

HOLLAND FIRE DEPARTMENT

2009 ANNUAL REPORT





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ANNUAL REPORT—2009

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MISSION STATEMENT

The Mission of the
Holland Fire Department
is to Provide Excellent Life and
Property Safety to
the Community through:

Aggressive Enforcement,

♦
Education,

♦
Safe and Efficient Suppression, and

♦
Emergency Medical, Hazardous
Materials, Fire Investigation, and Other
Services Consistent with
Modern Fire Protection.

February 10, 2010

Honorable Kurt Dykstra, Mayor
Members of the Holland City Council
Mr. Soren Wolff, City Manager

The attached report is a snapshot of fire department activity for 2009. Over the course of the year the department has accomplished a number of things. One of these is the purchase of our fire safety house through the FEMA, Assistance to Firefighters Grant Program. The fire safety house is a self contained public fire education classroom that allows children and adults to practice escape drills, calling 911 and learn how to prevent fires in a safe and friendly manner. Included with this unit is a scale model of a fire sprinkler system that demonstrates the effectiveness of residential sprinklers as well as dispelling some myths about them.

The second accomplishment is the comprehensive evaluation of the department by the Insurance Services Office (ISO). This consisted of an extensive review of department response records and procedures, training records, apparatus and equipment maintenance and allocation of personnel and resources. This took place over the course of the last week of July and was made possible by the concerted efforts of many of our personnel that were responsible for gathering and organizing data and working directly with a representative from ISO. We are expecting to receive the results of the evaluation in the near future. It is important to note that many of the processes developed to complete the evaluation are being adapted to organize and document all department training.

As noted in last year's report there was mention of fire inspections being conducted by shift personnel. There are a number of benefits to the community in that we now have the potential to inspect more commercial properties than we have in the past. In addition fire personnel have a better understanding of the occupancies we respond to and we have additional opportunities to create compliance through educating business owners in fire safe practices. The most important part of this evolution in the department is that it is one step towards changing the department's mission from primarily fire response to one where community risk reduction from all hazards becomes the primary mission. It is envisioned that there will be change to a Department of Life Safety & Fire rather than just the Fire Department.

Finally, you will note that the report provides information in the EMS Section that pertains to an upgrade in our agency license. The upgrade which occurred in October allows EMTs to provide advanced treatment methods that have gradually become available since 2004. This was done at a minimal cost and the upgrade positions the department to provide better treatment as protocols in Ottawa County allow.

As we begin 2010 we face challenges in how we currently deliver fire department services to the community. The current economy along with forecasts for the future does not paint a

pleasant picture. This creates both technical and adaptive challenges. To provide services in this type of environment requires open minds, ingenuity, collaboration and a willingness to change and adapt. The men and women of the Holland Fire Department embody these traits and will continue to work with all of you and the community to provide the quality of service that they deserve.

Respectfully,

Christopher M. Tinney
Interim Fire Chief



A "Size-Up" of the Holland Fire Department

A fire department was established in Holland on October 11, 1848 when a meeting of all adult males of the community was held to discuss fire dangers such as wooden buildings, underbrush and spring fires. On February 8, 1849 a fire commission consisting of 8 members and the President were elected to make plans for fire protection. This commission recommended that a fire bell be placed at the corner of Tenth Street and River Avenue; that 3 pails and a 20 foot ladder be kept by each householder; and that 3 cisterns be dug at different places in the village and a log pole be kept at each one.

When Holland became a City in 1867, two fire departments were established. They were called the Eagle Hose Company #1 and the Star Hook and Ladder Company on the west end of the City, and the Columbia Hose Company #2 on East 8th Street. From this small group of dedicated volunteers, the Holland Fire Department emerged. New equipment was obtained over the years, and in 1916 Holland purchased its first motorized apparatus.

The Holland Fire Department of today is known as a combination department, meaning that it employs a mixture of career and volunteer or "part-paid" firefighters. The Fiscal Year 2010 budget authorizes 26 full-time and 30 part-paid members in the department. The full-time positions include the Interim Fire Chief, a Fire Marshal, and a Department Assistant working 40-hour workweeks; along with 3 Captains, 6 Lieutenants, and 14 Firefighters who work 56-hour weeks. The 30 part-paid members carry pagers and are on call around the clock to respond primarily to structure fire incidents. The total FY-2010 budget for fire department personnel, operations and capital outlay is \$3,047,393.

The department provides fire protection from 3 stations located on Waverly Road, Kollen Park Drive, and 160th Avenue. The Waverly and Kollen Park stations are staffed around the clock with full-time members, and a complement of part-paid members is assigned to each station. The 160th Avenue station, which is jointly owned and used by the City of Holland and Park Township, is staffed solely by part-paid members. Housed in the stations are 2 front-line fire pumpers, 1 pumper-rescue vehicle, 1 reserve pumper, 1 aerial tower truck, 2 EMS squad vehicles, a brush fire unit, rescue watercraft, and 2 staff autos.



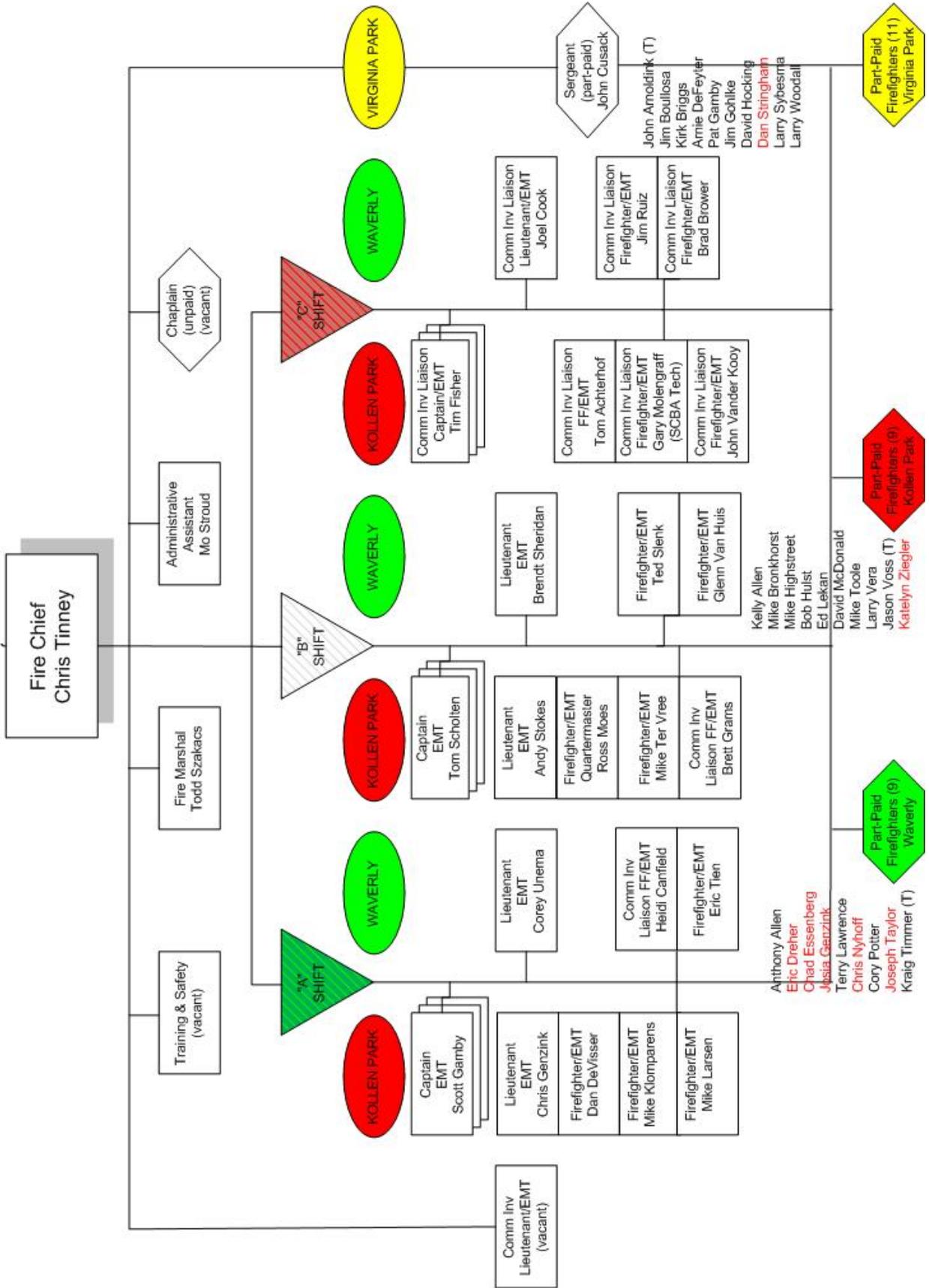
A "Size-Up" of the Holland Fire Department (continued)

The department responded to 2,799 incidents in 2009. As is typical with fire departments across the country, about 68% of those responses were medically-related. In addition to false alarms, hazardous conditions and service calls, the department responded to 94 fires in 2009. Those fires exposed \$247.6 million worth of property, and resulted in a direct fire loss of \$1,703,910; with a property saved/property exposed ratio of 99.31%.

The personnel, training, equipment, prevention, education and other aspects of the Holland Fire Department, combined with the City's excellent water supply system, provides a fire protection delivery system resulting in one of the few combination fire departments in Michigan with a Class 4 rating from the Insurance Service Office, providing an excellent return on the investment of tax dollars to the residents of the City.

Holland Fire Department Personnel

November 6, 2009





Fire Apparatus & Equipment Section by Captain Tom Scholten and Team Members

SCBA

The backbone of a Modern Fire Department

Smoke masks as they were called made their debut in the early 1800's in England. A farmer attempting to save his horses from a barn fire used a water pump to move air via a hose into a hastily assembled helmet. The procedure was successful.



Ever since, modifications and improvements included such things as charcoal filtering, closed loop recirculating, and a simple version where a hose would hang from the facepiece to the floor where cleaner air could be found.

The Holland Fire Department went through many of these stages also and has settled into basically a program where we have an SCBA for everyone that would potentially arrive at a fire. This was not always the case. As recently as the 1980's and prior we had very few SCBA's, the brand names and functions varied, and the paradigm of the time was real firefighters don't wear them. Today we want to wear them because we realize through education the dangers of smoke, especially in our synthetic age of plastics.

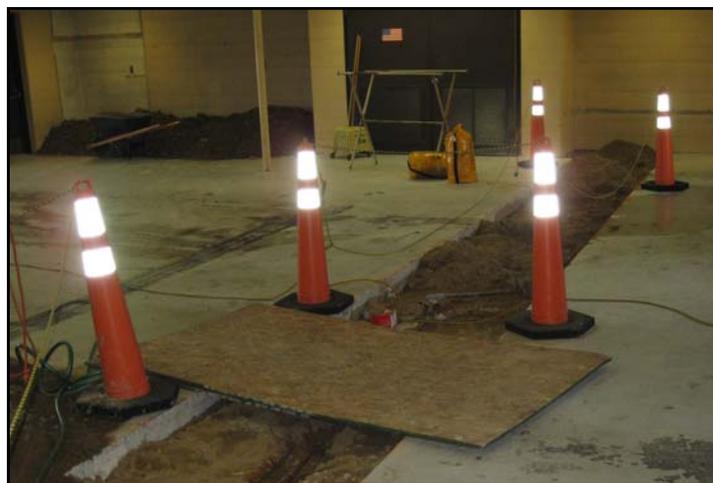
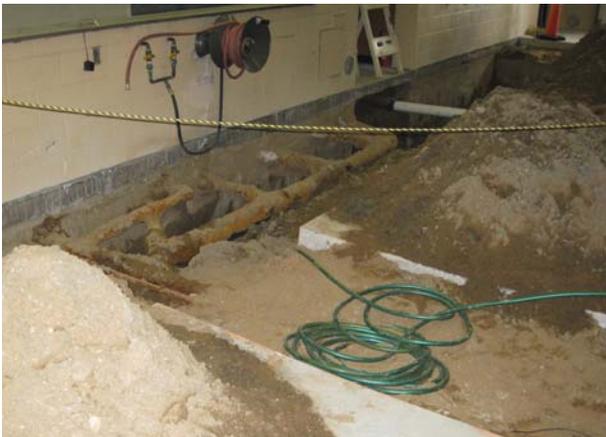
Every five years the NFPA meets to discuss upgrades to SCBA and our current SCBA are two upgrades old. Given that, we wrote a grant to FEMA to replace our SCBA to be compliant with current standards. As of this writing I am pleased to report that we have been awarded this grant, however I am cautious to say that the award was for significantly less than a 100% turnover of our stock. It is our wish that the remaining SCBA can be funded through the budgetary process. One tidbit of information is each SCBA cost about \$6,000, we own 36 of them.

SCBA have come a long way from a garden hose hooked to a helmet, the new packs that we are ordering have a list of compliances and features that are too numerous to mention, and rightly so given the environment they are meant to work in. Features like CBRN which is a terrorist chemical resistance standard, Heads Up Displays, and integrated radio communications are just a few of the important updates.



Buildings and Grounds by Captain Tim Fisher and Team Members

During the year 2009 buildings and grounds made a number of improvements to increase energy savings. The implementation of LED lights for outdoor and indoor lighting, putting motion sensors in rooms, and re-lamping with energy efficient bulbs and ballasts were some electrical improvements made. Also improvements were made by replacing broken windows. At station 1 plans were made to fix or replace broken sewer and storm drains and to address the problem of the building possibly settling. Cords were hung in the apparatus bay so trip hazards were eliminated with the cords that were previously on the floor. The rear driveway at the station was in very poor condition and was replaced to accommodate bigger trucks and make training easier and better at the station.





Emergency Medical Services by Captain Scott Gamby and Team Members

“Upgrade and Compliance”

The 2009 theme for the Holland Fire Department EMS Division was “Upgrade and Compliance”. Our first achievement was upgrading our medical license designation through the State of Michigan from Medical First Responder (MFR) to Basic Life Support (BLS) non transport. This significant step could give our customers a better chance of survival if they are faced with a comprised airway or a cardiac arrest.

Two key components that helped us achieve this upgrade was that our staff is already certified at the Emergency Medical Technician (EMT) level and a significant amount of the equipment that is required to operate is already in place and maintained on our vehicles. The only two pieces of equipment that we had to purchase were EpiPens and King or Combi tube airways.



The EpiPens administer a vital drug called epinephrine which will reverse allergic reactions.

The King or Combi tube is an airway device that is used for secure and reliable airway management in patients presenting with cardiac arrest or significant trauma. This tube assures that 100% of the oxygen that we are introducing into a patient goes directly into the lungs where it can be used for keeping the brain and other organs alive and functioning. If this is done before the Paramedics arrive they do not have to take time to establish an airway before they can administer advanced life support procedures.



The second achievement was to meet the requirements of the State of Michigan which states that all Emergency Medical Records of Patient Treatment will be submitted electronically by July 1, 2009. This information is then uploaded to the National EMS Information System where it will define EMS and pre-hospital care in a way never before imagined, improving patient care and EMS curriculum and defining a *standard* on which to measure care.

This task involved many members of the department, City Technology Services, new



Emergency Medical Services (continued)

software and upgrades in our computer system. It takes the information that we already are fielding on our incident reports and transfers it to the EMS portion of the report. This data set is then uploaded to the State. This results in a significant data base that the State can turn to in the future to make informed decisions about medical protocols and appropriate responses to a given situation.

In 2009 the department responded to 1,909 medical calls for service. 1,500 of these calls were priority 1 (life threatening) and 317 were priority 2 (broken arm, dizzy, could become life threatening) with the rest being priority 3 (lift assist, call for help). The average response time for our priority 1 and 2 calls was less than 5 minutes. That is measured by the time we get the call from Central Dispatch to the time we arrived on scene.

In closing we look ahead to what's in store for us in 2010. We have started conducting research into providing additional upgrades to the medical service we provide to the community. This will include the feasibility of advanced life support. Advanced life support with transport would be the next step in providing EMS care. Although this would require an upfront cost of equipment and education, this would allow us to provide ALS transport service something we currently do not. The efforts of the work group developed to research this topic will determine if there is a need for the service, the pros and cons of operating an ALS service, if the service could be profitable and to determine if it could improve services to the community. This effort will provide information for future discussions and possible opportunities if needed.

With today's economy and budget cuts City Council will have to decide who will provide medical services to the citizens of Holland. Over the last decade the Holland Fire Department has set a standard for the care its citizens deserve.



Fire Prevention by Fire Marshall Todd Szakacs

Several of the goals established for the position have been met or significant progress continues to be made toward their completion.

This year's fire prevention week activities again took place without any difficulty and with more involvement from area departments. The parade and associated education efforts have been coordinated by the Holland Area Fire Prevention Council which is a group comprised of representatives of the Graafschap, Holland, Holland Twp., Park Twp., Zeeland & Zeeland Twp. fire departments. The group meets on a monthly basis and not only works on the fire prevention week parade but mobilizes resources to assist in the delivery of fire prevention education and promote fire safety initiatives. The group is currently ready to adopt by-laws and formalize the organization. With the parade becoming an easily managed event for the group, a goal for this year is to work beyond the parade and develop a juvenile fire setter intervention program. This will consist of an interdisciplinary group of organizations committed to working with juveniles and fire from a prevention and management perspective. Juvenile fire setting is one of the leading causes of fires leading to death and injury and is certainly preventable.

In the area of fire inspections, the new department wide enhanced pre plan/inspection program is going well. Positive feedback from both community business owners and staff show the program is working successfully and helping with risk reduction efforts associated with fire hazards. With progress dependant upon charting a course, the following items have been established as goals for Emergency Preparedness & Fire Prevention:

- ◆ Systematic method for prioritizing maintenance inspections.
- ◆ Further development of the MCT occupancy database.
- ◆ The provision of opportunities for other department personnel to engage in inspections and investigations.

When last years report was being completed the department took delivery of the new 31ft. fire prevention trailer. This unit has allowed our department to educate over 1,500 children and adults about the importance of maintaining a fire safe environment. We continue to receive positive feedback from citizens which shows the program's success.



Fire Prevention (continued)

In the area of fire investigation, opportunities are being provided to include other department personnel and officers in the investigation process. This has been well received by personnel and has been helpful to the Fire Marshal when processing fire scenes. The inclusion of others in the process helps to unify the functions of suppression, investigation and public education. Having an understanding of fire behavior and causes makes department personnel better resources to the public when educating them about fire prevention and incident preparation. In addition understanding the dynamics of fire helps build on skills necessary to combat and suppress fire.

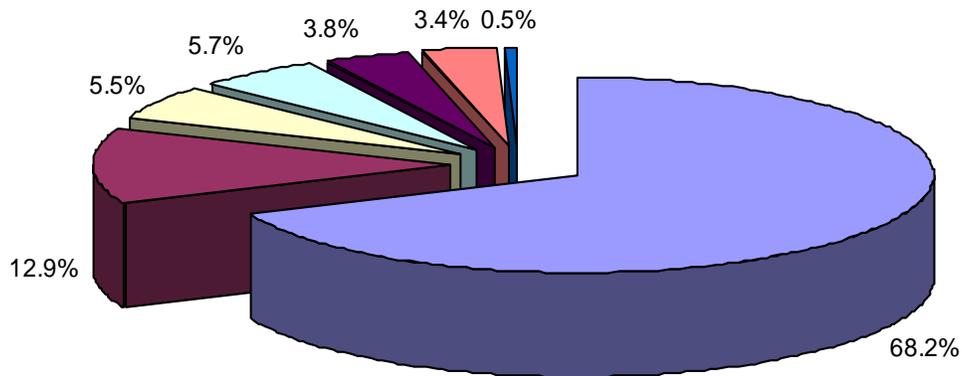


FIRE PREVENTION

	TOTAL ACTIVITY
Inspections	145
Compliance Verification	46
Complaints/Referrals from Others	21
Referrals to Others	3
Educational Programs Delivered	119
(audience numbers referred to CI)	
Fire Investigations	16
Plan Review	30
Site Plans	8
Water Based Fire Protection	7
Fire Alarm Systems	9
Construction Plans	6
Meetings with others	38
Educational /Continuing Ed Programs Attended	13
Special Assignments	90
Departmental Training Attended	6



TYPES OF SITUATIONS FOUND



- Medical Emergencies
- False Alarms
- Hazardous Conditions
- Service Calls
- Good Intent Calls
- Fires
- Others

Type of Situation	Incidents	Percent
Medical Emergencies	1909	68.2%
False Alarms	362	12.9%
Hazardous Conditions	153	5.5%
Service Calls	159	5.7%
Good Intent Calls	107	3.8%
Fires	94	3.4%
Others	15	0.5%
	2799	100.0%

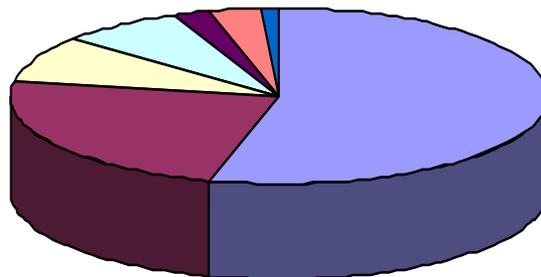


FIRE INCIDENTS

Classified by Property Types

Property Type	Incidents	Percent
Structures	51	54.3%
Vehicles	22	23.4%
Refuse	8	8.5%
Vegetation	7	7.4%
Fires/Explosion Not Classified	2	2.1%
Explosion/No Fire	3	3.2%
Outside of Structure	1	1.1%
	<u>94</u>	<u>100.0%</u>

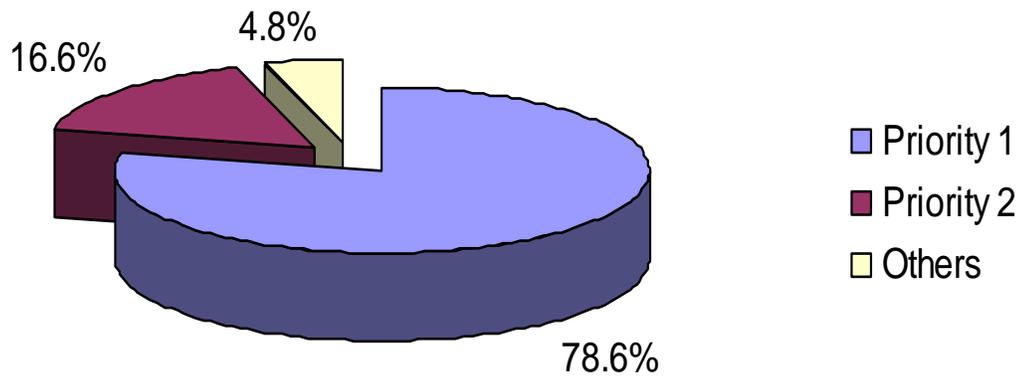
- Structures
- Vehicles
- Refuse
- Vegetation
- Fires/Explosion Not Classified
- Explosion/No Fire
- Outside of Structure





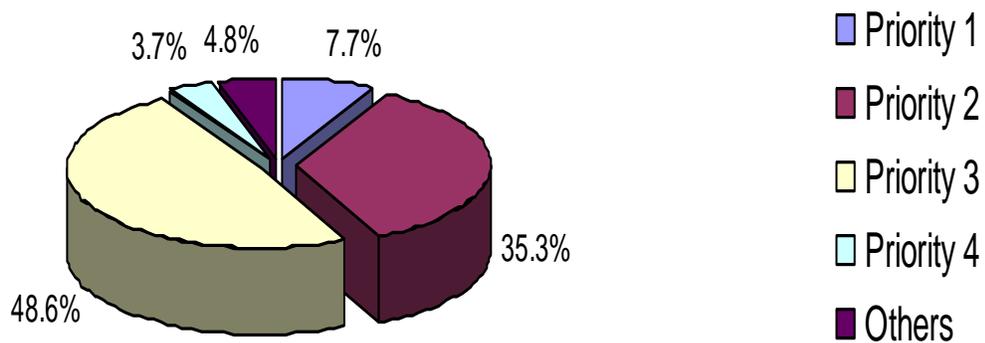
EMS CALLS BY PRIORITY

	Incidents	Percent
Priority 1	1500	78.6%
Priority 2	317	16.6%
Others	92	4.8%
	1909	100.0%



EMS CALLS BY ACTUAL PATIENT PRIORITY

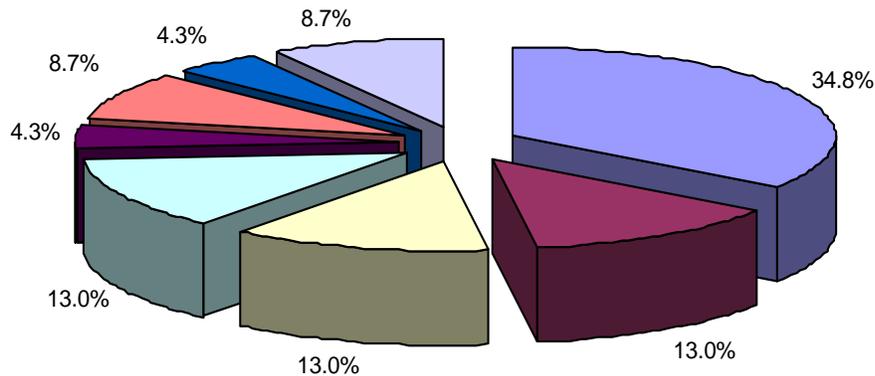
	Incidents	Percent
Priority 1	147	7.7%
Priority 2	673	35.3%
Priority 3	927	48.6%
Priority 4	70	3.7%
Others	92	4.8%
	1909	100.0%





SUMMARY OF FIRE CAUSES

- Mechanical Failure
- Operational Deficiency
- Incendiary/Suspicious
- Misuse of Heat Source
- Design Deficiencies
- Other
- Misuse of Fuel Supply
- Natural Causes



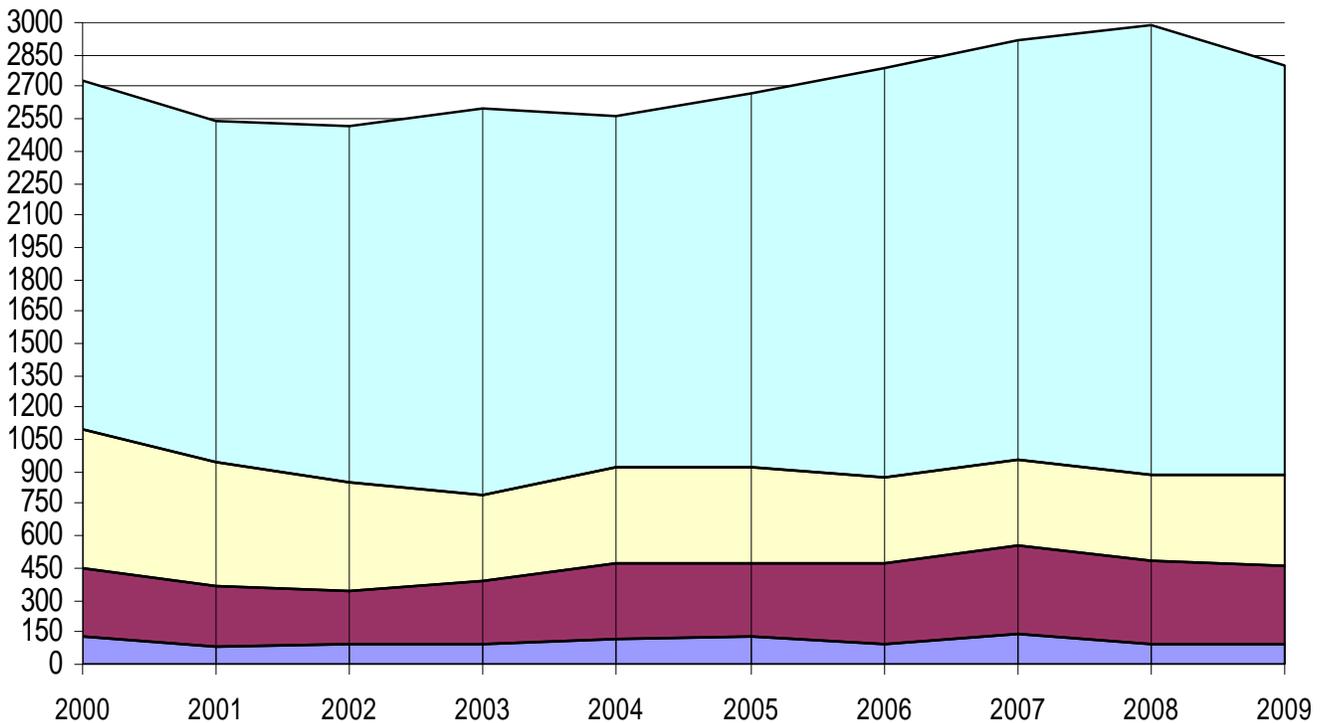
Type of Situation	Incidents	Percent
Mechanical Failure	8	34.8%
Operational Deficiency	3	13.0%
Incendiary/Suspicious	3	13.0%
Misuse of Heat Source	3	13.0%
Design Deficiencies	1	4.3%
Other	2	8.7%
Misuse of Fuel Supply	1	4.3%
Natural Causes	2	8.7%
	23	100.0%



10 YEAR INCIDENT SUMMARY

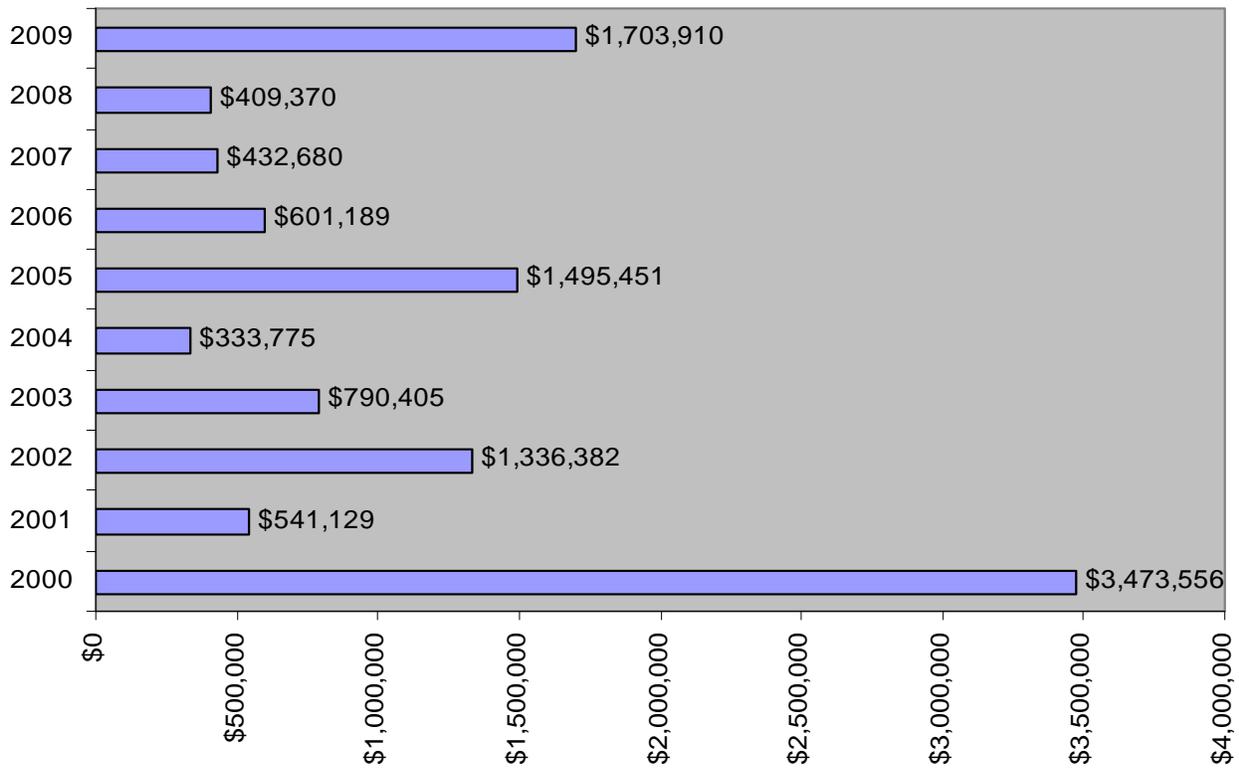
Situation	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Fires	135	82	94	93	118	129	98	146	89	94
False Alarms	313	286	250	302	350	342	378	405	393	362
Others	650	571	506	402	450	447	394	403	400	434
Medicals	1633	1599	1661	1800	1644	1752	1916	1959	2112	1909
Total	2731	2538	2511	2597	2562	2670	2786	2913	2994	2799

■ Fires
 ■ False Alarms
 ■ Others
 ■ Medicals





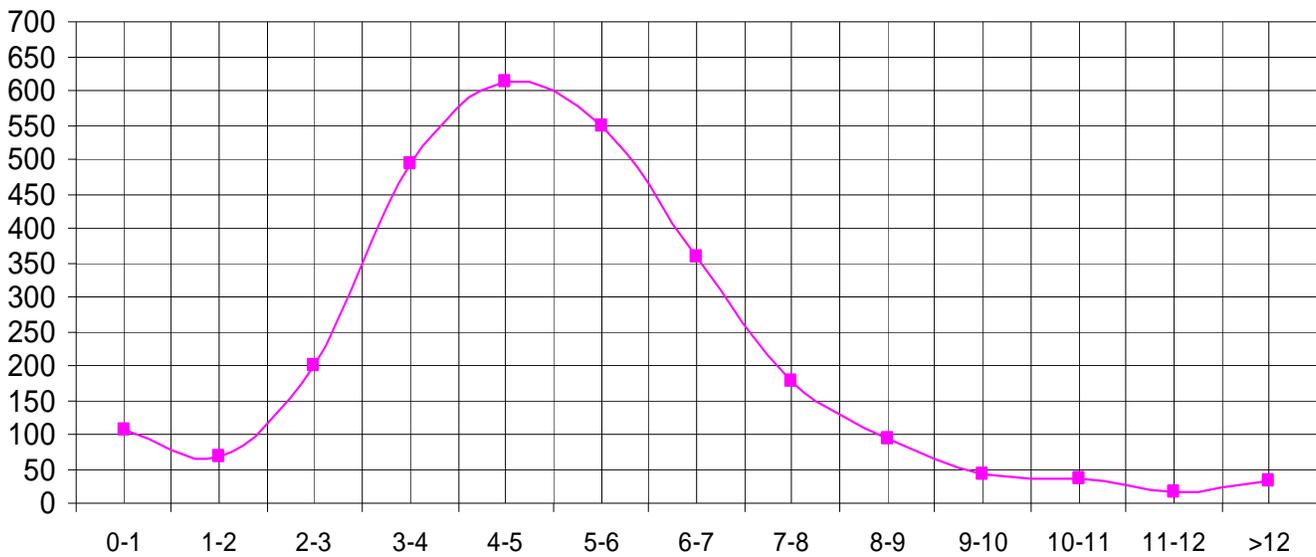
PROPERTY LOSS SUMMARY





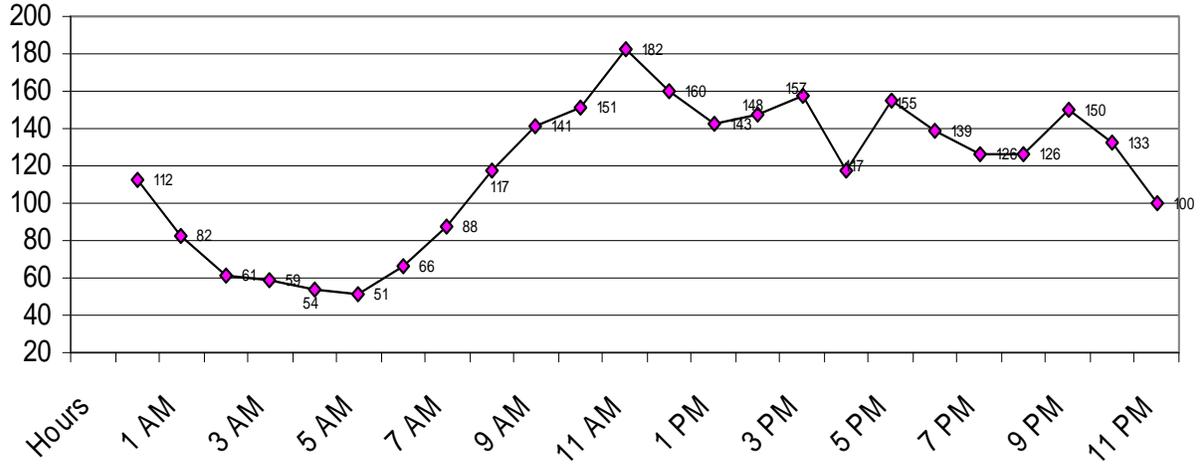
TIMES FROM CALL RECEIVED TO FIRST UNIT ON SCENE

MINUTES	INCIDENTS	PERCENT
0-1	107	3.8%
1-2	67	2.4%
2-3	200	7.1%
3-4	493	17.6%
4-5	612	21.9%
5-6	547	19.5%
6-7	357	12.8%
7-8	178	6.4%
8-9	94	3.4%
9-10	42	1.5%
10-11	34	1.2%
11-12	17	0.6%
>12	32	1.1%
2780		

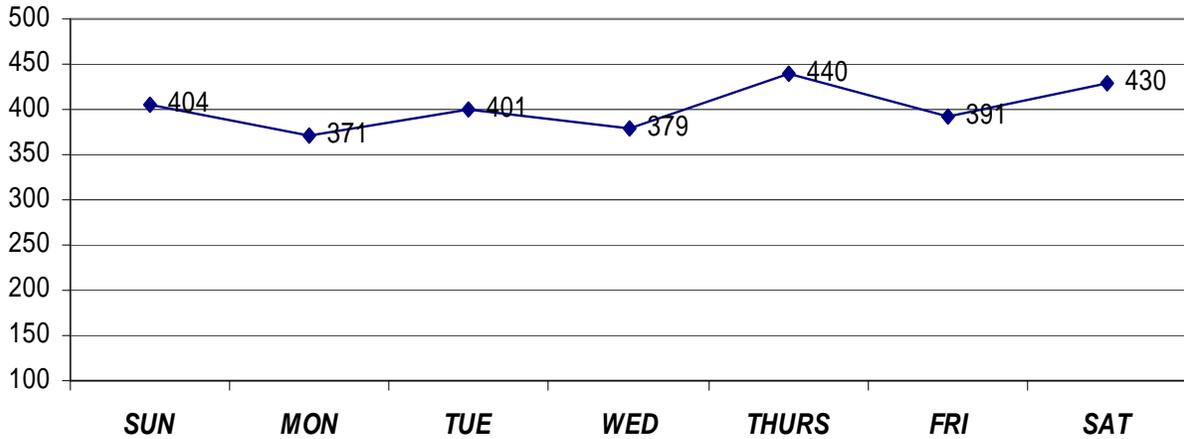




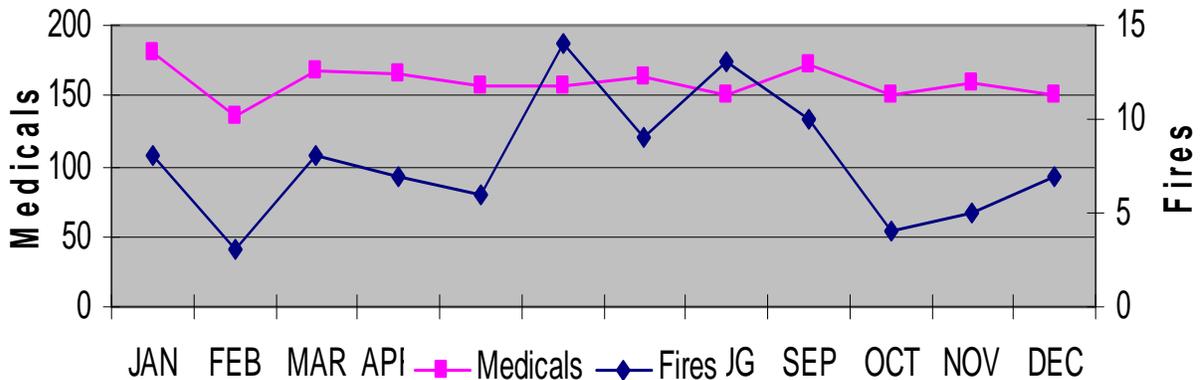
INCIDENTS BY HOUR OF DAY



INCIDENTS BY DAY OF WEEK

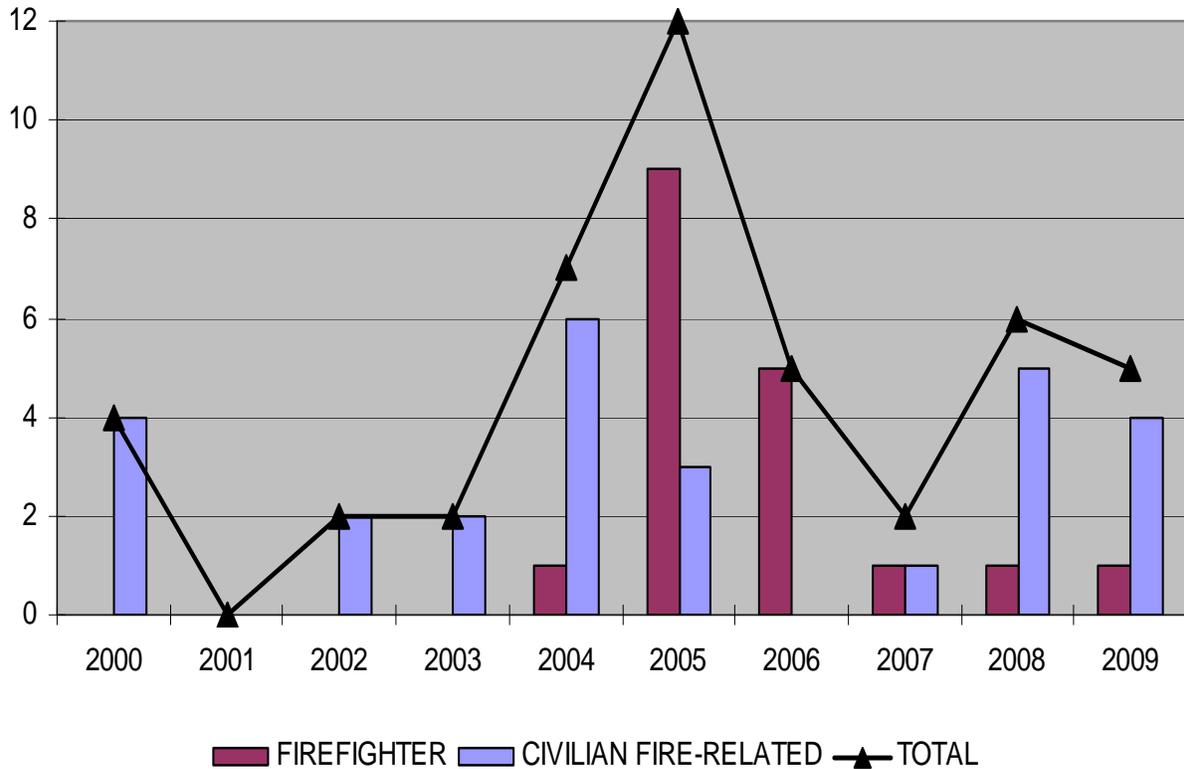


INCIDENTS BY MONTH OF YEAR





INJURIES SUMMARY

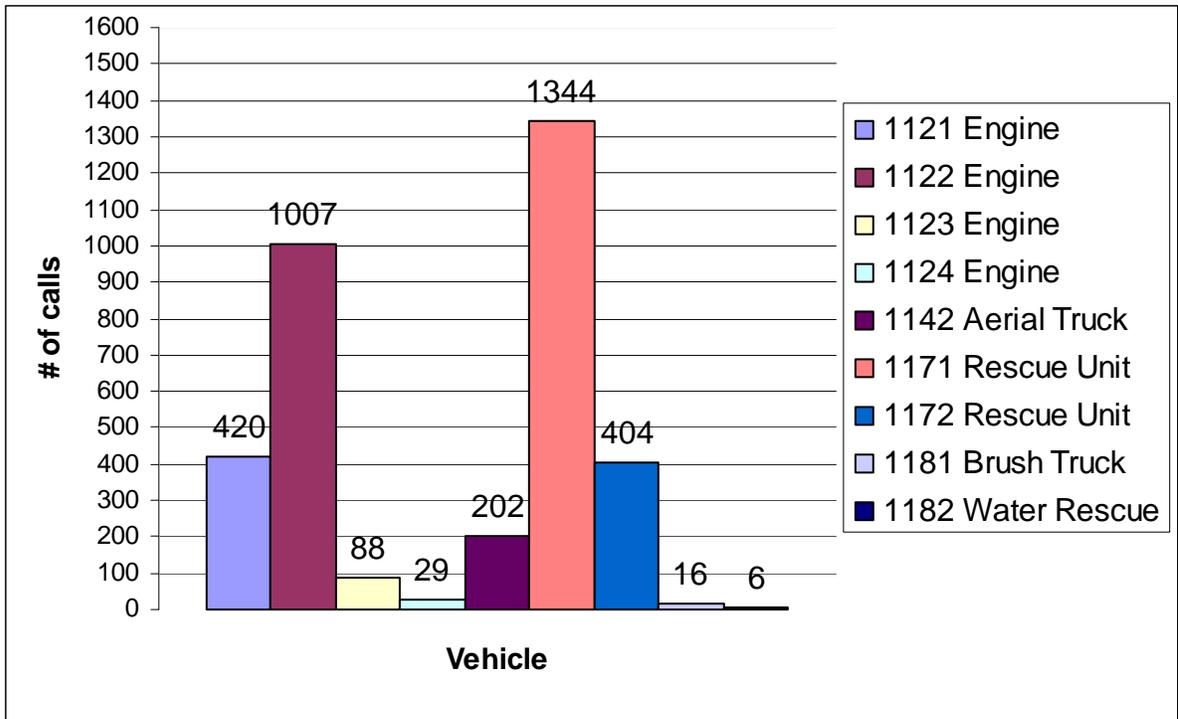


YEAR	FIREFIGHTER INJURIES	CIVILIAN FIRE-RELATED INJURIES	TOTAL INJURIES
2000	0	4	4
2001	0	0	0
2002	0	2	2
2003	0	2	2
2004	1	6	7
2005	9	3	12
2006	5	0	5
2007	1	1	2
2008	1	5	6
2009	1	4	5



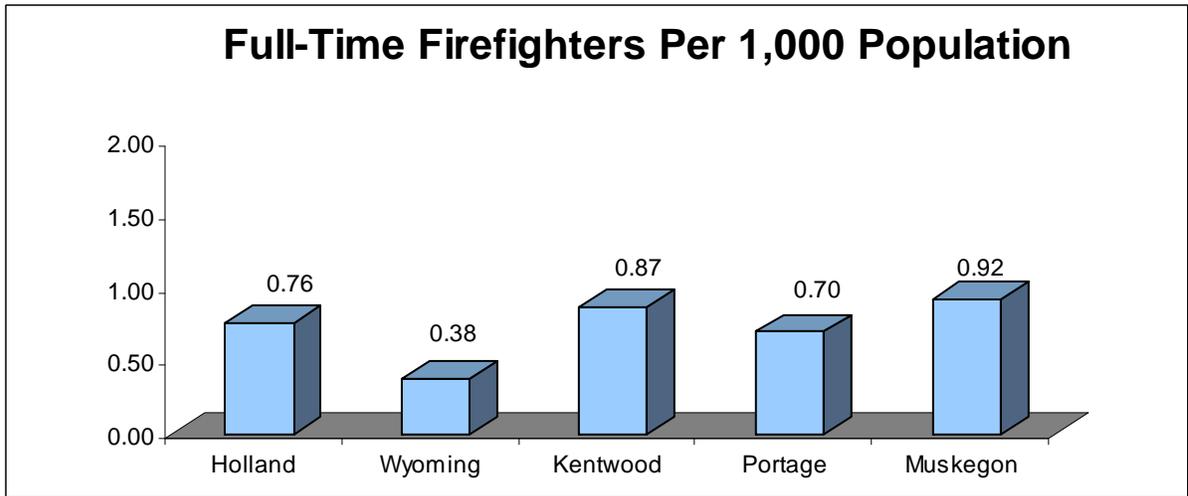
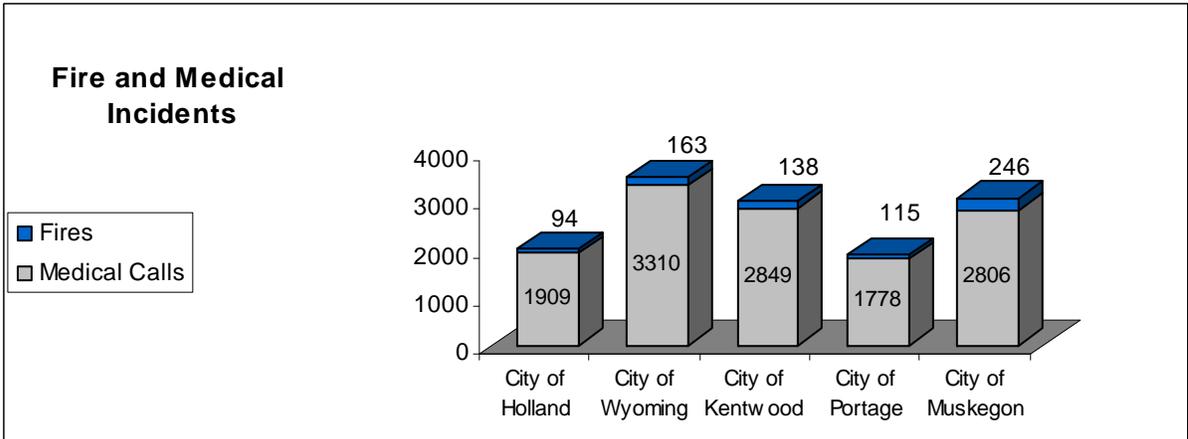
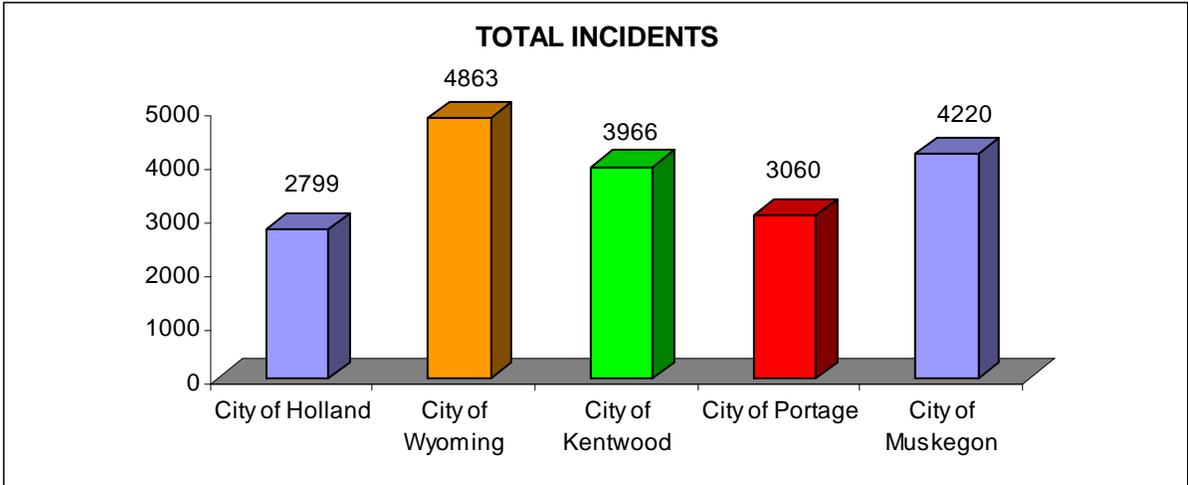
APPARATUS RESPONSES

RESPONSE DATA BY RESPONDING UNITS	YEAR TO DATE
1121 Engine	420
1122 Engine	1007
1123 Engine	88
1124 Engine	29
1142 Aerial Truck	202
1171 Rescue Unit	1344
1172 Rescue Unit	404
1181 Brush Truck	16
1182 Water Rescue	6
TOTAL RESPONSES	3516



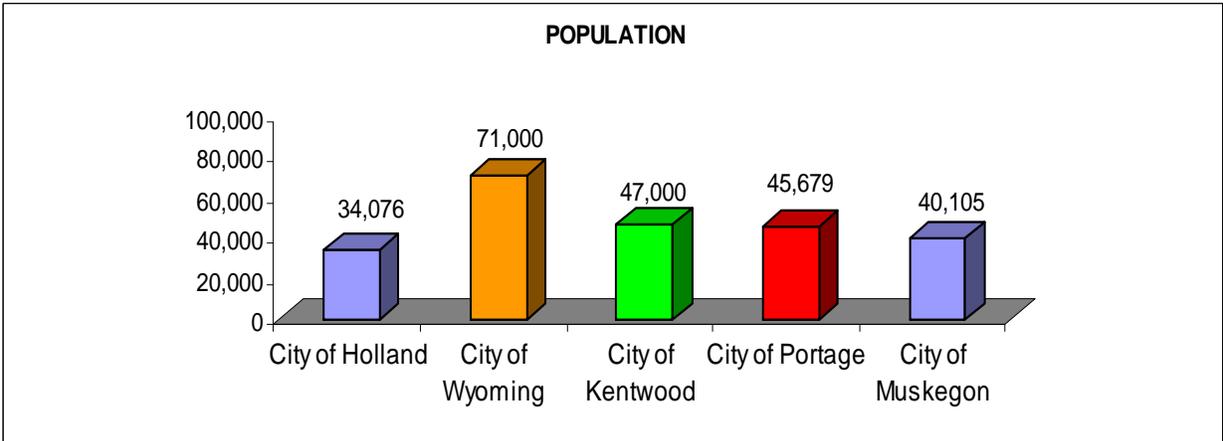
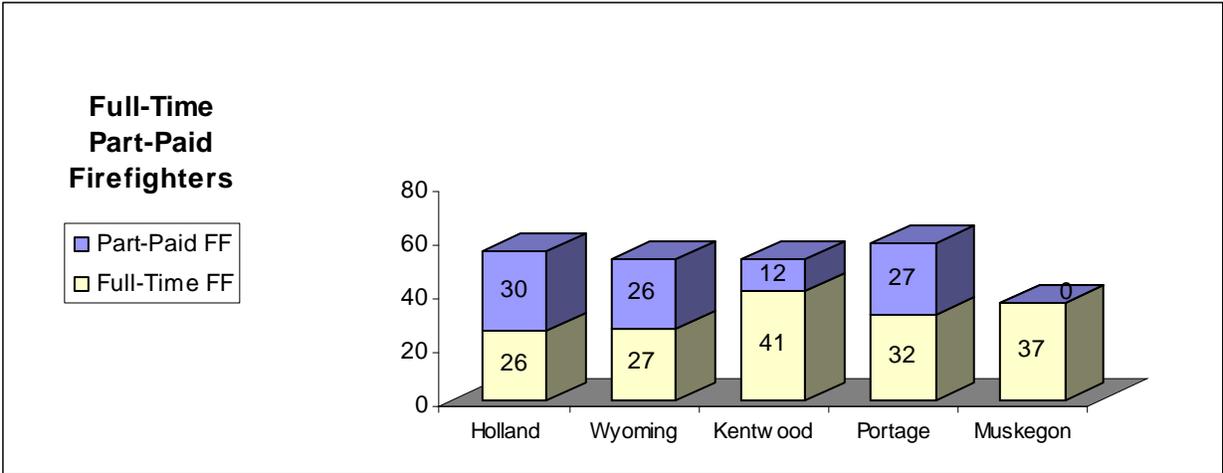


COMPARISON OF SELECTED STATISTICS WITH OTHER WEST MICHIGAN CITIES





COMPARISON OF SELECTED STATISTICS WITH OTHER WEST MICHIGAN CITIES (continued)



**PART-PAID ATTENDANCE—2009**

STATION 1	Average over past 12 months
ALLEN, A.	90%
DREHER	85%
ESSENBERG	90%
GENZINK	89%
LAWRENCE	76%
NYHOFF	85%
POTTER	76%
TAYLOR	72%
TIMMER	91%
STATION 2	
ALLEN, K.	77%
HIGHSTREET	78%
HULST	81%
LEKAN	78%
McDONALD	94%
TOOLE	82%
VERA	69%
VOSS	93%
ZIEGLER	101%
STATION 3	
ARNOLDINK	94%
BOULLOSA	82%
BRIGGS	76%
CUSACK	93%
DEFEYTER	75%
GAMBY	90%
GOHLKE	73%
HOCKING	77%
STRINGHAM	97%
SYBESMA	91%
WOODALL	83%