

City of Madison Fire Department

2011 ANNUAL REPORT



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A MESSAGE FROM FIRE CHIEF STEVEN A. DAVIS

Significant changes occurred within the Madison Fire Department during 2011. The most significant of those changes was the announcement in June of the pending retirement of Fire Chief Debra Amesqua. The announcement came as a shock for most; however, Chief Amesqua said that was always her plan; that with her 60th birthday she was ready to retire. Chief Amesqua started with the Madison Fire Department in 1996. She was the first female fire chief in the State of Wisconsin and, at the time, one of only seven female chiefs in the country. During Chief Amesqua's tenure, the Department grew to meet the needs of the rapidly expanding City of Madison, opening two new stations (in 2005 and 2009), and moving a third to a new location.

Filling Chief Amesqua's position was a daunting task, and ultimately the Police and Fire Commission hired me to fill the role. I would like to extend my special thanks to that group. The confidence and trust the PFC has invested in me is very humbling. The fundamental premise for the organization will be to *lead* people within the organization and community and *manage* resources. Leadership styles vary; however, the most important concept is that we "do the right thing" for people at all levels.

We have excellent people in place for the Department to become a true leader in the City of Madison, and we look to be a strong leader in Dane County as well. With focus of leadership staying local, recognition may come to the organization on a much larger scale.

The future brings many growth opportunities for the Fire Department. As the City of Madison expands, the Department must expand to meet the continually changing needs. The future brings expansion of service delivery with the goal of adding Fire Station 13. The station is in the design phase and the Department will look to construct the facility sometime in the year 2013. The future also looks bright for organizational development. The Department will look to develop our employees with progressive mentoring programs, cultural awareness, and community involvement. At the same time, we will continue to develop our operating standards, experiences, and equipment.

Madison Fire Department has often been compared to a family. The family is only as strong as the leaders holding it together. I am committed to this family and will work endlessly to ensure that the head of the family is at the table at all times. My commitment to the people of this great organization and the fine citizens of our community will never waver. I eagerly anticipate the future that lies ahead for us and the City of Madison as a whole.

As we grow within the community, I see unlimited potential in many areas. This is truly an exciting time for the Madison Fire Department. I look forward to leading the people within this organization and serving our community for many years.



SERVICES PROVIDED

2011 Activity for the Madison Fire Department

Structure Fire	260
Mobile Property Fire	74
Fire Other	145
Over Pressure/Rupture	69
EMS	19,698
Rescue	204
HURT	6
Lake Rescue	31
Haz Condition	372
Haz Mat	410
Service	877
Good Intent	527
False Alarm	2,422
Weather	2
Special	82
Others	19
TOTAL	25,198

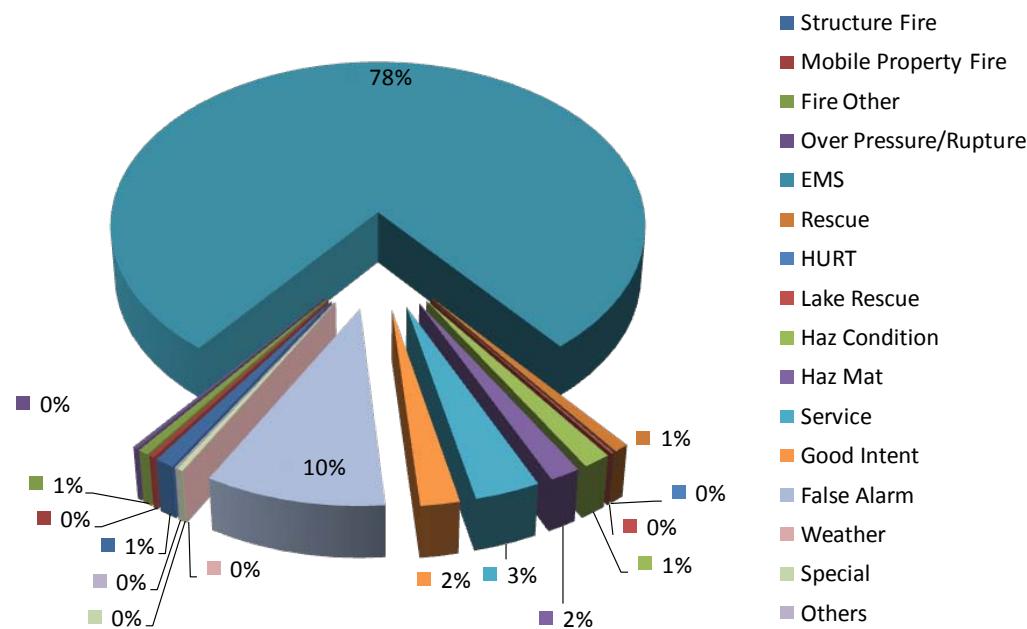
The Madison Fire Department currently operates out of 12 Fire Stations throughout the City with a staffing of 78 personnel on duty each day. There are 10 Engine companies, 5 Ladder companies, 8 Paramedic Units and 1 Command Vehicle in service every day to serve the citizens of and visitors to the City of Madison.

In 2011 the City of Madison Fire Department responded to 25,198 calls for service. The largest single type of call was Emergency Medical calls and they accounted for 19,698 of this total.

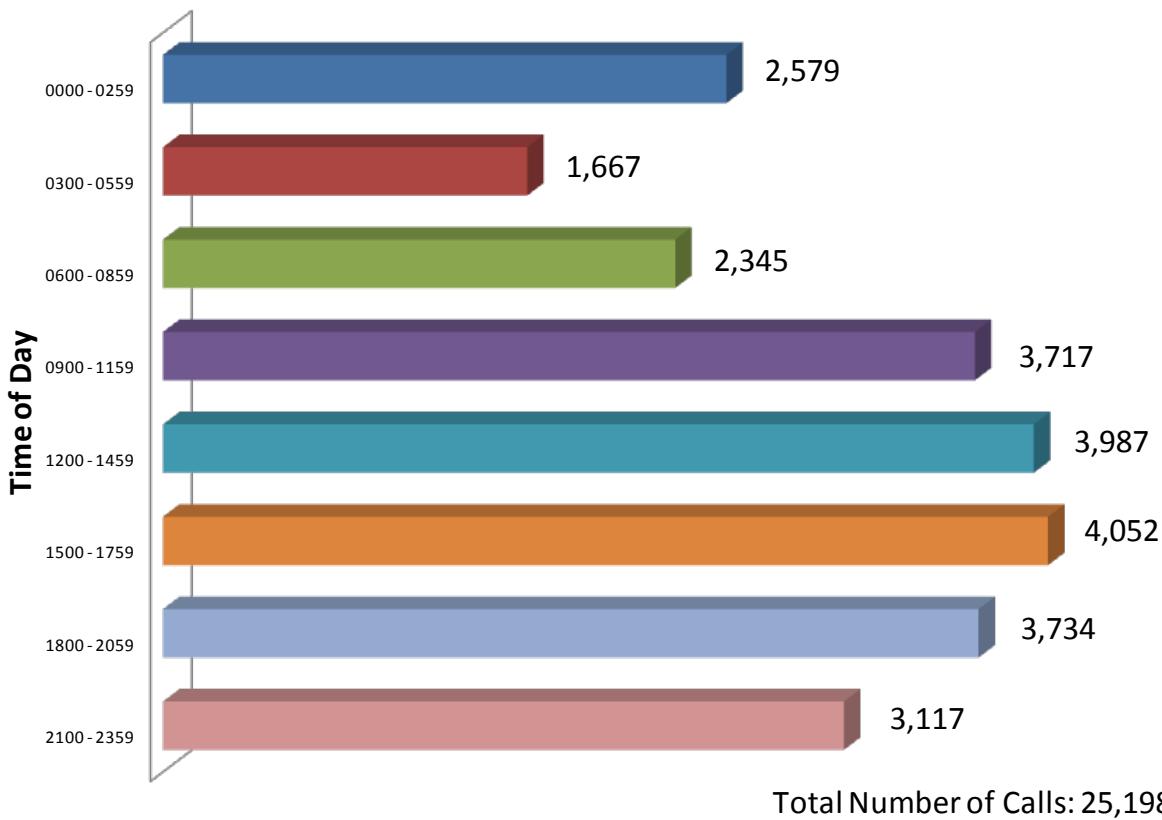
The Department continues to staff an extra Medic Unit at Station #4 on Monroe Street on UW home football game days. This Medic unit averaged 12 calls a day on the seven Saturday UW home football games. Even with the addition of the eighth Medic unit this extra unit is invaluable to maintain balanced coverage to the City of Madison during those high-demand event days.

The MFD developed and implemented contingency plans for a number of special events. These included the 2011 Budget Bill Protests at the State Capitol, the Mifflin Street Block Party, Madison Marathon, Rhythm and Booms, Ironman Triathlon, and Freakfest (the State Street Halloween program). These events required additional staffing by the command staff, firefighters, paramedics and TEMS medics. Through planning, experience, and cooperation with other agencies we are able to effectively manage the public safety concerns generated by these and other special events.

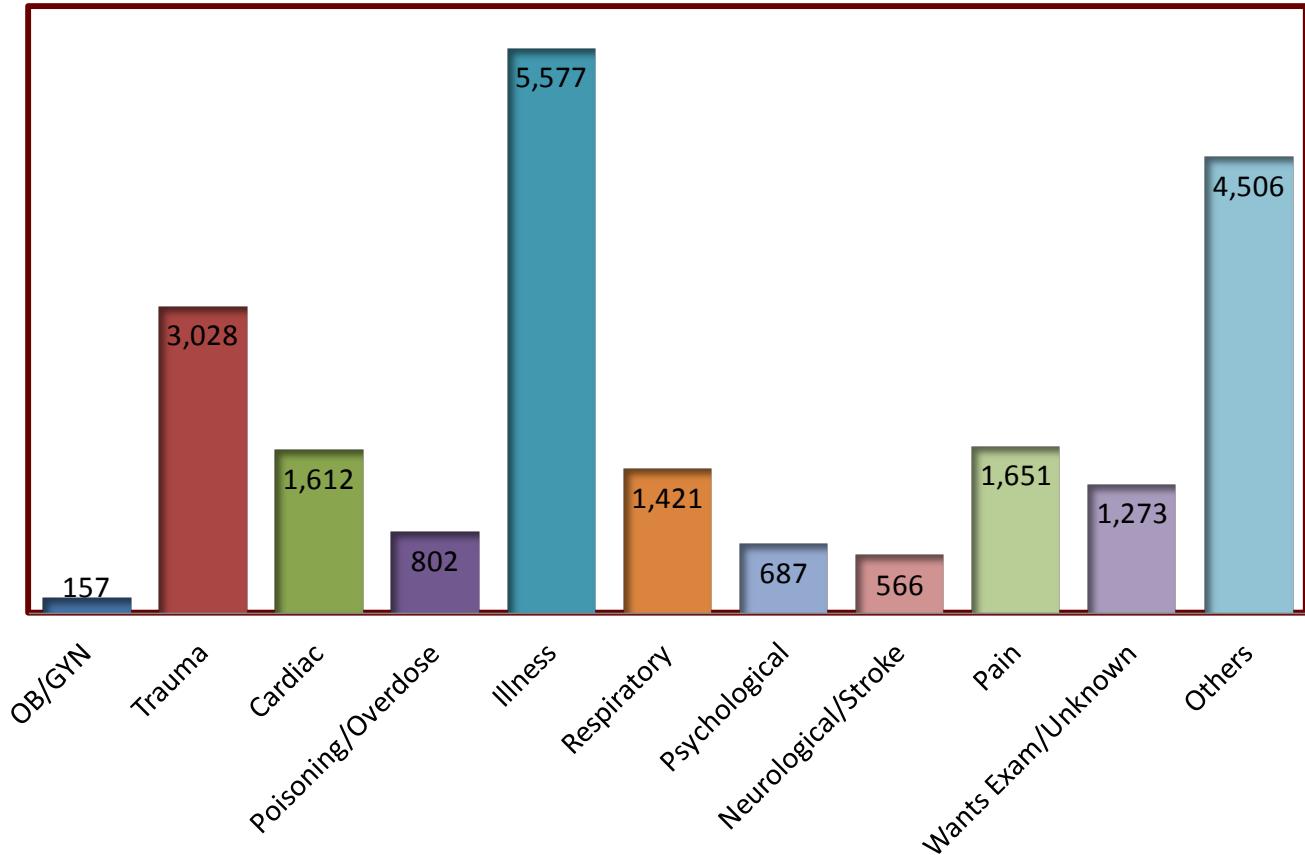
2011 Activity for the Madison Fire Department by Percentage



2011 Activity By Time of Day



2011 EMS Calls



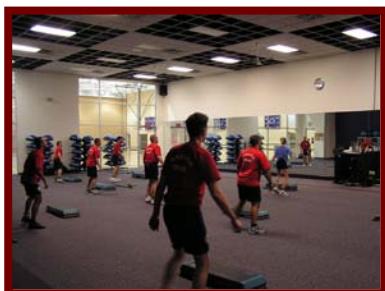
2011: THE YEAR IN REVIEW

- The City of Madison once again ended the calendar year with no fatalities related to fires. Since the end of 2007, the City has experienced only one fire death (in 2010). Research shows that a population the size of Madison's could expect about 2.5 fatalities per year, or about 7-8 over 3 years. Adding in the surge population from the University would likely mean an expectation of about 8-9 fatalities per year. With only one fire death in the last four years, the City of Madison remains safer than most cities its size.
- 2011 Hiring Process established an eligibility panel of 200 candidates. MFD froze the process before completion of the final interviews. This came as the result of changes in the expected number of firefighter positions that became available in 2011. We anticipate completing the hiring process in 2012 with a recruit academy starting in the fall of 2012.
- In 2011, MFD conducted Lieutenant, Division Chief, and Assistant Chief promotional processes.
- The Police and Fire Commission conducted a hiring process for the position of Fire Chief. Steven A. Davis was appointed Fire Chief on January 3, 2012.
- All fire companies were evaluated on NFPA Company standards. This evaluation ensures all companies have the skills to operate efficiently at fires.
- The MFD purchased two new ladder trucks, L-1 and L-7, and one remount medic unit.
- MFD front line Engines and Ladders were equipped with new high-rise kits.
- All MFD front line Engine Companies received A/E Water Supply kits.
- The Training Division was reorganized and the EMS Training Officers were assigned under the direction of the EMS Division Chief. Their office is now located at Fire Administration.
- Nine firefighters completed paramedic training and were activated in 2011. This was the 2nd paramedic class trained by Madison College. Two additional firefighters who were currently paramedics were also activated.
- A paramedic selection process was conducted for a fall class at Madison College. Six firefighters started training August 29th.
- MFD field-tested and evaluated new cardiac monitors for the MFD Medic units. Training will occur in early 2012.
- We also purchased 13 King Vision portable video laryngoscopes to assist paramedics with more accurate intubations while minimizing soft tissue manipulation.
- A total of 90 Paramedics completed their ACLS re-certification
- After years of planning and development, the UW Simulations Center opened. Four MFD medics were the first EMS providers to train at the simulation center.
- We developed and implemented a process to replace two openings on the TEMS team.
- In 2011, the Fire/Arson Investigation Division investigated 101 fires with an estimated dollar loss in excess of 6.2 million dollars. Twenty-four of those fires were determined to have been intentionally set. Investigations resulted in 5 arrests and 10 citations.
- The Fire/Arson Investigation Division successfully expanded its total personnel with the addition of a 4th full-time Fire/Arson Investigator in May 2011. This addition was necessary to respond to the increased demand and requirements of the Division.



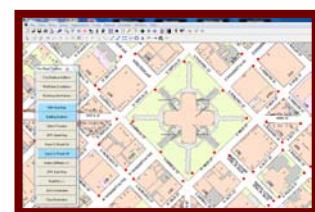
2011: THE YEAR IN REVIEW

- Annual medical exams were completed by Dean Health in 2011 based on NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments.
- As a result of the aforementioned hiring process freeze, there were no pre-employment medical exams in 2011. This medical exam is the most thorough process of all the medical services provided by Dean Health and is conducted over two days for new candidates.
- Flu vaccinations were offered to all MFD personnel in 2011. Approximately 175 flu shots were administered.
- The MFD Policy and Procedure Manual on Critical Incident Stress Management (CISM) and Employee Assistance Program (EAP) were updated.



- The Health and Wellness Committee continued to provide recipes for heart-healthy eating and other nutritional information needed to stay fit and healthy.
- New equipment introduced as part of the Health and Wellness program were power wheels and weighted jump ropes.
- The peer fitness trainers continued to assist their colleagues by developing personalized fitness programs, offering workout advice and answering fitness-related questions.

- Fire Stations #2, 3, and 8 received replacement treadmills in 2011. With those, we have now replaced the last of the first generation of treadmills purchased by the MFD.
- Recruitment Team continues to work on increasing the awareness of opportunities offered within the Madison Fire Department toward a goal of increasing firefighter diversity.
- MFD continued to develop the GTViewer mapping software. The software enables field personnel to identify routes to emergencies, locate hydrants, identify special hazards at specific locations, and determine water main sizes for sufficient supply at fires.
- MFD is in the process of testing a new system of receiving mobile data for our fire vehicles using WiFi cards and hotspots.



- The Training Division continued to take tactical scenarios and topics and put them into half-hour presentations via poly-com.
- Developed Combat Ready Drills based on National Standards with emphasis on firefighter safety and survival. The drills were videotaped and then shown to Company Officers as feedback.
- Developed Standard Operating Guidelines for fire response operations, HURT, SCUBA, and administrative tasks.
- Developed and implemented an Apparatus Engineer

Program which established 62 engine and 18 aerial acting drivers.

- Developed a Safety and Survival Week program which included fire company drills. This program was then implemented via poly-com. The Training Division is in the process of developing the 2012 program titled "Rules You Can Live By".
- Continued Officer Training and Development focusing on tactical size-ups, incident management, and situational awareness.
- Conducted a Fire Operations Exercise for UW ER Residents. This gave ER residents exposure to basic firefighting activities.

IMMEDIATE FUTURE PLANS

- Design Station #13 on the far east side for planned opening in 2013.
- Design and remodel Fire Station #2.
- Update Department Operational Guidelines.
- Replace the TxMessenger system with VisiNet Mobile to match the capabilities of our new CAD system.
- Deliver trench collapse course to 10 future HURT members.
- Complete a building collapse table top and functional exercise in 2012 with UWEM, DCEM, and surrounding fire departments, to test interoperability and coordination of various emergency response entities.
- Improve fire investigative capabilities and professional development for the betterment of the Department and the citizens of Madison.
- Coordinate the evaluation of Personal Performance Standards for all commissioned personnel.
- Have all MFD Paramedics train at the UW Simulation Center by July 1st.
- Revamp the Fire Recruit Academy Program and application for the hiring process in 2012.
- The Health and Wellness Committee continued its Recruit Academy Fitness Program and the focus is to revamp the program to a system of functional exercises that challenge and develop core strength for the unbalanced platform in which we work. Members of the Committee are studying the benefits of the program, not only in terms of the fitness level of the recruits, but also in terms of stress relief, injury prevention, flexibility and team building, to name a few.



LONG-TERM PLANS

- Design and integrate a new Fire/EMS reporting system.
- Develop an inventory control/accountability program.
- Have all TEMS members attend a formalized training program.

- Improve operations between MPD SWAT and MFD TEMS.
- Continue to maintain a strong working relationship between the Fire/Arson Investigation Division and the Madison Police Department, Dane County District Attorney's Office, the Dane County Coroner's Office, the WI Department of Justice – Division of Criminal Investigation, the Bureau of Alcohol, Tobacco, Firearms and Explosives, and surrounding fire and law enforcement agencies within Dane County. These agencies have participated in joint training opportunities with our MFD's Fire/Arson Division which reinforces its working relationship.
- Develop in-service training between Dane County Social Services and MFD Field personnel.
- Revise the Acting Officer Program based on feedback and changes to the industry.
- Development of Internal Program Experts.
- Continue to explore regionalization opportunities.

NEW INITIATIVES

- Provide a safer community through the identification of product failures, by educating the public of fire causes to prevent future fires, and by apprehending and prosecuting people responsible for incendiary fires.
- Expand safety education and prevention messages to include household safety and injury prevention.
- Convene a "hoarding summit" to explore necessity of a hoarding task force.
- Careless cooking mitigation.
- False alarm mitigation.
- Implement a new records management system.
- Implement a new computer-aided dispatch system.
- Institutionalize inspection training for stations.
- Implement inspection quality control program.
- Community Safety Center.
- Inspector on-call proposal.
- Develop and implement a training for tavern operators.
- Develop an automated reporting system for fire sprinkler and fire alarm testing results.
- On-line system for contractors to report fire system testing prior to testing.
- Expand elevator rescue training for Firefighters and Paramedics to include multiple training videos which will be provided online for MFD personnel.



2011 GRANT AWARDS



Staffing for Adequate Fire and Emergency Response (SAFER) was awarded to MFD in 2008 to increase staffing by 18 personnel. A total of \$1.9 million over 5 years will be awarded. This grant was used to add an additional ladder at Station 7, thus improving fire and EMS response.



The Department's Hazardous Materials Team received \$8,800 for equipment and items related to Dane County responses through the Emergency Planning and Community Right-to-Know Act (EPCRA) grant.

In September 2011, the Department applied for the Assistance to Firefighters Grant (AFG). MFD was awarded \$326,400 for 64 new SCBAs with facepiece and bottles and \$72,000 for sprinkler installation at an existing firehouse.

The Department applied for a grant through the AFG for the purchase of a new ambulance in September 2011. This grant was not awarded.

Through the WI Office of Justice Assistance (OJA), the Madison Fire Department Hazmat team will receive training funds of up to \$2,000 to participate in a full-scale hazardous materials exercise in 2012. Other grants awarded through OJA include funding for the Heavy Urban Rescue Team (HURT) to perform a tabletop and functional collapse exercise and a \$22,988 WISCOM grant for communication equipment upgrades.

MFD received a grant from the Office of Justice Assistance (through Homeland Security) to participate in a patient tracking pilot project. We were awarded \$12,500 for hardware and software products for the program. Training is ongoing into 2012.



SPECIAL TEAMS

In 2011, the Hazardous Materials Team completed over 400 hours of training including department-wide EMT Weapons of Mass Destruction (WMD) training. Other training and outreach included mutual operations training with Truax airport personnel, Safety Clean of Madison, Dane County Sheriff's Office, and presentations for Dane County Police Chiefs and the Governor's Conference in Middleton.

The Hazardous Materials Team responded to 94 HazMat incidents. These included calls ranging from CO alarms to an ammonia leak and other chemical spills.

In the last quarter of 2011, the Hazardous Materials Team began preparing for a biological response exercise. This exercise will involve participants from the MFD, Madison Police, Dane County Health Department, mutual aid fire departments, and other county and federal agencies. The Hazardous Materials Team also began preparing for taking on the added responsibility of mass decontamination for the County. The Team began working with other stakeholders to assure minimal disruption to this program. Development of a training schedule for MFD and County departments in the areas of Mass Decontamination, hazardous materials awareness, and operations is on-going.

MFD relocated the Hazardous Materials Team in 2011 from Fire Station #6 to Station #7. This move allows more of the 69 members to be housed in the same physical location which will aid in training and response.

In 2011, MFD also relocated the HURT (Heavy Urban Rescue Team) from Station #4 to Station #8.

Ten future HURT members participated in a Ropes Rescue Course.

The Rapid Intervention Team (RIT) conducted a number of drills including a May Day drill at the Langdon Towers, lost firefighter survival drills, safety engine responsibilities, and moving down firefighters.

In 2011, the Lake Rescue Team responded to 31 scuba calls. The Lake Rescue team participated in the Polar Plunge, Triathlons, and crew meets.



FIRE PREVENTION

The Fire Department works to prevent injuries and deaths by applying the principles of education, engineering, and enforcement. The fire prevention system utilized by the department includes activities by all personnel. Firefighters and personnel assigned to the Fire Prevention Division work side-by-side to conduct inspections and fire safety education programs. Staff conduct inspections to elevators to ensure the devices are safe. The all inclusive "systems" approach has contributed to a reduction in fire deaths and improved public safety.

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Other important data include:

- 33,773 inspections
- 15,000+ residents participated in safety education programs
- \$1,959,276 gross revenues



The **Community Education** Unit reaches out to residents through educational programming. The emphasis is on children and older adults, both at higher risk for fire-related injuries and fatalities.

In 2011, Community Education Unit presented to more than 15,000 men, women, and children in schools, workplaces, residential facilities, and community organizations.

This includes the following subcategories:

- Fire Extinguisher Training: 445
- Falls Prevention for Older Adults: 188
- Car Seat Checks: 492, with 223 seats provided in partnership with Safe Kids.
- Safety Town: 144 children



The Community Education Unit schedules and coordinates Station visits. Stations reported a total of 1,408 people visiting City firehouses in 2011.

New curriculum developed and delivered in 2011:

1. **The Use of 911 – Anatomy of a 911 Call** is co-presented with paramedics and Communications Center personnel. Comm Ed created this curriculum to demystify the process and help citizens understand the system of emergency response that begins when a 911 call is initiated.
2. **Careless Cooking** – The curriculum was expanded in 2011 to help combat consistently high instances of cooking fires. It has been customized for older adults, middle school and high school students, and general audiences. Key teaching concepts include: the scope of the cooking fire problem, most common causes of fires and resulting injuries, prevention and mitigation steps, and personal safety. A careless cooking safety module was also inserted in the 2011 Fire Prevention program for elementary school students, with the focus on keeping children at least 3 feet away from stoves, and a reminder that grownups should remain in the kitchen when cooking.

FIRE PREVENTION

The Department continues to expand its media presence, both in traditional media, and new media including Facebook, Flickr, and RSS feeds (in coordination with City IT). Prior to 2006, the Department averaged 50 impressions per year in traditional media. Since 2006, media impressions have averaged 200+ per year, with 220 reports generated in 2011:

- 115 media stories directly related to emergency response by MFD personnel for specific incidents
- 15 stories related to firefighter training and safety
- 15 stories related to carbon monoxide poisoning and state law pertaining to CO alarms
- 14 stories related to protests at the Capitol (mostly concerning safety issues at the Capitol; firefighter activities were referred to Local 311)
- 13 stories related to general safety information
- 12 stories related to Chief Amesqua's retirement
- 9 stories related to cooking/fire safety
- 4 stories on Local 311 activities related to charity
- 23 additional miscellaneous, including union contract questions referred to 311, Chief's process, retirements and 9/11-related stories.



The **Fire Protection Engineering** unit is responsible for ensuring site development, new construction, and alteration projects comply with the building and fire codes as well as Madison General Ordinances. This is accomplished by working with owners, developers, and contractors in the design phases of projects, reviewing of construction documents, and inspecting and testing installations of site access, fire suppression, fire alarm, controlled egress, smoke control, and fire command centers.

In 2011, fire prevention staff processed 873 fire protection system plans and 342 work permits for small alterations to existing systems. Staff also conducted or witnessed nearly 1,700 inspections and acceptance tests. The plan review process generated \$255,920 in revenue.

The Fire Prevention Division was also involved with other City agencies in their processes to issue licenses, Certificate of Occupancies, and site development approval.

The **Code Enforcement** unit activities focus on making sure buildings and facilities are operated and maintained safely. The primary tool for this initiative is fire safety inspections. Inspections are conducted in multi-unit residential buildings and all commercial facilities. The inspections are performed by firefighters and Code Enforcement Officers. Department personnel conducted 28,709 inspections. The inspections revealed 6,562 violations, all of which were corrected.



The flammable and hazardous liquids tank inspection contract with the State generated \$30,656.

The 2% fire dues program administered by the State generated \$701,300 locally.

Fire code licenses netted \$132,775.

The **Elevator Inspection** program collected \$832,000 in revenue. Staff performed 51 plan reviews for new elevators and 42 plan reviews for elevators that underwent full modernizations. The 2,386 conveyances in the City of Madison were inspected and 978 reinspections were performed.

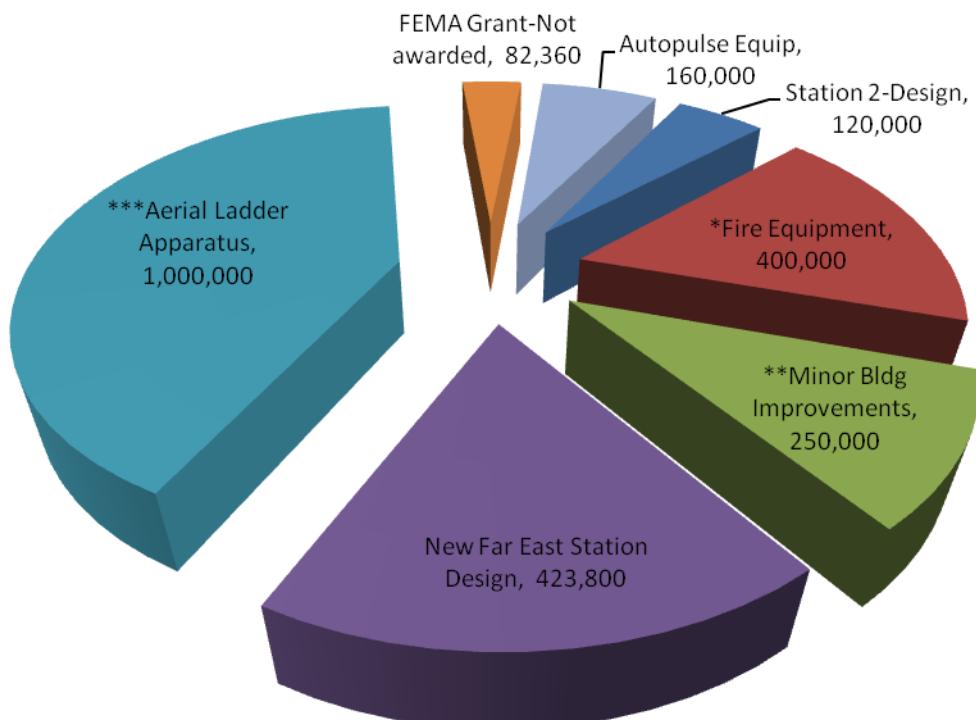
As of today, 98.6% of the elevators in Madison are operating in compliance with Permits to Operate.

FINANCIAL HIGHLIGHTS

	2011 OPERATING BUDGET AS OF FEBRUARY 24, 2012		
	Adopted Budget	Total Expenses with Encumberances	Balance
Permanent & Premium Salaries	\$ 26,015,919	\$ 25,863,982	\$ 151,937
Hourly Wages	-	7,804	(7,804)
Overtime Salaries	777,681	518,112	259,569
Benefits	12,563,133	12,837,014	(273,881)
Purchased Services	1,422,759	1,194,098	228,661
Materials & Supplies	1,219,137	967,042	252,095
Inter-agency Charges	3,308,135	3,290,869	17,266
Capital Assets-Grant	32,000	-	32,000
Inter-departmental Billings	-	(623)	623
Revenue	(1,665,887)	(1,911,094)	245,207
Net Budget	\$ 43,672,877	\$ 42,767,203	\$ 905,674

Reduced expenses due to increased revenue, staffing equalization program, lower utilities expense, reduction in contracted services and non-award of some grants.

2011 CAPITAL BUDGET AMOUNT



* Includes 2010 reauthorizations of \$225,000

**Includes 2010 reauthorizations of \$200,000

***New Ladder company added - west side