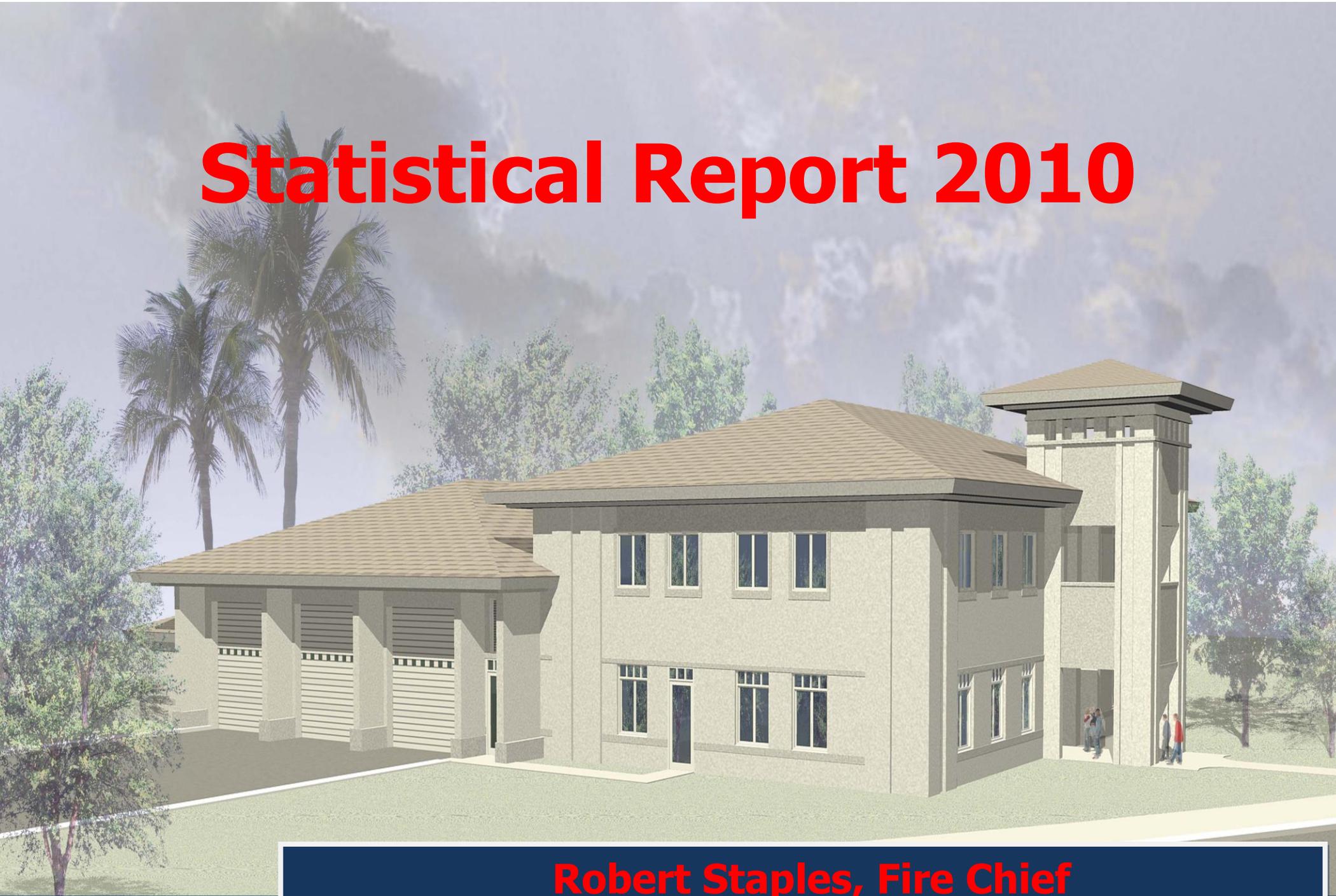
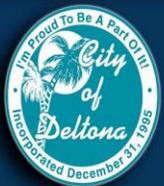


# Statistical Report 2010



**Robert Staples, Fire Chief**

*“Serving Our Community with Pride,  
Dedication and Honor”*



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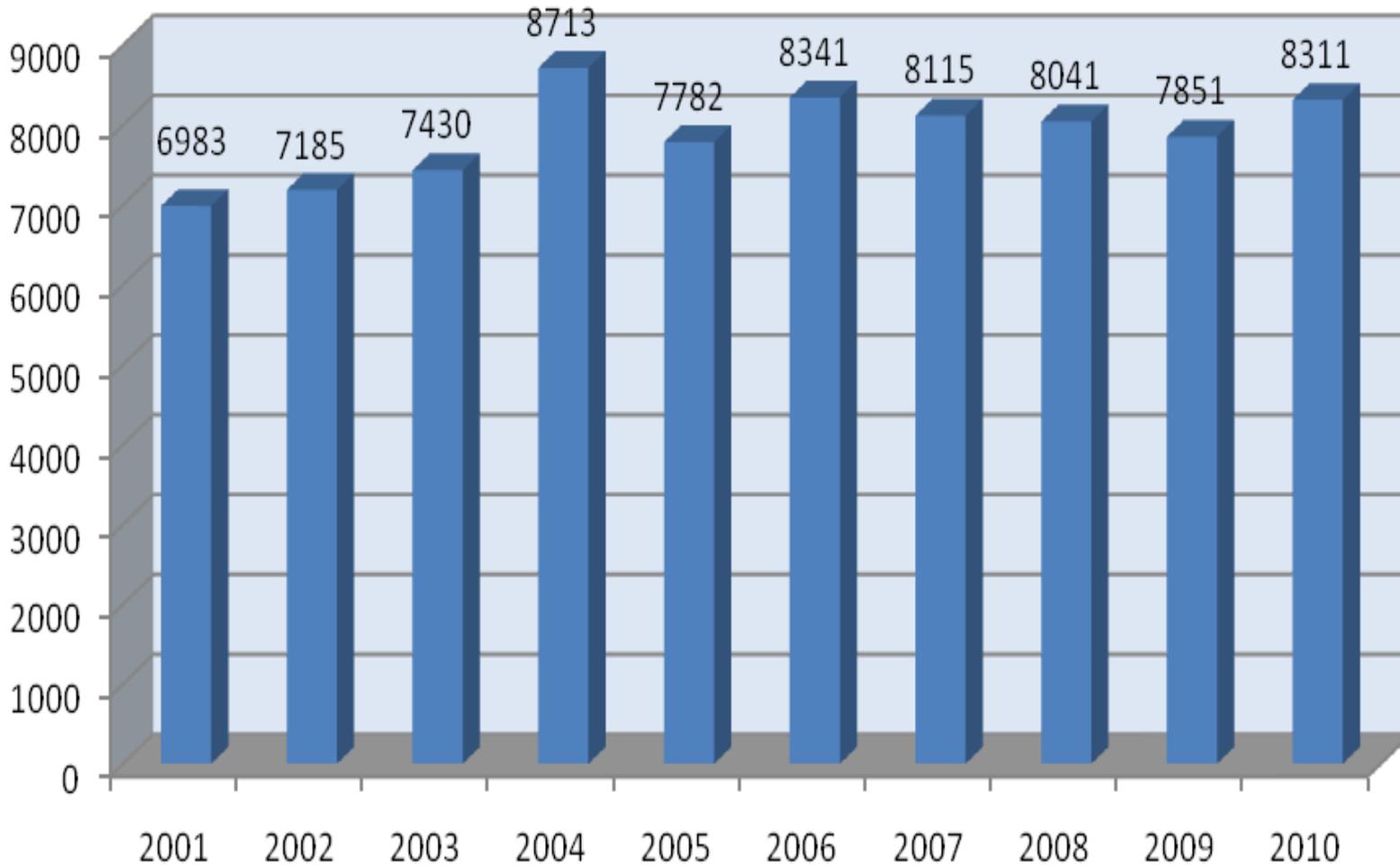
# INTRODUCTION

The City of Deltona Fire Department provides statistical reports for purposes of sharing information and long range planning. This 2010 annual report is a compilation of data derived from alarm response and activities involving department personnel. This report summarizes the 2010 activities and subsequent changes to our community.

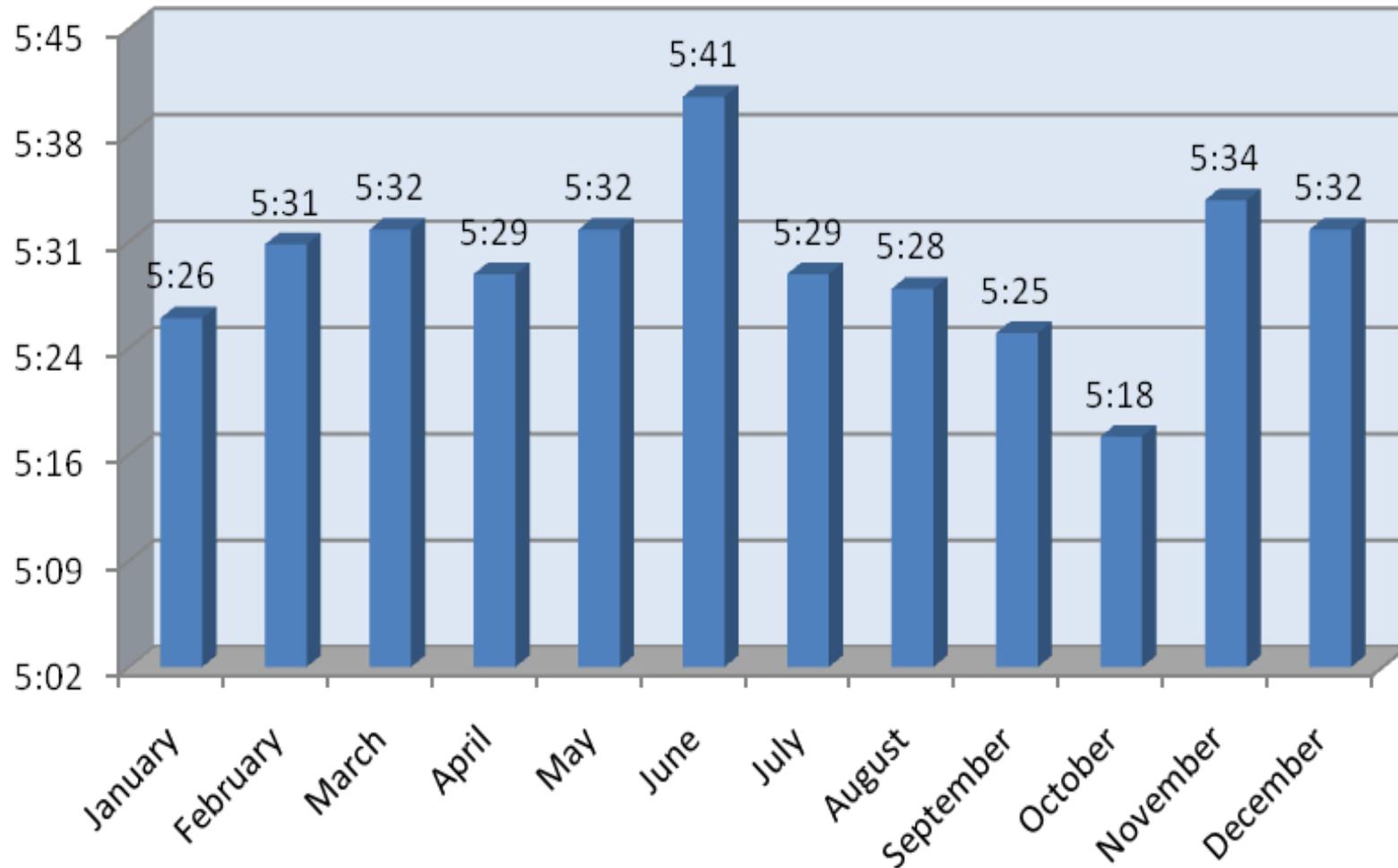
As an all hazards department, we routinely have experienced an increase in requests for service every year for the past twenty-five years; however, this trend changed in 2006 as the population decreased due to the housing market. For the past 3 years we have experienced reductions in calls by one to two percent per year. In 2010 we again saw an increase over 2009 of 5.8%, bringing our call load back to that of 2006. Service requests are both emergent and non-emergent in nature and include fire suppression, pre-hospital emergency medical care, auto extrication, electrical hazards, hazardous materials events, confined space rescues, trench rescue, water rescue and severe weather events. Our department also responds to incidents where residents and visitors may have locked themselves out of a home or auto or they require other non-medical assistance in their everyday lives.

The Deltona Fire Department is structured into three main divisions – Fire Operations (including Training and Emergency Medical Services), Administration/Emergency Management/Communications (including Logistics, Fleet Maintenance, 9-1-1 and Public Education), Fire Loss Management (Inspections, Arson Investigation, Plans Review, Fire Hydrants/Water System Distribution). These three components collectively provide a synergistic effect and unified approach to bring an efficient and cost effective service to the citizens. Department members are cross trained and wear many “hats”. All divisions handle several disciplines including firefighting, public education, fire and injury prevention and Emergency Medical Services. This saves on operating and personnel costs. Fire department personnel also lead the way in enhancing volunteer and career paths for our community. These initiatives include Citizen Emergency Response Team (CERT), Student Emergency Response Team (SERT), High School Health Academy, Emergency Medical Services & Sports Academy and our Fire Department Explorer Post. Our “Commitment to the Community” is demonstrated in everything we do. This report overviews the personnel and illustrates community growth while serving as a tool for future planning and efficient service delivery.

## Alarms Per Year

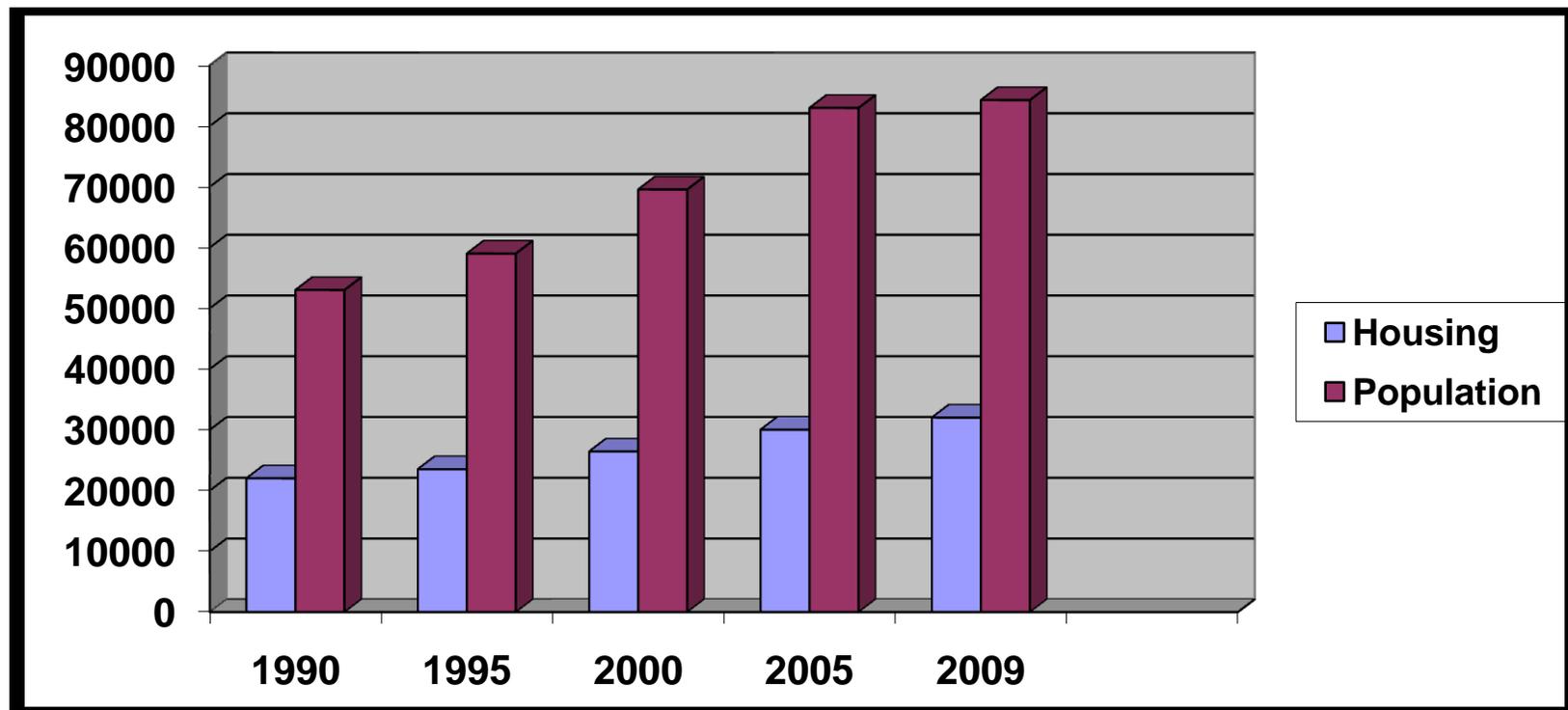


## Average Response Times



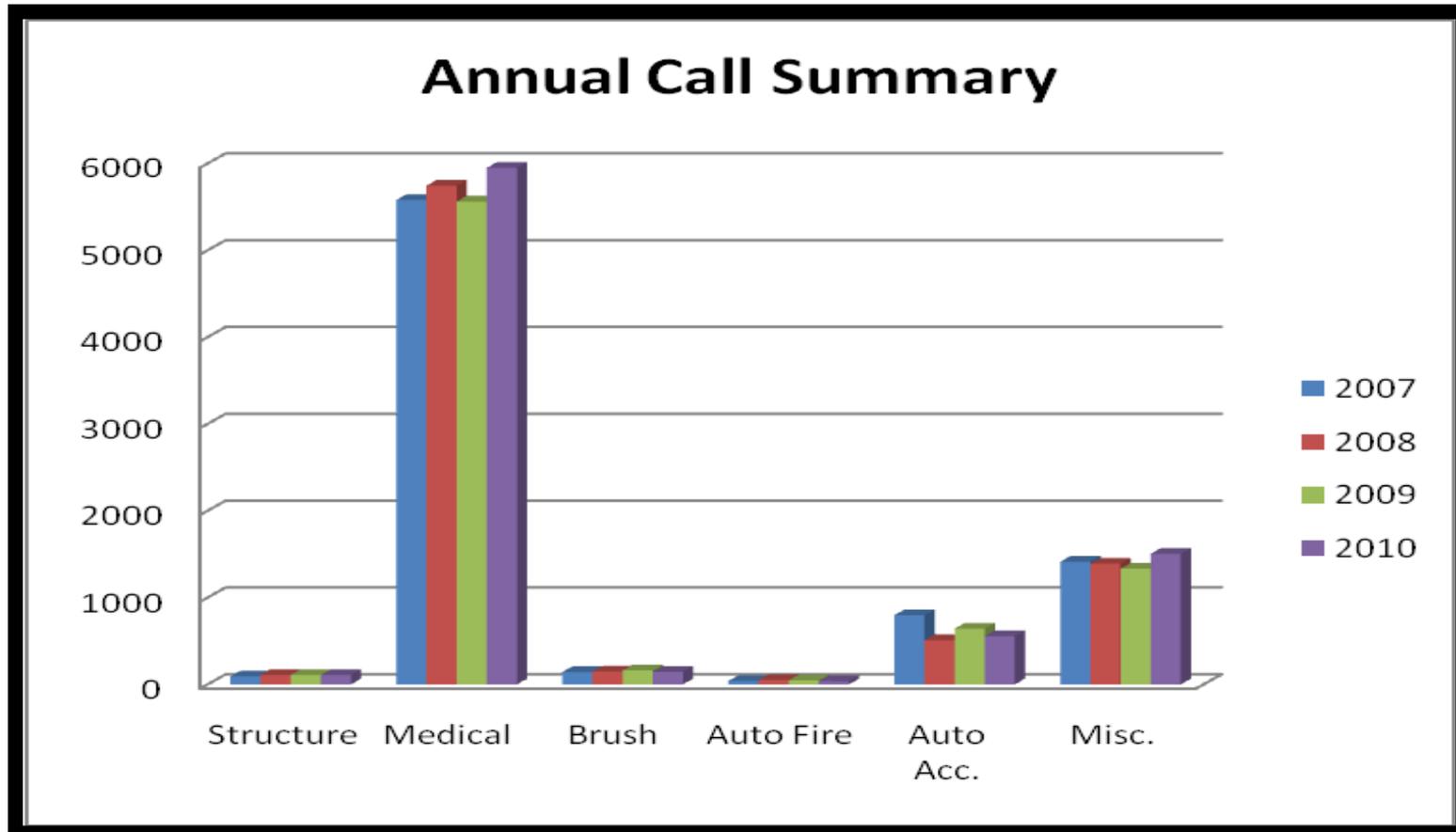
# POPULATION

The 2000 census reported the population of the City of Deltona at 69,543. The U.S. Census Bureau estimates the population of Deltona in 2009 as 83,531. The 2010 Census information was not available as of this writing. Between 2000 and 2005 there were an average of 1080 new homes built each year. In the last few years, the building of new homes has significantly decreased and with the recent economy we have seen homes vacated due to the mortgage crisis and unemployment. The increase in the number of structures built and population growth directly affects calls for service. Subsequently, the loss of population and the increase in vacant homes has resulted in a slight reduction of alarm load. The figures listed below are a reflection of the population growth and housing units in the City of Deltona.

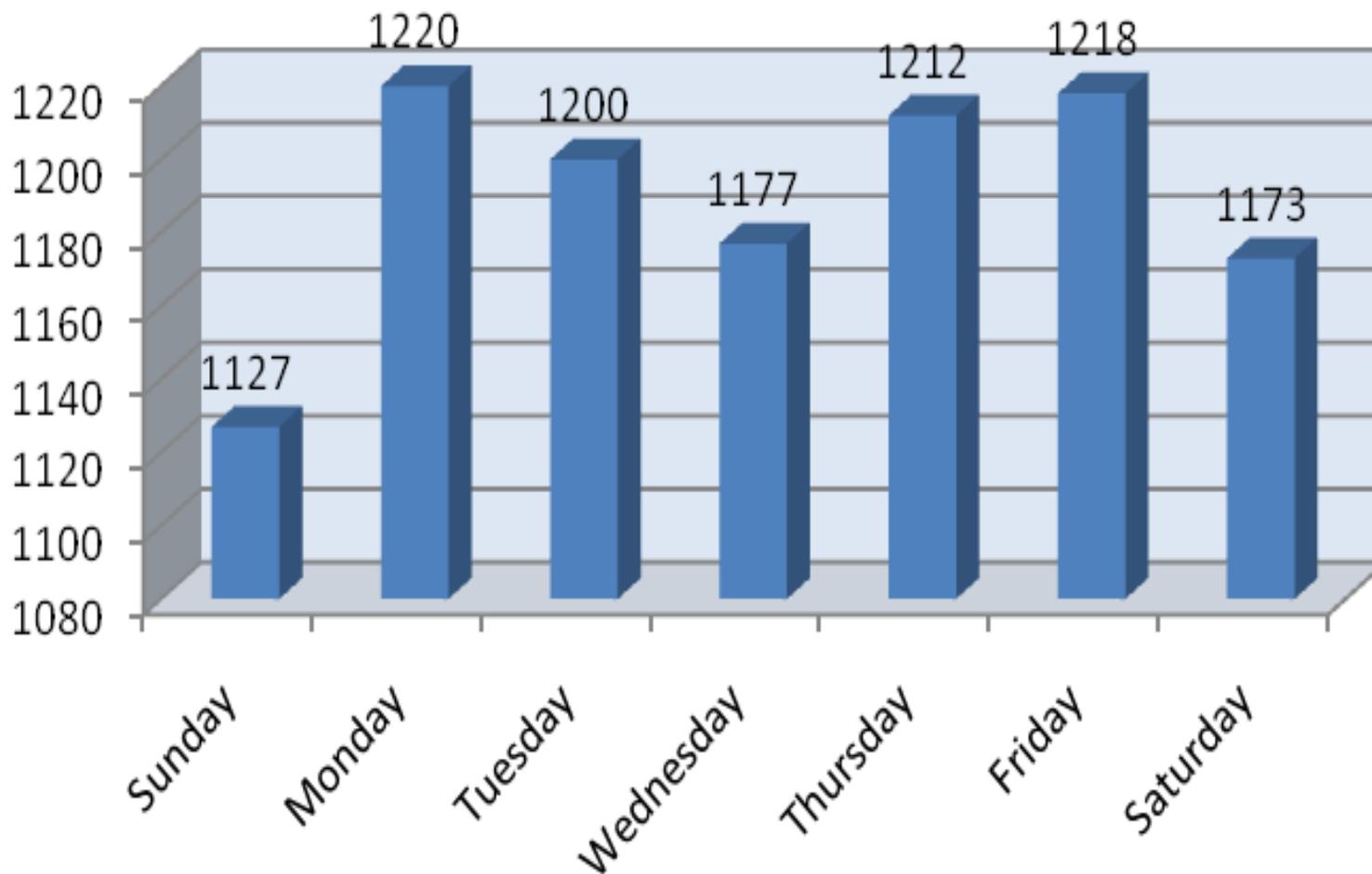


## Requests for Service

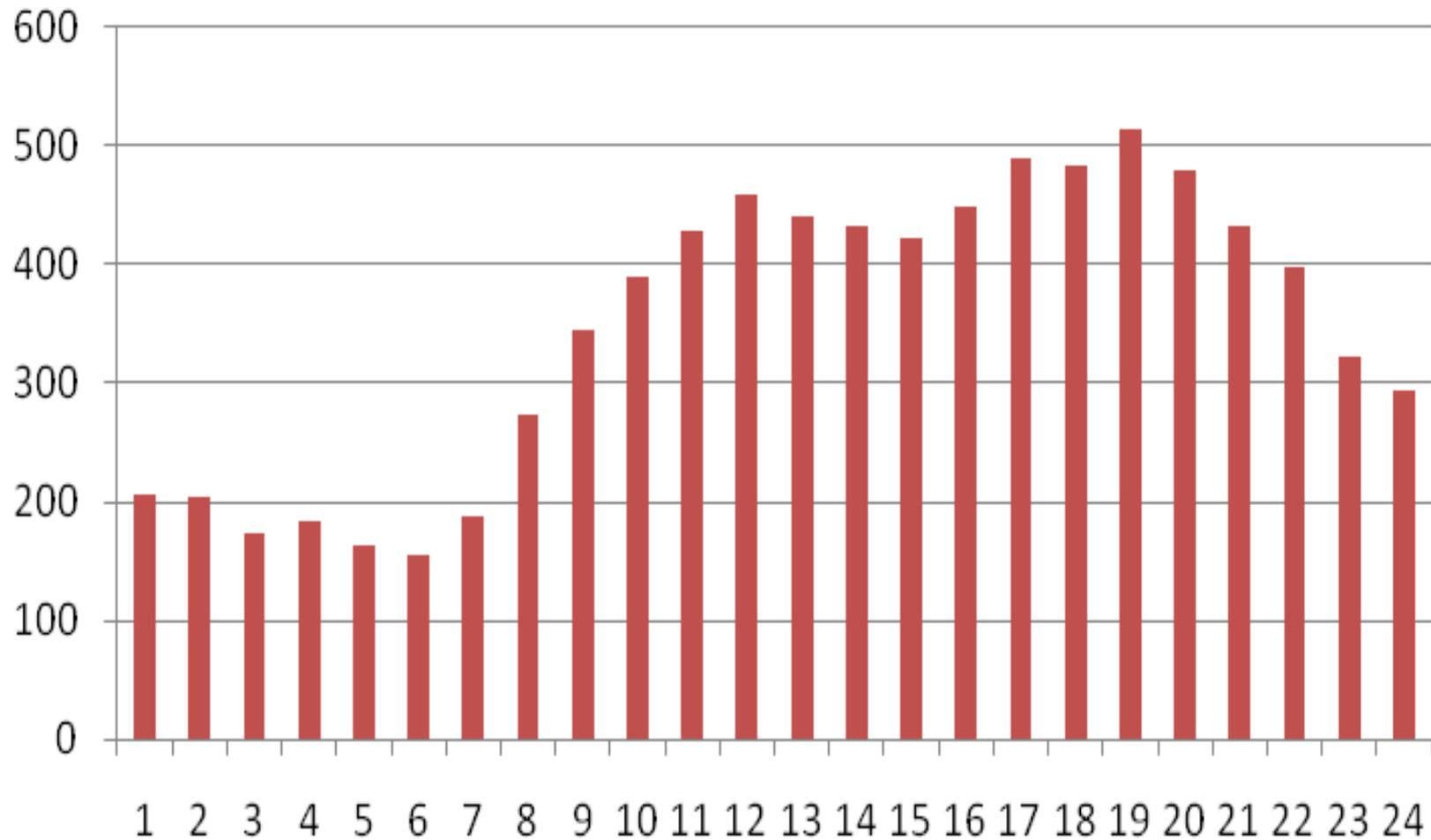
In 2010, the Operations Division responded to 8,311 alarms. This is a 5.86% increase over 2009. During 2007 to 2009 we experienced slight decreases in service requests. The 2010 alarm load was comparable to that of 2006.



## Alarms by Day of Week



## Alarms by Time of Day

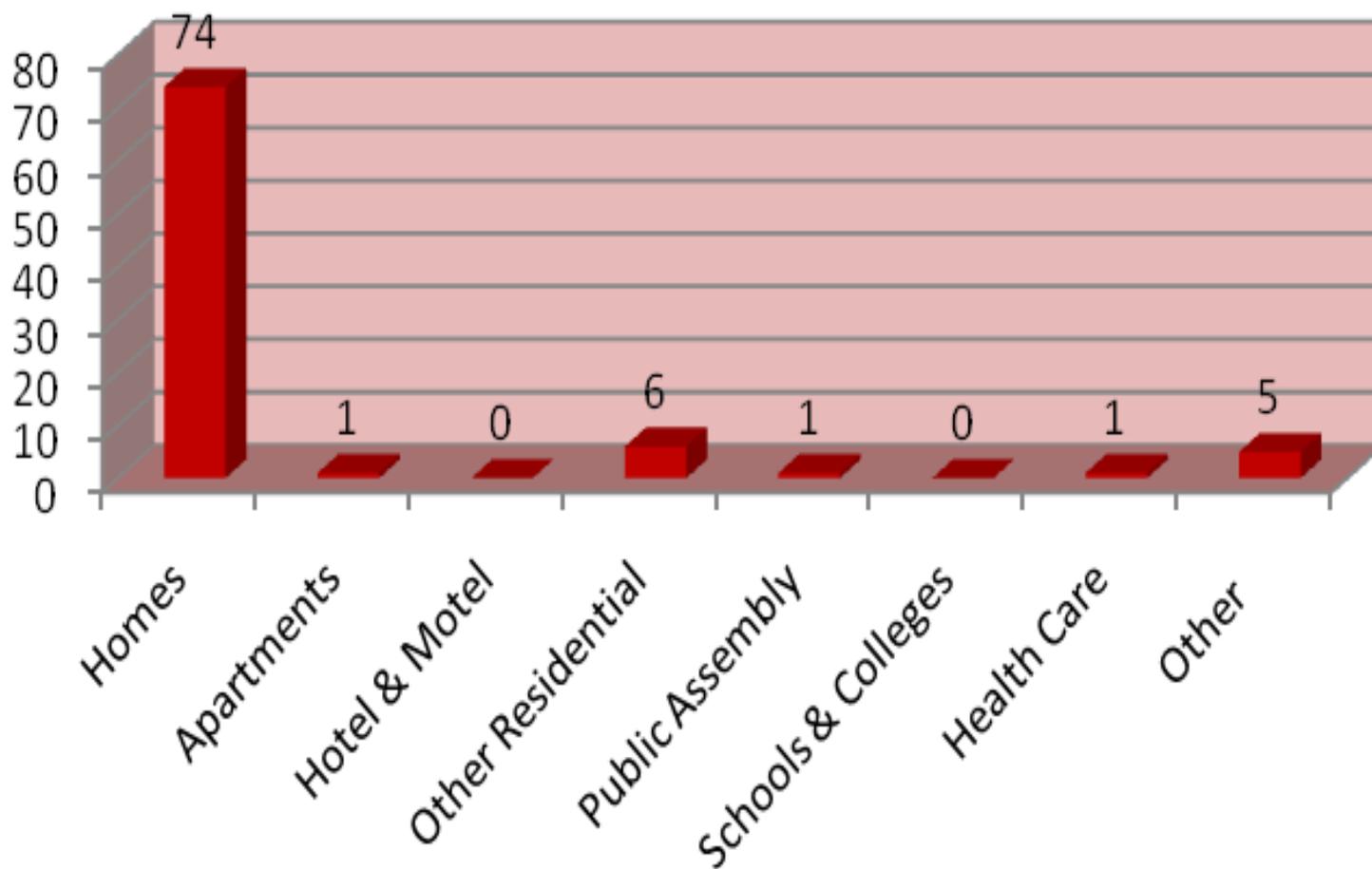


## **FIRE LOSS MANAGEMENT DIVISION**

In 2010 the community experienced a structural dollar loss of \$922,550 from 81 structural fires. Of these 81 structure fires, 4 were intentionally set resulting in \$49,500 in damage. We also responded to 33 vehicle fires resulting in \$198,800 in loss. Of these vehicle fires, 4 were arson resulting in a loss of \$27,200. Although our community continues to develop, our fire prevention efforts have been successful. During the past year, the Department has performed over 3,674 inspection activities. This includes existing and new businesses, schools, and government facilities. Violations, both large and small have been corrected through these inspections. The cooperation of local business owners and residents makes this program a great success. As part of our inspection program, we have been working closely with the Building Department on plans review for new construction. Fire Loss staff completed 48 plans reviews for new construction totaling 110,623 sq. ft.

During the past year, we have seen the completion of several new commercial buildings as the commercial property continues to develop. These include: Top Shelf Car Wash, Family Dollar (Elkcam Blvd.) a new building at Sunrise Elementary School and a new building at Pine Ridge High School. Staff has also been involved in the renovation or build-out of 13 separate occupancies. The need for inspection programs increases as the commercial base continues to grow. By being actively involved in new construction projects, we have identified the need for 8 new hydrants. These hydrants were installed at no cost to the City as part of the development process. Inspectors, working with internal departments and Volusia County have also been able to strategically place another 8 hydrants as part of other governmental projects such as Thornby Park, various utility projects and the DeBary Avenue bypass. Twenty-five hydrants have been replaced due to damage, age or related maintenance and an additional 7 new hydrants were installed in residential areas. Active prevention programs reduce operating costs, save lives and keep the business community on the tax rolls.

# Structure Fire Types



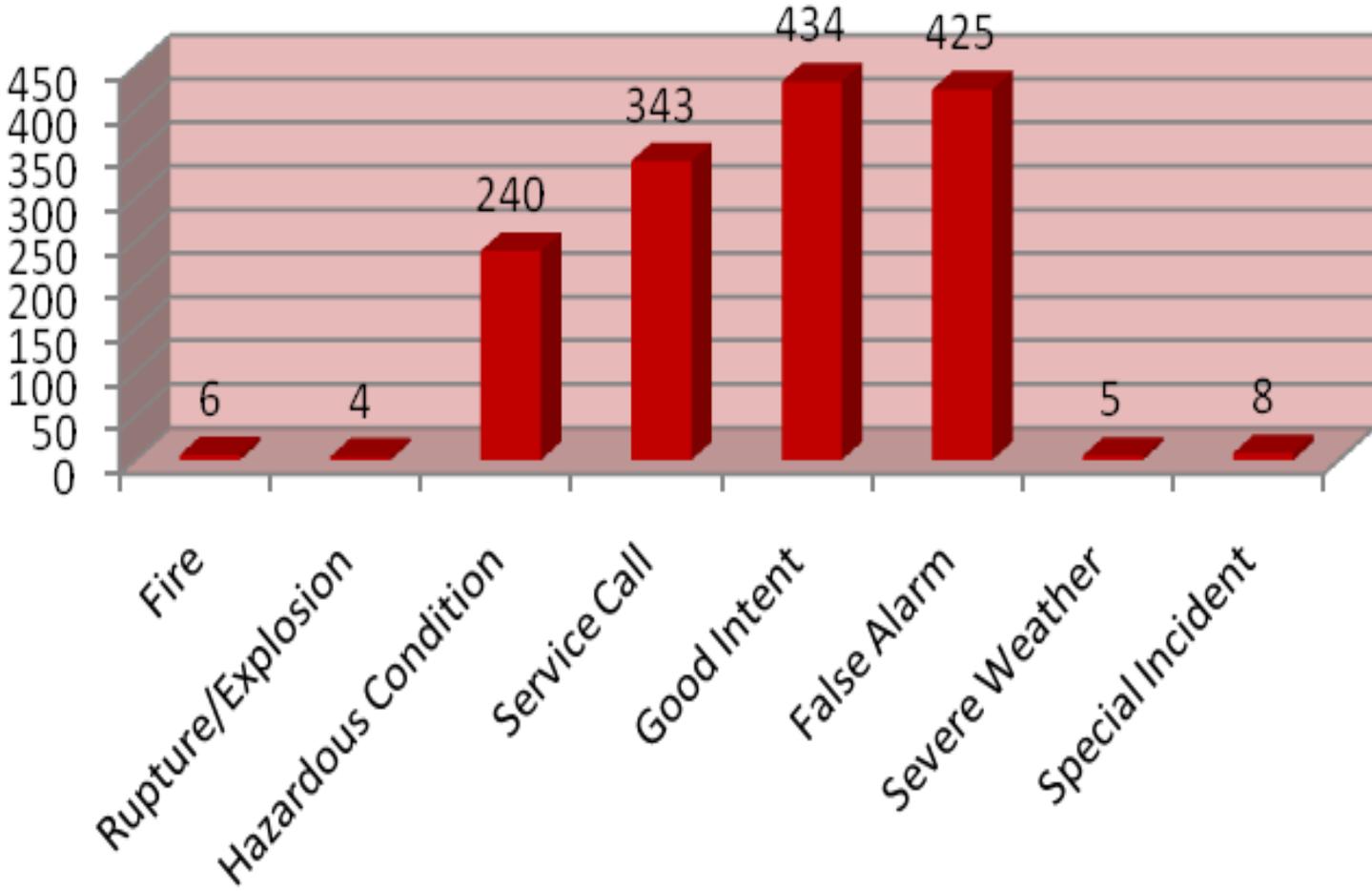
# **PERSONNEL NEEDED AND THEIR ROLE IN FIGHTING A "TYPICAL" RESIDENTIAL STRUCTURE FIRE**

Recently, the National Institute for Standards and Technology (NIST) performed research to determine the effectiveness of 2, 3, 4 and 5 person firefighting crews. It was of no surprise that crews consisting of 4 or 5 firefighters could more quickly and effectively mitigate a typical structure fire. What the study did determine is that a crew of 3 firefighters was 25% more effective at combating a fire and achieving all of the benchmarks required to safely mitigate a house fire.

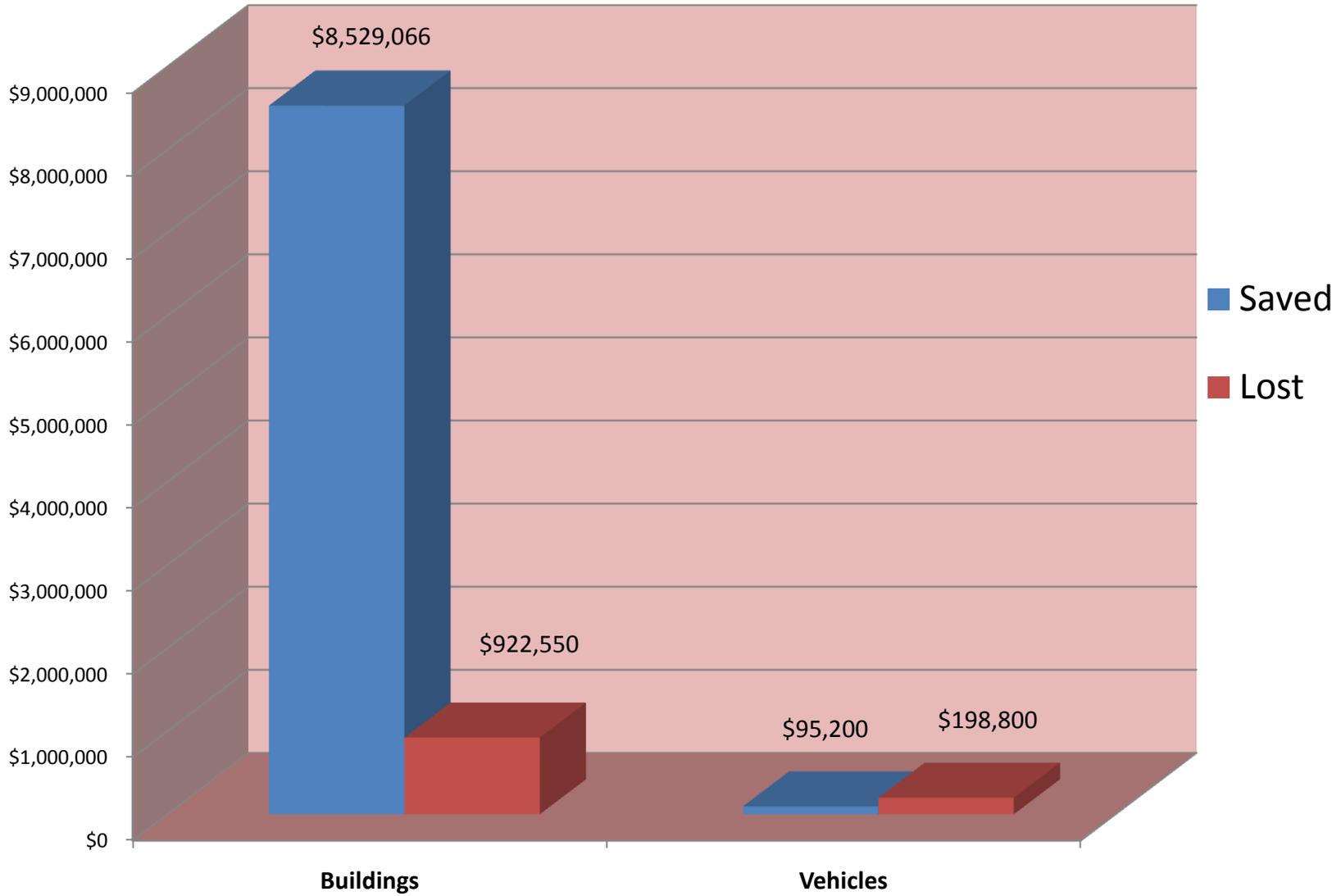
As part of this research project, NIST outlined the required tasks performed on the fireground and the minimum number of persons to complete these tasks safely and in a timely fashion. These results, combined with the long standing recommended requirements by the National Fire Protection Agency (NFPA) 1710, Florida Statute 633.821 and Florida Administrative Code 69A-62.003 provides the template below of the minimum number of firefighters necessary assemble on a scene within 10 minutes to fight a fire, reduce loss of property and lives.

<b>FUNCTION</b>	<b># OF PERSONS</b>
INITIAL ATTACK LINE	2
SEARCH AND RESCUE FOR VICTIMS AND ANIMALS	2
BACK-UP LINE	2
VENTILLATION, SECURITY OF UTILITIES, LADDER PLACEMENT	1-2
RAPID INTERVENTION TEAM (RIT)	2
WATER SUPPLY	1
FIRE PUMP OPERATOR	1
INCIDENT COMMAND, CONTROL AND ACCOUNTABILITY OF PERSONNEL	1
SAFETY OFFICER	1
<b>TOTAL MINIMUM NUMBER OF PERSONS REQUIRED</b>	<b>13-14</b>

# Fire Related Alarms



### Dollars Saved vs. Dollars Lost



## PUBLIC EDUCATION



In 2010 the Public Education Division reached out to over 10,000 adults and children educating them on the importance of fire and life safety practices. Department members conducted 100 programs of various types, covering over a dozen different program topics; helping to ensure the safety of our citizens. Proper fire and life safety behaviors are offered to audiences ranging from pre-school children to senior citizens. Members also spent nearly 900 hours actively participating in various community events. Our goal is to teach or change improper behaviors of adults and children which result in fires and injuries. This is the best way to control a fire or any life-threatening emergency and prevent it from occurring.

Listed below are examples of programs we provide and/or participate in:

Baby Sitter Safety Training  
Child Safety Seat Checks  
Fire Extinguishers  
Safe Kids/Safe Place  
Mock DUI Demonstration

Bike Rodeos  
Apparatus Displays  
Honor & Color Guards  
Smoke Detectors

Blood Pressure Checks  
Parades, Festivals & Carnivals  
Newborn Safe Haven  
Fire & Life Safety

CPR & First Aid  
Disaster Preparedness  
Juvenile Fire Setter  
Career Presentations

Each year we host a Fire Department Open House and Public Safety Day. This community event is held in conjunction with Fire Prevention Week in October. The 27<sup>th</sup> annual Public Safety Day will be held October 2<sup>nd</sup>. Hours are 11:00 am to 3:00 pm.

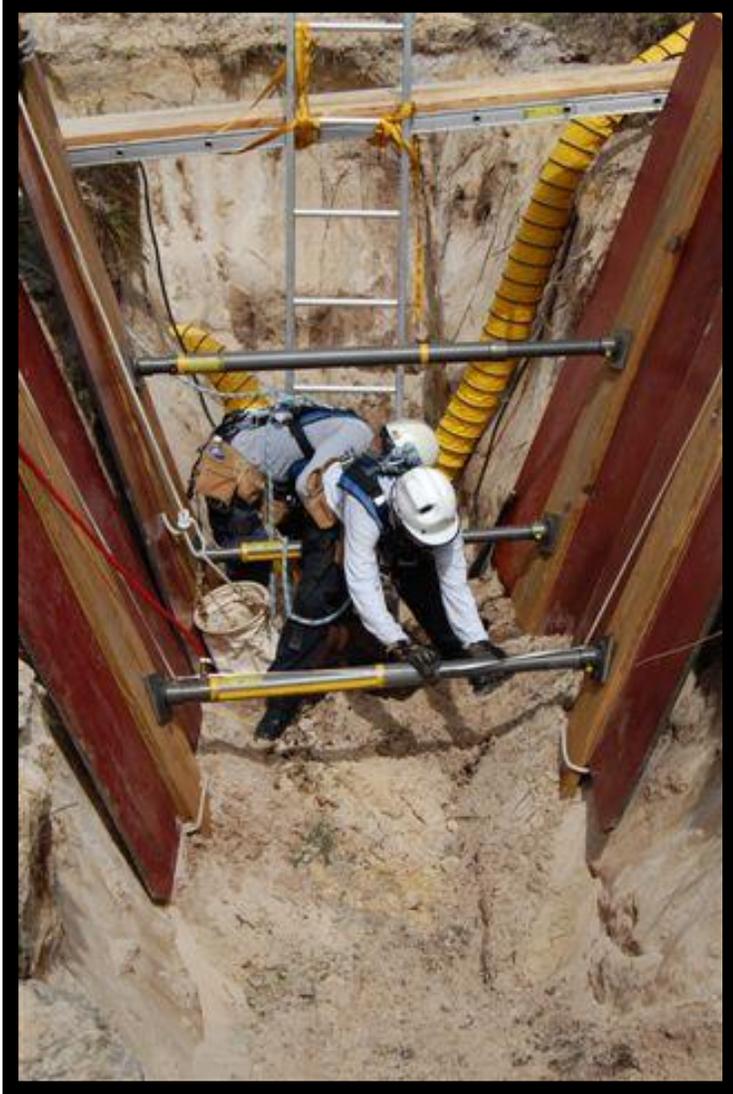
## TRAINING and SAFETY DIVISION



The Training and Safety Division's role is to provide a more focused effort to ensure competencies are met and that the department complies with specific local, state and federal training and safety mandates. The Division has already paid dividends in that we have developed an annual training calendar and conduct several training sessions annually. The Division was able to continue sharpening the skills of our personnel with the continued use of the FlameSim simulator. We have seen a marked improvement in the decision making, command and tactical skills of our personnel

that are being placed in command roles. The Training Division has made it a mission to make this fire department a organization that our Fire Chief, citizens, surrounding communities and elected officials will say "I'm proud to be a part of that organization". There were approximately 23,410 hours of fire-based continuing education training were completed by department personnel. This is an average of over 278 hours per person. The Special Operations Team has accumulated multiple hours of training by conducting training one week per month and coming together as a team for quarterly drills.





Partnering with our neighbors, the department has offered a variety of training opportunities to build teamwork and inter-agency operability on the fire ground. The Training and Safety Division continues to provide additional opportunities for “hands-on” practical training and has focused on expanding our fire explorer program. In order to develop our personnel to advance in their careers and function in multiple roles, the division evaluates and clears new employees and those wishing to advance to the next level in their careers. 2010 began the probationary process for three new employees; these employees should be cleared from their probationary status in early to middle 2011.

The Fire Explorers participated in several community service events that accounted for many contact hours with the citizens of Deltona and the surrounding communities. The Explorers have also completed several hours of training including EMS, fire and Honor Guard drills.

## EMERGENCY MEDICAL SERVICES DIVISION



The EMS Division began 2010 with a 12 Lead EKG training class for all personnel. This was not only a great review for our paramedics but gave some information to the EMT's that could be used as well. The department also toured the hyperbaric chamber and wound care center to understand the potential hazards they may face if responding to a medical call at that facility. Target Safety, our new training platform continued to offer fire and EMS training on demand and online allowing crews to remain in their first-due services area for a majority of their required training. This system also provides an easier method to track all of the

certifications and required CEU hours. 2010 was a renewal year for all EMT's and paramedics and the EMS Division was instrumental in organizing the appropriate information for that recertification.

As part of our effort to ensure firefighter safety and health, we continued the thorough physical evaluation of our employees including an ultra sound scanning of internal organs with immediately available results. Seasonal flu shots were again offered this year. Approximately 245 shots were provided this year. This resulted in revenue of over \$1,500 for the city. Additionally, we were able to provide fire department personnel and other city employees with the vaccination at no cost. The Hepatitis A series was started and available to those employees that were interested.





The EMS Division renewed several required certifications including the Advanced Life Support Service License and the Certificate of Public Convenience and Necessity. Negotiations continue with Volusia County to secure an agreement to provide contingency transport when EVAC Ambulance is either delayed or unable to respond.

Public education in emergency medical services has always been a priority of the division. In 2010 we offered 22 CPR classes consisting of CPR Pro for the Professional Rescuer, CPR for the Community and Workplace, and the appropriate recertification courses on a rotating basis throughout the year. We taught approximately 165 students CPR during 2010, this included Fire Explorers and CERT members. Sixty-seven persons received Basic First Aid training. Certified car safety seat

technicians installed and inspected 82 car seats in 2010. We continued to provide medical stand-by coverage for the high school football games. This resulted in over \$3,000 revenue for the city.

Deltona High School Health Academy students participated in our annual open house, and we assisted in providing classes at one high school on splinting and how to place a patient on a long back board and educated students on blood borne pathogens and patient privacy procedures and practices. Deltona Fire Department also participated in a practical First Responder exam held at one of the local high schools. High school students and Daytona State College EMT and Paramedic programs participated in ride a-longs as part of their curriculum.

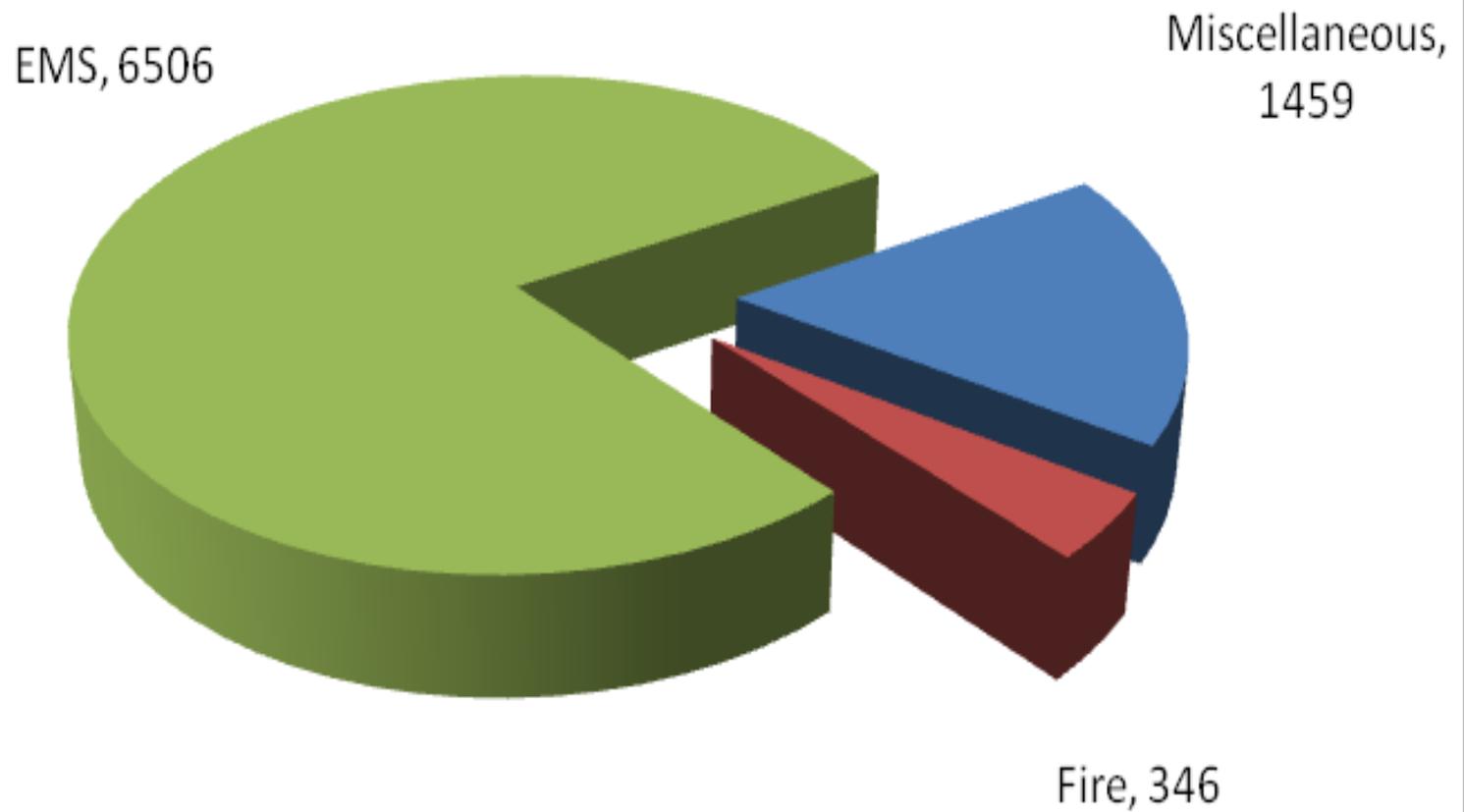
The department's EMS Bike Team provided coverage at the city's Halloween Spooktacular, Easter, and Fourth of July celebrations. The ALS (Advanced Life Support) bike team is made up of 16 members and is an invaluable asset to our department.

EMS training is constantly provided and included many different topics. Training in 2010 included report writing, EZ IO (intraosseous), and PEPP (pediatric education for prehospital professionals) to name a few.

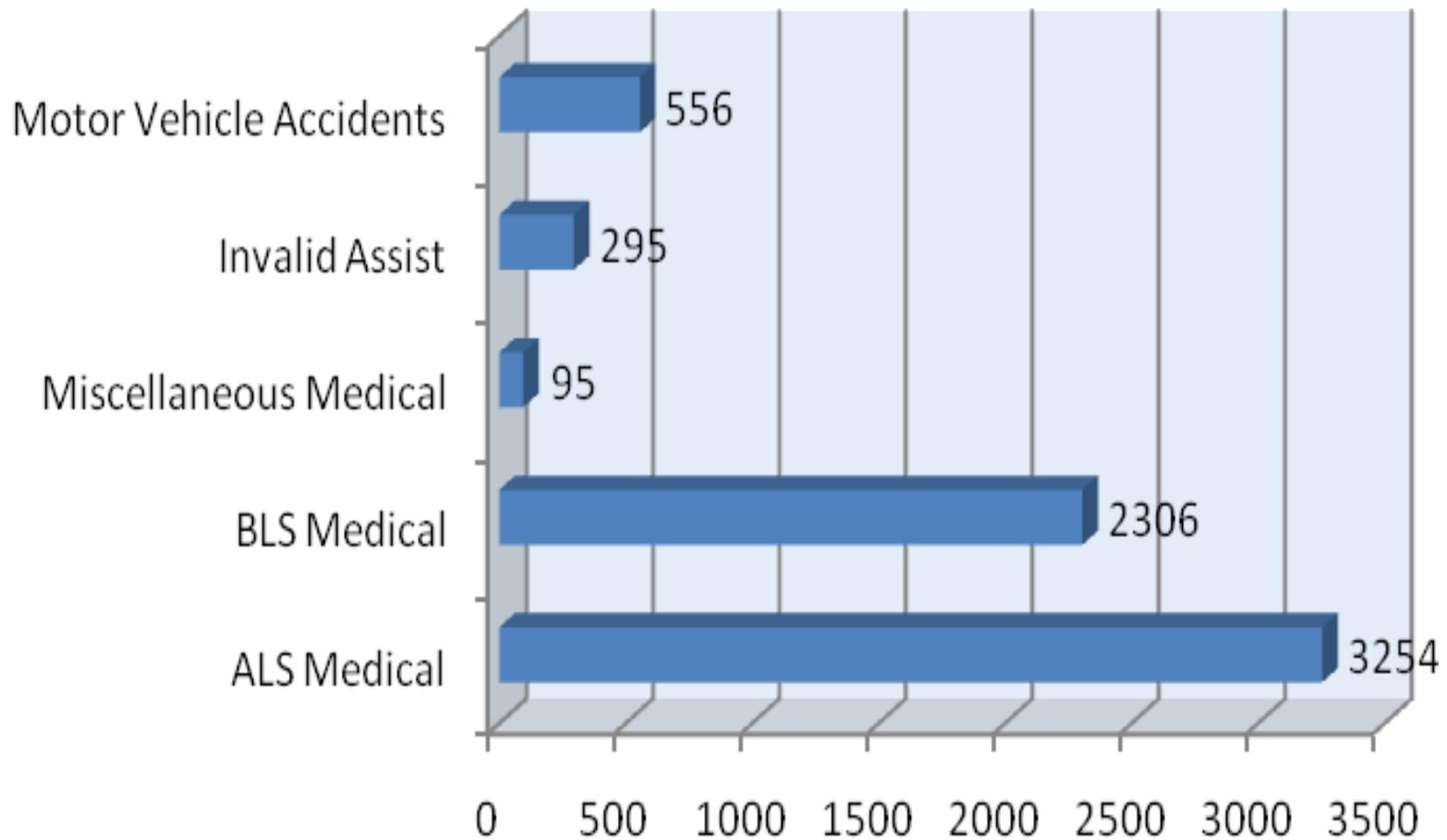
The EMS Division has completed EMS orientation for three new employees and has cleared two new paramedics that will act as lead paramedics for our agency in 2010.

The biggest accomplishment of 2010 has to be the award of a state Department of Health matching EMS grant. The department was able to secure 10 state-of-the-art cardiac monitors (Life Pack 15s). These cardiac monitors offer the latest in technology and provide the ability to obtain information that we have not been able to previously capture. We have put them on all units and have already had patients benefit from the carbon monoxide detection feature.

# Types of Alarms



# EMS Alarm Summary



## COMMUNICATIONS DIVISION



The City of Deltona Communications Division is the vital link between our citizens and several of the services provided by the City. These services include both emergency and non-emergency services such as Fire & Rescue Operations, Fire Administration, Code Enforcement, Animal Control, Deltona Water, Public Works and Fleet Maintenance. Our personnel utilize several different mediums to receive and send information including; analogue, digital, wireless and voice over internet protocol telephone lines, Enhanced 9-1-1, 800Mhz and VHF radio systems and Alpha-numeric paging systems.

The Center is staffed with 2-3 personnel, 24-hours a day and answers 13,000 9-1-1 calls and 45,000 non-emergency citywide requests for service annually. Our Telecommunicators are all professionally credentialed. These professional certifications include the Association of Public-Safety Communication Officials (APCO) Public Safety Telecommunicator, Emergency Medical Dispatch and Fire Service

Communications.

The City of Deltona Communications Center is one of four Public Safety Answering Points in Volusia County. Being a Public Safety Answering Point allows us to receive calls for fire, medical and rescue emergencies. This includes providing contract services for the cities of Orange City and DeBary. Calls are also processed for Animal Control, Code Enforcement and after-hours call center services for Public Works, Deltona Water and other city departments. Emergency service calls are received primarily by an Enhanced 9-1-1 system and then emergency services are dispatched by our personnel utilizing a Computerized Aided Dispatch system. Over 11,000 fire & rescue emergency 9-1-1 alarms were dispatched in 2010 for the Cities of Deltona, Orange City and DeBary.

Approximately ten thousand animal enforcement calls for service or direction were received & over five-thousand reports of service were generated by Animal Control.

Over fifty-thousand times a year we utilize highly trained personnel and state of the art communications technology and equipment to receive, reach out, touch and communicate with all city departments and the Citizens of Southwest Volusia County.

The consolidation of the 9-1-1 Communications Division with the countywide communications center under the jurisdiction of the Volusia County Sheriff's Office will provide a streamlined approach in 9-1-1 communications. With this merger, the department will gain several enhancements including: a state-of-the-art Computer-Aided Dispatch (CAD) system, better inter-operability between Deltona, VCSO, surrounding fire departments and EVAC Ambulance and the introduction of GPS, Automatic Vehicle Location (AVL) and Mobile Data Terminals (MDT) for the transfer of mission-critical information including for dispatch of the closest, appropriate unit while enhancing the safety of all personnel.



## **EMERGENCY MANAGEMENT**

The Fire Department serves as the coordinator and focal point for the City of Deltona Emergency Management functions. It is through this area that we ensure that our residents are provided information and direction through a cooperative relationship with Volusia County Emergency Management and the State of Florida Division of Emergency Management. The City's Comprehensive Emergency Management Plan (CEMP), originally written and approved in 1998, was revised in 2007. The formal shelter process for any needed evacuations has been updated and incorporates a Bi-lingual informational and directional process complete with maps. To date, our two high schools, Deltona High and Pine Ridge High serve as Shelter Information Points (SIP), while guiding residents and out of town evacuees through a controlled distribution point to our 12 elementary and middle schools that are used as shelters. When the need arises Volusia County Emergency Management in coordination with Volusia County School Board personnel and the American Red Cross personnel activate and open the shelters. Sheriff's Department COP's operate the SIP guiding evacuees to the appropriate shelter.

Our Department continues to provide annual training to our members in the area of Emergency Management. All members of our Department were reintroduced to the plan, the Emergency Operations Center (EOC) and how each city department fits into the process. In May 2010 City Liaison Representatives received training on the VCEM E-Team software. Additionally, city staff members participated in an EOC table top drill activating most of the EOC positions. Through the National Incident Management System (NIMS) Emergency Support Function (ESF) format, the City of Deltona EOC coordinates all activities within the City and with the County EOC. If additional resources are required beyond the County level, the State EOC would be notified.

The City of Deltona's Continuity of Operations Plan (COOP) developed in 2005 details how the City will continue to operate should we experience a major loss of critical facilities, such as City Hall, Public Works, Communications, or Fire or Police Administrative offices. During 2010 staff worked with VCEM and other City EM personnel to update the Local Mitigation Strategy. This 5 year update was completed and submitted to the State of Florida and FEMA for approval. Final revisions were made and the plan was approved February 2010.

On June 24, 2010 in cooperation with the Deltona Regional Chamber, we held a Hurricane Readiness and Recovery Program Workshop at the Deltona Women's Club. This workshop provided residents with an opportunity to learn or perhaps re-learn valuable tips to get their business and home ready for hurricane season. It is imperative to get business up and running when the winds die down because our employees and customers are counting on us. Speakers included Deputy Fire Chief Bob Rogers, FEMA representative Joyce Malone, Florida Division of Emergency Management External Affairs Director John Cherry, Florida SBA Deputy District Director Ralph Ross, City of Deltona Building Official Cy Butts, DM White Insurance Agency and John Brandt of John's Roofing.

The 2010 Atlantic hurricane season was very active with 19 named storms, 12 hurricanes and 5 (Cat. 3+) major hurricanes in the Atlantic Basin. The season officially started on June 1 and ended on November 30. These dates conventionally delimit the period of each year when most tropical cyclones form in the Atlantic basin. Tropical Depression Alex our first storm of the season formed on June 25 in the Western Caribbean and moved west over the next week impacting Central America and Mexico. The last hurricane of the season, Thomas, dissipated on November 7, 2010.

While the United States had no land falling hurricanes during the 2010 Hurricane Season, the season was in fact active overall with nearly twice the average number of storms. The statistical average for the Atlantic Basin is approximately 10 named storms with 6 of them becoming hurricanes (2 being major hurricanes).

## CONCLUSION

The City of Deltona Fire Department is a proactive organization that strives to provide effective and efficient services to our growing community. Responding with the appropriate services to the needs of our community is a necessity and a responsibility. Providing our residents and visitors with education and information on fire safety, injury prevention, emergency preparedness and first aid assists in accomplishing our mission in being the best provider of services within our community.

The dedicated men and women of the City of Deltona Fire Department are an important key to our success. It is through their enthusiasm and endless efforts that we can continue to maintain a proactive stance, move forward and develop new and innovative approaches to service delivery in our community.

### *Our Mission...*

*To contribute to maintaining and improving the quality of life of the community we serve by providing proactive community education and preventative measures, emergency services, and communications.*