

TROY FIRE DEPARTMENT



2005 ANNUAL REPORT



Fire Department Memorandum

July 1, 2006

TO: John Lamerato, Acting City Manager

FROM: William S. Nelson, Fire Chief

SUBJECT: 2005 Annual Report

I am pleased to submit the Troy Fire Department's Annual Report for 2005. This report documents the activities of the divisions and sections of the department.

It is significant to note that while structure fires and fire loss increased by 28% and 45% respectively, there was no loss of life or serious injury due to fire in Troy.

Major accomplishments during 2005 included:

- Receipt of the 2005 Life Safety Achievement Award from the Residential Fire Safety Institute.
- Expansion of the Regional Response Team to become a regional effort within Oakland County with members from 13 police, fire, and public safety departments participating.
- A replacement engine from HME, Inc was delivered and placed in service at fire station 4.
- Replacement ruggedized laptop computers were installed in six engines and three staff vehicles to complete the transition of preplan data from paper to electronic format.

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 Auxiliary 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 2005 Incident Activity

During 2005 the Troy Fire Department responded to 1,225 calls for service compared to 1,228 in 2004. This represented a .02% decrease.

There was an increase in fire activity from 181 in 2004 to 227 in 2005, up 25%. Structure fires increased from 75 incidents in 2004 to 98 in 2005, up 28%.

The majority of the increase in structure fires occurred in residential structures (single family and apartments). In residential occupancies we saw an increase of 12 incidents in 2005 over 2004.

Fire loss saw an increase. In 2004 our loss was \$1,613,915. In 2005 our fire loss was \$2,334,001. This is an increase of 45%.

During 2005 the Troy Fire Department responded to 566 false alarms. Most of those responses were to buildings with alarm systems that reported a fire for various reasons. Of that figure, 188 were confirmed system malfunctions. That total figure, 566, 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

2005 Annual Report

Incident Breakdown
and

Percentage of Change

Fire Incidents	2005	2004	Percent Change
Structure Fires	96	75	28%
Outside Structure Fires	2	3	-33%
Vehicles	66	45	47%
Grass	23	28	-18%
Refuse	26	14	86%
Other Fires	14	16	-13%
Total All Fires	227	181	25%
Non Fire Incidents			Percent Change
Overpressure/Explosion	3	1	200%
Rescue/Extrications	43	42	2%
Hazardous Conditions (1)	151	200	-25%
Public Service	19	23	-17%
Good Intent (2)	206	203	1%
False Alarms	380	366	4%
System Malfunctions	187	201	-7%
Weather Emergencies	7	11	-36%
Other Non-Fires	2	0	200%
Total Non Fire Incidents	998	1047	-5%

1. Includes spills or leaks with no fire, excess heat, arcing wires; and chemical emergencies.

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

Category	2005	2004	Percent Change
Total Fires	227	181	25%
Total Non Fire Incidents	998	1047	-5%
Total Alarms	1225	1228	0%

Page Two
Structure Fire Breakdown

Where Fires Are Occurring	2005	2004	Percent Change
Public Assembly	6	5	20%
Educational	3	0	300%
Institutional	0	1	-100%
Single Family Dwelling	50	35	43%
Apartments	13	16	-19%
Motel/Hotel	0	0	0%
Stores/Sales	4	3	33%
Office	2	4	-50%
Industrial	8	8	0%
Storage	3	0	300%
Construction/Other	7	2	250%

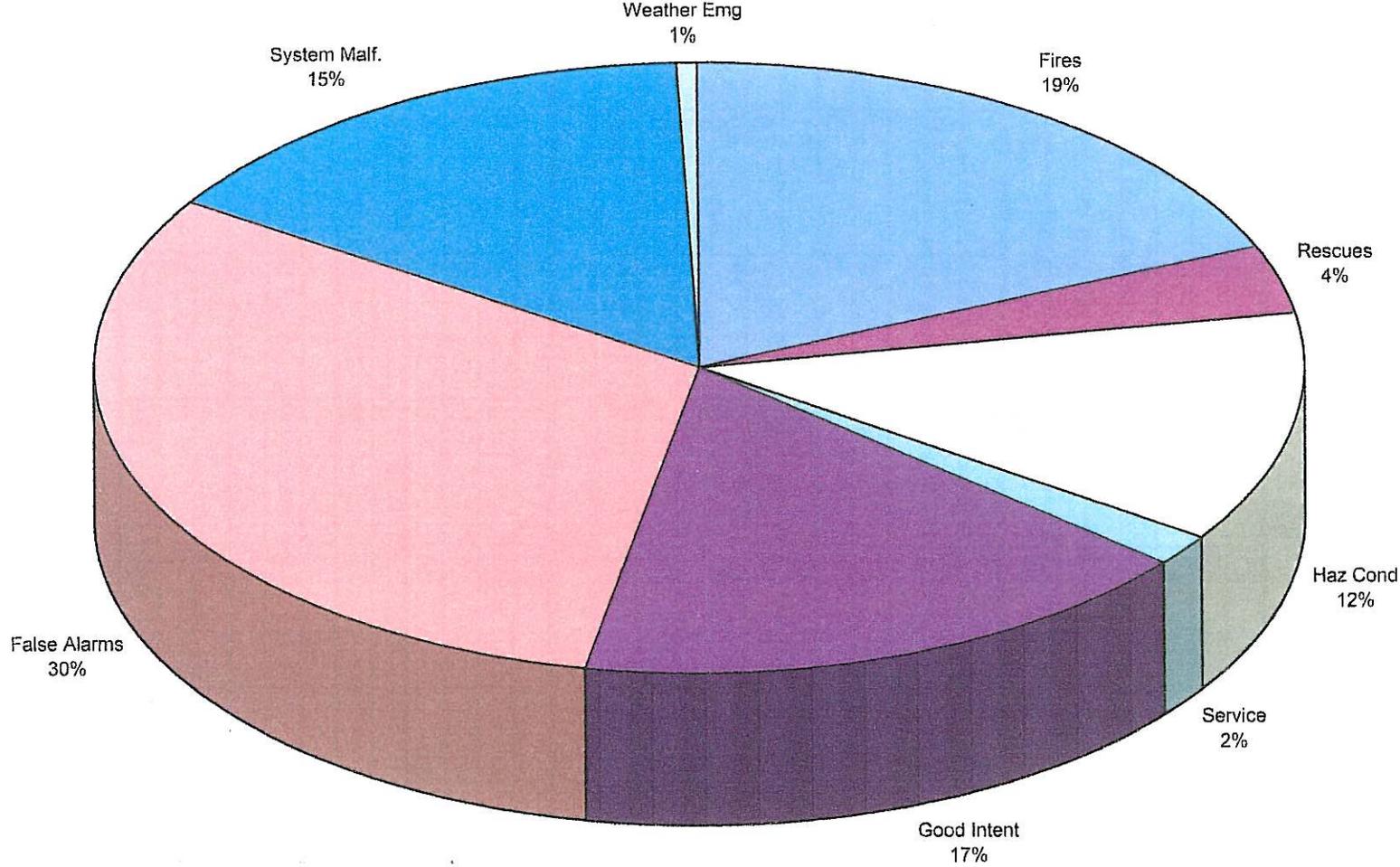
Fire Cause	2005	2004	Change
Incendiary/Suspicious	12	9	33%
Children Playing	2	0	0%
Smoking	3	0	0%
Heating	6	7	-14%
Cooking	20	21	-5%
Electrical	2	2	0%
Appliances/AC	5	2	200%
Open Flame, Ember	4	5	-20%
Other Heat/Spark/Flame	2	7	-71%
Other Equipment	2	4	-50%
Natural	1	1	100%
Exposures	5	0	0%
Undetermined	37	20	85%

TROY FIRE DEPARTMENT
INCIDENTS BY STATION
2005

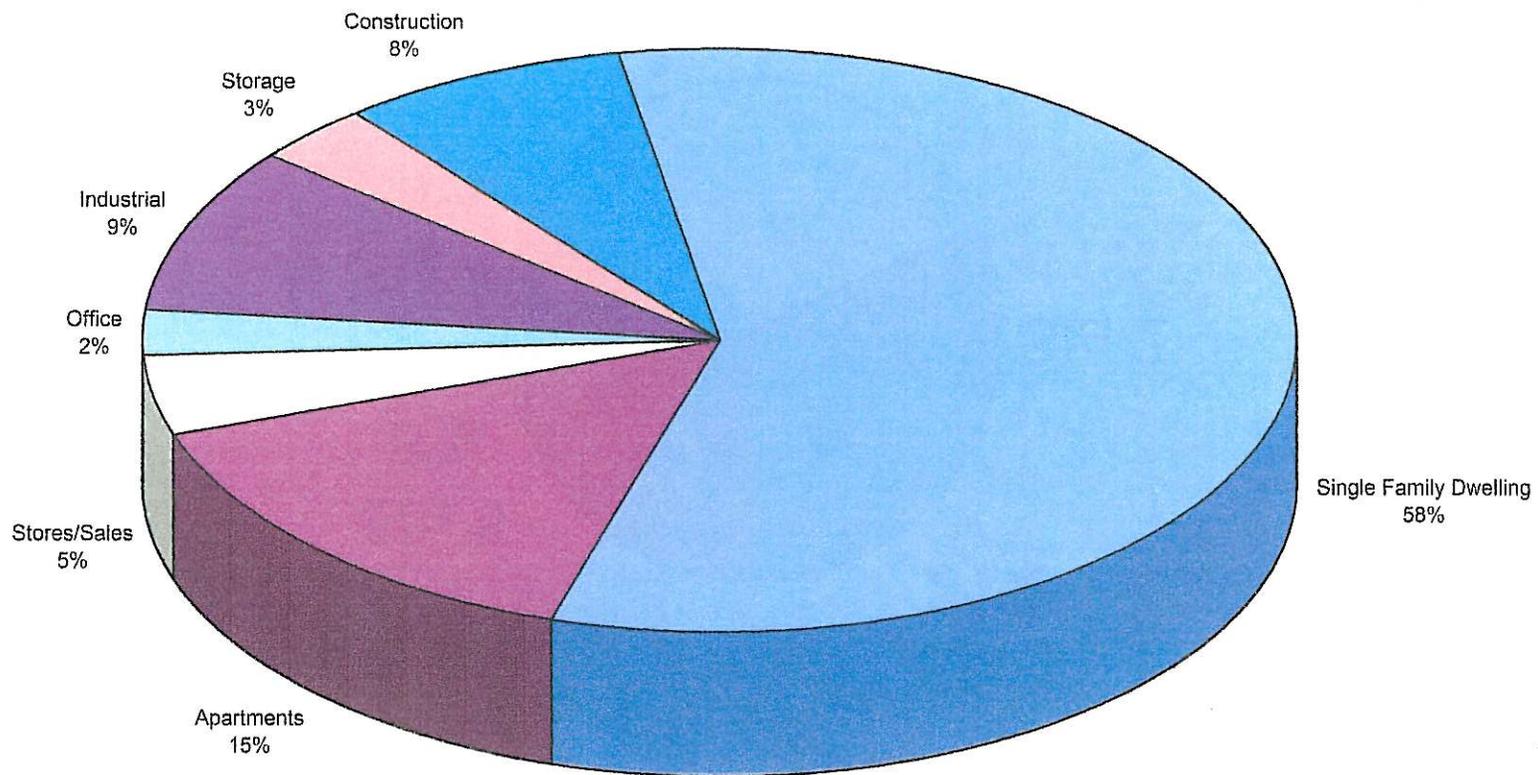
Fire Incidents	Sta 1	Sta 2	Sta 3	Sta 4	Sta 5	Sta 6
Structure Fires	21	11	17	16	17	6
Outside Structure Fires	2	0	0	0	0	0
Vehicles	11	15	17	13	4	6
Grass	5	4	6	3	1	4
Refuse	2	4	2	6	5	1
Other Fires	5	1	3	2	3	0
Total All Fires	46	35	45	40	30	17
Non Fire Incidents		0				
Overpressure/Explosion	0	0	1	0	0	0
Rescue/Extrication	7	7	4	15	5	5
Hazardous Conditions (1)	37	20	29	28	21	14
Public Service	1	3	1	3	3	3
Good Intent (2)	46	26	59	31	15	24
False Alarms	68	23	143	74	13	36
System Malfunctions	27	7	71	42	6	30
Weather Emergencies	0	1	1	1	1	2
Other Non-Fire Incidents	0	0	1	0	0	0
Total Non Fire Incidents	186	87	310	194	64	114
Fires by Type						
Public Assembly	1	0	2	1	1	0
Educational	1	0	0	0	2	0
Institutional	0	0	0	0	0	0
Single Family Dwelling	11	8	2	6	12	5
Apartments	4	0	5	3	1	0
Motel/Hotel	0	0	0	0	0	0
Stores/Sales	1	0	2	0	1	0
Office	0	0	2	0	0	0
Industrial	0	1	2	5	0	0
Storage	0	2	0	0	0	0
Construction/Other	3	0	2	1	0	1
Total Responses *	256	138	358	249	98	138

* Includes Normal Two Station Responses

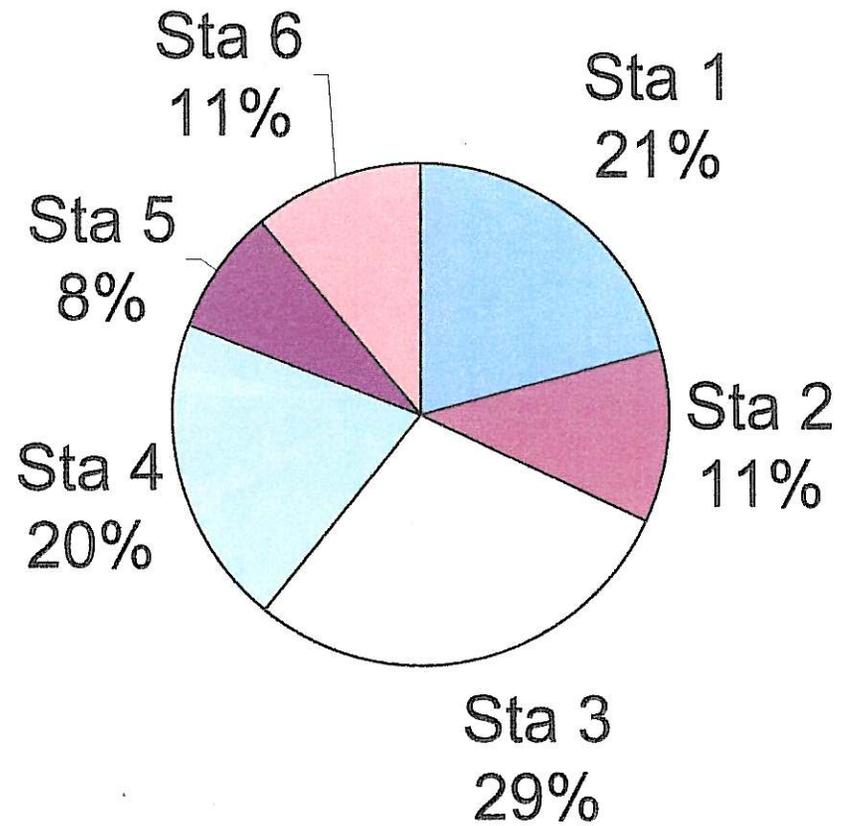
TYPES OF RESPONSES 2005



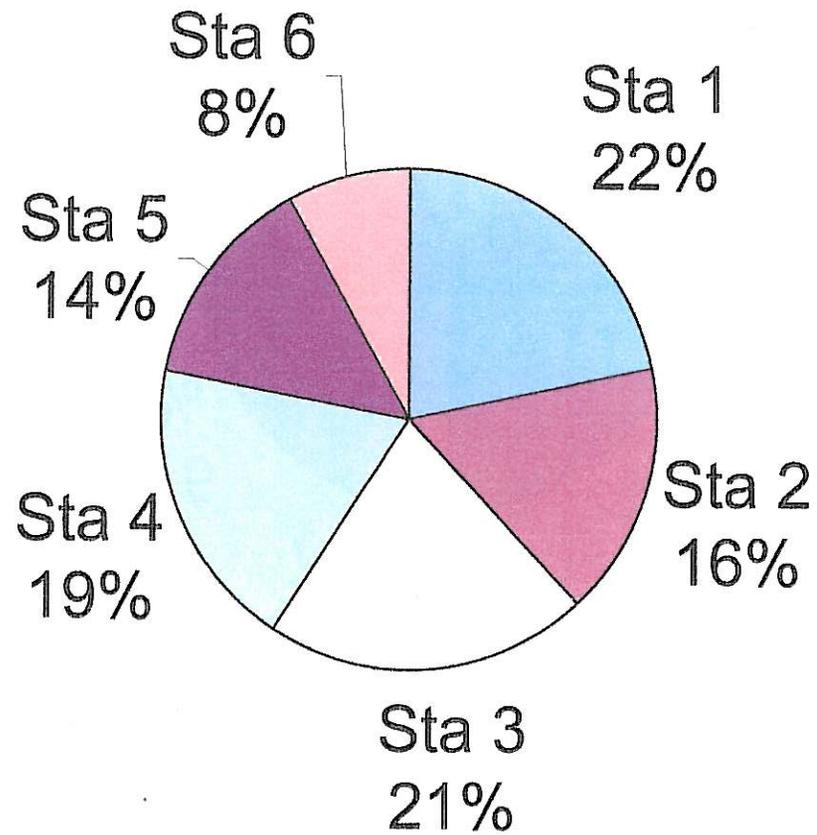
TYPES OF STRUCTURE FIRES 2005



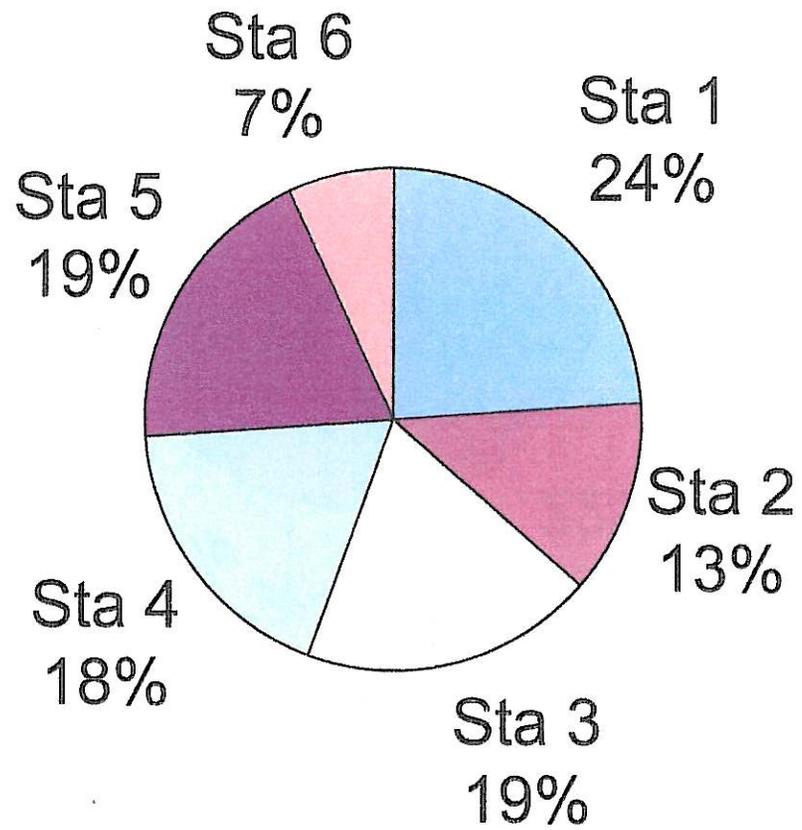
Incident Response 2005



Fire Incidents 2005

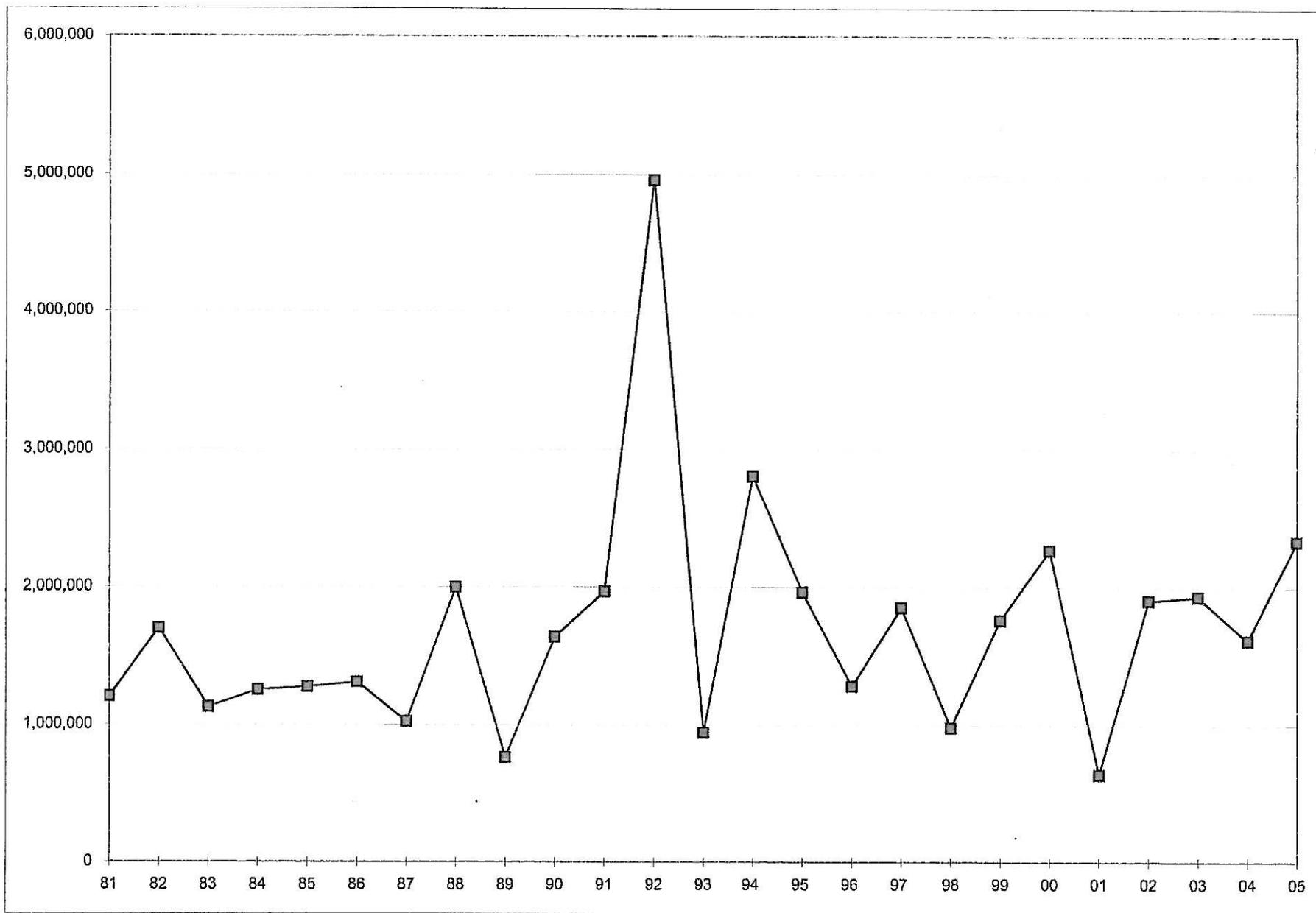


Structure Fires 2005



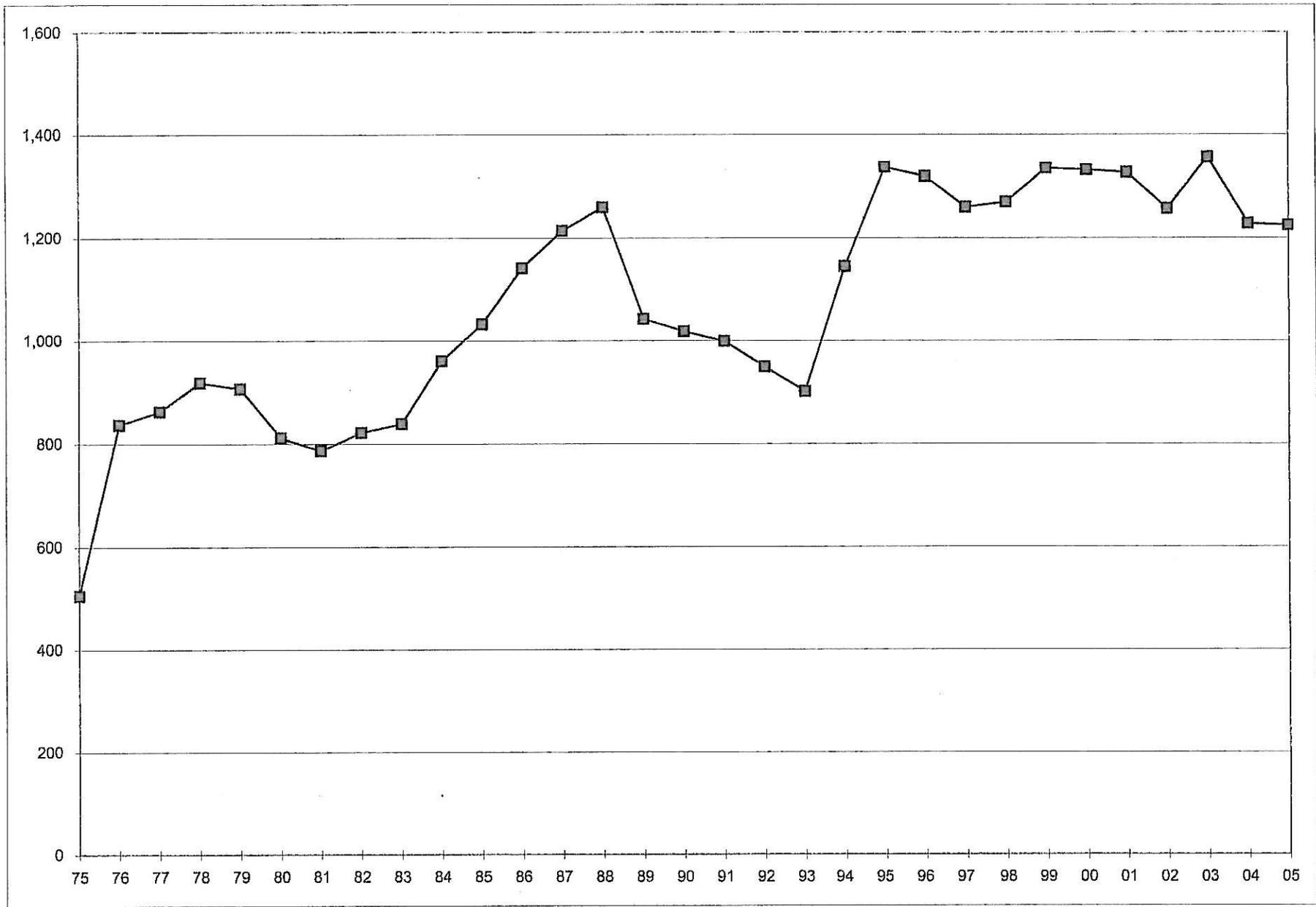
ANNUAL FIRE LOSS

1981-2005



YEARLY FIRE RESPONSE

1976-2005





Troy Fire Department Seniority List

Station 1

Years

Richard Wiles, Jr.	30.03
Dale Bise	30.02
John Foster	29.04
Dan Bise	28.03
Randall Kurth	24.05
David Weaver, Jr.	24.04
Dane Lawicki	23.08
John Collins	18.07
Paul Firth	18.00
Michael Sackner	17.09
Thomas Hoerle	15.01
Charlie Noonan	13.01
Jeff Gifford	11.10
Donald Hudson	11.01
Jason Dalbec	11.01
John Schoenbeck	9.11
Thomas O'Herron	8.10
Adam Kuz	7.07
Ryan Wolf	7.07
Adam Enterkin	6.10
Thomas Kmiec	5.10
Brian Dodoro	4.03
Garry Lenaway	4.03
Randy Odgers	4.03
Richard A. Wiles	4.03
Chris Ackerman	1.03
Walter Verbruggen Jr.	.09
Jason Voss	.06

Station 2

Years

Gerald Williams	30.03
Thomas Duncan	27.06
Scott Noble	25.08
Tonya Perry	21.02
Scott Stoglin	19.09
John Milliron	19.04
Joel Barthlow	19.01
Brian Verbruggen	18.00
Paul Lucas	17.10
Thomas Berlin	16.11
Glen Malone	16.11
Peter Dungjen	16.04
Steven Bauman	15.05
Donald Douglas	14.05
Jerry Bayliss	14.04
Michael Carter	13.00
Terry Smart	9.10
Jeff Otto	8.02
Sam Kalef	6.07
Christopher Steigerwald	6.07
Michael Koehler	6.00
Wade Rickard	5.08
Thomas Cleary	5.01
Kirk Linton	3.11
Aaron Boryczka	3.06
Daniel Inman	3.03
Jonathan Duncan	3.02
Drew Ginther	3.02
Keith Kohring	.08





Troy Fire Department Seniority List

Station 3

Years

David Roberts	27.00
Stan Godlewski	22.03
Charles (Patrick) White	21.01
Tim Wren	20.01
Susan Roberts	18.05
Jeff Bieber	16.05
Jim Haney	15.01
Richard Riesterer	14.11
Orville Allen	14.00
Eric Caloia	12.11
Donald Dougherty	11.11
Tim Dalglish	9.00
Michael Rusing	9.03
Mark McKimson	8.07
David Basile	8.02
Rob Bittner	7.07
Glenn Lanctot	7.05
Christopher Roberts	7.03
Paul Orrico	5.06
Sean Murphy	5.03
Nicholas Herzek	4.03
John Thomas	4.00
Kelley St. Cyr	3.08
William Corsaut	3.02
Adam Green	2.07
Carolyn Davis	1.05
Allan Soriano	1.05
Richard Leach	.10
Dan Mahrle	.06
Timothy Blackwood	.04

Station 4

Years

Walt Verbruggen	27.08
Mark Flint	25.08
Harry Hartfield	25.05
Greg Latka	24.09
James Davison	23.02
Terence Chartier	21.07
Jack Spreyer	21.01
Anthony Pabian	18.10
Robert Bunker	15.11
Ronald Griffiths	12.00
Stephen Vaillancourt	11.10
Larry Schultz	8.08
Daniel Jackson	7.07
Shawn Hugg	6.07
Brian Typinski	5.11
James Hazen	5.03
Reid Vandekerkhove	4.07
Matt Arnold	3.09
George Hawes	2.07
Jay Hernandez	2.07
Eric Baroky	2.03
Chris Miltimore	2.03
Jeff Miltimore	1.07
Michael Cleary	.05





Troy Fire Department Seniority List

Station 5

	<u>Years</u>
Robert Potts	29.07
William Barr	27.06
Glenn Plaskon	25.03
Robert Ziebell	24.00
Richard Pausch	23.10
Gary Wood	21.09
Randy Beachum	19.06
Jeff Denny	19.03
Phil Thor	19.02
Dan Thompson	18.08
Gerald Ball	18.05
Michael Viel	18.03
Jay Reynolds III	17.05
Gregory McMenamin	13.04
Mark Merian	13.01
Harold Kyte	13.01
Richard Bewick	11.08
Jason Reynolds	9.02
Ken Grand	7.07
Raymond Hella	7.07
John Schaufler	5.08
Adam Sinutko	5.08
Christopher Huck	5.04
Dan Madden	4.07
Mark Vleck	2.04
Steven McGee	2.01
Will Wood	1.08
James Roll	.02

Station 6

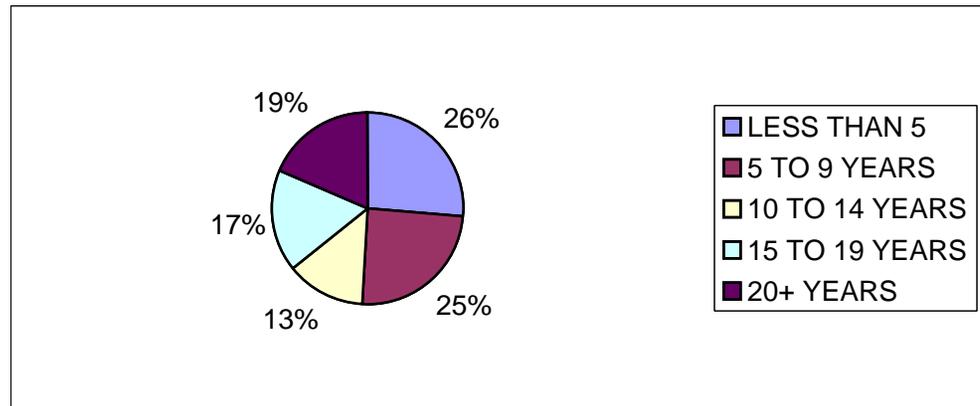
	<u>Years</u>
Ken Coppock	22.08
Joseph McKay	21.00
Daryl Klinko	20.05
Richard Harding	19.03
Donald Lockard	18.04
Paul Koehn	16.01
Mark Colombo	15.11
Stephen Pallotta	14.11
Bill Petrusa	14.11
Dan Carcone	12.11
Steven Splan	12.03
Peter Hullinger	12.03
Steven Gerard	9.02
Joseph K. LaGarde	9.02
Charles Roberts	9.02
Robert Shenk	9.02
Ali Taqi	7.10
Fred Reddig	6.07
Karen Lawson	5.08
Dustin Lockard	5.04
Dennis Lundstedt	3.03
Todd Dudzinski	3.03
Joseph J. LaGarde	2.11
Thomas Schramski	1.04
Andrew Satterfield	.06
Richard Bovensiep	.05
Darcy Schmidt	.04
Mark Jankowski	.01



FIREFIGHTER CREDITED SERVICE BY STATION AS OF 12-31-05

	LESS THAN 5 YEARS	5 TO 9 YEARS	10 TO 14 YEARS	15 TO 19 YEARS	20+ YEARS
FIRE STATION 1	7	6	4	4	7
FIRE STATION 2	6	7	3	9	4
FIRE STATION 3	10	9	4	3	4
FIRE STATION 4	8	5	2	2	7
FIRE STATION 5	5	6	4	7	6
FIRE STATION 6	8	8	5	4	3
DEPT. TOTAL	44	41	22	29	31

LESS THAN 5	44
5 TO 9 YEARS	41
10 TO 14 YEARS	22
15 TO 19 YEARS	29
20+ YEARS	31





FIRE PREVENTION DIVISION



2005 Annual Report



ENGINEERING



EDUCATION



ENFORCEMENT

FIRE PREVENTION DIVISION

Overview

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 carried out 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 2005 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

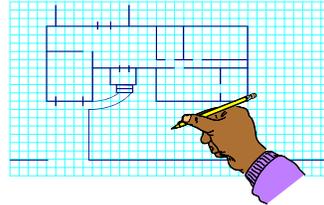
During 2005, 546.5 hours were spent conducting 1,330 construction related inspections, 874 existing building inspections, 15 hazardous materials inspections, and 47 miscellaneous or other type inspections for a total of 2,266 inspections.

Fees

The Division continued its fee assessment for fire alarm permits, fire protection permits, hazardous material permits, fireworks permits, special event permits, overtime inspections, and false fire alarm activations as required by ordinance. The Division accounted for \$22,995.00 from issuing 178 fire alarm permits; \$36,398 from issuing 308 fire protection permits; \$3,150.00 from issuing four hazardous materials permits; \$100.00 from issuing one fireworks permit, \$250.00 from issuing five exhibit/craft/trade show permits, \$1,300.00 in overtime inspections; and \$5,300.00 in false alarm fees for a total of \$69,593.00.

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 2005 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 city's building, electrical, and mechanical inspectors to coordinate inspections for buildings under construction and renovation.

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

FIRE PREVENTION DIVISION

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 1,106 violations and cleared 970 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 H.A.P.I.S. (Haz-Alerts / Pre-Incident Surveys), 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. 2005 marked the third 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 211 public education programs were conducted in 2005 reaching 8,878 children and 2,447 adults for a total of 11,325 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 Oakland Fire Training Academy.



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

FIRE PREVENTION DIVISION

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, a Division member shares a one week rotation with other staff members and is available 24 hours a day serving as the department duty officer in order to guide dispatchers, respond to and conduct fire investigations, investigate hazardous conditions and overcrowding complaints, and handle 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 1,225 total incidents in 2005, 566 were classified as "false calls." Of these false calls, activated system alarms overall totaled 548, (502 commercial, 46

residential). Thirteen businesses were responsible for generating between 5 and 13 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 47% 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.

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 basic fire fighting and safety related skills as well as develop professionally within the post.



Accomplishments

FIRE PREVENTION DIVISION

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 2005, 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 as a method for identifying and completing existing building inspections based upon occupancy type.

Over the Christmas holidays, several Division members participated with the Troy Police Department, Troy VFW post, and the Troy People Concerned charity organization, by delivering food baskets and installing 5 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 up from 2004. The percentage of fires being investigated by the unit went up from 22% to 28%. The unit investigated 63 fires, resulting in 264 man-hours. Of the 63 fires investigated, 11 were juvenile related.

Twelve of the fire investigations were found to be arsons. The most common single cause of accidental fires we had in 2005 were cooking related.

In 2005 Arson/Suspicious fires caused \$399,000 in direct losses. \$256,000 was property loss and \$143,000 was in content loss.

The Fire Investigation unit consists of one Assistant Fire Chief, five Fire Lieutenants, and one Police Sergeant. In 2005, 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 for the second straight year, a Courtroom Testimony Class offered to Fire Investigators.

Our arson-to-structure fire ratio went from 3% in 2004 to 4.1% in 2005. This is far below the national average of over 13%. But both nationally and in Troy, juveniles accounted for 50% of these arsons. In Troy, juveniles accounted for 63.6% in 2005.



Juvenile Fire Setters

Fires 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 them to the **Straight Talk Program**, sponsored by the U of M Burn Center. The goal of these types of programs is to raise awareness of the individuals as to what can happen, as well as change the dangerous behavior 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 division also began providing content development support and logistical support for training of the Special Response Unit members

The continued success of our fire fighting 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 2005, Troy firefighters attended a total of 18,823 hours of instruction, covering more than seventy different subject matters relating to incident response, fire investigation and fire prevention.

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 Fire Fighter I & II Academy. This year we held classes on Monday and Thursday evenings. There were also several all day Saturday sessions. The new academy started in October 2005, and will end in May 2006. We have five students enrolled in this year's academy. During the six months of the academy, the students each receive about 300 hours of instruction.

In 2005, one new Police Service Aide 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 Aides.

The Fire Department was fortunate to have 13 houses that were slated for demolition as a result of the Big Beaver widening project donated for training. These houses were used for live fire, rescue, ventilation and Rapid Intervention Team training. The training conducted in these houses alone accounted for 1,345 hours of training. All of the training sessions that were done in these houses were valuable, due to the realism of the training that could be provided as a result of being in an actual structure. In addition to the Big Beaver houses, three other houses scheduled for demolition were also donated to the Department. These houses were also used for a variety of different training evolutions. In 2005, the Department conducted a total of twelve live fire-training sessions.

Two of the Fire Stations conducted training sessions in the newly constructed training tower at the Combined Regional Emergency Services Training Center at the Oakland Community College-Auburn Hills campus. This high-tech. training facility provides state of the art training in a safe controlled environment. Training evolutions at the center included live fire attack as well as search and rescue.

In 2005, the five-minute training program that was started in 2004 was continued. The intent is that on

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 fire fighting. 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.

The training portion of the Fire Department intranet site was continuously enhanced with the addition of timely and pertinent videos and Power Point programs. One notable program is a Power Point program on gasoline/electric and hydrogen/electric hybrid vehicles. The number of gasoline/electric vehicles on the road is increasing steadily. Hydrogen/electric vehicles are not yet available to consumers, but there are a small number of these vehicles that are being used for research by area manufacturers that travel through our city. Our members are learning how to react to a situation if one of these vehicles is involved in a fire or an accident in which victims have to be rescued. There are distinct differences from a fire fighter safety standpoint between these vehicles and traditional gasoline vehicles.

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, high-angle rescue, confined space rescue, fire prevention training and public education training.

In the last quarter of 2005 the Training Division supported the members of the Department in completing two courses that were offered on line from the Federal Emergency Management Agency (FEMA). The subjects of these courses are **The National Incident**

Management System and the **National Response Plan**. By taking these courses members will be better able to respond to disaster type incidents when the Troy Fire Department may have to work with a number of other responding agencies. At the end of 2005 about one third of department members had completed these courses. The Department made use of the computer center in the Troy Library to help members complete these courses. Several Department members completed other FEMA courses besides the two that are described above. The topics of these classes dealt with a range of subjects including emergency preparedness, hazardous material response and disaster response.





Troy Fire Department Apparatus Section

The 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
- 4 Special Response Vehicles
(1 owned by Oakland County)
(1 RRTN vehicle)
- 1 Trailer Mounted Air
Compressor
- 1 Vehicle Mounted Air
Compressor
- 1 Grass Fire Unit
- 1 SRU Trailer
- 1 RRTN Decontamination
Trailer
- 1 Fire Safety House Trailer
- 1 Light Trailer
- 4 Utility Vehicles
- 1 Mobile Command Vehicle
- 1 Antique Pumper

During 2005, the Troy Fire Department received a new Hazardous Materials vehicle from the State of Michigan. This vehicle is used for the State of Michigan Regional Response Team Network.

It will respond to incidents in Troy, as well as when called upon for incidents anywhere in the State.

In 2005, the department took delivery of the new Engine 4-2. This engine has a 1500-gallon per minute pump, carries 1000 gallons of water, and has hydraulic rescue tool, electric, and air tool reels.

During 2005, the department also developed specifications and solicited bids for the replacement of Ladder 1. Ladder 1 is a 1984 Sutphen Platform. The new platform should be delivered in November of 2006.

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 check over 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 was officially established in 1983 with the addition of four police officers. The Unit is trained and equipped to respond to and mitigate hazardous material incidents, and technical rescue situations where specialized raising and lowering techniques are required. Today, SRU has grown into a multi-tasked regional team, including members from Clawson FD, Bloomfield Hills DPS, Berkley DPS, Bingham/Franklin FD, Beverly Hills DPS, Hazel Park PD, Huntington Woods DPS, Oak Park DPS and Alliance Mobile Health, the City of Troy's contracted medical first responder company.

In 2005, SRU had two full activations and several partial activations. We responded to Oak Park on an odor

investigation coming from the city's sewers and to a location on Maple on a chemical spill. The partial activations occurred when suspicious letters or packages were found and SRU had to assess for chemical, biological, radiological or explosives dangers before they were investigated. For the third straight year, SRU assisted Berkley Public Safety Department during the Woodward Dream Cruise to assure the safety of its citizens and visitors. We completed over 400 hours of training.

The team acquired over \$100,000 in grant funds and special equipment ranging from a portable x-ray machine to instruments that identify unknown substances.





Troy Fire Department Regional Response Team Network

The City of Troy hosts one of 16 State of Michigan Regional Response Network (RRTN) Teams. The RRTN is comprised of members from over 13 Police, Fire and Public Safety jurisdictions throughout Oakland County, as well as Troy SRU members. The primary mission of the Regional Response Teams is to rapidly respond to and assist jurisdictions in effectively addressing the consequences of a critical incident involving weapons of mass destruction (WMD) and toxic industrial chemicals (TIC). The teams will accomplish this mission in collaboration with and supported by other Regional Response Teams, as well as by local, state, and federal resources. The response and assistance may include pre-

deployment of assets to assist crisis management activities due to a credible threat throughout the State of Michigan. A secondary mission of the Regional Response Teams is to respond to a technological and/or natural incident in which the team's training, equipment, and experience can be effectively utilized.

In 2005, the RRTN took possession of a new \$180,000 Hazardous Material vehicle, a \$105,000 mass decontamination system, and a \$300,000 Safer Star Advanced Plume Modeling System. All of the equipment was either purchased by or had funding provided by Michigan State Police Homeland Security Section.

