



Fire Department Memorandum

March 30, 2006

TO: John Lamerato, Acting City Manager

FROM: William S. Nelson, Fire Chief

SUBJECT: 2004 Annual Report

I am pleased to submit the Troy Fire Department's Annual Report for 2004. This report documents the activities of the divisions and sections of the department.

It is worthy to note that in 2004 there was no loss of life due to fire in Troy. In addition, total fire responses decreased by 10%; structure fires decreased by 21%; and fire loss decreased by 16%.

Major accomplishments during 2004 included:

- Receipt of the 2004 Life Safety Achievement Award from the Residential Fire Safety Institute.
- Adoption of the 2003 International Fire Code.
- Implementation of the "Engine Maps" computer application in 12 fire apparatus. This is an automated mapping application that provides mapping and address specific information to responding firefighters.
- Implementation of the "Fire Personnel Availability Tracking System" in the department. This system tracks each volunteer firefighter's availability for responding to incidents and provides a real time reporting ability.

I would like to thank the City Council, you and your staff, and the other city departments for their continued support of the Troy Fire Department. I would also like to recognize the members of the department, volunteer and career, and the members of the Troy Firefighters Women's Auxilliary for their dedication and support.



Troy Fire Department Mission Statement

To provide the highest possible level of fire protection, rescue and hazard mitigation to the community.

This shall be accomplished with a team of professionals, both volunteer and career, by providing fire prevention, public education, emergency operations and planning.

This Department realizes that the members are the Department's most valuable resource and the key to its future.





Troy Fire Department Analysis of 2004 Incident Activity

During 2004 the Troy Fire Department responded to 1,228 calls for service. This represented a 10% decrease of incidents from 2003, which was 1,358.

In fire activity, we experienced a decrease of 23%, a total of 181 fires, down from 234 in 2003. Structure fires saw a decrease, down 21% from 2003, at 75 incidents in 2004 vs. 95 incidents in 2003.

The majority of the decrease in structure fires occurred in residential structures (single family and apartments). In residential occupancies we saw a decrease of 20 incidents in 2004 over 2003.

Fire loss saw a minor decrease. In 2003 our loss was \$1,931,230. In 2004 our fire loss was \$1,613,915. This is a decrease of 16%.

During 2004 the Troy Fire Department responded to 567 false alarms. Most of those responses were to buildings with alarm systems that reported a fire for various reasons. Of that figure, 201 were confirmed system malfunctions. That total figure, 567, represents 46% of the department's responses.

Included in this report are charts that outline the activity of the stations. These charts show station activity by runs, fires, and structure fires. You will note that total station response is higher than the total department response. This is due to sending multiple stations to reported structure fire, and multiple alarm responses.



TROY FIRE DEPARTMENT

2004 Annual Report

Incident Breakdown

and

Percentage of Change

Fire Incidents	2004	2003	Percent Change
Structure Fires	75	95	-21%
Outside Structure Fires	3	1	200%
Vehicles	45	72	-38%
Grass	28	25	12%
Refuse	14	15	-7%
Other Fires	16	26	-38%
Total All Fires	181	234	-23%
Non Fire Incidents			Percent Change
Overpressure/Explosion	1	5	-80%
Rescue/Extrications	42	50	-16%
Hazardous Conditions (1)	200	156	28%
Public Service	23	28	-18%
Good Intent (2)	203	229	-11%
False Alarms	366	424	-14%
System Malfunctions	201	223	-10%
Weather Emergencies	11	9	22%
Other Non-Fires	0	0	100%
Total Non Fire Incidents	1047	1124	-7%

1. Includes spits or teaks with no fire; excess heat; arcing wires; and chemical emergencies.

2. Includes smoke scares; wrong locations; steam mistaken for smoke; and controlled burning.

Category	2004	2003	Percent Change
Total Fires	181	234	-23%
Total Non Fire Incidents	1047	1124	-7%
Total Alarms	1228	1358	-10%

Page Two
Structure Fire Breakdown

Where Fires Are Occurring	2004	2003	Percent Change
Public Assembly	5	4	25%
Educational	0	1	-100%
Institutional	1	0	0%
Single Family Dwelling	35	55	-36%
Apartments	16	16	0%
Motel/Hotel	0	0	0%
Stores/Sales	3	1	200%
Office	4	3	33%
Industrial	8	5	60%
Storage	0	5	-100%
Construction/Other	2	4	-50%

Fire Cause	2004	2003	Change
Incendiary/Suspicious	9	4	125%
Children Playing	0	0	0%
Smoking	0	3	-100%
Heating	7	2	250%
Cooking	21	35	-40%
Electrical	2	1	100%
Appliances/AC	2	0	200%
Open Flame, Ember	5	2	150%
Other Heat/Spark/Flame	7	2	250%
Other Equipment	4	4	0%
Natural	1	0	100%
Exposures	0	0	0%
Undetermined	20	42	-52%

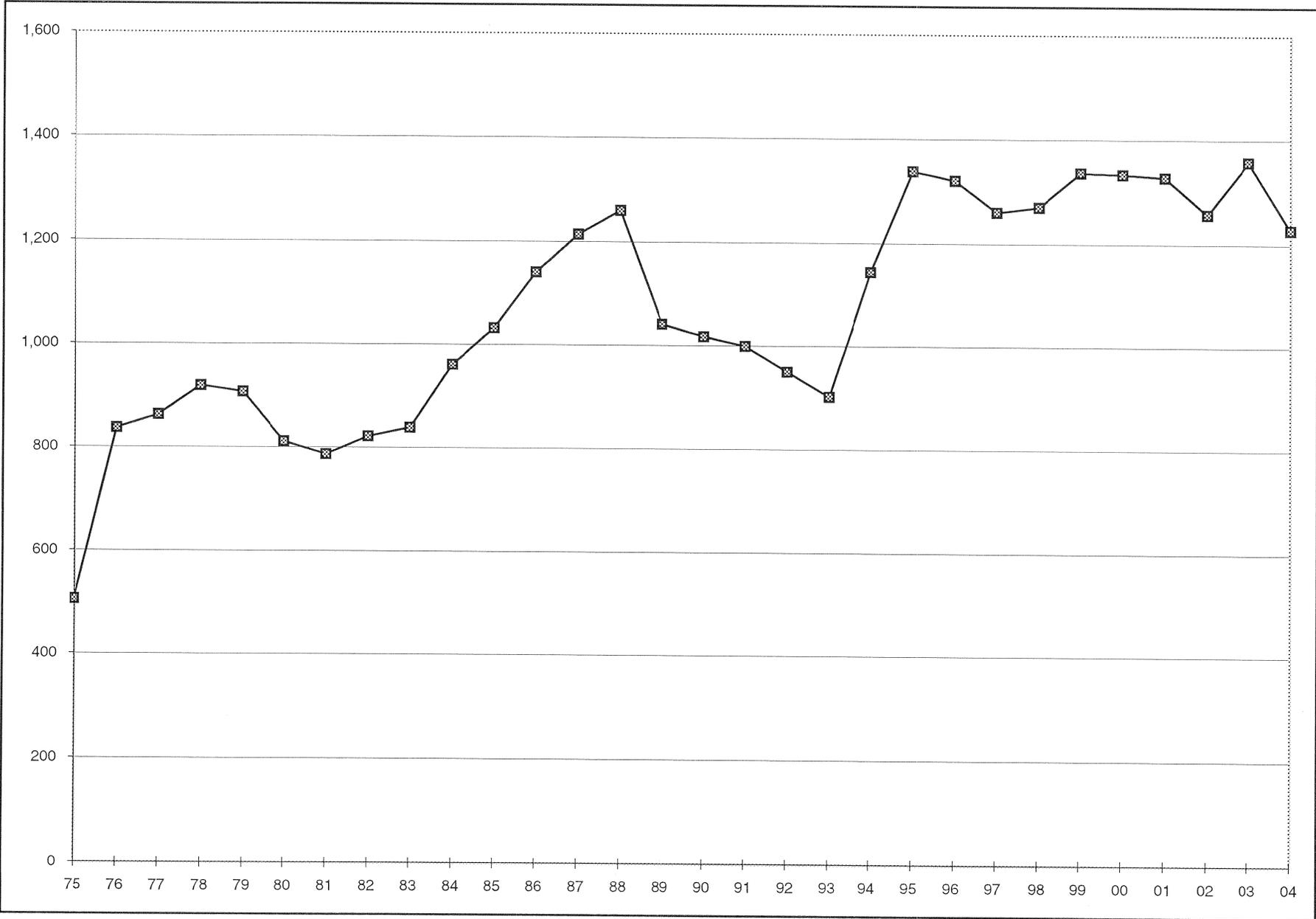
TROY FIRE DEPARTMENT
INCIDENTS BY STATION
2004

Fire Incidents	Sta 1	Sta 2	Sta 3	Sta 4	Sta 5	Sta 6
Structure Fires	9	7	15	14	13	10
Outside Structure Fires	1	2	0	0	0	0
Vehicles	9	6	10	10	3	7
Grass	5	4	8	3	3	4
Refuse	3	1	7	1	0	2
Other Fires	6	0	0	3	2	4
Total All Fires	33	20	40	31	21	27
Non Fire Incidents		0				
Overpressure/Explosion	0	8	0	0	0	1
Rescue/Extrication	4	37	13	6	4	7
Hazardous Conditions (1)	38	0	50	29	20	22
Public Service	7	36	5	2	2	0
Good Intent (2)	51	34	50	33	13	18
False Alarms	53	16	129	82	16	40
System Malfunctions	24	2	63	58	3	32
Weather Emergencies	1	0	6	0	1	0
Other Non-Fire Incidents	0	0	0	0	0	0
Total Non Fire Incidents	178	133	316	210	59	120
Fires by Type						
Public Assembly	1	1	0	1	1	0
Educational	0	0	0	0	0	0
Institutional	0	0	0	0	0	1
Single Family Dwelling	3	50	6	3	8	6
Apartments	2	0	6	2	4	1
Motel/Hotel	0	0	0	0	0	0
Stores/Sales	0	0	0	1	0	1
Office	3	0	0	0	0	1
Industrial	0	0	2	6	0	0
Storage	0	0	0	0	0	0
Construction/Other	0	0	1	1	0	0
Total Responses *	258	173	358	251	85	158

* Includes Normal Two Station Responses

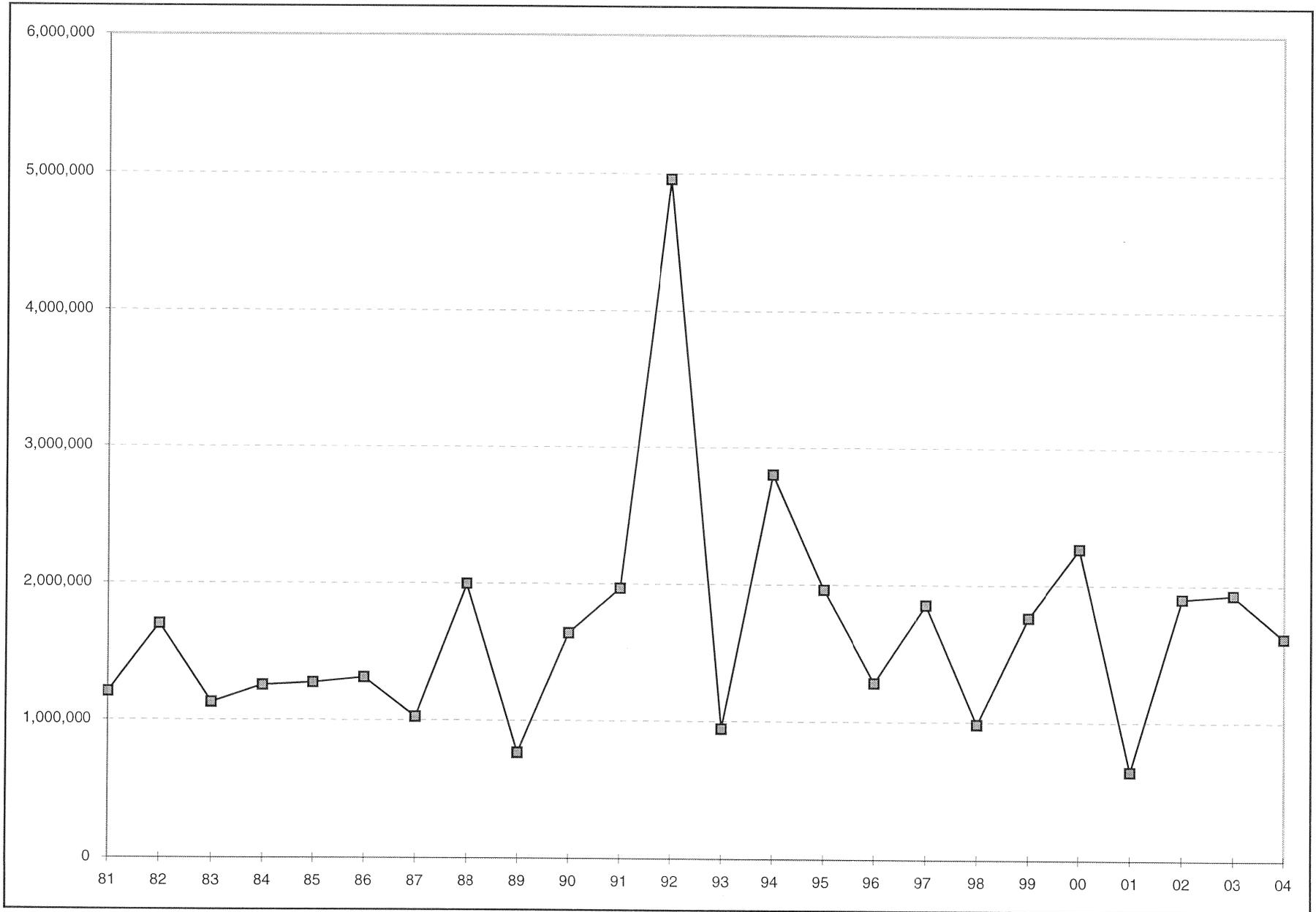
YEARLY FIRE RESPONSE

1976-2004



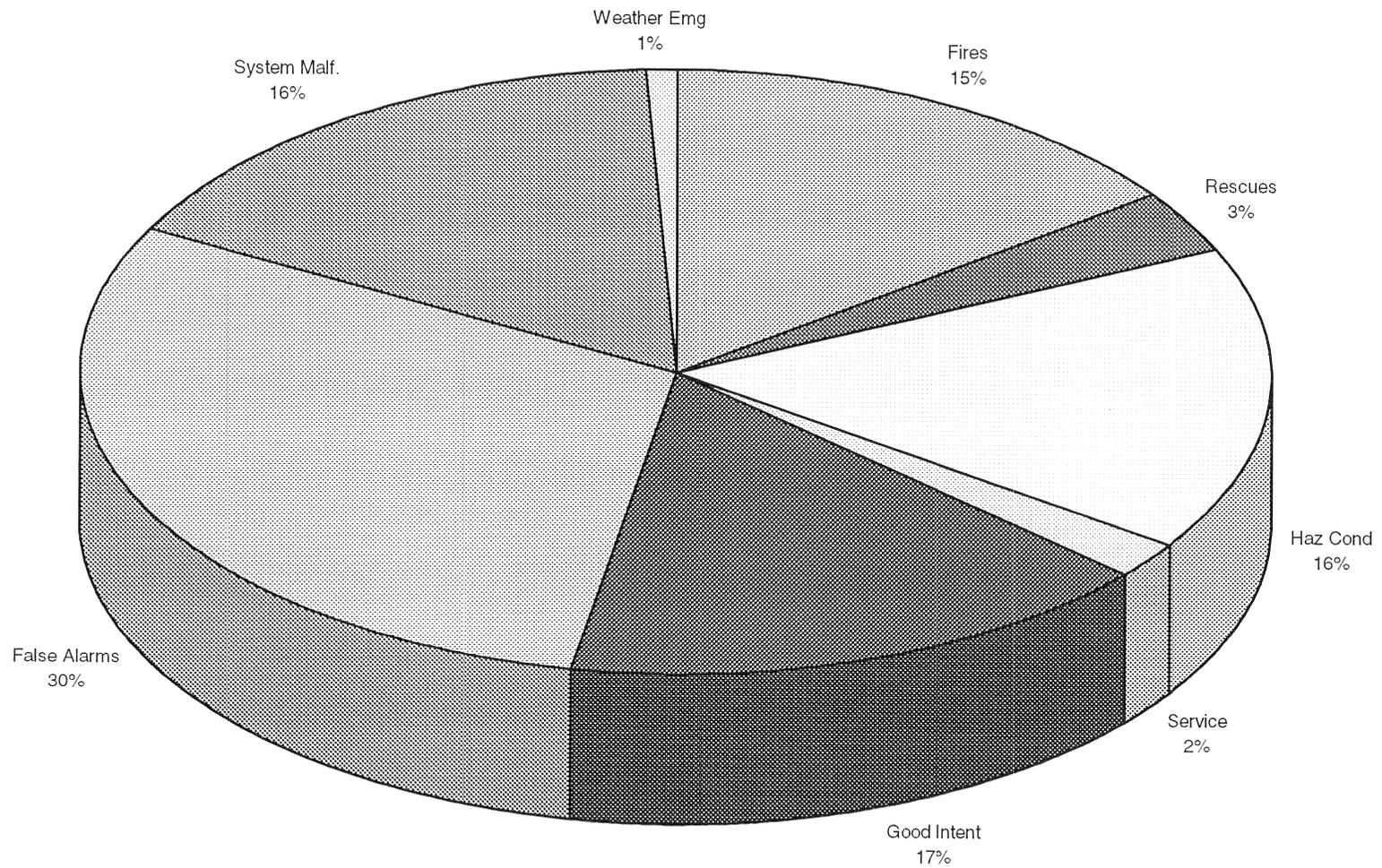
ANNUAL FIRE LOSS

1981-2004

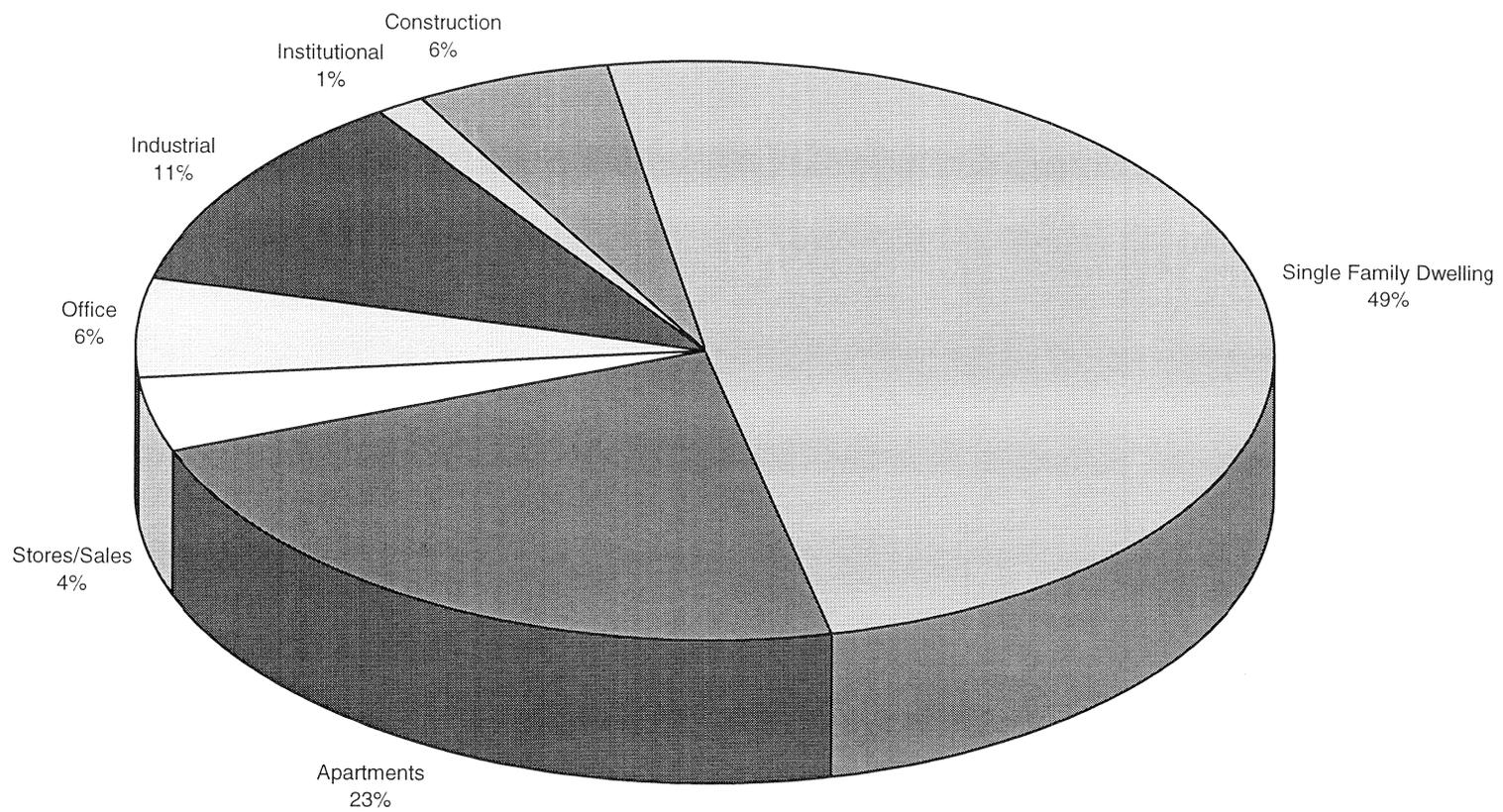


TYPES OF RESPONSES

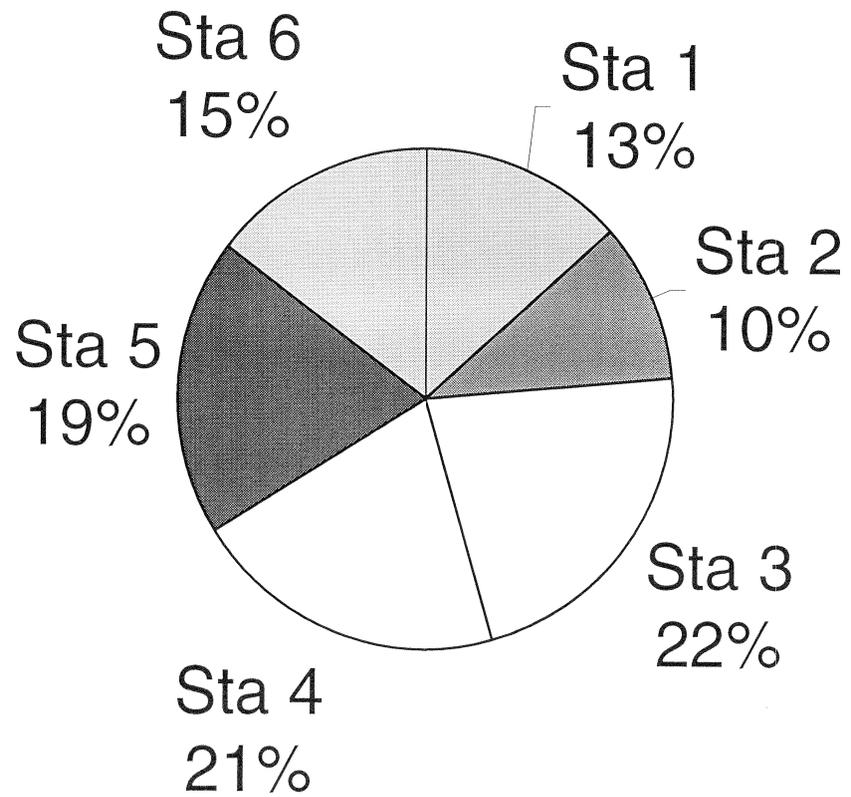
2004



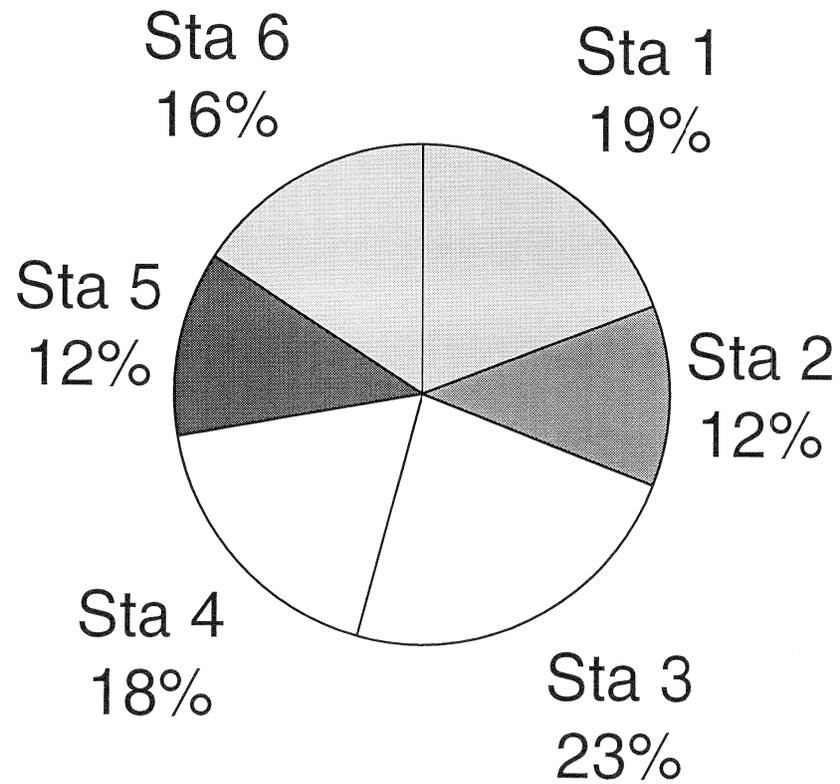
TYPES OF STRUCTURE FIRES 2004



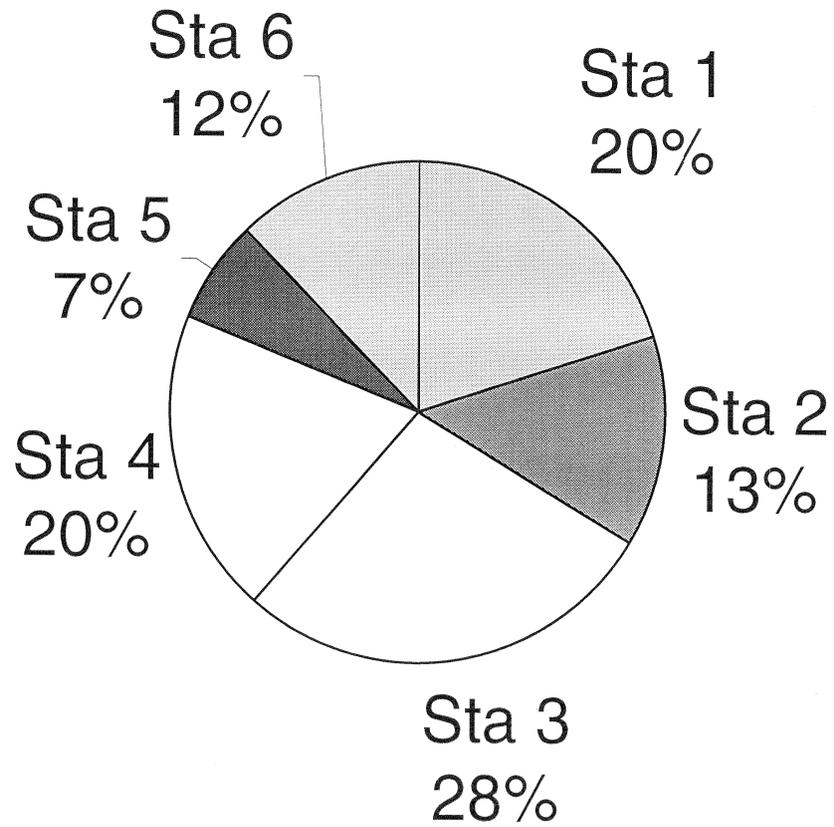
Structure Fires 2004



Fire Incidents 2004



Incident Response 2004





Troy Fire Department Seniority List

Station 1

	<u>Years</u>
Steve Armstrong	29.04
Richard Wiles, Jr.	29.03
Dale Bise	29.02
John Foster	28.04
Dan Bise	27.03
Dale Ballard	25.08
Randall Kurth	23.05
David Weaver, Jr.	23.04
Dane Lawicki	22.08
John Collins	17.07
Paul Firth	17.00
Michael Sackner	16.09
Thomas Hoerle	14.01
Charlie Noonan	12.01
Jeff Gifford	10.11
Donald Hudson	10.01
Jason Dalbec	10.01
John Schoenbeck	8.11
Thomas O'Herron	7.10
Steve Didocha	6.07
Adam Enterkin	6.07
Adam Kuz	6.07
Ryan Wolf	6.07
Thomas Kmiec	4.10
Brian Dodoro	3.03
Garry Lenaway	3.03
Randy Odgers	3.03
Richard A. Wiles	3.03
Darren Brewster	.06
Chris Ackerman	.03

Station 2

	<u>Years</u>
Gerald Williams	29.03
Thomas Duncan	26.06
Scott Noble	24.08
James Saylor	23.08
Tonya Perry	20.02
Scott Stoglin	18.09
Joel Barthlow	18.01
John Milliron	18.04
Brian Verbruggen	17.01
Paul Lucas	16.10
Thomas Berlin	16.02
Glen Malone	15.11
Peter Dungjen	15.04
Steven Bauman	14.05
Donald Douglas	13.05
Jerry Bayliss	13.04
Michael Carter	12.00
Danny Daniel	10.01
Terry Smart	8.10
Jeff Otto	7.02
Sam Kalef	5.07
Christopher Steigerwald	5.07
Michael Koehler	5.00
Thomas Cleary	4.08
Wade Rickard	4.08
Aaron Boryczka	2.11
Kirk Linton	2.11
Daniel Inman	2.03
Jonathan Duncan	2.02
Drew Ginther	2.02





Troy Fire Department Seniority List

Station 3

Years

David Roberts	26.00
Stan Godlewski	21.03
Charles (Patrick) White	20.01
Tim Wren	19.01
David Balagna	17.11
Susan Roberts	17.05
Jeff Bieber	15.05
Jim Haney	14.01
Richard Riesterer	13.11
Orville Allen	13.03
Eric Caloia	11.11
Donald Dougherty	10.11
Tim Dagleish	8.00
Michael Rusing	8.03
Mark McKimson	7.07
David Basile	7.02
Rob Bittner	6.07
Glenn Lanctot	6.05
Christopher Roberts	6.03
Paul Orrico	5.04
Sean Murphy	4.03
Nicholas Herzek	3.03
John Thomas	3.00
Adam Green	2.07
Kelley St. Cyr	2.08
William Corsaut	2.02
Carolyn Davis	.05
Allan Soriano	.05

Station 4

Years

Walt Verbruggen	26.08
David Schmidlin	25.01
Mark Flint	24.08
Harry Hartfield	24.05
Greg Latka	23.09
James Davison	22.02
Terence Chartier	20.07
Jack Spreyer	20.01
Anthony Pabian	17.10
Robert Bunker	14.11
Ronald Griffiths	11.00
Stephen Vaillancourt	10.10
Larry Schultz	7.08
Daniel Jackson	6.07
Shawn Hugg	5.07
Brian Typinski	5.06
James Hazen	4.03
Reid Vandekerkhove	3.07
Matt Arnold	2.09
George Hawes	1.07
Jay Hernandez	1.07
Eric Baroky	1.03
Chris Miltimore	1.03
Jeff Miltimore	.07
Brian Rebits	.07





Troy Fire Department Seniority List

Station 5

	<u>Years</u>
Robert Potts	28.09
William Barr	26.06
Glenn Plaskon	24.03
Robert Ziebell	23.05
Richard Pausch	22.10
Gary Wood	20.09
Randy Beachum	18.06
Jeff Denny	18.03
Phil Thor	18.02
Dan Thompson	17.08
Gerald Ball	17.05
Michael Viel	17.03
Jay Reynolds III	16.05
Gregory McMenamin	12.04
Mark Merian	12.01
Harold Kyte	12.01
Richard Bewick	10.08
Jason Reynolds	8.02
Ken Grand	6.07
Raymond Hella	6.07
Richard W. Mattot	5.02
John Schaufler	4.08
Adam Sinutko	4.08
Christopher Huck	4.04
Dan Madden	3.07
Ken Kiley	1.06
Mark Vleck	1.04
Steven McGee	1.01
Will Wood	.08

Station 6

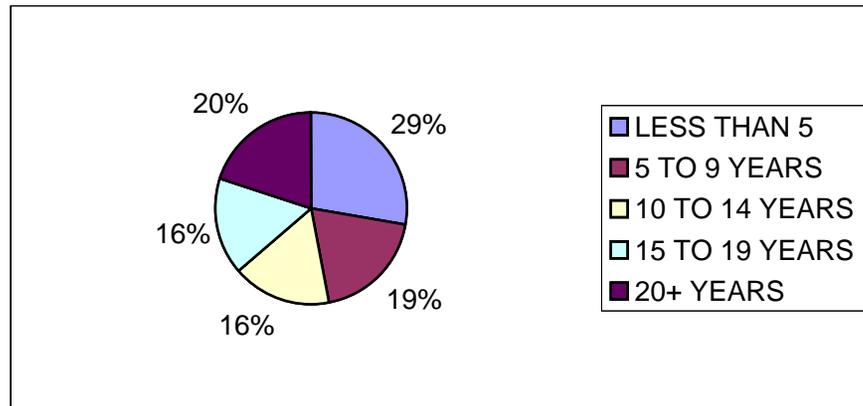
	<u>Years</u>
Ken Coppock	21.08
A. M. Leavitt	20.10
Joseph McKay	20.00
Daryl Klinko	19.05
Jim Kauffman	18.08
Richard Harding	18.03
Donald Lockard	17.04
Paul Koehn	15.01
Mark Colombo	14.11
Stephen Pallotta	13.11
Bill Petrusa	13.11
Dan Carcone	11.11
Steven Splan	11.06
Peter Hullinger	11.03
Steven Gerard	8.02
Joseph K. LaGarde	8.02
Charles Roberts	8.02
Robert Shenk	8.02
Ali Taqi	6.10
Fred Reddig	5.07
Karen Lawson	4.08
Dustin Lockard	4.04
Dennis Lundstedt	2.03
Todd Dudzinski	2.03
Joseph J. LaGarde	1.11
Robert Weichert	1.06
Thomas Schramski	.04
Kenny Mills	.04



FIRE FIGHTER CREDITED SERVICE BY STATION AS OF 12-31-04

	LESS THAN 5 YEARS	5 TO 9 YEARS	10 TO 14 YEARS	15 TO 19 YEARS	20+ YEARS
FIRE STATION 1	7	6	5	3	9
FIRE STATION 2	7	5	5	8	5
FIRE STATION 3	8	8	5	4	3
FIRE STATION 4	9	4	3	1	8
FIRE STATION 5	8	4	4	7	6
FIRE STATION 6	8	6	6	5	3
DEPT. TOTAL	47	33	28	28	34

LESS THAN 5	47
5 TO 9 YEARS	33
10 TO 14 YEARS	28
15 TO 19 YEARS	28
20+ YEARS	34





FIRE PREVENTION DIVISION



2004 Annual Report



ENGINEERING



EDUCATION



ENFORCEMENT

FIRE PREVENTION DIVISION

Overview

Historically, the United States has the largest fire loss of any other industrialized nation in the world while it spends the most on public fire protection. A proactive approach to fire prevention principles and practices serves to provide for a community free from the destructive forces of fire. This approach is fulfilled through installed fire protection and detection systems with an adequate and easily accessible water supply for fire extinguishment should it be needed.

The following is the 2004 Annual Report for the Fire Prevention Division as obtained from data logged by Division personnel. This report, however, does not reflect time spent in the management, planning, supervision, and administration of the Division, and cannot account for errors in data gathering, nor can it account for missing data due to program software shortfalls.

Inspections

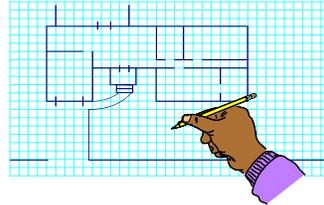
During 2004, 946.88 hours were spent conducting 1,247 construction related inspections, 1,023 existing building inspections, and 33 miscellaneous or other type inspections for a total of 2,303.

Fees

The Division continued its fee assessment for fire protection permits, hazardous material permits, fireworks permits, special event permits, and false fire alarm activations as required by ordinance. The Division accounted for \$81,427.00 from issuing 314 fire protection permits and 186 fire alarm permits; \$1,200.00 from issuing two hazardous materials permits; \$200.00 from issuing two fireworks permits, \$400.00 from issuing eight craft show permits, \$425.00 from conducting three overtime inspections; and \$11,700.00 in false alarm fees for a total of \$95,352.00.

Fire Prevention Activities

The Fire Prevention Division continued to perform the normal variety of fire prevention activities. While not all activities are listed, some of these activities included the following:



Plan Review

Except for one and two family residences, the Fire Prevention Division reviews building construction plans, tenant renovation plans, individual site plans, and residential development plats. The Division also has primary plan review responsibility for specialized fire protection systems such as fire alarm and extinguishing systems. The Division reviewed a total of 936 plans during 2004 including building, site, engineering, subdivision, and water main plans. The Division coordinates regularly, and values a close working relationship with the Building, Planning, Engineering, and Water Departments.

Construction Related Inspections

The Fire Prevention Division's role in new construction includes inspection of construction methods as well as inspection and testing of fire protection systems including fire suppression, fire detection and alarm, smoke control, and related systems. The Division interfaces on a daily basis with the building department's building, electrical, and mechanical inspectors to coordinate inspections for buildings under construction and renovation.

FIRE PREVENTION DIVISION

Existing Building Inspections

The Fire Prevention Division performs existing building and tenant inspections in all types of structures. This also includes inspection and testing of fire protection systems including fire suppression, fire alarm and detection, and related systems; and hazardous materials in existing occupancies.

Violations

Violation notices are issued when an inspection reveals fire code violations and safety related hazards. All violations are tracked until: 1) they are corrected; 2) they are successfully appealed through the appeal process; or 3) they are referred to the Law Department. The Division issued a total of 1,420 violations and cleared 1,227 violations.

Hazardous Materials & Firefighter Right To Know

In order to minimize hazards to responding firefighters and to comply with Federal and Michigan Right-to-Know requirements, the Fire Prevention Division surveys and develops site-specific informational bulletins for all firefighters. These bulletins, known as Haz-Alerts / Pre-Incident Surveys (H.A.P.I.S.), contain information about hazardous materials and other unusual hazards that exist within the community. Working with the Local Emergency Planning Committee, efforts have been made to assist businesses in Troy as well as in Oakland County to report hazardous materials and make appropriate information available to fire fighters for purposes of pre-incident planning.

Inspection Related Activities

Division personnel perform various fire inspection related activities including preparing inspection reports and violation notices, researching codes and standards, researching hazardous materials, and inputting data in the computerized fire records management system (FRMS). In addition, Division personnel attend a variety of meetings. These include planning and design meetings with architects, engineers, owners, developers, and contractors regarding new construction and renovation projects.



Public Education & Training

The Fire Prevention Division conducts public education by providing public fire safety education programs to the citizens of the community. This activity includes: fire safety lectures; school programs; and Fire Safety House demonstrations. 2004 marked the second year of the "Safe at Home" fire safety education program within the Troy School District. With cooperation and planning from key TSD personnel, this program is delivered within every Troy elementary school with curriculum for 1st, 3rd, and 5th grades. This program continues to be successful and will be further enhanced as needed in the future. A total of 254 public education programs were conducted in 2004 reaching 8,719 children and 1,662 adults for a total of 10,381 people. The Fire Prevention Division also occasionally assists with the training of firefighters by conducting various training programs for the stations and assisting at the fire training academy.

FIRE PREVENTION DIVISION



Administrative Activities

Division personnel perform various administrative tasks in the fire department offices. These include reviewing journals and technical publications, and returning telephone calls. In addition, Division personnel attend a variety of meetings. These include Division as well as office staff, department officer, safety, and open house committee meetings; department training meetings; traffic committee meetings; Troy Daze committee meetings; and various professional organization meetings.

Support Activities & Other Assigned Duties

The Fire Prevention Division continues to take part in numerous other activities in support of the overall mission of the fire department, some of which include the following:

Incident Responses & Investigations

Division personnel continue to respond to incidents to support fire suppression personnel. In addition, one Division member is available 24 hours a day serving as the department duty officer in order to respond to and conduct fire investigations, investigate hazardous conditions, overcrowding complaints, and miscellaneous requests and notifications.

Training Attended

In order to maintain skill proficiency, expertise, and job certification, personnel attend continuing education as necessary. Division personnel attend training programs related to such topics as code enforcement, plan review, fire protection systems, alarm systems, and hazardous materials.

False System Alarms

The Division continued tracking and billing for false alarm activations in all properties within the city and by visiting commercial properties, after the occurrence of two or more false alarms, to discuss maintenance requirements with responsible individuals. Out of 1,229 total incidents in 2004, 567 were classified as "false calls." Of these false calls, activated system alarms overall totaled 528, (496 commercial, 32 residential) down 97 or 16% from 2003. Approximately 62% of these false alarms were attributed to 20 businesses that generated between 5 and 14 false activations. Other incidents classified as false calls included malicious and/or mischievous, carbon monoxide, central station error, and bomb scares.

False system alarms accounted for 43% of total incident responses, placing an unnecessary burden and risk on the department. The "System Trouble/Test" and "System Impairment" entries into the C.A.D. system, however, continued as an aid to reduce the number of responses to false alarms. This potentially prevented unnecessary dispatching of fire stations to false alarm activations from known testing and maintenance to these systems.

FIRE PREVENTION DIVISION

Explorer Post 911

Members of the Explorer Post support the Division and the department by participating in the annual Troy Daze community fair and the department's annual open house. Additionally, post members staffed and operated a booth at Troy's annual Community Kaleidoscope and operated the Fire Safety House at various events in and around Troy. The members educated and informed many people in matters related to fire and life safety. Members continue to participate in the annual March of Dimes Walk America, monitoring the safety and security of walkers. Members continue to learn as well as develop professionally within the post.



Accomplishments

The Fire Prevention Division remains a staunch advocate of installed fire protection, usually in the form of automatic sprinklers, because of their undisputed record of providing life safety and property protection.¹ During 2004, nearly one third of commercial buildings in Troy remain equipped with automatic fire sprinklers. This equates to approximately 65% of existing,

commercial / industrial floor space protected by automatic fire sprinklers.

The Division continued its Fire Inspection Resource Allocation Model method for identifying and completing existing building inspections based upon occupancy type.

The Fire Prevention Division added a part-time clerk typist to its staff to assist with data entry and clerical functions. Over the Christmas holidays, the Division participated with Wayne State University's Physician Assistant Studies Program and donated 12 smoke detectors to needy families of a Detroit elementary school. The Division also participated with the Troy People Concerned charity organization by delivering food baskets and installing three smoke detectors in homes of needy families in Troy.

¹ Statistics reveal that there has never been a multiple loss of life from fire in occupancies where an automatic fire sprinkler system was installed and operational. Sprinkler systems are both effective and affordable. So much so that national building and fire prevention codes make allowances to site development, construction methods and occupancy practices where fire protection is installed.



Troy Fire Department Fire Investigation/Juvenile Fire Setters

Fire Investigation

Both the number of structure fires and the number of fires requiring the investigative unit were down from 2003. But overall, the percentage of fires being investigated by the unit stayed at 22% or 40 investigations. These 40 investigations consumed 429 man-hours. Of the 40 fires investigated, 11 were juvenile related. The fires caused by juveniles fell into three groups: playing with matches, fireworks, and arson.

Six of the fire investigations were found to be arsons. The most common single cause of accidental fires we had in 2004 was candle related.

The Fire Investigation unit consists of one Assistant Fire Chief, five Fire Lieutenants, and one Police Sergeant. In 2004, the members of the unit attended over 174 hours of fire investigative training. Members of the investigation unit also served on three different boards of directors for fire investigation organizations.

They published articles related to fire investigation and have taught at numerous seminars and classes on fire investigation. The unit also

hosted the first Courtroom Testimony Class to be offered to Fire Investigators.

Our arson-to-structure-fire ratio is 3% in Troy. This is far below the national average of over 13%. But both nationally and in Troy, juveniles accounted for 50% of these arsons. According to the FBI 2003 statistics, only 17% of the arson offenses were solved. In Troy last year, we cleared 50% of our arson offenses.

Juvenile Fire Setters

Fires which are started by juveniles are not all determined as incendiary or arson fires. Fires classified as children playing with matches, lighters or fire play are handled internally. There are several times, however, when the juvenile fire setters need more specialized intervention at which time we refer then to the Straight Talk Program that is sponsored by the U of M Burn Center. In 2004 we referred 8 juveniles to this program and one juvenile was admitted to the burn unit at Detroit receiving Hospital. The goal of these programs is to raise the awareness of the individuals as to what can happen and change the dangerous behavior that they have demonstrated.



Troy Fire Department Training Section Report

The training section of the Troy Fire Department is responsible for the ongoing training of our firefighters, new recruit training (in cooperation with the Oakland Fire Training Institute), training new Police Service Aids, and continuing education for the Police Service Aids. The training division staff is responsible for providing subject content, equipment, and record keeping for all training activities. The training division is also responsible for updating the fire dispatch portion of Computer Aided Dispatch System.

The continued success of our firefighting training is due to the firefighters' commitment to training and the efforts of the station training officers. Each year every Troy firefighter is required to attend a minimum of sixty hours of instruction. In 2004, Troy firefighters attended a total of 19,609 hours of instruction covering more than seventy different subject matters relating to fire suppression, investigation and prevention. The total number of training hours is a slight increase over the 2003 number of hours.

One member of each fire station serves as that station's training officer. The station training officer

(with the support of training division staff) is responsible for providing training that is pertinent, challenging, and up to date with constantly changing fire suppression tactics and technology.

As in past years, the Troy Fire Department along with the Oakland Fire Training Institute presented the Firefighter I & II Academy. This year we held classes on Monday and Thursday evenings. There were also several Saturday all day sessions. The new academy started in October, 2004, and will end in April, 2005. We have 6 students enrolled in this year's academy. During the six months of the academy, the students each receive about 300 hours of instruction. One member attended a Firefighter I & II Academy presented by the Orion Township Fire Department. The training division provided instructional assistance to this Academy.

In 2004 one new Police Service Aid was given forty hours of training on fire dispatch. In addition, forty hours of continuing education training on fire dispatch were provided to existing Police Service Aids.

In 2004 the Department continued the process of training its members on Rapid Intervention Teams. This prepares Firefighters to rescue fellow Firefighters in the event that they become lost or trapped in a structure fire.

The Fire Department was fortunate to have two houses that were slated for demolition donated for training. These houses were used for live fire, rescue and Rapid Intervention Team training.

In February, two presentations were offered on nutrition and physical fitness for Firefighters. These were classroom sessions presented by a Certified Physical Fitness Trainer. Heart attacks and other cardiovascular events account for approximately forty per cent of the Firefighter deaths in the United States each year. Muscular strains and sprains account for approximately forty-seven per cent of the Firefighter on-duty injuries in this country on an annual basis. These sessions addressed what our members need to do in terms of exercise and nutrition to help prevent one of these events from happening to them. These sessions were attended by over one hundred and twenty of the department members.

In the spring, four of the stations had their members participate in live fire flashover training at the CREST site at the Oakland Community College Auburn Hills Campus. Being caught in a flashover in a structure fire has been one of the leading causes of on-scene Firefighter fatalities in the United States for the past several

years. This training has Firefighters actually experience the evolution of a flashover in a safely controlled environment and teaches them how to recognize this phenomenon and how to avoid or escape this type of situation.

In the summer of this year an ongoing series of trainings were introduced and are being delivered to the stations. These are called five minute trainings. The intent is that on the training nights at the stations, five minutes are taken at the beginning of the session to present and discuss the topic of the five minute training. With some relevant and timely exceptions, the topics presented in these trainings focus on some element of safety as it relates to firefighting. The goal is accident and injury prevention. New five minute trainings are being sent to the stations on a bi-weekly and frequently weekly basis.

In September, one station took advantage of the excellent facilities at the CREST Center by conducting search and rescue drills using buildings in the simulated city at that site.

Also, in August, training sessions were held for all stations at our Training Center on proper suppression techniques for magnesium fires. These were classroom and hands-on, live fire training sessions with actual magnesium fires. Magnesium and other combustible metals are becoming more and more prevalent in automobile and truck components.

This was uniquely valuable training because fighting fires in which these metals are involved is much more difficult than fighting fires involving ordinary combustible materials.

With the introduction of the Fire Department Intranet site, the delivery of training materials to the stations went through a significant evolutionary step in 2004. All texts, lesson plans, PowerPoint presentations and videos that are in our training library are continuously available to the stations by accessing this site. All of these materials can be viewed anytime including viewing videos, which can, are streamed through this site. All of the stations are set up so that via the station computers the PowerPoint presentations and videos can be shown in the station classrooms. The five minute trainings (described above) which were previously being e-mailed to the stations are now posted on this site.

Members of the department also participated with outside agencies in joint training sessions which covered a wide variety of topics including vehicle extrication and advanced vehicle stabilization, hazardous material training, fire officer training, live fire training, instructor development, fire prevention training and public education training.





Troy Fire Department Apparatus Section

Fire Department owns, operates and maintains a fleet of 27 vehicles, 1 trailer mounted air compressor, an SRU trailer, a light trailer, and a Fire Safety House trailer. The fleet includes the following:

- 9 Pumpers
- 1 Reserve Pumper
- 1 Training Aerial/Pumper
- 3 Aerial Platforms
- 3 65' Aerial/Pumpers
- 3 Special Response Vehicles
(1 owned by Oakland County)
- 1 Trailer Mounted Air
Compressor
- 1 Vehicle Mounted Air
Compressor
- 1 Grass Fire Unit
- 1 SRU Trailer
- 1 Fire Safety House Trailer
- 1 Light Trailer
- 3 Utility Vehicles
- 1 Mobile Command Vehicle
- 1 Antique Pumper

During 2004, the Troy Fire Department received a new Hazardous Materials vehicle from Oakland County. This vehicle is used for the Oakland County "East"

response team. It will respond to incidents in Troy, as well as when called upon for incidents in the county.

During 2004, the department also developed specifications and solicited bids for the replacement of Engine 4-2. 4-1 is a 1989 Darley pumper.

One of the goals of the Troy Fire Department is to replace pumpers when they are between 15 to 18 years old, and ladder trucks when they are between 20 and 25 years old. Presently the average age of front line fire apparatus is 9 years old.

Maintenance on our apparatus is a high priority. Every piece of apparatus must be ready to run at full capacity, for many hours when called upon. Our apparatus have extensive systems built into them, such as pumping systems, foam systems, communications systems, including computers, electrical systems, both 12 volt and 110 volt, and other complex components needed to perform their functions.

Every piece of apparatus receives two complete services and a complete checkover while at the Motor Pool facility. The Motor Pool provides other services, such as brake system repairs, suspension repairs, and tire replacement.

Below are some brief statistics concerning the Troy Fire Department apparatus capabilities:

Pumping Capacity –
22,500 gallons per minute

Water Carried –
10,700 gallons

Truck Mounted Deluge Guns –
11,000 gallons per minute

Elevated Master Streams –
6,000 gallons per minute

Elevated Ladders – 480 feet

Ground Ladders – 965 feet

5" Supply Line – 6,900 feet





Troy Fire Department Special Response Unit

The Special Response Unit is a multi-jurisdictional team consisting of firefighters, police officers, and public safety officers from Troy, Clawson, Bloomfield Hills, Franklin-Bingham, Berkley, Beverly Hills, Oak Park, and Huntington Woods. These members are trained and equipped to manage the following types of incidents:

1. Hazardous material incidents including leaks, spills, and reactions of chemicals, which may be hazardous due to toxicity, radioactivity, corrosiveness, or flammability.
2. Technical rescue situations such as high angle and confined space rescue.
3. Fires where large quantities of foam are required such as flammable liquid fires or aircraft accidents.
4. Weapons of Mass Destruction (CBRNE-chemical, biological, radiological, nuclear and explosive)

The unit, established in 1980, is a member of the RRTN (Regional

Response Team Network) established by the Michigan State Police to deal with hazardous materials and terrorism incidents within the state. The role of the unit is to act as a resource for the Incident Commander (IC) and to provide technical expertise and specialized equipment as required. Unit members are trained to the Hazardous Materials Technician level and a number of members have completed advanced training at specialized programs across the country.

The unit operates with three vehicles: SR-1, a 1996 Darley with custom cab and body which functions as a communication center, research center, and carries monitoring equipment, personal protective equipment, and hazardous materials abatement equipment; SR-2, a 2003 Pierce with custom cab and body that carries decontamination, technical rescue and other equipment; and SR-3, a 1986 GMC/Marion Haz-mat, carries foam and associated equipment.

During 2004, the unit responded to four hazardous material incidents within the city. The hazardous material incidents involved chemical spills, and an ammonia and chlorine gas leak. In addition, Unit members assisted in threat assessment activities and standbys during the Woodward Dream Cruise, Ryder

Cup, Presidential visits, and other events.

SRU members held sessions totaling 1100 hours of in-house and outside training in 2004. Several members attended specialized Weapons of Mass Destruction training sponsored by the U.S. Dept. of Justice.

