The "Emergency Traffic" announcement will continue to be used for other high-risk hazards at the scene such as to evacuate the building or downed power lines.

If a firefighter(s) becomes trapped, disabled, or otherwise in need of assistance by the RIT, the incident commander shall announce this action to Winter Park (Communications) via the radio. In turn, Winter Park shall simulcast the emergency message signal and announce that a rescue is in progress. All radio traffic that is not directly related to the firefighter(s) rescue shall cease immediately to facilitate the rescue. An immediate personnel accountability report (PAR) shall be conducted.

Should the incident commander order a building evacuation, a PAR shall be conducted (as outline in the SOGs, Personnel Accountability System) immediately after the building has been evacuated. The RIT shall remain in place for immediate activation should a team fail to report during the PAR.

This policy also includes and applies to interior firefighting within a downed aircraft.

Exceptions

If upon arrival at a fire emergency, members find a fire in its **incipient stage**, extinguishment of such a fire shall be permitted with less than 4 persons on the scene.

Extinguishment of outside fires such as dumpsters, brush, or automobiles, shall be permitted with less than 4 persons, even if SCBA is being worn.

If upon arrival at the scene members find an **imminent life-threatening situation** or **probable life-threatening situation** where immediate action may prevent the loss of life or serious injury, such action shall be permitted with less than 4 persons on the scene. The rescue can be attempted when the probability of a rescue is made in accordance with normal size-up indicators and fireground evaluation factors. (Examples: a reliable report of persons inside, signs of persons inside, etc.).

The incident commander (or company officer) shall evaluate the situation, considering the occupancy, time of day, day of week, reports from persons on the scene, signs that persons may be inside the structure, etc. Entry may be considered with less than 4 persons on the scene if signs indicate a probable victim rescue.

In the absence of clear signs or a report from a responsible person on the scene that people are in the structure, it is to be assumed that no life hazard exists and interior attack shall not be initiated until the minimum of 4 persons arrive on the scene.

If members are going to initiate actions that would involve entering an IDLH atmosphere because of a probable or imminent life-threatening situation where immediate action may prevent the loss of life or serious injury, and at least 4 firefighters are not on the scene, the members should carefully evaluate the level of risk that they would be exposed to by taking such actions. In all cases a minimum of two (2) firefighters shall form the entry team.

If it is determined that the situation warrants immediate intervention and 4 firefighters are not on the scene, the incident commander (or company officer) shall notify Winter Park of the intent to enter the IDLH atmosphere prior to the availability of a rapid intervention team. Winter Park shall then notify all responding companies of this action and receive acknowledgement from responding Incident Commanders that the transmission was received.

Should the incident commander (or company officer) on the scene deviate from this guideline; the actions taken shall be documented on the fire incident report and forwarded through the chain of command to the fire chief. The narrative of this report shall be by the incident commander and outline the reasons, rationale, justification, and end result of the deviation from standard operating

guideline. All information in the report shall be of enough depth so as to provide a comprehensive understanding of the actions taken.

210.03.05. Structural Search & Rescue During Fire Conditions:

Search and Rescue in live firefighting situations should be performed according to an efficient, well-planned guideline, which has included the safety of search crew personnel. The object of the search effort is to locate possible victims, not create additional ones by neglecting the safety of the search crew.

Prior to entering the search area, all search team members should be familiar with the specific search plan including the overall objective, a designation of the search area, individual assignments, etc. This may require a brief conference among crewmembers before entering the search area to develop and communicate the plan.

> *Note: Search activities will be conducted in teams made of a minimum of two members.*

During any interior search operations the minimum of a two-person rescue team will be operating on the exterior of the building and will monitor the location of the interior firefighting and search teams. See Section IV of this guideline.

Company officers must maintain an awareness of the location and function of all members within their crew during search operations. In a multi-story structure, a brief look around the floor below the fire may provide good reference for the search team, as floors in multi-story occupancies usually have a similar layout.

Whenever a search is conducted that exposes search crews to fire conditions (particularly above the fire floor) the search team should be protected, as soon as possible, with a charged hose line, in order to insure a safe escape route.

In limited cases, if search personnel are operating without a hose line, lifelines should be used when encountering conditions of severely limited visibility.

Unless otherwise instructed, use Search & Rescue Guidelines taught and adopted by the Training Division.

Interior firefighting search crews should attempt to utilize a **Thermal Imaging Camera** to enhance their search efforts. TICs offer dramatic visibility advantages to crews entering structural fire scenarios. See SOG 230.08 for further retails.

Primary Search:

It will be standard practice to extend a primary search into all involved and exposed occupancies, which can be entered. Command must structure initial operations around the completion of the primary search. Primary search means companies have quickly gone through all effected areas and verified the removal and/or safety of all occupants. Time is the critical factor in the primary search process. Successful primary search operations must necessarily be extended quickly and during initial fire stages.

The completion of the primary search is reported utilizing the standard radio reporting term "ALL CLEAR". It is the responsibility of Command to coordinate primary search assignments, secure completion reports from interior companies and to transmit the "ALL CLEAR" report to Winter Park.

“Winter Park” will record the time of this report from Command.

Secondary Search:

The rescue functions that follow lengthy fire control activities will be regarded tactically as presenting a secondary search. Secondary search means that companies thoroughly search the interior of the fire area after initial fire control and ventilation activities have been completed. It is preferable that different companies than those involved in primary search activities complete the secondary search. Thoroughness, rather than time, is the critical factor in performing a secondary search.

The Company Officer assigned to complete the Secondary Search shall announce the completion of the "*Secondary Search Complete*." Do not use the term "ALL CLEAR", as it applies only to the **primary search**.

Stages of Fire Development:

The stage of the fire becomes a critical factor that affects the rescue approach developed by Command. The following items outline the basic Command approach to fire stages:

- In ***"NOTHING SHOWING"*** situations, or in very minor fire cases that clearly pose no life hazard, Command must structure a rapid interior search and report "ALL CLEAR” as soon as conditions warrant. In this case, responding units should take a non-committed posture until notified by Command to proceed with an assignment.
- In ***"SMOKE SHOWING"*** and ***"WORKING FIRE"*** situations, fire control efforts must be extended simultaneously with rescue operations in order to gain entry and control interior access to complete a primary search. In such cases, Command and operating companies must be aware the operation is in a rescue mode until primary search is complete, regardless of the fire control required. In working fire situations, primary search must be followed by a secondary search.
- In cases of fully involved buildings or sections of buildings, immediate entry and primary search activities become impossible and survival of occupants is improbable. Command must initially report “fully involved” conditions. As quickly as fire control is achieved, Command must structure what is in effect a secondary search for victims.

Command and operating companies cannot depend upon reports from spectators or occupants to determine the potential status of victims. Fire control forces should utilize reports as to the location, number, and condition of

victims as supporting primary search efforts and must extend and complete a primary search wherever entry is possible.

Command must consider the following factors in developing a basic rescue size-up:

1. Number, location, and condition of victims.
2. Effect the fire has on the victims.
3. Capability of the control forces to enter the building, remove/protect victims and control fire.

210.03.06. Evacuation of Structures:

Overview:

In firefighting and other emergency operations, it is often necessary to evacuate a building or part of a building. This plan is intended to establish a standard system for evacuation.

Establish an Evacuation Plan:

Plan the evacuation and make assignments and progress reports related to the plan to the Incident Commander or Division/Group Officer.

Evacuate Persons in the Greatest Danger First!

The people in the greatest danger in a fire are those in the immediate area and those above the areas of involvement.

Assign Specific Areas For Evacuation

Companies should be assigned according to priorities to specific areas, Group/Divisons, or floors to evacuate and report "ALL CLEAR." Example: "All Clear 5th floor".

Identify Safe Evacuation Routes

Usually an evacuation is intended to remove occupants from a hazard. The objective should include moving occupants to safe areas via identified safe paths. Companies may have to be assigned to keep the evacuation routes safe (with protective lines, ventilation, etc.) Use normal means of egress first; i.e., halls, stairs, elevators, etc. Tower trucks, ground ladders, fire escapes, etc., are secondary means of egress.

If the evacuation route is unsafe, consider leaving occupants where they are until conditions improve and "defend in place”.

Identify Evacuation Stairs

In multi-story buildings, it may be necessary to designate one stairway to be used for evacuation while another is used for firefighting and/or ventilation.

Evacuate To A Safe Location

Move evacuees to a location out of danger, but not further than is practical. In a high-rise building two or three floors below the fire is usually adequate. Attempting to move evacuees too far tends to complicate the situation. The location chosen must be safe.

Mark Rooms Or Suites After Evacuation

When searches or evacuations are conducted in rooms or suites the doors must be marked to avoid duplication of efforts. Use a method adopted by our Training Division, if possible, which is to place the "sure search" devise around the doorknob. Marking doors with grease pencil or marker is also acceptable. Units should indicate unit number, i.e. E62 OK on the door.

Use Alarms and Communications Systems

These systems are designed to warn people of the need to evacuate. Use these in conjunction with evacuation teams when the need to evacuate is urgent. (If the situation is not urgent, face-to-face contact is less distressing than alarm bells.)

Avoid Panic!

Personnel must consciously work to lessen anxiety of occupants and avoid panic. Explain what the problem is and what needs to be done as accurately as the situation permits.

Assign Sufficient Resources To Facilitate Evacuation Plan

Rapid evacuation of a building may require a major commitment of companies. The commitment of companies must be sufficient to provide for non-ambulatory evacuees and those needing physical assistance. Never leave evacuated occupants unattended.

Use Elevators With Emergency Controls

Elevators may be a valuable tool in evacuating a high-rise building if they have Emergency Control features and are operated by Fire Department personnel in communication with Command. Elevators should only be used when the safety of the hoist-way is known.

Do Not Evacuate Unnecessarily

If conditions do not present a hazard, evacuation may be unnecessary. Send personnel to evaluate conditions and judge the need for evacuation if the need is not obvious.

Authority To Evacuate

The Fire Department may order citizens to evacuate if there is a significant danger.

210.03.07. Fire Control:

Command Responsibilities

It is within our Standard Operating Guideline to attempt to stabilize fire conditions by extending, **wherever possible**, an aggressive well placed and adequate offensive interior fire attack effort; and to support that aggressive attack with whatever resource and action is required to reduce fire extension and to bring the fire under control.

A critical Command decision (both initial and on-going) relates to the offensive/defensive mode of the situation. Command must define offensive/defensive mode based upon:

1. Fire extent
2. Structural conditions
3. Entry capability
4. Ventilation profile
5. Rescue ability of occupants
6. Resources

Offensive Strategy

Interior attack and related support directed toward quickly bringing the fire under control.

Basic Offensive Plan

1. Take command.
2. Do primary search
3. First line - fast, aggressive, interior attack.
4. Second line - back-up first/cover internal exposure and react.
5. Pump water.
6. Provide support activities.
7. Quickly evaluate success.

Defensive Strategy

Exterior attack directed to first reduce fire extension and then bring the fire under control.

Basic Defensive Plan

1. Take command
2. Evaluate fire spread/write-off lost property
3. Identify key tactical positions
4. Prioritize fire streams
5. Provide big, well-placed streams
6. Pump water
7. Quick determination on additional resource
8. Surround and drown

Offensive Firefighting Operations

Many times offensive/defensive conditions are clear-cut and Command can quickly develop a decision that relates to that mode. In other cases, the situation is marginal and Command must initiate an offensive interior attack, while setting up defensive positions on the exterior. The effect of the interior attack must be evaluated and the attack abandoned if necessary. Mode changes can develop almost instantly or can take an extended time. Command must be aware and responsive to such mode changes.

Command must consider the most dangerous direction of fire extension particularly as it affects rescue activities, confinement efforts, and exposure protection. Command must then allocate resources based upon this fires spread evaluation.

In some cases, the most effective tactical analysis involves an evaluation of what is not burning rather than what is actually on fire. The unburned portion represents where the fire is going and should establish the framework for fire control requirements. ***Offensive fires*** should be fought from the **INTERIOR or UNBURNED SIDE** (interior capability is the principal offensive strategy factor).

Initial attack efforts must be directed toward supporting primary search - attack line must go ***BETWEEN THE VICTIMS AND THE FIRE*** to protect avenues of escape.

Determine fire location and extent before starting fire operations (as far as possible). Avoid operating fire streams into smoke.

Command cannot lose sight of the very simple and basic fire ground reality that at some point the fire forces must engage the fire and fight. Command must structure whatever operations are required to ***PUT WATER ON THE FIRE***. The rescue/fire control/extension/exposure problem is solved in the majority of cases by a fast, strong, well-placed attack.

Effective fire control requires that water be applied directly on the fire or directly into the fire area. Command must establish an attack plan that overpowers the fire with actual water application.

Where fires involve concealed spaces (attics, ceiling areas, construction voids, etc.) these areas must be opened and fire streams operated into them. Early identification and response to concealed space fires can save the structure. Officers who hesitate to open up because they don't want to beat up the building, many times must attempt an hour later to hold the fire to the neighborhood of origin.

The attack plan must take into consideration the seven sides of a structure: top, bottom, front, back, both sides, and the interior. The plan must concentrate on the most dangerous directions and avenue of fire extension and provide a means to stop the fire in that direction. The remaining sides are then considered in order of danger.

The basic variables that Command must manage in the attack plan are:

- Location/Position of Attack - Evaluate options (offensive and defensive) provided by building openings (doors, windows, and arrangement of surrounding buildings).
- Size of Attack - Evaluate options of fire attack (manpower, hand lines, master streams, etc.) and translate into the size and number of hose lines.
- Support Functions - Evaluate the activities necessary to facilitate access and operations (forcible entry, ventilation, etc.) and integrate with other attack variables. Command must also insure that the 2 in / 2 out rule is met and RIT is responded.
- Time of Attack - Evaluate options of timing of fire attack (when to begin, duration, etc.).

Time becomes an extremely important factor with regard to attack operations. The bigger the attack or the more interior the attack is positioned, the longer it takes to get it going. Command must balance and integrate attack size and position with fire conditions and his resources.

Companies may have the desire to lay hose and put water on the fire utilizing the fastest, shortest, most direct route. This process is called the *"candle moth"* syndrome and may draw a company to attack a fire from the burned side, which should be avoided.

An attack initiated from the involved side of a building will generally drive the fire, smoke and heat back into the building, hindering rescue efforts and decreasing survivability of victims. Damage to the structure is also dramatically increased in these cases.

When fire is burning out of a building and not affecting any exposures, let it burn out, and extend an interior attack from the **unburned side**. It is usually venting in the proper direction. It requires discipline on the part of control forces to do so and not submit to *"candle moth"* temptations.

Command must develop a fire control plan of attack that first stops the forward progress of the fire and then brings the fire under control. In large complex fires, Command will not immediately have adequate resources to accomplish all of these attack needs. Initially Command must prioritize attack efforts, act as a resource allocation and determine the response that will eventually be require. Accurate forecasting of conditions by Command becomes critical during this initial evaluation process.

Command must develop critical tactical benchmarks that relate to cut-off points and must approach fire spread determinations with pessimism. It takes a certain amount of lead-time to "get water" and the fire continues to burn while the attack gets set up. If Command misjudges the fires potential, it may burn past the attack/cut-off position. Command must accurately project set-up time, write-off lost property and get ahead of the fire.

Write-off property that is already lost and go on to protect exposed property based on the most dangerous direction of spread. Do not continue to operate in positions that are essentially lost.

Defensive Operations

The decision to operate in a defensive mode indicates that the offensive attack strategy has been abandoned for reasons of personnel safety, and the involved structure has been conceded as lost (written off).

The announcement of a change to a defensive mode will be made as EMERGENCY TRAFFIC and all personnel will withdraw from the structure and maintain a safe perimeter. Communications Center will sound alert tones and repeat Emergency Traffic message.

The Incident Commander will in addition, designate one unit to operate their air horn devices for a period of 15 seconds, continuously. Company Commanders will account for their personnel and report PAR to Command. *See SOG 700.03.*

Interior lines will be withdrawn (or abandoned if necessary) and repositioned when changing to a defensive mode. Lines should be backed away to a position, which will protect exposures.

The first priority in a defensive operation is to protect exposures. The second priority may be to knock down the main body of fire. This may assist in the protection of exposures but does not replace it as a first priority.

Master streams are generally the most effective tactic to be employed in defensive operations. For tactical purposes, a standard master stream flow of 500 GPM should be the guideline. Adjustments may be made upward or downward from this figure to more efficiently extinguish the fire.

When the exposure is severe and water is limited, the most effective tactic is to put the water on the exposure. Once exposure coverage is

established, attention may be directed to knocking down the main body of fire and thermal-column cooling. The same principles of large volume guidelines should be employed.

The completion of bringing the fire under control is reported utilizing a radio report of, "FIRE UNDER CONTROL." It is the responsibility of Command to transmit this report to dispatch. This time will be recorded by dispatch.

"Fire Under Control" means the forward progress of the fire has been stopped and the remaining fire can be extinguished with the on-scene resources; it does not mean the fire is completely out.

Summary of Fire Control Guidelines

Command Must!

- Consider standard factors to determine offensive/defensive mode.
- Extend a strong interior attack to confine and control in offensive cases.
- Protect exposures, stabilize forward fire progress, and surround and drown in defensive cases.
- Control position and function of control forces in marginal (offensive/defensive) cases.
- Consider most dangerous direction and avenue of fire spread.

210.03.08. Apparatus Placement:

Apparatus function should regulate its placement on the scene. Poor placement of apparatus results in limiting the options or eliminating functions that units can be assigned.

The tendency to drive apparatus as close to the fire as possible may result in the positioning of rigs that is dangerous. The placement of all apparatus on the fire ground should be a reflection of one of the following:

- Standard operational guideline for first arriving companies.
- Prearranged staging guideline.
- Direct order from Command.
- Conscious decision on the part of the officer assigned to apparatus based on existing or predictable conditions.

Effective apparatus placement must begin with the arrival of first units. The placement of the initial arriving engine, truck and rescue should be based upon initial size-up and general conditions upon arrival. First arriving companies should place themselves to maximum advantage and

go to work. Later arriving units should place themselves in a manner that builds on the initial plan and allows for expansion of the operation.

When a truck company is not needed for upper level access or rescue, spot apparatus in a position that would provide an effective position for elevated nozzle operation if the fire goes to a defensive mode. Truck Company officers must consider extent and location of fire, most dangerous direction of spread, confinement, exposure conditions, overhead obstructions and structural conditions in spotting apparatus. The truck / aerial should be spotted where the device can be raised and used effectively without repositioning.

The Command Vehicle should be located in a manner, which allows for maximum visibility of the fire building and surrounding area and the general affect of the companies operating on the fire. Command vehicle position should be easy and logical to find and should not restrict the movement of other apparatus.

Rescue units should be spotted in a safe position that will provide the most effective treatment of fire victims and firefighting personnel, while not blocking movement of other apparatus or interfering with firefighting operations.

Rescue units must also provide for access out of the immediate scene area in preparation for situations involving patient transportation.

Later arriving companies should hold a staged position a minimum of one block short of the immediate fire area, and remain uncommitted until ordered into action by Command. Company officers should select standby positions allowing the maximum of tactical options.

Command must maintain awareness that access to the scene increases the tactical options and that the immediate fire area can quickly become congested with apparatus. Apparatus on the fire ground fall into two categories:

1. Apparatus that is working.
2. 2. Apparatus that is parked (out of the way).

Command, Groups, and all operating units should attempt to maintain an access lane down the center of streets whenever possible.

Think of fire apparatus as an expensive exposure: position working apparatus in a manner that considers the extent and location of the fire and a pessimistic evaluation of fire spread and building failure. Anticipate the heat, which may be released with structural collapse**. Apparatus should generally be positioned at least 30 feet away from involved buildings, even with nothing showing. Greater distances are indicated in many situations**.

Beware of putting fire apparatus in places where it cannot be repositioned easily and quickly - particularly operating positions with only one way in and out; i.e., yards, alleys, driveways, etc. If apparatus becomes

endangered, operate lines between it - and the fire while you reposition it. When you do move it, move it to a position that is safe.

Beware of overhead power lines when positioning apparatus. Do not park where power lines may fall. It is dysfunctional to move a rig several times throughout the progress of a fire.

Initial arriving pumpers should be placed in "key" positions. These positions should offer maximum access to the fire area and be supplied with large diameter pumped supply lines as quickly as possible. Subsequent arriving companies can operate hose lines from this apparatus.

Key tactical positions should be identified and engines placed in those locations with a strong water supply. The water supply should be one large diameter hose from an engine on a hydrant. The forward engine can distribute this water supply to a variety of hand lines, master streams or other devices. The number of lines from hydrants to the fire will be substantially reduced.

Hydrants located close to the fire area should be regarded as "key" hydrants.

Position pumpers on "key" hydrants before tying up secondary hydrants that require longer hose lays. Pumpers hooked up to key hydrants can supply water to two or more pumpers in forward positions.

Personnel should take advantage of the equipment located on the apparatus already in the fire area instead of bringing in more units. Connect extra lines to pumpers, which already have a good supply line instead of making "daisy chain" supply line connections.

Do not hook up to hydrants so close to the fire building that structural failure or fire extension will jeopardize the apparatus.

Fire hose (particularly large diameter) soon limits the general access as the fireground operation matures. Lines should be laid with attention to the access problems they present. Try to lay lines on the same side of the street as the hydrant and cross over near the fire.

210.03.09. Staging:

The Department utilizes two levels of staging for all response units. They will be designated as Level 1 and Level 2 Staging.

Level One Staging

Level One Staging will automatically apply to all multiple unit responses, unless otherwise ordered by Command, and will involve the following:

First arriving engine company will respond directly to the scene and operate to best advantage.

First arriving truck company will respond directly to the scene and place themselves to best advantage; generally at the front of the building, and initiate truck company operations.

First arriving rescue company will respond directly to the scene and place their apparatus in a location that will provide maximum access for Medical/Rescue Support and not impede the movement of other units. Unless otherwise directed by Command, the Rescue crew should report to the first entrance point of the structure and initiate RIT responsibilities.

All other units will stage in their direction of travel, uncommitted, approximately one block from the scene until assigned by Command. Selection should be based on maximum tactical options with regard to access, direction of travel, and water supply.

All responding engine companies should refer to their map books and other references to determine the best available water supply options for the emergency.

Staged companies or units will, in normal response situations, report company designation and location. An acknowledgment is not necessary from Command. Staged companies will stay off the air until orders are received from Command.

These staging guidelines attempt to reduce radio traffic, but in no way should reduce effective communications or the initiative of officers to communicate. If staged companies observe critical tactical needs, they will advise Command of such critical conditions and their actions.

When arriving at staging, companies will indicate their status as "Staged, at location..." If assigned to a task they will indicate, "On the scene and action being taken." Companies should continue response to the scene until a company reports "On The Scene", Level One Staging will begin within these guidelines...

If a company, which would normally be first due to the incident, is out of normal response area and arrival order is uncertain, the officer of that company will communicate his location over the tactical radio channel. In situations where the simultaneous arrival of first due companies is possible, the affected officers shall utilize radio communications to coordinate activities and eliminate confusion. It will be the ongoing responsibility of Communications to confirm the arrival of the first "on the scene" unit.

Exceptions: Pre-fire planning will identify exceptions to Level One Staging with regard to the special functions that must be performed in that particular occupancy. In the absence of such tasks, regular Level One Staging guidelines will automatically apply. An example of an exception would be a fire in a high-rise building.

Level Two Staging

Level Two Staging is used when an "on-scene" reserve of companies is required.

These companies are placed in a staging area at a location designated by Command. When Command announces "Level Two Staging" all 2nd alarm and greater companies will report to and remain in the staging area until assigned.

First alarm companies will continue with Level One Staging unless instructed otherwise. When going to Level Two Staging, Command will give an approximate location for the Staging Area. Companies that are already staged (Level One) will stay in Level One Staging unless advised otherwise by Command. All other responding units will proceed to the Level Two Staging Area.

The Staging Area should be away from the Command Post and from the emergency scene in order to provide adequate space for assembly and for safe and effective apparatus movement.

When calling for additional resource, Command should consider Level Two Staging at the time of the call. This is more functional than calling for Level Two Staging while units are en route. The additional units will be dispatched to the Staging Area.

Command or Support may designate a Staging Area and Staging Officer who will be responsible for the activities outlined in this guideline. In the absence of such an assignment, the first fire department officer to arrive at the staging area will automatically become the Staging Officer and will notify Command or Support on the assigned tactical channel.

Due to the limited number of truck companies, a Truck Company Officer will transfer responsibility for staging to the first arriving Engine Company Officer. Staging Officers will assign their company members to the best advantage.

In some cases, Command or Support may ask the Staging Officer to scout the best location for the Staging Area and report back the location.

The radio designation for the Staging Officer will be "Staging." All communications involving staging will be between Staging and Command or Support. All responding companies will stay off the air, respond directly to the designated Staging Area, and report in person to the Staging Officer. They will standby their unit with crew intact and warning lights turned off. Staged units will indicate their status to Communications as "STAGED."

When directed by Command or Support, the Staging Officer will verbally assign companies to report to specific Group/Divisons, telling them where and to whom to report. Staging will then advise Command or Support of the specific unit(s) assigned. The operating Group/Divison Officer may

then communicate directly with the company by radio. When assigned, companies will indicate their status as "on-the-scene" by radio.

Staging will give Command or Support periodic reports of available companies in staging. Command will utilize this information to request additional resource.

The Staging Officer will also be responsible for the following functions:

- Coordinate with the police department to block streets, intersections and other access required for the Staging Area.
- Ensure that all apparatus is parked in an appropriate manner.
- Maintain a log of companies available in the Staging Area and inventory all specialized equipment that might be required at the scene (see Tactical Worksheet for staging).
- Progress reports to Command or Support indicating number and type of units available.
- Assume a position that is visible and accessible to incoming and staged companies. This will be accomplished by leaving warning lights operating.
- In some cases, the Staging Officer may have to indicate the best direction of response and routing for responding companies to get into the Staging Area.

At some incidents, such as a major medical emergency, it may be necessary to designate parking area for used (committed) apparatus near the incident scene. This would be necessary when the Staging Area is too far from the incident to facilitate hand-carrying needed equipment to the incident site. In such cases, the Staging Officer shall designate the parking site and instruct each company of its location prior to leaving staging. The parking area should be close enough to the incident site to allow easy transfer of needed equipment to the scene. The parking area should in no way impede necessary access for units or other vehicles to the incident area.

Unless otherwise instructed by Command or Support, Staging will advise Command when the level of resources in the Staging Area is depleted to two engines and one truck or less. Command or support will make a decision whether or not to request additional companies.

When To Summon Additional Resource:

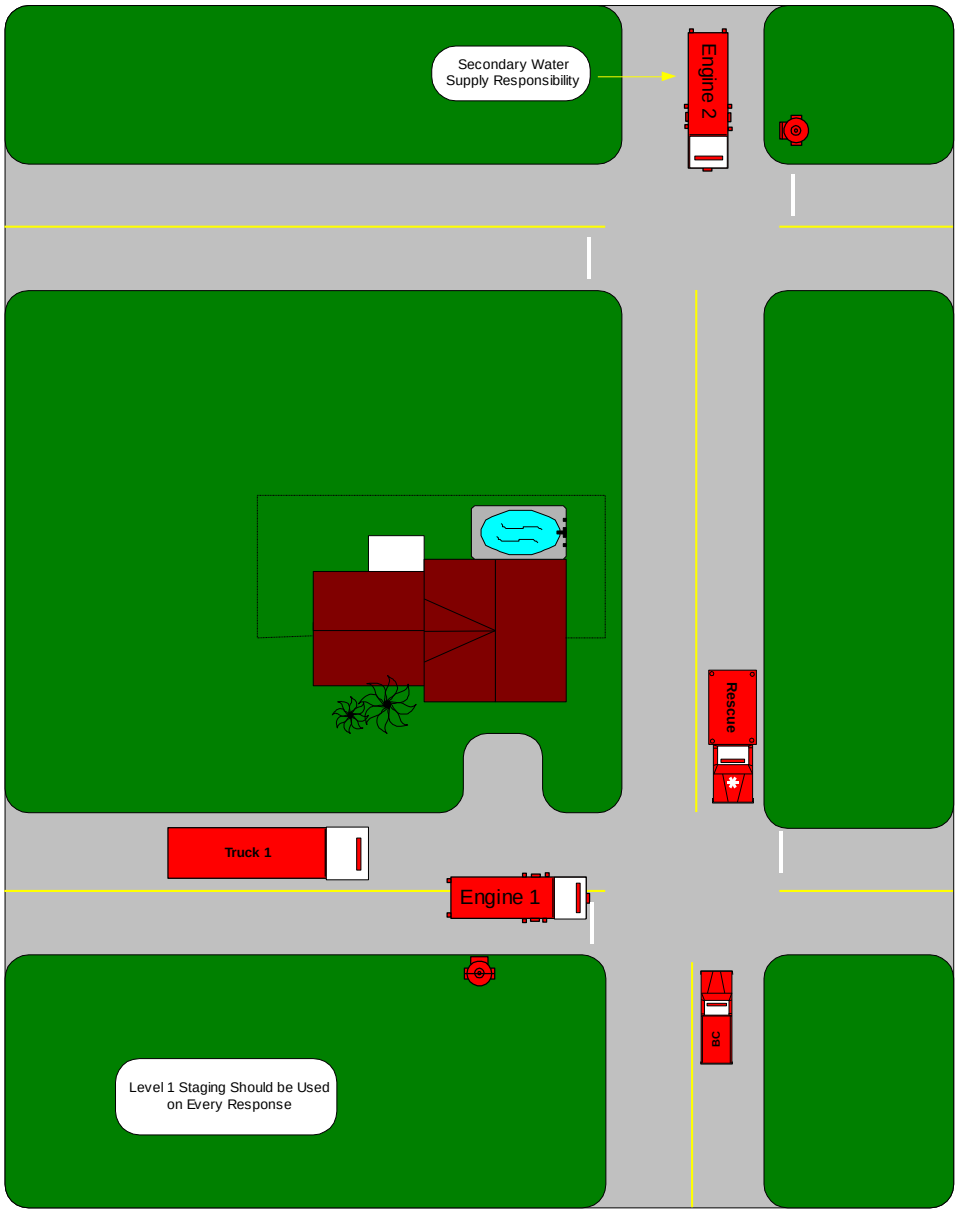
- An actual or potential fire situation exists and the life hazard exceeds the rescue capabilities of initial alarm companies.
- The number, location, and condition of actual victims exceed the rescue/removal/treatment capabilities of companies.

- An actual or potential fire situation exists and the property protection demand (both internal and external) exceeds the fire control capabilities of initial alarm companies.
- Fire conditions become more severe or the situation deteriorates significantly.
- All companies have been committed and the fire is not controlled.
- Upon confirmation of a structure fire, the IC should request an additional ALS rescue in order to ensure immediate availability of medical personnel to treat injured civilians and firefighters, as well as to establish rehab as outlined under SOG 210.11.

Level 1 Staging **is intended to place only those units needed to effectively handle the emergency at the scene in addition to having the balance of the required response assignment stage in strategically specific locations close to the incident. Level 1 Staging is to be used at all multiple unit response assignments.**

The Incident Commander should specify with responding units their staging locations at the scene.

Suggested Apparatus Placement Guideline
Level 1 Staging

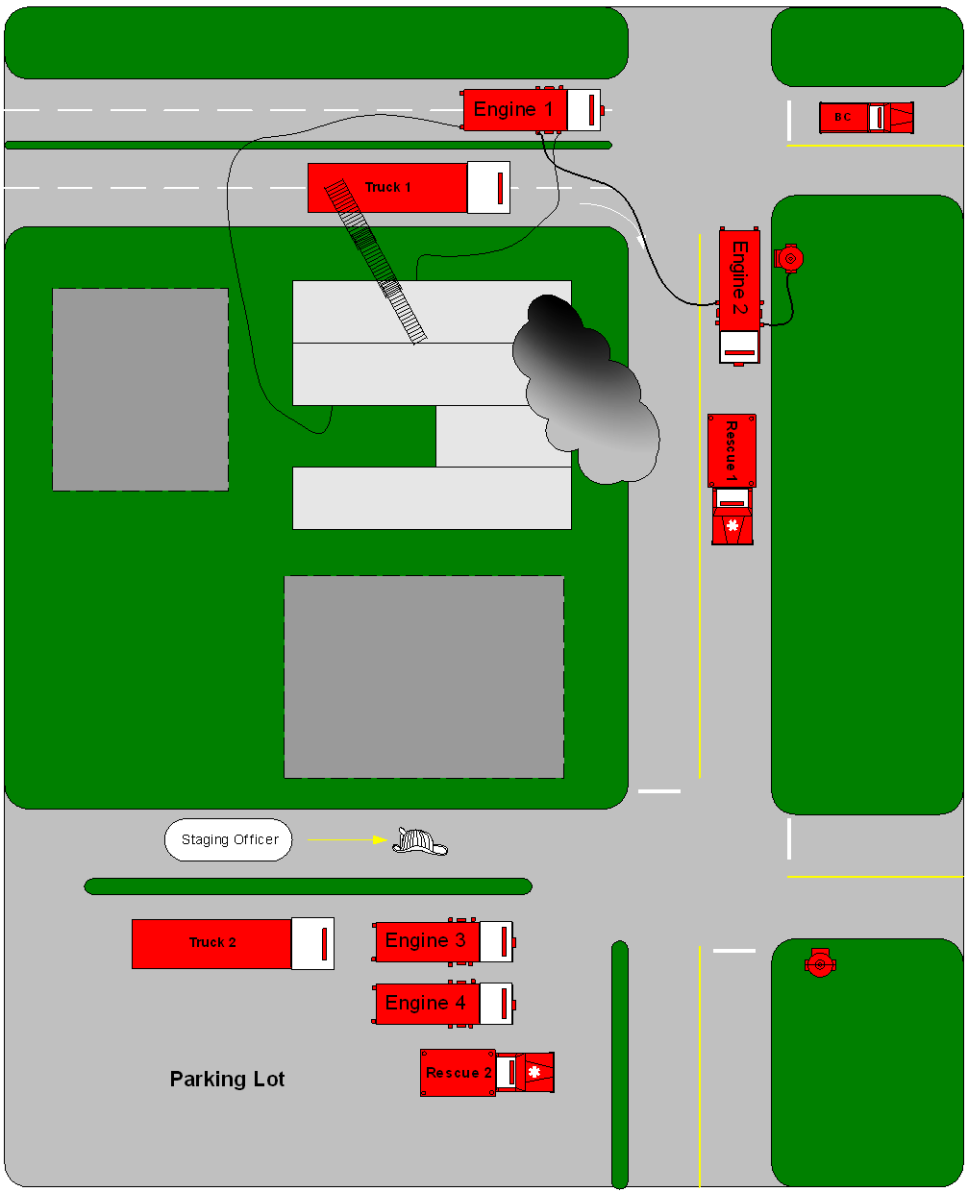


Reference: IFSTA Fire Department Pumping Apparatus 7th Edition

Level 2 Staging of Apparatus should be performed any time additional units beyond the initial alarm assignment are summoned to the scene. Provisions should be made to have a Staging Officer located at the designated area. The Staging Officer should be in contact with the IC via radio or in some instances, face to face.

Apparatus dispatched on subsequent alarm assignments should report to the designated Staging Area and remain on the Staging Group/Divison Radio assigned radio TAC.

Suggested Apparatus Placement Guideline
Level 2 Staging



210.03.10. Vehicle Fires:

Several important considerations need to be addressed when crews are faced with fighting active fire involving automobiles. These fires can be very unpredictable and are often considered mundane by the experienced firefighter. It is easy to fail to consider the potential dangers and challenges related to vehicle fires. This guideline serves only to remind all personnel of some of the common hazards and safety practices associated with vehicle fires.

The Company Officer should realize that all fire situations pose specific challenges. Vehicle fires are often fought in high traffic situations were firefighters are exposed to the dangers of other motor vehicles around the scene. The IC should consider the safety of their personnel paramount to the flow of traffic in the area. The IC should work with the Police to return traffic to normal as quickly as possible but never at the expense of creating an unsafe working environment.

Vehicles are rolling hazardous materials containers. Every vehicle on the road contains an amount of gasoline along with motor oil. In addition, vehicles today are storage lockers for people's unwanted chemicals. Containers of every unknown product could be loaded in the vehicle, which is now on fire.

Company Officers should be aware that when weighing the risk verses cost in fighting a vehicle fire, that most vehicles built in the last twenty years contain sensitive electrical components which if destroyed would render it a total loss. Therefore, attempts should be made to contained vehicle fire to the area of origin while keeping risk to firefighters low. Aggressive attempts should be made to control fire exposures and damage to unburned areas of the car.

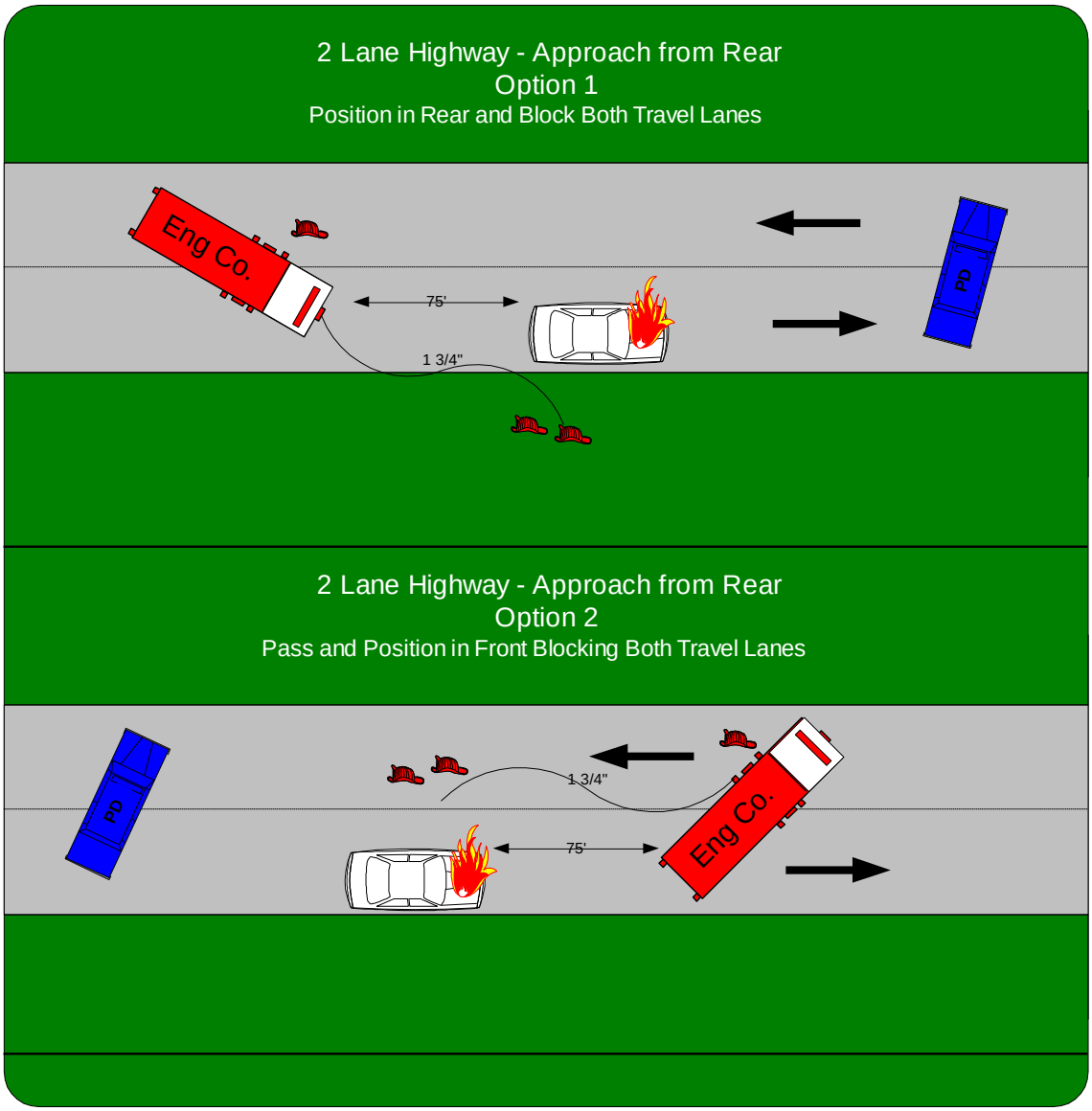
SAFETY NOTE:

While vehicle fires mostly occur outdoors, their products of combustion create a very hazardous environment for firefighters. Therefore, all firefighting including those involving vehicles shall be performed in full protective clothing including SCBA.

Apparatus placement at vehicle fires is also critical. Engine Companies should place their rigs in a position, which creates an additional safety zone for firefighters. Again, impeding the flow of traffic is critical to creating a safe work zone for firefighters.

Engines should be angled so that lines can be easily deployed and a view of the fire scene is afforded to the pump operator. The following depicts several possible options for apparatus placement at the scene of vehicle fires in active roadways.

Suggested Apparartus Placement Guideline
Vehicle Fires



Reference: IFSTA Fire Department Pumping Apparatus 7th Edition

210.03.11. Wildland - Urban Interface Firefighting:

While the Winter Park Fire-Rescue Department does not experience the potential for serious wildland-urban interface fires, our personnel may be assigned wildland duties as part of a State Task Force response. Therefore, it is important to note the following information regarding safe practices during these particular types of fires.

Tactical Priorities

Reconnaissance: A careful and complete survey of the area involved will be the top priority of the first arriving unit. The only exceptions should be small fires where the entire area can be observed from one location, or situations, which require immediate action, as in a rescue or an exposure severely threatened.

Exposure Protection: Protecting exposures and improvements from the fire becomes a high priority, even at the risk of adding extra acreage to the size of the fire.

Confinement of Perimeter: The head(s) of the fire should be given highest priority in order to efficiently control the fire spread. A direct application fire stream, with units operating inside the burn area, is the fastest control evolution available to stop the fire spread, (direct attack). Many situations will not support this method, and Command may elect to use natural and manmade barriers to stop the forward progress of the fire, (indirect attack). Where geographical, weather, and exposure condition permit, the initial attempt at controlling the fire should be the indirect method. Special consideration must be given to the availability of resources for patrolling the perimeter.

Wildland Fire Command Considerations

Upon arrival, the initial Incident Commander shall provide the following information in the initial radio report:

- Size (an estimate, given in acres or faction of acres).
- General size of vegetation (light, medium, or heavy rough)
- Rate of spread (expressed as slow, moderate, or rapid.
- Command shall request a Division of Forestry unit to respond if the fire requires two or more woods trucks to control.

On major incidents, establish a Command Post as soon as possible. With large, complex fires, Geographic Group/Divisons, Reconnaissance

Group/Divison, and Resource Group/Divisons to coordinate move-ups and callbacks will be essential and should be initiated as soon as possible. Level I and Level II staging, should be utilized by Command as on other types of incidents.

Command should plot and update the fire size, location, and progress as often as possible using maps or aerial photographs and information from Reconnaissance Group/Divison.

Command shall determine the location of tankers and other sources of water supply, and notify all units at the incident of their locations.

Whenever possible, location for Command Post should be chosen with a suitable site for helicopters to land.

Standard Company Operations

Standard company operations assign basic fireground functions and activities to the various companies based upon the capability and characteristics of each type of unit. Standard Company Operations on brush fires vary greatly from other types of incidents.

The following items represent the standard Operations that will normally be performed by the Companies on brush fire incidents in our area:

Woods Truck: Available from Orange / Seminole County Fire

Operate off-road, in natural ground cover to directly apply fire streams.
Reconnaissance
Lighting and control of backfires
Exposure protection
Fire line and spot-fire patrol
Overhaul (mop-up)

Engine Company

Exposure protection
Water supply for woods trucks
Overhaul of accessible areas

Tankers

Water supply for woods trucks
Exposure protection
Overhaul in accessible areas
Water supply and shuttle for mulch fires

Due to the ever-changing nature of a brush fire, the key concept in Standard Company Operations is **mobility**. Engine Companies and Tankers should not be committed in such a manner as to become inflexible to rapid reassignment of duties or location.

Wildland Fireground Factors

The following factors have a critical effect on the burning characteristics of a brush fire and on the effectiveness of control efforts.

Weather

Relative humidity.
Wind, speed and direction.
Temperature

Cumulative drying, long range drying as in a drought; referred to as a build-up index.

Fuel

Type
Size
Arrangement

Equipment Available

It is essential to effective control that Division of Forestry units be requested as early as possible. During peak fire periods, Forestry Units may be committed or have extended response times due to the large geographical area that they cover.

Access and natural or man-made barriers

Rivers, lakes, swamps.
Fences, canals, ditch.
Muck, dried lakebeds.
Heavy or dense forest.

Soft sand.

Tactics and Strategy

Brush fires often present a large area of rapidly spreading fire with numerous and complex exposure problems. The basic brush fire philosophy will be to control the spread of the fire by use of natural boundaries. Where exposures are, or may soon be threatened, or where a small fire can be quickly extinguished by one woods truck, a direct attack may be warranted.

There are two basic methods of attacking a brush fire, the direct attack and the indirect attack. In many situations a combination of the two, applied to different areas of the fire, has proven most successful in providing effective control.

Command must quickly develop a firefighting plan, and this plan must remain flexible throughout the incident.

Wildland Firefighting Apparatus

Vehicles should not be left unattended in dry grass or other flammable vegetation. On large operations it may be necessary to burn off an area for staging.

If a vehicle is left unattended near the fire area, windows are to be rolled up; keys are to be left in the ignition. **This applies to staff and support vehicles as well as operations units.**

While operating off-road, maintain a constant awareness of soil composition or conditions that would hamper mobility. Be careful of changes in type, size, or color of vegetation as it may indicate a change in soil composition. Use a man or foot (swamper) to precede the unit when soil is questionable.

When entering off-road areas, vehicles so equipped should switch to four-wheel drive prior to departing the hard surface of the roadway.

Vehicles with a winch should be backed into questionable areas to more readily facilitate removal if they become stuck.

Wildland Overhaul

Overhaul should start as soon as manpower is available. Don't wait until the fire is completely contained unless it is absolutely necessary. Overhaul must be thorough. If there is a very large fire area, overhaul at least 100 yards

into the main burn from the perimeter. Use water as often as possible to mop up. Dirt also works well.

Remember that perimeter fire control only contains the fire; it is not out until every ember is cold. Embers can be blown over the perimeter and quickly start spot fires.

Firefighter Safety

Always provide for an escape route.

Do not allow firefighting personnel to become exhausted.

Provide drinking water.

Wear protective clothing.

Use hand tools correctly.

Remember, fire can burn against the wind.

Keep your equipment and yourself in good condition.

Wildland Apparatus Placement

Never place apparatus directly in front of a brush fire.

If you park in a brush area, remember that the exhaust system can start a fire below your truck.

Provide protection for the engineer in case the wind changes direction.

Beware of getting stuck.

Know the limitations of your apparatus in rough terrain.

Be alert to the possibility of puncturing your tires.

210.03.12. Summary:

While this document in no way represents a complete written guideline for fighting fires. It does inform employees how the department expects certain jobs to be performed. Winter Park Fire-Rescue prides itself on the fact that our crews perform aggressive fire attacks with a high regard for personal safety and care. It is also a fact that our people take extraordinary care in providing the highest degree of customer service taking care not to cause more damage than is absolutely necessary to stop the damaging spread of fire.

Compliance with the items contained in this guideline will help to ensure our mission of helping to maintain the high quality of life our citizens currently enjoy.

James E. White
Chief of Department

EXHIBIT K – Performance Chart Sample – Five Year Period 2011-2015

Baseline Measurement (FIRE) @ 90%		Benchmark Goal	Performance Gap	2011-2015 (42)	2015 (11)	2014 (11)	2013 (10)	2012 (7)	2011 (3)
Alarm Handling Time	Pick-up to Dispatch (seconds)	:60	+:05	:55	:49	:55	:54	:47	:65
Turnout Time	Priority One Calls	1:20	+:06	1:14	1:11	1:11	:58	:53	2:07
Travel Time	1st Assigned Unit **Distribution**	5:00	-1:18	6:18	5:52	6:30	7:33	4:09	5:55
	Effective Response Force (17) **Concentration***	10:00	+3:33	6:27	6:27	5:33	6:09	5:43	8:38
Total Response Time	1st Unit On Scene **Distribution**	7:20	-:27	7:47	7:52	7:35	7:56	7:38	8:25
	Effective Response Force (17) **Concentration***	12:20	+3:46	8:36	8:27	9:41	8:01	9:53	11:33

**Effective Response Force (ERF) represents data for Low, Moderate or Significant FIRE Responses (17 Personnel)*

Baseline Measurement (EMS) @ 90%		Benchmark Goal	Performance Gap	2011-2015 (14,670)	2015 (3251)	2014 (2856)	2013 (2950)	2012 (2973)	2011 (2671)
Alarm Handling Time	Pick-up to Dispatch (seconds)	:60	+:05	:55	:56	:54	:54	:60	:65
Turnout Time	Priority One Calls	:60	-:13	1:13	1:14	1:14	:58	1:14	2:07
Travel Time	1st Unit **Distribution**	5:00	-:42	5:42	5:44	5:19	5:49	4:07	5:55
	Effective Response Force (5) ***Concentration**	10:00	+4:30	5:44	5:27	5:32	6:01	5:54	8:38
Total Response Time	First Unit On Scene **Distribution**	7:00	-:18	7:18	7:24	7:13	7:13	7:24	8:25
	Effective Response Force (5) ***Concentration**	12:00	+4:08	7:52	7:10	7:40	7:55	9:38	11:33

**Effective Response Force (ERF) represents data for Low and Moderate EMS Responses (5 Personnel)*

 All Response Data is Based Upon PRIORITY 1 (Emergency) Responses Only

Baseline Measurement (Tech Rescue) @ 90%		Benchmark Goal	Performance Gap	90% Performance	2015 (0)	2014 (5)	2013 (2)	2012 (2)	2011 (2)
Alarm Handling Time	Pick-up to Dispatch (seconds)	:60	:10	:50	_	:48	:51	:47	:65
Turnout Time	Priority One Calls	1:20	-:10	1:30	_	:59	:52	:53	2:07
Travel Time	1st Unit **Distribution**	5:00	-1:10	6:10	_	6:31	5:50	4:09	5:08
	Effective Response Force (14) ***Concentration**	10:00	+4:10	5:50	_	_	6:28	5:43	5:28
Total Response Time	Total Response Time 1st Unit On Scene **Distribution**	7:20	-:10	7:30	_	_	6:57	7:38	8:30
	Effective Response Force (14) ***Concentration**	12:20	+3:30	8:50	_	_	8:20	9:53	8:50

**Effective Response Force (ERF) represents data for Moderate Technical Rescue Responses (14 Personnel)*

Baseline Measurement (Hazardous Materials) @ 90%		Benchmark	Performance Gap	90% Performance	2015 (27)	2014 (16)	2013 (37)	2012 (17)	2011 (25)
Alarm Handling Time	Pick-up to Dispatch (seconds)	:60	+:03	:57	:59	:57	:55	:47	:65
Turnout Time	All Priority One Calls	1:20	+:07	1:13	:50	1:06	:55	:53	2:07
Travel Time	First Assigned Unit **Distribution**	5:00	-:37	5:37	5:25	6:46	7:04	4:09	5:08
	Effective Response Force ***Concentration**	10:00	+3:37	6:23	6:49	5:43	6:56	5:43	5:28
Total Response Time	First Unit On Scene **Distribution**	7:20	-:24	7:44	7:54	8:42	7:28	7:38	8:30
	Effective Response Force ***Concentration**	12:20	+3:47	8:33	8:41	7:50	8:46	9:53	8:50

**Effective Response Force (ERF) represents data for Low and Moderate HM Responses (14 Personnel)*