



CITY COUNCIL AGENDA ITEM

Date: April 26, 2011

To: John Szerlag, City Manager

From: William S. Nelson, Fire Chief

Subject: 2010 Fire Department Annual Report

Due to resource constraints, the fire department has redesigned our annual report format. The new format consists of a two page summary document that provides a high level overview of the previous year's activity compared to the preceding year and a more detailed six page document that provides more specific information.

Key trends in 2010 include:

- There were no civilian or firefighter deaths.
- Overall fire department responses increased by over 17%.
- Structure fires decreased by 8% while overall fires increased by 51%.
- Fire loss increased by 144% due to several high loss structure fires.
- Volunteer firefighter staffing levels remain stable.

Both the 2010 summary report and the 2010 detailed report will be placed on the city website in order to provide access to the information. If you have any questions or comments, please contact me.



TROY FIRE DEPARTMENT ANNUAL REPORT SUMMARY 2010

<u>Category</u>	<u>Count</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Total Fire Incidents	170	17.28%	156	8.97%
Total Non Fire Incidents	814	82.72%	683	19.18%
Total Incidents	984	100.00%	839	17.28%

<u>Fire Incidents</u>	<u>Count</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Structure Fires	68	40.00%	74	-8.11%
Other Fires	102	60.00%	38	168.42%
Total Fire Incidents	170	100.00%	112	51.79%

<u>Structure Fires by Occupancy</u>	<u>Count</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Commercial Buildings	31	45.59%	39	-20.51%
Single Family Dwelling	37	54.41%	35	5.71%
Total Occupancies	68	100.00%	74	

<u>Structure Fire Causes</u>	<u>Count</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Intentional	4	5.88%	4	0.00%
Accidental/Unintentional	36	52.94%	57	-36.84%
Undetermined	28	41.18%	13	115.38%
Total Causes	68	58.82%	74	

<u>Total Casualties</u>	<u>Number</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Civilian Injury	3	18.75%	2	50.00%
Civilian Death	0	0.00%	0	0.00%
Firefighter Injury	13	81.25%	10	30.00%
Firefighter Death	0	0.00%	0	0.00%
Total Casualties	16	100.00%	12	

<u>Total Estimated Fire Loss</u>	<u>Amount</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Structure Value *	\$90,960,680.00	100.00%	\$69,719,009.00	30.47%
Property Loss	\$3,288,183.00	3.61%	\$1,401,795.00	134.57%
Contents Loss	\$2,590,626.00	2.85%	\$1,002,560.00	158.40%
Total Loss	\$5,878,809.00	6.46%	\$2,404,355.00	144.51%
Total Endangered/Saved	\$85,081,871.00	93.54%	\$67,314,654.00	26.39%

* Value of structures/property involved



TROY FIRE DEPARTMENT ANNUAL REPORT SUMMARY 2010

Response Time Analysis **

<u>Emergency Responses</u>	<u>Count</u>	<u>Cumulative Response</u>	<u>Percent</u>	<u>Cumulative</u>
0 - 5 Minutes	137	137	22.99%	22.99%
6 - 10 Minutes	379	516	63.59%	86.58%
10 + Minutes	80	596	13.42%	100.00%
Total Emergency Responses	596		60.57% of total responses	
Total Responses	984			

*** Response Time Analysis as recorded by the dispatch center includes call processing time; turnout time; and travel time*

Staffing

<u>5 Year Average (2006-2010)</u>	<u>Total</u>	<u>Change</u>	<u>Cumulative</u>
Station	172.6	-0.42%	-2.10%
Administration	12.2	-3.48%	-6.82%
<u>2 Year Average (2009-2010)</u>	<u>Total</u>	<u>Change</u>	<u>Cumulative</u>
Station	168.5	-0.75%	-4.68%
Administration	11.5	-4.55%	-12.88%

<u>Activities</u>	<u>Count</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Operations Activity	1,562	9.49%	1,452	7.58%
Fire Prevention Activity	14,892	90.51%	24,775	-39.89%
Total Activities	16,454	100.00%	26,227	-32.32%
<u>Hours</u>	<u>Count</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Fire Prevention Hours ***	5,721.50	22.33%	7,802.97	-26.68%
Operations Hours ****	19,904.00	77.67%	19,247.00	3.41%
Total Hours	25,625.50	100.00%	27,049.97	-23.26%

*** Career Staff-Hours Only

**** Department Man-Hours. Includes Volunteer & Career Staff.



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2010**

<u>Category</u>	<u>Count</u>	<u>Percent of Total Incidents</u>	<u>Previous Year</u>	<u>Change</u>
Total Fire Incidents	170	17.28%	156	8.97%
Total Non Fire Incidents	814	82.72%	683	19.18%
Total Incidents	984	100.00%	839	17.28%

<u>Fire Incidents</u>	<u>Count</u>	<u>Percent of Total Fires</u>	<u>Previous Year</u>	<u>Change</u>
Structure Fires	68	40.00%	74	-8.11%
Vehicle Fires	51	30.00%	38	34.21%
Grass Fires	16	9.41%	9	77.78%
Refuse Fires	25	14.71%	19	31.58%
Other Fires	10	5.88%	16	-37.50%
Total Fire Incidents	170	100.00%	156	8.97%

<u>Non Fire Incidents</u>	<u>Count</u>	<u>Percent of Total Non Fires</u>	<u>Previous Year</u>	<u>Change</u>
Overpressure/Explosion	2	0.25%	3	-33.33%
Rescues/Extrications	24	2.95%	36	-33.33%
Hazardous Conditions *	155	19.04%	103	50.49%
Public Service	21	2.58%	23	-8.70%
Good Intent **	170	20.88%	172	-1.16%
False Alarms	262	32.19%	213	23.00%
System Malfunctions	171	21.01%	130	31.54%
Weather Standby	8	0.98%	2	300.00%
Other Non Fire	1	0.12%	1	0.00%
Total Non Fire Incidents	814	100.00%	683	19.18%

* Includes spills or leaks with no fire; excess heat; arcing wires; and chemical emergencies

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



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<u>Structure Fires by Occupancy</u>	<u>Count</u>	<u>Percent of Structure Fires</u>	<u>Previous Year</u>	<u>Change</u>
Public Assembly	1	1.47%	5	-80.00%
Institutional	2	2.94%	2	0.00%
Single Family Dwelling	37	54.41%	35	5.71%
Apartments	15	22.06%	14	7.14%
Motel/Hotel	0	0.00%	4	-100.00%
Stores/Sales	1	1.47%	4	-75.00%
Office	2	2.94%	4	-50.00%
Industrial	3	4.41%	2	50.00%
Storage	1	1.47%	1	0.00%
Other	6	8.82%	3	100.00%
Total Occupancies	68		74	

<u>Structure Fire Causes</u>	<u>Count</u>	<u>Percent of Structure Fires</u>	<u>Previous Year</u>	<u>Change</u>
Intentional	4	5.88%	4	0.00%
Children Playing	1	1.47%	0	0.00%
Smoking	1	1.47%	3	-66.67%
Heating	3	4.41%	4	-25.00%
Cooking	14	20.59%	18	-22.22%
Electrical Distribution	2	2.94%	3	-33.33%
Appliances	4	5.88%	4	0.00%
Open Flame, Ember	5	7.35%	3	66.67%
Other Heat, Flame, Spark	2	2.94%	1	100.00%
Other Equipment	3	4.41%	1	200.00%
Natural	1	1.47%	1	0.00%
Undetermined	28	41.18%	12	133.33%
Total Causes	68		54	



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Civilian Injury	3	18.75%	2	50.00%
Civilian Death	0	0.00%	0	0.00%
Firefighter Injury	13	81.25%	10	30.00%
Firefighter Death	0	0.00%	0	0.00%
Total Casualties	16	100.00%	12	

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* Value of structures/property involved

Response Time Analysis **

<u>Emergency Responses</u>	<u>Count</u>	<u>Cumulative Response</u>	<u>Percent</u>	<u>Cumulative Percent</u>
0 - 1 Minute	4	4	0.67%	0.67%
1 - 2 Minutes	4	8	0.67%	1.34%
2 - 3 Minutes	21	29	3.52%	4.86%
3 - 4 Minutes	39	68	6.54%	11.40%
4 - 5 Minutes	69	137	11.58%	22.98%
5 - 6 Minutes	96	233	16.11%	39.09%
6 - 7 Minutes	94	327	15.77%	54.86%
7 - 8 Minutes	77	404	12.92%	67.78%
8 - 9 Minutes	62	466	10.40%	78.18%
9 - 10 Minutes	50	516	8.39%	86.57%
10 + Minutes	80	596	13.42%	99.99%
Total Emergency Responses	596		60.57% of total responses	
Total Responses	984			

** Response Time Analysis as recorded by the dispatch center includes call processing time; turnout time; and travel time



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<u>Activities</u>	<u>Count</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Fire Station Service Requests	909	58.19%	834	8.99%
Fire Investigations	37	2.37%	38	-2.63%
In-Service Training Provided	473	30.28%	473	0.00%
Specialty Team Training Provided	50	3.20%	43	16.28%
Fire Academy Training Provided	93	5.95%	64	45.31%
Subtotal	1,562	100.00%	1,452	7.58%
Plans Reviewed	693	4.72%	564	22.87%
Permits Issued	414	2.82%	346	19.65%
Inspections	2,412	16.44%	2,745	-12.13%
Violations Issued	1,318	8.98%	2,174	-39.37%
Violations Cleared	686	4.67%	1,444	-52.49%
Hydrant Flow Tests Conducted	24	0.16%	23	4.35%
Public Education Programs	155	1.06%	232	-33.19%
Public Education Participants	7,313	49.84%	8,351	-12.43%
HAPIS Computer Entries	1,027	7.00%	8,365	-87.72%
Alarms Registered *	632	4.31%	N/A	N/A
Subtotal	14,674	100.00%	24,244	-39.47%
Total Activities	16,236		24,775	-34.47%

* Assumed this role from the police department in 2010.

<u>Activity Hours</u>	<u>Count</u>	<u>Percent</u>	<u>Previous Year</u>	<u>Change</u>
Operations Hours **	19,904.00	77.67%	19,247.00	3.41%
Fire Prevention Hours ***	5,721.50	22.33%	7,802.97	-26.68%
Total Hours	25,625.50	100.00%	27,049.97	-23.26%

** Department Man-Hours. Includes Volunteer & Career Staff.

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Staffing

<u>Volunteer</u>	<u>Station 1</u>	<u>Station 2</u>	<u>Station 3</u>	<u>Station 4</u>	<u>Station 5</u>	<u>Station 6</u>	<u>Total</u>	<u>Change</u>	<u>Cumulative</u>
2006	30	30	30	25	31	30	176	0.00%	0.00%
2007	28	28	30	26	32	31	175	-0.57%	-0.57%
2008	29	30	29	24	31	32	175	0.00%	-0.57%
2009	29	27	28	24	31	25	164	-6.71%	-7.28%
2010	29	27	29	32	30	26	173	5.20%	-2.08%
<u>5 Yr. Avg.</u>	29.0	28.4	29.2	26.2	31.0	28.8	172.6	-0.42%	-2.10%
<u>2 Yr. Avg.</u>	29.0	27.0	28.5	28.0	30.5	25.5	168.5	-0.75%	-4.68%

<u>Career</u>	<u>Chief</u>	<u>Assistant Chief</u>	<u>Staff Lieutenant</u>	<u>Staff Technician</u>	<u>Total</u>	<u>Change</u>	<u>Cumulative</u>
2006	1	2	10	0	13	0.00%	0.00%
2007	1	2	9	1	13	0.00%	0.00%
2008	1	2	7	2	12	-8.33%	-8.33%
2009	1	2	6	3	12	0.00%	-8.33%
2010	1	2	6	2	11	-9.09%	-17.42%
<u>5 Yr. Avg.</u>	1.0	2.0	7.6	1.6	12.2	-3.48%	-6.82%
<u>2 Yr. Avg.</u>	1.0	2.0	6.0	2.5	11.5	-4.55%	-12.88%



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Supplemental

<u>Valid Alarm Activations</u>	<u>Count</u>	<u>Percent of Total Incidents</u>	<u>Previous Year</u>	<u>Change</u>
Cooking	19	1.93%	24	-20.83%
Fire	4	0.41%	3	33.33%
Freon Leak	2	0.20%	0	200.00%
Overheat	3	0.30%	6	-50.00%
Smoke	3	0.30%	2	50.00%
Total Valid Alarms	31	3.15%	35	-11.43%

<u>False Alarm Activations</u>	<u>Count</u>	<u>Percent of False Alarms</u>	<u>Previous Year</u>	<u>Change</u>
Unintentional	257	26.12%	193	33.16%
Malfunction	171	17.38%	131	30.53%
Other	5	0.51%	19	-73.68%
Malicious	0	0.00%	2	-100.00%
Total False Alarms	433	44.00% of Total Incidents	343	26.24%

<u>Accomplishments</u>	<u>Count</u>	<u>Cost</u>
Purchased / placed in service new pumpers.	2	\$980,536.00 Total
Purchased / placed in service new personal protective equipment with FEMA Fire Act Grant funds.	173	\$144,540.00 Total

