JIM PETRO
AUDITOR OF STATE

STATE OF OHIO

CITY OF WARREN
FIRE DEPARTMENT
PERFORMANCE AUDIT

MARCH 29, 2001

STATE OF OHIO
OFFICE OF THE AUDITOR

JIM PETRO, AUDITOR OF STATE

To the Citizens of the City of Warren:

In response to a request from the City of Warren (the City) to complete comprehensive performance audits of all General Fund departments, the Auditor of State's office is pleased to provide the completed performance audit report for the Fire Department. The City requested that the performance audits be conducted to provide a resource in the City's ongoing effort to improve the efficiency of operations, establish internal accountability over the use of tax dollars, maintain an appropriate level of public safety, improve the quality of life and responsiveness of city government to its constituents and to help address the financial difficulties the City is experiencing.

This report assesses the operations of the City's Fire Department. The Fire Department was chosen because it represents a significant portion of the City's general fund expenditures and is a critical mechanism for ensuring public safety. The Auditor of State's Office conducted an independent assessment of the Fire Department with the objective of providing recommendations to the City of Warren in areas where the City can either recognize financial benefits or achieve efficiency improvements in operations and service delivery.

An executive summary has been prepared which includes the project history, City overview, purpose and objective of the performance audit and a summary of findings, commendations, recommendations and financial implications. This report has been provided to the City of Warren and its contents discussed with members of City Council and management. The City has been encouraged to utilize the results of the performance audit as a resource in improving its overall operations, service delivery and financial stability. Additional copies of this report can be requested by calling the Clerk of the Bureau's office at (614) 466-2310 or the toll free number in Columbus, (800) 282-0370. In addition, this performance audit can be accessed on-line through the State Auditor's Office website at http://www.auditor.state.oh.us/ by choosing the "On-Line Audit Search" option.

Sincerely,

JIM PETRO
Auditor of State

March 29, 2001

EXECUTIVE SUMMARY

Project History

In April 2000, the mayor, the city auditor and the director of public service and safety (City Officials) of the City of Warren (the City) contacted the Auditor of State's Office requesting a performance audit be conducted on all of the general fund operations within the City of Warren. The City Officials were seeking assistance on how to improve the efficiency of operations and effectiveness of the delivery of services to the citizens of Warren as well as to help address the financial difficulties the City was experiencing. As a result of this meeting, it was determined that because of the City's current financial and staffing conditions, a prioritization approach would be used whereby those general fund operations determined to have the most significant impact on revenues, expenditures and public safety would be the first departments to be assessed, with the remaining departments being reviewed in subsequent phases. Based on discussions with the City Officials, the following departments were selected for the initial assessment:

- Income Tax Department
- Police Department
- Fire Department
- Operations Department

The performance audits of the Income Tax Department, the Police Department and the Operations Department were officially released on October 19, 2000. This report represents the comprehensive performance audit of the Fire Department. Within the City's operations, the Fire Department is important to assess because it is a critical mechanism for ensuring public safety and represents approximately 22 percent of the City's total General Fund budget. Planning for the Fire Department performance audit began in May 2000, and the actual performance audit was conducted primarily during the months of June, 2000 through December, 2000.

Objectives and Scope

A performance audit is defined as a systematic and objective assessment of the performance of an organization, program, function or activity to develop findings, conclusions and recommendations. Performance audits are usually classified as either economy and efficiency audits or program audits.

Economy and efficiency audits consider whether an entity is using its resources efficiently and effectively. They attempt to determine if management is maximizing output for a given amount of input. If the entity is efficient, it is assumed that it will accomplish its goals with a minimum of resources and with the fewest negative consequences.

Program audits normally are designed to determine if the entity's activities or programs are effective, if they are reaching their goals and if the goals are proper, suitable or relevant. Program audits often focus on the relationship of the program goals with the actual program outputs or outcomes. Program audits attempt to determine if the actual outputs match, exceed or fall short of the intended outputs. This audit was primarily designed as an economy and efficiency audit.

The Auditor of State's Office has designed this performance audit with the objective of reviewing systems, organizational structures, finances and operating procedures to develop recommendations for reducing operating costs, increasing revenues or improving efficiency. Specific objectives of this performance audit are the following:

- Identify opportunities for improving the Fire Department's effectiveness, responsiveness and quality of service delivery which is cost beneficial
- Identify opportunities for improving the Fire Department's procedures, work methods and capital asset utilization which should result in higher quality and/or reduced costs
- Evaluate Fire Department policies and procedures and provide recommendations for enhanced revenue flows, expenditure reductions, delivery of service or employee productivity
- Evaluate Fire Department contractual provisions and provide recommendations for increasing management's ability to manage employees

Methodology

To complete the performance audit, the auditors gathered and assessed a significant amount of data pertaining to the City, conducted interviews with various groups associated with the City and conducted interviews and assessed information from the peer cities along with other cities. The methodology is further explained below.

Studies, reports and other data sources

In assessing the various performance audit areas, the City was asked to provide any previous studies or analyses already prepared on the subject areas. In addition to assessing this information, the auditors spent a significant amount of time gathering and assessing other pertinent documents or information. Examples of the studies, reports and other data sources which were studied include the following:

- Various revenue, payroll, expenditure and budgetary reports from the City's financial systems
- Various management reports generated from systems within the Fire Department
- Negotiated labor contracts
- Various departmental policies and manuals

- Various demographic and statistical reports provided by the Ohio Department of Development
- National benchmarking information provided by the National Fire Protection Association, the Phoenix Fire Department national survey, the Federal Emergency Management Association and the Minnesota Best Practices review
- Data and reports provided by the peers
- Various sections of the Ohio Revised Code and the Ohio Administrative Code

Interviews, Discussions and Surveys

Numerous interviews and discussions were held with many levels and groups of individuals involved internally and externally with the Fire Department. These interviews were invaluable in developing an overall understanding of the Fire Department's operations and, in some cases, were useful sources in identifying concerns with the Fire Department's operations and in providing recommendations to address these concerns. Examples of the organizations and individuals that were interviewed include the following:

- The mayor, the city auditor and the director of public safety and service
- The fire chief and his staff
- Various representatives from the National Fire Protection Association as well as representatives from other municipalities
- Private vendors specializing in technology

Benchmark Comparisons with Other Cities

Three other municipalities, Cuyahoga Falls, Mansfield and Middletown, were selected to provide benchmark comparisons with the City of Warren. The aforementioned cities were selected based upon demographic and operational data. Performance indicators were established for the various performance audit areas to develop a mechanism for determining how effectively and efficiently the City of Warren is providing services. The information was obtained primarily through information requests and interviews held with the appropriate personnel at each city.

Summary Result

The summary result of this performance audit is contained within pages 1-4 through 1-6. A summary of background information, major findings, major commendations and major recommendations is provided. However, a thorough analysis of the Fire Department's operations, including detailed findings and recommendations, is contained in the remainder of report. All interested parties are encouraged to read the entire report.

The results of this report should not be construed as criticisms of the City. The performance audit should be used as a management tool by the City Officials in their attempt to efficiently provide services to the citizens of Warren.

The performance audit is not a financial audit. Therefore, it was not within the scope of this work to conduct a comprehensive and detailed examination of Warren's fiscal records and past financial transactions. However, copies of the financial audits are available through the Auditor of State's Office.

Fire Department

Background: This report focuses on the Warren Fire Department, which is charged with the duty to safeguard and preserve life and property through fire suppression. The Fire Department also performs fire incident investigations, building fire safety inspections, fire prevention activities, hazardous materials response, confined space and high angle rescue as well as limited water rescue. Prior to the staffing reductions in January 2000, the Department operated three stations with a total staffing of 77. After the staffing reductions, two stations were closed which resulted in the City operating one station with a total staffing of 64 (52 pledged fire suppression personnel, three inspectors, three dispatchers, three assistant chiefs, one chief, one clerical person and one mechanic). During FY 1999, the Department responded to 1,193 fire emergency calls, inspected 1,509 structures and investigated 55 suspicious fires on an operating budget of approximately $5.3 million.

Findings: A summary of the significant findings in this report include the following:

- In 1999, the City operated three fire stations. Since January 2000, the City has been operating one fire station with 64 employees. The City decided to close two stations because of a reduction of firefighters in January of 2000. The closing of the two stations has adversely effected response time. Based upon the City's overall population, demographics and population density, operating one fire station does not provide adequate safety to the citizens of Warren.
- All fire related 911 emergency calls are received by the police dispatchers and then transferred to the dispatch center within the Fire Department. Therefore, both the Police and Fire Departments are dedicating staff to receive 911 emergency calls.
- Currently, it appears that the Department is manning its apparatus with more personnel than the peers and other nationally recognized standards.
- Warren's staffing level for fire inspectors as well as average salaries and benefit costs are higher than the peers. A factor contributing to this is the Fire Department requiring its inspectors to work the same schedule as the firefighters (24 hours on-duty and 48 hours off-duty). As a result, the majority of the inspectors work time is scheduled during non-business hours.
- The City rarely utilizes mutual aid from other surrounding governmental entities.

- The Fire Department does not have an accurate and complete inventory of buildings that require inspections for compliance with the fire prevention provisions of the Ohio Basic Building Code. In addition, the Department appears to have difficulty managing its inspection process and inspection records indicate an informal and irregular inspection history.
- Certain functions within the Fire Department's computer system have not been used because in the past, the outlying stations did not have computer access.
- The number of false alarms reported by the Department have increased each of the past three years. Many of these false alarms were the result of accidental or malfunctioning alarms.
- The Fire Department does not currently charge a fee for conducting reviews on residential and commercial building construction projects.
- Although the City of Warren's overall compensation package for its firefighters appears to be in line with the peers, there are certain contractual provisions which appear to be in excess of the peers. More specifically, the personal and vacation day accrual rates as well as the amount of supplementals the firefighters receive are all significantly higher than the peers. In addition, the City does not require the firefighters to contribute towards healthcare costs. In contrast, both the City of Mansfield and City of Middletown require employee healthcare contributions.

Commendations: A summary of the significant commendations in this report include the following:

- The Warren Fire Department is maintaining the lowest operational cost per hour when compared to the peer fire departments.
- The Fire Department appears to be managing scheduled leave time as evidenced by the minimal overtime costs when compared to the peers.

Recommendations: A summary of the significant recommendations in this report include the following:

- To improve response time and safety services to the citizens of Warren, the City should immediately open the two closed fire stations. It is estimated that the City will need eight additional fire suppression personnel to implement this recommendation. However, four of these positions can be filled by reallocating existing staff. Therefore, the annual salary and benefit cost for four positions is estimated to be approximately $238,400. Annual utility operating costs for the two stations are estimated to be approximately $8,900.
- Based upon the potential availability of additional resources, the City should consider opening a fourth station in an effort to improve the response time to the outlying areas.
- The City should establish a single functioning 911 service by consolidating the Fire Department's communication dispatch function with the Police Department. Adopting this recommendation would allow the Department to reallocate three fire suppression personnel to be used in reopening the two closed fire-stations.

- The Department should consider implementing a 40 hour work week schedule for its inspectors. Adopting this recommendation would allow the Department to reallocate one fire suppression personnel to be used in reopening the two closed fire-stations.
- The Department should expand its use of mutual aid or automatic agreements with neighboring fire departments.
- The Department should utilize technology to improve its efforts in maintaining an inventory of buildings and to develop a priority system to ensure all buildings are inspected. In addition, the technology should be used to maintain information relating to fire safety inspections.
- The Department should consider providing computer connectivity to the outlying stations when they are reopened. It is estimated that implementing this recommendation will cost the City approximately $6,800.
- The City should consider enforcing false alarm citations. In addition, the City should also consider instituting a fee for conducting building inspections and building plan reviews. It is estimated that enforcing these provisions will result in false alarm citation revenues of approximately $7,500 annually and building fee revenues of approximately $40,000 annually.
- If in future negotiations the City increases any component of the overall compensation package, the City should consider negotiating the removal of the supplementals, requiring the Fire Department employees to contribute towards healthcare costs and reducing the personal and vacation day accrual rates to be more in line with the peers. It is estimated that implementing this recommendation would result in an annual savings of approximately $189,000. These savings could be used in part to recall some of the laid-off firefighters, which will help enhance the safety of the firefighters as well as the safety of the citizens of Warren.

Additional Comments

During the course of this engagement, the Warren Professional Firefighters Association commissioned a Geographical Information System (GIS) study which was prepared by an unknown source and contained a fire suppression capability analysis. This study contained two major recommendations (see **Appendix A**) consisting of the following:

- "A minimum of two closed stations should be reopened and staffed with at least three firefighters deployed on one engine."
- "The City should consider opening an additional station in the southeastern corner of the jurisdiction staffed with at least three firefighters deployed on one engine."

The recommendation to open a minimum of two stations directly concurs with the recommendations contained within this performance audit (See **R5.1**). Further, the GIS study is also consistent with this performance audit regarding the recommendation that a **minimum** of three firefighters be deployed on each engine. However, it should be noted that there is an upcoming NFPA standard recommending that four firefighters be deployed on each engine. Adopting the proposed staffing levels in **Table 5-7** of this performance audit would allow the City to comply with this standard as the recommended staffing levels were based on the assumption that four firefighters would be deployed with each engine.

The GIS study's second recommendation regarding the City opening a fourth station also directly concurs with this performance audit, which indicates that opening a fourth station would be ideal in minimizing response time to the outlying areas (see **R5.1**). However, the performance audit also indicates that any decision to open a fourth station must be weighed against the City's current financial situation as well as a number of unmet needs in other departments throughout the City.

As a result of the post audit held with the City of Warren and comments made by the Fire Chief, the Auditor of State's Office asked the Fire Chief for additional information to support his comments on this report. As of the date of this report, the Fire Chief has not provided any of the requested information.

Appendix A

The following is the executive summary (Pg. 2) from the GIS study.

Executive Summary

The Warren City Fire department has long provided fire suppression and fire protection services to the citizens of Warren, Ohio. In 1971, 96 firefighters protected the city's 13.23 square miles from six stations. By 1999, the city had reduced the number of firefighters to only 74, deployed from three stations, with a minimum of 17 firefighters on-duty at any given time. In January 2000, further reductions resulted in a layoff of 17 firefighters, when the department was cut to 57 firefighters working from a single fire station, with only 12 firefighters on-duty, to protect a city that has increased in size to 16.08 square miles. To improve Warren City fire suppression and fire prevention services, this report recommends that:

- *A minimum of two closed stations should be reopened and staffed with at least three firefighters deployed on one Engine.*

- *The City should consider opening an additional station in the southeastern corner of the jurisdiction staffed with at least three firefighters deployed on one engine.*

This Geographical Information System (G.I.S.) study and report was commissioned by the Warren Professional Firefighters Association. The study and report contains a Fire Suppression Capability Analysis, covering department staffing, response times, and station locations. The survey is based on Warren city government public records, satellite-based geographic mapping programs, and national fire service standards.

Appendix B

The following is the proposed station location and staffing proposal as outlined on Pg. 5 of the GIS study.

Current Station Locations and Staffing

Station	Address	Apparatus	Staffing
Central	111 South Street	Squad 1	1-Capt., 3-FF
		Engine 5	1-Lt., 2-FF
		Ladder 1	1-Lt., 2-FF
		Car 12	1-Asst. Chief
		1 Radio Operator	1-Firefighter
		Rescue 1**	1-Lt., 2-FF
		** Cross-staffed from	S. 1/Lad. 1
		Total	**12 Personnel**

Proposed Station Locations and Staffing
(Restored to 1999 configuration)

Station	Address	Apparatus	Staffing
Central	111 South Street	Squad 1	1-Capt., 5-FF
		Ladder 1	1-Lt., 2-FF
		Car 12	1-Asst. Chief
		1 Radio Operator	1-Firefighter
		Rescue 1**	1-Lt., 2-FF
		** Cross-staffed from	S. 1/Lad. 1
Station 5	1700 Atlantic St., NE	Engine 5	1-Lt., 2-FF
Station 6	2454 Parkman Rd., NW	Engine 6	1-Lt., 2-FF
		Total	**17 Personnel**

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Fire Department

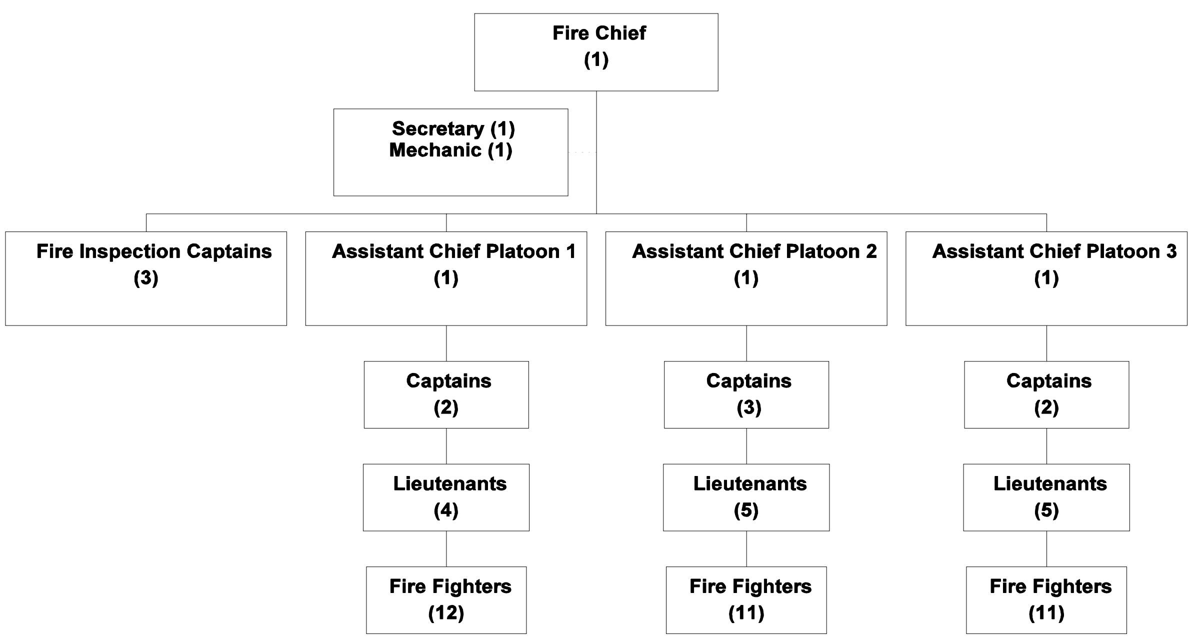
Background

This section summarizes the performance review of the City of Warren's (the City) Fire Department (the Department) operations. Comparisons are made throughout this report with the peer cities of Cuyahoga Falls, Mansfield and Middletown, Ohio to illustrate various operational issues. The Fire Department is responsible for fire suppression, investigation and prevention activities within the City.

Organizational Chart and Staffing

In FY 1999, the Fire Department operated three stations with 77 personnel. As a result of the expenditure reductions implemented on January 1, 2000, the Fire Department currently operates one station with 62 fire fighters (including the chief), in addition to one clerical person and one mechanic. The Fire Department is organized into a three-platoon system, with each platoon working a shift of 24 hours on-duty and 48 hours off-duty. **Chart 5-1** provides an overview of the Fire Department's organizational structure and staffing levels. All positions shown are full-time employees (FTEs).

Chart 5-1: Fire Department



Organizational Function

The City's Fire Department is charged with the duty to safeguard and preserve life and property through fire suppression activities. In addition, the Fire Department performs fire incident investigations, building fire safety inspections and fire prevention activities. Other services provided by the Fire Department include hazardous materials response, confined space and high angle rescue and limited water rescue. Currently, emergency medical services (EMS) in the City are provided by two private ambulance companies.

Summary of Operations

The Fire Department currently operates two engine companies and one truck company. One engine company consists of one driver, one officer and two fire fighters. The second engine company consists of one driver, one officer and one fire fighter while the truck company consists of one driver, one officer and one fire fighter. On-duty fire fighters above this manning respond with assigned apparatus according to a deployment policy put into effect on January 1, 2000. When a multiple alarm fire occurs or when more than one fire occurs in the City and the current on-duty crews cannot be re-deployed, off-duty fire fighters are called out to provide the additional work force needed. Warren Fire Department participates in the county Mutual Aid Box Alarm System (MABAS) which specifies mutual aid assistance by multiple alarm and hazard severity. Outside resources are not requested until a fifth alarm (recall of all Department personnel) has been called.

The initial response strength for an emergency call is usually two engine companies and the truck company. However, if the call is known to be a car or dumpster fire, only one engine responds. If a call is received for a hazardous materials incident, brush fire or heavy rescue incident, the appropriate response vehicles are manned and dispatched.

Three captains are responsible for fire safety inspections of buildings and facilities within the City. Fire prevention activities are performed by members of the on-duty platoon that are assigned to the Fire Prevention Bureau. A fire investigator is designated on each platoon and is assisted by other on-duty personnel. In addition, one on-duty fire fighter from each platoon is assigned dispatching responsibilities. The Fire Department also has a clerk and a vehicle mechanic.

Staffing

Table 5-1 presents the City of Warren Fire Department FTE staffing levels for FY 1999 and 2000.

Table 5-1: Fire Department FTE Staffing Levels by Functions

Position	FY 1999 FTEs Pre Layoff	FY 2000 FTEs Post Layoff	Net Change
Administration:			
Chief	1.0	1.0	0.0
Clerical	1.0	1.0	0.0
Fire Suppression Division:			
Assistant/Battalion Fire Chief	3.0	3.0	0.0
Captain	6.0	7.0	**1.0** [1]
Lieutenant	15.0	14.0	**(1.0)** [1]
Firefighter/EMT/Paramedic	47.0	34.0	**(13.0)**
Fire Prevention	3.0	3.0	0.0
Fire Investigation/Arson	0.0	0.0	0.0
Mechanic	1.0	1.0	0.0
TOTAL FIRE DEPARTMENT POSITIONS	77.0	64.0	**(13.0)**

Source: Fire Department

[1] Promotion made due to extended illness of one Captain.

Net staffing reductions of 13 FTEs between FY 1999 and FY 2000 resulted in an overall decrease of 16.9 percent in personnel. The most notable decrease was in fire fighter positions, with FTEs reduced from 47 to 34 or 27.7 percent. Three of the positions were reduced through regular and disability retirement. The remaining 10 fire fighters have not been recalled to duty.

Table 5-2 presents the current Fire Department full-time equivalent (FTE) staffing levels for the City of Warren and the peer cities.

Table 5-2: Fire Department FTE's Staffing Levels by Functions

	Warren FY 1999	Warren FY 2000	Cuyahoga Falls	Mansfield	Middletown	Peer Average[1]
Administration:						
Chief	1.0	1.0	1.0	1.0	1.0	1.0
Clerical	1.0	1.0	3.0	1.0	1.0	1.7
Training Officer	0.0 [2]	0.0 [2]	0.5	1.0	3.0	1.5
Other	0.0	0.0	1.5	2.0	0.5	1.3
Fire Suppression Division:						
Assistant/ Fire Chief	3.0	3.0	2.0	3.0	3.0	2.7
Captain	6.0	7.0	3.0	18.0	7.0	9.3
Lieutenant	15.0	14.0	16.0	0.0	10.0	8.7
Firefighter	47.0	34.0	40.0 [4]	61.0	46.0	49.0
EMS [3]	0.0	0.0	18.0 [4]	18.0	18.0	18.0
Fire Prevention	3.0	3.0	2.0	1.5	0.5	1.3
Fire Investigation/Arson	0.0 [5]	0.0 [5]	0.0	0.5	1.0	0.5
Mechanic	1.0	1.0	0.0	1.0	0.0	0.3
TOTAL DEPARTMENT POSITIONS	77.0	64.0	87.0	108.0	91.0	95.3

Source: Fire Departments

[1] Peer average does not include Warren.

[2] Training Officer functions assigned to selected fire suppression staff as dual functions.

[3] Cuyahoga Falls, Mansfield and Middletown fire fighters and EMS staff are cross-trained and rotate duties.

[4] Cuyahoga Falls maintains six EMS units in service at all times. However, EMS units also respond to and assist with fire suppression duties. Adjusted staffing for fire suppression activities was estimated.

[5] Fire investigation functions are assigned to selected fire suppression staff as dual functions.

Financial Data

Table 5-3 presents the actual expenditures for FY 1998 and FY 1999 for the Warren Fire Department and the budgeted amounts for FY 2000.

Table 5-3: General Fund Expenditures, Three-Year History

	Actual FY 1998	**Actual FY 1999**	**Actual FY 2000**	**Change FY 1999 - 2000 (Percent)**
Salaries and Wages	$3,415,398	$3,350,553	$2,913,058	(15.0)%
Overtime	$139,816	$64,805	$91,941	29.5%
Fringe Benefits [1]	$1,388,168	$1,434,780	$1,538,787	6.8%
Contractual Services	$46,399	$63,109	$53,789	(17.3)%
Materials and Supplies	$123,174	$139,673	$36,644	(281.0)%
Education	$10,383	$9,900	$0	(100.0)%
Utilities [2]	45,166 [2]	$54,584	$41,630 [2]	(23.7)%
TOTAL OPERATING COSTS	**$5,168,504**	**$5,117,404**	**$4,675,849**	**(9.4)%**
Capital Outlay [3]	$214,686	$214,362	$208,615 [4]	(2.7)%
TOTAL COSTS	**$5,383,190**	**$5,331,766**	**$4,884,464** [1]	**(9.2)%**

Source: City of Warren, Auditor's Office; Accumulated Transaction Listing
[1] Actual unemployment compensation of $81,837 for FY 2000 is not included.
[2] Utilities costs for FY 1998 and FY 2000 are estimated based on the FY 1999 actual expenditures.
[3] Capital Outlay reflects the payments for capital debt/capital lease.
[4] Amount estimated based on FY 1998 and FY 1999

The FY 2000 Fire Department General Fund expenditures (excluding unemployment compensation of $81,837) of $4,884,464 represents a decrease of 9.2 percent from the FY 1999 General Fund budget. The largest line-item decrease is in the category of salaries and wages, which decreased approximately $437,000 or 15 percent as a result of 10 staff members who were laid-off on January 1, 2000. If the unemployment compensation is included, the largest line-item increase is in the category of fringe benefits which increased approximately $104,000 or 6.8 percent. The increase in fringe benefits was the result of increases and off-setting decreases in fringe benefit line items including the increase in FY 2000 unemployment expenditures due to the significant layoffs. In addition, the FY 2000 workers' compensation expenditures are budgeted to increase from the FY 1999 levels. This increase is due to the City receiving a premium discount in FY 1999 rather than an increase in claims. Off-setting decreases appear in the Fire Pension and Fire Hospitalization line items representing the effect of the FY 2000 personnel reductions.

Operational Statistics

Table 5-4 presents operational data for the City of Warren's Fire Department and the peers. Data for both FY 1999 and FY 2000 is presented to show the effect of the personnel layoffs and station closings.

Table 5-4: Fire Department Operational Data

	Warren FY 1999	Warren FY 2000	Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]
Number of Fire Stations	3.0	1.0	4.0	5.0	5.0	4.7
Minimum Staffing [2] - Fire Suppression	15.0	10.0	NA [3]	15.0 [4]	15.0 [4]	15.0
In-service Companies **Engine Companies** **Truck companies**	 3 1	 2 1	 3 2	 5 1	 3 2	 3.67 1.67
Square Miles of City	16.3	16.3	27.8	31.5	25.5	28.3
Population [5]	46,866	46,866	49,913	49,802	48,558	49,424
ISO Rating	3	3	3	3	3	NA
In-Service Equipment	4	3	5	6	5	5
Number of Fire Emergency Calls - 1999	1,193	1,173 [6]	1,515	1,743	1,944	1,734
Number of EMS Calls - 1999	N/A [7]	N/A [7]	4,867	3,850	5,414	4,710
Average Response Time to Fire Emergency Calls (in minutes)	4	7 [8]	3 to 5	3 to 5	3.46	3.82
Number of Fires	350	350 [6]	455	323	421	400
Number of Inspections (all types)	1,509	1,509 [9-]	1,181	1,000	1,418	1,200
Number of Fires Investigated	55	87 [6]	50	59	67	59
Fire Related Deaths	1	3 [6]	0	0	0	0
Fire Related Injuries	8	14 [6]	0	14	20	11

Source: Fire Departments Annual Reports

[1] Peer average does not include Warren or Cuyahoga Falls if NA is indicated

[2] Minimum Staffing is the number of personnel needed to keep first-line response equipment in service and does not include shift supervisors (Assistant Chiefs/Shift Captains) or dispatchers.

[3] Cuyahoga Falls maintains six EMS units in service at all times. However, EMS units also respond to and assist with fire suppression duties. Adjusted staffing for fire suppression activities only could not be determined.

[4] Both Mansfield and Middletown keep three EMS units in operation requiring six personnel on each shift. The numbers provided reflect fire suppression personnel only.

[5] 1998 Population estimates from the Ohio Department of Development, Office of Strategic Research

[6] This information is annualized from year-to-date (first seven months of FY 2000) information provided by the Warren Fire Chief.

[7] The Warren Fire Department does not currently provide EMS services.

[8] The FY 2000 average response time was estimated by the Warren Fire Chief.

[9] It is assumed that the Department would perform the same number of inspections in FY 2000 as it did in FY 1999.

The estimated FY 2000 Department operational data changed significantly from FY 1999. Major changes include the decrease from three operating stations to one station, the decrease in minimum staffing levels and the increase of three minutes in the average response time to fire emergency calls. In addition, fire related deaths and injuries increased.

Performance Measures

The following is a list of performance measures used to conduct the analysis of the City of Warren Fire Department operations.

- Assess the current staffing levels
- Assess the efficiency and effectiveness of fire investigation, prevention and suppression activities
- Assess the operating expenditures
- Assess the potential revenue generating activities
- Assess the training and education programs provided to the fire fighters
- Assess the collective bargaining and contractual issues
- Assess the salary and overtime costs

Findings/Commendations/Recommendations

Operational Issues and Comparative Ratios

F5.1 **Table 5-5** presents key operational ratios for Warren and the peer city fire departments.

Table 5-5: Fire Department Operational Ratios

	Warren FY 1999	Warren FY 2000	Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]
Staffing per 10,000 Residents						
Administration	0.43	0.43	0.90	0.60	1.03	0.85
Fire Suppression	15.15	12.38	12.22 [2]	16.47	13.59	15.79
Fire Prevention	0.64	0.64	0.40	0.31	0.10	0.21
Fire Investigation/Arson	0.00 [3]	0.00 [3]	0.00	0.10	0.21	0.16
EMS	0.00	0.00	3.61 [2]	3.61 [4]	3.71 [4]	3.84
Other [5]	0.21	0.21	0.30	0.60	0.10	0.37
Total	**16.43**	**13.66**	**17.43** [2]	**21.69**	**18.74**	**21.23**
Fire Suppression: Percentage of Employees by Rank						
Assistant/ Fire Chief	4.2%	5.2%	3.3%	3.7%	4.5%	4.1%
Captain	8.5%	12.1%	4.9%	22.0%	10.6%	16.9%
Lieutenant	21.1%	24.1%	26.2%	0.0%	15.2%	6.8%
Firefighter	66.2%	58.6%	65.6% [2]	74.3%	69.7%	72.3%
Total	**100.0%**	**100.0%**	**100.0%** [2]	**100.0%**	**100.0%**	**100.0%**
Number of Fire Calls	1,193	1,173 [6]	1,515	1,743	1,944	1,734
Number of EMS Calls	NA [7]	NA [7]	4,867	3,850	5,414	4,710
Total Number of Calls	1,193	1,173 [6]	6,382	5,593	7,358	6,444
Total Fire Suppression Cost per Citizen	$113.77	$100.71	N/A [9]	$127.17 [8]	$110.66 [8]	$119.02

Source: Fire Department

[1] Peer average does not include Warren. In addition, peer average does not include Cuyahoga Falls because EMS costs could not be determined.

[2] Cuyahoga Falls maintains six EMS units in service at all times. However, EMS units also respond to and assist with fire suppression duties. Adjusted staffing for fire suppression activities are estimated.

[3] Fire investigation functions assigned to selected fire suppression staff as dual functions.

[4] Both Mansfield and Middletown keep three EMS units in operation requiring six personnel on each shift. The numbers provided reflect fire suppression personnel only.

[5] Other includes the mechanic

[6] The data was estimated utilizing information from the first seven months of FY 2000.

[7] The Warren Fire Department does not currently provide EMS service.

[8] Mansfield and Middletown expenditure per resident figures have been adjusted for EMS costs. See **Table 5-10** for details. Cuyahoga Falls expenditure per resident figure has not been adjusted for EMS costs and are not included in the peer average.

[9] The total fire suppression cost per citizen for Cuyahoga Falls could not be determined because EMS personnel also respond to fires

The total staffing per 10,000 residents for the Department in FY 2000 is 36.7 percent lower than the peer average. The Department's fire suppression staffing decreased approximately 18.3 percent in FY 2000 because of the net staffing reductions made in January 2000. However, the Department's staffing for fire inspections did not decrease as a result of the January 2000 staffing reductions and remains higher than the peers.

The percentage by rank provides information on the allocation of employee resources. **Table 5-5** indicates that approximately 41.4 percent of the Department's staff are officers compared to the peer cities' range of 25.6 percent to 30.3 percent. Currently, the Department fire fighters represent 58.6 percent of the total fire suppression FTEs. The peer cities' fire fighters represent between 69.7 percent and 74.4 percent of the total fire suppression FTEs. The Department's percentage of fire fighters has decreased approximately 7.6 percentage points in FY 2000 as compared to FY 1999 due to the reduction in staff. Officer positions were not reduced as a result of the FY 2000 lay-offs.

In FY 1999, the Department responded to 1,193 fire emergency calls, which is approximately 651 or 35.3 percent fewer calls than the peer average. Currently, all EMS calls for the City are responded to by private companies. Therefore, the total number of calls is significantly lower than in the peer cities.

A fire department's cost per citizen measures the cost of services per capita. In 1999, the Department cost per citizen ($113.77) was approximately $5.25 or 4.4 percent lower than the peer average adjusted for EMS costs ($119.02). Staffing issues are addressed in **R5.1**, **R5.2, R5.3** and **R5.9**.

F5.2 **Table 5-6** presents the number of fire stations and the minimum staffing levels for the Department and the peer cities.

Table 5-6: Stations and Staffing Levels

	Warren FY 1999	Warren FY 2000	Cuyahoga Falls FY 1999	Mansfield FY 1999	Middletown FY 1999	Peer Average [1]
Number of Fire Stations	3.0	1.0	4.0	5.0	5.0	4.7
Minimum Staffing per Shift [2]	15.0	10.0	15 [3]	15.0 [4]	15.0 [4]	15.0
Platoon Strength	20.0	16.0	NA [3]	25.0	20.0	22.5
Percentage Difference Between Minimum Staffing and Platoon Strength	33.3%	60.0%	NA [3]	66.7%	33.3%	50.0%
In-service Companies						
Engine Companies	3	2	3	5	3	4.0
Truck companies	1	1	2	1	2	1.5
Square Mile of City	16.3	16.3	27.8	31.5	25.5	28.5
Average Square Miles per Station	**5.4**	**16.3**	**7.0**	**6.3**	**5.1**	**5.7**
Average Response Time per Call (in minutes)	4	7	3 to 5	3 to 5	3	3.5
Population	46,866	46,866	49,913	49,802	48,558	49,180
Population Density per Square Mile	**2,875**	**2,875**	**1,795**	**1,581**	**1,904**	**1,742**

Source: Annual Reports for Warren, peer cities and the Ohio County Profiles

[1] Peer average does not include Warren or Cuyahoga Falls. Peer average does not include Cuyahoga Falls because EMS costs could not be determined.

[2] Minimum Staffing is the number of personnel needed to keep first-line equipment in service and does not include shift supervisors (Assistant Chiefs/Shift Captains) or dispatchers..

[3] Cuyahoga Falls maintains six EMS units in service at all times. However, EMS units also respond to and assist with fire suppression duties. Information needed to determine an adjusted staffing for fire suppression activities was not provided.

[4] Both Mansfield and Middletown keep three EMS units in operation requiring six personnel on each shift. The numbers provided reflect fire suppression personnel only.

Prior to the staffing reductions in January 2000, the Department operated three stations with two stations housing one engine company each (three fire fighters per company) and one engine company (six fire fighters) and one truck company (three fire fighters) at the central station for an average of five fire fighters per station, which was the highest among the peers. Schedules provided by the City indicate that company staff could increase depending on the total platoon strength working on a particular day. After the staffing reductions, the decision was made to close two fire stations although it appears that the City maintained enough staff to only close one station. According to the Fire Chief, closing two stations provided a safer operations environment for fire suppression personnel. As a result, the Department is currently maintaining only one station with approximately three times the square miles per station. In addition, the average response time per call appears to have been affected by the closing of the two fire stations in January 2000. According to the Fire Chief, additional staff may be required to maintain acceptable fire suppression levels because the population density per square mile (2,875) is significantly higher than for the peers and the peer average (1,726).

Although the Department maintained three stations prior to January 2000, the Fire Chief has used a mapping software to show that certain outlying areas of the City were not accessible within a four minute response time under the three station system. The software also showed that to provide the majority of the City with a four minute response time, the City would need to open a fourth station. If a decision were made to open a fourth station, certain data and ratios would need to be considered in determining the location of the station. The data and ratios that would need to considered include, but are not limited to, the following:

- Current response time to the community surrounding the station location under consideration
- Zoning and construction type
- Population density per square mile and population demographics
- Run incident rate in the community surrounding the station location under consideration

R5.1 To improve response time and services to the citizens of the City of Warren, the City should immediately reopen two closed fire stations and begin maintaining a minimum of three fire stations. Based on the proposed staffing allocation in **Table 5-7**, it is estimated that the City would need eight additional fire suppression personnel to maintain a minimum of three fire stations. However, as **Table 5-7** also indicates, there is a possibility to reallocate four existing personnel from other duties within the Fire Department by implementing **R5.9** (reassigning one fire inspection FTE) and **R5.2** (reassigning three dispatching FTEs) from this performance audit. This reallocation would reduce the additional fire suppression personnel needed to maintain a minimum of three fire stations to four FTEs. **Table 5-7** presents the proposed staffing allocation needed to maintain a minimum of three fire stations.

Table 5-7: Proposed Staffing Level in FTEs

	Current Level	Proposed Level
Central Station		
Captain	7	2
Lieutenants	14	4
Firefighters	31	15
Opened Station A		
Captain		1
Lieutenants		2
Firefighters		9
Opened Station B		
Captain		1
Lieutenants		2
Firefighters		9
Additional Unassigned Fire Fighters (used to cover vacations and other leave usage) [1]		15
Total Fire Suppression	**52**	**60**
Fire Inspection (Capt)	3	3
Assistant Chiefs	3	3
Chief	1	1
Dispatchers	3	3
Secretary	1	1
Mechanic	1	1
Total Staff Level	**64**	**72**
Reassignments from R5.3 and R5.10		(4)
Adjusted Proposed Staffing Level	**64**	**68**

[1] Reserve fire fighters supplement fire suppression staffing levels to cover vacations, sick leave and other leave usage. This number assumes that each employee has 17 years of service for vacation accrual purposes. It is further assumed that employees will use all personal days, FLSA reduction days and sick time earned during the year.

Table 5-7 was developed based on the assumption that the Fire Department would staff each engine with four firefighters, which exceeds current NFPA standards (three firefighters per engine) but is in line with proposed modifications to the standards (NFPA is likely to increase standard to four firefighters per engine). Other significant assumptions that were made in developing **Table 5-7** include the following:

- One engine in each of the three stations with the downtown station housing one truck company in addition to the engine.
- One officer assigned to each apparatus on each shift.
- Staff needed to cover leave usage and keep first-line equipment in service is based on the assumption that each employee has 17 years of service for vacation accrual rate purposes. It was further assumed that employees will use all vacation days, personal days, sick days and FLSA reduction days earned during the year.

Based upon the potential availability of additional resources, the City should consider opening a fourth station in an effort to improve the response time to the outlying areas. However, opening a fourth station could be difficult due to the City's current financial situation and the number of unmet needs in other departments throughout the City.

During the course of this audit, the City of Warren received a Workers' Compensation rebate in January of 2001. The City authorized the proceeds of this rebate to be used in providing for overtime costs to increase the minimum staffing levels per shift by two firefighters. Therefore, while the total fire suppression staffing has remained the same at 52 firefighters, the minimum staffing per shift has increased to 12 with two individuals working overtime (at the start of this engagement, the minimum fire suppression staffing was 10). However, because one shift is approximately 24 hours and there are three platoons that rotate shifts (24 hrs. on-duty and 48 hrs. off-duty), by increasing the minimum staffing per shift by two firefighters, the City has in effect increased its overall firefighting staffing by six FTEs. Therefore, if the City implements **R5.2** and **R5.9**, it appears that with the six additional FTEs, the City has the capability to reopen the two closed stations. Accordingly, if the City plans to continue allowing for two additional firefighters per shift through overtime expenditures, the City should assess the feasability of opening the two remaining fire stations immediately. However, due to the priority of needing three stations with dedicated staffing, the City might need to reconsider the decision to supplement existing staff through the use of overtime versus adopting the proposed staffing plan outlined in **Table 5-7**.

Financial Implication: If the City reopens the two closed fire stations and adopts the proposed staffing level in **Table 5-7**, there would be additional costs for salaries, wages and fringe benefits for eight additional fire fighters. Assuming an annual salary and benefits per fire fighter of approximately $59,600, additional annual personnel costs would be approximately $476,800. However, **R5.9** could reduce the financial implication by $59,600 and **R5.2** could reduce the financial implication by $178,800 for a net annual salary cost of approximately $238,400. Annual utility costs of approximately $8,900 for both stations would also be incurred.

F5.3 Currently, the Department maintains a separate communication dispatch center as part of its 911 emergency system. All 911 emergency calls are channeled through the Police Communication Center. If the call is a fire emergency, communication center operators transfer the call to the Department Communications Center located in the central station. The Fire Department's 911 dispatch operator asks various questions of the caller to identify the location of the incident and to assess the level of emergency response required. The Fire Department's system does capture the call transfer time between the Police and Fire Communications room. However, according to the Fire Chief, the information to measure complete response time is not consistently tracked.

R5.2 The Department should consolidate the communication dispatch services with the Police Department. A single functioning 911 dispatching service should provide a more efficient and cost-effective means of dispatching fire service for the City. Over the long run, consolidation could increase efficiency as many administrative functions, such as budgeting, planning, maintaining equipment and training of personnel could be centralized. In addition, a consolidated 911 dispatching center would free up one additional fire fighter per shift to perform fire suppression activities.

Financial Implications: If the Department would consolidate the communication dispatch service with the Police Department, the Department could reassign staffing by approximately three FTE's to help staff the three fire stations as recommended in **R5.1**. The added functions to the Police dispatchers may require additional costs associated with training and staffing to ensure public safety, but these costs could not currently be determined. The financial implication associated with this recommendation is already included in **R5.1**.

F5.4 **Table 5-8** shows the ratio of officers (assistant fire chief, captains and lieutenants) to fire fighters for the City of Warren and the peer cities respectively.

Table 5-8: Staffing Ratio Comparison

	Warren FY 1999	Warren FY 2000	Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]
Officers [2]	21	21	18	18	17	17.7
Fire Fighters	47	34	58	79	64	67
Span of Control	1 to 2.2	1 to 1.6	1 to 3.2	1 to 4.4	1 to 3.8	1 to 3.8

Source: Fire Department annual reports and peer information

[1] Peer average does not include Warren.

[2] Assistant chiefs and shift captains are not included in this category.

Before the layoffs in January 2000, the Department maintained a ratio of one supervisor to 2.2 firefighters, which was the lowest among the peers. Because the reduction in force was based on seniority, the least senior firefighters were laid off and the span of control ratio decreased significantly to one supervisor to 1.6 firefighters. As a result, many officers are required to perform duties that would normally be completed by fire fighters.

If the City adopted the staffing levels proposed in **R5.1** (**Table 5-7**),the Fire Department would consist of 12 officers (captains and lieutenants) and 45 firefighters. As a result of this redistribution, the span of control ratio would increase significantly to one supervisor for every 3.75 firefighters, which is approximately equal to the peer average noted in **Table 5-8** of one supervisor for every 3.8 firefighters.

R5.3 Based on **Table 5-8** and the analysis contained in **F5.4**. the Fire Department appears to be overstaffed at the officer level. To rectify this, the City should consider adopting the proposed staffing levels in **R5.1** and redistributing some of the existing staff from the officer level to the firefighter role. To achieve the peer average span of control of one supervisor for approximately every 3.8 fire fighters, the City could potentially redistribute nine officer positions. The redistribution of staff discussed in this recommendation would depend on specific action by Warren's City Council.

Fire Suppression

F5.5 **Table 5-9** provides the average number of personnel staffing for each type of unit (when in service) in Warren and in the peers, as well as peer and national averages. Warren's staffing numbers were taken from Fire Department orders (FD98-GOP-02-01 Rev 0 in effect February 9, 1998 and FD98-GOP-02-01 Rev 4 in effect January 1, 2000) at the mid-point of the potential number of fire fighters on duty.

Table 5-9: Staffing by Apparatus Type

	Warren FY 1999		Warren FY 2000		Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]	National Average [2]
Population	46,866		46,866		49,913	49,802	48,558	49,424	50,000
Engines	6.00 [3]	3.00 [3]	4.00 [3]	3.00 [3]	3.00	2.50	3.00	2.83	3.08
Ladders	N/A		N/A		3.00	2.00	2.00	2.33	2.51
Heavy Rescues	3.00		3.00		3.00	N/A	N/A	3.00	2.30
Hazmat	3.00		3.00		3.00	3.00	N/A	3.00	2.33
Quints	4.00		4.00		3.00	N/A	3.00	3.00	3.05
Ambulances	N/A		N/A		2.00	N/A	2.00	2.00	2.22

Source: Warren Fire Department orders and peer annual reports
[1] Peer average does not include Warren
[2] National average results are from the 1998 Phoenix Fire Department National Survey on Fire Department Operations
[3] In FY 1999, one engine staffed with six fire fighters and the remaining engines staffed with three fire fighters. In FY 2000, one engine staffed with four fire fighters and the remaining engine staffed with three fire fighters. The staff assigned to the remaining engine companies could be increased depending on the platoon strength working on a particular day.

The staffing of an apparatus responding to an emergency is a critical component in fire suppression. In FY 1999, the Department staffed an engine company with six firefighters, which was approximately two times the national (3.08 FTEs) and peer averages (2.83 FTEs). Although the staffing of that engine was reduced to four firefighters due to the layoffs in FY 2000, this staffing level still exceeded the peer and national averages by approximately one firefighter. In addition, the City's staffing of the quint (4.0 FTEs) also exceeded the peer (3.0 FTEs) and national averages (3.05 FTEs) by approximately one firefighter. Although the City's staffing for the Hazmat and Heavy Rescue vehicles are consistent with the peers, these levels exceeded the national averages by approximately one firefighter.

Based on **Table 5-9**, the Department appears to have more staff on the engine and truck (quints and/or ladders) apparatus when responding to an emergency than the peer and national averages. This additional staff could be potentially used in an effort to reopen the two remaining stations. However, according to the Department Fire Chief, the additional staff members are needed on the apparatus because of the City's dense population and the type of structures within the City such as high-rises, hospitals, correctional facilities and industries.

R5.4 Based on comparisons to the peer and national averages, it appears that the City has the capability to reduce the number of fire fighters per vehicle. Therefore, given the City's desire to enhance the safety of its citizens, the City should consider the feasability of reassigning the current apparatus staffing to be more in-line with the peer and national averages. By implementing this recommendation, the City would free-up between two to four existing firefighters that can be used in reopening the two remaining fire-stations and/or operating a third engine. (see **F5.2** and **R5.1**).

F5.6 The City of Warren participates in the county Mutual Aid Box Alarm System (MABAS) in lieu of individual written agreements with each local community fire department. According to the Fire Chief, individual mutual aid agreements are not used because of worker's compensation responsibility concerns associated with responding to calls outside of the home community. The Department responded to 11 incidents in FY 1999. However, the Department does not generally request assistance from neighboring departments when additional manpower is needed. Currently, each of the peer fire departments operates under mutual aid or automatic aid agreements with bordering counties, townships or villages. Mutual aid agreements provide for assistance from surrounding fire departments in the event of multiple alarm fires, multiple fires or natural disasters. The agreements state the terms of the aid provided and the procedures for incident command. According to a Minnesota best practice review, 98 percent of all Minnesota fire departments participate in mutual aid for some fire-related services. Fire departments who use mutual or automatic aid do not exchange money or charge fees for most responses.

R5.5 The Department should consider using mutual aid or automatic agreements with neighboring fire departments. Through mutual aid or automatic response agreements, fire departments can rely on nearby departments to assist when additional resources are needed. Fire departments also use mutual aid associations for sharing information and other collaborative efforts including training exercises and equipment purchases. Mutual aid may supplement a fire department's personnel, equipment and apparatus in a cost-efficient manner. Considering that the Department has significantly reduced staff and is operating only one fire station, using mutual aid agreements should help ensure the safety of the citizens of Warren.

Advance planning is important to effectively implement mutual aid or automatic response agreements. Additionally, department members must be trained in the operating procedures of the other mutual aid departments. The Warren Fire Department should continue to participate in county fire training with surrounding fire departments.

F5.7 **Table 5-10** presents a summary of the FY 1999 Fire Department operational expenditures for the City of Warren and the peer fire departments.

Table 5-10: FY 1999 Fire Department Operating Costs

	Warren	Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]
Salaries and Wages	$3,350,553	$3,691,768	$4,802,620	$3,852,386	$4,327,503
Overtime	$64,805	$630,701	$270,976	$239,344	$255,160
Fringe Benefits	$1,434,780	$1,537,435	$1,698,642	$1,631,752	$1,665,197
Contractual Services	$63,109	$151,932	$223,053	$61,909	$142,481
Materials and Supplies	$139,673	$451,236	$216,715	$345,999	$281,357
Utilities	$54,584 [3]	$49,881	$51,009	$78,344	$64,677
Training	$9,900	$31,185	$6,341	$24,395	$15,368
Total Operating Costs	**$5,117,404**	**$6,544,138**	**$7,269,356**	**$6,234,129**	**$6,751,743**
Capital Outlay [2]	$214,362	$124,184	$303,027	$398,655	$350,841
EMS Adjustments [4]	N/A	N/A	(1,238,874)	(1,259,459)	(1,249,167)
Total Adjusted Costs	**$5,331,766**	**$6,668,322**	**$6,333,509**	**$5,373,325**	**$5,853,417**
Total Population	46,866	49,913	49,802	48,558	49,180
Total Cost per Citizen	$113.77	$133.60	$127.17	$110.66	$119.02
Number of Fire Calls	1,193 [5]	1,515	1,743	1,944	1,844
Number of EMS Calls	N/A	4,867	3,850	5,414	4,632
Total Number of Calls	1,193 [5]	6,382	5,593	7,358	6,476

Source: Fire Departments annual budgets and Ohio County Profiles for 1998 populations
[1] Peer average does not include Warren. In addition, peer average does not include Cuyahoga Falls because EMS costs could not be determined.
[2] Capital outlay reflects the payments for capital debt/capital lease.
[3] Utilities were adjusted to include gas, water and electric.
[4] Adjustments to the yearly costs were made based on the number of EMS FTEs for Mansfield and Middletown. Adjustments included salaries, estimated overtime, fringe benefits, supplies and capital outlay costs.
[5] Total number of calls include fire and emergency medical calls.

In FY 1999, the Department's average cost per citizen for fire services was $113.77, which is approximately $5.00 lower than the peer average. Some of the factors that appear to have contributed to this lower cost per citizen include significantly lower overtime costs and minimal spending on discretionary items such as materials and supplies, utilities, training and capital outlay.

C5.1 The Warren Fire Department is maintaining a low operational cost per citizen when compared to the peer average. By managing overtime costs and discretionary spending, the Fire Department is helping to limit the General Fund resources that are necessary.

F5.8 **Table 5-11** shows the percentage of operational expenditures by functions for Warren and the peer cities in FY 1999.

Table 5-11: Operational Expenditures by Function

	Warren	Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]
Salaries and Wages	**62.9%**	55.4%	62.5%	56.6%	59.6%
Overtime	1.2%	9.4%	3.6%	3.6%	3.6%
Fringe Benefits	**26.9%**	23.1%	22.3%	24.4%	23.4%
Contractual Services	1.2%	2.3%	3.5%	1.2%	2.4%
Materials and Supplies	2.6%	6.7%	2.4%	5.0%	3.7%
Utilities	1.0%	0.7%	0.8%	1.5%	1.2%
Training	0.2%	0.5%	0.1%	0.5%	0.3%
Total Operating Cost	96.0%	98.1%	95.2%	92.8%	94.0%
Capital Outlay	4.0%	1.9%	4.8%	7.2%	6.0%
Total Costs	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Fire Departments annual budgets
[1] Peer average does not include Warren

The allocation of resources between the various functions of the Department is one of the most important aspects of the budgeting process. Given the limited resources available, functions must be evaluated and prioritized. Analyzing the spending patterns between the various functions should indicate where the priorities of the City and the Department are placed. **Table 5-11** indicates that the Department's expenditure for salaries and wages (62.9 percent) and fringe benefits (26.9 percent) are higher than the peer cities and the peer average. See the **compensation analysis** subsection of this report for an additional discussion concerning salaries and benefits.

F5.9 **Table 5-12** summarizes the civilian fire-related casualties for the past five years and a five-year average for FY 1995 through FY 1999. The civilian fire related casualties for the first seven months of FY 2000 are also presented. The Department classifies fire deaths by causes which range from arson to explosions.

Table 5-12: Civilian Fire-Related Casualties FY 1995 through July 31, 2000

Year	Deaths	Per 10,000 [1]	Injuries	Per 10,000 [1]
1/1/00 - 7/31/00	2	0.4%	6	1.3%
FY 1999	1	0.2%	8	1.7%
FY1998	5	1.1%	13	2.8%
FY 1997	4	0.9%	21	4.5%
FY 1996	0	0.0%	2	0.4%
FY 1995	3	0.6%	10	2.1%
FY 1995 to FY 1999	2.6	0.6%	10.8	2.3%

Source: Warren's Fire Department annual reports
[1] Per 10,000 residents

The extent of fire related casualties is a function of a number of factors including the magnitude of a fire and the response time. From FY 1998 to FY 1999, the number of civilian related deaths decreased significantly from five to one. However, after the first seven months, the number of civilian fire related deaths in FY 2000 has already exceeded the FY 1999 levels. Additionally, while the number of civilian related fire injuries decreased significantly from FY 1998 to FY 1999, it appears that the number of injuries in FY 2000 is on pace to exceed the FY 1999 levels. The current death rate may not necessarily be attributed to the longer response time, however, decreasing the response time rate could help to reduce the number of fire-related injuries and/or casualties. The magnitude of the fire is directly related to the response time. According to NFPA, a fire doubles in size each minute it burns.

R5.6 The Department should take action to reduce the response time for all emergency calls. By implementing various recommendations in this report, the Department should reduce its response time to a level similar to the peers. The specific recommendations that the Department could implement to help reduce the civilian casualties include the following:

- Reducing response time could be accomplished by reopening fire stations (**R5.1**)
- Consolidating dispatch services (**R5.2**)
- Using mutual aid agreements with bordering communities (**R5.5**) and
- Reallocating staff to fire suppression (**R5.9**)

F5.10 Staff evaluations of training programs were not completed. In FY 1999, the Department fire fighters spent approximately 6,174 hours (80 hours per staff member) in training. The training programs offered to the Department fire fighters are scheduled on a daily basis. Each fire fighter is required to attend one hour of training during their scheduled shift, unless permission to not attend is granted by the assistant chief or house captain.

Training is a key component in improving fire suppression efforts. Training evaluations could help trainers to enhance and revise training course outlines and plans. According to the Minnesota best practice review, a well-trained workforce lends itself to efficient and effective operations and reduces the risk of injury to fire fighters.

R5.7 The Department should require training program evaluations from the trainees. In addition, skills assessments should be performed by surveying fire fighters on skills and abilities about which they feel less confident. Periodic appraisals of fire fighters' performance could also help identify particular training needs that can improve the fire fighters' skills and affect the working of the department as a whole.

Fire Prevention

F5.11 The Department does not have a complete inventory of buildings that require inspections for compliance with the fire prevention provisions of the Ohio Basic Building Code. In addition, the Department does not have a written policy or procedure for completing the inspection process. The Department's Bureau of Fire Inspection and Prevention is required to inspect all buildings regulated by the Ohio Basic Building Codes and enforce all provisions of the code relating to fire prevention. In accordance with the rules and regulations established by the Department, the Bureau of Fire Inspection and Prevention is responsible for all fire inspections, records and enforcement of the codes with the supervision of the chief of the Fire Department. Information identifying buildings requiring inspection is available from the state and county governments. Additionally, the Department has not assessed the fire risk for each building within its jurisdiction.

The Fire Department appears to have difficulty managing its inspection process because its central filing system is not accurately maintained and does not contain complete records of all activities. In addition, the Department does not maintain records indicating those buildings within its jurisdiction that have received regular inspections. The Department maintains reports using filing systems that require knowledge of the type of business instead of the street name and address. This may lead to potential identification problems as the type of business may change or the business location may change. Inspectors also do not consistently file inspection reports in the central filing system. Based on a review of 25 inspection files, 72 percent of the Department inspection documents were missing. The Department's current computer system has the software to maintain and track occupancy and inspection records. However, prior to the start of this engagement, the Firehouse software was only partially utilized.

R5.8 The Department should improve its inventory of buildings and develop a priority system to ensure all buildings are inspected. Fire inspections serve as the primary means to identify problem areas. The Department should also develop inspection policies and procedures that ensure accurate and complete records. During the fire inspections, fire fighters should take the opportunity to familiarize themselves with the property and bring any fire safety concerns to the attention of the owner. Fire inspectors should look for potential fire hazards, inspect fire protection systems, such as sprinkler systems, and test equipment and alarms. The Department's inspections program should include procedures for addressing violations, issuing citations for violations and reinspecting buildings to ensure correction of documented violations.

The Department also should implement a computerized inspection database to increase the efficiency of the inspection and re-inspection processes. In developing the database, the Department should include data on the buildings, including when they were inspected and when the re-inspection should take place. To ensure the database has maximum value, the Department should include the full building inventory for the City and the inspection frequency for these buildings. The system should also be able to produce reports prompting staff when inspections and re-inspections are due. Additionally, the central filing system should be maintained by street address which should make for easy retrieval of information, rather than by business type.

The system should also produce reports that the Fire Chief can use to allocate manpower and monitor inspectors' progress on inspections. Proper filing and documentation of inspection and re-inspection records would allow the Fire Chief to ensure inspectors are carrying out their assigned fire safety inspections and appropriately following up on identified violations. All inspectors should be fully trained in the use of the database.

According to the National Fire Protection Association (NFPA), cities that do not annually inspect public buildings have fire rates as much as 50 percent higher than cities that inspect public buildings annually. The higher fire rate could result in loss of life, injury or damage to public buildings. The Department can reduce the fire risk at buildings within its jurisdiction by conducting regular fire safety inspections.

F5.12 **Table 5-13** summarizes the number of staff members dedicated to fire inspections as well as the average salary and benefits for Warren and the peer cities.

Table 5-13: FY 1999 Fire Inspections per Staff Member

	Warren	Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]
Total Inspectors (FTEs)	3.0	2.0	1.5	2.0	1.8
Total Salaries and Benefits	$231,197	$144,147	$83,696	$105,837	$111,227
Average Salary and Benefits	$77,066	$72,074	$55,798	$52,919	$60,264

Source: Warren and peer annual reports
[1] Peer average does not include Warren

As **Table 5-13** indicates, Warren's total staffing levels as well as average salaries and benefit costs for the inspector positions are higher than all of the peers. The higher staffing levels can be attributed to the Department requiring its inspectors to work the same 24 hours on-duty and 48 hours off-duty schedule as the fire suppression personnel. Under this schedule, the inspectors of the Department respond to first alarm calls during their shift and receive a scheduled period of down time between 9:00 p.m. and 6:00 a.m. unless there is an emergency fire call. Because of this scheduling system, it takes three inspectors to conduct 40 hours worth of inspections a week. All of the inspectors are captains and receive a significantly higher compensation package than the majority of the other fire suppression personnel within the Department (See **Table 5-19**).

In contrast to Warren, each of the peers schedules their inspectors to work during the normal business hours associated with a 40 hour work week. Consequently, it only takes one full-time inspector at the peers to complete 40 hours worth of inspections in a week. This is evident by the peer average staffing level for inspectors of 1.8 FTEs.

In addition, it appears that inspection reports have not been effectively maintained in the past. For example, the Department was unable to provide an accurate and reliable figure for total inspections in FY 1999. Furthermore, as noted in **F5.11**, approximately 72 percent of the inspection records reviewed lacked sufficient documentation. By lacking sufficient documentation on the number and nature of inspections, not only can prosecution efforts of potential building code violators be hindered, but it is also difficult to ensure the effectiveness and efficiency of the Department's inspection efforts.

R5.9 The Department should maintain and track all fire safety inspections and follow-up on identified violations. Each inspection should include a report which lists all violations, a time frame in which violations should be corrected, the signature of the owner(s) designee, inspector's name and date of inspection or follow-up inspection. The NFPA recommends that fire agencies develop a program for issuing fire-code citations, and that this program specify appropriate follow-up procedures. The NFPA further recommends documenting this process in the fire agency's policies.

The Department should attempt to maximize the number of inspections that can be conducted by an inspector. Therefore, the Department should consider implementing a 40 hour work week schedule for inspectors (currently work the same 24 hours on-duty and a 48 hours off-duty schedule as the firefighters) and discontinue the practice of sending inspectors on first alarm response calls. By eliminating the practice of inspectors responding to first alarms calls and implementing a 40 hours per week work schedule, the Department could potentially reassign one inspector to the fire suppression area. Reducing the number of inspectors should decrease the total cost per inspection and increase the number of inspections per inspector.

Furthermore, the Fire Chief should require the inspectors to utilize the Firehouse inspection features to track the inspection process. Through the effective use of the inspection database the Fire Chief should be able to monitor the number of inspections completed, the number of re-inspections completed and document the required inspections to comply with the Ohio Revised Code for state and local government buildings.

Financial Implications: If the City would implement a 40 hours per week schedule for inspectors and reassign one FTE to fire suppression duties, the Department could reduce the financial implication in **R5.1** by $59,600 and support the opening of the additional fire stations.

F5.13 The Department has the authority to investigate complaints regarding fire safety at buildings within its jurisdiction and sends investigators to evaluate these complaints. However, the Department does not maintain a formal complaint log. In addition, complaint investigation documentation is generally incorporated with the other inspection records. The lack of a formal log identifying the number and nature of complaints makes it difficult to evaluate the Department's efforts in investigating fire safety complaints. On September 26, 2000, the Fire Chief implemented a manual complaint log.

R5.10 The Fire Department has formalized its process for receiving and investigating fire safety complaints against buildings within its jurisdiction. The Department developed a complaint log that describes the location, the nature of the complaint, when it was received, the complainant's name and the disposition of the complaint. However, this information should be incorporated in the system database for cross-referencing against fire inspections and future complaints(see **R5.19**).

F5.14 The Department lacks an effective pre-incident emergency management plan. Documents made available appear to indicate that the Department's pre-planning methods are outdated. The pre-planning books kept in the fire vehicles have not been regularly updated. Because fire fighters use pre-planning books during fire calls to familiarize themselves with the structure's exits, sprinkler systems and other information, pre-planning books are vital to the safety of fire fighters and residents in an emergency situation. The Federal Emergency Management Agency (FEMA) offers local governments a wide range of resources to help develop, maintain and improve their emergency preparedness and response capabilities.

R5.11 The Department should develop or update pre-incident plans and establish a level of cooperation and coordination with other agencies. Effective emergency planning should provide not only operational plans, but also the ability to locate, mobilize, coordinate and use resources that are beyond the normal capabilities. Some important factors in effective pre-incident planning include the following:

- The pre-planning system should be planned, documented, practiced and known to participants as well as updated regularly. The more the systems are built on every day standard operating procedures, the more they can be expected to function effectively in a major emergency situation.

- Major emergencies occur in unanticipated ways, locations and times. Effective plans are adaptable to a variety of situations, by calling upon the elements that are needed in each case.

- Public education and information distribution systems are extremely important in managing an incident that arouses public concern or requires public response. Additionally, a positive established relationship with local news media is essential.

- Emergency planning should include both public and private sector organizations and should establish relationships that can be utilized when the need is recognized.

- Familiarity and mutual confidence among individuals established through planning efforts and exercises are key factors in responding to actual emergency situations.

Because pre-incident plans are an integral element for effective management to emergency situations, the Department should consider developing and formalizing one. The ability to plan, manage and successfully activate a major emergency plan requires coordination and interagency cooperation. Additionally, the FEMA's Emergency Management Institute (EMI) offers local fire district personnel a number of courses designed to help fire departments build, maintain and improve emergency operations planning skills.

F5.15 In FY 1999, the Department spent 235 hours on prevention programs aimed at educating adults and children about the dangers of fire. Year-round programs conducted by fire fighters placed emphasis on visits to public schools, business and industry, high rise buildings and residences. However, current records provided by the Department did not show detailed demographic information or demonstrate results achieved with the prevention programs. Detailed demographic information could include the number of participants, age groups and materials used. The Department tracks how many prevention activities each fire company held monthly, however, formally established goals and objectives do not drive the activities.

R5.12 The Department should formally monitor and track the performance of fire prevention activities. The Department should also consider implementing formal prevention plans based on existing programs such as the Residential Smoke Detectors Program, the Home Alone Program or the Juvenile Fire Setter Program. The plans should include a set of outcomes related to strategic goals, the planned number of activities and a description of how the activity will achieve the strategic goals.

Fire Investigations

F5.16 The Warren Fire Investigation Unit (FIU) is charged with the responsibility of investigating all fires. In 1999, the total loss on intentional fires was $2,039,584. This was primarily due to several large structural fires. The FIU is responsible for finding the cause and origin of fires and deterring the crime of arson. **Table 5-14** provides statistical information regarding arson rates per 10,000 population for Warren and the peer cities.

Table 5-14: Arson Rate per 10,000 Residents, Five-Year History

Year	Warren	Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]	National Average [2]
FY 1999	12.2	0.8	5.0	4.7	3.5	N/A [3]
FY 1998	9.0	1.2	5.6	6.4	4.4	2.8
FY 1997	8.5	2.4	6.2	4.5	4.4	3.1
FY 1996	5.5	0.6	7.8	4.9	4.4	3.6
FY 1995	8.7	0.8	5.4	3.5	3.2	3.6

[1] Peer average does not include Warren
[2] National Average is for group IV, cities with population of 25,000 to 49,999
[3] The national average for 1999 was not available at the time of this report

Over the last five years, based on data provided by the Warren Fire Department, arson fires within the city have steadily increased by about 3.5 percent, while the national average has been steadily declining. During the same period of time, the peer average has experienced an overall increase of about 0.3 percent. A report in October 1997 issued by the Fire Analysis & Research Division of the National Fire Prevention Association (NFPA) indicates that poverty and unemployment are highly correlated with arson. Arson for profit can be for insurance fraud or property value enhancement. **Table 5-15** shows the unemployment rate and the per-capita income for the City of Warren in comparison to the peers as of November 1999 and 1997, respectively.

Table 5-15: Unemployment Rates

	Warren	Cuyahoga Falls	Mansfield	Middletown	Peer Average
Unemployment Rate	6.3%	3.6%	6.2%	5.0%	5.3%
Income per-Capita (1997 Data)	$22,827	$25,794	$20,941	$23,309	$23,348.00

Source: Cities Finance Departments, County profiles from ODOD

As **Table 5-15** illustrates, the City of Warren has the highest rate of unemployment among the peers and the second lowest per-capita income. This comparison supports the correlation shown in the NFPA report.

F5.17 The Department uses a local area network (LAN) to support operational functions. In addition, the City's AS-400 platform can be accessed by wireless connection. Some of the programs available for department use are listed below.

- MS Office - general office productivity software
- Cameo - hazardous materials chemical data base
- Visio - Drawing program for pre-planning and for scene restoration
- Marplot and Aloha - Modeling programs for HazMat leaks
- Firehouse - general fire department operations software

Firehouse provides several functions including fire incident reporting. According to the Fire Chief, this functionality was not used because outlying stations did not have computer access. Currently, fire responses are maintained on an in-house written "Run Card" program which provides query abilities on several different data elements.

R5.13 The Department should consider providing computers and connectivity to outlying stations, when these stations are reopened. Costs would include computers and the wireless bridges required to provide connectivity to the central station server.

Financial Implication: It is estimated that providing connectivity to the outlying stations would cost City approximately $3,400 per station or $6,800 total. However, this cost estimate assumes that the Fire Department already has available computers as has been indicated by the fire chief.

Revenue Generation

F5.18 The City of Warren passed False Alarm Ordinance 1510 in 1987. In §1510.03, the Ordinance states, "No user shall cause, facilitate, permit, allow, accommodate or experience more than two separate false alarms, from an alarm system, to be received by the Fire Alarm Office within a calendar year." The penalties associated with this section is $100 each for the third and fourth false alarm within a calendar year and $300 for each false alarm thereafter. However, according to the Fire Chief, the City does not enforce the Ordinance.

Table 5-16 summarizes the number of alarms the Department responded to and the number that were classified as false alarms.

Table 5-16: Number of Alarms and the Percentage of False Alarms

Year	Alarms	False Alarms	% of Alarms Determined to be False
FY 1999	1,193	257	21.54%
FY 1998	1,225	253	20.65%
FY 1997	1,306	235	17.99%
FY 1996	1,243	191	15.37%
FY 1995	1,085	187	17.24%
5 year Average	1,210	225	18.56%

Source: The Warren's fire department Annual Reports

The number of false alarms reported by the Department has continued to increase over the past three years. A review of the probable cause codes indicates that a large number of false alarms were a result of accidental or malfunctioning alarms. The Minnesota best practice review of fire services revealed that one common activity for which fire departments charged fees was for responding to repeat false alarms at a given location.

R5.14 The City should consider enforcing the false alarm code citation program that enables city fire inspectors to charge fees for code violations. The ability to issue citations provides fire inspectors with another tool to encourage violators to comply. To implement this alternative, a fire department has to determine what codes are appropriate for punitive enforcement and enforce the collection of the fines.

Financial Implication: If the City enforces a false alarm penalty of $100 and using the five year average of false alarms per year and assuming 67 percent of the alarms as un-chargeable, fee collection could be approximately $7,500 annually.

F5.19 The Fire Department is responsible for reviewing residential and commercial building construction and remodeling projects, as well as alterations and additions to state, county and public school buildings in Warren. Although the City currently charges building permit fees on these construction projects, the fee is designed to cover the costs the Engineering Department incurs in overseeing the construction projects within the City. Therefore, none of the current fees are dedicated strictly to cover the cost of the Fire Department's reviews. According to the Mayor, the City's current building permit fees are the highest within Trumbull County.

Based on discussions with the Fire Chief, the average time needed by an inspector to review a building plan is approximately one hour. In FY 1999, the Fire Department inspectors reviewed approximately 193 building plans. Currently, the Department does not charge for this service or other inspection services such as inspections for occupancy permits, special hazard permits, above ground or underground tank storage permits and reviewing fire systems.

R5.15 The City should consider instituting a fee for conducting building inspections, building plan reviews for fire code compliance and the inspection of the installation of the fire system during construction. Fees should also be considered for occupancy permits, special hazard permits, above ground or underground tank storage permits and reviewing new fire protection systems in existing buildings. The fees should be based upon the type of inspection conducted (initial or repeat), the type of building (high-rise, commercial, industrial, etc), the square footage and if special hazards material are present. Fees for prevention services, although a small part of the budget, can help offset the costs of providing services to the community. The Ohio Fire Code 1301:7-1-04(B)FM-103.2 allows local fire officials to assess reasonable fees for permits and inspections. The state fire marshal establishes the standard fees for inspections as follows: inspection fees of $100.00 and subsequent re-inspection fees of $50.00 per re-inspection.

However, given that the City's existing building permit fees are higher than the neighboring communities, prior to taking any action to implement this recommendation, the City should consider the effect any potential fee increase may have on construction activities within the City. If it is determined that assessing additional fees for fire inspections is not feasible, then the City should consider allocating a specific portion of the existing fee to the Fire Department to be used in covering the inspection costs.

Financial Implications: If the City implemented inspection and review fees and assuming the cost of approximately $100 per hour based on the Ohio Fire Code, the City could recognize revenues of approximately $40,000 annually.

Contractual Issues

The City of Warren fire fighters are represented by Local 204, International Association of Fire Fighters (IAFF). Currently, the City and the fire fighters are operating under a collective bargaining agreement which expires December 31, 2002. Contractual obligations account for approximately 91.1 percent of the Fire Department's budget. Because these obligations have the ability to directly and significantly impact the Fire Department's operating budget, many of the major contractual issues have been assessed to show their resultant financial implications.

F5.20 On January 1, 2000, an agreement was entered into between the City of Warren and the International Association of Firefighters (the Union), Warren Local No. 204. This contract covers the period between January 1, 2000 and December 31, 2002.

Table 5-17 compares some key contractual issues between the union agreement for the Warren Fire Department and the union agreements for the peer cities.

Table 5-17: Contractual Issues Comparison

	Warren	Cuyahoga Falls	Mansfield	Middletown
Length of Work Day: Fire fighters Inspectors	 24 hrs on 48 hrs off 24 hrs on 48 hrs off	 24 hrs on 48 hrs off 40 hrs per week	 24 hrs on 48 hrs off 40 hrs per week	 24.1 hrs on 47.9 hrs off 40 hrs per week
Number of Holidays	11 days	10 1/2 days	11 days	11 days
Number of Personal Days Received	2 days	0 days [1]	1 day [2]	None stated
Call-out Time	4 hours minimum	None stated	3 hours minimum	None stated
Health Insurance Contribution	$0	$0	Monthly premiums of $11.08 single/ $26.80 family plan	Not to exceed 10% of annual cost
Cost of Living Increase per each year of contract	FY 2000: 0.00% FY 2001: 4.00% FY 2002: 4.00%	FY 2000: 3.25% FY 2001: 3.00% FY 2002: N/A	FY 2000: 3.50% FY 2001: 3.50% FY 2002: N/A	FY 2000: 3.00% FY 2001: 3.00% FY 2002: 3.00%
# of day to file grievance	11 days	4 days	15 days	30 days

Source: Collective bargaining agreements for the City of Warren and peer cities
[1] Martin Luther King, Jr. and Columbus Days are granted as holidays in lieu of personal days.
[2] Personal leave use is deducted from the employee's sick leave balance.

F5.21 The length of a work day for the City's fire fighters is comparable to the peer cities. However, the inspectors of the Department work 24 hours on-duty and 48 hours off-duty, a schedule which is not used in the peer cities See **R5.8** for further discussion regarding rescheduling the inspectors' length of a work day.

Other contractual differences with the peers include the following:

- The City provides two personal days to fire fighters. One peer has no personal days stated, one has two holidays granted in lieu of personal days and one provides one personal day.

- The City provides a four hour minimum call-out benefit for fire fighters who are called out for emergency situations. Mansfield has a three-hour provision and the other peers have no call-out provisions stated in the contract. Consequently, if a fire fighter is called out to fight a fire and the job is completed in fifteen minutes, that employee will receive four hours of pay at time and one-half their rate.

- The City does not require a premium co-payment from fire fighters. Two of the three peers require some premium co-payment.

R5.16 The City should consider the issues above for inclusion in the next contract negotiations. The reduction of personal days may provide increased staffing levels. A reduction in call-out overtime may provide for cost savings. In addition, benefit cost savings may be recognized with the implementation of a premium co-payment from fire fighters (see **F5.29** and **R5.22**). The City should negotiate with the union to create alternatives to these current contract articles. One option may be to limit the minimum four hour call-out payments to two hours and require employees to complete at least two hours of work once called out. Another option may be to reduce the time and a half rate (2,080 hours) to straight time and half rate (2,704 hours) for the purposes of call-out payments.

F5.22 **Table 5-18** provides a comparison between the peer cities regarding vacation benefits. The City of Warren provides 260 hours (five weeks) of vacation after seventeen years of service and 312 hours (six weeks) after 23 years of service, which is higher than the benefits provided by all of the peer cities. The City also allows a maximum accrual rate of 936 hours (18 weeks) that will be included in the employees severance payout.

Table 5-18: Comparison of Vacation Benefits

Years of Service	Warren	Cuyahoga Falls	Mansfield	Middletown
After 1 year of service	104 hours	96 hours	96 hours	104 hours
After 5 years of service	156 hours	144 hours	144 hours	120-170 hours [1]
After 11 years of service	208 hours	192 hours	192 hours	178-185 hours [1]
After 17 years of service	260 hours	240 hours	240 hours	186-238 hours [1]
After 23 years of service	312 hours	288 hours	288 hours	252-260 hours [1]
Maximum years of service	312 hours/ 23 years	288 hours/ 21 years	288 hours/ 25 years	260 hours/ 34 years
Maximum Accrual Rate	Can bank up to 936 hours vacation payable at retirement, then "use it or lose it" policy becomes effective	Employees can carry over one-half of the pervious year's vacation into the following year only	288 - 366 hours	260 hours

Source: Collective bargaining unit agreements
[1] Middletown's vacation policy has different ranges which are 1-4 years: 104 hours, 5-7 years: 118 hours, 8-9 years: 170 hours, 10-14 years: 178 hours, 15 years: 185 hours, 16-19 years: 237 hours, 20-24 years: 244 hours, 25-29 years: 252 hours and30-34 years: 260 hours respectfully.

The severance payment for accumulated vacation is the current hourly rate in effect at the time of retirement. Consequently, the City could be incurring an excessive financial burden, due to the maximum accrual rate of 936 hours (39 days) which is approximately three times higher than the peer cities.

R5.17 The Fire Department's maximum accrual rate for vacation benefits appears to be generous when compared to the peer cities. The City should negotiate with the union to decrease the maximum accrual rate for vacation benefits to be more in line with the peer cities. This may be accomplished by either increasing the years of service requirements, decreasing the length of vacation time provided by the City or decreasing the hours an employee can bank which are payable at retirement.

The City should also consider negotiating a reduction in the maximum accrual of vacation payout at retirement. By negotiating a reduction in high end vacation lengths and limiting the amount of accumulated time, the City could potentially see a reduction in costs in the amount of severance payout for vacation at retirement.

Compensation Analysis

F5.23 **Table 5-19** shows the overall compensation package for Warren in comparison to the peers. The analysis is based on W-2 wages, which includes all supplemental and overtime earnings. The analysis also takes into account the value of retirement costs paid by the peer cities as well as any employee related healthcare contribution required by the peer cities. To take into account regional economic factors, the total of the W-2 wages, the retirement benefits and employee healthcare contributions are then adjusted for a cost of doing business factor to yield an estimated adjusted average employee compensation package.

Table 5-19: Comparison of Employee Compensation Packages

	Warren	Cuyahoga Falls	Mansfield	Middletown	Peer Average [1]
ASSISTANT CHIEF					
Average W-2 Salaries (Excluding P&FPF Pickup Paid by City)	$60,999	$66,008	$64,493	$60,900	$63,800
Average Overtime per Employee	($1,013)	($7,249)	($2,509)	($2,659)	($4,139)
Average Employee Healthcare Contribution	N/A	N/A	($227)	($250)	($159)
Total Average Compensation Package	$59,986	$58,759	$61,757	$57,991	$59,502
Cost of Doing Business Factor	1.0782	1.1133	1.0377	1.1196	1.0902
Adjusted Average Compensation Package	**$55,635**	**$52,779**	**$59,513**	**$51,796**	**$54,579**
CAPTAIN					
Average W-2 Salaries (Excluding P&FPF Pickup Paid by City)	$55,619	$69,876	$58,461	$53,062	$60,466
Average Overtime per Employee	($1,013)	($7,249)	($2,509)	($2,659)	($4,139)
Average Employee Healthcare Contribution	N/A	N/A	($227)	($250)	($159)
Total Average Compensation Package	$54,606	$62,627	$55,725	$50,153	$56,168
Cost of Doing Business Factor	1.0782	1.1133	1.0377	1.1196	1.0902
Adjusted Average Compensation Package	**$50,646**	**$56,253**	**$53,700**	**$44,795**	**$51,521**
LIEUTENANT					
Average W-2 Salaries (Excluding P&FPF Pickup Paid by City)	$47,411	$58,084	N/A	$46,234	$52,159
Average Overtime per Employee	($1,013)	($7,249)		($2,659)	($4,954)
Average Employee Healthcare Contribution	N/A	N/A	N/A	($250)	($83)
Total Average Compensation Package	$46,398	$50,835	N/A	$43,325	$47,122
Cost of Doing Business Factor	1.0782	1.1133	1.0377	1.1196	1.0902
Adjusted Average Compensation Package	**$43,033**	**$45,662**	**N/A**	**$38,697**	**$43,223**
FIRE FIGHTER					
Average W-2 Salaries (Excluding P&FPF Pickup Paid by City)	$41,242	$48,462	$41,699	$42,443	$44,201
Average Overtime per Employee	($1,013)	($7,249)	($2,509)	($2,659)	($4,139)
Average Employee Healthcare Contribution	N/A	N/A	($227)	($250)	($159)
Total Average Compensation Package	$40,229	$41,213	$38,963	$39,534	$39,903
Cost of Doing Business Factor	1.0782	1.1133	1.0377	1.1196	1.0902
Adjusted Average Compensation Package	**$37,311**	**$37,019**	**$37,547**	**$35,311**	**$36,602**

[1] Peer Average does not include Warren

As **Table 5-19** illustrates, when comparing the City of Warren's overall compensation package for the fire fighter ranks to the peer departments, Warren has the second highest adjusted total compensation package. Between 53 and 73 percent of Warren and the peer's fire department personnel are at this rank. Warren is also second highest in the Assistant Chief ranks while next to lowest in the captain and lieutenant ranks. Based on **Table 5-19**, it appears that Warren's overall compensation package for the Fire Department is in line with the peers. However, the City's adjusted average compensation appears to be in the high end of the range for Warren and the peers. The overall compensation package is a function of the base salaries, the negotiated supplementals, overtime costs and other negotiated benefits. As a result, any adjustments to the compensation package would have to be negotiated with the union.

F5.24 **Table 5-20** shows the average base salary for each position within the Fire Department as of December 31, 1999. **Table 5-20** also indicates the average 1999 W-2 amount within each position.

Table 5-20: Base Salary vs. W-2 Comparison

Position Title	Average 1999 W-2 Amounts	Average Estimated Base Salary	Differences
Assistant Chief	$60,999	$48,699	$12,300
Captain	$55,619	$43,480	$12,139
Lieutenant	$47,411	$38,829	$8,582
Fire Fighter	$41,242	$34,070	$7,172
Total (Average)	**$51,318**	**$41,270**	**$10,048**

Source: Collective bargaining unit agreement and 1999 W-2 amounts from finance Department

In FY 1999, the Department's supplemental costs to the City was approximately $263,854. Of the four position classifications in the Fire Department, all classifications received average yearly salaries in excess of base salaries. Furthermore, the average base salary for the entire Fire Department in FY 1999 was $41,270 compared to the FY 1999 W-2 amount of $51,316, a difference of $10,046. The amounts which were paid to excess of the base salary can be attributed to overtime costs as well as numerous supplementals provided to employees under the union agreement.

F5.26 **Table 5-21** shows an analysis of overtime cost for the Warren Fire Department in 1999.

Table 5-21: Analysis of 1999 Fire Department Overtime Paid by Month

Month	Overtime Hours	Paid Overtime (Dollar Value)
January	138.0	$3,136.81
February	16.0	$671.87
March	56.0	$1,486.65
April	77.5	$2,010.88
May	127.5	$4,444.63
June	111.5	$2,659.54
July	125.0	$3,453.14
August	213.5	$5,135.82
September	356.0	$11,059.68
October	490.5	$13,326.44
November	115.0	$2,901.39
December	511.0	$14,518.42
Total	**2,337.5**	**$64,805.27**
	Average cost per hour	**$27.72**

Source: City of Warren Data Processing payroll records for the Fire Department

In 1999, approximately 69.9 percent of the overtime hours were used to cover manpower shortages attributed to vacation, holiday and sick leave schedules. The average overtime cost to the City was approximately $27.72 per hour. The union contract with IAFF Local 204 allows the staff to take vacation at any time during the year with approval of the Fire Chief. The Department offers vacation, holidays and sick leave plans to employees and allows the employees to take vacation before a year of service has been completed. Without appropriate management, these practices could cause scheduling difficulties and lead to overtime payments. Since the union agreement with IAFF Local 204 states that vacation time is subject to the approval of the Fire Chief, a department vacation policy (FD97-GOP-01-01) was implemented and establishes an annual policy for the selection of vacations and other leaves. Even though overtime amounts in **Table 5-21** show 69.9 percent of overtime covering manpower shortages, the magnitude of the overtime costs compared to the total Fire Department budget is minimal (1.2 percent).

C5.2 Warren Fire Department should be commended for the efficient management of scheduled leaves resulting in minimal overtime costs. **Table 4-11** also shows that Warren has a lower percentage of overtime costs to total operating costs (1.2 percent) than the three peers (9.4, 3.6 and 3.6 percent respectively).

F5.26 **Table 5-22** summarizes the supplemental benefits for the Department and the peer cities.

Table 5-22: Additional Pay Supplementals

Type	Warren	Cuyahoga Falls	Mansfield	Middletown
Hazardous Pay	$620 annually to each member of the unit	Nothing stated	$500 annually to each qualifying member of the unit	Nothing stated
Roll Call Pay	1 ½ times the rate for the 15 minutes before the shift. In 1999, this benefit averaged $1,300 per person.	Nothing stated	Nothing stated	Nothing stated
Shift Differential	$13.85 biweekly which equates to $620 per member annually	Nothing stated	Nothing stated	Nothing stated
Working Out of Rank	Paid the hourly rate of the equivalent of rank filled in for	Nothing stated	An additional $1.00 per hour to perform duties of a higher rank	Raised one-step in salary for the hours worked in a higher rank
Assigned Driving Duties	$25 per shift for each driver which equates to $2,300 annually per driver	Nothing stated	Nothing stated	Nothing stated
Attendance Bonus	Jan. 1 - April 30: $100 May 1-Aug. 31: $400 Sept. 1- Dec. 31: $100	Nothing stated	$300 or additional day's pay	Nothing stated
Uniform Allowance	$500 annually [1]	Uniforms provided by the City	$1,000 annually	$300 annual purchase credit allowance
Uniform Maintenance Allowance	$400 annually [1]	$100 annually	City provides funds for repair/maintenance	$300 annually
Longevity	$72 for each year of completed service which equates to $1,440 annually after 20 years	Nothing stated	$100 for each completed year of employment with the City of Mansfield 20 years: $2,000	10-14 years service 1% 14-19 years service 2% 20+ years service 3% which equates to $1,165 annually after 20 years (Lieutenant's average base salary)

Source: Collective bargaining unit agreements
[1] Warren does not include this amount in their W-2 wages

F5.27 As indicated in **Table 5-22**, the agreement between the City of Warren and IAFF Local #204 permits Department employees to receive several supplementals which increase their annual income. The supplementals with major financial implications are shown below:

- Each employee receives $620 annually for hazardous duty pay whether or not they work the Hazardous Rescue Unit. In Mansfield, only the employees who meet the qualifications for service and serve on the Hazardous Rescue Team for an entire year receive an additional $500 per year. Both Cuyahoga Falls and Middletown do not include additional hazardous duty pay for its employees. In FY 1999, the total cost to the City for hazardous pay was approximately $38,500.

- The Department pays every member of the bargaining unit 15 minutes, at one and one-half times their hourly rate per day if they are present for roll call. None of the peer cities collective bargaining units agreements include a roll call pay incentive for their employees. Based on FY 1999 roll call expenditures, the total cost to the City for roll call incentives was approximately $40,100.

- A shift differential of $13.85 per bi-weekly pay period is provided to employees. None of the peer cities collective bargaining unit agreements include a shift differential pay. In FY 1999, this provision cost the City approximately $26,600.

- The Department's employees are entitled to receive 50 percent of the difference between the lieutenant hourly rate and the top fire fighter's hourly rate (approximately $25 per shift per driver) for driving any fire apparatus for a given turn. Currently, the Department assigns four fire fighter operators per turn to drive the different apparatus. None of the peer cities provide a supplemental pay to fire fighters who drive any apparatus. In FY 1999, the total cost to the City for this supplemental was approximately $36,500.

R5.18 The supplementals are in excess of those of the peers. An analysis of the total compensation package in **Table 5-19** indicates that while the overall compensation package appears to be in line with those of the peers, the adjusted average compensation in two ranks appear to be in the upper range of the comparison. Accordingly, to keep the overall compensation package comparable with the peers, prior to negotiating future union agreements, the City should perform assessments similar to **Table 5-19** and **Table 5-20.** Based on **Table 5-19**, if in the future the City increases any of the components of the overall compensation package, one option the City could pursue to keep the compensation package comparable to the peers would be to negotiate the removal of the supplementals noted above.

Financial Implication: If the City is able to negotiate an elimination of the supplementals, the annual savings would be approximately $141,700.

F5.28 Currently, the City pays each member of the Fire Department bargaining unit $500 annually as a uniform allowance. In addition to the uniform allowance, the City pays each member of the bargaining unit $400 annually as a uniform maintenance allowance. There are no provisions stipulated in the current collective bargaining agreement that requires the Department members to document the expenditure of the uniform allowance or the maintenance allowance. Cuyahoga Falls and Middletown request proposals from vendors to secure the lowest cost possible while maintaining a high quality standard. Additionally, both peer cities use a uniform purchasing credit plan, therefore, the members do not receive the funds directly. In Cuyahoga Falls, uniform maintenance is provided by the Department, therefore, its members turn in an item to be repaired or replaced. If the item cannot be repaired, it is replaced and charged against the department's allowance accounts.

Wearing standard uniforms help ensure that its members are protected in performing their fire fighting duties. The primary responsibility for the City and the Department is to ensure that the allowances given to its members are used for their intent. According to the Cuyahoga Falls Fire Chief, the competitive bidding process has enabled the City to increase its purchasing power and maintain a higher quality standard in uniforms for its members.

R5.19 The City should consider requiring members of the Department who receive a uniform allowance or a maintenance allowance to substantiate their expenditures with receipts. Another alternative to requiring documentation would be to implement a competitive bidding process and purchasing credit policy similar to that of Cuyahoga Falls. Competitive bidding allows the peer cities to control costs and maintain a high standard in uniforms for its members.

F5.29 A report on the Cost of Health Insurance in Ohio's Public Sector was completed by the State Employee Relations Board (SERB). Based on the 1999 study, approximately 65 percent of employers required their employees to pay a portion of the costs of a family premium. Fifty-two percent required their employees to share the cost of the single plan. The average monthly contribution is $22.17 for single and $63.33 for family. These rates amount to 11.3 percent of the single plan and 12.6 percent of the family premium. The study also indicates that, on average, city employees are required to contribute 10.9 percent to the monthly premiums of a single plan and 10.0 percent to the monthly premiums of a family plan.

Currently, the City pays all monthly health care costs for the Department employees. In comparison, the City of Mansfield requires its fire department members to contribute $11.08 monthly for a single plan and $26.08 for a family plan. The City of Middletown requires its fire department members to contribute an amount not to exceed 10 percent of the estimated annual cost of the City's medical insurance plan.

R5.20 If in future negotiations, the City increases the value of any component of the overall compensation package, another option that should be considered to keep the compensation package in line with the peers would be to require the employees to contribute towards the monthly premium costs. During FY 1999, medical premium costs for employees of the Fire Department were approximately $477,000. If the City were to require a similar contribution percentage as that noted in the SERB study of 10 percent, the overall insurance expenses would be reduced by $47,700.

Financial Implication: Requiring employees in the Fire Department to contribute 10 percent of the monthly premiums, which follows the average percentage paid by city employees in Ohio according to the 1999 SERB study, the City could save approximately $47,700 annually.

Financial Implications Summary

The following table represents a summary of the annual cost savings, revenue enhancements and implementation costs for the recommendations in this section of the report. For the purpose of this table, only recommendations with quantifiable financial impacts are listed.

Summary of Financial Implications

Recommendations	Annual Cost Savings	Revenue Enhancements	Implementation Costs
R5.1 Reopen two fire stations and adopt proposed staffing (net of reassignments of **R5.2** and **R5.9**)			$247,300
R5.13 Provide computer connectivity to the outlying stations			$6,800
R5.14 Implement fees for false alarms		$7,500	
R5.15 Implement fees for inspections		$40,000	
R5.18 Eliminate contractual supplemental payments	$141,700		
R5.20 Require employees to contribute 10 percent of the monthly premiums for healthcare	$47,700		
Total	**$189,400**	**$47,500**	**$254,100**

Conclusion Statement

The City of Warren's Fire Department faces significant operational challenges such as determining appropriate staffing levels, the call-back of laid-off fire fighters and the reopening of closed stations. In addition, several areas of improvement have been identified. The Fire Department's staffing is relatively high at the officer levels and in the number of fire inspectors. The Department should strive to make its operations more efficient by negotiating mutual aid agreements, realigning its current staffing structure and more fully utilizing technology in its fire prevention, suppression and investigating activities.

Based on comparisons with peer and national averages, it appears that the Department maintains higher staffing levels on its apparatus and in manning its stations. Accordingly, the Fire Chief should review the current staffing levels to determine the optimal level needed for effective operations to ensure the safety of the citizens of Warren. To improve response time and services to the citizens of the City of Warren, the City should immediately reopen two closed fire stations and begin maintaining a minimum of three fire stations. Additionally, based upon the potential availability of additional resources, the City should consider opening a fourth station in an effort to improve the response time to the outlying areas.

Improvements in operational efficiency can be accomplished by completing an accurate inventory of buildings that require inspection and the efficient scheduling of inspectors during business hours. Inspectors do not adequately document inspections, re-inspections or violations to meet compliance with the Ohio Basic Building Code. Through an examination of its inspection process and with the implementation of the recommendations noted in this report, the Department could improve the efficiency of its inspection process. Additionally, the Department should implement a computerized inspection database to increase the efficiency of the inspection processes and the accuracy of its inventory of buildings.

Considering the fundamental necessity of the Fire Department and the budget concerns of the City, all options for improving service should be considered, including mutual aid agreements and reassigning staff to reopen the closed fire stations. Furthermore, residents of the community served by the Fire Department should be provided with options and input regarding their fire services. Failure to address the various issues noted in this report will further hinder the Fire Department from providing effective services to its residents.