



2006 Fairbanks Fire Department Annual Report



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FAIRBANKS, ALASKA

Fairbanks is located in the heart of Alaska's Interior, on the banks of the Chena River in the Tanana Valley. By air, Fairbanks is 45 minutes from Anchorage and 3 hours from Seattle. It lies 358 road miles north of Anchorage. It lays at 64.8 degrees North Latitude and 147.7 degrees West Longitude. The current population is 30,224 (2000 Census – includes Ft. Wainwright.)

Interior Alaska experiences seasonal temperature extremes. Winter temperatures average -12°F; summer temperatures averages +61°F. Temperatures have been recorded as low as -62°F in mid-winter, and as high as +96°F in the summer. Average annual precipitation is 11.3 inches, which includes an average of approximately 65 inches of snow. Ice fog is common during the winter.

The Fairbanks area is the second-largest community in Alaska. Residents are primarily non-Native, though diverse. There are 20 schools located in the community attended by 10,119 students.

As the regional service and supply center for Interior Alaska, Fairbanks offers a diverse economy, including City, Borough, State and Federal government services, transportation, communication, manufacturing, financial and regional medical services. Tourism and mining are also a significant part of the economy. Including Eielson Air Force Base and Fort Wainwright personnel, 50% of the employment is in government services. The University of Alaska Fairbanks is a major employer. Fairbanks hosts approximately 325,000 visitors each summer.

Fairbanks is at the confluence of the Richardson Highway, George Parks Highway, Steese Highway, and the Elliott Highway, connecting the Interior to Anchorage, Canada, and the lower 48 states. The Dalton Highway (formerly the North Slope Haul road), which connects to Prudhoe Bay, begins about 75 miles north of town.

Goods are transported to Fairbanks by truck, air, and the Alaska Railroad. Regularly-scheduled jet flights are available at the State-owned Fairbanks International Airport. An 11,800' asphalt runway, heliport and seaplane landing strip are available. A public seaplane base is also located on the Chena River. In addition, there are several privately-owned airstrips and heliports in the vicinity.



FAIRBANKS FIRE DEPARTMENT

MISSION STATEMENT

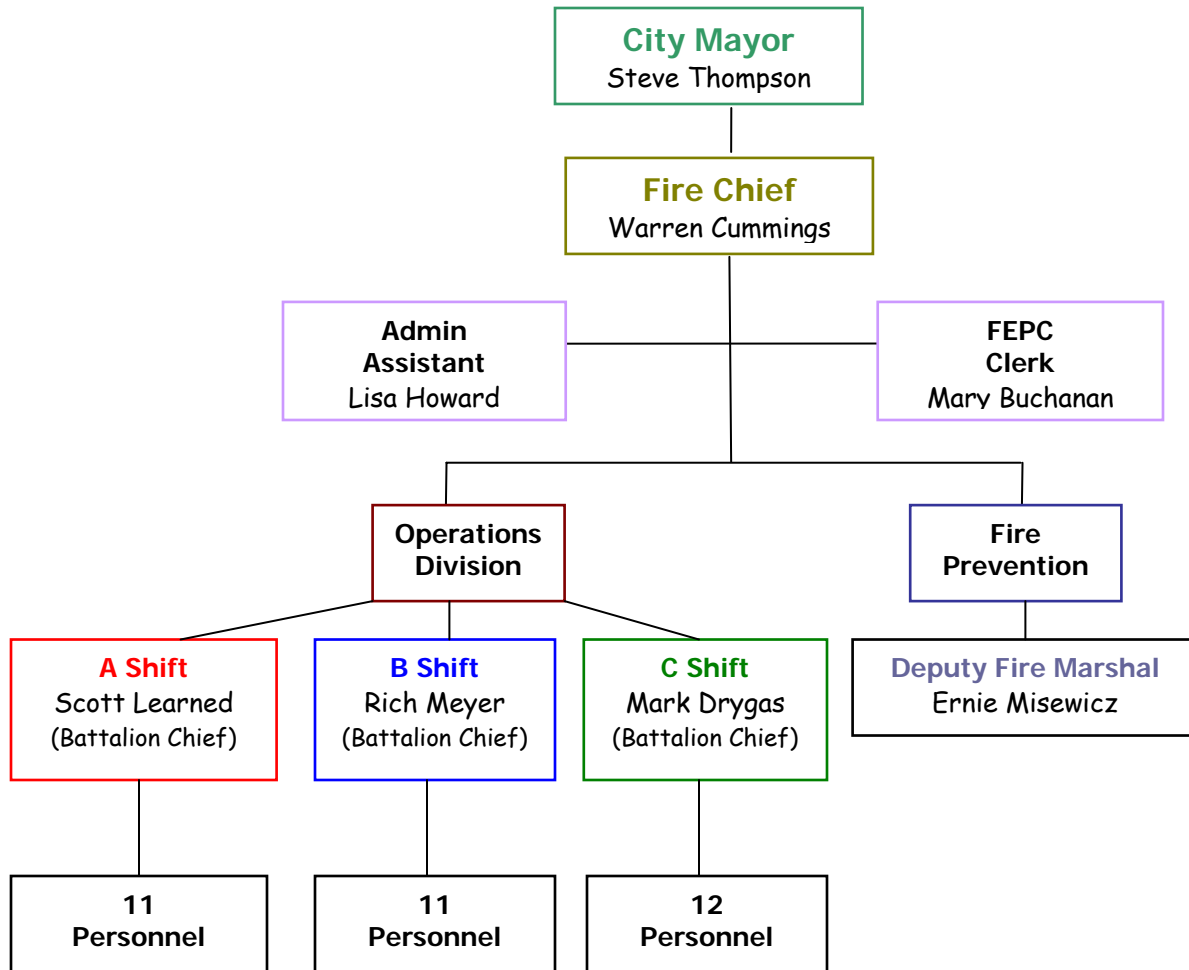
The City of Fairbanks Fire Department Mission is to provide a fire safe and hazard free community, while protecting life and property from fire and other emergencies.

This Mission is accomplished through public education, fire code management, fire suppression, paramedic level pre-hospital emergency medical care and transport, hazardous condition mitigation and rescue services.



CITY OF FAIRBANKS FIRE DEPARTMENT

Organizational Chart



Fire Chief

Warren B. Cummings



Chief Cummings has been with the Fairbanks Fire Department for 35 years. He has been in-charge of the Department for the last 13 years. He is responsible for the 5 million-dollar annual budget as well as 41 full-time employees.

During his tenure, the Fire Department has seen over 11 million dollars in capital improvements including the construction of a new fire station.

In 2005, Chief Cummings was elected for a two-year term as President of the Alaska Fire Chiefs Association.

Chief Cummings is also very active in the Community and serves on the International Moose Community Service Committee.

FAIRBANKS FIRE DEPARTMENT

The Fairbanks Fire Department is a fully paid Fire Department with a staff of 41 persons. Fire Chief Warren B. Cummings who has 35 years of service on the FFD heads the Department. The workforce is divided into three shifts and work a “24 on, 48 off” schedule. Each shift has a Battalion Chief, three Captains, four Drivers and four Firefighters. The Department also has a Deputy Fire Marshal, and two clerical persons.

The Department has four fire engines, one 102-foot platform, a 100-foot ladder truck, a medium rescue truck, four ambulances, one incident command van, one rescue boat, one raft, one heat trailer, one light trailer, and a technical rescue trailer. There are two staffed fire stations – the main headquarters at 1101 Cushman Street and Station 3 at 1033 Aurora Drive. A City-operated Regional Fire Training Center is located in south Fairbanks.

The Department runs a paramedic level transport ambulance service. There are fifteen firefighters that are also trained as paramedics. The Prevention Division also receives assistance from the firefighters.

The City of Fairbanks has a population of 22,850¹ citizens. The temperature in Fairbanks ranges from 90 degrees above zero in the summer to 60 degrees below zero in the winter. The amount of daylight hours range from 21 hours, 49 minutes in the summer and 3 hours, 42 minutes in the winter. These temperature and daylight extremes can make quite a challenge for fire fighting.

The FFD's response area is 13.1 square miles, with a total asset evaluation of \$1,594,257,518, and includes the Chena River, Pioneer Park, the Carlson Center, Fairbanks Memorial Hospital and many other important landmarks. Fairbanks Fire provides mutual aid support for 10 surrounding fire departments including Fort Wainwright Army Base and Eielson Air Force Base.

Engine 2 – 2004 American LaFrance



Platform 1 – 102' 1995 KME



¹2000 Census (excluding the population of Ft. Wainwright)

HIGHLIGHTS OF YEAR 2006

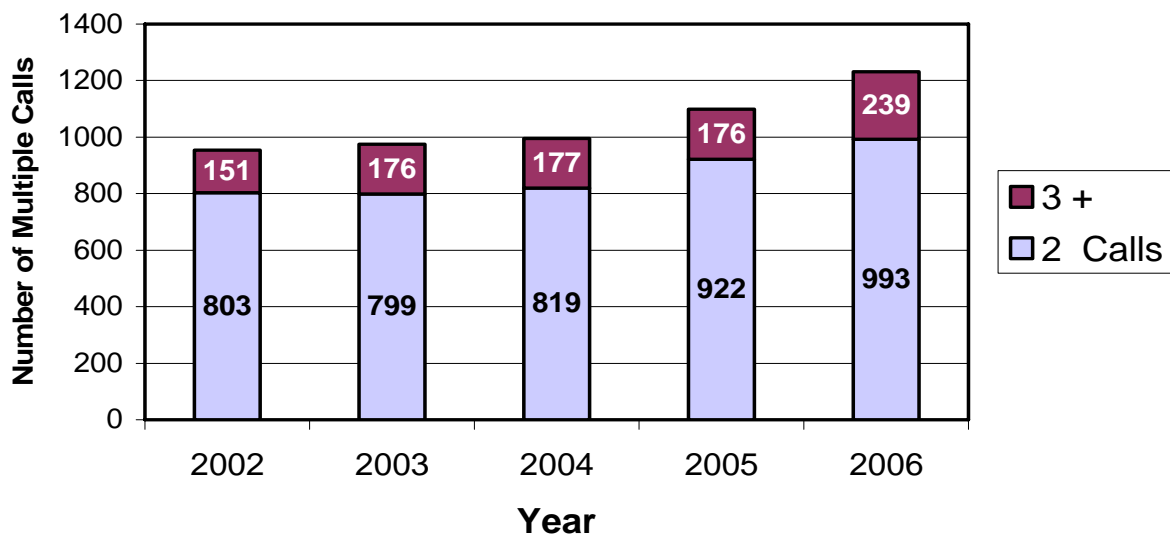
1. The completion of the new Headquarters Fire Station at 1101 Cushman Street with full operation on July 22, 2006.
2. The Department finished 2006 with a fire loss amount of \$1,552,854. This total was 104 percent of the ten-year fire loss average of \$1,489,999.
3. Negotiations of new lease with State of Alaska Training and Education Bureau for Fire Station Two at the Regional Fire Training Center.
4. Received State of Alaska grant for \$150,000 to purchase replacement ambulance.
5. Ordered an American La France Aerial Platform to replace our 1977 100-foot Seagraves Aerial Ladder.
6. Design phase for repair of the winter damaged water system at the Regional Fire Training Center.
7. Continued with "Operation Night Light," an evening fire safety inspection program of assembly occupancies. This program helped identify and correct some serious fire and life safety issues.
8. We continued with our "Free" residential smoke detector installation project through assistance with funding from the Alaska Injury Prevention Institute and the FIRE Grant. This installation project is to help with the problem of missing or non-functioning smoke detectors in homes. Target audience is our low income areas with children and our senior population.
9. We reallocated some excess grant funding from the FIRE Grant to purchase additional fire safety education props and material to augment our Fire Safety Education Program in our schools and with our senior population.
10. All Firefighting personnel were equipped with new NFPA compliant turnout gear funded by the Fire Act Grant.

11. Receipt of 2006 Homeland Security Grant funds totaling \$469,440 to upgrade fire station dispatching for the City of Fairbanks, the City of North Pole, Northstar Volunteer Fire Department, Salcha Rescue and Delta Junction Fire Departments.
12. Driver/Paramedic Mayfield and Driver Kulp returned safely from military duty in Iraq.

PROBLEM AREAS FOR 2006

1. Our first fire fatalities in three years (Gaffney Road fire -- one infant and one adult).
2. A continuing increase in multiple emergency calls. In 2006 there were 1232 multiple calls with 294 involving two or more ambulances.

The Growing Problem – Simultaneous Emergency Calls



3. The lack of recurring fire safety inspections due to the shortage of personnel in the Fire Marshal's office. This has serious fire and life safety problems continuing without corrective action.

4. We are continuing to see an increase in our local fire loss; it has gone over 1,000,000 dollars three times in five years.
5. Continued overtime problems created by Drivers Mayfield and Kulp being deployed to Iraq, and a Captain on Worker's Compensation for the first six months of the year.
6. Lead based paint prevented the burning of Fairview Manor, resulting in the cancellation of our planned large scale controlled burn training exercise.

2007 Budget Year Goals

1. Remodel Fire Station 3 and completion of repairs to the Regional Fire Training Center water system.
2. Continuous reduction in overtime – by increasing shifts staffing.
3. Put new Aerial Platform in service.
4. Continue support of the "Risk Watch" safety education program in the elementary schools.
5. Continue to update our Standard Operating Procedures.
6. Continued upgrades of our department equipment.
7. Increased initial and reoccurring proficiency training of our personnel.
8. Secure funding for a new pumper/engine to replace our 1996 pumper/engine.
9. Reduce fire problems through continued public fire and life safety education in schools, businesses and civic groups.
10. The hiring of a Deputy Chief to augment the oversight of the fire department.
11. Secure funding for a second new ambulance in 2007.

Fire Department 5-Year Plan

1. Complete renovation of Fire Station 3.
2. Maintain up-to-date support equipment to include hose, breathing apparatus, medical equipment, safety equipment, rescue equipment, radios and fire equipment.
3. Maintain up-to-date vehicles on a 10 to 20-year replacement cycle.
4. Develop our Insurance Service Office (ISO) Protection Rating goals to obtain the insurance rating of class one in 2009 from our current class three rating.
5. Reduction of code problems in facilities by increasing Fire Prevention staff by two in order to augment the inspection program.
6. Increase on-duty Fire Suppression staff to 17 from the current average of 10. This would bring us to the recommended national level and meet our Insurance Service Office goals.
7. To have a residential sprinkler program put in place to encourage builders and homeowners to install them. (Sprinklers in residences could have saved all nine of the fire fatalities in Fairbanks during the last ten years, and significantly reduced the dollar loss caused by fires.)
8. Upgrade the Regional Fire Training Center to include water system, burn building, and training tower.



MAJOR FIRES IN 2006

Represents \$856,500 or approx 55% of the total fire loss,
and 2 Fatalities for 2006.

\$350,000

741 Gaffney Rd. - January 2, 2006

Fourteen Unit Apartment Building
\$350,000 loss, 2 fatalities and one injury; Insured
Smoke Detectors: Present but battery missing
Cause: Cause undetermined

\$135,000

95 Glacier Ave – February 12, 2006

Eight Unit Apartment Building
\$135,000 Loss, Insured
Smoke Detector: Present and operated
Cause: Grow Light too close to combustibles

\$110,000

1222 McCarty Ave – February 15, 2006

Duplex Apartment Building
\$110,000 Loss, Insured
Smoke Detector: Present and operating
Cause: Furnace Malfunction

\$110,000

1115 Gregory St. – September 3, 2006

Single Family Residence
\$110,000 loss, Insured
Smoke Detector: Present but battery missing
Cause: Vehicle fire in garage

\$95,000

2606 Gillam Way – February 25, 2006

Four-Plex Apartment Building
\$95,000 Loss, Insured
Smoke Detector: Present and operated
Cause: Malfunction in dish washer

\$56,500

1239 23rd Ave – August 20, 2006

Single Family Dwelling
\$56,500 Loss, Insured
Smoke Detector: None...under construction
Cause: Incendiary

2006 IN REVIEW

| Call Volume | <u>Fire Calls</u> | <u>EMS Calls</u> | <u>Total Calls</u> |
|----------------------------|--------------------------|-------------------------|---------------------------|
| Total Number of Calls | 803 | 2938 | 3741 |
| Arson Calls | 17 | -- | 17 |
| Total Personnel Hours | 2142 | 5091 | 7233 |
| Average Calls per Day | 2.20 | 8.04 | 10.24 |
| Average Personnel per Call | 6.41 | 3.65 | 4.23 |
| Average Apparatus per Call | 3.24 | 1.60 | 1.98 |
| Total Calls by Station | Sta. 1 – 3632 | Sta. 2 – 0 | Sta. 3 – 109 |
| Total Calls by Shift | A-1213 | B-1268 | C-1260 |

| Response Data | <u>Emergency</u> | <u>Non-Emerg</u> | <u>All Calls</u> |
|------------------------------------|-------------------------|-------------------------|-------------------------|
| Total Apparatus Responses in Year | 5158 | 2679 | 7837 |
| Average Turn Out Time | 0:00:42 | 0:00:56 | 0:00:47 |
| Average Response Time | 0:04:35 | 0:06:20 | 0:05:14 |
| Average Total Time on Call | 0:37:55 | 0:36:12 | 0:37:16 |
| Note: Times in (Hr:Min:Sec) format | | | |

| Fire Activity | <u>All Fires</u> | <u>Arson</u> |
|-----------------------|-------------------------|---------------------|
| Estimated Dollar Loss | \$1,552,854 | \$ 233,363 |
| Estimated Value | \$70,211,116 | \$3,720,000 |
| Percentage Saved | 97.79% | 93.73% |
| Injuries | FFD 0, Civilian 2 | FFD 0, Civilian 1 |
| Fatalities | FFD 0, Civilian 2 | None |

| Mutual Aid | <u>Given</u> | <u>Received</u> |
|------------------------|---------------------|------------------------|
| Assistance to EMS Crew | 0 | 1 |
| EMS Call | 9 | 9 |
| Fire, Brush | 1 | 1 |
| Fire, Structure | 18 | 9 |
| Fire, Vehicle | 0 | 1 |
| Rescue, Water | 0 | 1 |
| Other | 4 | 2 |
| Total | (32) | (24) |

Fairbanks Fire Department Prevention Division

Fire Prevention Division GOALS for 2007

- Increase staffing of the Division to meet the increased work load. Will continue to work with the administration to hire a recruit Deputy Fire Marshal.
- Seek outside funding (grants) to support the Public Safety Education in the Community.
- Will continue to support our teachers in area schools with the RISK WATCH children injury prevention program by increasing the presents of the Fire Department in our schools and with civic groups through our Public Education Programs. Continue to work to help develop partnerships to impact the safety issues facing the community.
- Will continue to work to develop a five-year inspection plan for facilities in the city. Increase the number of inspections in specific occupancies. These inspections will correlate with the 5 year plan.
- Develop plan to implement a "Fire Corp and CERT Program in the City of Fairbanks

2006 Highlights of the Prevention Division

- **IMPROVEMENT OF RISK WATCH:** Worked with the State Champion Management Team on developing an "arctic supplement" for RISK WATCH to address safety concerns in Alaska and in the Interior.
- **RECEIVED FIRE PREVENTION GRANT:** Received AFG Fire Prevention Grant from Department of Homeland Security. Grant funding was used to support RISK WATCH in the schools, Home Smoke Detector and House Number Project, purchase teaching prop for fire extinguisher training, and portable fire safety message board.
- **CONTINUED USE OF THE FAIRBANKS AREA FIRE INVESTIGATION TASK FORCE:** The Task Force has been up and running for six years now. Our local Task Force guide has been the model for several other communities around the state.

Areas of Concern in 2006

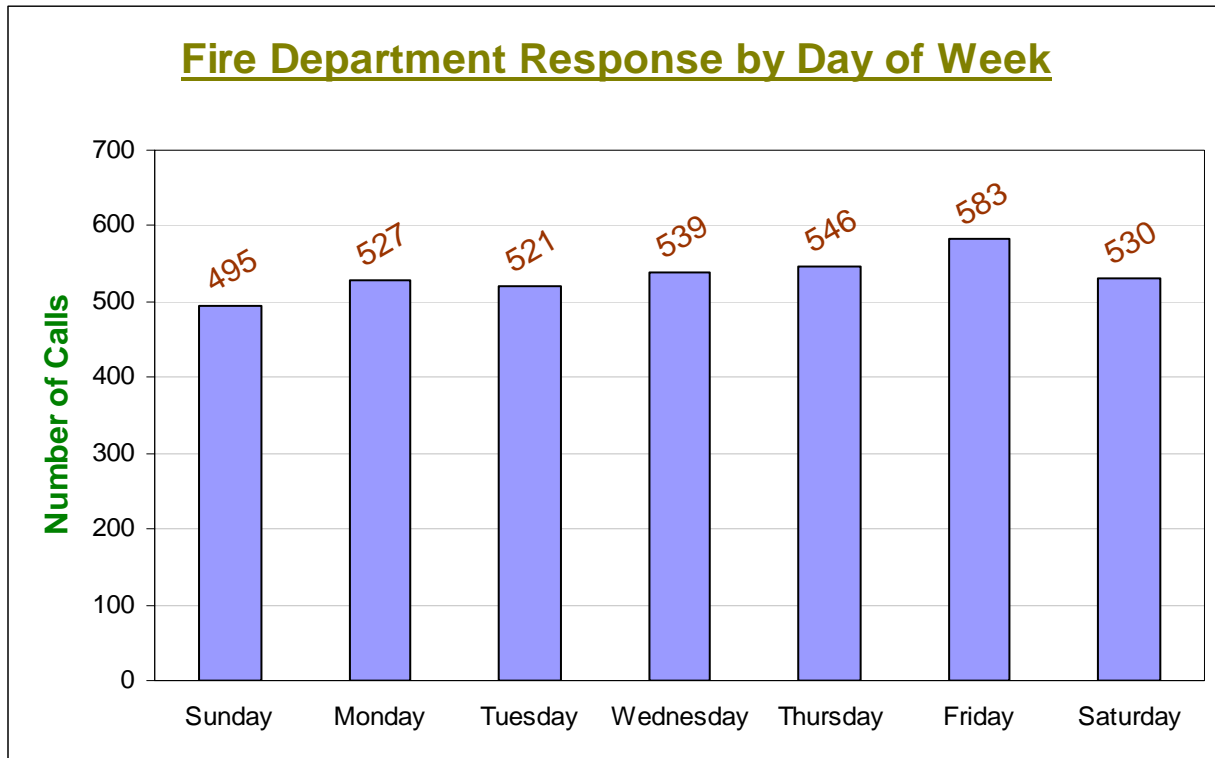
LACK OF PERSONNEL

The continued lack of adequate staffing in the Fire Prevention Division continues to impact the daily operation of the Division. We have had significant construction in 2006. Large number of projects required review and ongoing inspections. These reviews and inspections limited the ability of the Fire Prevention Division to:

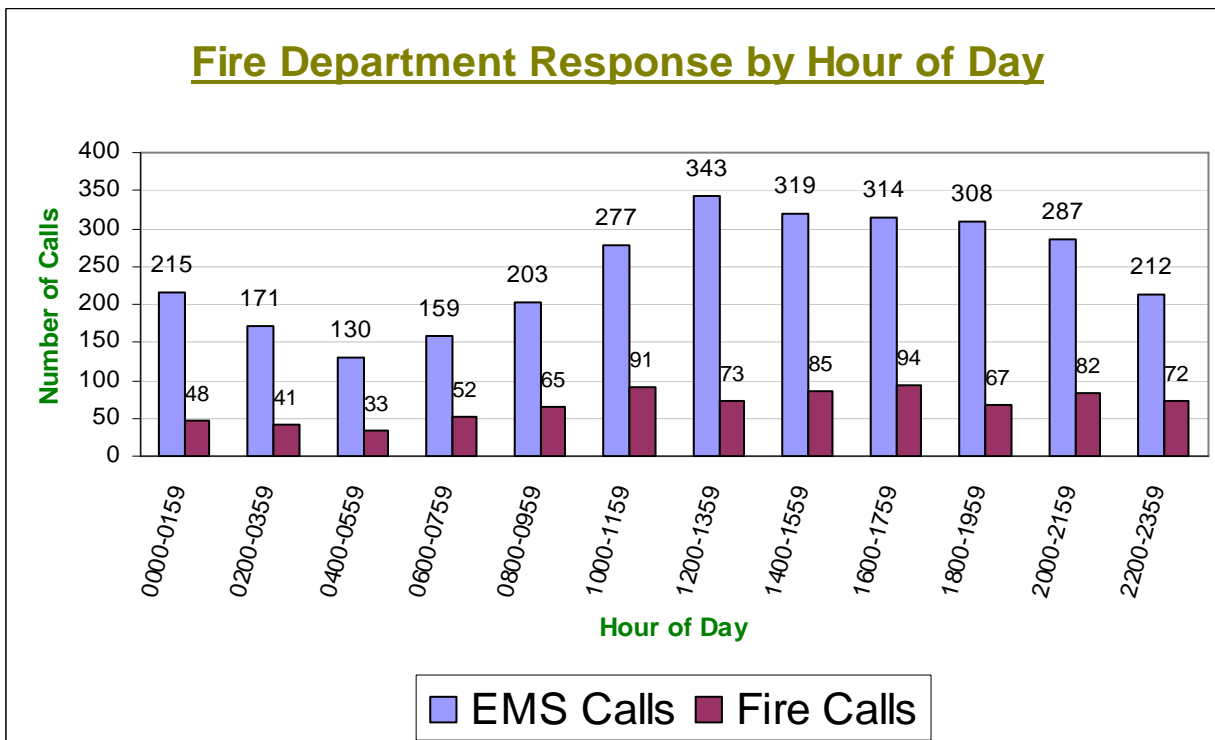
- ✓ Continue periodic Fire Safety Inspection of facilities around the community.
- ✓ Impacted the ability to do timely follow up to fire & life safety complaints.
- ✓ Ability to conduct follow-up on fire investigations.
- ✓ Continue fire safety education efforts in our school and around the community.

2006 RESPONSE STATISTICS & GRAPH

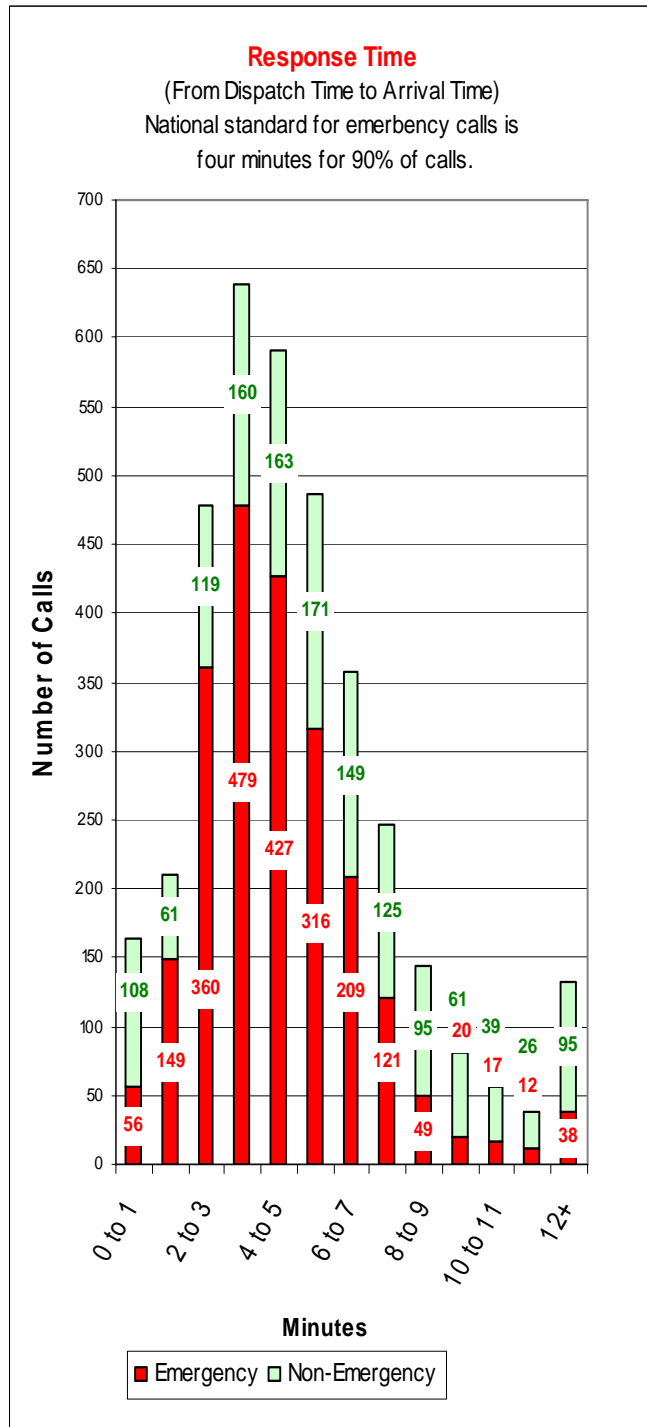
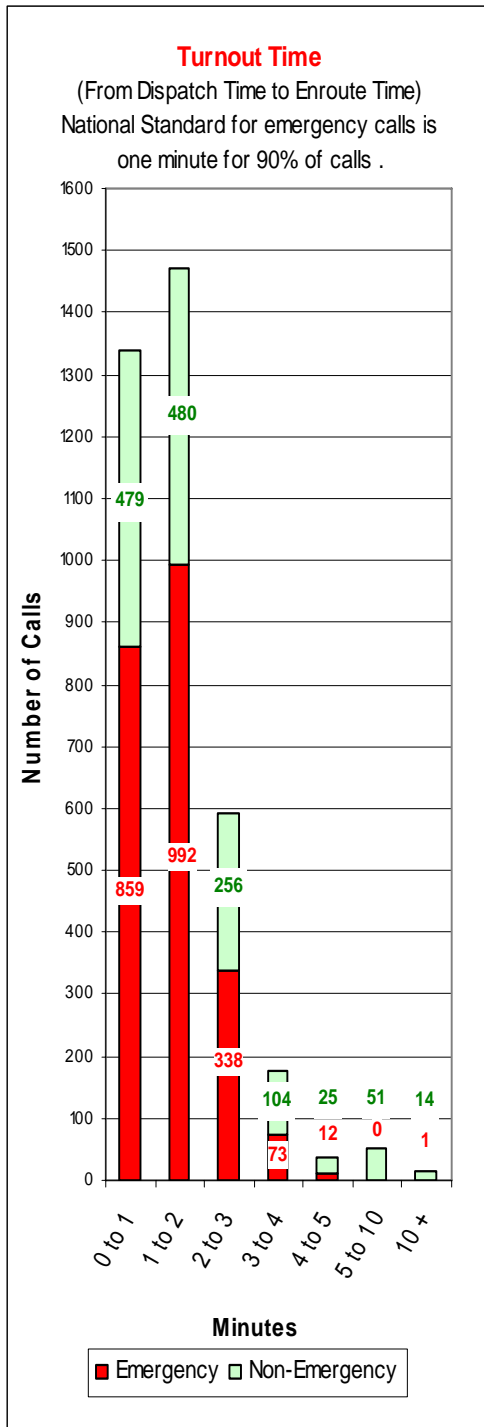
All Emergency Calls for 2006



The highest number of responses were on **Fridays**. The busiest time is from noon to 2pm. (1200 - 1359)



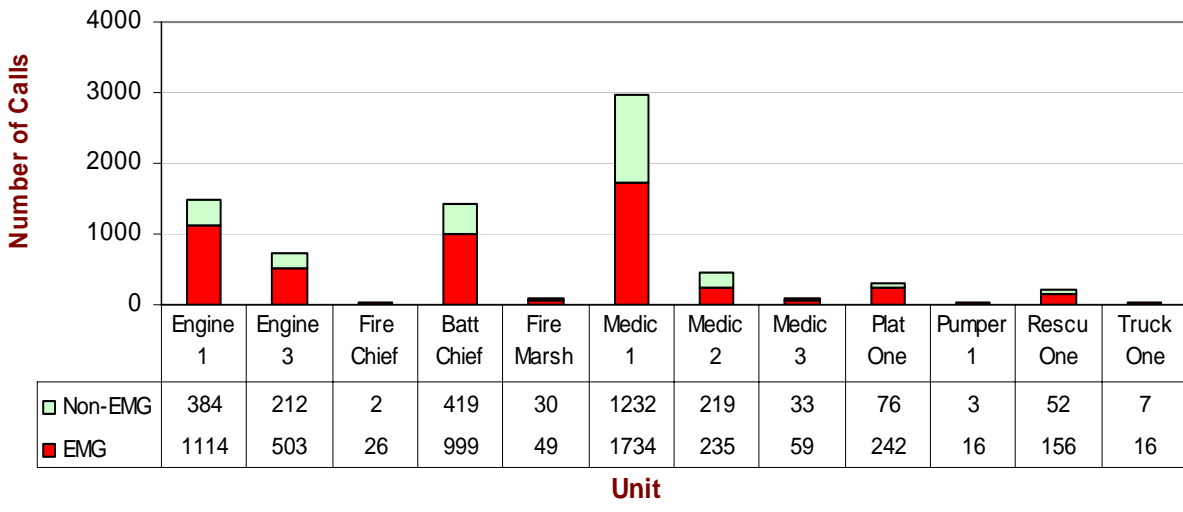
For **Thirty-Eight** (38%) percent of emergency calls, the apparatus were enroute to the call in under one minute of the tone. There were **57** calls where no turnout time was recorded. This is due to being cancelled prior to apparatus movement from the station.



@ **38%** - need 90% **← TO MEET NATIONAL STANDARD →** @ **46%** - need 90%

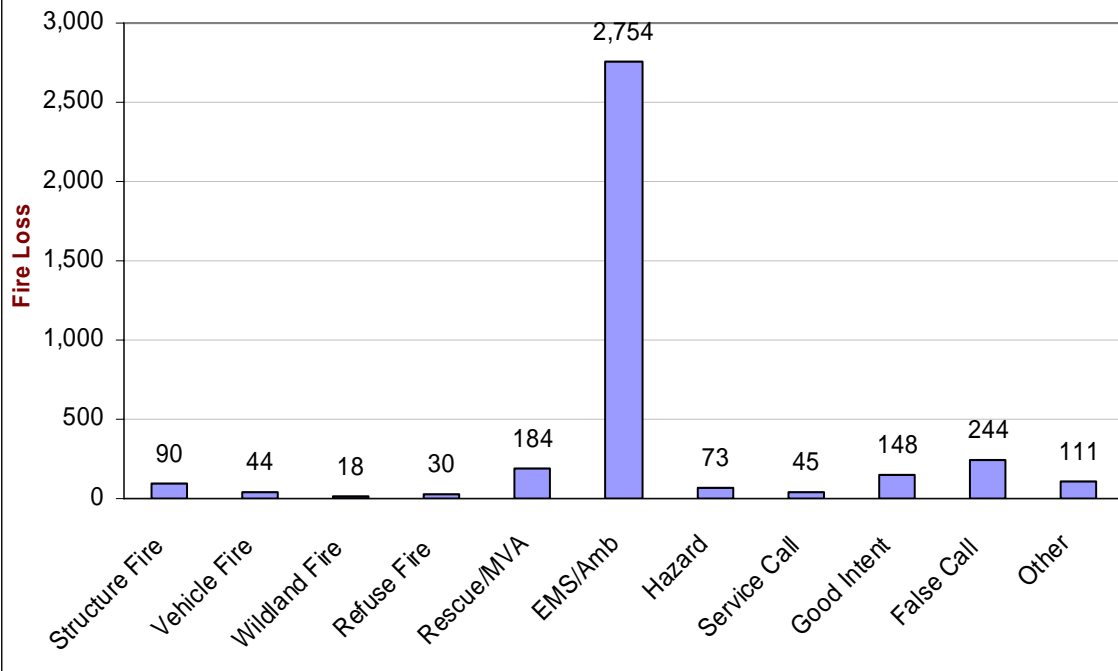
For **Forty-Six** (46%) percent of emergency calls, the first arriving apparatus was on-scene within four minutes of the alarm. There were **58** calls where apparatus did not arrive at the scene. This was due to being cancelled prior to arrival.

2006 Apparatus Response All Types of Calls

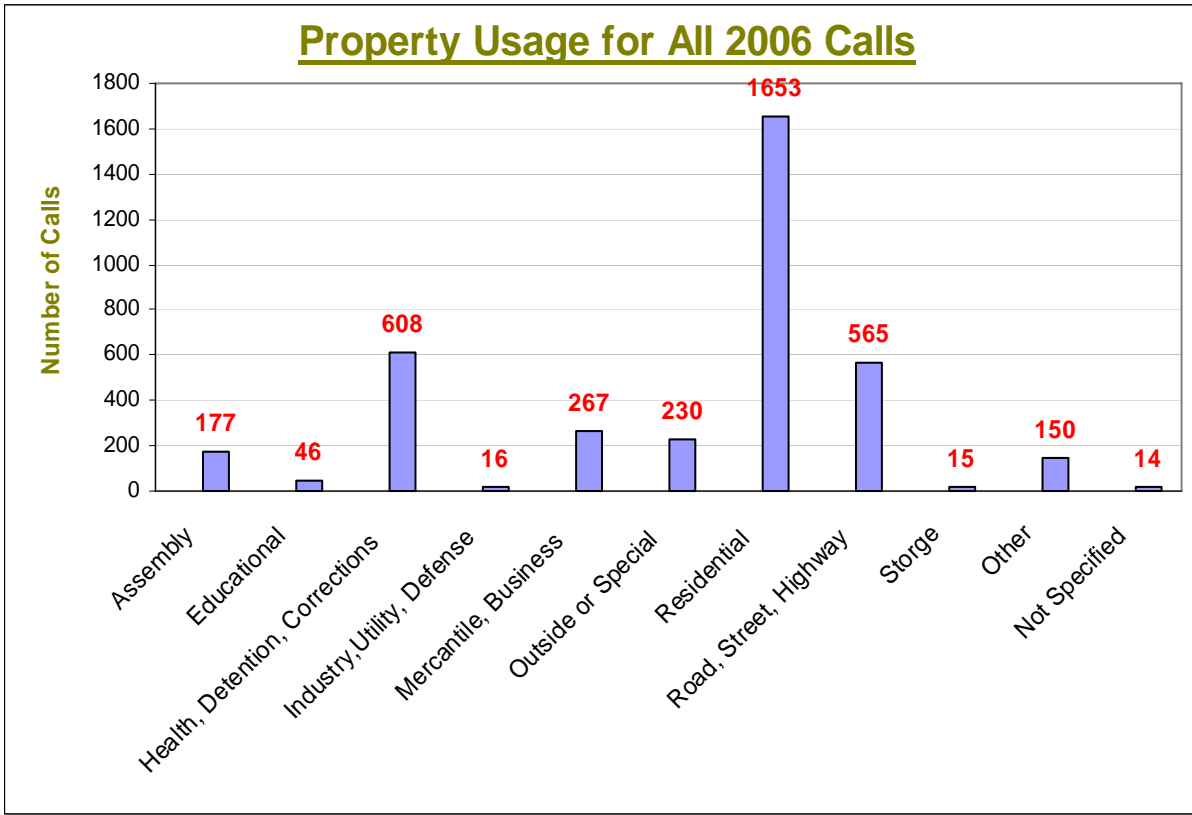


The bulk of responses were medical in nature. **Medic-1** is the first out ambulance. The on-duty Battalion Chief responds to provide scene management and support to the responders. **Engine-1** is the third busiest apparatus. **Engine-1** responds on all fires, but also responds on motor vehicle crashes and to assist the ambulance when needed.

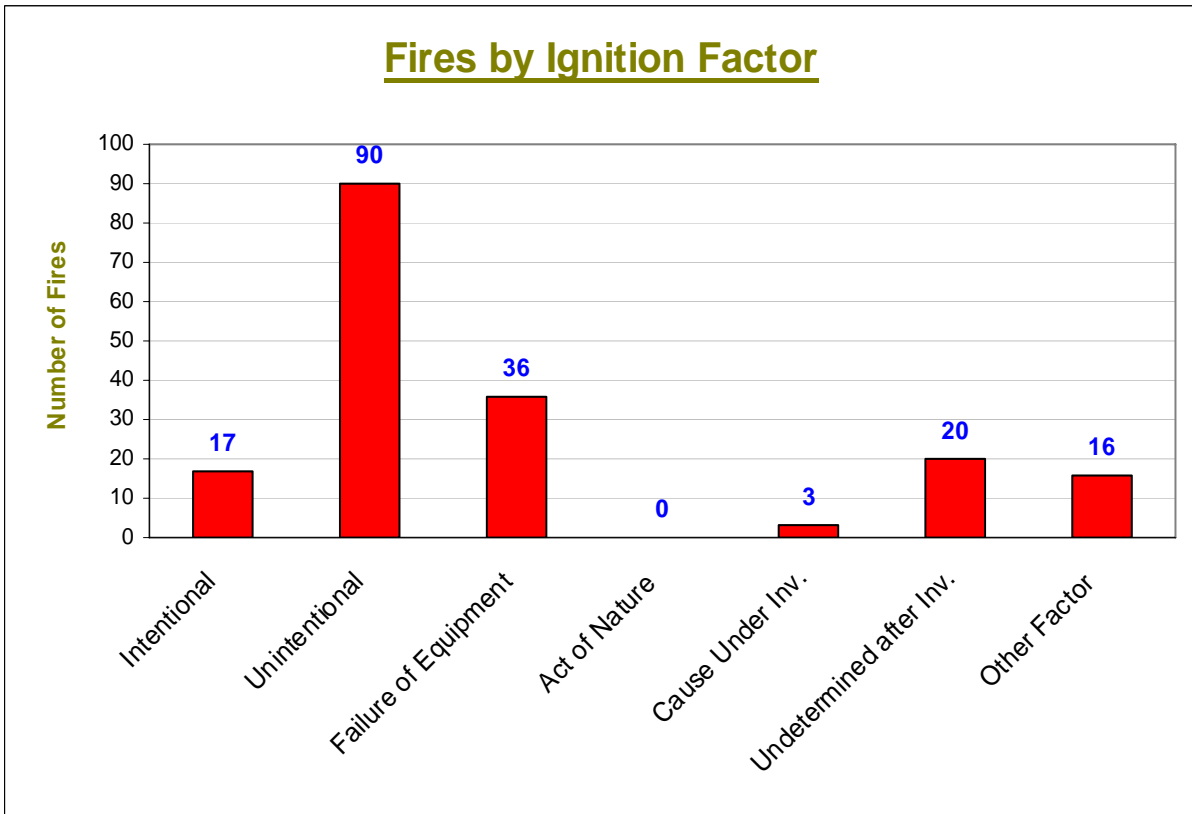
2006 Calls by Incident Type

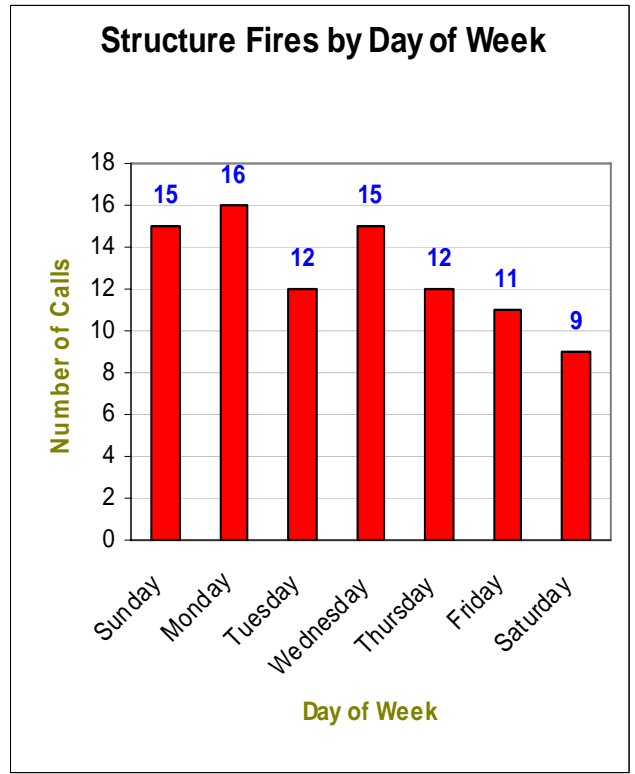
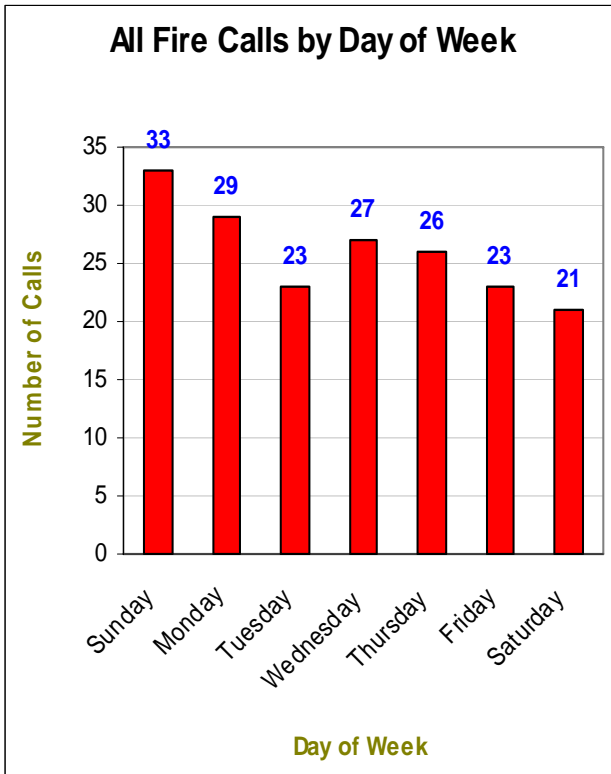


Seventy-Four (74%) percent of calls were EMS/Ambulance calls. This number excludes all Rescue & Motor Vehicle Accidents, which may have also involved injuries requiring EMS services.

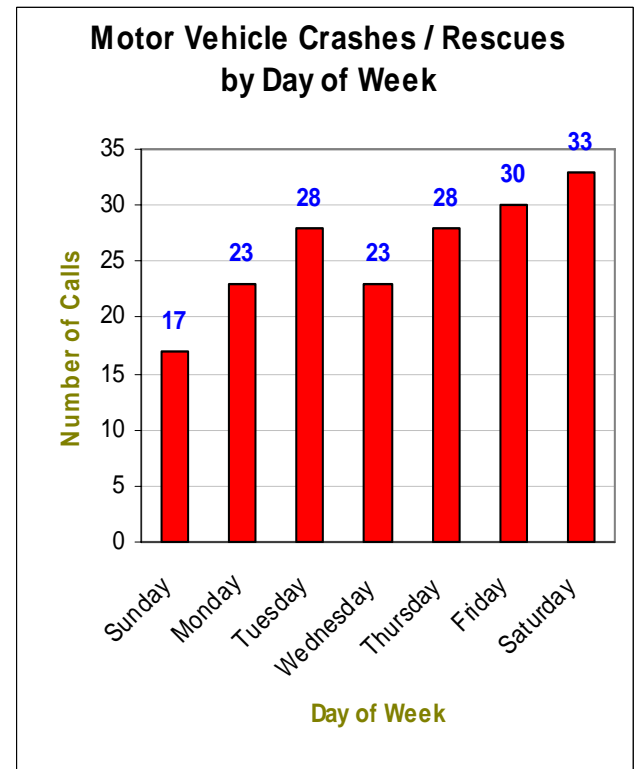
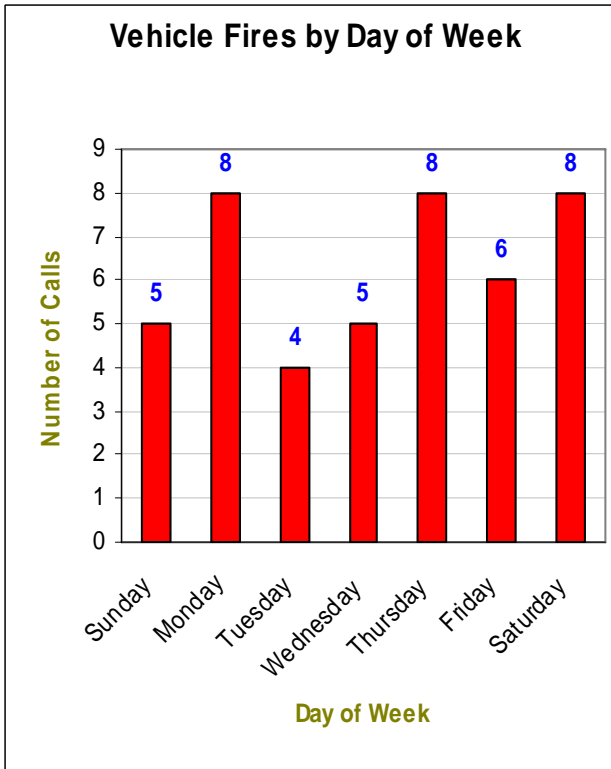


FIRE Calls for 2006



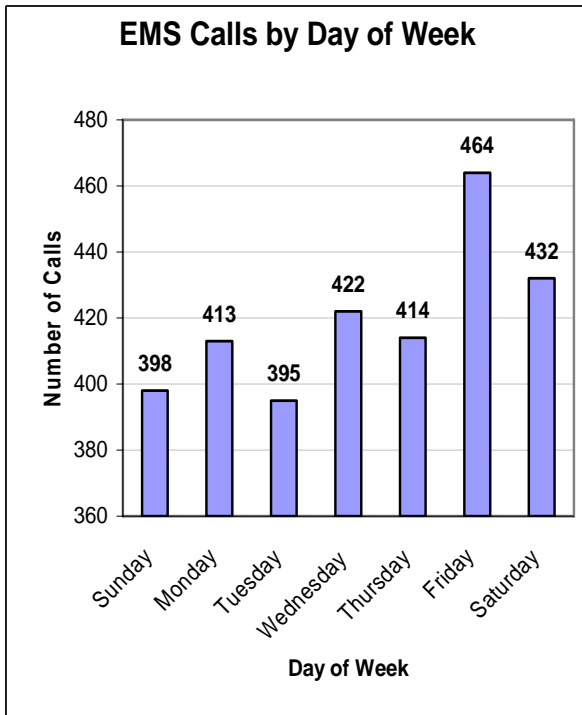


Sundays were the high day of the week for fire calls in general and **Monday** was the day with the most structure fires.



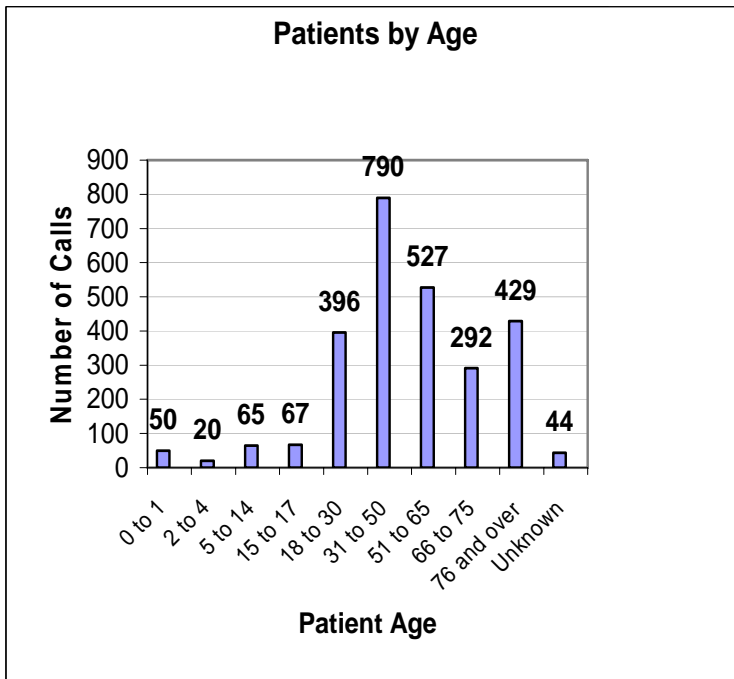
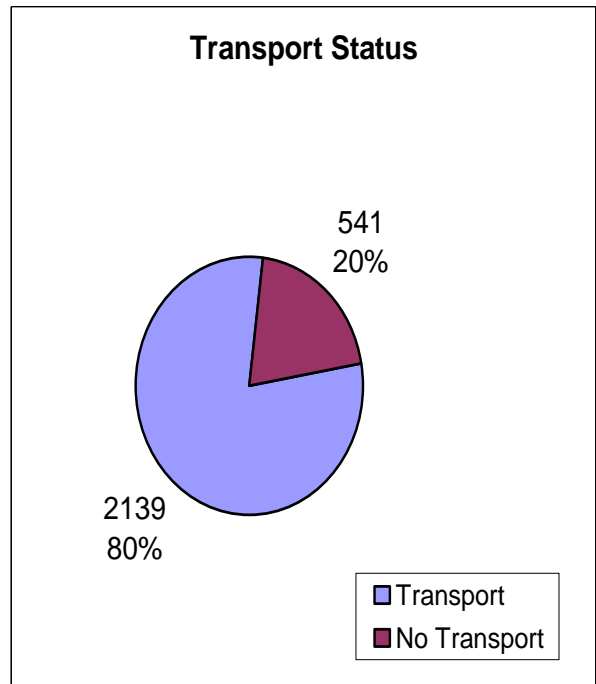
Saturdays are the most active days for motor vehicle crashes and rescue events.

EMS Calls for 2006

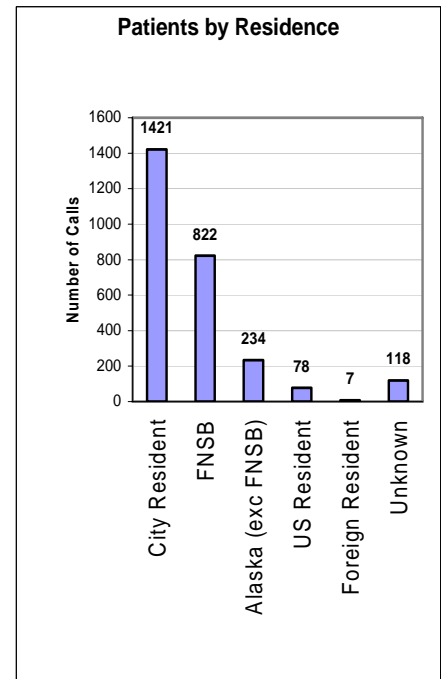


Fridays became the most active day for EMS calls.

In 2006, there were **2938** EMS calls, with a total of **2680** patients assessed/treated.

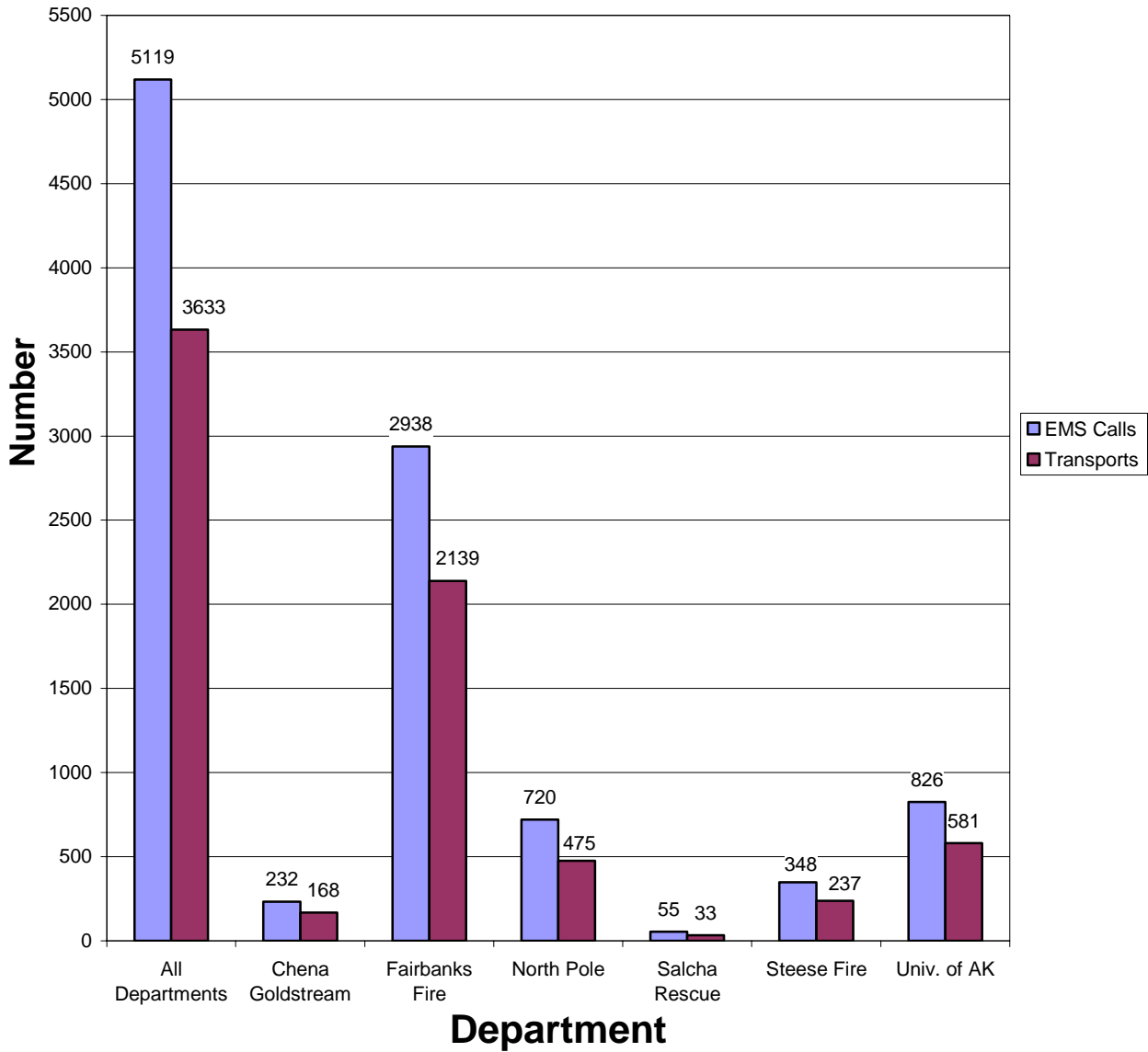


Patients 31 to 50 years old were the most common. The majority of patients were City residents.



Areawide Activity Comparison for EMS

2006 Areawide EMS Activity

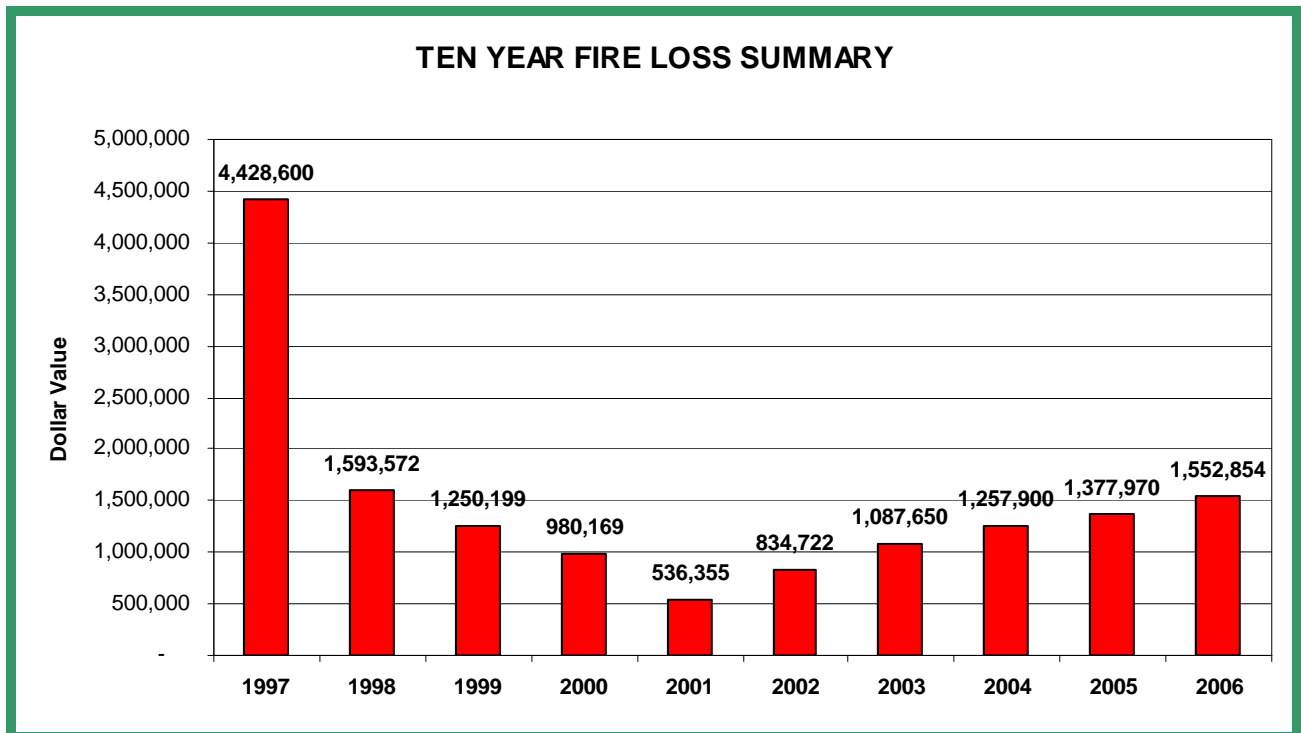
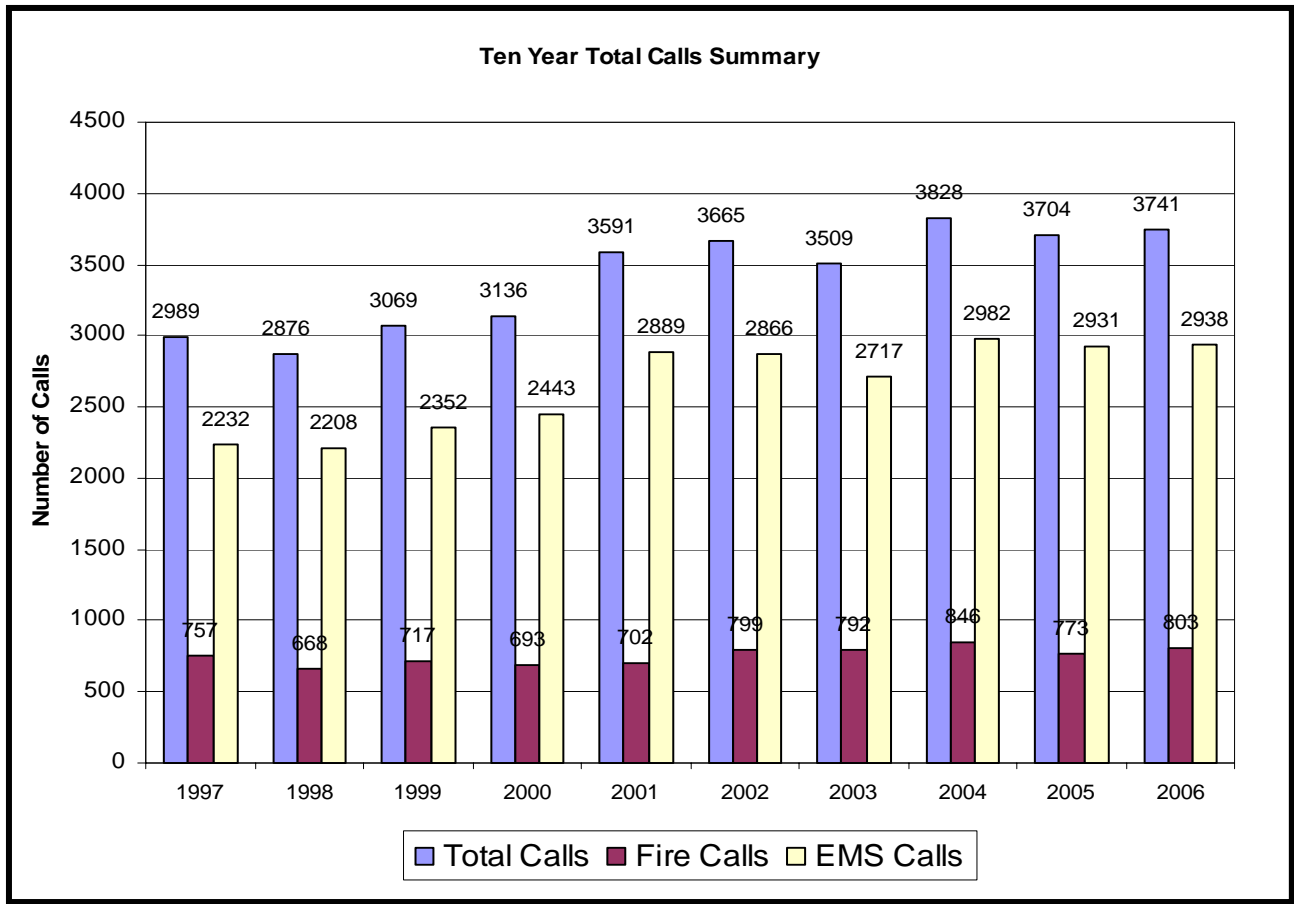


| | % of Call Volume | EMS Calls | Transports | Transport Ratio |
|-------------------------|------------------|-------------|-------------|-----------------|
| Chena Goldstream | 4.5% | 232 | 168 | 72.41% |
| Fairbanks Fire | 57.4% | 2938 | 2139 | 72.80% |
| North Pole FD | 14.1% | 720 | 475 | 65.97% |
| Salcha Rescue | 1.1% | 55 | 33 | 60.00% |
| Steese Fire | 6.8% | 348 | 237 | 68.10% |
| Univ. of AK FD | 16.1% | 826 | 581 | 70.34% |
| All Departments | 100.0% | 5119 | 3633 | 70.97% |

Fairbanks Fire Department 5-Year Historical Comparison

| | 2006 | 2005 | 2004 | 2003 | 2002 |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Number of calls: | | | | | |
| Fire | 803 | 773 | 846 | 796 | 799 |
| EMS | 2938 | 2931 | 2982 | 2717 | 2866 |
| Total | 3741 | 3704 | 3828 | 3513 | 3665 |
| Involving Arson | 17 | 8 | 16 | 35 | 10 |
| Average calls per day: | | | | | |
| Fire | 2.20 | 2.10 | 2.28 | 2.16 | 2.18 |
| EMS | 8.04 | 8.04 | 8.14 | 7.44 | 7.85 |
| Total | 10.24 | 10.14 | 10.45 | 9.62 | 10.04 |
| Fire dollar loss: | | | | | |
| Dollar Loss | 1,552,854 | 1,377,970 | 1,255,150 | 1,087,650 | 834,722 |
| Dollar Value Involved | 70,211,116 | 32,346,825 | 150,470,310 | 45,504,555 | 33,239,233 |
| Percentage Value Saved | 97.79% | 95.74% | 99.16% | 97.60% | 97.48% |
| Dollar loss involving arson: | | | | | |
| Dollar Loss | 233,363 | 23,765 | 30,950 | 199,100 | 188,130 |
| Dollar Value Involved | 3,720,000 | 153,515 | 26,931,000 | 697,530 | 17,315,000 |
| Percentage Value Saved | 93.73% | 84.51% | 99.88% | 71.45% | 98.91% |
| INJURIES | | | | | |
| Fire Service | 0 | 5 | 0 | 1 | 0 |
| Civilian Fire | 2 | 6 | 5 | 5 | 7 |
| FATALITIES | | | | | |
| Fire Service | 0 | 0 | 0 | 0 | 0 |
| Civilian Fire | 2 | 0 | 0 | 0 | 1 |
| APPARATUS | | | | | |
| Average Turnout Time | 0:47 | 1:32 | 1:52 | 1:36 | 1:02 |
| Average Response Time | 5:14 | 5:18 | 5:45 | 5:25 | 4:56 |
| Average Total Time | 37:16 | 36:53 | 37:43 | 37:12 | 33:56 |
| MUTUAL AID | | | | | |
| Given | 31 | 27 | 20 | 17 | 11 |
| Received | 24 | 32 | 36 | 29 | 28 |

Historical Comparisons (1997 – 2006)



Note: The large dollar loss in 1997 was due to the catastrophic fire at Fairview Manor.