

**THE CONSOLIDATION AND COOPERATIVE SERVICE
IMPACT ON THE BRUNSWICK AREA FIRE SERVICE**

By: Mark Schrade
Fire Chief
Brunswick Division of Fire
4383 Center Road
Brunswick, OH 44212

A proposed research project submitted to the Ohio Fire Executive Program

15 June 2005

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.

Signed: Mark Schrade

Printed Name: MARK SCHRAD

ABSTRACT

A common scenario has developed in cities and towns throughout the nation where there is an increased need for efficient and expanded fire and emergency medical services to community residents. However, this service need has been met with flat or reduced revenue streams to the affected communities.

The purpose of this research study was to investigate how other communities have successfully partnered together to provide efficient service intent upon saving money to the local taxpayers.

Historical research was utilized to gather information to answer the following questions:

- 1) What is the history of consolidation?
- 2) What types of consolidation exist?
- 3) Why have communities chosen to consolidate?
- 4) What are the advantages of consolidation?
- 5) What is the process involved in consolidating?
- 6) How is support gained for consolidation and resistance countered?

Nationwide journal documents and articles were utilized in the literature review to gain a historical perspective of documented consolidation, merging or cooperative services already implemented in communities in the United States.

The primary finding contained in the research was the fact service remained or became more efficient and the economies of scale were improved while providing taxpayers with cost effectiveness. Additionally, the research indicated resistance to merging or consolidation is predictable and therefore must be dealt with factually with effective communication of the process to the community and any affected fire department personnel.

Resulting recommendations from this study were that decision-makers of communities consider the advantages of consolidation to provide efficient, cost-effective fire and emergency medical services

TABLE OF CONTENTS

CERTIFICATION STATEMENT..... 2

ABSTRACT..... 3

TABLE OF CONTENTS..... 4

INTRODUCTION 5

BACKGROUND AND SIGNIFICANCE..... 7

LITERATURE REVIEW 9

PROCEDURES 19

RESULTS 21

DISCUSSION..... 25

RECOMMENDATIONS 29

REFERENCES 30

APPENDIX 1 – FIRE DEPARTMENT SURVEY 31

APPENDIX 2 – SURVEY RESULTS 35

INTRODUCTION

Statement of the Problem

The majority of fire departments throughout the nation are currently faced with the need to accomplish more activity with less funding availability. Changing economic conditions in the post 911 environment have challenged department administrators to budget in alternative fashion.

The City of Brunswick and the Township of Brunswick Hills are two communities faced with the aforementioned problem. Both have traditionally operated similar services, purchased redundant equipment and struggle to plan for the future. Focus has been on determining what is best for each community rather than what is in the best interest of the area.

Purpose of the Study

The purpose of this study is to provide both communities with information to examine current operations and understand the concepts of the consolidation or merger process. With this information, the determination may be made as to whether or not this alternative operation will meet customer expectations as revenue remains flat and competition for budgetary dollars increase within the communities.

Research Questions

The research questions this study will investigate are:

- 1) What is the history of consolidation/cooperative service in the American fire service?
- 2) What forms of consolidation/cooperative service exist?
- 3) Why have communities decided to consolidate service?
- 4) What are the advantages and disadvantages of consolidation/cooperative service?

- 5) What steps are involved in the process?
- 6) How is support gained and resistance countered in the process?

BACKGROUND AND SIGNIFICANCE

The fire service in northeast Ohio has been laden with tradition since its advent. Although tradition is important and allows us to understand our history, tradition many times does not allow us to make needed changes to better serve our customers. In fact, tradition has caused many departments to lose focus and vision of the future.

Duplication of equipment, facilities, and redundancy of service throughout the area has become a problem for today's fire service manager. Over time cities, villages, and townships wanted to provide residents with their own fire department. Each community found pride in purchasing a fire engine, ladder truck, and ambulances to meet the needs of constituents. Therefore, hundreds of thousands of dollars were spent on those items. In addition, staffing costs increased due to manpower requirements.

The City of Brunswick and Brunswick Hills Township have proudly provided fire and emergency medical service to their respective towns. Both communities have purchased similar apparatus over the years providing redundant capabilities. Both provide two stations, three which tend to overlap a significant area while a large area remains underserved.

The city now automatically requests mutual aid for specific circumstances. The township normally waits until scene arrival before requesting assistance. In addition, training activities are conducted separately.

In the 1960's and 70's communities were firm in belief they could handle their own incidents and seldom called for mutual aid or help from anyone else. During the 1980's, leaders found the benefit of calling each other for assistance. Development of automatic aid and mutual aid box alarms allowed for departments to effectively tap into each other's resources.

Because of reduced revenue streams and the ever increasing cost of doing business, communities need to address how to better provide fire and emergency medical services. Today's fire service leader must now deal with the problem of previous excesses, and in doing so, provide for direction into the future where resources are better allocated.

The findings of this research can assist the City of Brunswick and its neighbors to better understand the concept of cooperative or consolidated service. The information provided will allow departments to evaluate their current status from an operational stand point as well as investigate capital funding and give alternatives to improve management of the revenue and expense streams. The research will also provide both communities examples of successful ventures and the benefits received by placing aside individual agendas and working together for a common goal.

LITERATURE REVIEW

Consolidation or other cooperative efforts is not a new concept in the fire service. The earliest discussions about cooperative services in Contra Costa County, California took place in 1930. (Snook, and Johnson, 1997) Although it took nearly 35 years, the Contra Costa County Fire Department was eventually formed.

In 1959, the Los Angeles County Fire Department was formed. Today the fire department serves 52 of 88 cities in Los Angeles County for a total combined population of 3.2 million. (Snook et al, 1997)

The 1950's and 1960's found small communities growing and expanding rapidly. Subsequent to the growth came annexation of rural areas. In 1968 the city of Jacksonville, Florida consolidated with Duval County. This consolidation marked one of the earliest strategic alliances between a metropolis and a county. (Snook et al, 1997)

During the 1970's as opposed to meeting the needs of a growing community, funding of departments was the motivational force behind contracts, consolidation, and mergers. As mentioned earlier, lack of funding forced changes in how fire departments delivered service. Because of California Proposition 13 and Massachusetts Proposition 2 ½, local tax initiatives have been placed in check, which directly impact fire department concerns.

During the 90's, political, economic, and operational forces pushed emergency service providers to seek alternatives to meeting challenges. The result has been a myriad of strategic alliances, cooperative service agreements, consolidations, and mergers. (Jensen, and Snook, 2000)

In its simplest form, consolidation is a movement in cooperation. Typically, the road to consolidation or merger has many steps in the process.

Mutual aid is common throughout the nation and is the first step. Mutual aid gives fire departments reciprocal assistance for emergency calls. (Snook et al, 1997) This form of cooperation can fail, as mutual aid does not demand the closest unit respond. (Snook et al, 1997) Additionally, units may be unavailable to respond as requested to the incident.

Automatic aid agreements tend to be more specialized and may be designed specifically for two or three departments. (Snook et al, 1997) Jurisdictional boundaries are essentially eliminated and the closest unit(s) respond to the incident request. As communities continue to operate independently, automatic aid does not address the purchase of redundant equipment or assigned staffing levels as could be formulated in cooperative efforts.

The definition of consolidation is the unification of two or more units by dissolving the current ones and creating one single unit.

Consolidation itself can take shape in different forms.

1) A partial consolidation allows departments to retain individual identity. However, individuals are placed together to perform a function or task. Joint staffing of a fire station would be an example of partial consolidation. (Snook et al, 1997)

2) Functional consolidation agreement allows two or more departments to join together and complete duties as one organization. An example of functional consolidation would be when three departments agree to provide a training program as one unit benefiting the three departments.

3) Operational consolidation occurs when two or more separate departments join together operationally or administratively to form one organization. (Snook et al, 1997) Essentially they operate as one unit although they retain legal identity.

Providing contractual service from one community to another, although not consolidation, is another form of cooperative service. Usually these contracts provide for a functional process which a community can not provide for itself. The contracting community requires a level of service clearly defined by the contract and each party agrees to fulfill the contract in a defined manner over a determined time frame. (Snook et al, 1997)

The last form of cooperation is that of a merger. A merger is when one unit absorbs one or more entities or any method of combining two or more organizations. In this situation, two communities become one new operation. An advantage of a merger is it forces the development of a strategic plan. (Snook et al, 1997) The permanence of a merger allows chief officers to look at coverage as a whole rather than individually. (Snook et al, 1997) The new association can now focus on the future of the organization, individual aspects of the participating departments no longer factor into the planning process.

As communities look to consolidate, contract, or merge, it has been noted there are efficiencies between any two organizations sharing a common boundary. (Snook et al, 1997) Improved efficiencies allow for the participating organizations to enhance operations and provide better service to their residents. By communicating desires, communities can effectively identify and capture the efficiencies. (Snook et al, 1997)

The discussion of consolidation or cooperative service may be brought to the forefront by one or many problems communities face. These problems may develop over time or may be an acute situation revealing a need for change.

In Wisconsin, discussion of merger between the cities of Cudahy and South Milwaukee found neither is able to independently mitigate a significant fire incident or multiple incidents without the use of mutual aid. (Tri-Data Fire Study [TDFS], 2001) In continued talks they also

found response time is perhaps the most important of the commonly used indicators of performance. (TDFS, 2001) Another example of the consideration for consolidation are the twin problems of staffing and response time facing fire departments in Camden County, New Jersey. (Laughlin, 2002)

Other communities have found as they grew, the demand for specialized services, as well as service in general, grew with them. (Jensen, et al, 2000) Rapid growth has made it difficult to meet or even maintain service levels. Issues of service become concerns cities deal with day to day. Officials want to make sure service quality will be uniform throughout both areas. (Preston, 1999) The article further discusses the mergers goals were to maintain or reduce average response times, enhance the availability of paramedic ambulances, enhance the availability and capability of fire suppression and mutual aid, and provide enhanced technical services. (Preston, 1999)

The geographic location of stations has led to cooperation. While some agencies still insist on building expensive fire stations to serve only their own customers, others consider the location of surrounding infrastructures and willingly negotiate for the most cost-effective service from their neighbors. (Jensen, et al, 2000)

Concerns over being financially able or responsible cause communities to review efforts. In an area around Cherry Hill, New Jersey, questions about fiscal accountability, disproportionate tax rates and the inefficiency of six autonomous entities were the driving forces behind this movement/consolation of consolidation. (Giorgio, 2000)

Volunteer or part-time departments additionally face staffing issues. The Pinebrook Hills Fire Protection District faced an acute shortage of volunteers. The review board considered

whether it was possible to continue operating a volunteer department. (Boulder Mountain Fire Protection District [BMFPD], 2004)

In a nutshell, the rationale for consolidation can be easily understood when the city leaders of Livermore and Pleasanton saw that service improvements and economies of scale could be achieved by consolidating their fire services. Even more remarkable, no stations were closed or personnel laid off due to consolidation. (Gary, 1999)

The reasons vary as to why two or more communities choose to consolidate or merge fire service operations. Usually more than one reason leads to explore the consolidation need.

Many times communities find they are unable to independently mitigate a significant fire incident or multiple incidents without use of mutual aid. (TDFS, 2001) The combined service allows operations to meet manpower requirements on fire scenes. Cities and towns have found the duplication of effort among relatively similar jurisdictions is not necessary. (TDFS, 2001)

In addition, communities have found these other benefits achieved through cooperative service:

- The additional personnel help in compliance with NFPA guidelines. (TDFS, 2001)
- Improved economies of scale
- Improve incident safety and accountability
- Improved incident command
- Reduction of fleet size
- Reduction in duplication of administrative and executive efforts. (TDFS, 2001)

An example of successful consolidation lies in the Boulder Mountain Fire Authority. The Authority was formed by the Boulder Heights and Pine Brook Hills Fire districts. They found

through combining staff, equipment and financial resources, they could better address a number of immediate and potentially catastrophic problems. (BMFPD, 2004)

In their decision to consolidate, the communities of Boulder Heights and Pine Brook Hills found the following issues to be addressed. (BMFPD, 2004)

- Improve fire protection
- Enhance efficiency and cost effectiveness
- Unify employees
- Allow citizens to receive high quality service
- Reduction of insurance services office rating

The Authority found they could provide services superior to those that either one of the fire protection districts could alone provide. (BMFPD, 2004)

Regionalization in Camden County, New Jersey is also being considered. It is felt the costs of firefighting could be more evenly spread over a larger tax base, creating the money needed for more paid firefighters. Fire stations and equipment could be placed and distributed where they would be needed most, creating a fire service responsive to the changes in population in the growing county. (Laughlin, 2002)

Merger discussions between the city of East Lansing and Meridian Township Fire Departments established goals of reducing average response times, enhancing availability and capability of fire suppression and mutual aid, and providing enhanced technical service. (Preston, 1999)

Through the review of other efforts, it is easily seen how efficient service can become and how the community wins.

Over time, as a community grows in both infrastructure and population, the demands on its emergency services organizations grow accordingly. (Bennett, 2003) Therefore, departments must find better ways to preserve their operations and funding ability. Without careful attention, long-term planning and adequate funding, communities risk an alarming deterioration in fire protection. (McLaughlin, 2004)

Redundancy of fire apparatus has traditionally plagued fire departments throughout the country. Consolidation or merging allows the new department to reduce equipment needs where overlap existed. The apparatus fleet is streamlined resulting in reduced maintenance costs and outlays needed for additional capital purchases.

The joint purchasing of supplies has brought about increased savings to new entities. Additionally streamlined purchasing operations create further savings by reducing administrative costs.

By combining duplicated services such as fire prevention/education and training, costs savings are realized. Training is a key element in any effective fire agency. (Giorgio, 2000) A larger entity can provide a system dedicated to improved training programs to the firefighters and effectively upgrade their operating procedures.

Fire operations have been shown to improve dramatically due to consolidation in the following circumstances:

- Stronger incident command: Before consolidation, company officers at times had to operate as incident commanders, which reduced the number of people available to fight the fire. The on duty incident commander now responds and commands all significant incidents. (Giorgio, 2000) This allows commanders to become more experienced and competent in their roles.

- Staffing levels have improved resulting in improved personnel safety on incidents.

It must be remembered that although the initial expense can result in an increase in revenue needed, it's the overall savings in both tax dollars and efficiency over the long term that's the true benefit achieved for the tax paying public. (Giorgio, 2000)

As with any project promising a positive outlook and vision, there are resistant perceptions in need of review. Understanding these perceptions or concerns allow for proper preparation in overcoming these issues.

Although the cities of Cudahy and South Milwaukee are good consolidation candidates, it is important to understand that a primary challenge will be to merge two different approaches to inspections and investigation. (TDFS, 2001) It is obvious the importance of addressing this issue and providing an answer appropriate to meet the needs of the communities as a consolidated unit.

Managing the diverse elements of the overall system could pose a daunting challenge. Parochial viewpoints may create political difficulties as each community attempts to influence policy development and operating procedures. (TDFS, 2001) The creation of a third party to oversee the process would allow more objective views and decisions to be established.

Each city relinquishes, to some extent, the ability to determine the scope and level of emergency services provided to its own community. (TDFS, 2001) Perceived change may cause consternation among some stakeholders including department personnel, employee labor groups, and the general public. (TDFS, 2001) Therefore, it is plain to see the need for proper communication providing factual information.

The new direction may become challenged by the old guard and the traditional belief structure. The Cherry Hill, New Jersey consolidation found members of the organization who'd been against consolidation presented every roadblock imaginable to derail the new department.

(Giorgio, 2000) As mentioned before, proper communication and factual information can help offset this problem.

Training of personnel may become a substantial issue during consolidation. The Toronto Fire Services dealt with this problem on a grand scale. Merging six fire departments, ranging in size from 140 to 1200 members, would be a daunting task that would pose training challenges at every turn. (Sells, 1999) Establishment of a committee representing all communities and interests allowed for successful merging of the training divisions.

Other issues may arise, as reasons to resist consolidation such as some individuals just do not want to be part of a larger organization. (BMFPD, 2004) Some may perceive that consolidation would result in some measure of loss of community identity. (BMFPD, 2004)

Obviously, any change to an organization can result in resistance. Careful planning and design can offset the fears and concerns of those not in favor of the project. The task of consolidation or merging operations is not a simple one. It may take years for the process to be complete. It is important for all bases to be covered for the process to be effectively completed.

It is never wrong to evaluate whether some form of cooperative service could lead to cost savings or improved efficiencies. It is wrong, however, if those opportunities exist and you refuse to examine them. (Snook et al, 1997) This process is one where personal viewpoints need to be put aside for the vision of community service.

The process of collecting data and information should be left to department heads. Elected officials should not deal with the details. (Snook et al, 1997) It is important to remember the ultimate scenario is to provide more services for less money. (Snook et al, 1997)

In order for personnel to support the project, it is important for them to be provided factual information. It is critical that the staff and career and volunteer personnel be completely

briefed on the process and how they will be impacted. (Snook et al, 1997) Every attempt should be made to involve personnel in the process of implementation. This allows them to take ownership in the program and become a shareholder in the operation.

As with any type of project, it is important to clearly identify the objectives. Without clearly defined objectives and expectations, (Snook et al, 1997) it is difficult to address arising issues and remain focused on the plan.

The benefits of improved operations, cost effective purchasing and reduced redundancy as indicated in review of the literature, show support for communities to investigate and modify the current way of doing business. Fear of change or loss of control are not acceptable excuses to not make changes to benefit customers.

PROCEDURES

The intended purpose of this research project was to provide nationwide information and insight into the movement to consolidate or merge fire service operations. The City of Brunswick, Township of Brunswick Hills and neighboring communities could utilize the information to analyze their specific organizations and determine whether or not the process would improve and enhance current operations.

Historical research methodology was used to investigate the advantages of establishing cooperative or consolidated service. Focus was also placed on determining the change effected upon organizations having participated in the process.

Materials for literature review were obtained through an internet engine search and the United States Fire Administration learning resource center. Journal documents and articles reflected views and findings from around the nation where consolidation or merging was attempted or has taken place. Specific findings subsequently did not reflect regional preferences, but provided insight to the positive and negative aspects encountered nationwide.

Descriptive research methods were also used to evaluate the fire service in the State of Ohio. A survey was administered to departments throughout Ohio to determine:

- 1) How current operations were being handled
- 2) Whether or not department expectations were being met
- 3) Whether or not departments were willing to explore the cooperative service or consolidation aspect.

One hundred four surveys were administered to Fire Chiefs in the State of Ohio. Career, combination and volunteer departments representing suburban and rural areas were randomly selected for review. Seventy-five surveys were returned prior to the established return date.

These seventy-five were utilized in tabulating results and providing information to understand the views of peers throughout the state regarding consolidation and cooperative service.

RESULTS

A review of the literature concerning consolidation expressed clear benefit to the involved communities. Likewise, perceived problems or concerns of participants were acknowledged and addressed. The literature review provided a format to allow stakeholders the ability to proceed in a logical fashion to determine the best plan of action.

Answers to the research questions

Research question #1. *What is the history of consolidation/cooperative service in the American fire service?*

The history dates back several decades when discussion took place regarding cooperative service. The rapid growth decades of the 1950's and 1960's found alliances being formed to address growth and annexation. The 1970's found communities struggling with funding due to political decisions limiting funding. Therefore, fire departments joined together to provide service with reduced cost. The 1990's brought economic change forcing communities to provide alternative methods of delivering service to customers.

Research question #2. *What forms of consolidation/cooperative service exist?*

The research indicates mutual and automatic aid provide the first step into cooperative service efforts. These efforts do not address redundant equipment or staffing levels. In addition, it does not necessarily require the closest unit to respond to an incident.

Consolidation is the unification of two or more entities by dissolving the current ones and creating one new entity. Consolidation may take form as partial, functional or operational in addressing the needs of the parties to the program.

Contractual agreements may also be formed between communities where a specific service is provided by one to the other for a predetermined cost.

When one entity absorbs one or more entities to provide service, a merger has taken place. A merger allows for planning to take place for the new operation rather than individual plans for each unit.

Research question #3. *Why have communities decided to consolidate?*

There are several reasons to consolidate services. Many are similar in nature and overlap in concept to provide better options.

- 1) Enhance operational procedures and improve service.
- 2) Address staffing levels.
- 3) Improve response times.
- 4) Meet the demand for specialized services.
- 5) Provide service quality in a cost-effective manner.
- 6) Improved command, safety and accountability.
- 7) Reduction in fleet size as well as administrative and executive efforts.

Research question #4. *What are the advantages of consolidation/cooperative service?*

There is some overlap from the previous question as to the advantages discovered in the consolidation process. The process leads to several benefits.

- 1) Additional personnel available for incident management.
- 2) Improved safety and command.
- 3) Reduced redundancy.
- 4) Improvement in fire protection and service.
- 5) Improved cost effectiveness while enhancing efficiency.
- 6) Distribution of equipment in staff in areas needed the most.

Research question #5. *What are the steps involved in the process?*

The process of consolidation or merging is quite involved and may take many months to complete. For success to be obtained, the following steps need to be taken in a forthright fashion.

- 1) Interested communities need to approach the feasibility of the project as a group.
- 2) Community leaders and politicians need to put aside boundaries.
- 3) Involved individuals need to understand that not all positions may survive the process.
- 4) Funding needs to be established to finance the study.
- 5) Establish project start and end dates.
- 6) Understand the results of the study will dictate the future course of action.

In the event the study results indicate the need to move forward to consolidate or merge, the following steps need to be taken.

- 1) Development of an action plan.
- 2) Creation of task forces to review functions and operations.
- 3) Establishment of task force goals.
 - a. Reduce operating costs
 - b. Eliminate redundancy
 - c. Explore alternative programs
- 4) Periodically review material and adjust as needed.

Research question #6. *How is support gained and resistance countered in the process?*

When dealing with personnel, many times change is resisted for many different reasons. Therefore, there may be a need to have an objective third party oversee the process as it evolves.

The process of communicating factual information to the stakeholders is paramount in gaining the trust of these individuals. Proper planning and design for the project can help reduce fears and concerns personnel may have over the project.

DISCUSSION

As dollars to communities continue to diminish and service requirements continue to increase, the nations fire service must look to become a more efficient model of operation. As we venture further into this new century, it is my belief in order for fire departments to survive the need for consolidation of entities or improved cooperation of service is paramount.

The literature review indicates several advantages of consolidation or cooperative service available to the fire service. An advantage of a merger is it forces the development of a strategic plan. (Snook et al, 1997) This in itself causes communities to look at the total picture and plan accordingly. As mentioned in the review, individual aspects of participating departments no longer factor into the planning process.

Other advantages include meeting NFPA guidelines for personnel, improvement of economies of scale, incident command, safety and accountability. Reduction of fleet size as well as a reduction in duplication of administrative efforts is also seen as advantages of consolidation or cooperative service.

The results of the survey of Ohio Fire Chiefs indicate they understand the advantages of consolidation and are willing to explore the same.

Over half of the departments surveyed indicated staffing levels for their departments are not adequate for normal call volume. Career and combination departments make up the majority of this response while the part-time/volunteer respondents indicate staffing levels are adequate. This response may result due to the numbers responding to incident requests in the volunteer service as opposed to set staffing levels of the other respondents.

When attempting to meet the guidelines of NFPA 1710 or 1720, career and combination departments indicate they are unable to meet the standard. A large portion of part-time/volunteer

respondents indicate they are not sure whether or not they meet the standard. This may indicate a lack of familiarity and understanding of the requirement.

In response to staffing levels of engine companies, the majority of combination and career services indicate three as the minimum staffing level. Whereas, the part-time/volunteer departments are able to staff at a level of four. As mentioned earlier, this increase may be attributed to personnel numbers responding to the incident. It is important to mention, with this increased staff comes increased response time due to the time associated with personnel turn out time.

The response to ladder company staff levels indicated two as the norm for career and combination departments. Four was the staff level of the majority of part-time/volunteer departments. An extremely disturbing finding was fifty percent of part-time/volunteer respondents, ten percent of combination and six percent of career departments indicated one as a staffing level for ladder companies.

The majority of all types of departments indicated funding is appropriate to meet operating expectations. On the other hand, a significant group indicated funding does not allow them to meet operating expectations.

Capital equipment needs are met through current capital expense funding by the majority of departments questioned. Once again, a significant group also indicated they could only partially meet their capital needs.

The responses to operating and capital funding indicate departments are able to function, however, the trend may be the future holds less success in operations due to reduced funding available to communities.

The majority of all departments surveyed indicated satisfaction with the training program currently utilized in their operation. A smaller sample indicated the program could be improved.

Likewise, the majority of departments indicated satisfaction with their current fire prevention and education efforts to the community. Very few respondents indicated any dissatisfaction.

A vast majority of respondents indicated satisfaction with their current training programs and the ability to provide adequate fire prevention and education.

Nearly half of the total operations surveyed indicated utilization of automatic aid in their current responses. A large number indicated using mutual aid after scene size-up. Automatic aid results in the immediate response of assigned neighboring units to the incident. This approach allows for departments to better achieve manpower requirements for initial assignment.

Nearly all of the respondents indicated participation in regional teams for the purpose of hazardous material or technical rescue response. These teams are excellent examples of cooperative service where efficiencies are capitalized upon.

The majority of departments responding to the survey indicated the need to seriously evaluate the concept of regionalization or consolidation for their specific area. Likewise, large numbers also felt this concept would provide more effective and efficient service.

In response to capital cost and operating expense savings, respondents feel capital costs can be reduced while it appears they are not sure operating costs can be reduced. These items would be taken into serious consideration during the evaluation process for purposes of consolidation.

It is clearly evident the City of Brunswick and Brunswick Hills Township should investigate the benefits of cooperative service or consolidation. The advantages discussed in the

literature review are evident. The few disadvantages of loss of community identity, not wanting to be part of a larger organization or the fear of change do not warrant not further investigating benefits.

RECOMMENDATIONS

The resulting recommendation from the research analysis is communities interested in improving service while remaining cost effective, should look to cooperative service, merging or consolidation as a viable alternative to current independent operations.

The benefits of meeting NFPA personnel guidelines, improved economies of scale as well as overall operational improvement clearly outweigh any negative component associated with service intent upon improved cooperation.

Further support of the recommendation to look toward consolidation or cooperative service may be found in the survey results. Respondents indicated based upon current revenue streams they are able to operate and provide capital equipment. However, they indicated as independent communities, the revenue stream of the future will hold less support of operations and capital expenditures causing reliance on more cooperative efforts.

Additionally, survey results indicated inadequate manpower for the typical call volume generated within communities. Likewise, staffing of equipment due to manpower limitations was indicated as inappropriate.

The combination of support from the literature review and results of the survey tie directly into the problems faced by the City of Brunswick and Brunswick Hills Township. It is important for the two communities of the City of Brunswick and Brunswick Hills Township to put aside past animosities and the inability to work together in order to benefit the citizens of the area. It is necessary for department leadership to begin the process of evaluating fire department operations, investigate alternative capital funding opportunities and look to improve the management of expense and revenue streams.

REFERENCES

- Snook, J. & Johnson, J. (1997). *Making the pieces fit*. West Linn: Emergency Services Consulting Group.
- Jensen, A. & Snook, J. (2000, February). Consolidations a la carte. *Fire Chief*.
- Tri-Data Fire Study Final Report (2001). *Multijurisdictional fire service study*.
- Boulder Mountain Fire Protection District (2004). *Proposed consolidation of the Boulder Heights Fire Protection District and the Pine Brook Hills Fire Protection District*.
- Laughlin, J. (2002, August 27). Better firefighting plan sought. *Courier Post online*. Retrieved April 29, 2004 from <http://www.southjerseynews.com>.
- Preston, J. (1999, July 7). Officials concerned with inequalities in possible fire department merger. *Stateneews.com*. Retrieved April 29, 2004 from <http://www.stateneews.com>.
- Gary, S. (1999, July). One is better than two: The benefits of local fire agency consolidation. *Western City*. Retrieved April 29, 2004 from <http://www.westerncity>.
- Giorgio, R. (2000, February). The consolation of consolidation. *Fire Chief*.
- Bennett, J. (2003, November). Warehouse savings. *Fire Chief*.
- McLaughlin, P. (2004, January). Growing pains. *Fire Chief*.
- Sells, P. (1999, April). Consolidation poses training challenges. *Fire Chief*.

APPENDIX 1 – FIRE DEPARTMENT SURVEY

QUESTIONNAIRE

- 1) Based upon the number of incidents requested and the average type of incident encountered, the staffing levels of my community are adequate.
- Strongly agree
 - Agree
 - Not sure
 - Disagree
 - Strongly disagree
- 2) As a department we are able to meet the guidelines established by NFPA 1710 or 1720 as it applies to our operation.
- Strongly agree
 - Agree
 - Not sure
 - Disagree
 - Strongly disagree
- 3) Indicate minimum staffing as it applies to company assignments for your department.
(Check all that apply)
- | ENGINE | LADDER | RESCUE VEHICLE | AMBULANCE |
|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> Two | <input type="checkbox"/> Two | <input type="checkbox"/> Two | <input type="checkbox"/> Two |
| <input type="checkbox"/> Three | <input type="checkbox"/> Three | <input type="checkbox"/> Three | <input type="checkbox"/> Three |
| <input type="checkbox"/> Four | <input type="checkbox"/> Four | <input type="checkbox"/> Four | <input type="checkbox"/> Four |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> Other _____ | <input type="checkbox"/> Other _____ | <input type="checkbox"/> Other _____ |
- 4) Funds to *operate* our department allow us to:
- Exceed our expectations of service
 - Meet our expectations of service
 - Not meet our expectations of service
 - Operate well below our service expectations
- 5) Yearly *capital* funding allows our department to:
- Exceed our required equipment needs
 - Meet our equipment needs
 - Partially meet our equipment needs
 - Fall short in meeting equipment needs

- 6) Our fire department training program meets the objectives of a positive learning experience, opportunity availability and practicality.
- Strongly agree
 - Agree
 - Not sure
 - Disagree
 - Strongly disagree
- 7) Our department efforts in fire prevention and education provide our customers with a positive learning experience.
- Strongly agree
 - Agree
 - Not sure
 - Disagree
 - Strongly disagree
- 8) In regards to the use of mutual aid, our department:
- Utilizes *automatic* mutual aid
 - Requests mutual aid after scene size up
 - Requests mutual aid upon receipt of additional information
 - Seldom utilizes mutual aid for assistance
- 9) Capital equipment purchase decisions are:
- Based only upon the needs of our community
 - Based upon the needs of our community and our neighbors
 - Jointly agreed upon with input from neighboring communities
 - Take into account equipment already present in neighboring communities
- 10) Our department profile best meets the following description:
- Career
 - Career and part-time (combination)
 - Part-time
 - Volunteer
- 11) Services our department provides include: (Check all that apply)
- | | |
|---|--|
| <input type="checkbox"/> Fire suppression | <input type="checkbox"/> Hazardous materials response |
| <input type="checkbox"/> Technical rescue | <input type="checkbox"/> Fire prevention and education |
| <input type="checkbox"/> Medical response | <input type="checkbox"/> Fire inspection |

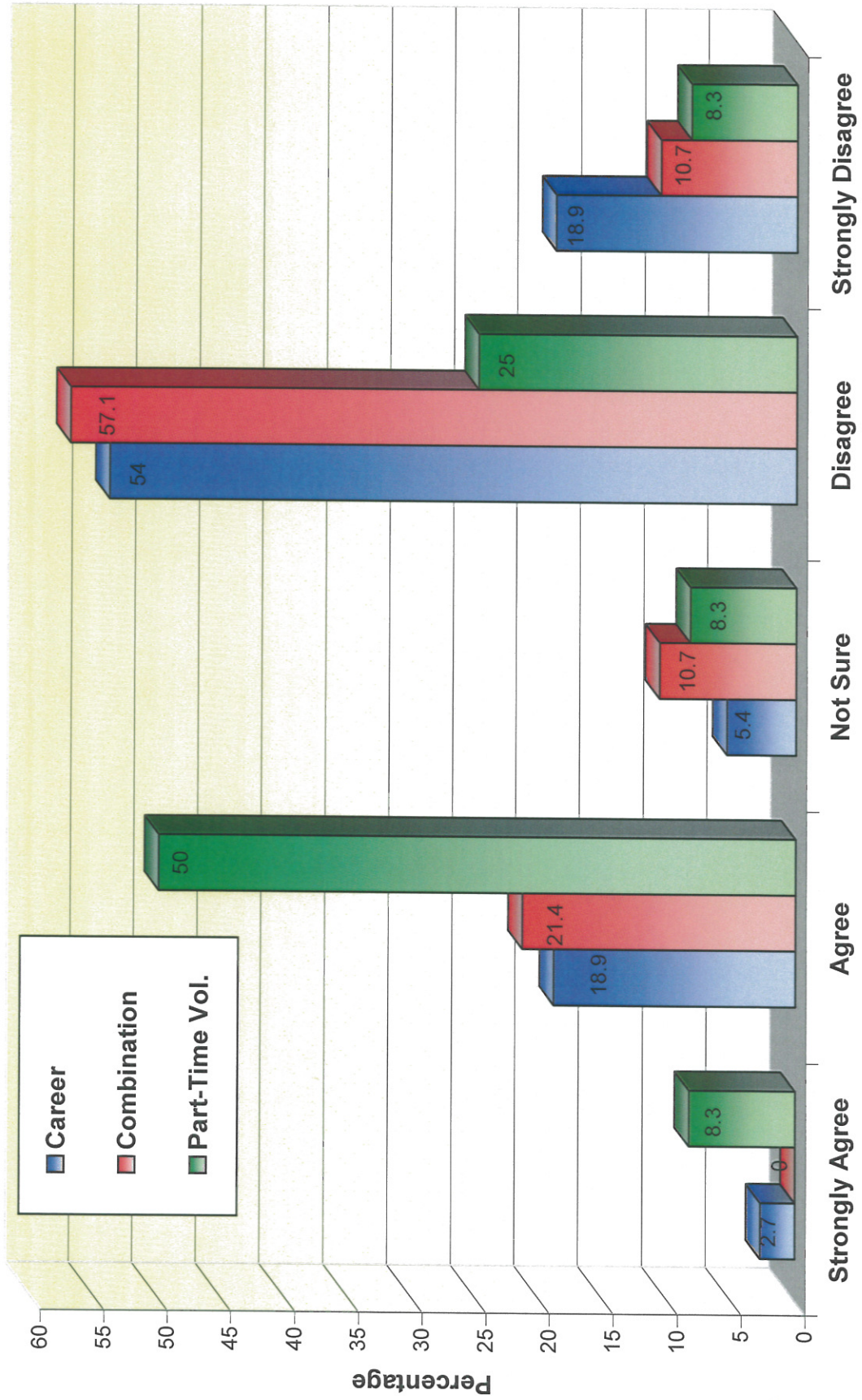
- 12) Our department participates in regionally sponsored activities (response teams, training programs, etc.)
- Yes
 - No
- 13) Regionalization or consolidation of services should be seriously evaluated and considered in and around our community.
- Strongly agree
 - Agree
 - Not sure
 - Disagree
 - Strongly disagree
- 14) Regionalization or consolidation of services would provide more efficient and effective response to our community and its neighbors.
- Strongly agree
 - Agree
 - Not sure
 - Disagree
 - Strongly disagree
- 15) Regionalization or consolidation of services would provide *capital* cost savings to our community and its neighbors.
- Strongly agree
 - Agree
 - Not sure
 - Disagree
 - Strongly disagree
- 16) Regionalization or consolidation of services would reduce *operating* expenses to our community and its neighbors.
- Strongly agree
 - Agree
 - Not sure
 - Disagree
 - Strongly disagree
- 17) Our department is willing to explore the perceived benefits of regionalization or consolidation specific to our area.
- Yes
 - No

- 18) We as leaders in the fire service owe it to our citizens to do what is in their best interest.
- Yes
 - No
- 19) Population served by your department:
- Less than 10,000
 - 10,000 – 50,000
 - 50,000 – 100,000
 - Greater than 100,000
- 20) Square mileage served by your department:
- Less than 5 square miles
 - 5 – 25 square miles
 - 25 – 50 square miles
 - Greater than 50 square miles
- 21) Number of stations operated within your community:
- One
 - Two to five
 - Five to ten
 - Greater than ten
- 22) Total incident volume in 2004 (EMS and Fire):
- Less than 500
 - 500 – 1,000
 - 1,000 – 5,000
 - Greater than 5,000
- 23) Please use the area below or on another piece of paper for any comments or concerns you wish to share:

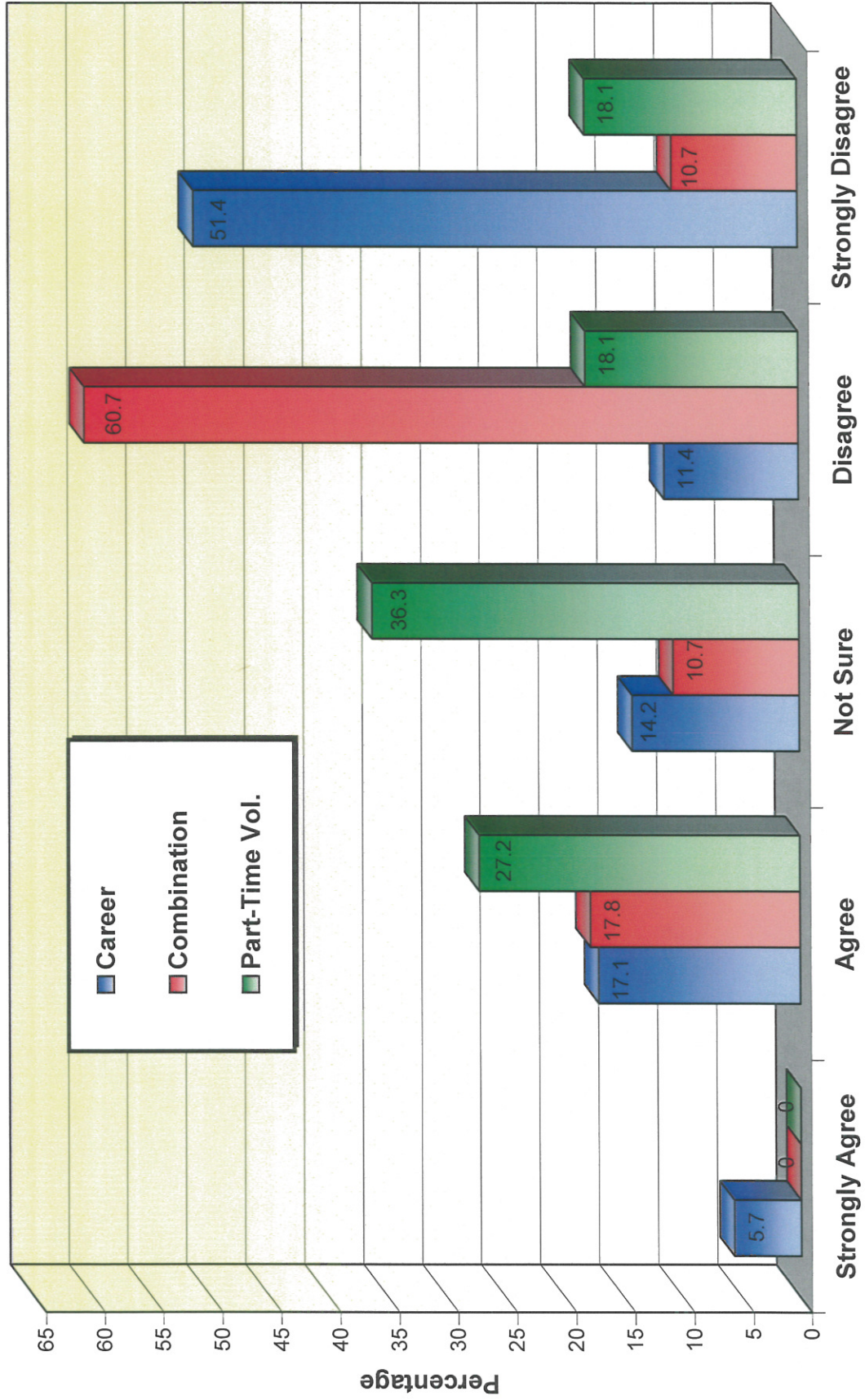
Thank you for your valuable time in completing this survey. Results of the survey may be obtained by contacting me at schrade@brunswick.oh.us. Chief Mark Schrade _____

APPENDIX 2 – SURVEY RESULTS

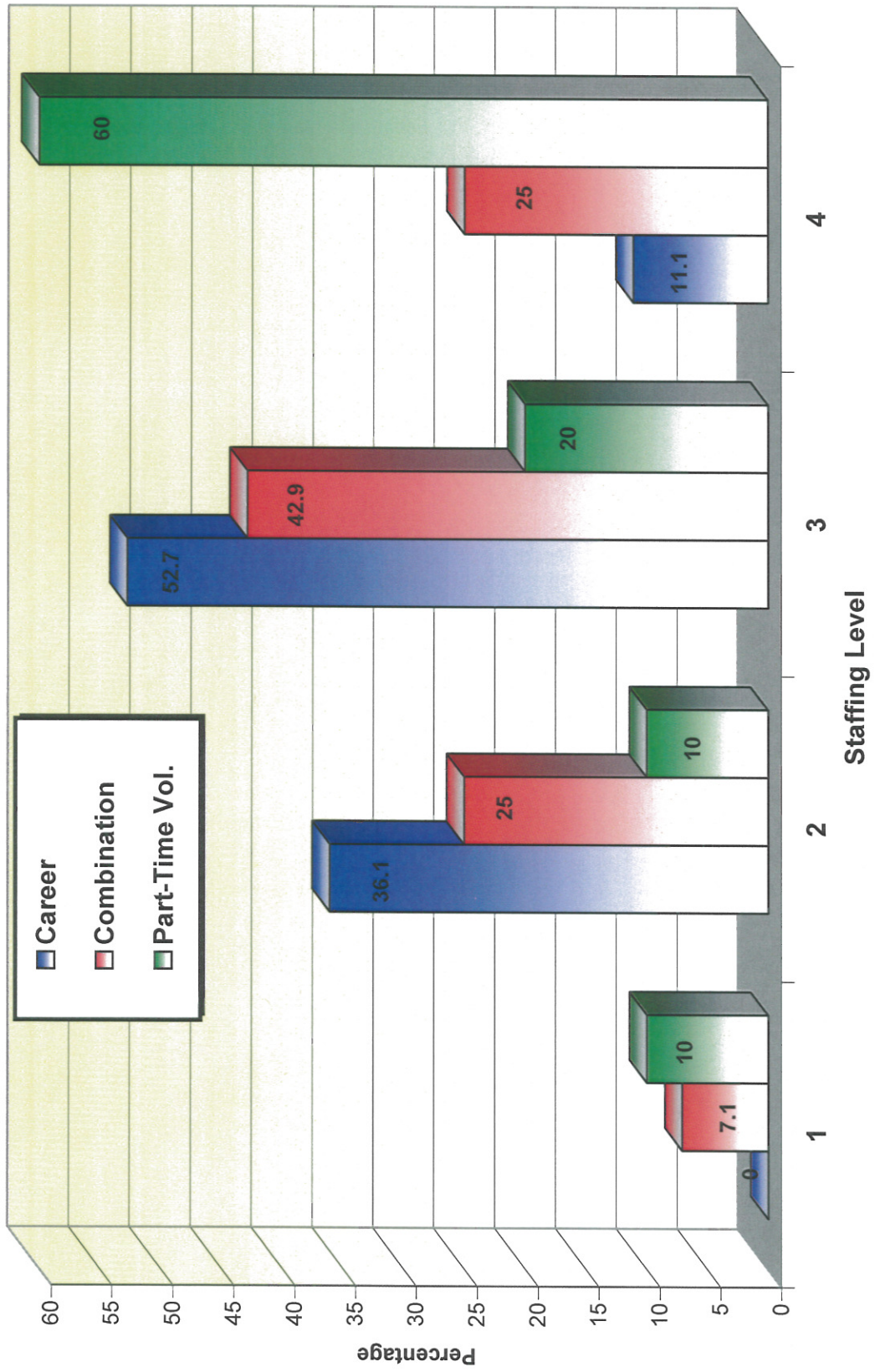
Staffing Levels Are Adequate



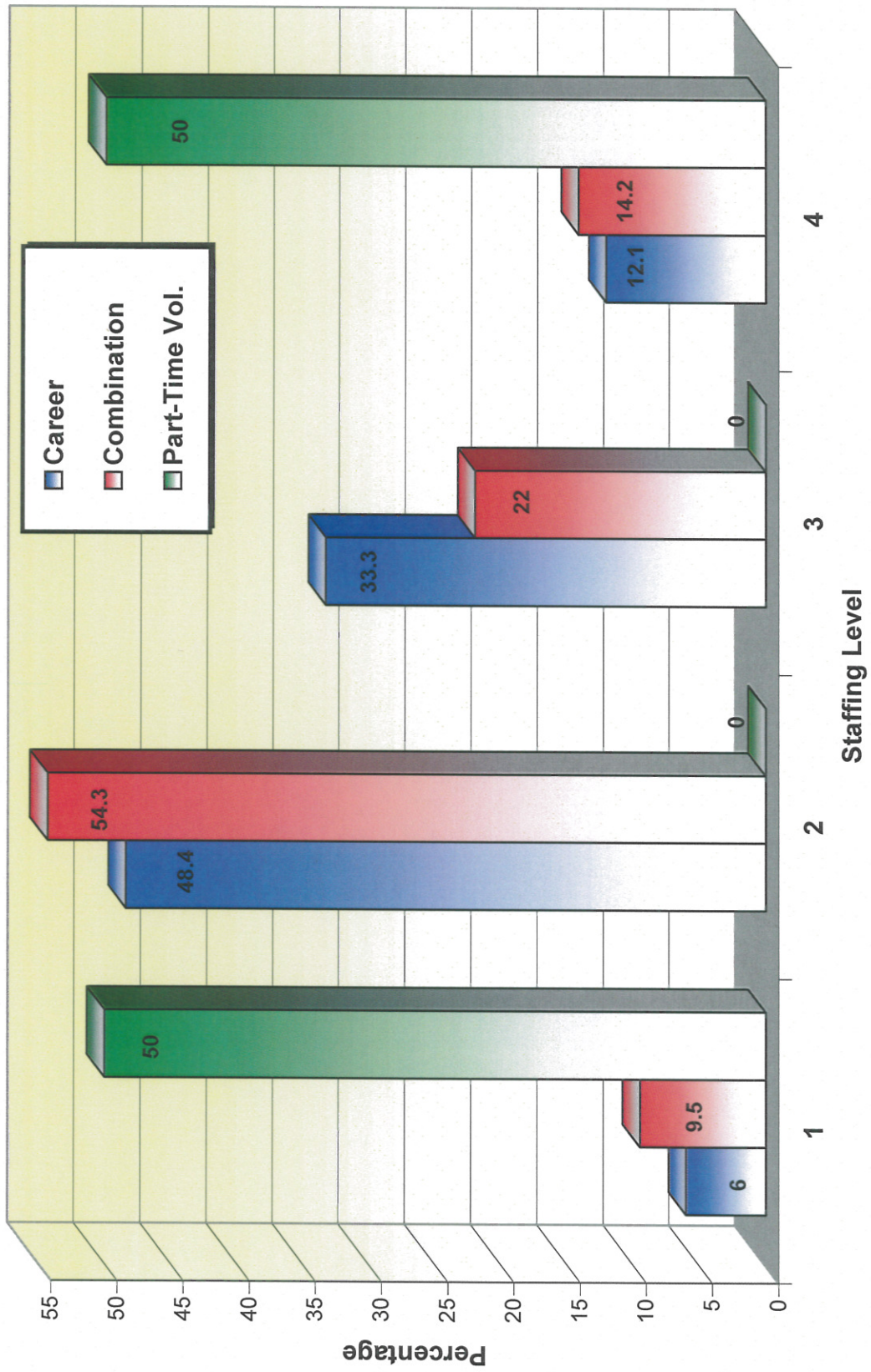
Able To Meet NFPA 1710/1720 As It Applies To Individual Department



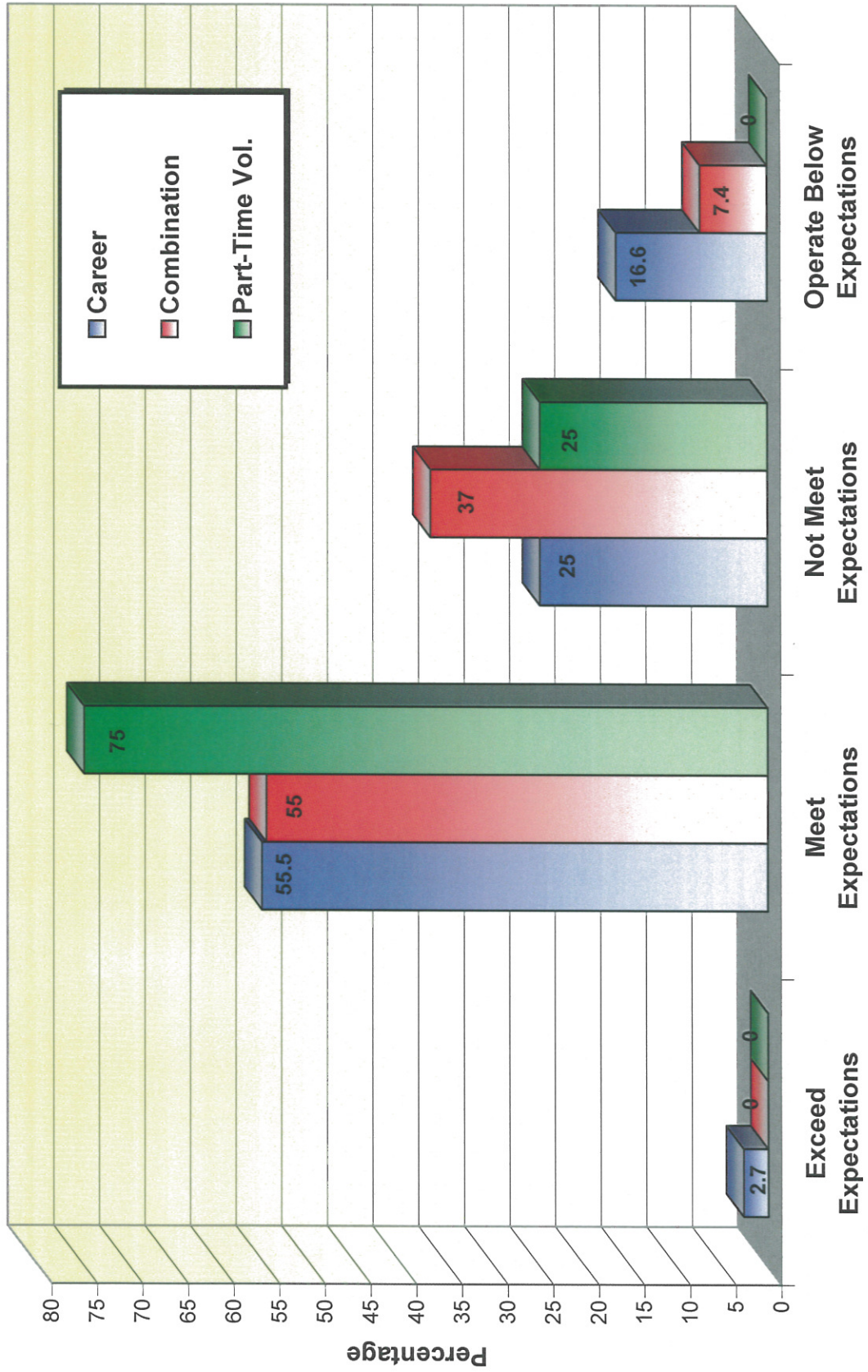
Staffing Levels - Engine Company



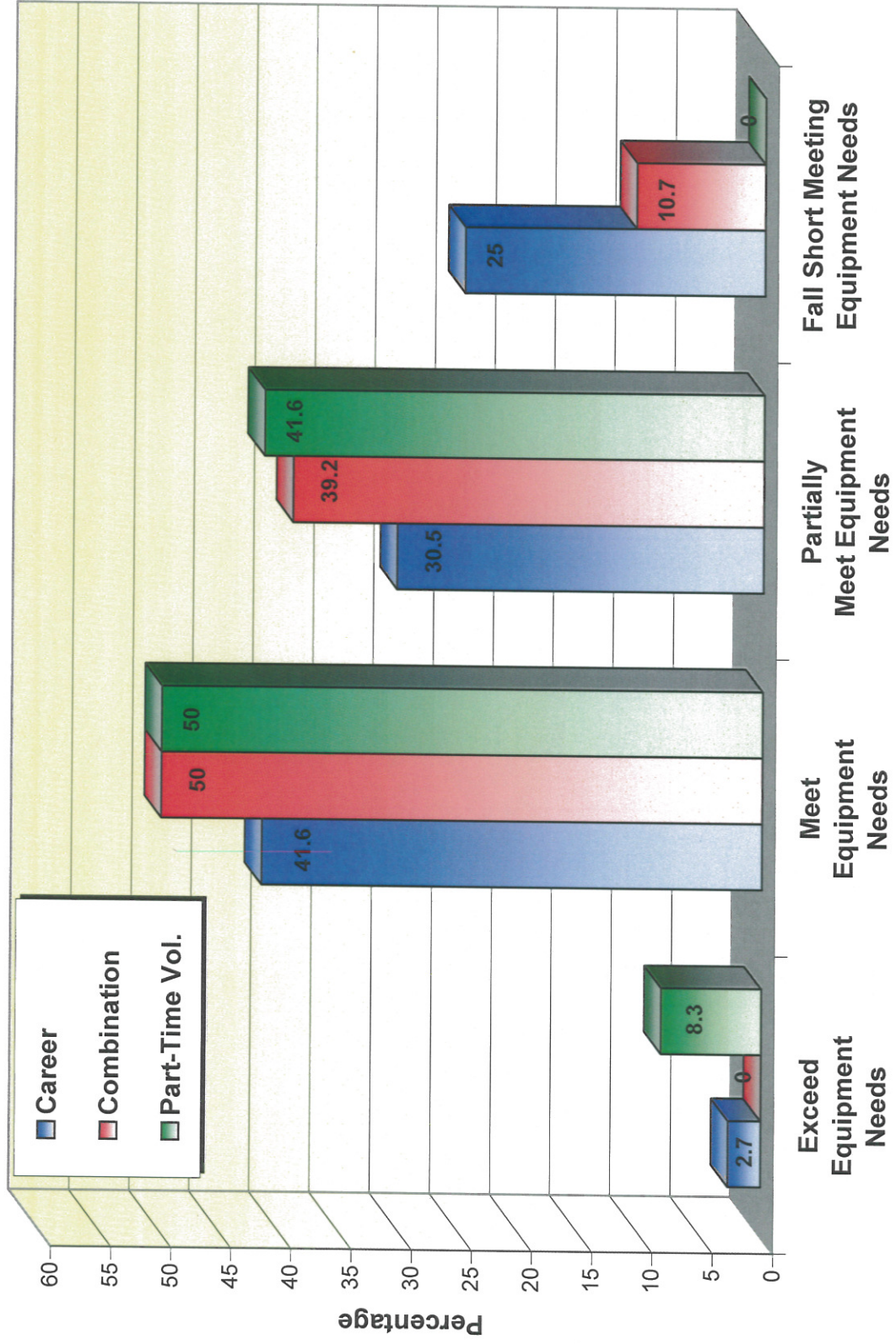
Staffing Levels - Ladder Company



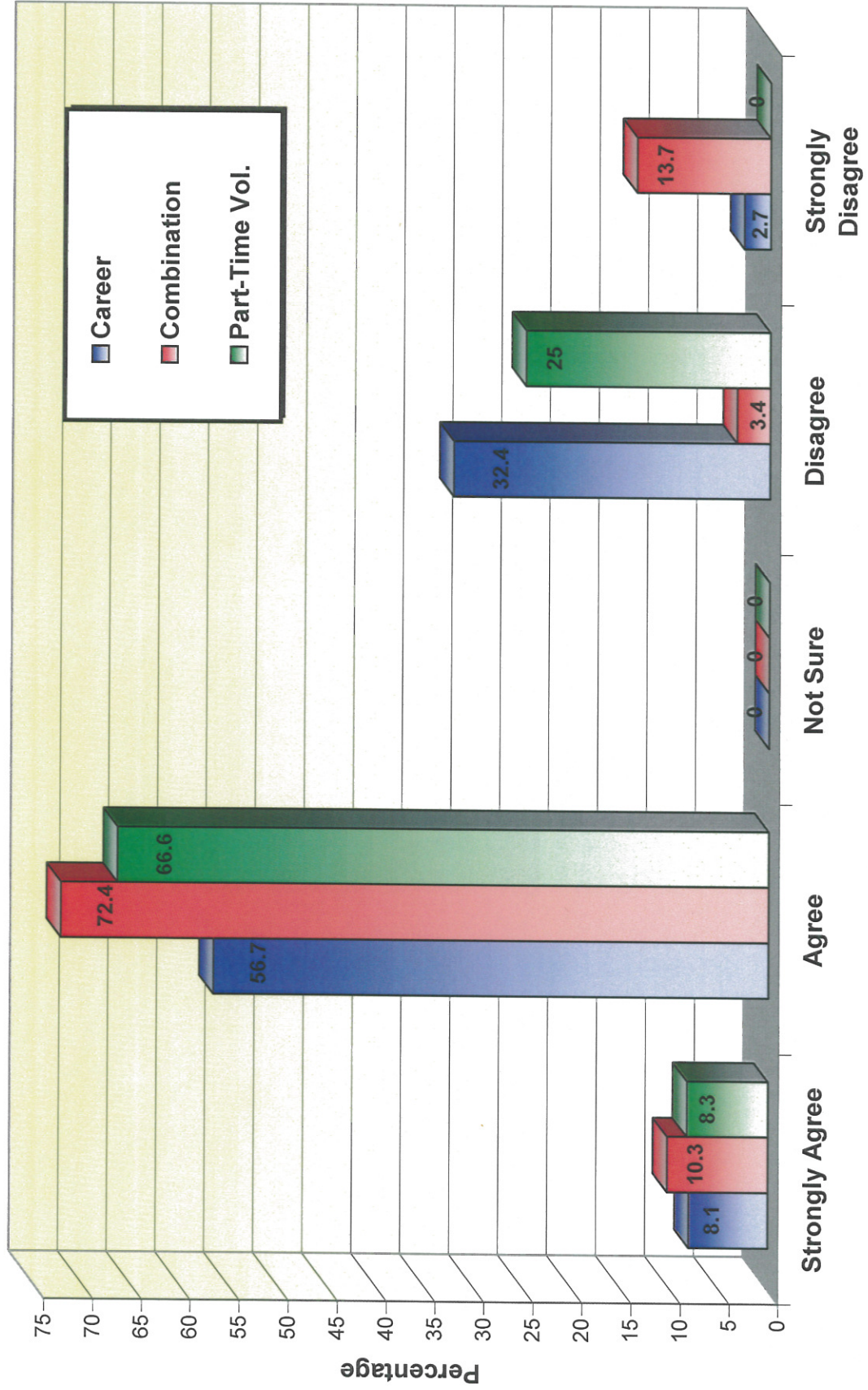
Operating Funds Allow Department To



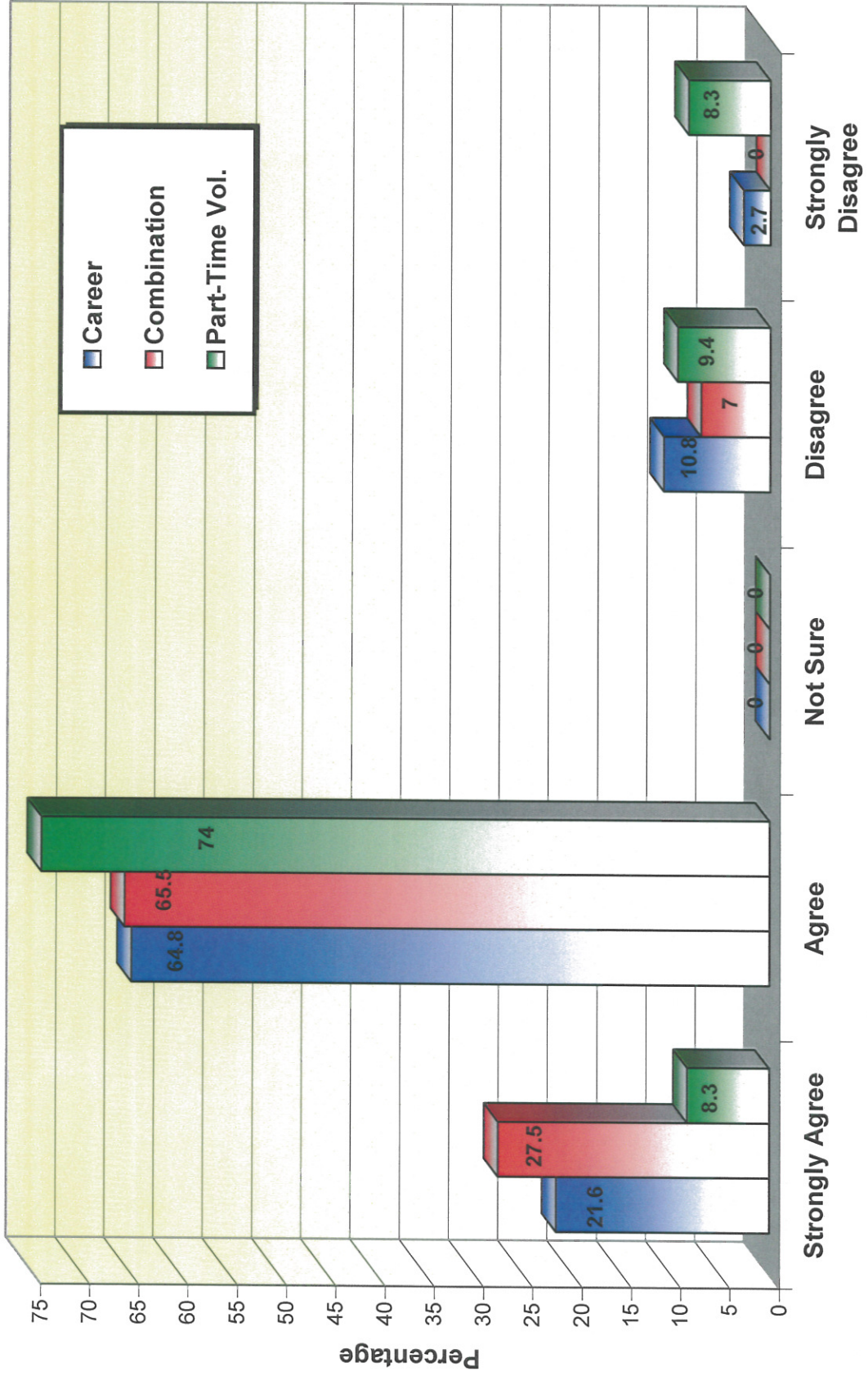
Capital Funds Allow Department To



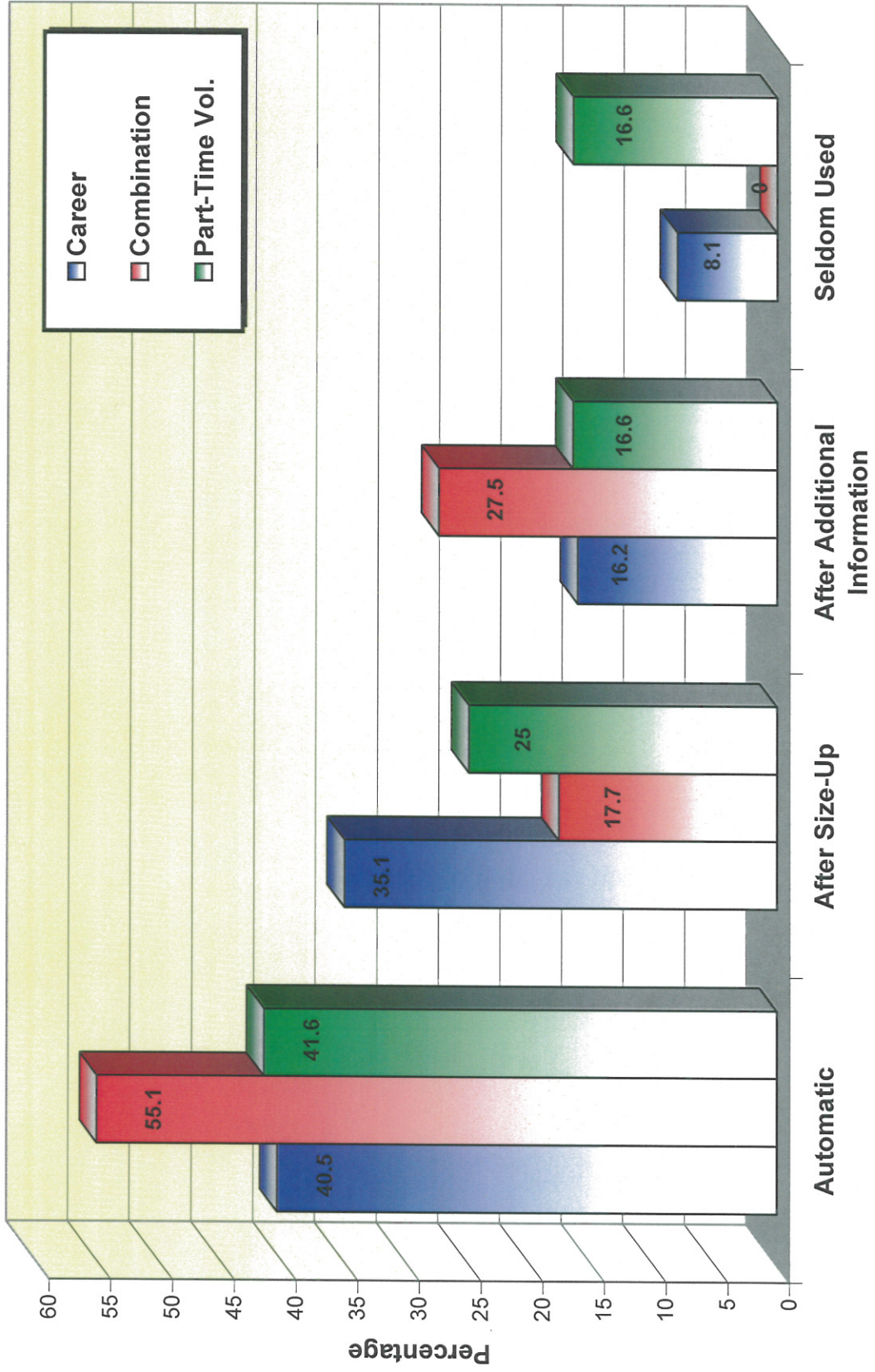
Department Training Program Is A Positive Experience



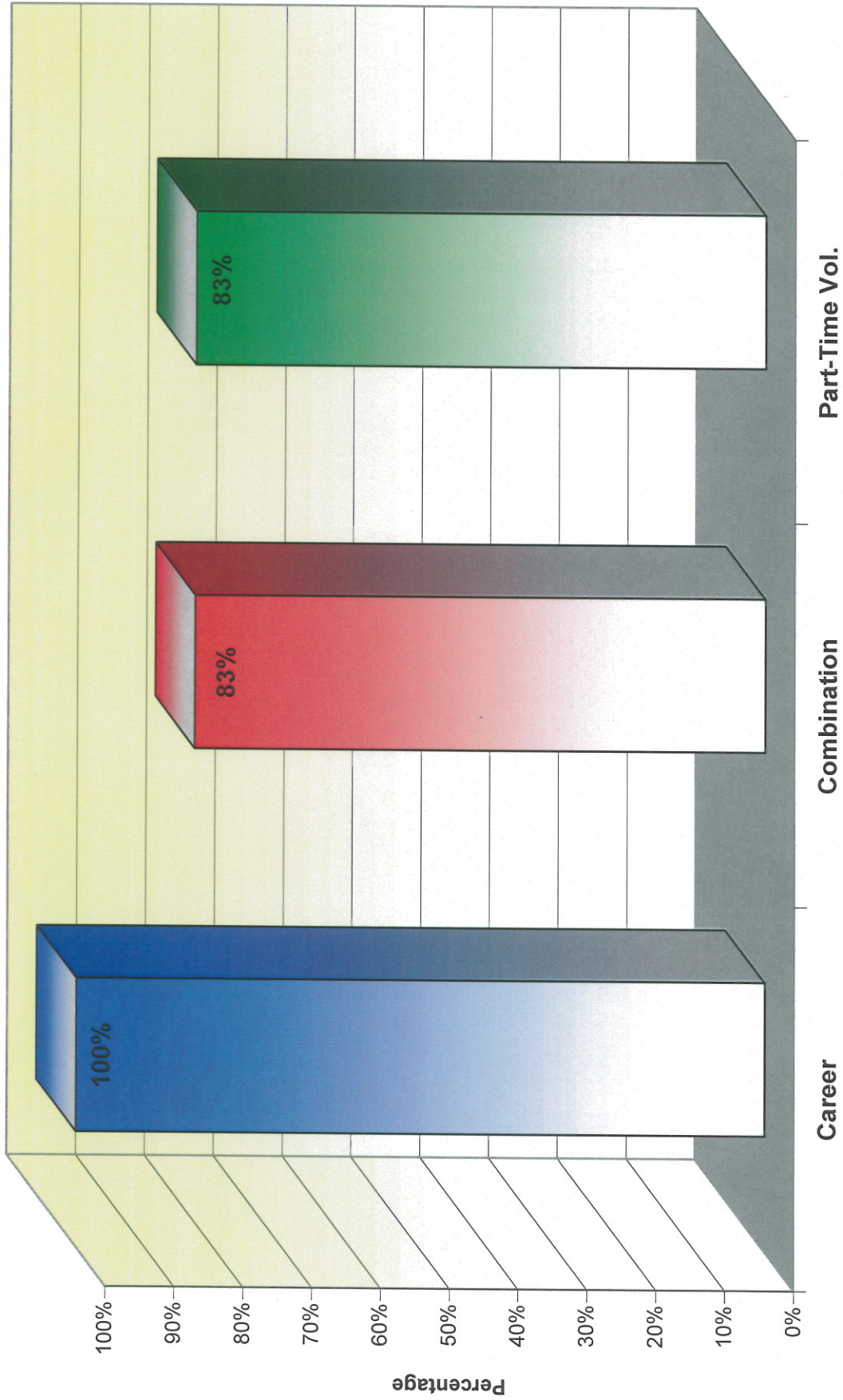
Fire Prevention/Education Programs Provide A Positive Experience



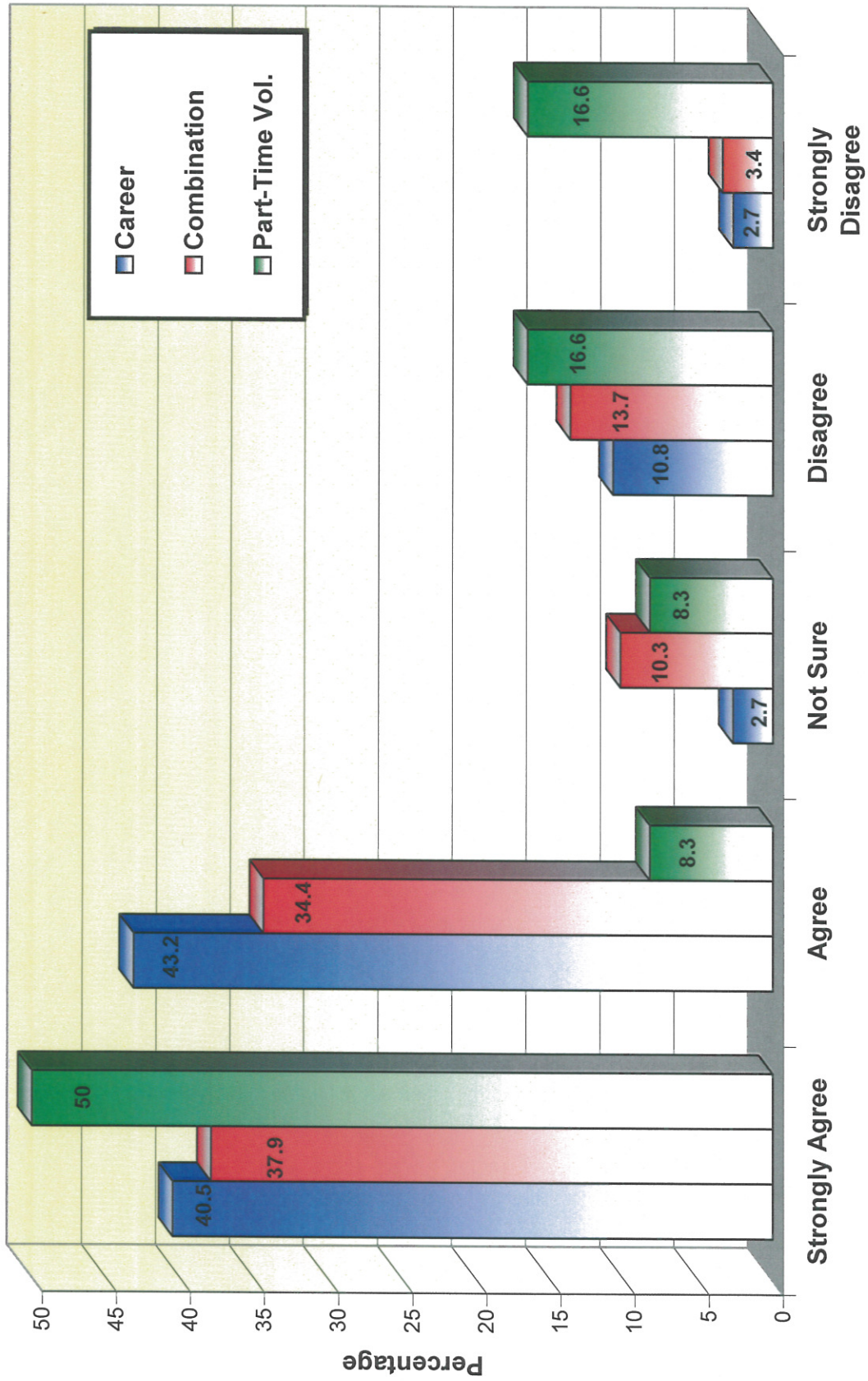
Utilization of Mutual Aid



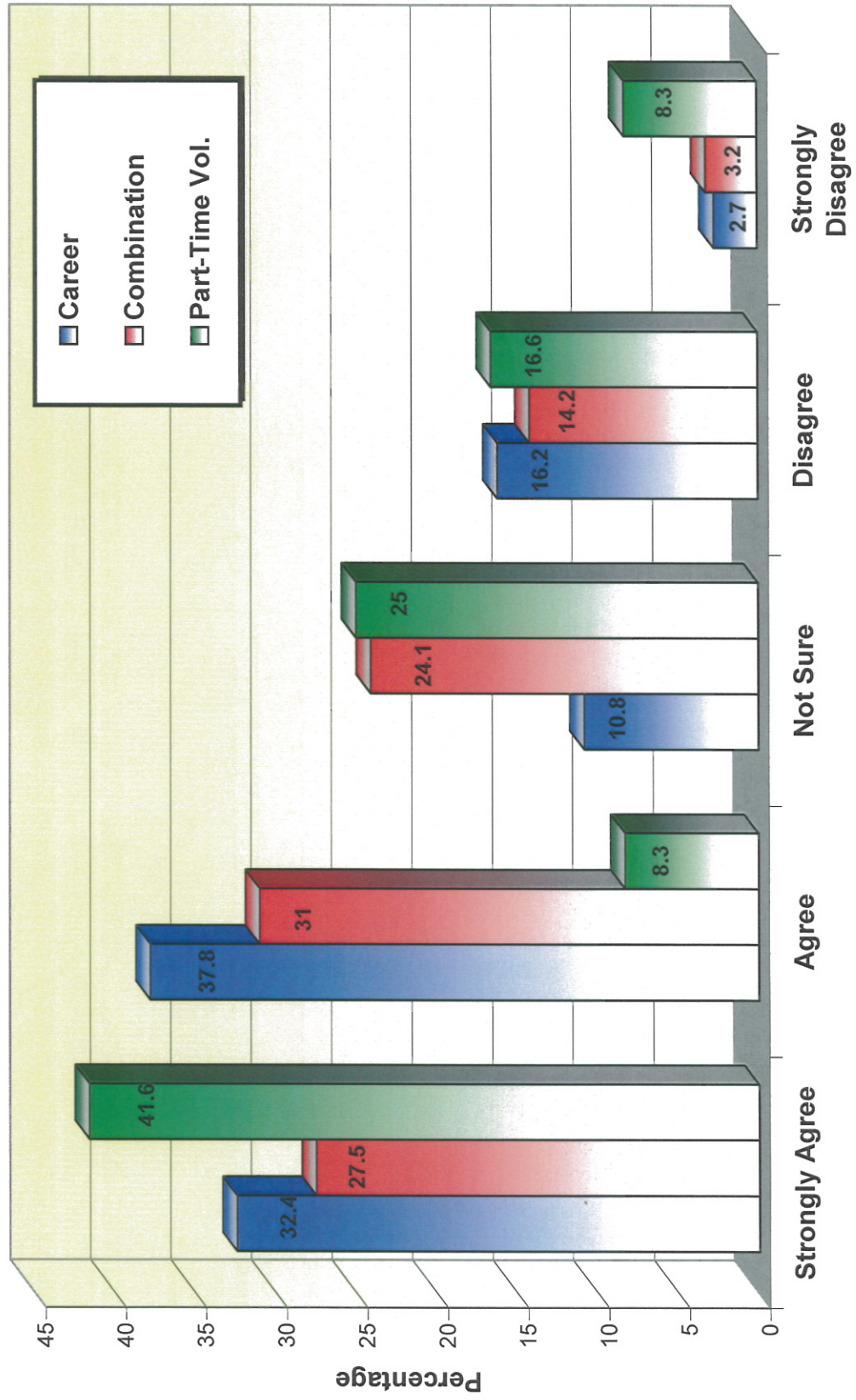
Department Participating in Regional Teams



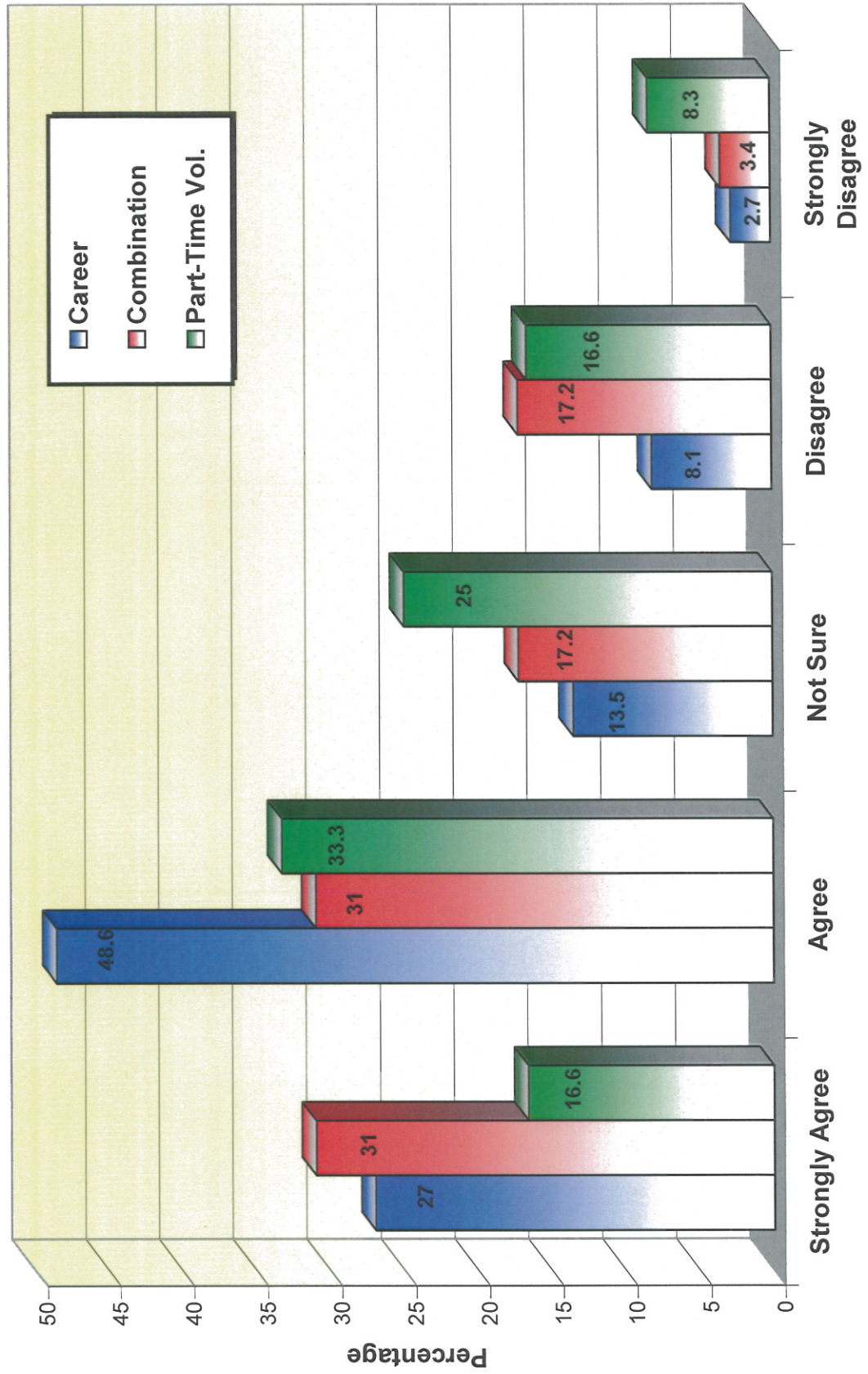
Regionalization/Consolidation Should Be Seriously Evaluated



**Regionalization/Consolidation Would Provide
More Efficient/Effective Service**



Regionalization/Consolidation Would Provide Capital Cost Savings



**Regionalization/Consolidation Would Provide
Reduced Operating Expenses**

