Alternative Funding Methods for the Newark, OH Fire Department

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A Research Project submitted to the Ohio Fire Executive Program

CERTIFICATION STATEMENT

I hereby certify that the following statements are true:

- 1. This paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.
- 2. I have affirmed the use of proper spelling and grammar in this document by using the spell and grammar check functions of a word processing software program and correcting the errors as suggested by the program.

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ABSTRACT

This paper addressed the problem of insufficient funding capabilities in providing emergency services and identified alternative ways of producing additional revenue for the Newark, OH Fire Department.

The purpose of this study was to provide data that may be used to assist local government in obtaining alternative funding methods for the Newark, OH Fire Department.

Descriptive research was used to gather information and data that were presented to city officials and may result in the approval and subsequent implementation of a program or programs that will increase revenue to the city.

The descriptive method of research was employed to investigate if other fire departments have funding issues and if so, how they responded to the problem. A survey was conducted utilizing OFCA and IAFC email addresses. There were 47 respondents to the survey.

Four research questions were posed as a foundation for this project:

- 1. What are the reasons that alternative funding methods are needed?
- 2. What alternative funding methods are available?
- Which funding methods are currently most appropriate for the Newark, OH Fire Department?
- 4. How have other fire departments of similar size and demographics addressed funding reductions in recent years?

The procedures consisted of a literature review and external survey. The results of the survey showed very similar tactics to produce additional revenue. Recommendations include proposing a tax increase, charging for fire inspections and pursuing "hard billing" emergency medical services fees.

TABLE OF CONTENTS

CERTIFICATION STATEMENT	2
ABSTRACT3	3
TABLE OF CONTENTS4	ŀ
INTRODUCTION	;
Statement of the Problem	į
Purpose of the Study	į
Research Questions	í
BACKGROUND AND SIGNIFICANCE	7
LITERATURE REVIEW)
PROCEDURES	3
Limitations of the Study)
RESULTS)
DISCUSSION 25	į
RECOMMENDATIONS 28	3
REFERENCES	L
APPENDIX 1 – State of Current NFD Fire Apparatus	3
APPENDIX 2 – 10 Year Total Budget Trend	ŀ
APPENDIX 3 – General Fund 10 Year Trend Revenue and Expenses	į
APPENDIX 4 – Alternative Funding Methods Survey	ó
APPENDIX 5 – Alternative Funding Methods Survey Results	3
APPENDIX 6 – Middletown Fire Department Phone Survey	3
APPENDIX 3 – Mansfield Fire Department Phone Survey	ļ

INTRODUCTION

Statement of the Problem

The Newark Fire Department (NFD) has continually been challenged with reduced financial capabilities as well as an increased call volume. Staffing and equipment replacement has overrun the allocated budget reducing the ability of the fire department to provide adequate service. Over the last several years, staffing levels have fallen from 88 to 72 sworn full time firefighters, which in turn increased the overtime requirement to maintain safe staffing levels. In 2007, overtime costs rose to over \$950,000. This raised concerns publicly about the fire departments ability to staff within the budget. At this point, those levels are not able to be met requiring that one of four stations close its doors when daily staffing levels are not met. Income tax collections are down and the 0.5% safety levy (2001) does not generate enough money to continue to provide service. Currently, staffing levels continue to fall and run volume has significantly increased surpassing 10,000 annual calls for assistance. Mutual aid fire departments that provide help are spending a considerable amount of time responding to emergencies in Newark, thus being unavailable for their own communities.

Staffing is not the only concern, as an outdated and aging fleet have begun to place a significant burden on the operating budget. NFD maintains that alternative funding methods must be obtained in order to continue providing the service that the community expects. *The problem that this research addressed is* the insufficient level of funds available to continue the current level of services, maintain equipment and meet unexpected new demands from the community.

Purpose of the Study

The purpose of this study was to provide data that may be used to assist local government in obtaining alternative funding methods for the Newark, OH Fire Department. Descriptive research gathered in this study will be presented to city officials and may result in the approval and subsequent implementation of a program or programs that will increase revenue to the city.

Research Questions

The research questions this study will investigate are:

- 1. What are the reasons that alternative funding methods are needed?
- 2. What alternative funding methods are available?
- 3. Which funding methods are currently most appropriate for the Newark, OH Fire Department?
- 4. How have other fire departments of similar size and demographics addressed funding reductions in recent years?

BACKGROUND AND SIGNIFICANCE

Located in Licking County, Ohio, Newark is the county seat providing a small town atmosphere where economic development is the primary topic of political discussion. In 2014, The United States Census Bureau identifies that The City of Newark has a documented population of 47,839 and encompasses 20.88 square miles. This population and land mass has been consistent and has shown no significant growth in many years however, Newark is the 19th largest city in Ohio.

The NFD is rich in tradition that began in the early 1860's. It wasn't until 1869 when the first Silsby steam engine was purchased and paid firefighters were tasked with providing fire protection. Since then, the fire department has grown to include four fire stations that are strategically placed throughout the city providing fire, rescue and emergency medical services. There are 72 sworn full time personnel that work a 24/48 shift with an assigned Kelly Day on a 21 day cycle. Metric based data provided by a state of the art records management system defines the locations of specific response apparatus to better serve the community. Station One is centrally located in the downtown area and has been the busiest fire station historically, accounting for 42% fire responses and 44% EMS responses. It houses a paramedic unit, engine/rescue, ladder and battalion/command vehicle. Station Two is the second busiest fire station (31% Fire, 24% EMS) and houses an engine/ladder (Quint) and a paramedic unit that covers the north district. Station three covers the west district of the city and is the third busiest fire station (18% Fire, 23% EMS). It houses an engine and a paramedic unit. Last, station four is the least busy fire station (5% Fire, 9% EMS) and is equipped with an engine and a paramedic unit that cover the east district. Department staffing numbers have continued to decrease over the years by way of attrition. In 2005, staffing levels were at 80 sworn personnel and had risen to 88

in 2010, but have fallen currently to 72 including the fire chief. At this point, there have not been any emergency worker layoffs; however, two civilian employees, a mechanic and a secretary have been eliminated leaving only one division clerk.

Over a period of many years, the fire department has been tasked with increasing call volumes and reduced funding. In 2005, the department responded to a combined 8,526 fire and emergency medical services emergencies, compared to statistics from 2015 showing 10,226 calls for service. The increased call volume (20%) coupled with reduced funding poses a significant problem for city managers. The community has come to expect a formidable service, but clearly the cost of providing current services has overrun the revenue collected by the city. In a ten year trend, the expenses outweighed the revenue six times (see Appendix 2).

Seeking alternative revenue methods is necessary due to several different reasons.

Contributing factors include a declining tax base, increased volume of calls, rising costs of vehicle and equipment maintenance and replacement as well as contractual monetary mandates by the International Association of Firefighters (Local-109) collective bargaining agreement (CBA). These factors have forced city management to reduce staffing by attrition, prolong vehicle replacement schedules and deny much needed training. Additionally, NFD has liquidated rescue team equipment and relies on an agreement with the *Licking County Dive and Rescue Team* for specialized incidents. A county funded hazardous materials response apparatus is still housed at station #3, but the cost associated with keeping personnel properly trained has been financially difficult.

The concern this problem brings to the fire department is the forecasted inability to maintain the current staffing levels and emergency response vehicles needed to continue to provide service to the citizens. The most recent decline in allocated funds for the fire department

(Station 4). The inability to replace the needed daily staffing of firefighters closed the doors of that firehouse. Specific metrics shows that the district affected by the "brown out" requires fewer calls for help than any other area of the city, but has also the highest potential by the fact that it is the oldest area of the city encompassing a less fortunate demographic. In an effort to place resources in their most appropriate location, run data was used in January of 2015 to move a paramedic unit from a lesser busy fire station (Station 2) to the city's busiest district (Station 1). In June of 2015, the decision was made to staff Medic 2 at station 2 with personnel that would have been assigned to station 4. The "brown out" of that firehouse during times of reduced staffing was based on run data and metrics. In essence, the least busy fire station was "browned out" and the other three stations were staffed. The constant measuring of call volume in all areas of the city is the controlling factor when assigning apparatus and staffing to those areas.

Vehicle replacement schedules have been provided to the city administration in an effort to show the need for updated equipment, but the lack of adequate funding has prevented staying on that schedule. At one point during a 10 year trend (2005-2015), total fire department budget allocation reached \$9.8 million, but has fallen to just above \$8 million. Staffing levels had also reached 88 sworn personnel in 2010 and has decreased to 72 in 2015. Emergency run volume has continued to increase each year, placing more of a burden on the funding crisis. *NFPA 1901* recommends front line apparatus be placed in reserve status at 15 years, but also states that engine hours and mileage are key factors in deciding on replacement. In some cases, 10 years is listed as a replacement schedule if the apparatus is "worn out". The standard mentions poor maintenance programs associated with the lack of safety upgrades can increase the risk to

firefighters and the communities they serve (National Fire Protection Agency, 2015). The current state of fire apparatus, age and mileage are concerning (see Appendix 1).

Newark has been struggling with balancing the budget for several years and blames the downturn of available funds on the low average household taxable income and a high number of rental properties. This is also associated with the elimination of local government funding in 2011, the elimination of personal property tax and local estate tax. Fortunately in 2007, the city administration allowed the fire department the ability to institute emergency medical services (EMS) billing, which has historically brought in \$1.5 million in actual revenue. In 2001, city voters approved a 0.5% safety levy assessed on their income tax which is split 50/50 with the Newark Police Department. This also generates about \$6 million dollars total, leaving \$3 million each to the police and fire departments. The 10 year trend on allocated funds for the Newark, OH Fire Department defines a business model that is not sustainable (see Appendix 2).

In addition to the fire department budget specifically, the city's total general fund budget revenue as compared to expenses has fluctuated over a 10 year trend. The elimination of local government funding, personal property and estate tax leave little for emergency funds.

Historically, the city maintained a budget stabilization fund for emergency needs, but recent times have city officials using that fund to pay year-end deficits and guarantee jobs. These figures are measured and show very little stability (see Appendix 3). It must be noted that the fire and police departments operate solely out of income tax collected for the general fund. In 2002, that figure was \$13M and has increased to \$16M in 2014. The smaller increase in revenue associated with the larger costs of providing service have created a significant problem.

Additionally, every three years the Newark Firefighters I.A.F.F. Local 109 collective bargains with the city. The potential for wage increases during negotiations lead city officials to pause on

larger needed expenditures pending outcomes. The current collective bargaining agreement with the firefighters required wage increases even after city officials presented the concerning financial state of the city (City of Newark, 2014).

SIGNIFICANCE OF THE STUDY

The potential impact this study could have on the Newark, OH Fire Department could be very positive by providing an opportunity to continue the level of service that the community has grown to expect. More importantly, the research and data provided will continue to underpin the trust the community has in the fire department. Providing actual fact based data associated with specific needs allows the community to understand the financial state of the city and why the problem exists. Communication with the community when seeking alternative funding is essential to being successful (Anderson, 2000). A public and proactive approach to this problem can only result in some form of a positive solution.

The research gathered in this report will be shared with city officials as well as council members in order to inform them of the current and trending data. The information will provide alternative methods for increasing the city's revenue, thus providing a proactive approach to guarantee appropriate funding for the Newark, OH Fire Department. Realistic and obtainable programs will be suggested and discussed for their possible implementation.

LITERATURE REVIEW

A literature review for this paper was conducted to find similar problems that have been experienced and addressed by other fire departments. Resources such as the U.S Fire Administration, National Fire Academy Applied Research library, International City/County Management Association, National Fire Protection Agency (NFPA) and the Fire Chief's Handbook Sixth Edition were used to compare and contrast data.

The recent economic downturn has created funding problems for many municipalities across America forcing administrations to be more creative in obtaining additional revenue. "The funding issue is not one to be left solely to accountants and finance officers; it is a vital public policy issue that can literally mean life or death in the community" (ICMA University, 2002, p. 97). Furthermore, funding has a direct impact on the amount of resources and services available, including fire prevention activities, which in turn influence life or death (U.S. Fire Administration, 2012). In many cases, fire chiefs are placed under quite a bit of pressure to keep fire stations open by local politicians that vow to uphold public safety. In today's fire service, record management systems allow a fire chief to show trending data and metrics that support changing operations, up to and including "brown out's". Historically, fire departments relied on a specific tax base to fund personnel and operations. The time has come to look beyond conventional funding methods and be more creative. According to Ron Coleman, "It is almost as important for fire chiefs to be able to read spreadsheets and profit and loss statements as it is for them to be able to use the incident command system." (Coleman, 1991, pp. 49-50)

The Newark, OH Fire Department functions under a budget that relies on general fund tax revenue. The most common sources of funding for municipal local government are taxes.

According to (U.S. Fire Administration, 2012), local governments assess property, sales, excise

and income taxes to fund public safety. In some cases, a specific tax may be regulated at the state or local level. Recently, the State of Ohio has eliminated local government funding (Exner, 2016). This placed an additional burden on some municipalities already struggling budgets. For instance, The City of Newark local government funding balance was \$2.22 million in 2001, but has fallen to \$1.17 million in 2015, equating to a 52% revenue reduction (City of Newark Auditor, personal communication, January 21, 2016). In addition, the state removed the ability of local governments to assess personal property tax and estate tax. Many state and local governments have worked hard on developing public/private partnerships in order to fill the budget gap related to decreased tax revenue (Cohen, 2014).

According to information provided by (U.S. Fire Administration, 2012), there are some alternative funding options;

1. Additional Taxes:

- a. Property, income, sales, excise, real estate.
 - In most cases, the State Constitution specifies which taxes are available to local governments.

2. User fees:

- a. Cities have the authority to impose fees to individuals that use specific services. The money collected must be spent only on that service.
- EMS response fees, inspection fees, plan review, hazardous materials
 response fees and special duty fees are examples.

3. Fines and penalties:

- a. Fire lane parking violations, seatbelt violations, nuisance alarms.
 - i. Specific legislation can help in recovering the costs.

4. Sale of assets:

 Equipment liquidation. Revenue can be used towards purchase of new equipment.

5. Grants:

- a. Federal, State and Local grants are available.
- b. Can assist in equipment purchase, training needs as well as staffing.

6. Private sector donations:

a. Can help fund important projects. Generally capital needs such as equipment are most often pursued.

7. Borrowing:

a. Low interest bonds for the purchase of long term capital items.

8. Leasing:

a. Lease purchase agreements can help acquire needed equipment.

9. Cost sharing:

- a. Buying supplies in bulk with other agencies at a lower rate.
- b. Purchasing cooperatives.

10. Consolidation:

a. Pulling resources together with other entities to avoid duplication of spending.

When making a decision to increase revenue by alternative funding methods, the people of the community, as well as local elected officials will most likely evaluate the purpose.

According to (Fire Engineering, 2003), fire chiefs should evaluate beneficiaries and the governmental purpose to a potential funding source. Who will benefit from the service and the

revenue mechanism? They go on to identify the benefit as the public good, merit good and private good. The public good is the community as a whole. Merit good refers to the specific users of the resource as well as the community as a whole. Private good is a benefit that affects primarily the specific user. It is important to note that the fire department falls into all three of these categories. By the very dynamic nature of the work performed, the community as a whole can benefit from an alternative funding model that overall benefits everyone (Salvatore, 1999).

The above suggested information provides options to alternative funding methods; however the Newark, OH Fire Department only participates in a few of these and at a limited capacity. The 0.5% safety levy assessed in 2001 as well as emergency medical billing practice in 2007 has helped lessen the burden, but annual budgets have still been falling short of what is needed to maintain service (Appendix 2 and 3). Federal grant money has been awarded to help to provide staffing needs from the SAFER grant, but staffing levels are still below what is needed to appropriately staff response apparatus and prevention needs (Appendix 2). The City of Newark's Collective Bargaining Agreement with the firefighters union in 2007 mandated 19 firefighters on duty each day, but that minimum staffing requirement was eliminated in the collective bargaining process in 2009, leaving no minimum staffing standard. NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments recommends four firefighters be assigned to an apparatus whose primary function is to pump and deliver water and perform basic firefighting at fires, including search and rescue (National Fire Protection Agency, 2004). NFD currently assigns three personnel to firefighting apparatus. Furthermore, the high call volume leaves many of the firefighting apparatus unavailable to respond to emergencies due to being "tied up" on other emergencies. The average daily staffing

in the Newark Fire Department is just over 16 daily (Newark Fire Department Clerk, personal communication, January 21, 2016). Current NFPA recommendations show that 19-23 firefighting personnel should constitute a first alarm assignment to a confirmed single family dwelling fire (National Fire Protection Agency, 2008). The need for additional personnel requires additional revenue to be able to fund them. It should be noted that studies have shown negative consequences of inadequate fire apparatus staffing, specifically tied to increased civilian and firefighter deaths and injuries (Wilson, 2009). It should be noted that a fire chief's ability to reallocate staff, rotate shifts or develop a new working schedule is prohibited in many cases due to the current collective bargaining agreement (CBA) between the City of Newark and the International Firefighters Local 109 Union. For instance, Article 36, Section 36.1 of the current CBA states that the firefighters have a right to bid assignments based on length of service and qualifications (City of Newark, 2014). Many attempts to adjust personnel and assignments are met with grievances which lead to potential binding arbitration hearings. Furthermore, Article 20, Section 20.1 of the CBA specifically identifies the normal fire department workweek schedule. An effort to change the schedule would also create problems with the current agreement. With agreements between the city and the IAFF, changes can be very limited and force city administrations to look elsewhere to find money to fund the fire department. Some additional resources that are not used currently are cost sharing initiatives, consolidation of resources, accepting private donations and increasing or starting programs that assess fines and penalties.

For example, (Anderson, 2000) states that Salt Lake City, Utah passed an ordinance that allows fire departments the ability to recover the costs of negligently caused fires. It also includes fines to properly notified business owners that have had a fire in one of their vacant and

abandoned properties. Unfortunately, (Anderson, 2000) states that some of these fees in many cases are insufficient to cover the costs of personnel and are merely funding much smaller obligations.

The literature review provided adequate information on the topic of alternative funding methods. In all, fourteen resources were utilized and information was compared and contrasted to formulate realistic and obtainable ideas and solutions. In addition, a *Survey Monkey®* was conducted and sent via email to multiple fire agencies. Information obtained in the literature review offered several alternatives, but the survey conducted was instrumental in showing what is being done locally to combat the decline of fire department funding.

PROCEDURES

This researcher used a two part methodology to gather pertinent information relating to the research questions. The desired outcome was to identify alternative funding methods that can be utilized by the Newark, OH Fire Department.

The first part of the research utilized academic information as noted in the reference section of this paper.

The second part of the research utilized a survey to gather pertinent information to answer the research questions. The intent was to survey multiple comparable career fire departments serving a population base of 10,000 and no more than 100,000 people, including current members and their departments represented in OFE class 15. The survey was designed to extract data that will be pertinent to the study and be applicable to the Newark, OH Fire Department.

A Survey Monkey® was designed and distributed to fire departments in the region to show how they responded to a need for additional funding and if there were any similarities in funding loss and potential solutions. The survey was sent to email lists created by the Ohio Fire Chief's Association and the International Association of Fire Chief's. There were 45 responses to the survey and two phone interviews. The data collected was broken down into individual question responses. It is unknown how many fire departments received the survey due to the centralized distribution to a mass group.

The results of the data collected were used to identify areas of revenue that could be used to continue the level of emergency services to the citizens of Newark, Ohio.

Limitations of the Study

The research project is subject to certain limitations and assumptions. Due to an assumed difference in fire department demographics and budget concerns, the research gathered in the report will show differences in specific fire department needs. This author attempted to design the survey to gather information showing a decline in fire department funding and an increase in community needs in an effort to identify similarities to the Newark, OH Fire Department. An assumption was made that all respondents would understand the survey questions, possess the knowledge and ability to answer the survey, and would submit the answers in a timely manner.

RESULTS

Research Question 1 - What are the reasons that alternative funding methods are needed?

The recent economic downturn has created funding problems for many municipalities across America forcing administrations to be more creative in obtaining additional revenue. "The funding issue is not one to be left solely to accountants and finance officers; it is a vital public policy issue that can literally mean life or death in the community" (ICMA University, 2002, p. 97).

There are three reasons in the discussion about increasing funding for the fire service that a community and its leaders should discuss. The ability to generate additional revenue is highly regarded as the most popular. Secondly, a fire department should discourage behavior that affects the community negatively, or encourage behavior that improves the quality of life within that community. Last, is a mission to prevent waste and redistribute resources to those that have the greatest need within the community (Damrell, 1995).

The survey was specifically designed to gather information regarding the financial status of a fire department and if there was a problem, identify how it was dealt with. The information identified that the majority of departments surveyed were primarily funded by levies, with income and property tax listed as another major contributor.

Research Question 2 - What alternative funding methods are available?

Many communities are under pressure to provide appropriate funding to their safety forces. There are a variety of options that have been identified in order to close the gap between revenue and expenses. One of the options found to be effective are state and local governments working hard on developing public/private partnerships in order to fill the budget gap related to

decreased tax revenue (Cohen, 2014). The City of Newark, Ohio has already instituted emergency medical services billing to supplement revenue, a very common practice being utilized in that region, but continues to fall short in needed total revenue. According to information provided by (U.S. Fire Administration, 2012), there are some additional alternative funding options;

- 1. Additional Tax Revenue
- 2. User Fees
- 3. Fines / Penalties
- 4. Sale of Assets
- 5. Grants
- 6. Private Sector Donations
- 7. Borrowing
- 8. Leasing
- 9. Cost Sharing
- 10. Consolidation

Furthermore, Salvatore (1999) identified several other options available for potential additional revenue such as advertising for private companies on the apparatus and the following;

- 1. Alarm Company Monitoring Fees
- 2. Fire Investigation Fees
- 3. Repeat Fire Inspection Fees
- 4. Public Education Fees
- 5. Tollway Reimbursement

- 6. False Fire Alarm / DUI Prosecution Fees
- 7. Firefighter Training Reimbursement

It should be noted that local communities are requiring more from their emergency responders and leaders are tasked with finding alternative funding to provide those additional services. According to Coleman, "It is almost as important for fire chiefs to be able to read spreadsheets and profit and loss statements as it is for them to be able to use the incident command system." (Coleman, 1991, pp. 49-50)

Research Question 3 - Which funding methods are currently most appropriate for the Newark, OH Fire Department?

The Newark, OH Fire Department currently utilizes several outside sources for revenue including federal and state grants, 0.5% safety levy, emergency medical services billing, private sector donations, special duty fees and hazardous materials reimbursement. Research has identified several ideas that could be utilized at the Newark, OH Fire Department. Emergency medical services billing has been in effect since 2007 and produces \$1.4 million in actual revenue annually. However, these figures are associated with "soft" billing and not "hard" billing collection tactics. Fire prevention inspection fees, additional tax revenue and cost sharing are all areas that have not been investigated. It should be noted that The City of Newark local government funding balance was \$2.22 million in 2001, but has fallen to \$1.17 million in 2015, equating to a 52% revenue reduction (City of Newark Auditor, personal communication, January 21, 2016). An effort to replace the lost revenue has recently forced city leaders to ask the community for an additional 0.25% earned income tax that would be divided or allocated between paving (60%), police (20%) and fire departments (20%) capital needs. At the time of this writing, the levy failed by a 9% margin. There is an effort to continue to ask the voters for an

increase in tax revenue to fund emergency services in the near future. In an effort to be efficient, Newark Fire Department has already browned out a fire station, reduced daily staffing, reduced any expenses from the operating budget unless they were needed and applies for every grant opportunity possible bringing in over \$1.2 million in the last 4 years (City of Newark Grant Writer, personal communication, October 13, 2016).

Research Question 4 - How have other fire departments of similar size and demographics addressed funding reductions in recent years?

Many fire departments identified the reduction in local government funding and the economic downturn to searching for alternative ways of funding safety services. Information gathered shows an overwhelming similarity identifying EMS billing as a primary source of additional revenue. Additionally, the data shows that 61% of surveyed departments pursue federal, state and local grants more now than ever (Appendix 5). Mansfield, OH Fire Department was contacted by phone and advised that they had collected motor vehicle accident fees at one time. However, the collections were so low that the end did not justify the means. When calculating the man hours to process the billing, they were no further ahead (Appendix 7). It is important to note that the survey listed specific ideas for selection, but also included an "other" option to list any alternative funding sources that may not have been listed. Twenty percent (20%) of surveyed departments identify that they are recovering costs associated with hazardous materials responses with six (6%) to nine (9%) percent of other departments using inspection fees, false alarm fees, structure fire response fees and motor vehicle accident fees (see Appendix 5). In an effort to continue service with a reduction in revenue, sixty percent (60%) of surveyed departments' state that they use part time firefighters as a way to be more efficient (see Appendix 5). Fifty two percent (52%) stated that they use computer technology or a "going green"

initiative to reduce costs (see Appendix 5). Moreover, forty five percent (45%) stated that they have scaled down their response assignments in order to save money. Other ideas received some response such as a reduction in overall apparatus fleet (20%), utilizing volunteers (31%), and (27%) utilize public education to reduce call volume (see Appendix 5). Comments listed on the survey offer suggestions to other alternative efficiency options such as shared fire facilities, reducing collective bargaining incentives, reducing minimum staffing needs and limiting training costs to the bare essentials (see Appendix 5).

DISCUSSION

The Newark, OH Fire Department has historically fallen short of needed emergency funding. Multiple administrations over the years have struggled with finding the needed money to provide services. Depending on the political affiliation of an administration, fire department unions have been blamed for gaining incentives in collective bargaining negotiations resulting in budget shortfalls. Others have looked to decreasing revenue and increased expenses as a reason for budgetary concerns. Regardless of the reason why, there isn't enough funding to continue a specific level of service. The research identified that the stakeholders (fire departments) have a major role in the success of their organizations. One excerpt stated "The funding issue is not one to be left solely to accountants and finance officers; it is a vital public policy issue that can literally mean life or death in the community" (ICMA University, 2002, p. 97). Furthermore, funding has a direct impact on the amount of resources and services available, including fire prevention activities, which in turn influence life or death (U.S. Fire Administration, 2012). The survey that was conducted identified seven percent (7%) has browned out fire stations in an effort to reduce costs. One would think that this is a reduction of service that could endanger the lives of those that live in that fire stations district. In Newark, a fire station was closed due to reduced staffing with not much concern identified by the public. However, this relates to the aforementioned comment that public safety financing can be a life or death issue in a community.

Historically, fire departments relied on a specific tax base to fund personnel and operations. The time has come to look beyond conventional funding methods and be more creative. Leaders need to have a good understanding of the fiscal situation in their respective government in order to manage the needs. Ron Coleman said "It is almost as important for fire

chiefs to be able to read spreadsheets and profit and loss statements as it is for them to be able to use the incident command system." The days of fire chiefs and fire department executives requesting money for operations and personnel without metrics and proof of the need are over. Run volumes, response times, vehicle replacement schedules, NFPA standards and property loss numbers are just a few of the facts that need to be presented to government officials before they even consider an expendature. Professionally written and oral communications are essential in a continued revenue stream to provide services and show a need.

Information gathered in the survey showed similarities in operational reductions due to budget constraints. Reductions in staffing, vehicle replacements, equipment purchases, public education, training and fire prevention are all mentioned and have negatively affected local fire departments.

The economic downturn of years past has forced city leaders to look into alternative funding solutions. The City of Newark local government funding balance was \$2.22 million in 2001, but has fallen to \$1.17 million in 2015, equating to a 52% revenue reduction (City of Newark Auditor, personal communication, January 21, 2016). This reduction impacted the city's general fund balance thus negatively impacting the fire, police and street departments. Without a funding stream to replace the lost revenue, cuts are made that impact the community. Newark city officials have launched an economic development plan in an effort to bring business and industry to the city. They hope that increased businesses will produce more employees and generate additional tax money that will enhance the general fund. This is a long term plan that is needed, but does not address the immediate needs of the safety services. Tax abatements and tax increment financing options continue to be a topic of discussion for the future of the city. Many disagree with decisions that are made that do not benefit the safety services. It should be noted

that voters failed to support a recent earned income capital levy proposed to replace the loss of local government funding. This shows a lack of community trust in city officials.

The results of the survey showed a common theme of reductions that have impacted the majority (66%) of the fire departments that were surveyed (see Appendix 5). Many of the departments function on different types of staffing levels, response areas and even government types, however they are still feeling a similar financial constraint forcing cutbacks in areas that do negatively impact service.

The results also show that the Newark, OH Fire Department has been on the right track in many of the things that have been done to continue to provide service. However, the urgency of additional funding continues despite the effort. The information gathered in the survey does identify areas in which revenue could be aquired such as fire inspection fees, motor vehicle accident fees, "hard billing" EMS fees and possibly structure fire response fees. It should be noted that successful collective bargaining agreements with the union can positively impact the operations of the department by reducing some of the incentives that, from a management perspective, negatively affect the budget and staffing needs of the community.

RECOMMENDATIONS

The problem that this research addressed is the insufficient level of funds available to continue the current level of services, maintain equipment and meet unexpected new demands from the community. The information gathered in this report has identified a few options to increase available funding for the fire department.

It should be mentioned that this researcher could have gathered more specific information from the surveyed departments to identify differences in each of their governmental processes.

This would have helped identify the difference in how money is spent on safety services in a municipality versus a township government. However, the premise remains the same with many (31%) of the surveyed departments identifying some form of lack of funding in providing services.

The Newark, OH Fire Department does not have a specific funding mechanism outside of the general fund budget to finance costs. Capital expenditures continue to be a problem when no guaranteed funding is allocated annually.

Recommendation #1

A guaranteed funding mechanism should be defined in order to replace needed capital items and maintain personnel levels to safely protect the citizens. Vehicle replacement schedules are not able to be followed due to the lack of overall capital resources citywide. Furthermore, many of the suggestions on the survey are currently being accomplished locally, but there have been a few that could generate some additional revenue.

Recommendation #2

Newark City Administrators should continue their effort to ask the citizens for increased revenue in the form of an earned income tax for safety services. This would create a line item in the budget that does not currently exist.

Recommendation #3

Newark City Administrators should revisit the way emergency medical services' billing is distributed. They can increase revenue by "hard" billing instead of the current practice of "soft" billing. This places the additional revenue on the people in the community that have actually used the service.

Recommendation #4

Newark Fire Department should initiate fees associated with fire inspections. Newark has historically not charged for prevention services. The survey did recognize that 7% of fire departments do charge for inspections. This is an area that should be pursued and can benefit the community by potentially using additional revenue to enhance the fire prevention bureau.

Recommendation #5

City administrators should attempt to reduce the overall costs of providing services by asking for concessions from the IAFF in contract negotiations.

It is imperative that monetary items awarded in a collective bargaining agreement are realistic and do not place the city in a situation to reduce the service to the community. The reality of contract negotiations places binding decisions that require a city to pay for increases in wages that do affect the financial bottom line. Many cost saving measures mentioned such as part time firefighters are a subject of contract negotiations. Nearly 60% of the surveyed departments utilize part time firefighters to staff daily. If these items cannot be negotiated, they

lead to an accusation of unfair labor practice which leads to binding arbitration. This in turn costs the city taxpayer thousands in legal fees.

An area that has been identified as a shared problem is the State Government cuts to local government funding. Sixty four percent (64%) of fire departments surveyed stated their departments have been negatively affected by the cuts. This researcher would like to pursue state government in order to restore the lost funding. Newark specifically has recently attempted an earned income tax levy to replace the lost state funds. Unfortunately, it was defeated by a nine percent (9%) margin. Continued efforts and discussion to revisit the tax levy in the future are ongoing.

The current financial situation in Newark has led to reduced staffing, scaled down response assignments and a reduced fleet due to lack of funding for a provided replacement schedule. The suggestions identified in this research can be implemented, but the additional revenue provided may not bridge the gap in order to continue the service the community expects. The fire department has continued to bring in external funding to help provide service. For example, \$1.2 million in the last 4 years earmarked for staffing needs related to the Staffing for Adequate Fire & Emergency Response (City of Newark Grant Writer, personal communication, October 13, 2016). An additional \$1.4 million in annual revenue is generated by emergency medical service billing (City of Newark Auditor, personal communication, January 21, 2016). The need for additional funding is not an issue that is specific to Newark, but is shared by many other fire departments across the state. This researcher hopes to implement suggestions identified in this research in order to continue the level of service to the community that they expect and deserve.

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APPENDIX 1 – STATE OF NFD CURRENT FIRE APPARATUS

Fire Vehicle	Year	Hours	Miles	
Rescue 1		2005	12079	126133
Tower 1		1996	4372	18237
Ladder 2		2006	8049	87072
Engine 3		2004	8377	97060
Engine 4		1996	10704	129149
Reserve		1995	11690	115268
Average		15.6	9211.83	95486.50

APPENDIX 2 – 10 YEAR TOTAL BUDGET TREND

	Staffing	Total Budget	Operating	%	Personnel	%	OT Spent
2005	80	\$8,614,083	\$1,568,162	18.20%	\$7,045,921	81.80%	\$671,890
2006	78	\$8,968,244	\$1,496,000	16.68%	\$7,472,244	83.32%	\$593,608
		\$354,161	\$72,162		\$426,323		
2007	79	\$9,112,582	\$1,353,990	14.86%	\$7,758,592	85.14%	\$957,440
		\$144,338	\$142,010		\$286,348		
2008	79	\$9,877,313	\$1,534,706	15.54%	\$8,342,607	84.46%	\$825,046
		\$764,731	\$180,716		\$584,015		
2009	86	\$9,707,880	\$1,342,610	13.83%	\$8,365,270	86.17%	\$470,979
		\$169,433	\$192,096		\$22,663		
2010	88	\$9,376,475	\$1,408,293	15.02%	\$7,968,183	84.98%	\$193,599
		\$331,405	\$65,683		\$397,087		
2011	82	\$9,035,700	\$1,228,109	13.59%	\$7,807,590	86.41%	\$373,187
		\$340,775	\$180,183		\$160,593		
2012	80	\$8,534,231	\$1,017,741	11.93%	\$7,516,490	88.07%	\$109,193
		\$501,469	\$210,369		\$291,100		
2013	77	\$8,156,675	\$683,239	8.38%	\$7,473,436	91.62%	\$178,459
		\$377,556	\$334,502		\$43,054		
2014	73	\$8,200,855	\$850,618	10.37%	\$7,350,238	89.63%	\$235,580
		\$44,180	\$167,379		\$123,198		
2015	72 (76)	\$8,038,151	\$780,951	9.72%	\$7,257,200	90.28%	\$244,365
	Add 4						
Sep-15	FF's	\$162,704	\$69,667		\$93,038		

Total Budget Largest Deficit \$1,839,162

Operating Budget Largest Deficit \$787,211

Personnel Budget Largest Deficit \$1,319,349

Indicates mandated minimum daily staffing per CBA at 19 firefighters from 2007-2009 (3 year contract). Indicates highest allocation in that column

Indicates lowest allocation in that column

APPENDIX 3 – GENERAL FUND 10 YEAR TREND REVENUE AND EXPENSES

	GF Total Revenue	GF Expenses	Difference
2005	\$27,004,958	\$27,133,901	-\$128,943
2006	\$27,682,683	\$27,358,808	\$323,875
2007	\$30,480,439	\$29,010,899	\$1,469,540
2008	\$29,993,408	\$30,700,684	-\$707,276
2009	\$28,440,553	\$29,435,606	-\$995,053
2010	\$27,529,431	\$27,541,131	-\$11,700
2011	\$26,868,761	\$26,701,433	\$167,328
2012	\$28,783,624	\$28,802,864	-\$19,240
2013	\$28,749,835	\$28,477,056	\$272,779
2014	\$28,185,086	\$28,663,462	-\$478,376
2015	\$29,543,936	\$28,687,729	\$856,207

APPENDIX 4 – ALTERNATIVE FUNDING METHODS SURVEY

- 1. What is the population of your jurisdiction?
 - a. 10,001-30,000
 - b. 30,001-50,000
 - c. 50,001-70,000
 - d. 70.001-90.000
 - e. 90,001 and up
- 2. What is your fire department's current annual operating budget?
 - a. \$100,001-\$500,000
 - b. \$500,001-\$1,000,000
 - c. \$1,000,001-\$4,000,000
 - d. \$4,000,001-\$7,000,000
 - e. \$7,000,001-\$10,000,000
 - f. \$10,000,001 and up
- 3. How many full time career firefighters do you employ?
 - a. 0-20
 - b. 21-40
 - c. 41-60
 - d. 61-80
 - e. 81-100
 - f. 101 and up
- 4. How is your department primarily funded?
 - a. Income Tax
 - b. Property Tax
 - c. Levies
 - d. Combination (Select all that apply)
- 5. In the past 5 years, the main source of fire department funding has;
 - a. Increased
 - b. Decreased
 - c. Stayed the same
- 6. Has your department been affected by cuts in government funding (Local, State or Federal)
 - a. Yes
 - b. No
- 7. Has your fire department seen budget related reductions in service in the past 5 years? (Select all that apply)
 - a. None
 - b. Staffing / Personnel reduction / Layoffs
 - c. Vehicle replacement
 - d. Equipment purchases
 - e. Fire Prevention
 - f. Training
 - g. Closed/Browned out fire stations
 - h. Public Education
 - i. Other (Please specify(Text box provided))

- 8. Does your department have any alternative funding sources besides tax revenue? Select all that apply.
 - a. Grants (Federal, State, Local)
 - b. Inspection Fees
 - c. EMS Transport Fees
 - d. Motor Vehicle Accident Fees
 - e. Hazardous Materials Response Fees
 - f. Structure Fire Response Fees
 - g. None
 - h. Other (Please specify (Text box provided))
- 9. What percentage of your jurisdiction is listed as in a state of poverty?
 - a. 0%-20%
 - b. 21%-40%
 - c. 41%-60%
 - d. 61%-80%
 - e. 81%-100%
- 10. What does your fire department do to be more efficient?
 - a. Scaled down response assignments
 - b. Part time firefighters
 - c. Reduction in apparatus fleet
 - d. Volunteers
 - e. Public education to reduce call volume
 - f. Use computer technology / Going green initiatives

41

APPENDIX 5 – ALTERNATIVE FUNDING METHODS SURVEY RESULTS

Alternative Funding Methods

1. What is the population of your jurisdiction?				
Answer Options	Response Percent	Response Count		
10,001-30,000	75.6%	31		
30,001-50,000	22.0%	9		
50,001-70,000	2.4%	1		
70,001-90,000	0.0%	0		
90,001 and up	0.0%	0		

answered question skipped question

2. What is your fire department's annual operating budget?				
Answer Options	Response Percent	Response Count		
\$100,001-\$500,000	22.7%	10		
\$500,001-\$1,000,000	4.5%	2		
\$1,000,001-\$4,000,000	38.6%	17		
\$4,000,001-\$7,000,000	11.4%	5		
\$7,000,001-\$10,000,000	18.2%	8		
\$10,000,001 and up	4.5%	2		
answered question 44				
skipped question 1				

3. How many career firefighters do you employ?				
Answer Options	Response Percent	Response Count		
0-20	56.8%	25		
21-40	20.5%	9		
41-60	13.6%	6		
61-80	6.8%	3		
81-100	2.3%	1		
101 and up	0.0%	0		
answered question 44				
skipped question 1				

4. How is your department primarily funded? (Select all that apply)

Answer Options	Response Percent	Response Count
Income Tax	37.8%	17
Property Tax	37.8%	17
Levies	53.3%	24
Other (Please specify below)	20.0%	9
Other (please specify)		9
	answered question	45
	skipped question	0

Numbe r	Response Date	Other (please specify)	Categories
	Sep 7, 2016		
1	7:55 PM	ems billing	
	Sep 7, 2016		
2	12:53 AM	ems billing	
	Sep 6, 2016		
3	11:44 PM	Boot Drive and donations	
	Sep 6, 2016		
4	9:40 PM	Ambulance and fire departmen	t service billing.
_	Sep 6, 2016		
5	4:45 PM	EMS Billing	
	Sep 6, 2016		
6	4:10 PM	EMS Billing returns	
	Sep 6, 2016		
7	3:36 PM	EMS Revenue	
	Sep 6, 2016		
8	3:01 PM	EMS billing	
	Sep 6, 2016		
9	2:41 PM	EMS Billing.	

5. In the past 5 years, the main source of fire department funding has; **Answer Options** Response Percent **Response Count** 35.6% 16 Increased 31.1% 14 Decreased 33.3% 15 Stayed the same answered question 45 skipped question

6. Has your department been affected by cuts in government funding? (Local, State or Federal) Answer Options Response Percent Yes 63.6% 28 No 36.4% 16

answered question 44 skipped question 1

7. Has your department seen any of the following budget related reductions in service in the past 5 years? (select all that apply)

Answer Options	Response Percent	Response Count
None	34.9%	15
Staffing / Personnel reduction / Layoffs	32.6%	14
Vehicle replacement	44.2%	19
Equipment purchases	44.2%	19
Fire Prevention	18.6%	8
Training	23.3%	10
Closed / Browned out fire stations	7.0%	3
Public Education	14.0%	6
Other (Please specify below)	0.0%	0
Other (please specify)		1
	answered question	43
	skipped question	2

Numbe r	Response Date	Other (please specify)	Categories
1	Sep 6, 2016 2:34 PM	Staffing: Still short one person from	2008-2009 reduction by attrition.

8. Does your department have any alternative funding sources besides tax revenue? (Select all that apply)

Answer Options	Response Percent	Response Count
Grants (Federal, State or Local)	61.4%	27
Inspection fees	6.8%	3
EMS Transport Fees	75.0%	33
Motor Vehicle Accident Fees	15.9%	7
Hazardous Materials Response Fees	20.5%	9
Structure Fire Response Fees	6.8%	3
None	6.8%	3
Other (Please specify below)	9.1%	4
Other (please specify)		5
	answered question	44
	skipped question	1

Numbe r	Response Date	Other (please specify)	Categories
1	Sep 6, 2016 5:54 PM Sep 6, 2016	JEDD - Joint Economic Development District	
2	4:00 PM Sep 6, 2016	Plan review fees We bill for EMS but it goes into the	ne General Fund. Therefore, we don't
3	3:37 PM Sep 6, 2016	receive the money directly.	
4	3:35 PM	False alarm billing False alarm fees (Minimal)	
5	Sep 6, 2016 2:34 PM	Spot coverage contracts (25K)	

9. What percentage of your jurisdiction is listed as in a state of poverty?			
Answer Options	Response Percent	Response Count	
0%-20% 21%-40% 41%-60% 61%-80% 81%-100%	73.2% 14.6% 4.9% 2.4% 4.9%	30 6 2 1 2	
answered question 41			
skipped question			

10. What does your fire department do to be more efficient? (Select all that apply)			
Answer Options	Response Percent	Response Count	
Scaled down response assignments	45.5%	20	
Part time firefighters	59.1%	26	
Reduction in apparatus fleet	20.5%	9	
Volunteers	31.8%	14	
Public education to reduce call volume	27.3%	12	
Use computer technology / Going green initiatives	52.3%	23	
Other (Please specify below)	15.9%	7	
Other (please specify)		10	
answered question 44			
skipped question			

Numbe r	Response Date	Other (please specify)	Categories
	Sep 7, 2016		
1	3:53 PM		
_	Sep 6, 2016	we are all volunteer firemen and the dept. is owned by the Township Gov.	
2	11:44 PM	Trustee's	
•	Sep 6, 2016	III to to the constitution of the constitution	
3	4:49 PM	Limited training to Division needs not employee desires.	
4	Sep 6, 2016	Outland a Boundaria to a constitution of the Landaria to the Constitution of the Const	
4	4:46 PM	Collective Bargaining language changesReduced FLSA OT calculations.	
5	Sep 6, 2016	ahanadaan iiraa maismal sallahanationa	
5	3:56 PM Sep 6, 2016	shared services, regional collaborations	
6	3:37 PM	We rely on mutual aid a great deal now.	
U	Sep 6, 2016	vve rely on mutual aid a great deal now.	
7	3:36 PM	Annual budget reviews; Community Medic Program	
,	Sep 6, 2016	7 milian baaget reviews, comma	inty Modic Frogram
8	3:35 PM	Minimum staffing of four for City. Two at each station.	
	Sep 6, 2016	minimum duming of four for only. Two di odon didion.	
9	3:01 PM	two person EMS crews	
	Sep 6, 2016		
10	2:34 PM	we are up 13%.	, ,

APPENDIX 6 – MIDDLETOWN FIRE DEPARTMENT PHONE SURVEY

Middletown Fire phone interview Wednesday October 12, 2016 at 15:30

Question 1 - What is the population of your jurisdiction?

Answer 1 - 30,001-50,000

Question 2 - What is your department's annual operating budget?

Answer 2 - \$7,000,000-\$10,000,000

Question 3 - How many career firefighters do you employ?

Answer 3 - 81-100

Question 4 - How is your department primarily funded?

Answer 4 - Income Tax and Levies

Question 5 - In the past 5 years, the main source of fire department funding has;

Answer 4 - Increased

Question 6 - Has your department been affected by cuts in government funding?

(Local, State or Federal)

Answer 6 - Yes

Question 7 - Has your department seen any of the following budget related reductions in service in the past 5 years?

Answer 7 - Staffing/Personnel Reduction/Layoffs, Vehicle Replacement,

Equipment Purchases, Fire Prevention, Closed/Browned out Fire Stations

Question 8 - Does your department have any alternative funding sources besides tax revenue?

Answer 8 - Grants, EMS Transport Fees, Hazardous Materials Response Fees

Question 9 - What percentage of your jurisdiction is listed as in a state of poverty?

Answer 9 - 23.9%

Question 10 - What does your fire department do to be more efficient?

Answer 10 - Scaled down responses, Computer technology/Going Green Initiatives,

Reduction in Apparatus Fleet, Public Education to reduce call volume.

APPENDIX 7 – MANSFIELD FIRE DEPARTMENT PHONE SURVEY

Mansfield Phone Interview Wednesday October 12, 2016 at 10:13am

Question 1 - What is the population of your jurisdiction?

Answer 1 - 30,001-50,000

Question 2 - What is your department's annual operating budget?

Answer 2 - \$10,000,000 and

up

Question 3 - How many career firefighters do you employ?

Answer 3 - 81-100

Question 4 - How is your department primarily funded?

Answer 4 - Income Tax and Levies

Question 5 - In the past 5 years, the main source of fire department funding has;

Answer 4 - Increased

Question 6 - Has your department been affected by cuts in government funding?

(Local, State or Federal)

Answer 6 - Yes

Question 7 - Has your department seen any of the following budget related reductions in service in the past 5 years?

Answer 7 - Staffing/Personnel Reduction/Layoffs

Question 8 - Does your department have any alternative funding sources besides tax revenue?

Answer 8 - Grants, EMS Transport Fees, Hazardous Materials Response Fees. Attempted motor vehicle accident fees and identified the revenue didn't justify the means.

Question 9 - What percentage of your jurisdiction is listed as in a state of poverty?

Answer 9 - 25.5%

Question 10 - What does your fire department do to be more efficient?

Answer 10 - Use computer technology/Going Green Initiatives