Stevens County

Feasibility Study for Shared or Cooperative Fire and Emergency Services

September 2011



Stevens County

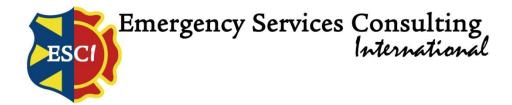
Minnesota

Feasibility Study for Shared or Cooperative Fire and Emergency Services

Summer 2011

Prepared by:

Phil Kouwe Kent Greene Joe Parrott



Acknowledgements

Emergency Services Consulting International (ESCI) would like to thank the following individuals without whom the completion of this project would not have been possible. In addition to these individuals, ESCI would also like to thank the members of each participating agency that provided requested data and information along with access to their facilities.

Stevens County

Randy Willis, Sheriff

Chokio Fire Department

Bruce Quackenbush, Fire Chief
Officers and Members of Chokio Fire Department

Donnelly Fire Department

Brad Searle, Fire Chief
Officers and Members of Donnelly Fire Department

Hancock Fire Department

Mark Holleman, Fire Chief
Officers and Members of Hancock Fire Department

Morris Fire Department

Doug Stork, Fire Chief Eugene Krosschell, Finance Director Officers and Members of Morris Fire Department

Stevens County Ambulance Service

Randall Fischer, President and CEO

Table of Contents

Acknowledgements	
Table of Figures	٠١
Executive Summary	
Evaluation of Current Conditions	11
Organization Overview	11
Governance and Lines of Authority	15
Foundational Policy Documents	16
Organizational Design	20
Budget and Finance	22
Internal Assessment of Critical Issues	35
Internal and External Communications	35
Document Control and Security Issues	39
Information Technology Systems	39
Capital Assets and Capital Improvement Programs	41
Facilities	41
Apparatus	52
Staffing and Personnel Management	69
Administration and Support Staffing	70
Operational Staffing	71
Staffing Performance	72
Compensation Systems	74
Disciplinary Processes	76
Application, Recruitment and Retention	76
Promotional Processes	
Service Delivery and Performance	81
Notification System	81
Demand Study	83
Distribution Study	88
Performance Summary	92
Incident Command and Control	
Mutual and Automatic Aid Systems	
Support Programs	100
Training	100
Life Safety Services	103
Opportunities for Cooperative Efforts	107
General Partnering Strategies	108
Autonomy	
Functional Consolidation	108
Operational Consolidation	108
Legal Unification	109
Consolidation of Chokio, Donnelly, Hancock and Morris Fire Departments	110
Firefighter Relief Associations	116
Policy Action	
Functional Cooperative Efforts	
A – Develop Standard Operating Guidelines	122



B – Create a Unified Occupational Medicine Program	124
C – Create a Unified Wellness and Fitness Program	126
D – Develop and Adopt Common Training Standards	130
E – Create a Regional Training Manual	
F – Develop an Annual Regional Training Plan	
G – Purchase Uniform Emergency Apparatus	
H – Provide for Joint Incident Command and Operations Supervision	
Findings, Recommendations and Plan of Implementation	
Conclusion	150

Table of Figures

Figure 1: Regional Comparison of Area Served - Square Miles	15
Figure 2: Regional Comparison of Population Served	15
Figure 3: Comparison of Organizational Governance	16
Figure 4: Comparison of Foundational Documents	17
Figure 5: Sample SOG Topics for Field Operations	19
Figure 6: Sample SOG Topics for Non-Emergency Operations	
Figure 7: Comparison of Organizational Design	
Figure 8: CFD Budget History	23
Figure 9: Revenue Distribution - CFD	24
Figure 10: Cost Per Capita Comparison - CFD	24
Figure 11: Budget Distribution - CFD	25
Figure 12: Budget Distribution - DFD	26
Figure 13: Revenue Distribution - DFD	26
Figure 14: Cost Per Capita Comparison - DFD	27
Figure 15: HFD Budget History	28
Figure 16: Revenue Distribution - HFD	28
Figure 17: Cost Per Capita Comparison - HFD	29
Figure 18: Budget Distribution - HFD	30
Figure 19: Budget History - MFD	31
Figure 20: Revenue Distribution - MFD	31
Figure 21: Cost Per Capita Comparison - MFD	32
Figure 22: Budget Distribution - MFD	33
Figure 23: Budget Distribution - Regional	33
Figure 24: Budget Distribution by Department	34
Figure 25: Regional Cost per Capita Comparison	34
Figure 26: Assessment of Critical Issues	35
Figure 27: Comparison of Internal and External Communications Factors	37
Figure 28: Document Control and Security Issues	39
Figure 29: Information Technology Inventory	40
Figure 30: Comparison of Resources per 1,000 Population	67
Figure 31: Administrative and Support Personnel	71
Figure 32: Emergency Services Operational Personnel	71
Figure 33: Regional Comparison of Volunteers per 1,000 Population	
Figure 34: Average Structure Fire Staffing Performance History	74
Figure 35: Officer Incentives - HFD	
Figure 36: Officer Incentives - MFD	76
Figure 37: Disciplinary and Appeals Process Summary	76
Figure 38: Application, Recruitment and Retention Summary	78
Figure 39: Communications and Dispatch Information Components	82
Figure 40: Total Service Demand by Type	83
Figure 41: Comparison of Total Incidents	84
Figure 42: Comparison of Structure Fires	84
Figure 43: Service Demand by Month	85
Figure 44: Service Demand by Day of Week	86
Figure 45: Service Demand by Hour of Day	87



Figure 46: Travel Time Coverage	89
Figure 47: Five Mile Coverage	
Figure 48: Response Time Performance History – 2010	92
Figure 49: Response Performance by Hour of Day - Average	93
Figure 50: Response Performance by Hour of Day – 90 th Percentile	94
Figure 51: Command and Control Comparisons	96
Figure 52: Training Components Comparison	101
Figure 53: NFPA Inspection Frequency	104
Figure 54: Life Safety and Prevention Components Comparison	105
Figure 55: Consolidated Comparison of Firefighters per 1,000 Population	113
Figure 56: Consolidated Comparison of Resource per 1,000 Population	114
Figure 57: Comparison of Incidents per 1,000 Population	115
Figure 58: Comparison of Fires per 1,000 Population	116
Figure 59: Comparison of Assets, Liabilities and Funding	117
Figure 60: Comparison of Fund Revenues	117
Figure 61: Comparison of Fund Expenditures	117
Figure 62: Relief Association Qualifying Criteria Summary	117
Figure 63: Comparison of Fund Benefits	118
Figure 61: Evample Implementation Flowchart	15/

Executive Summary

Emergency Services Consulting International (ESCI) was engaged by Stevens County, Minnesota, to evaluate the current delivery of fire and emergency services throughout the county and to provide recommendations regarding the feasibility of moving forward with shared or cooperative efforts among the four emergency services providers. This document serves as the culmination of that project by providing information on the current delivery of emergency services as well as making recommendations for future cooperative service delivery. The report begins with a general overview of each agency as summarized below.

Chokio Fire Department (CFD) is a direct operating department of the City of Chokio. The department provides fire protection services to a jurisdiction that encompasses all of the governmental boundaries of the community, along with additional contractual service areas. The jurisdiction is located in Stevens County, approximately 13 miles west of Morris. The department operates from a single facility with a staff of 20 personnel utilizing five apparatus to cover an area of 175 square miles and a population of 1,243.

Donnelly Fire Department (DFD) is a direct operating department of the City of Donnelly. The department provides fire protection and emergency medical first responder services to a jurisdiction that encompasses all of the governmental boundaries of the community, along with additional contractual service areas. The jurisdiction is located in Stevens County, approximately eight miles northwest of the City of Morris. The department operates from a single facility with a staff of 23 personnel utilizing six apparatus for an area of 121 square miles and a population of 908.

Hancock Fire Department (HFD) is a direct operating department of the City of Hancock. The department provides fire protection services to a jurisdiction that encompasses all of the governmental boundaries of the community, along with additional contractual service areas. The jurisdiction is located in Stevens County, approximately nine miles southeast of the City of Morris. The department operates from a single facility with a staff of 25 personnel utilizing eight apparatus for an area of 138.5 square miles and a population of 1,706.

Morris Fire Department (MFD) is a direct operating department of the City of Morris. The department provides fire protection services to a jurisdiction that encompasses all of the governmental boundaries of the community, along with additional contractual service areas. The jurisdiction is located in Stevens

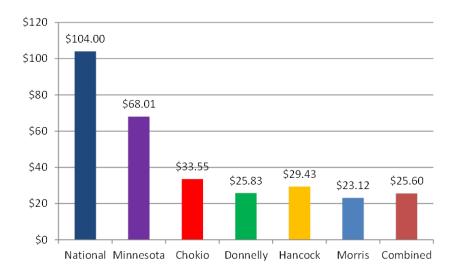
County, approximately 140 miles west of the Minneapolis metropolitan area. The department operates from a single facility with a staff of 28 personnel utilizing nine apparatus to deliver services to an area of 122 square miles and a population of 6,704.

Comparatively speaking, the distribution of area served by Chokio, Donnelly, Hancock, and Morris Fire Departments is relatively equal at 31 percent, 22 percent, 25 percent, and 22 percent, respectively. Conversely, the distribution of population among the four departments is much more varied, with Morris serving 63 percent; Hancock, 16 percent; Chokio, 12 percent; and Donnelly, 9 percent.

In addition to the general overview of each agency, the evaluation of current conditions within each department analyzed governance and lines of authority, foundational policy documents and organizational design. The evaluation of these components resulted in the following recommendations.

- Each department needs to ensure that both administrative and operational policies are kept updated and written in a complete and professional format.
- Each department needs to improve the quality and content of its standard operating guidelines, particularly in the area of response operations. Additional guidelines are needed for tactics, fire stream operations, pumping operations, ladders and ventilation, and other operational functions.
- Chokio, Donnelly, and Hancock should review organizational structures to ensure the fire chief
 does not exceed a reasonable span of control, typically considered to be between three and
 seven.

The next component evaluated was that of budget and finance of each department in order to identify funding mechanisms, budgetary controls, and historical expenditures. Within each department, the majority of expenditures is for operational costs, as would be expected from volunteer organizations; however, personnel costs were found to be unusually high. These costs are based on response and incentive pay provided to each departmental member. From a regional perspective, funding for fire protection was found to be well below the national and Minnesota State averages as illustrated in the following figure.



ESCI continued with the evaluation of current conditions by analyzing critical issues, internal and external communications, document control and security, and information technology systems. Additionally, capital assets and capital improvement programs were evaluated.

Inadequate facilities for housing personnel and apparatus detract from an organization's mission. Limited space can significantly impact the available options for resource assignment, hinder the ability to maintain a well-trained workforce, and may affect member and employee morale. The table below provides a summary of each facility within the study region.

			Suitable for	Adaptable for
	Functionality	Safety	Current Use	Future Use
Chokio FD	Limited	Adequate	No	No
Donnelly FD	Limited	Adequate	No	No
Hancock FD	Limited	Minimally	No	No
Morris FD	Adequate	Adequate	Yes	Yes

In totality, the departments maintain a fleet of 28 response and specialty service vehicles. Most of the current emergency vehicles fall within what is considered to be an acceptable life span, with an average age calculated at 15.0 years. Each apparatus was evaluated based on a scale of Excellent, Good, Fair, Poor, and Serviceable. The following table summarizes the categorization of the primary response apparatus.

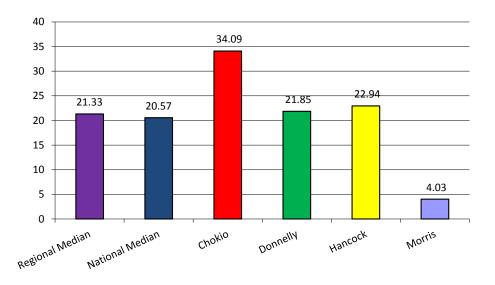
	CFD	DFD	HFD	MFD
Excellent	1	0	1	4
Good	1	3	2	2
Fair	3	3	5	3
Poor	0	0	0	0
Serviceable	0	0	0	0

Next, ESCI evaluated the staffing and personnel management components of each organization. The following figures summarize the administrative and emergency response personnel current in use.

	CFD	DFD	HFD	MFD	Total
Fire Chief	1	1	1	1	4
Assistant Chief	1	2	2	2	7
Secretary	1	1	1	1	4
Relief Association Board Members	5	5	7	7	24
Training Officer	2	2	1	1	6
Total Admin and Support	10	11	12	12	45

	CFD	DFD	HFD	MFD	Total
Captain	-	1	-	3	4
Firefighters	11	13	14	19	57
Total Operations	11	14	14	22	61

The following figure compares the study departments to the regional and national medians for numbers of volunteer personnel per 1,000 population.



In most communities around the country, the number of fire calls has declined over the past decade. Yet as the frequency of fires diminishes, in part due to stricter fire codes and safety education, the workload of fire departments has risen sharply — medical calls, hazardous materials calls, and every sort of household emergency are now addressed by fire departments. Therefore, as the frequency of fires diminishes, the need for a ready group of firefighters has increased. The following summarizes how well each department did during 2010 at producing staff for structure fires.

	Average Staff
CFD	11.3
DFD	3.0
HFD	0.0
MFD	25.7
Overall Average	10.0

It should be noted that these figures were extracted from each department's National Fire Incident Reporting System (NFIRS) database and the method by which each department tracks personnel could not be determined. Total personnel on the scene for structure fires could include mutual aid personnel. In addition, CFD recorded only two structure fires during the two-year data period, and DFD also recorded two structure fires. HFD recorded zero structure fires, and Morris recorded seven structure fires. The low incidence of structure fires makes the use of average staffing levels somewhat unreliable.

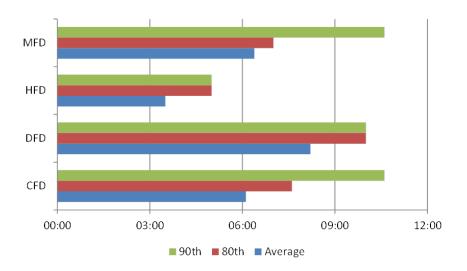
Additional staffing and personnel management components evaluated during this section include compensation systems, disciplinary processes, application, recruitment and retention efforts, and promotional processes. The remainder of the first report section focuses on service delivery and performance, beginning with an evaluation of the Emergency Notification System. From this point, ESCI evaluated service demand (workload), distribution of resources, and response performance.

Overall, the region experienced 98 incidents during 2010 as compared to 79 incidents during 2009. This number is significantly below expected workload but is a testament to the safety of the general community. Evaluating service demand temporally revealed that workload generally increases during the summer months, during the midweek days, and during normal daytime working hours. These trends closely follow typical human activity and would be expected for a system of this size and geography.

Across the region, the four agencies operate from four facilities, all staffed with volunteers based on incident dispatch. No station has on-duty coverage 24 hours per day. There exists a certain extent of the

jurisdiction that can be reached within a certain travel time from the stations regardless of staffing patterns. Based on the fact that ESCI was unable to plot calls for service, it is not possible to determine what percentage of service demand falls within each of the noted travel models. Each agency should ensure that incident records document the exact 9-1-1 address of each incident in order to plot service demand geographically for future study and analysis of resource deployment.

Total response time is the amount of time a resident or business wait for an apparatus to arrive at the scene of an emergency beginning when they first call 9-1-1. The following charts illustrate the response time for the study agencies for 2010 based on the average, 80th and 90th percentile measurements.



Region-wide, the average response time to emergency incidents calculated to be 6:03, with a 90th percentile response performance of 9:03 and 7:24 when measured at the 80th percentile. *NFPA 1720* recommends that volunteer and combination departments establish response performance standards that achieve response times of 9:00 at the 90th percentile in urban areas, 10:00 at the 80th percentile in suburban areas, and 14:00 at the 80th percentile is rural areas. Although the study region was not evaluated on the basis of population density to determine those areas that would be classified as urban, suburban, or rural, it would appear that a joint, concerted response by the study agencies would achieve response performance that exceeds the NFPA recommendations.

The Evaluation of Current Conditions for this project concludes with an evaluation of incident command and control, mutual and automatic aid systems, training programs, and life safety services programs. Analysis of these components resulted in the following recommendations.

- CFD, HFD, and MFD should formally adopt a local policy that is compliant with the "two-in, two-out" OSHA regulations for operating in hazardous atmospheres, including structure fires.
- CFD, HFD, and MFD should adopt minimum hazardous material training requirements of Operations Level for all persons responding to incidents involving leaks or spills of fuels or other hazardous substances.
- CFD, DFD and HFD should adopt a formal NIMS-compliant Incident Command System for all emergency responses.
- CFD, DFD and HFD should adopt a formal personnel accountability system and initiate it for all high-risk emergency responses.
- CFD, DFD and HFD should initiate the use of a safety officer assignment for all high-risk emergency responses.
- Each department should formally adopt a policy that requires a minimum level of training prior to allowing new personnel to respond to incident scenes.
- Each department should develop a standard training manual that ensures new personnel have met minimum requirements before leaving probationary status.
- CFD and HFD should adopt minimum annual training requirements for all personnel.
- CFD, DFD, and MFD should establish consistent officer training programs to encourage member advancement.
- CFD, DFD, and HFD should each adopt a standard training curriculum to ensure that each member is being trained consistently across each department.
- Each training session, regardless of instructor, should follow a formal lesson plan and have a safety office appointed to oversee any manipulative sessions.
- CFD, DFD, and HFD should institute a program mirroring MFD that evaluates personnel physical abilities and capacities
- CFD, DFD, and HFD should institute a program to periodically conduct skills competency for all members.
- All departments should work together to implement a computerized training records management system to track individual training, departmental training, and individual certification requirements.

The next section of the report addresses potential opportunities for cooperative efforts between the study agencies. The previous section of the document provides an overview and baseline assessment of the emergency services delivery system within Chokio, Donnelly, Hancock and Morris and each department's primary response areas outside their respective municipal boundaries. This section uses that assessment of baseline conditions to develop scenarios for future service delivery utilizing the concept of shared or cooperative services.

Four basic strategies are generally available when considering consolidation of services, beginning with a do-nothing approach and ending with complete unification of the organizations into what is, essentially, a new emergency service provider: Autonomy, Functional Consolidation, Operational Consolidation and Legal Unification. Each strategy is discussed within the body of the report. In identifying potential cooperative opportunities, the project team considered the key issues now challenging each agency. Some issues represent roadblocks to integration, while others provide a unique chance for improvement. As an element of the review, affected staff and other officials provided local and internal perspective on organizational culture, community expectation, and other significant matters.

The evaluation of the feasibility of consolidating the four study agencies is presented in detail including the level of cooperation, timeline for completion, sections affected and overall objective. The following is a summary of the option.

The fire departments within Stevens County already benefit from some collaborative programs such as mutual and automatic aid; it is natural that continuing the long-term strategy of cooperation should eventually lead to the whole area forming a single fire agency. Since each department within Stevens County is volunteer in the way that they delivery services, the total budget for fire protection is extremely low at \$270,388. The greatest savings from consolidations and/or mergers are typically found in personnel costs. This is not the case with Stevens County. Volunteers would presumably still receive incentive pay for incident response, training sessions, and meetings and would likely see an overall increase in these incentives based on the highest current incentive paid (\$10.00 – MFD); the consolidated system could potentially employ a full- or part-time Chief to oversee the entire operation. These changes could result in an increase in the overall cost of providing fire protection to the county through a consolidated system.

Aside from an operational consolidation of the four study agencies, there are other functional components of each department that could be operated in a cooperative manner. As was shown during the evaluation phase of this report, apart from automatic and mutual aid, each department operates independently. Little in the way of standard operating guidelines, training, recordkeeping, unit staffing, etc. is coordinated among the departments. This produces inefficiencies throughout the system. In the absence of consolidation of the study agencies, ESCI makes the following recommendations in regard to functional cooperative efforts that should improve efficiency and the overall level of service to the community as well as an increased level of safety for department personnel.

- A Develop Standard Operating Guidelines
- B Create a Unified Occupational Medicine Program
- C Create a Unified Wellness and Fitness Program
- D Develop and Adopt Common Training Standards
- E Create a Regional Training Manual
- F Develop an Annual Regional Training Plan
- G Purchase Uniform Emergency Apparatus
- H Provide for Joint Incident Command and Operations Supervision

The remainder of the report describes a recommended process for moving forward with the potential implementation of a cooperative service delivery effort. The word 'potential' is used here because a part of this process includes the policy decisions necessary to determine, based on the results of the study, whether there is sufficient desire among the political bodies of the organization to continue with the process or not. The implementation begins with that step.

The ESCI project team began collecting information concerning the fire and emergency services for Chokio, Donnelly, Hancock, and Morris in May 2011. The team members recognize that the report contains a large quantity of information and ESCI would like to thank the elected officials of each organization involved as well as the officers, employees and volunteers of the four fire departments for their tireless efforts in bringing this project to fruition. ESCI would also like to thank the various individuals and external organizations for their input, opinions, and candid conversations throughout this process. It is ESCI's sincere hope that the information contained in this report is utilized to its fullest extent and that the emergency services provided to the citizens of Chokio, Donnelly, Hancock, and Morris, as well as the surrounding areas, are improved by its implementation.

Evaluation of Current Conditions

Emergency Services Consulting International (ESCI) was engaged by Stevens County, Minnesota to evaluate the current delivery of fire and emergency services throughout the county and to provide recommendations regarding the feasibility of moving forward with shared or cooperative efforts among the four emergency services providers. This document serves as the culmination of that project by providing information on the current delivery of emergency services as well as making recommendations for future cooperative service delivery. This section provides a general overview of the current conditions.

Organization Overview

Chokio Fire Department

Chokio Fire Department (CFD) is a direct operating department of the City of Chokio in the state of Minnesota. The department provides fire protection services to a jurisdiction that encompasses all of the governmental boundaries of the community, along with additional contractual service areas. The jurisdiction is located in Stevens County, approximately thirteen miles west of Morris. The response area includes rural residential and agricultural land and has been experiencing very limited growth.

Currently, the specific services provided by the department include fire suppression. Technician-level hazardous materials response is provided by a state team. Call receipt and dispatch services are provided by Stevens County Communications Center.

This department provides service to a population of approximately 1,243 in an area of approximately 175 square miles. The services are provided from one facility with a fleet of vehicles that includes two engines, one tanker, and two brush trucks.

There are currently a total of 20 personnel involved in delivering and supporting the department's services. The primary "management team" is made up of the chief, assistant chief and training officer. Primary response staffing is provided by on-call responders coming from home or work. For immediate response, there are typically a minimum of 4 personnel that are in the community and available, carrying pagers to receive radio calls for emergency response.

The Insurance Services Office (ISO) reviews the fire protection resources within communities and provides a Community Fire Protection Rating system from which insurance rates are often based. The



rating system evaluates three primary areas: the emergency communication and dispatch system, the fire department, and the community's pressurized hydrant or tanker-based water supply. The overall rating is then expressed as a number between 1 and 10, with 1 being the highest level of protection and 10 being unprotected or nearly so. As of the latest rating, ISO gave the service area a rating of class 7. The latest ISO rating review was conducted in 2005.

Donnelly Fire Department

Donnelly Fire Department (DFD) is a direct operating department of the City of Donnelly in the state of Minnesota. The department provides fire protection and emergency medical first responder services to a jurisdiction that encompasses all of the governmental boundaries of the community, along with additional contractual service areas. The jurisdiction is located in Stevens County, approximately 8 miles northwest of the City of Morris. The response area includes rural residential and agricultural land and has been experiencing very limited growth.

Currently, the specific services provided by the department include fire suppression, emergency medical first responder, vehicle extrication, hazmat operations-level, and public education. Technician-level hazardous materials response is provided by a state team. Call receipt and dispatch services are provided by Stevens County Communications Center.

This department provides service to a population of 908 in an area of approximately 121 square miles. The services are provided from one facility with a fleet of vehicles that includes two pumpers, two tankers, one brush truck, and one rescue. There are currently a total of 23 personnel involved in delivering and supporting the department's services. The primary "management team" is made up of the chief, two assistant chiefs, two training officers, and a rescue captain. Primary response staffing is provided by on-call responders coming from home or work. For immediate response, there are typically a minimum of 8 personnel that are in the community and available, carrying pagers to receive radio calls for emergency response.

The Insurance Services Office (ISO) Community Fire Protection Rating for this department is class 7/9. The split rating applies the lower of the two ratings to those structures within five miles of a fire station and within 1,000 feet of a hydrant or creditable water source. All others receive the higher rating.

Hancock Fire Department

Hancock Fire Department (HFD) is a direct operating department of the City of Hancock in the state of Minnesota. The department provides fire protection services to a jurisdiction that encompasses all of the governmental boundaries of the community, along with additional contractual service areas. The jurisdiction is located in Stevens County, approximately nine miles southeast of the City of Morris. The response area includes rural residential and agricultural land and has been experiencing very limited growth. The department first began providing services in 1910.

Currently, the specific services provided by the department include fire suppression, hazmat operations-level, and public education. Technician-level hazardous materials response is provided by a state team. Call receipt and dispatch services are provided by Stevens County Communications Center.

This department provides service to a population of 1,706 in an area of approximately 138.5 square miles. The services are provided from one facility with a fleet of vehicles that includes three pumpers, two tankers, two brush trucks, and an equipment van.

There are currently a total of 25 personnel involved in delivering and supporting the department's services. The primary "management team" is made up of the chief and two assistant chiefs. Primary response staffing is provided by on-call responders coming from home or work. For immediate response, there are typically a minimum of 10 personnel that are in the community and available, carrying pagers to receive radio calls for emergency response.

The Insurance Services Office (ISO) Community Fire Protection Rating for this department is class 6/9. The split rating applies the lower of the two ratings to those structures within five miles of a fire station and within 1,000 feet of a hydrant or creditable water source. All others receive the higher rating. The latest ISO rating review was conducted in 2011.

Morris Fire Department

Morris Fire Department (MFD) is a direct operating department of the City of Morris in the state of Minnesota. The department provides fire protection services to a jurisdiction that encompasses all of the governmental boundaries of the community, along with additional contractual service areas. The jurisdiction is located in Stevens County, approximately 140 miles west of the Minneapolis metropolitan area. The response area includes urban residential and commercial, rural residential and agricultural

areas and has been experiencing very limited growth. The department first began providing services in 1890.

Currently, the specific services provided by the department include fire suppression, vehicle extrication, hazmat operations-level, technical rescue- high-angle rope, technical rescue- confined space, code enforcement and inspections, and public education. Technician-level hazardous materials response is provided by a state team. Call receipt and dispatch services are provided by Stevens County Communications Center.

This department provides service to a population of 6,704 in an area of approximately 122 square miles. The services are provided from one facility with a fleet of vehicles that includes three engines, one ladder, one rescue truck, one tanker, two brush units, and a utility truck.

There are currently a total of 28 personnel involved in delivering and supporting the department's services. The primary "management team" is made up of the chief, two assistant chiefs, three captains, and a training officer. Primary response staffing is provided by on-call responders coming from home or work. For immediate response, there are typically a minimum of 18 personnel that are in the community and available, carrying pagers to receive radio calls for emergency response.

The Insurance Services Office (ISO) Community Fire Protection Rating for this department is class 6. The latest ISO rating review was conducted in 1998.

The following figure provides a side-by-side comparison of the land area served by each of the study agencies.

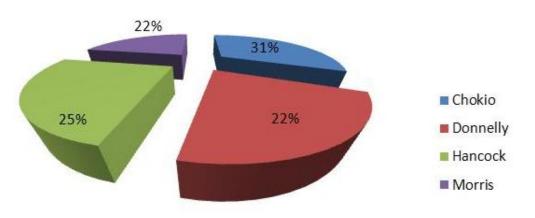


Figure 1: Regional Comparison of Area Served - Square Miles

As illustrated in the figure above, service area is well distributed amongst the four fire departments. However, the populations of the departments varies widely as noted in the following figure.

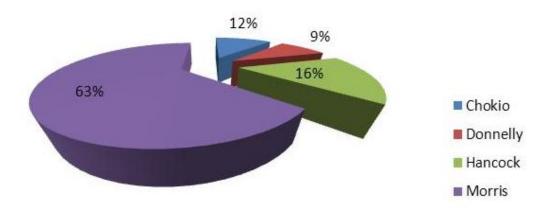


Figure 2: Regional Comparison of Population Served

As the largest municipality in Stevens County, Morris contains 63 percent of the county's total population. This will be reflected later in service demand.

Governance and Lines of Authority

It is important to understand the governance structure in which a fire department operates. This includes the documents that authorize its functioning and the ability for it to receive adequate and sustainable funding. The lines of authority differentiate the basic organizational structure under which each department functions.



The following table describes the basic governance and authority of these fire departments.

Figure 3: Comparison of Organizational Governance

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Municipality or Organization Type	Municipality	Municipality	Municipality	Charter city
Name Of Governing Entity, Board or Person	City of Chokio	City of Donnelly	City of Hancock	City of Morris
Taxing Authority	Provided the authority to levy taxes for operating a fire protection system	Provided the authority to levy taxes for operating a fire protection system	Provided the authority to levy taxes for operating a fire protection system	Provided the authority to levy taxes for operating a fire protection system
Form of Government	Strong Mayor- Council	Strong Mayor- Council	Strong Mayor- Council	Council-Manager
Title of Governing Authority or Body	City Council	City Council	City Council	City Council
Governing Authority Number of Members	5	5	5	5
How Are Governing Authority Members Appointed	Elected by the voters			
Length of Term for Governing Authority Members	Two years	Four years	Four years	Four years
Title of Governing Authority Executive	Mayor	Mayor	Mayor	City Manager
Agency Authorization Document	City charter and ordinances			
Policy Limiting Governing Body from Operational Authority	No	Yes	Yes	Yes
Fire Chief Status	Elected officer position	Elected officer position	Elected officer position	Elected officer position
Elected Fire Chief Term of Office	Two years	Two years	Three years	Two years

Foundational Policy Documents

Organizations that operate efficiently are typically governed by clear policies that lay the foundation for effective organizational culture. These policies set the boundaries for both expected and acceptable behavior, while not discouraging creativity and self-motivation. A comprehensive set of departmental operating rules and guidelines should contain at least two primary sections. The following format is suggested.



- 1. Administrative Rules This section would contain all of the rules that personnel in the organization are required to comply with at all times. Administrative Rules, by definition, require certain actions or behaviors in all situations. The governing body should adopt or approve the Administrative Rules since the Chief is also subject to them. However, the Board should then delegate authority to the Chief for their enforcement on department personnel. The Administrative Rules should govern all members of the department: paid, volunteer and civilian. Where rules and policies, by their nature, require different application or provisions for different classifications of members, these differences should be clearly indicated and explained in writing. Specifically the Administrative Rules should contain sections which address:
 - Public records access and retention
 - Contracting and purchasing authority
 - Safety and loss prevention
 - Respiratory protection program
 - Hazard communication program

- Harassment and discrimination
- Personnel appointment and promotion
- Disciplinary and grievance procedures
- Uniforms and personal appearance
- Other personnel management issues
- 2. Standard Operating Guidelines (SOGs) This section should contain "street-level" operational standards of practice for personnel of the department. SOGs are different from Administrative Rules in that variances are allowed in unique or unusual circumstances where strict application of the SOG would be less effective. The document should provide for a program of regular, systematic updating to assure it remains current, practical and relevant. SOGs should be developed, approved, and enforced under the direction of the Fire Chief.

The following table provides information related to each of the departments' foundational policy documents.

Figure 4: Comparison of Foundational Documents

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Titles of Policy Documents	By-laws	By-laws	City ordinances	By-laws, standard operating guidelines
Total Number of Policy/Governing Documents	1	1	1	2
Quality of Administrative Policy Documents	Poorly organized and hard to apply	Well organized and complete	Minimal content, roughly organized	Well organized and complete
Important Civil Liability and Risk Management Policies Present	No	No	No	In city documents not currently applied to FD
Quality of Standard Operating Policies	None	None	None	Reasonably well- organized
Adequate Operational Scene Guidance	No	No	No	Content could be expanded and updated



The following two tables provide a listing of various topics that the fire departments might eventually wish to consider including in their Standard Operating Guidelines to enhance field operations.

Figure 5: Sample SOG Topics for Field Operations

Alarms and Response Procedures	Medical Emergencies			
Alarm Response Procedures	Operational Guidelines for Medical Aid Responses			
Alarm Response Areas	Operations with Ambulance Personnel			
Automatic Aid	Emergency Medical Technician - Defibrillator (EMT-D)			
Mutual Aid	Major Medical Incidents			
Contractual Agreements	Triage			
Fire Company Operations	Exposure to Infectious Diseases and Hazardous Materials			
Standard Company Operations	Suspected Drug Overdose			
First to Arrive Duties	Animal Bites			
Returning Companies to Service	Vial of Life and Medic Alert Tags			
Use of Civilians	Attempted Suicide			
Fire Scene Investigations	Suspected Homicide			
High Volume Smoke Removal System	DOA (Dead on Arrival)			
Personal Alert Safety Devices	Suspected Child Abuse			
On-Scene Equipment Inventory	Suspected Sexual Assault			
Personnel Accountability System	Hospital Disaster Notification			
2 IN 2OUT	EMS Reports			
Initial Fireground Operations	EMS Radio Procedures			
Fluorescent Safety Vests	Drug Box Exchange Policy			
Highway Incident Safety	BLS Rules and Regulations			
Command Operations	ALS Rules and Regulations			
General Strategic Guidelines	Electrical Emergencies			
Incident Management System	Electrical Emergency Operations			
Command Post Procedures	Rescue Operations			
Welfare	Vehicle Rescue and Extrication			
Helicopter Operations	Life Line Operations			
Public health Considerations	Rescue from Machinery			
Incident Critique	Escalator Emergencies			
Area Evacuation	Elevator Emergencies			
Incident Command Resource Request	Cave-in and Manhole Rescues			
Building Evacuation	Building Collapse			
Firefighting	Rescue at Structure Fires			
Metal Fires	Transportation Emergencies			
Structure Fires (General)	Interstate Operations			
Operations in Sprinklered Buildings	Railroad Emergencies			
On-Site Auxiliary Fire Equipment	Aircraft Emergencies			
High Rise Fires	Hazardous Materials Incidents			
Wildland Fires	Hazardous Materials (General)			
Vehicle Fires	Flammable Fuel Spill (Liquid or Gas)			
Fire Stream Management	LPG Emergencies			
Industrial Dumpster Fires	Fumigation Emergencies			
Fire Watch Detail	Explosives and Bombs			
Fires in US Mailboxes	PCB's			
University of Virginia Reactor Facility	Pesticide Procedures			
High Rise Pack	Radioactive Materials			
Bowstring Truss Roof - Operations Procedures	Natural Gas Filled Structures - No Fire			
Carbon Monoxide Hazards	Natural Gas Fed Fire - Inside Structure			
Thermal Image Camera	Broken Natural Gas Main - Fire			
	Broken Natural Gas Main - No Fire			



Figure 6: Sample SOG Topics for Non-Emergency Operations

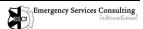
Station Operations	Color Coding Equipment		
Station Operations - General	Radio Repair Procedure		
Station Maintenance	Pressure Vessel Maintenance		
Station Alerting System	Hose Maintenance		
Purchasing Procedures	Self-Contained Breathing Apparatus (SCBA)		
National Flag/National Anthem	Preventive Maintenance - SCBA's		
Equipment Loan Out	Respiratory Breathing Air Systems		
Yard Maintenance	Ladder Maintenance		
Emergency Power Systems	Nozzle Maintenance		
Miscellaneous Station Duties	Fire Extinguishers		
Personal Locker Assignments	Hydrant Maintenance		
Telephone Use	Hand Tool Maintenance		
Station Libraries	Power Tool Maintenance		
Scheduling Use of Media Center	Chainsaw Operation and Maintenance		
Energy Conservation	Circular Saw Operation and Maintenance		
Apparatus Operations	Public Education		
Apparatus Maintenance	General Policy		
Vehicle Out of Service Procedure	Public Education Scheduling Policy		
Testing Apparatus Pumps	Public Relations		
Driving Emergency Vehicles	Station Tours		
Warning Devices	Fire Extinguisher Demonstrations		
Apparatus Operational Limits	Engine Demonstrations		
Fueling Procedure	Special Activities Engine - Engine One		
Reserve Apparatus	Radio Controlled Education Robots		
Apparatus Snow Chains	Fire Prevention		
Apparatus Movement to Training Center	Fire Company Fire Prevention Inspections - General		
Driver Operator - Pump Certification	Fire Prevention Inspection Guideline		
Equipment Operations	Fire Investigation		
Equipment Repairs	Related Codes		
Equipment Out of Service	Pre-Fire Plans		

Recommendation:

- Each department needs to ensure that both administrative and operational policies are kept updated and written in a complete and professional format.
- Each department needs to improve the quality and content of their standard operating guidelines, particularly in the area of response operations. Additional guidelines are needed to guide tactics, fire stream operations, pumping operations, ladders and ventilation, and other operational functions.

Organizational Design

A well-designed organizational structure should reflect the efficient assignment of responsibility and authority, allowing the organization to accomplish effectiveness by maximizing distribution of workload.



The lines on an organizational chart simply clarify accountability, coordination and supervision. Thorough job descriptions should provide the details of each position and ensure that each individual's specific role is clear and centered on the overall mission of the organization.

The organizational structure of the department should demonstrate a clear unity of command, in which each individual member reports to only one supervisor (within the context of any given position) and is aware to whom he or she is responsible for supervision and accountability. This method of organization encourages structured and consistent lines of communication and prevents positions, tasks, and assignments from being overlooked. The overall goals and objectives of the organization can be more effectively passed down through the rank and file members in a consistent fashion.

The organizational structure should be charted with clear, designated operating divisions that permit the core functions of the organization to be the primary focus of specific supervisors and assigned members. While some task-level activities may carry over from division to division, the primary focus of leadership, management, and budgeting within the division should be clarified by the division's key function within the mission statement. Those individuals supervising or operating within a specific division must be positively clear as to the role of the division and its goals and objectives.

The department should have sufficiently analyzed its mission and functions such that a resulting set of specific agency programs have been established. Organized, structured programs permit better assignment of resources, division of workload, development of future planning, and analysis of service delivery. Those departments that have clarified their programs with titles, assigned leadership, resources, budget appropriations, performance objectives and accountability are among the most successful.

The following table provides information related to these departments' basic organizational design.

Figure 7: Comparison of Organizational Design

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Does This Department Have Clear Unity of Command	Yes	Yes, within roles that vary due to limited organization structure	Yes	Yes
Is This Department Organized With Clear Operating Divisions	No	No	No	Yes: Truck, Ladder, Rescue
Are There Specific Programs With Managers Designated	The organization is small and programs are limited primarily to core services	The organization is small and programs are limited primarily to core services	The organization is small and programs are limited primarily to core services	The organization is small and programs are limited primarily to core services
List The Individuals That Report Directly To The Chief	All members	all personnel	all personnel	assistant chiefs
Chief's Span of Control	20	22	25	28
What is the Chief's Disciplinary Authority	Disciplinary policy is unclear	Limited suspension from duty pending authorization	Suspension from duty and recommendation for termination	Suspension from duty and recommendation for termination
Quality of Job Descriptions	None	None	Incomplete, with only key duties listed	Complete

Recommendation:

• CFD, DFD, and HFD should review organizational structures to ensure the fire chief does not exceed a reasonable span of control, typically considered to be between three and seven.

Budget and Finance

Without adequate funding, no emergency services organization can survive or provide the level of service the community expects and deserves. Adequate funding can come from a variety of sources including property taxes, special purpose levies, fund-raising, donations, or fees for service. Regardless of the source of revenue, it is imperative that departments have sufficient funding to carry out their primary mission. This section provides an overview of each agency's financial and budgeting components.

Chokio

CFD is an operating division of the City of Chokio and, as such, receives operating funds from the taxes levied by the City and through contracts for service with surrounding municipalities. The following figure illustrates how the department's budget has varied over the last five years.

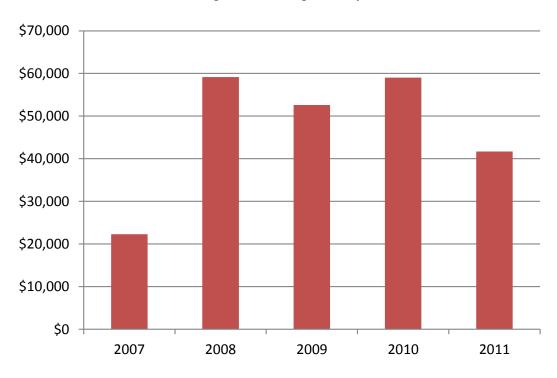


Figure 8: CFD Budget History

Although a majority of the department's funding comes from the City of Chokio, the department also has contracts with nine townships as well as Big Stone County to provide fire protection within those areas. The following figure illustrates how much of each area is protected and the amount of funding received from each.

Figure 9: Revenue Distribution - CFD

	Amount	Percent Serviced	Population	Population Served	Cost Per Capita
City of Chokio	\$28,363	100.00%	443	443	\$64.02
Big Stone County	\$25	Farmsite	5	5	\$5.00
Baker Township	\$2,500	100.00%	265	265	\$9.43
Eldorado Township	\$250	10.00%	109	10.9	\$22.94
Everglade Township	\$2,500	100.00%	128	128	\$19.53
Leonardsville Township	\$144	5.50%	145	8	\$18.03
Moonshine Township	\$419	16.75%	149	25	\$16.78
Pepperton Township	\$1,250	50.00%	148	74	\$16.89
Scott Township	\$2,500	100.00%	150	150	\$16.67
Stevens Township	\$2,500	100.00%	82	82	\$30.49
Synnes Township	\$1,250	50.00%	104	52	\$24.04

Based on the information contained in the figure above, the total cost per capita calculates to \$33.55. This is substantially below the Minnesota and National per capita rates for fire protection as illustrated in the following figure.

Figure 10: Cost Per Capita Comparison - CFD

Emergency services organizations distribute their respective budgets in different ways based on what types of services are delivered and whether or not paid personnel are utilized within the system. Those

agencies that employ paid personnel tend to spend a majority of their budgets on personnel expenditures (salaries and benefits) while volunteer agencies tend to focus their spending on operational costs. The figure below illustrates how CFD distributed the 2010 budget across the three primary categories of personnel, operations, and capital.

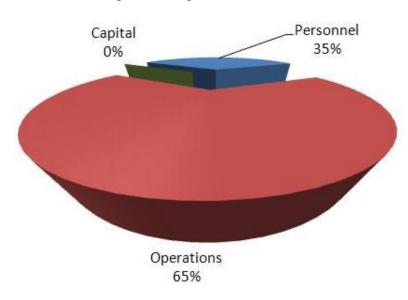


Figure 11: Budget Distribution - CFD

As can be seen in the figure above, CFD commits most budgetary funds to operational costs. The personnel expenditures noted are for incentives provided to volunteer members of the department based on participation and response activity.

In regard to debt, CFD is not holding any debt as it relates to the delivery of emergency services. Likewise, the department reports no open claims that could represent a financial liability.

Donnelly

DFD is an operating division of the City of Donnelly and, as such, receives operating funds from the taxes levied by the City and through contracts for service with surrounding municipalities. The department was not able to provide a budget history but did supply the 2010 budget information, which totaled \$24,453. The figure below illustrates how that budget is distributed across the personnel, operations, and capital expenditure categories.

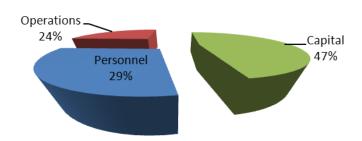


Figure 12: Budget Distribution - DFD

As can be seen in the figure above, DFD commits most budgetary funds to operational costs. The personnel expenditures noted are for incentives provided to volunteer members of the department based on participation and response activity.

Although a majority of the department's funding comes through the City of Donnelly, the department also has contracts with six townships to provide fire protection within those areas. The following figure illustrates how much of each area is protected and the amount of funding received from each.

Figure 13: Revenue Distribution - DFD

	Amount	Percent Serviced	Population	Population Served	Cost Per Capita
City of Donnelly	\$4,320	100%	254	254	\$17.01
Pepperton Township	\$2,160	50%	148	74	\$29.19
Morris Township	\$1,440	40%	574	229.6	\$6.27
Rendsville Township	\$4,320	100%	177	177	\$24.41
Donnelly Township	\$4,320	100%	113	113	\$38.23
Eldorado Township	\$960	20%	109	21.8	\$44.04
Roseville Township	\$1,080	25%	154	38.5	\$28.05

The remainder of the department's funding comes from training and equipment grants, insurance payments, truck fund payments and other miscellaneous sources.

Based on the information contained in the figure above, the total cost per capita calculates to \$25.83. This is substantially below the Minnesota and National per capita rates for fire protection as illustrated in the following figure.

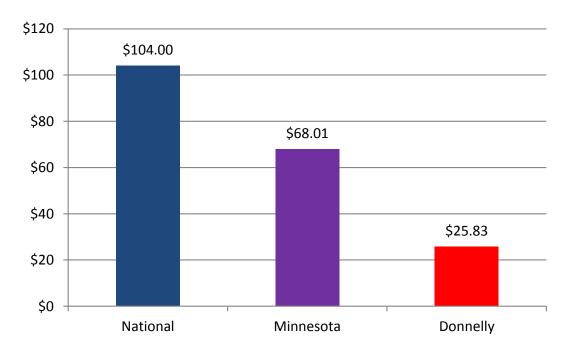


Figure 14: Cost Per Capita Comparison - DFD

Hancock

HFD is an operating division of the City of Hancock and, as such, receives operating funds from the taxes levied by the City and through contracts for service with surrounding municipalities. The following figure illustrates how the department's budget has varied over the last five years.

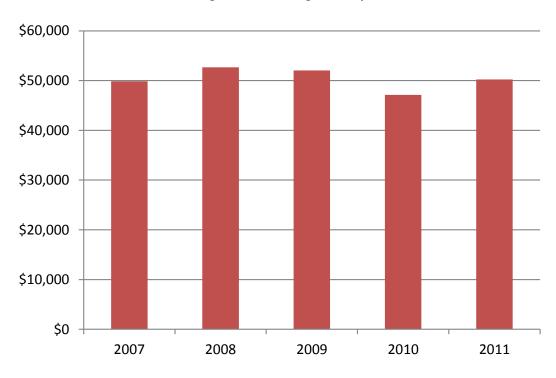


Figure 15: HFD Budget History

Although a majority of the department's funding comes from the City of Hancock, the department also has contracts with six townships to provide fire protection within those areas. The following figure illustrates how much of each area is protected and the amount of funding received from each.

Figure 16: Revenue Distribution - HFD

	Amount	Percent Serviced	Population	Population Served	Cost Per Capita
City of Hancock	\$36,528	100%	765	765	\$47.75
Hodges Township	\$3,957	74%	277	205	\$19.30
Horton Township	\$4,325	74%	170	125	\$34.61
Hoff Township	\$3,457	67%	152	102	\$33.95
Moore Township	\$6,391	100%	243	243	\$26.30
Tara Township	\$1,224	19%	88	17	\$73.21
Walden Township	\$2,625	50%	500	250	\$10.50



Based on the information contained in the figure above, the total cost per capita calculates to \$29.43. This is substantially below the Minnesota and National per capita rates for fire protection as illustrated in the following figure.

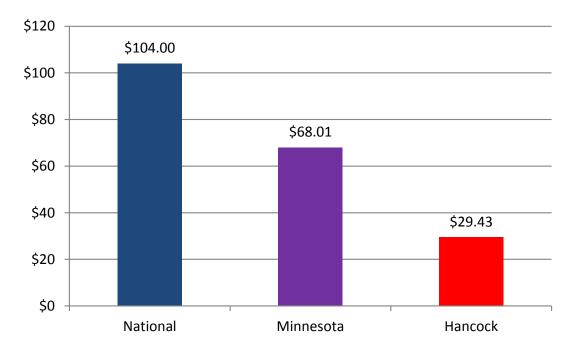


Figure 17: Cost Per Capita Comparison - HFD

Emergency services organizations distribute their respective budgets in different ways based on what types of services are delivered and whether or not paid personnel are utilized within the system. Those agencies that employ paid personnel tend to spend a majority of their budgets on personnel expenditures (salaries and benefits) while volunteer agencies tend to focus their spending on operational costs. The figure below illustrates how HFD distributed the 2010 budget across the three primary categories of personnel, operations, and capital.

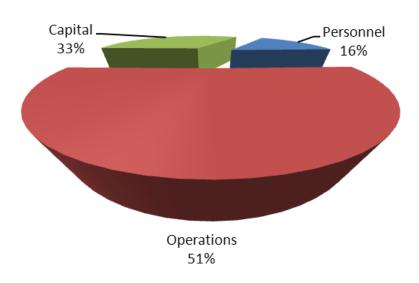


Figure 18: Budget Distribution - HFD

As can be seen in the figure above, HFD commits most budgetary funds to operational costs. The personnel expenditures noted are for incentives provided to volunteer members of the department based on participation and response activity.

Morris

MFD is an operating division of the City of Morris and, as such, receives operating funds from the taxes levied by the City and through contracts for service with surrounding municipalities. The following figure illustrates how the department's budget has varied over the last five years.

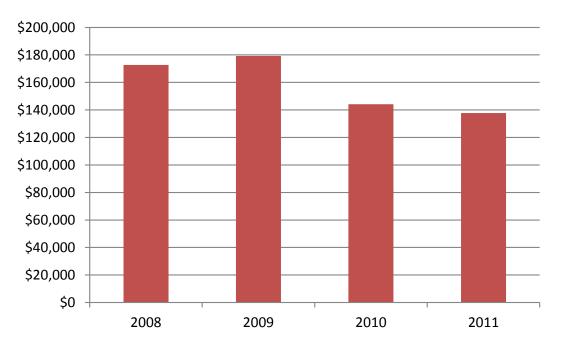
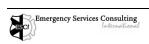


Figure 19: Budget History - MFD

Although a majority of the department's funding comes from the City of Morris, the department also has contracts with eight townships as well as the City of Alberta to provide fire protection within those areas. The following figure illustrates how much of each area is protected and the amount of funding received from each.

Figure 20: Revenue Distribution - MFD

	Amount	Percent Serviced	Population	Population Served	Cost Per Capita
City of Morris	\$138,310	100%	5286	5286	\$26.17
City of Alberta	\$4,175	100%	103	103	\$40.53
Fairfield Township	\$4,175	100%	128	128	\$32.62
Swan Lake Township	\$4,175	42%	194	81.48	\$51.24
Morris Township	\$4,175	64%	396	253.44	\$16.47
Faramnas Township	\$4,175	36%	305	109.8	\$38.02
Darnen Township	\$4,175	100%	292	292	\$14.30
Hodges Township	\$4,175	15%	277	41.55	\$100.48
Synnes Township	\$4,175	50%	118	59	\$70.76
Horton Township	\$4,175	26%	174	45.24	\$92.29



Based on the information contained in the figure above, the total cost per capita calculates to \$23.12. This is substantially below the Minnesota and National per capita rates for fire protection as illustrated in the following figure.

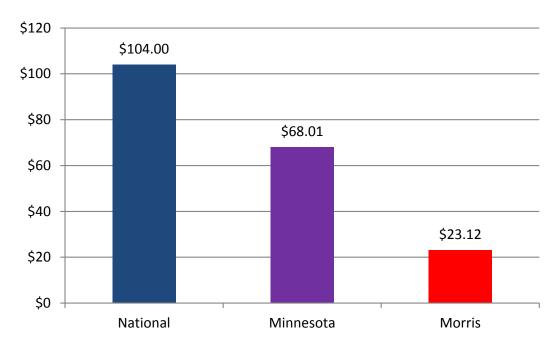


Figure 21: Cost Per Capita Comparison - MFD

Emergency services organizations distribute their respective budgets in different ways based on what types of services are delivered and whether or not paid personnel are utilized within the system. Those agencies that employ paid personnel tend to spend a majority of their budgets on personnel expenditures (salaries and benefits) while volunteer agencies tend to focus their spending on operational costs. The figure below illustrates how MFD distributed the 2010 budget across the three primary categories of personnel, operations, and capital.

Operations 32%
Personnel 54%

Figure 22: Budget Distribution - MFD

As can be seen in the figure above, MFD commits most budgetary funds to personnel costs. The personnel expenditures noted are for stipends, incentives and duty pay provided to volunteer members of the department based on participation and response activity.

Regional Summary

Although the individual department information provided previously is useful in evaluating each department singularly, the intent of this study is to evaluate the feasibility of cooperative or shared services regionally. Thus this section provides a summary of the combined finance and budget from each agency to produce an overall regional cost per capita. The total regional budget calculates to \$270,388. The following figure evaluates the budget distribution to the three categories noted previously.

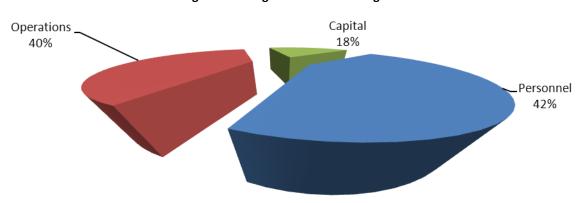


Figure 23: Budget Distribution - Regional

In regards to area distribution, the area protected by Morris would comprise a majority of the overall regional budget as illustrated below.



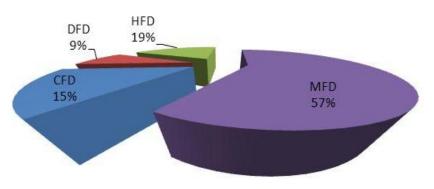


Figure 24: Budget Distribution by Department

In regards to revenues, ESCI assumed that the service area would remain the same as is currently served by each individual area and that current contracts would continue. Alternative funding methodologies will be presented later in this report. Based on 2010 budget figures the regional cost per capita for fire protection would calculate to \$25.60. As with each individual department, this is substantially lower than the Minnesota and National averages as is illustrated below.

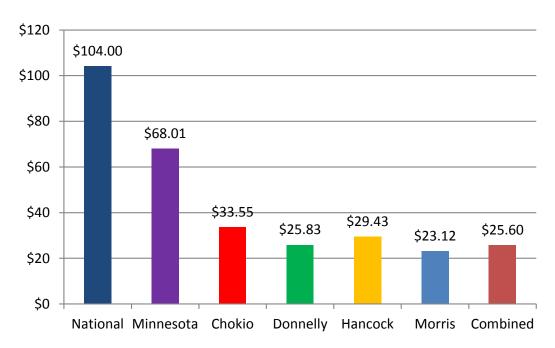


Figure 25: Regional Cost per Capita Comparison

Internal Assessment of Critical Issues

It is extremely important that there be a clear understanding of critical issues facing the departments. Without such an understanding, department leadership cannot be prepared to face these issues. In addition, the enunciation of critical issues to employees and members increases their awareness of the organization's priorities and assists them in becoming focused on solutions.

None of the departments in this study have conducted a formal strategic planning process. However, officers from each department were asked to identify the top three critical issues facing their agencies.

Morris Fire Donnelly Fire Chokio Fire Hancock Fire Department Department Department Department Critical Issue #1: Maintaining Daytime availability Ability to keep up Sustainable funding of response staff adequate daytime with administrative for operations and response staffing paperwork and capital replacement required trainings Critical Issue #2: Adequate response Maintaining Maintaining Maintaining adequate training adequate training staffing adequate training to ensure safe and and skill and skill effective operation competency competency Critical Issue #3: Apparatus funding Participation level Lack of standards Aging workforce of personnel has and operating and need to gain new personnel and been decreasing guidelines adequate experience for

Figure 26: Assessment of Critical Issues

Internal and External Communications

Quality communications is an achievable goal for any organization, but one that always seems to be most elusive. However, it is extremely important. Regularly scheduled meetings permit management personnel to openly exchange ideas on a regular basis, share issues and concerns, apply creative teambuilding and problem-solving, and improve the overall flow of communications. Distributed minutes or summaries of regular staff meetings encourages internal communications and permits members to share ideas on issues involving departmental issues, enhancing a feeling of empowerment among personnel. Written, formal memorandums ensure that all members receive critical data in an organized and consistent fashion. This process also provides a critical written record of internal communications that are important to organizational efficiency. Employee and community newsletters can foster improved relations with internal and external stakeholders.



younger members

To their credit, there are established communication processes within each of these departments that provide opportunities for department personnel to be heard and be involved and for information to be exchanged with the public. The following table provides information related to each agency's internal and external communications efforts.

Figure 27: Comparison of Internal and External Communications Factors

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Does this agency conduct regularly scheduled staff meetings for key management personnel?	Only as needed	Yes- monthly	Yes- monthly	Yes- monthly
Are minutes of the staff meetings taken and made available to the members?	No minutes taken	Yes	Minutes taken but not posted	Yes
Are written memos (print or electronic) used for the regular dissemination of agency information?	Not regularly, rely on department meetings	Not regularly	Not regularly, rely on department meetings	Yes
Is there a standardized process for distribution that ensures all members receive memos and information?	No	No	No	Yes
Is there a means of verifying receipt of critical policies or information?	No formal system	Yes- signature required	No formal system	No formal system
Are there any forums for members to exchange information with top management?	Yes- monthly member meetings	Yes- monthly member meetings	Yes- monthly member meetings	Yes- monthly member meetings
Does the agency or its parent community publish a regular employee newsletter?	No	No	No	No
Are the bulletin boards in the organization controlled and organized under the responsibility of a specific assigned individual/group?	No	No	No	Yes
Is email distribution of information available to all members of the organization and used regularly?	Yes- personal email addresses used	No formal regular use of email	Sporadic use of email by some	Yes- personal email addresses used



Do all members have a formal location for hard-copy information, forms, policies?	Chokio Fire Department No	Donnelly Fire Department No	Hancock Fire Department No	Morris Fire Department No
Do key personnel have availability of voicemail?	No regular voicemail used	No regular voicemail used	No regular voicemail used	No regular voicemail used. Fire Chief as voicemail
Does the community publish a regular newsletter to the general public?	No	Yes- issued by mail, agency has contributed material	Yes- issued by mail, agency has contributed material	No. Published and distributed to city departments
Does the department have an active website?	No	No	Yes- includes basic agency information only	Yes, includes updates statistics and public education materials
Has the agency or community ever conducted a formal survey of the public opinion regarding services, priorities, budgets, etc?	No	No	No	Yes, municipality conducted for all services
Does this agency have a formal, written complaint-handling policy in place?	No	No	Not in writing	Not in writing
Has any form of Citizen's Advisory Group ever been formed to assist this agency in regard to planning, budgeting, policy development, etc.?	No	No	No	No
Clear, Written Policy and Procedure for Access of Public Records (FOIA)	Policy not in writing	Policy not in writing	Yes	Yes



Document Control and Security Issues

A variety of uses are made of written records and their integrity must be protected. These fire departments also have a significant investment in facilities, apparatus, equipment and other items, along with their financial assets. Protecting these records and assets is very important.

The following table summarizes information related to document control and other security issues for these departments.

Figure 28: Document Control and Security Issues

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Hard Copy Files Secured	Yes, container locks only	Yes, container locks only	No	Yes, passage locks and container locks
Buildings Consistently Secured When Unoccupied	Yes- firm policy rigidly followed	Yes- firm policy rigidly followed	Yes- firm policy rigidly followed	Yes- firm policy rigidly followed
Public Access Limited When Buildings Occupied	Public access is not significantly controlled	Public access is not significantly controlled	Public access is not significantly controlled	Public access secured to limited areas
Locks or Codes Changed Occasionally	Locks changed in last 3 to 5 years	Locks changed in last 3 to 5 years	Locks rarely or never changed	Locks changed in last 3 to 5 years
Any Buildings with Premises Security Alarms	No security systems	No security systems	No security systems	No security systems
Any Buildings with Monitored Fire Alarm Systems	No monitored fire alarm systems	No monitored fire alarm systems	No monitored fire alarm systems	No monitored fire alarm systems
Cash Accepted on Premises	No cash accepted	No cash accepted	No cash accepted	No cash accepted
Petty Cash Use	No petty cash used	No petty cash used	No petty cash used	No petty cash used
General Use Credit Cards	No general use cards	No general use cards	No general use cards	No general use cards

Information Technology Systems

Records management is a critical function to any organization. Effective performance measurement can only be accomplished when records are effectively collected, stored and analyzed. This section provides an overview of these agencies' very limited information technology systems.



Figure 29: Information Technology Inventory

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Type of Computer Network or System	Individual PC's only	Individual PC's only	Individual PC's only	Individual PC's only
Computer Files Backed Up	No backups occur	No backups occur	No backups occur	Yes- backed up off- site
Computers Programmed with Password Protection	Passwords not used	Passwords not used	Passwords not used	Passwords not used
Updated Firewall and Virus Protection	Yes	Yes	No	Yes
Records Fully Computerized	Incident records	Incident records	Incident records	Incident records, training, maintenance

Capital Assets and Capital Improvement Programs

In order for any emergency services system to be effective, physical resources must be sufficient to handle the current and expected workload and be adequately distributed throughout the primary response area so as to affect the quickest response possible to the greatest number of incidents. Additionally, the apparatus or vehicles used in service delivery must be reliable and sufficient in number to accommodate the anticipated workload. This section of the report will evaluate the facilities and apparatus currently in use by the three departments. Distribution of those resources throughout the response area will be analyzed in the next section of this report.

Facilities

Inadequate facilities for housing personnel and apparatus detract from an organization's mission. Limited space can significantly impact the available options for resource assignment, hinder the ability to maintain a well-trained workforce, and may affect member and employee morale. The primary functions that take place within the station should provide adequate and efficient space for all functions. Some examples include:

- Housing and cleaning of apparatus and equipment
- Administrative office duties where necessary
- Personnel training
- Residential living that is gender compatible for on-duty members when necessary
- Operations that include enough room for community groups and parking

While this list may seem elementary, the lack of dedicated space compromises the ability of the facility to support these functions, and can detract from its primary purpose. ESCI did not conduct an in-depth review of the stations in the study area but did note locations, access to the community, and general size and condition.

Chokio Fire Department



Common name of this	Chokio Fire Department
facility	
Is this facility solely used for	No
administrative offices	
Facility used for: (select all	Active response station,
that apply, major functions	Administrative offices
only)	(HQ station)
Address of Facility	221 Main Street, Chokio
Year Facility Initially	1984
Constructed	
Number of Major Additions	1
or Renovations	
Year of Major	1996
Addition/Renovation	

Construction Features

Building Square Feet	4000
Apparatus Bays:	
Back-in, single unit	4
Back-in, used with stacked parking	1
Drive-through use, single unit	0
Drive-through capable, used with stacked parking	0
Building Height	One-story
Construction Type	TYPE V-BUnprotected Wood Frame
Outside Finish	Metal siding
Unusual Construction Features	None
Overall Construction Condition	Worn paint or finishes
Does Structure Appear to be ADA Compliant	No
Building Code Issues Evident	Yes, No one hour separation bays to offices
Roof Type	Peaked- metal
Roof Age	Over 30 years
Roof Condition	No known problems
Type of Heating System (all that apply)	Forced air- LP
Heating System Age	1 to 10 years
Air Conditioning (all that apply)	Window AC unit-living and administrative areas
	only
Any Other Known Maintenance or Disrepair	None
Issues	

Design Features

Overall Size of Facility Adequate for Current Use	No
Apparatus Exit	Exit to traffic flow safe and unimpeded
Building and Property Blend Well with	Yes
Neighborhood	
Building and Property Adaptable if Future	No
Expansion Needed	
Adequate Staff and Visitor Parking	Staff parking is inadequate
Any Additional Design Comments	Yes, some bays are unheated

Safety Features

Automatic Door Stops on Overhead Doors	No
Operating Properly	
Adequate Fire Extinguishers (not on apparatus)	Yes
Cooking Equipment Central Shutdown	No cooking equipment present
Automatic Fire Sprinklers Present	None
Fire Sprinkler System Type	
Alarm Systems Present	No alarm systems present
Is Commercial Cooking Equipment Present	No
Proper Hood Duct and Grease Filters in Place	
Fixed Fire Extinguishing System in Hood Properly	
Inspected	
Flammable and Combustible Liquids Stored in	No
Approved Cabinet	
Location of Improperly Stored	No separate storage
Flammables/Combustibles	
All Pressure Cylinders Stored Properly	Yes
Location of Improperly Stored Pressure Cylinders	
SCBA Compressor System Present	No
Air Sample Certification Present and Visible	
Back-Up Generator Present	No generator present
Generator Fuel Type and Source	

Environmental Features

Apparatus Exhaust Removal	No exhaust removal effort in place
Underground Storage Tanks Present	Yes
Type of Underground Storage Tank	Fuel oil for HVAC
Age of Underground Storage Tank	Age unknown
Type of Leak Detection in Place	Manual level readings comparison
Apparatus Floor Drain Oil Separators in Place	No oil separator in use



Station Staff Facilities and Features

Adequate Space for Working On or Around Apparatus	Space around apparatus cramped and movement is limited, Limited space for working at rear of apparatus, Apparatus parking is impeded due to inadequate space
Apparatus Room Accommodates Working on Small Equipment	Space is small and limited
Personnel Can Move Quickly and Easily to Apparatus for Response	Inadequate space
Adequate Space for Cooking and Eating	Inadequate space
Adequate Space for Local Company Training and Drills	Yes
Are Compromises Necessary for Two-Gender Staffing	No
Two-Gender Compromises	
Adequate Space for Personal Hygiene	Yes
Adequate Space for Sleeping	Not intended for sleep accommodation
Adequate Space for Storage	Inadequate space
Identify any Additional Operational Compromises Made by Staff or Crew to Compensate for Facility Inadequacies	No cooking area, no sleeping areas.
List Facility Features	Administrative/support offices, Classroom for >10

Donnelly Fire Department



Common name of this	Donnelly Fire
facility	Department
Is this facility solely	No
used for	
administrative offices	
Facility used for:	Active response station,
(select all that apply,	Administrative offices
major functions only)	(HQ station)
Address of Facility	166 4th Street, Donnelly
Year Facility Initially	1973
Constructed	
Number of Major	0
Additions or	
Renovations	

Construction Features

Building Square Feet	2000
Apparatus Bays:	
Back-in, single unit	0
Back-in, used with stacked parking	2
Drive-through use, single unit	0

Drive-through capable, used with stacked parking	0
Building Height	One-story
Construction Type	TYPE II-BUnprotected Non-Combustible
Outside Finish	Metal siding
Unusual Construction Features	None
Overall Construction Condition	Worn paint or finishes
Does Structure Appear to be ADA Compliant	No
Building Code Issues Evident	Yes no one-hour separation
Roof Type	Peaked- metal
Roof Age	Over 30 years
Roof Condition	No known problems
Type of Heating System (all that apply)	Forced air- LP,Forced air- electric
Heating System Age	1 to 10 years
Air Conditioning (all that apply)	No AC present
Any Other Known Maintenance or Disrepair	None
Issues	

Design Features

Overall Size of Facility Adequate for Current Use	No
Apparatus Exit	Exit to traffic flow safe and unimpeded
Building and Property Blend Well with	Yes
Neighborhood	
Building and Property Adaptable if Future	No
Expansion Needed	
Adequate Staff and Visitor Parking	Staff parking is inadequate
Any Additional Design Comments	None

Safety Features

Automatic Door Stops on Overhead Doors	Yes
Operating Properly	
Adequate Fire Extinguishers (not on apparatus)	Yes
Cooking Equipment Central Shutdown	No cooking equipment present
Automatic Fire Sprinklers Present	None
Fire Sprinkler System Type	
Alarm Systems Present	No alarm systems present
Is Commercial Cooking Equipment Present	No
Proper Hood Duct and Grease Filters in Place	
Fixed Fire Extinguishing System in Hood Properly	
Inspected	
Flammable and Combustible Liquids Stored in	No
Approved Cabinet	
Location of Improperly Stored	floor areas
Flammables/Combustibles	
All Pressure Cylinders Stored Properly	Yes
Location of Improperly Stored Pressure Cylinders	
SCBA Compressor System Present	Yes



Air Sample Certification Present and Visible	Certification status unknown, not present
Back-Up Generator Present	No generator present
Generator Fuel Type and Source	

Environmental Features

Apparatus Exhaust Removal	No exhaust removal effort in place
Underground Storage Tanks Present	No
Type of Underground Storage Tank	
Age of Underground Storage Tank	
Type of Leak Detection in Place	
Apparatus Floor Drain Oil Separators in Place	No oil separator in use

Station Staff Facilities and Features

Adequate Space for Working On or Around Apparatus	Space around apparatus is adequate
Apparatus Room Accommodates Working on Small Equipment	Space is small and limited
Personnel Can Move Quickly and Easily to Apparatus for Response	Inadequate space
Adequate Space for Cooking and Eating	Inadequate space
Adequate Space for Local Company Training and Drills	Yes
Are Compromises Necessary for Two-Gender Staffing	No
Two-Gender Compromises	
Adequate Space for Personal Hygiene	Yes
Adequate Space for Sleeping	Not intended for sleep accommodation
Adequate Space for Storage	Inadequate space
Identify any Additional Operational Compromises Made by Staff or Crew to Compensate for Facility Inadequacies	triple parking in rear bay area
List Facility Features	Separate watch room/station office,Classroom for >10,SCBA filling station

Hancock Fire Department



Common name of this	Hancock Fire
facility	Department
Is this facility solely used	No
for administrative offices	
Facility used for: (select	Active response
all that apply, major	station
functions only)	
Address of Facility	662 6th Street,
	Hancock
Year Facility Initially	1985
Constructed	
Number of Major	0
Additions or Renovations	

Construction Features

Building Square Feet	3600
Apparatus Bays:	
Back-in, single unit	2
Back-in, used with stacked parking	3
Drive-through use, single unit	0
Drive-through capable, used with stacked parking	0
Building Height	One-story
Construction Type	TYPE II-BUnprotected Non-Combustible
Outside Finish	Metal siding
Unusual Construction Features	None
Overall Construction Condition	Worn paint or finishes
Does Structure Appear to be ADA Compliant	No
Building Code Issues Evident	Yes no one-hour separations
Roof Type	Peaked- shingle
Roof Age	1 to 10 years
Roof Condition	No known problems
Type of Heating System (all that apply)	Radiant- natural gas
Heating System Age	Over 20 years
Air Conditioning (all that apply)	No AC present
Any Other Known Maintenance or Disrepair	None
Issues	

Design Features

Overall Size of Facility Adequate for Current Use	No
Apparatus Exit	Exit to traffic flow safe and unimpeded
Building and Property Blend Well with	Yes
Neighborhood	
Building and Property Adaptable if Future	No
Expansion Needed	



Adequate Staff and Visitor Parking	Parking is adequate
Any Additional Design Comments	None

Safety Features

Automatic Door Stops on Overhead Doors	No
Operating Properly	
Adequate Fire Extinguishers (not on apparatus)	Yes
Cooking Equipment Central Shutdown	No cooking equipment present
Automatic Fire Sprinklers Present	None
Fire Sprinkler System Type	
Alarm Systems Present	No alarm systems present
Is Commercial Cooking Equipment Present	No
Proper Hood Duct and Grease Filters in Place	
Fixed Fire Extinguishing System in Hood Properly	
Inspected	
Flammable and Combustible Liquids Stored in	No
Approved Cabinet	
Location of Improperly Stored	Floor areas
Flammables/Combustibles	
All Pressure Cylinders Stored Properly	Yes
Location of Improperly Stored Pressure Cylinders	
SCBA Compressor System Present	No
Air Sample Certification Present and Visible	
Back-Up Generator Present	No generator present
Generator Fuel Type and Source	

Environmental Features

Apparatus Exhaust Removal	No exhaust removal effort in place
Underground Storage Tanks Present	No
Type of Underground Storage Tank	
Age of Underground Storage Tank	
Type of Leak Detection in Place	
Apparatus Floor Drain Oil Separators in Place	No oil separator in use

Station Staff Facilities and Features

Adequate Space for Working On or Around Apparatus	Space around apparatus cramped and movement is limited. Limited space for working at rear of apparatus. Apparatus parking is impeded due to inadequate space
Apparatus Room Accommodates Working on Small Equipment	Work must be conducted outdoors
Personnel Can Move Quickly and Easily to Apparatus for Response	Inadequate space
Adequate Space for Cooking and Eating	Compromised
Adequate Space for Local Company Training and Drills	Compromised, must use community center if available

Are Compromises Necessary for Two-Gender	No
Staffing	
Two-Gender Compromises	
Adequate Space for Personal Hygiene	Yes
Adequate Space for Sleeping	Not intended for sleep accommodation
Adequate Space for Storage	Inadequate space
Identify any Additional Operational Compromises	Building is too small for current stock of apparatus
Made by Staff or Crew to Compensate for Facility	
Inadequacies	
List Facility Features	Other Apparatus bays and bathroom only, office in
	bays

Morris Fire Department



Common name of this	Morris
facility	
Is this facility solely used	No
for administrative offices	
Facility used for: (select	Active response
all that apply, major	station, Administrative
functions only)	offices (HQ station)
Address of Facility	115 S. Hwy 9, Morris
Year Facility Initially	1980
Constructed	
Number of Major	0
Additions or Renovations	

Construction Features

Building Square Feet	9000
Apparatus Bays:	
Back-in, single unit	1
Back-in, used with stacked parking	1
Drive-through use, single unit	0
Drive-through capable, used with stacked parking	3
Building Height	Two-story
Construction Type	TYPE I-BFire Resistive Non-Combustible
Outside Finish	Masonry block
Unusual Construction Features	None
Overall Construction Condition	Good condition
Does Structure Appear to be ADA Compliant	No
Building Code Issues Evident	None
Roof Type	Flat- membrane
Roof Age	1 to 10 years
Roof Condition	Small, isolated leaks evident or reported
Type of Heating System (all that apply)	Forced air- natural gas



Heating System Age	1 to 10 years
Air Conditioning (all that apply)	Central air- living and administrative areas only
Any Other Known Maintenance or Disrepair	None
Issues	

Design Features

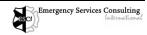
Overall Size of Facility Adequate for Current Use	Yes
Apparatus Exit	Exit to traffic flow safe and unimpeded
Building and Property Blend Well with	Yes
Neighborhood	
Building and Property Adaptable if Future	Yes
Expansion Needed	
Adequate Staff and Visitor Parking	Parking is adequate
Any Additional Design Comments	None

Safety Features

Automatic Door Stops on Overhead Doors	No
Operating Properly	
Adequate Fire Extinguishers (not on apparatus)	Yes
Cooking Equipment Central Shutdown	No
Automatic Fire Sprinklers Present	None
Fire Sprinkler System Type	
Alarm Systems Present	No alarm systems present
Is Commercial Cooking Equipment Present	No
Proper Hood Duct and Grease Filters in Place	
Fixed Fire Extinguishing System in Hood Properly	
Inspected	
Flammable and Combustible Liquids Stored in	Yes
Approved Cabinet	
Location of Improperly Stored	
Flammables/Combustibles	
All Pressure Cylinders Stored Properly	Yes
Location of Improperly Stored Pressure Cylinders	
SCBA Compressor System Present	Yes
Air Sample Certification Present and Visible	Certification status unknown, not present
Back-Up Generator Present	Yes, with auto transfer switch
Generator Fuel Type and Source	Diesel fuel, local tank

Environmental Features

Apparatus Exhaust Removal	No exhaust removal effort in place
Underground Storage Tanks Present	No
Type of Underground Storage Tank	
Age of Underground Storage Tank	
Type of Leak Detection in Place	
Apparatus Floor Drain Oil Separators in Place	Oil separator in use



Station Staff Facilities and Features

Adequate Space for Working On or Around Apparatus	Limited space for working at rear of apparatus. Apparatus parking is impeded due to inadequate space
Apparatus Room Accommodates Working on Small Equipment	Adequate space
Personnel Can Move Quickly and Easily to Apparatus for Response	Yes
Adequate Space for Cooking and Eating	Yes
Adequate Space for Local Company Training and Drills	Yes
Are Compromises Necessary for Two-Gender Staffing	No
Two-Gender Compromises	
Adequate Space for Personal Hygiene	Yes
Adequate Space for Sleeping	Not intended for sleep accommodation
Adequate Space for Storage	Yes
Identify any Additional Operational Compromises Made by Staff or Crew to Compensate for Facility Inadequacies	none
List Facility Features	Separate watch room/station office, Classroom for >10,Coed dormitory, Shower/locker room(s),Turnout gear extraction washer, SCBA filling station



Apparatus

In totality, the departments maintain a fleet of 28 response and specialty service vehicles. Most of the current emergency vehicles fall within what is considered to be an acceptable life span, with an average age calculated at 15.0 years. The following figures summarize currently existing fire and emergency medical response apparatus, as well as the equipment capacities and condition.

Chokio



Engine 706

Manufacturer	Other Central States Fire Apparatus
Year of Manufacture	2001
Mileage	2975
Hours	265
Pumping Capacity	1,250 gpm
Capacity	1,500 gallons
Seating Capacity	3
Number of SCBA	6
Equipment	Class A foam injected, Other Dump valve, drop tank
Surface Rust Present	None
Structural Rust and Corrosion	None
Fluid Leaks	None
Overall Appearance and Condition Rating	Excellent



Engine 707

Manufacturer	Other Luverne Equipment
Year of Manufacture	1984
Mileage	6244
Hours	300
Pumping Capacity	750 gpm
Tank Capacity	1,000 gallons
Seating Capacity	3
Number of SCBA	4
Equipment	Other Drop tank
Surface Rust Present	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	Light
Overall Appearance and Condition Rating	Fair



Tanker 708

Manufacturer	Other Heiman Fire Equipment
Year of Manufacture	2004
Mileage	3233
Does this unit also respond as a standard engine	Tanker use only
Pumping Capacity	300 gpm
Tank Capacity	3,000 gallons
Seating Capacity	3
Number of SCBA	0
Equipment	Portable dump tank, Other Two direction dump
	valves
Surface Rust	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Fair



Brush 705

Manufacturer	Chevrolet- Local Modifications
Year of Manufacture	1986
Mileage	65000
Pumping Capacity	100-250 gpm
Tank Capacity	Other 300
Seating Capacity	3
Number of SCBA	0
Equipment	Other Dust masks
Surface Rust	Moderate
Structural Rust and Corrosion	Moderate
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Fair



Brush 704

Manufacturer	Other Engle Fire Equipment
Year of Manufacture	2005
Mileage	2800
Pumping Capacity	100-250 gpm
Tank Capacity	Other 300
Seating Capacity	6
Number of SCBA	1
Equipment	Thermal imaging camera
Surface Rust	None
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Good

Donnelly



Unit 1

Manufacturer	Other Pema Fire Equipment
Year of Manufacture	1984
Mileage	82301
Hours	6301
Pumping Capacity	1,000 gpm
Tank Capacity	750 gallons
Seating Capacity	4
Number of SCBA	7
Equipment	Generator, Power rescue tool, Thermal imaging
	camera, Other Drop tank
Surface Rust Present	None
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Good



Manufacturer	Other Forstner Fire Equipment
Year of Manufacture	1974
Mileage	4400
Hours	498
Pumping Capacity	750 gpm
Tank Capacity	500 gallons
Seating Capacity	3
Number of SCBA	2
Equipment	Generator
Surface Rust Present	None
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Fair



Unit 7

Manufacturer	Other International- local modifications
Year of Manufacture	1989
Mileage	196000
Does this unit also respond as a standard engine	Tanker use only
Pumping Capacity	300 gpm
Tank Capacity	Other 1200
Seating Capacity	2
Number of SCBA	0
Equipment	Generator, Portable dump tank
Surface Rust	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Good



Manufacturer	GMC- Local Modifications
Year of Manufacture	1977
Mileage	76000
Does this unit also respond as a standard engine	Tanker use only
Pumping Capacity	300 gpm
Tank Capacity	1,500 gallons
Seating Capacity	2
Number of SCBA	0
Equipment	Other none
Surface Rust	Light
Structural Rust and Corrosion	Moderate
Apparent Fluid Leaks	Light
Overall Appearance and Condition Rating	Fair



Unit 10

General Rescue Class	Light Rescue
Manufacturer	MedTec
Year of Manufacture	1994
Mileage	62400
Seating Capacity	4
Number of SCBA	2
Equipment	BLS medical gear, automatic external defibrillator
Surface Rust	None
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Good



Manufacturer	Berts Truck Equipment
Year of Manufacture	1981
Mileage	100000
Pumping Capacity	100-250 gpm
Tank Capacity	200 gallons
Seating Capacity	5
Number of SCBA	6
Equipment	Class A foam
Surface Rust	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	Light
Overall Appearance and Condition Rating	Fair

Hancock



Unit 734

Emergency One
2003
6287
288
1,250 gpm
1,000 gallons
3
5
Generator, Class A foam injected, Class B
foam/eductor, Other drop tank
None
None
None
Excellent



Manufacturer	Luverne Fire Equipment
Year of Manufacture	1987
Mileage	11258
Hours	945
Pumping Capacity	750 gpm
Tank Capacity	1,000 gallons
Seating Capacity	3
Number of SCBA	3
Equipment	Generator, Class A foam/eductor, Class B
	foam/eductor, Other drop tank
Surface Rust Present	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Fair



Unit 737

Other FMC
1977
8843
500 gpm
1,000 gallons
3
2
Other high-pressure pump
Moderate
Moderate
None
Fair



Tanker 1

Manufacturer	Other International- local modifications
Year of Manufacture	1978
Mileage	86607
Does this unit also respond as a standard engine	Tanker use only
Pumping Capacity	Other none
Tank Capacity	3,000 gallons
Seating Capacity	2
Number of SCBA	0
Equipment	Portable dump tank
Surface Rust	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Fair



Tanker 2

Manufacturer	Other International- local modifications
Year of Manufacture	1989
Does this unit also respond as a standard engine	Tanker use only
Pumping Capacity	Other none
Tank Capacity	2,200 gallons
Seating Capacity	2
Number of SCBA	0
Equipment	Portable ground pump
Surface Rust	None
Structural Rust and Corrosion	None
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Good



Manufacturer	Chevrolet- Local Modifications
Year of Manufacture	1987
Mileage	64880
Pumping Capacity	No pump
Tank Capacity	No tank
Seating Capacity	5
Number of SCBA	3
Equipment	Generator, Thermal imaging camera, Other Turnout
	gear, miscellaneous equipment
Surface Rust	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	Light
Overall Appearance and Condition Rating	Fair



Unit 738

Manufacturer	Chevrolet- Local Modifications
Year of Manufacture	1986
Mileage	25778
Pumping Capacity	100-250 gpm
Tank Capacity	200 gallons
Seating Capacity	3
Number of SCBA	0
Equipment	Other miscellaneous
Surface Rust	None
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Fair



Manufacturer	Ford- Local Modifications
Year of Manufacture	2001
Mileage	103456
Pumping Capacity	Other 10 gpm high pressure
Tank Capacity	Other 150 gallons
Seating Capacity	5
Number of SCBA	0
Equipment	Other miscellaneous equipment
Surface Rust	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Good

Morris Fire Department



Engine 10

Manufacturer	Pierce Mfg.
Year of Manufacture	2000
Mileage	1940
Pumping Capacity	1,500 gpm
Tank Capacity	750 gallons
Seating Capacity	6
Number of SCBA	4
Equipment	Large diameter hose, Generator, Class A foam
	injected, Class B foam/eductor, Other drop tank
Surface Rust Present	None
Structural Rust and Corrosion	None
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Excellent



Engine 11

Manufacturer	Pierce Mfg.
Year of Manufacture	2007
Mileage	6232
Hours	275
Pumping Capacity	1,500 gpm
Tank Capacity	1,000 gallons
Seating Capacity	6
Number of SCBA	6
Equipment	Generator, Power rescue tool, Class A foam
	injected, Other drop tank
Surface Rust Present	None
Structural Rust and Corrosion	None
Apparent Fluid Leaks	None
Overall Appearance and Condition Rating	Excellent



Engine 2

Other Luverne
1985
6632
1120
750 gpm
1,500 gallons
2
2
Generator, Other 2 drop tanks
Light
Light
Significant
Fair



Engine 3

Manufacturer	LTI Simon Duplex		
Year of Manufacture	1995		
Mileage	17177		
Hours	52		
Pumping Capacity	1,500 gpm		
Type of Elevating Aerial Device	Straight Ladder		
Elevating Device Style	Rear Mount		
Height Of Device At Full Elevation	75		
Does this unit also respond as a standard engine	Responds as aerial/truck company only		
(quint use)			
Tank Capacity	500 gallons		
Seating Capacity	6		
Number of SCBA	4		
Equipment	Large diameter hose, Generator		
Surface Rust	None		
Structural Rust and Corrosion	None		
Apparent Fluid Leaks	None		
Overall Appearance and Condition Rating	Excellent		



Unit 20

Manufacturer	Ford- Local Modifications	
Year of Manufacture	1989	
Mileage	145217	
Does this unit also respond as a standard engine	Tanker use only	
Pumping Capacity	300 gpm	
Tank Capacity	Other 4100	
Seating Capacity	2	
Number of SCBA	0	
Equipment	Portable dump tank	
Surface Rust	Light	
Structural Rust and Corrosion	None	
Apparent Fluid Leaks	None	
Overall Appearance and Condition Rating	Good	



Unit 356

General Rescue Class	Heavy Rescue, walk-in		
Manufacturer	Custom Fab & Body LLC		
Year of Manufacture	1991		
Mileage	8038		
Seating Capacity	Other 12		
Number of SCBA	6		
Equipment	generator, power rescue tool, rope rescue gear,		
	BLS medical gear, automatic external		
	defibrillator, thermal imaging camera, other gas		
	sensor, command area		
Surface Rust	None		
Structural Rust and Corrosion	None		
Apparent Fluid Leaks	None		
Overall Appearance and Condition Rating	Good		



Unit 5

Manufacturer	Chevrolet- Local Modifications
Year of Manufacture	1984
Mileage	14014
Pumping Capacity	100-250 gpm
Tank Capacity	Other 250
Seating Capacity	2
Number of SCBA	0
Equipment	Other wildland equipment
Surface Rust	Light
Structural Rust and Corrosion	Light
Apparent Fluid Leaks	Light
Overall Appearance and Condition Rating	Fair



Unit 6

Manufacturer	Chevrolet- Local Modifications	
Year of Manufacture	1984	
Mileage	67453	
Pumping Capacity	100-250 gpm	
Tank Capacity	Other 250	
Seating Capacity	2	
Number of SCBA	0	
Equipment	Other wildland equip	
Surface Rust	Light	
Structural Rust and Corrosion	Light	
Apparent Fluid Leaks	Light	
Overall Appearance and Condition Rating	Fair	



Unit 8 Crew Transport

Manufacturer	Chevrolet- Local Modifications	
Year of Manufacture	2005	
Mileage	17000	
Pumping Capacity	No pump	
Tank Capacity	No tank	
Seating Capacity	7	
Number of SCBA	0	
Equipment	Other none	
Surface Rust	None	
Structural Rust and Corrosion	None	
Apparent Fluid Leaks	None	
Overall Appearance and Condition Rating	Excellent	

The following figure compares the study departments to the national median in regards to number of stations, pumpers, and aerials per 1,000 population.

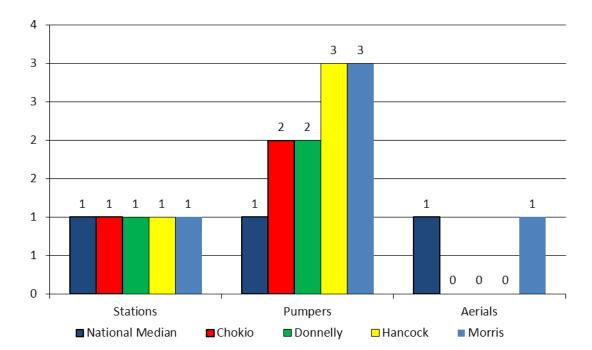


Figure 30: Comparison of Resources per 1,000 Population

When compared to national standard medians, the study departments have a comparable number of stations, a number of pumpers generally higher than the national average, and a comparable number of aerial devices. It should be noted here that these national average rates for resources are based solely on population and do not consider geography or community risk. Each department, and the region as a whole, must determine the appropriate level of assumed risk and resource appropriately to that risk.

Staffing and Personnel Management

In simplest terms, staffing is defined "as to supply with a staff or with workers." In broader terms, it involves the decisions and activities connected with selecting and training individuals for specific job functions and charging them with job responsibilities. These individuals provide the staff for an organization.

Before delving into a discussion of staffing and personnel management a clarification is provided. The terms "human resource management" and "human resources" (HR) have largely replaced the term "personnel management" as a description of the processes involved in managing people in organizations.² However, the terms are frequently used interchangeably when describing the recruitment and retention of a workforce, regardless of whether that workforce is career, other paid, or volunteer.

Human resource management (HRM) is based on the assumption that workers and members of organizations are individuals with varying goals, desires, needs, and wants. As such, the workforce should never be thought of as an inanimate business resource. Because people represent the very foundation of any successful organization, HRM should take a positive view of workers, assuming that all wish to contribute productively; and that the main obstacles to any endeavor result from a lack of knowledge, insufficient training, or process failure.

Careful attention must be paid to managing the workforce to achieve maximum productivity for the organization and maximum satisfaction for the individual. A safe working environment, fair treatment, and recognition for a job well done are key components to job satisfaction.

It is important that the organization's members know to whom they should go when they have a problem, question, or issue related to their relationship to the organization. In large organizations, a human resource department typically handles this function. Staff within such a department addresses questions, issues, and tasks related to appointment, benefits, performance, discipline, promotion, or termination of employees. These duties are often combined with other responsibilities in smaller organizations.

² Armstrong, Michael (2006). *A Handbook of Human Resource Management Practice* (10th edition), London: Kogan.



_

¹ Merriam-Webster Online Dictionary, 2010.

Administration and Support Staffing

The primary responsibility of a department's administration and support staff is to ensure that the organization's operational entities have the abilities and means to fulfill its mission at an emergency incident. Efficient and effective administration and support are critical to the department's success. Without adequate oversight, planning, documentation, training, and maintenance program the operational capabilities of the department will suffer and may fail operational testing. Administration and support require appropriate resources to function effectively.

Analyzing the ratio of administration and support positions to the total departmental positions facilitates an understanding of the relative number of resources committed to this function. The appropriate balance of administration and support positions to the operational component is critical to the department's ability to fulfill its mission and responsibilities. Although no formal studies have been conducted to identify the optimum personnel mix, it has been ESCI's experience that the typical ratio of administrative and support staff to total personnel in career departments fall within the 10 to 15 percent range.

Chokio

CFD is an all-volunteer fire department, thus the administrative and support positions are also active in emergency operations. Administration and support for CFD consists of the fire chief, one assistant chief, two training officers, and one secretary. In addition to these positions, five individuals serve on the department's relief association board.

Donnelly

DFD is an all-volunteer fire department, thus the administrative and support positions are also active in emergency operations. Administration and support for DFD consists of the fire chief, two assistant chiefs, and two training officers. All administrative and support functions are handled by these positions.

Hancock

HFD is an all-volunteer fire department, thus the administrative and support positions are also active in emergency operations. Administration and support for HFD consists of the fire chief, two assistant chiefs, one training officer, and one secretary. In addition to these positions, seven individuals serve on the department's relief association board.

Morris

MFD is an all-volunteer fire department, thus the administrative and support positions are also active in emergency operations. Administration and support for MFD consists of the fire chief, two assistant chiefs, one training officer, and one secretary. All administrative and support functions are handled by these positions. The following figure summarizes the administrative and support positions across the study region.

Figure 31: Administrative and Support Personnel

	CFD	DFD	HFD	MFD	Total
Fire Chief	1	1	1	1	4
Assistant Chief	1	2	2	2	7
Secretary	1	1	1	1	4
Relief Association Board Members	5	5	7	7	24
Training Officer	2	2	1	1	6
Total Admin and Support	10	11	12	12	45
% Admin and Support	47.6%	44.0%	46.2%	35.3%	52.5%

As can be seen in the figure above, each department's ratio of administration and support to total personnel is well above the expected level with the exception of MFD, which is only slightly above the expected level. However, this is not uncommon for volunteer departments where the administrative and support positions are also actively involved in emergency operations.

Operational Staffing

It takes an adequate and well trained staff of emergency responders to put the appropriate emergency apparatus and equipment to its best use in mitigating incidents. Insufficient staffing at an operational scene decreases the effectiveness of the response and increases the risk of injury to all individuals involved. The following list summarizes the services that are provided by each agency.

Figure 32: Emergency Services Operational Personnel

	CFD	DFD	HFD	MFD	Total
Captain		1		3	4
Firefighters	11	13	14	19	57
Total Operations	11	14	14	22	61



The following figure compares the study departments to the regional and national medians for numbers of volunteer personnel per 1,000 population.

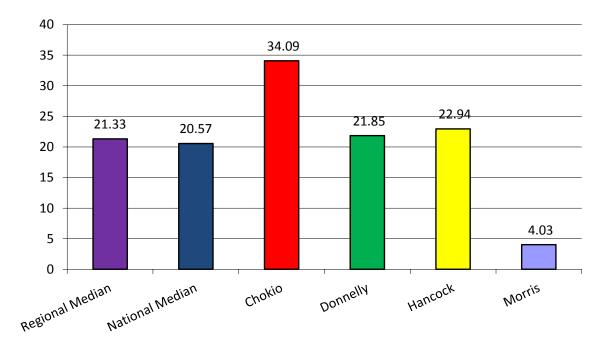


Figure 33: Regional Comparison of Volunteers per 1,000 Population

As illustrated in the figure above, CFD, DFD, and HFD have higher rates of volunteers per 1,000 population while MFD does not enjoy the same ratio of community volunteerism.

Staffing Performance

In most communities around the country, the number of fire calls has declined over the past decade. Yet as the frequency of fires diminishes, in part due to stricter fire codes and safety education, the workload of fire departments has risen sharply — medical calls, hazardous materials calls, and every sort of household emergency are now addressed by fire departments. Therefore, as the frequency of fires diminishes, the need for a ready group of firefighters has increased.

Although modern codes tend to make fires in newer structures more infrequent, today's energy-efficient construction (designed to hold heat during the winter) also tends to confine the heat of a hostile fire. In addition, research has shown that modern furnishings generally burn hotter (due to synthetics), and roofs collapse sooner because prefabricated roof trusses separate easily after a very short exposure to flame. In the 1970s, scientists at the National Institute of Standards and Technology

found that after a fire broke out, building occupants had about 17 minutes to escape before being overcome by heat and smoke. Today, that estimate is three minutes.³ The necessity of firefighters arriving on the scene of a fire in the shortest span of time is more critical now than ever.

ESCI is providing analysis of incident staffing performance in two ways. Initially, the report will provide a glimpse of how well the department is doing at producing its own manpower for incidents within its primary service area. ESCI believes this data is important and can be an indicator for the individual department as to the effectiveness of its staffing efforts.

ESCI also recognizes that for all but the smallest, low-risk incidents, fire departments are typically acting together in providing fire protection through a coordinated regional response of mutual and automatic aid. This is particularly true for structure fires and other high-risk incidents where staffing needs are high. ESCI believes that this data is equally important and can be an indicator of the level of success the department is achieving in providing adequate staffing to meet the needs of the higher-risk incidents.

Of significance to the staffing objective of this study is that *NFPA 1710* establishes that a response company consists of four personnel. The standard does not *require* that all four be on the same vehicle, but does expect that the four will operate as a single functioning unit once on scene. The *NFPA 1710* response time standard also requires that all four personnel be on scene within the recommended response time guidelines.

There is another reason the arrival of four personnel is critical for structure fires. As mentioned earlier, OSHA regulations require that before personnel can enter a building to extinguish a fire, at least two personnel must be on scene and assigned to conduct search and rescue in case the fire attack crew becomes trapped. This is referred to as the two-in, two-out rule.⁴ There are, however, some exceptions to this regulation. If it is *known* that victims are trapped inside the building, a rescue attempt can be performed without additional personnel ready to intervene outside the structure. The following figure illustrates, on average, how many personnel responded to working structure fires within the region over the past two years.

³ National Institute of Standards and Technology, *Performance of Home Smoke Alarms, Analysis of the Response of Several Available Technologies in Residential Fire Settings,* Bukowski, Richard, et al.

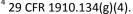




Figure 34: Average Structure Fire Staffing Performance History

	Average Staff
CFD	11.3
DFD	3.0
HFD	0.0
MFD	25.7
Overall Average	10.0

It should be noted that these figures were extracted from each department's National Fire Incident Reporting System (NFIRS) database and the method by which each department tracks personnel could not be determined. Total personnel on the scene for structure fires could include mutual aid personnel. In addition, CFD recorded only two structure fires during the two year data period while DFD also recorded two structure fires. HFD recorded zero structure fires and Morris recorded seven structure fires. The low incidence of structure fires makes the use of average staffing levels somewhat unreliable.

Compensation Systems

In order for a department to recruit and retain quality personnel, compensation and benefits (as well as overall working conditions) must be in line or in excess to those of surrounding organizations. Volunteer organization have an especially difficult time in recruiting and retaining personnel due to the fact that, in the current economy, personnel are looking for positions that will help support their standards of living rather than strictly volunteer roles. To combat this, many volunteer organizations have implemented programs to compensate their members in a variety of ways. The following descriptions and figures summarize the compensation systems components utilized within the region.

Chokio

CFD provides each member with a limited amount of pay for fire responses, meetings and training sessions. For fire responses, members receive \$6.00 per hour. Meetings and trainings are paid at \$6.00 for each occurrence rather than a per hour rate. In addition, the Fire chief receives an annual stipend of \$500. The department pays members accumulated incentives annually. In addition to incentive pay, CFD maintains a Fire Relief Association that provides limited retirements benefits for members. Relief Associations will be discussed in a later section of this report.

Donnelly

DFD provides each member with a limited amount of pay for fire responses, meetings and training sessions. For fire responses, members receive \$8.00 per hour. Meetings and trainings are paid at \$8.00 for each occurrence rather than a per hour rate. The department pays members accumulated incentives annually. In addition to incentive pay, DFD maintains a Fire Relief Association that provides limited retirement benefits for members.

Hancock

HFD provides each member with a limited amount of pay for fire responses, meetings and training sessions. For fire responses, members receive \$6.00 per hour. Meetings and trainings are paid at \$6.00 for each occurrence rather than a per hour rate. The department pays members accumulated incentives annually. In addition to incentive pay, HFD maintains a Fire Relief Association that provides limited retirements benefits for members.

Officers of HFD receive incentive pay in the following amounts.

Figure 35: Officer Incentives - HFD

Position	Annual		
	Incentive		
Fire Chief	\$300		
Secretary	\$100		
Mechanics	\$200		
Treasurer	\$100		

Morris

MFD provides each member with a limited amount of pay for fire responses, meetings and training sessions. For fire responses, members receive \$10.00 per hour. Meetings and trainings are paid at \$7.75 per hour rate. External educational opportunities and schools are paid at \$25.00 per day. The department pays members accumulated incentives annually. In addition to incentive pay, MFD maintains a Fire Relief Association that provides limited retirements benefits for members. Relief Associations will be discussed in a later section of this report.

Officers of MFD receive incentive pay in the following amounts.

Figure 36: Officer Incentives - MFD

Position	Annual Incentive		
Fire Chief	\$5,000		
1 st Asst. Chief	\$900		
2 nd Asst. Chief	\$800		
Secretary	\$750		
Treasurer	\$750		
Training Officer	\$750		
Truck Maintenance	\$750		
Building Maintenance	\$750		
Rescue Captain	\$200		
Truck Captain	\$200		
Ladder Captain	\$200		

Disciplinary Processes

Maintaining discipline in a public safety organization is a crucial component of a well-run department. Members must be allowed latitude to perform using wisdom and judgment but must also be held accountable for actions, whether good or less agreeable. It is important to establish a method by which employees are encouraged to exhibit behavior that reflects a high moral standard and creates and maintains a safe and healthy working environment. Disciplinary policies that focus on coaching, counseling, and behavioral modification instead of punishment have been shown to produce positive results. The following figure summarizes the disciplinary and appeals processes in use by the organizations.

Figure 37: Disciplinary and Appeals Process Summary

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Disciplinary Policy	No disciplinary policy	Formal policy in by- laws regarding participation but no other	No disciplinary policy	Formal written policy in place
Disciplinary Appeals Process	No appeal process available	No appeal process available	No appeal process available	Formal written process in administrative policy documents

Application, Recruitment and Retention

Personnel recruitment is a key function of all emergency service agencies. The community places a tremendous amount of faith in fire and EMS personnel, trusting them to provide the highest level of

service when the public is most vulnerable. As such, the process used to select personnel should be very comprehensive.

The Americans with Disabilities Act (ADA) prohibits discrimination against individuals with physical disabilities but permits employers to establish reasonable physical standards required to perform the primary functions of any job safely and effectively. History has shown that the most effective method of avoiding ADA litigation is through reasonable and consistent application of job-relevant pre-employment physical ability testing.

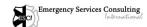
Experience within the fire service industry has shown that relaxing the requirements for entry-level positions is not the answer for recruiting any employee. Instead, most departments have had greatest success in activities that encourage qualified applicants to apply. This process often involves targeted advertising and promotional campaigns aimed at demonstrating the salary and benefits, as well as the personal satisfaction, of a career in the fire service. Existing employees can be encouraged to participate in any such campaign and professional assistance from a human resource department is advisable. The following figure summarizes the recruitment, application and retention efforts and policies across the region.

Figure 38: Application, Recruitment and Retention Summary

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Minimum Physical	No physical	No physical	No physical	Locally developed
Standards Established	standards	standards	standards	and administered
Aptitude of Knowledge Testing	No	Completion of FFI within one year or First Responder within one year if joining Rescue Squad member	No	Yes
Pre-Appointment Medical Exam Required	No	No	No	Yes
Pre-Appointment Medical Exam Paid	No	No	No	Paid by agency
Nature of Pre- Appointment Medical Exam	N/A	N/A	N/A	Conducted by department or contracted physician
Who is the Hiring Authority	Department committee	Department committee	Department committee	Department committee
Applicant Process Includes	Application sheet, Probationary period	Criminal history check, Probationary period, No application. Members vote for a 6 month probation before full membership. Drug testing and criminal background check is conducted but not consistently.	Application sheet, Probationary period	Complete application packet with job description and requirements, Application review, Applicant interview panel, Employment reference checks, Personal reference checks, Physical agility test, Medical examination, Probationary period, Have not done criminal history checks but will for all new hiring

Promotional Processes

Once on staff, personnel should be evaluated periodically to ensure their continued ability to perform job duties safely and efficiently. Technical and manipulative skills should be assessed on a regular basis. This provides documentation about a person's ability to perform responsibilities and provides valuable input into the training and education development process.



It is important to maintain such promotion programs whenever possible; it has long been known that members sincerely wish to be a contributing part of any organization. This basic desire to succeed is best encouraged through feedback that allows each member to know what he/she is doing well and what skills may need improvement. Honest and effective feedback encourages members to reinforce mastered skills and abilities and to work harder to improve the areas where performance may fall short.

Regular evaluation and feedback for personnel is critical to behavior modification and improvement. No formal performance evaluation system is currently in place for all employees of the fire departments.

Technical and manipulative skills should be evaluated regularly. This provides documentation about a person's ability to perform their responsibilities and provides valuable input into the training and education development process. No formal competency evaluation of fire skills of employees with emergency response job duties is conducted.

Incumbent uniformed career fire department personnel who are assigned hazardous materials duties are required to participate in and pass a medical physical assessment on a yearly basis. Annual medical physical examinations are not required for other department employees with emergency response job duties.

Annual medical physical examinations should be considered for fire department personnel at all ranks and job assignments. Examinations should follow *NFPA 1582*. Baseline values for all firefighters should be established at time of hire that include: titer level, vision, spirometry, audiometry, hepatitis B and C, and tetanus.

A stress test is used to determine the amount of stress that a heart can manage before developing either an abnormal rhythm or evidence of ischemia (inadequate blood flow to the heart muscle). The test provides information about how the heart responds to exertion. It usually involves walking on a treadmill or pedaling a stationary bike at increasing levels of difficulty, while an electrocardiogram, heart rate, and blood pressure are monitored. The test helps to determine if there is adequate blood flow to the heart during increasing levels of activity and the likelihood of having a coronary event or the need for further evaluation.

Medical physical assessments should involve periodic stress tests of incumbent employees every two to five years, based on age and risk factors. We recommend that a stress test be performed at the time of

hire to determine if a candidate has an underlying heart defect or disease that would put them at risk while performing the duties of a firefighter. The leading cause of death for firefighters is heart attack (44 percent). Death from trauma, including internal and head injuries, is the second leading cause of death (27 percent). Asphyxia and burns account for 20 percent of firefighter fatalities.⁵ The following figure summarizes the organizations' testing, measurement and promotional processes.

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Periodic Capability Testing	No formal periodic	No formal periodic	No formal periodic	Yes
to Measure Minimum	testing-	testing-	testing-	
Standards Compliance	observation only	observation only	observation only	
Periodic Performance	No	No	No	No
Evaluations				
Formal Promotional	No	No	No	No
Testing				

⁵ The United States Fire Administration (USFA), *The USFA Firefighter Fatality Retrospective Study: 1990-2000*, October 2002.



Service Delivery and Performance

The delivery of fire suppression, emergency medical and rescue services is no more effective than the sum of its parts. It requires efficient notification of an emergency, rapid response from well-located facilities in appropriate apparatus, and sufficient staffing following a well-practiced plan of action. This section evaluates these various components and provides observations of the elements that make up the delivery of the most critical core services provided by the three fire departments.

Notification System

All four fire departments in this study are provided communications and dispatch services through the Stevens County Communications Center (SCCC), a branch of the Stevens County Sheriff's Department. The dispatch center is the primary Public Safety Answering Point (PSAP) for the county.

The Communications Center is managed under the Sheriff's Department command structure with no formal representation from the fire departments. A civilian manager is assigned the responsibility for the center, reporting to the Sheriff. The SCCC maintains between one and two personnel on duty, depending on workload. The center uses cross-trained call-taker/telecommunicators. No specific supervisor over the communications function is on duty 24 hours.

No formal call processing time standards have been adopted. An informal call pick-up time of ten seconds is an indicated goal. Quality assurance is being conducted by supervisor observation. *NFPA 1221*, Section 6.4.2 (*Installation, Maintenance, and Use of Emergency Services Communications Systems*) section 6.4.3 specifies that, "Ninety-five percent of emergency dispatching shall be completed within 60 seconds." These or similar standards should be considered for formal adoption and performance monitoring should be conducted regularly. If these standards are adopted, the center should begin reviewing call processing time at the 90th percentile, in addition to call answering or "pick-up" time.

There is currently no computer-aided dispatch software available to the fire dispatcher. Notification of companies takes place by *department announce* only, with no programmed assignment of specific apparatus quantities and types. Apparatus availability for the departments is not tracked automatically. Dispatch of stations takes place by open radio. Field personnel are notified by pocket-sized tone-encoded radio receivers.

Dispatchers are fully certified in the Emergency Medical Dispatch system, allowing them to provide prearrival instructions to bystanders at medical incidents.

The County's radio system operates on a conventional VHF system. The dispatch center has adequate contingency plans for system failure. Back-up power is in place, with a back-up transmitter and a functionally redundant dispatch site available.

The following table summarizes the information and data collected from the dispatch center.

Figure 39: Communications and Dispatch Information Components

Dispatch Center Name	Stevens County Communications Center
Dispatch Agency Type	County law enforcement dispatch center
Incoming Emergency Calls	Primary 9-1-1 PSAP
Dispatch Center Governance	Subdivision of law enforcement agency
Center Management	Center civilian manager responsible to this agency head
Center Staffing	
Maximum total staff at peak demand	2
Minimum total staff at off-peak demand	1
Is a Supervisor On Duty At All Times	No
Dedicated Consoles for Fire and/or EMS	No
Call Answering Methodology	Combination call-taker/telecommunicator handles call
	start to finish
Responsibility for Training	Dedicated training officer
Dispatcher Initial Training	Agency conducts initial training in-house
In-house Initial Training in Weeks	
Classroom technical training	0
Emergency medical dispatch training/certification	0
Practical experience with console training officer	5
Law enforcement criminal data training	1
Fire service/EMS ride-along	0
Law enforcement ride-along	0
Telecommunicator basic certification course	0
First responder certification course	0
CPR certification course	1
Annual Recurrent Training in Days	
Classroom technical training	1
Emergency medical dispatch training/certification	1
Workshops and seminars	1
Ancillary Functions Performed by Telecommunicators	Monitor premises video feeds
	Administrative telephone call answering
	Holding cell security/functions
	Routine data entry
	Miscellaneous law enforcement duties
Number of Incoming 9-1-1 Lines	4
Wireless Phase II compliant?	Yes
Formal Performance Standards	No
Informal Performance Standards in Seconds	
Call pick up	10
r - ~r	

Formal Quality Assurance Program	Yes, with non-random review by supervisor observation		
Computer-Aided Dispatch Available	No		
Dispatch Method	Department announce only		
Methods of Station Notification	Open station radio only		
Methods of Field Personnel Notification	Voice pagers		
Is Emergency Medical Dispatch Used	Yes, pre-arrival instructions only		
	Telecommunicators certified		
Emergency Communication System	Conventional VHF		
Number of Radio Channels Used by this Agency	2		
Center Redundancy Preparation	Back-up power		
	Back-up transmitters		
	Redundant dispatch site		
Center Security	Off ground floor		
	Hardened or no windows		
	Electronic passage lock system		
	Fire suppression system		

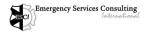
Demand Study

Each department provided ESCI with National Fire Incident Record System (NFIRS) incident records for calendar years 2009 and 2010. The following figure illustrates the overall volume of service demand over the data period provided.

Figure 40: Total Service Demand by Type

		CFD	DFD	HFD	MFD
2009	Fire	4	2	10	10
	Explosion			1	
	EMS	3	1		6
	Hazmat	1			11
	Weather		2		
	Service Call	1		7	1
	False Call				19
2009 Total		9	5	18	47
2010	Fire	10	7	3	14
	EMS	4	16		5
	Hazmat	1			5
	Weather		1		1
	Good Intent	1		1	
	False Call	3		1	20
	Service Call			1	4
2010 Total		19	24	6	49

The following figure illustrates how each of the study departments compares against the urban and rural high and low ranges of incidents per 1,000 population.



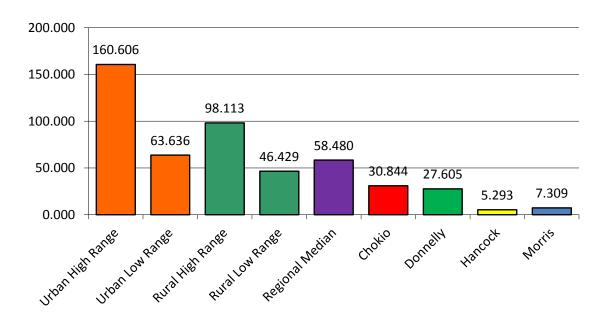


Figure 41: Comparison of Total Incidents

As can be seen in the figure above, the total incidents experienced throughout the study area are significantly less than the urban and rural high and low ranges as well as the regional median, which involves the Midwestern U. S. The same is true for actual structural fires that occurred within the study area over the last two years as illustrated below.

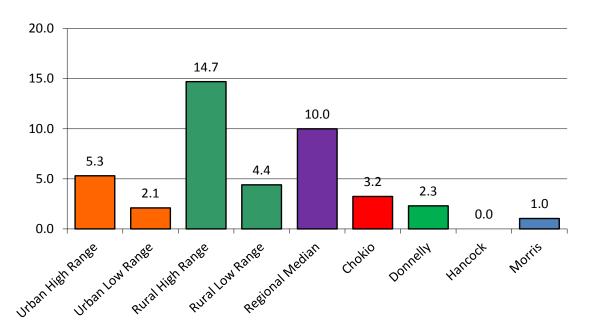


Figure 42: Comparison of Structure Fires

A review of incidents by time of occurrence also reveals when the greatest response demand is occurring. The following charts show how activity and demand changes for each agency based on various measures of time. ESCI began by breaking down yearly workload into monthly increments.

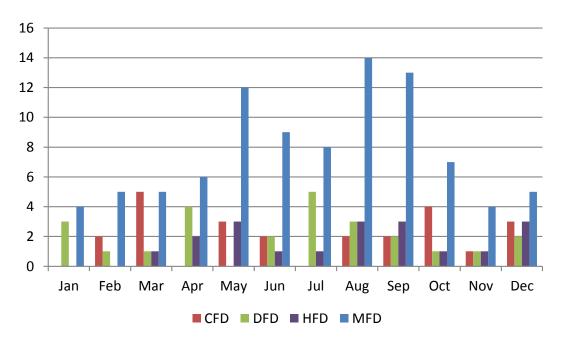


Figure 43: Service Demand by Month

The figure indicates that workload is highly variable across the departments. For MFD, service demand is greater during the summer months and more in line with the other departments throughout the remainder of the year. Those areas without a column indicate no workload recorded during that time period. In further analysis, workload is examined by day of the week, again showing a high degree of variability across the departments' daily workload.

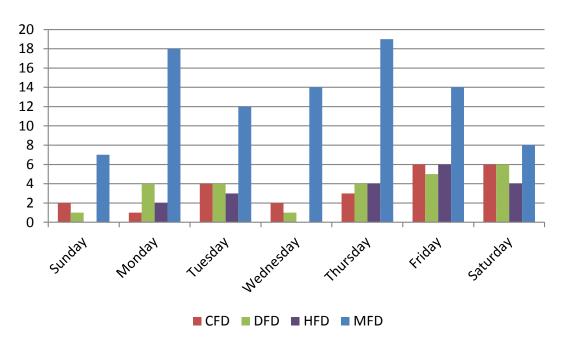


Figure 44: Service Demand by Day of Week

Again, MFD's workload is much different than the other departments - showing higher service demand during the week and low demand on weekends. Overall, Sunday proved to be the lightest day with Friday being the heaviest.

The final analysis of historical workload concludes with examination of service demand by hour of day. Understanding when peak activity occurs begins the process of reviewing deployment strategies and needs assessment.

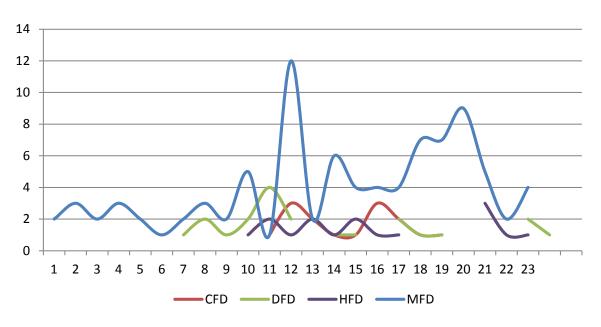


Figure 45: Service Demand by Hour of Day

Once again, the workload by hour of day is highly variable between the departments with CFD, DFD, and HFD having several time periods for which no incidents were recorded, resulting in no line on the chart. MFD's workload by hour of day tends to generally follow the national trend of increasing workload around 7:00 a.m., peaking around mid-day, then tailing off into the evening.

Peak activity times can be reflected in response time performance in certain cases. The impact of response time on the outcome of emergency incidents has been exhaustively studied, both in the laboratory and in historical data, with a predictable correlation between the two. Though seemingly intuitive, it is still useful to review how longer response times can have a negative effect on the ability to suppress fires, particularly in structures, or to successfully intervene in a life-threatening medical emergency. Response time performance is examined in a separate section of this report.

In addition to the temporal analysis of the current service demand, it is useful to examine geographic distribution of service demand. This analysis will allow for assessing the location of stations in comparison to the actual service demand within the area. In most projects such as this, the next representation would be that of geographic service demand distribution. In other words, ESCI would plot each incident on a map to illustrate how incidents were distributed across the region. Unfortunately, the method in which incident information is recorded by the four agencies is such that this type of plotting is impossible. Although the county has recently transitioned to a standard 911

addressing system, the tradition of recording incident location by descriptor rather than address has continued. For example, rather than inputting the assigned address for an incident, a text descriptor such as, "...two doors past the red barn next to the Martholler place" is used. For accuracy, ESCI prefers to utilize rates above 95 percent when geocoding incidents for plotting. For Stevens County, the accuracy was less than 15 percent. Thus, no geographic display of incident distribution or density is offered in this report.

Distribution Study

Across the region, the four agencies operate from four facilities, all staffed with volunteers based on incident dispatch. No station has on-duty coverage 24 hours per day. There exists a certain extent of the jurisdiction that can be reached within a certain travel time from the stations regardless of staffing patterns.

The following map illustrates the four, eight, and 12 minute travel model from each existing station location.

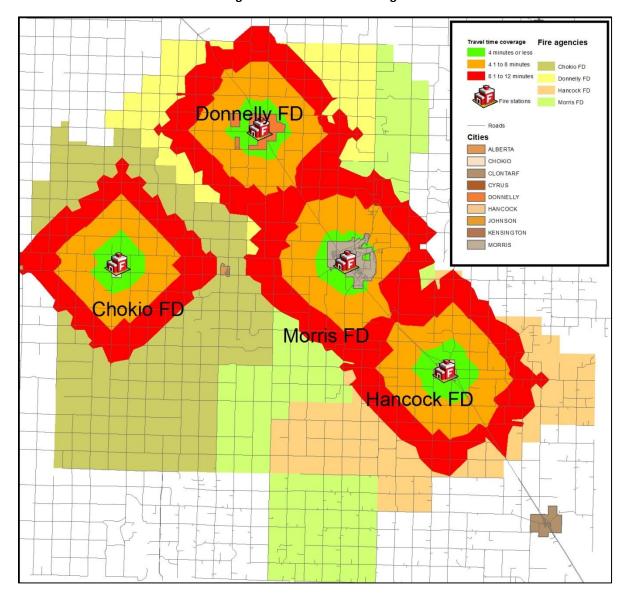


Figure 46: Travel Time Coverage

Based on the fact that ESCI was unable to plot calls for service, it is not possible to determine what percentage of service demand falls within each of the noted travel models.

The national peer standards, NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments⁶ and NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer or

⁶ 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. (National Fire Protection Association 2010.)



Combination Fire Departments includes a performance objective of 240 seconds or less travel time for the arrival of the first arriving engine company. The travel time models produced by ESCI indicate that existing station deployment would be capable of producing a travel time performance of less than 90 percent, below the NFPA 1720 standard for volunteer and combination fire departments. Actual performance may be different from modeled performance, and the department's overall response time performance will be discussed in a later section of this report.

Another factor to consider when evaluating distribution of resources is the impact of that distribution on the Insurance Services Offices (ISO) rating for the area. ISO rates fire departments based on several criteria and then applies a code that many property and casualty insurance carriers utilize to set homeowners insurance rates. As discussed previously, the four study agencies have varying ISO ratings based on where property is located in relation to the nearest fire station. Those areas outside of five road miles from a fire station are considered to be 'unprotected.' Those property owners may find it difficult to obtain insurance coverage for their property and, if they do, it can be quite expensive. The following figure illustrates the five mile distance from each of the study fire stations.

Emergency Services Consulting

⁷ NFPA 1720, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer and Combination Fire Departments. (National Fire Protection Association 2010.)

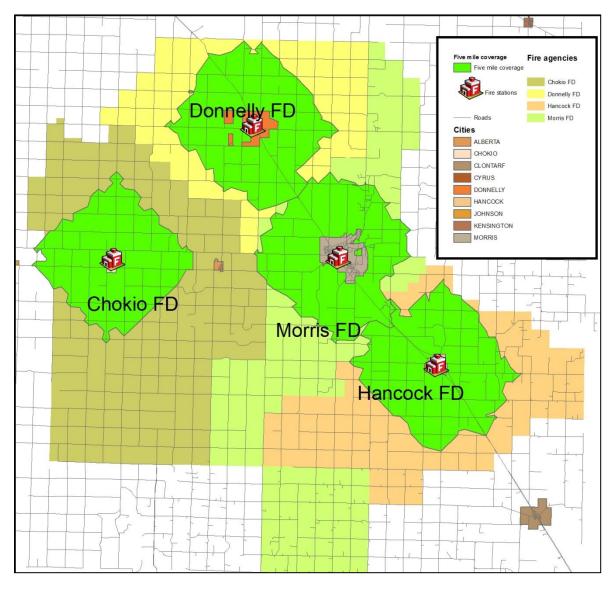


Figure 47: Five Mile Coverage

As can be seen from the figure above, the central portion of each response area is within the five-mile coverage area but large portions lie outside that distance. This can impact homeowner's insurance rates for residents living in those areas outside five miles from a fire station.

Performance Summary

Total response time is the amount of time a resident or business wait for an apparatus to arrive at the scene of an emergency beginning when they first call 9-1-1. The following charts illustrate the response time for the study agencies for 2010 based on the average, 80th and 90th percentile measurements.⁸

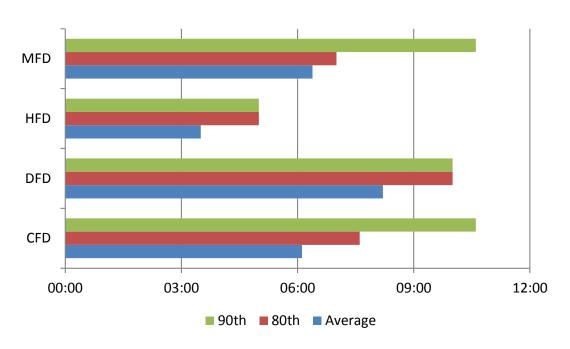
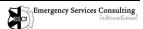


Figure 48: Response Time Performance History - 2010

Region-wide, the average response time to emergency incidents calculated to be 6:03, with a 90th percentile response performance of 9:03 and 7:24 when measured at the 80th percentile. NFPA 1720 recommends that volunteer and combination departments establish response performance standards that achieve response times of 9:00 at the 90th percentile in urban areas, 10:00 at the 80th percentile in suburban areas, and 14:00 at the 80th percentile is rural areas. Although the study region was not evaluated on the basis of population density to determine those areas that would be classified as urban, suburban or rural, it would appear that a joint, concerted response by the study agencies would achieve response performance that exceeds the NFPA recommendations.

Response times can vary by time of day in reflection of service demand workload, traffic congestion, weather, and distance to the call from the station, to name but a few. CFD, DFD, and HFD, unfortunately

⁸ Mutual aid calls, non-emergent calls, and interfacility transfers were removed from response time analyses as they were found.



did not have sufficient incident volume spread across all hours of the day that allowed for graphical display. The following chart illustrates how the average response time performance varies by the hour of day for MFD.

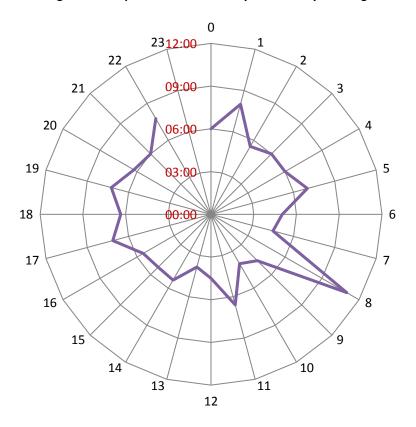


Figure 49: Response Performance by Hour of Day - Average

The following figures illustrate the same information as above but measured at the 80^{th} and 90^{th} percentile.

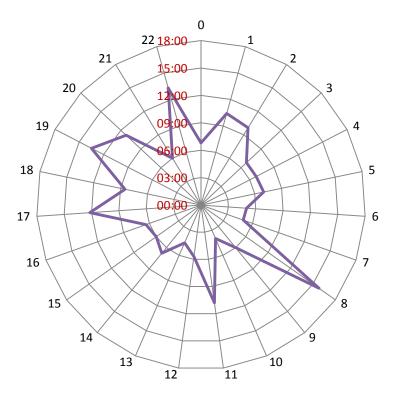


Figure 50: Response Performance by Hour of Day – 90th Percentile

What would routinely be expected from this analysis are consistently higher response times during the overnight hours. For MFD, however, some of the longest response times occur in the early evening hours and early to mid-morning.

One element of the overall response time performance that personnel can control is the turnout time interval. Turnout time represents the period between the radio dispatch of a call and the time the unit actually leaves the building or location where it is staged and begins travel to the incident. It can include activities such as moving to the apparatus, donning gear and equipment, verifying travel routes and maps, and buckling safety harnesses.

ESCI could not measure the turnout time performance of the study departments since no computer aided dispatch (CAD) data was available. Without specific CAD data, it was also unclear as to whether the dispatch time in the NFIRS records represented the true time the fire department was notified of the call or the time when the dispatch center picked up the call. Therefore, ESCI could not determine whether call processing time was included in the overall fire department response time analysis, nor could ESCI measure the turnout time performance.

This is a critical loss for overall department performance analysis. From the response time analysis, the actual response time performance to 90 percent of calls is 9:03.

Nationally, the highest percentage (16 percent) of structure fires had a response time in the 4-minute range. The percent of structure fires with response times of three minutes and five minutes were not far behind at 15 percent and 14 percent, respectively. Overall, 61 percent of structure fires in 2001 and 2002 had a response time of less than six minutes. The analysis contained in this report indicates that station distribution and travel time should not be a significant factor. Overall unit workload and resource drawdown also should not be a response time factor. The department and its dispatch center should be held accountable for more detailed and precise response time performance measurement, with a focus on call processing time, turnout time analysis and determination of methods to improve response time.

Incident Command and Control

Fire departments must have systems in place to manage incidents and resources. Preparation begins with the establishment of pre-incident plans on higher risk structures, such as commercial or industrial occupancies, along with development of resource management systems in the event of large-scale or concurrent incidents. Location mapping, standardized response protocols, and water supply planning also help prepare a department for efficient and effective emergency response.

Once a call is dispatched, management of the incident itself begins. Fire departments should utilize incident command structures compliant with the National Incident Management System (NIMS). Personnel accountability systems should be established in department procedures, and should be implemented on all multi-apparatus working incidents.

Finally, OSHA regulations related to operating in a hazardous atmosphere or around hazardous materials should be enforced through department procedures and training. This includes the regulations requiring firefighters to operate in teams of two, with a minimum of two persons, response-ready, remaining outside the hazard area whenever a team of two is operating inside the hazard area. This is commonly referred to as the "two-in, two-out" regulation. Proper levels of hazardous materials response training compliant with OSHA's CFR 1910.120 standard should also be enforced.

The following table summarizes comparative information on the departments' command and control performance.

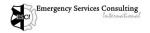
Figure 51: Command and Control Comparisons

Department Name	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Levels of Tactical Pre-Incident Planning	No pre-incident planning program	Pre-incident plans random occupancies only	No pre-incident planning program	Pre-incident plans for only high-hazard occupancies, Printed versions shared on all appropriate vehicles
Levels of Operational Planning	Mutual aid agreements in place- no formal assignment system, Multi-level hazmat response plan, Local or regional disaster plans	Mutual aid agreements in place- no formal assignment system, Multi-level hazmat response plan, Local or regional disaster plans	Mutual aid agreements in place- no formal assignment system, Multi-level hazmat response plan, Local or regional disaster plans	Resources managed by standard apparatus assignment based on call-type, Mutual aid agreements in place- no formal assignment system, Multi-level hazmat response plan, Local or regional disaster plans
Hydrant Locations Mapped	No hydrants	Yes, no main sizes or flow rates shown	No hydrant mapping available	Yes, with main sizes only
Alternate Static Water Points Mapped	Yes	Written locations	No	No
Maps Available in All Vehicles	Yes, department vehicles only			
Standard Response Recommendation Based on Type of Call	No	No	No	Yes
Minimum Number of Responders per Apparatus Standardized	Yes	Yes	Yes	Yes
Turnout Time Standards Established	No	No	No	Yes 3 minutes
Total Response Time Standards Established	No	No	No	No
Simultaneous Incident Cover Plans	Additional manpower paging for on-call responders, Mutual aid initiated on simultaneous call receipt	Additional manpower paging for on-call responders, Mutual aid initiated on simultaneous call receipt	Additional manpower paging for on-call responders, Mutual aid initiated on simultaneous call receipt	Additional manpower paging for on-call responders, Mutual aid initiated on simultaneous call receipt
Is a Duty Officer Assigned 24-Hours Per Day	No formal system	No formal system	No formal system	Yes- voluntary coordination among on-call command

				officers
Is Incident Command System Used	ICS is inconsistent	Major incidents only- not NIMS compliant	ICS is inconsistent	Major incidents only- NIMS compliant
Incident Arrival Size-Up Announcement Required	Not formally required and inconsistently performed	All incidents with significant risk	Not formally required and inconsistently performed	All multi-company incidents
Initial Strategy Declaration Required on Arrival	Not formally required and inconsistently performed	Not formally required and inconsistently performed	Not formally required and inconsistently performed	Working structure fires only
Is an Accountability System Used on All Major Incidents	No formal accountability system in place	Inconsistent	Inconsistent	Always
Do Command Officers Have Formal Strategy and Tactics Training	No formal training requirements specific to strategy and tactics	No formal training requirements specific to strategy and tactics	No formal training requirements specific to strategy and tactics	No formal training requirements specific to strategy and tactics
Do Command Officers Have Formal Building Construction Training	No formal training requirements specific to building construction	No formal training requirements specific to building construction	No formal training requirements specific to building construction	Yes, Fire Academy Building Construction I
Minimum Level of Hazmat Certification for Responding Personnel	Hazmat- Awareness	Hazmat- Operations	Hazmat- Awareness	Hazmat- Awareness
Formal Safety Officer Assignment	Safety officer assignments are inconsistent	Safety officer assignments are inconsistent	Safety officer assignments are inconsistent	Auto-dispatch and assignment based on call type
Two-In, Two-Out OSHA/EPA Compliance	Two-in, two-out rule compliance only if sufficient manpower present	Strict compliance two-in, two-out rules	No formal adaptation of two-in, two-out rule in SOGs	No formal adaptation of two-in, two-out rule in SOGs

In review of the compliance with OSHA CFR Section 1910.120, one significant finding was the lack of personnel trained to the "Operations" level specified by the OSHA rules. Many firefighters in Chokio, Hancock, and Morris receive training only to the "Awareness" level.

Of primary concern here is that each agency should have firm procedures in place to limit any personnel from performing tasks and functions that would be considered above their level of training and certification at incidents involving hazardous materials release. Personnel not trained beyond the Awareness level should not be permitted to respond into hazardous materials incident locations, but rather should be directed to remain in an off-site support mode.



The Awareness level of training is intended to enable an individual to "...discover a hazardous substance release and... initiate an emergency response sequence by notifying the proper authorities", but nothing else⁹. Obviously, once an incident has been reported, such as a fuel leak from a vehicle called in to 9-1-1, the incident has already been recognized and moved beyond the Awareness level. The act of dispatching a fire engine presumes action on the part of the responding crew involving size-up, containment, decontamination or clean-up. Any of these tasks would exceed the training level certified under Awareness and are actions specifically described in the "First Responder Operations Level" Written procedures should prohibit response by personnel certified by their department at less than Operations level to any incident with a known, suspected, or likely release of a hazardous substance, including fuels and gases.

Another significant finding was a lack of formal adoption of "two-in, two-out" standard operating procedures, compliant with OSHA regulations. As an enforceable federal standard, the rule should be adopted into local policies and procedures, enforced through department command structure, and reinforced through regular training.

Recommendations:

- CFD, HFD, and MFD should formally adopt a local policy that is compliant with the "two-in, two-out" OSHA regulations for operating in hazardous atmospheres, including structure fires.
- CFD, HFD, and MFD should adopt minimum hazardous material training requirements of Operations Level for all persons responding to incidents involving leaks or spills of fuels or other hazardous substances.
- CFD, DFD and HFD should adopt a formal NIMS-compliant Incident Command System for all emergency responses.
- CFD, DFD and HFD should adopt a formal personnel accountability system and initiate it for all high-risk emergency responses.
- CFD, DFD and HFD should initiate the use of a safety officer assignment for all high-risk emergency responses.

Mutual and Automatic Aid Systems

There are numerous mutual aid agreements, both formal and informal, in place between fire, police, and emergency medical agencies in Stevens County and surrounding areas. Mutual aid is typically employed on an "as needed" basis where units are called for and specified one by one through an



⁹ OSHA CFR 1910.120(q)(6)(i)

¹⁰ OSHA CFR 1910.120(q)(6)(ii)

Incident Commander. There are some conditions under which the departments have agreed to "dual response", wherein units from more than one department are dispatched on certain types of calls.

According to interviews, multi-agency training is sporadic. For the most effective mutual and automatic aid programs, as well as maximum credit in the ISO Fire Protection Rating system, multi-agency drills should be scheduled regularly. Ideally, these should occur at least once per quarter and be recorded as multi-agency training in all agency records. In addition to the ISO credit, these trainings will naturally lead to enhanced working relationships, more regional thinking, and perhaps cooperative planning, policy, and procedural development.

From a formal standpoint, all three departments regularly interact with the local law enforcement agencies. Interviews indicated that these relationships are effective and efficient with no problems or issues cited by either fire or police officials. In many cases, police agencies are even responding to fire or EMS calls and assisting with traffic and other needs, underscoring the quality of the relationships between fire and police. The county's Sheriff takes an active role in coordination of the area fire departments.

Support Programs

Training

Providing quality and safe fire and emergency services requires a well-trained response force. Training and education of department personnel are critical functions for any agency. In the past, officers in the fire service were raised with a "Management by Objectives" foundation. This type of system was based upon quality, quantity, and costs as the elements. Officers used to plan, measure, control, time, and execute training outcomes.

Today's fire service consists of creating, promoting, and delivering training to members; but many training programs fall short and members become less interested. Training officers should capitalize on a training program that will effectively overcome personal and organizational blocks to achieve results. Without a quality, comprehensive training program, emergency outcomes are compromised and department personnel are at risk.

Because the fire service is constantly changing, training cannot be limited to new recruits. Seasoned firefighters can benefit from training by learning new methods and procedures. In addition to training firefighters in the skills and knowledge needed in today's fire departments, training officers and instructors need to establish educational opportunities for more advanced procedures and new technical subjects. The following figure summarizes the training components of each participating agency.

Figure 52: Training Components Comparison

Department Name	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Initial Training of Personnel Conducted By	Other area fire departments	Other area fire departments	Other area fire departments	Local community/technical college
Firefighter Training Required Prior to Scene Response	Mandatory firefighter I within two years	Mandatory Firefighter I course	Cannot go into structure before FFI and cannot drive during 1 year probation	No formal training required- duties limited on scene
Firefighter Training Required to Leave Probation/Trainee Status	No formal training required	No formal training required	No formal training required	No formal training required
Established Minimum Training Hours Annually	No	Attend one quarter of all training offered.	No	Yes
Minimum Training Hours Annually by Duty				
Firefighter	0	0	Yes	24
EMT	0	0	No	0
Paramedic	0	0	Training Officers	0
First responder	0	0	0	0
Hazmat technician	0	0	0	0
Apparatus driver/operator	0	0	0	8
Fire officer	0	0	0	0
Fire inspector	0	0	No	4
other	0	0	No	0
All Position Minimum Requirements Follow NFPA Standards	No	No	No	Yes
Consistent Officer Training Provided	No	No	Yes	No
Consistent Driver/Operator Training Provided	No	No	None	Yes
Individual Responsible for Training Program	Two Training Officers	Two Training Officers	Training Officer	Training Officer
Number of Certified Fire Instructors in Agency				
Fire	0	0	0	0
EMS	0	1	0	1
Other	0	0	0	0
Are All Company Officers Trained in Instructional Technique	No	No	No	No
Is an Annual Training Plan Prepared and	No	No	No	Yes



Followed				
Does the Training Program Have Software and Data Support	No	No	No	Off-the-shelf database software used
Does the Training Program Have an Identified Program Budget	Yes	No	No	Yes
Training Resources Available	Formal classroom, Ridgewater College	Formal classroom(s),EMS training supplies, EMS training manikins, simulators	None	Formal classroom(s), Appropriate AV equipment, Training library, EMS training supplies, EMS training manikins, simulators
Standard Training Curriculum Manuals Used	None	None	None	Jones and Bartlett
Lesson Plans Utilized	Only for classes conducted through college	Lesson plans inconsistently or rarely used	Lesson plans inconsistently or rarely used	For most training sessions
Night Drills Conducted	Quarterly	Quarterly	Quarterly	Monthly
Multi-Company Drills Conducted	Rarely	Annually	Quarterly	Quarterly
Regional Disaster Drills Conducted	None	Annually, by Emergency Management agency	Rarely	Rarely
Is There a Periodic Physical Performance Evaluation to Ensure Personnel Maintain Physical Capacity to Perform Duties	None	No effort to track physical ability	No effort to track physical ability	Yes, combined with periodic skill competency evaluations
Is There a Periodic Skills Competency Test to Ensure Personnel Maintain Competency in Job- Required Skills	None	No effort to track required skills competency	No effort to track required skills competency	Yes, combined with periodic physical ability evaluations
Post-Incident Analysis	None	Conducted with no specific consistency	Conducted with no specific consistency	Conducted with no specific consistency
Safety Officer for Drills	Instructor also fills safety role	Instructor also fills safety role	Instructor also fills safety role	Instructor also fills safety role
Training Records	Individual attendance records in hard copy only	Individual attendance records in hard copy only	Individual attendance records in hard copy only	Individual attendance records computerized, searchable
Recertification Requirements	Recorded and monitored by company officer	Recorded and monitored by company officer	Left up to individual employee/member	Recorded and monitored by agency training officer

Recommendations:

- Each department should formally adopt a policy that requires a minimum level of training prior to allowing new personnel to respond to incident scenes.
- Each department should develop a standard training manual that ensure new personnel have met minimum requirements before leaving probationary status.
- CFD and HFD should adopt minimum annual training requirements for all personnel.
- CFD, DFD and MFD should establish consistent officer training programs to encourage member advancement.
- CFD, DFD and HFD should each adopt a standard training curriculum to ensure that each member is being trained consistently across each department.
- Each training session, regardless of instructor, should follow a formal lesson plan and have a safety office appointed to oversee any manipulative sessions.
- CFD, DFD and HFD should institute a program mirroring MFD that evaluates personnel physical abilities and capacities
- CFD, DFD and HFD should institute a program to periodically conduct skills competency for all members.
- All departments should work together to implement a computerized training records management system to track individual training, departmental training, and individual certification requirements.

Life Safety Services

Aggressive risk management programs, through active fire prevention efforts, are a fire department's best opportunity to minimize the losses and human trauma associated with fire. A fire department should actively promote fire resistive construction, built-in early warning and fire suppression systems, and an educated public trained to minimize their risk to fire.

The fire prevention effort in each of these departments is not a formal departmental division and consists primarily of the fire chief and a few other personnel who assist in fire inspections, public education and other prevention efforts. This section of the report summarizes each department's efforts in this area.

The State of Minnesota Fire Code references the 2007 Edition of the International Fire Code (IFC). This model code, with some state amendments, was adopted under authority of the Minnesota State Legislature.

The importance of effective code enforcement cannot be overemphasized. The International Fire Code, while containing many regulations for new construction, is primarily a maintenance code. This means that the code is intended to set standards for maintaining a building's fire and life safety features, such

as exits, detection and suppression systems, compartmentation, and smoke removal systems. It also ensures that the building is kept free from hazards and conditions that might lead to the ignition of a fire or increase fire spread.

The nationally *recommended* frequency of commercial fire safety inspections varies by the type of business. Generally they are classified by degree of hazard. The table below describes the various hazard classes and the National Fire Protection Association's optimum recommended frequency for fire safety inspections.

Figure 53: NFPA Inspection Frequency

Hazard Classification	Example Facilities	Recommended Inspection Frequency
Low	Apartment common areas, small stores and offices, medical offices, storage of other than flammable or hazardous materials.	Annual
Moderate	Gas stations, large (>12,000 square feet) stores and offices, restaurants, schools, hospitals, manufacturing (moderate hazardous materials use), industrial (moderate hazardous materials use), auto repair shops, storage of large quantities of combustible or flammable material.	Semi-annual
High	Nursing homes, large quantity users of hazardous materials, industrial facilities with high process hazards, bulk flammable liquid storage facilities, an facility classified as an "extremely hazardous substance" facility by federal regulations	Quarterly

While the above charted inspection frequency may be very difficult for any department to maintain, it does serve to point out the accepted national practice of classifying occupancies by hazard (risk) and adjusting inspection frequency accordingly. This practice is also demonstrated in national model fire codes, where frequency of inspection is often dictated by risk.

Another area of life safety programming, fire safety education, is the greatest opportunity to influence human behavior that often results in hostile fire. It is an area that should be emphasized by an active fire prevention program. The most receptive audience to the fire safety message is children.

There are also very good programs designed to address the growing emergency medical incident rate. These programs, such as NFPA's Risk Watch, teach children how to avoid common injuries due to

accidents. Many department adopt such programs as part of the total prevention program for their communities.

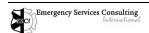
Finally, the investigation of fires, explosions, and related emergencies when they do occur is an integral part of providing life safety services to a community. The "fire problem" in a community is addressed by a "cycle" of resources provided by the authority having jurisdiction. These resources include **public education** so the citizen is aware of hazards, how to prevent them, and what to do should they occur; **engineering/code enforcement** so fire and life safety is an inherent part of the community infrastructure and, where there is a violation, compliance is achieved; **fire suppression** so that, when there is a failure in the education or engineering/code enforcement part of the cycle, the emergency can be resolved; and **fire investigation** where the incident is documented, the cause determined as accidental or intentional, and steps taken so it will not happen again.

The results of fire investigations suggest public education needs and results, the need for code modifications and changes, fire department training, resources and deployment, and identification of the community's "fire problem."

The following table summarizes the information relative to these agencies' fire prevention and life safety programs.

Figure 54: Life Safety and Prevention Components Comparison

	Chokio Fire Department	Donnelly Fire Department	Hancock Fire Department	Morris Fire Department
Applicable Fire Code	Code is state-wide minimum	Code is state-wide minimum	Code is state-wide minimum	Locally adopted for local enforcement Code is state-wide minimum
Local Sprinkler Requirements Exceeding Model Code	None	None	None	None
Agency Involvement in New Commercial Construction				Agency requires plan submittal Site review conducted
Key-Vault Entry Box Program	No program in place	No program in place	No program in place	Yes- voluntary only
Inspection Frequency for High-Risk Occupancies Inspection Frequency for Moderate-Risk Occupancies	No fire inspection program in place	No fire inspection program in place	No fire inspection program in place	No regular schedule No regular schedule



Inspection Frequency for Low-Risk Occupancies				No regular schedule
Number of Initial Inspections Conducted Prior Year				10
Formal Training for Inspectors				Formal inspection certification
Public Education Officer/Program Manager Assigned	No formal assignment	Yes ancillary duty assignment	No formal assignment	Yes ancillary duty assignment
Topics Included in Public Education Programs	Residential exit plans/drills Smoke alarm use General fire safety Public relations events only	Residential exit plans/drills Smoke alarm use General fire safety Injury prevention	Smoke alarm use General fire safety	Residential exit plans/drills Smoke alarm use General fire safety Fire extinguisher use Injury prevention
Publications Stocked and Distributed	Not consistently	Yes	Not consistently	Yes
Formal Public Education Training Provided to All Personnel	No	No	No	No
Number of Formal Public Education Contact Events Prior Year	1	3	2	30
Level of Fire Investigation Provided by Agency Itself	Initial scene control and reporting	Fire origin and cause determination	Fire origin and cause determination	Fire origin and cause determination
Additional Fire Investigation Resources Available	State Fire Marshal's Office fire investigators	State Fire Marshal's Office fire investigators	State Fire Marshal's Office fire investigators	State Fire Marshal's Office fire investigators
Individual Responsible for Fire Investigations	Chief	Chief	Chief	Chief
Formal Training for All Personnel	None	None	None	Scene control and evidence quarantine
Formal Training for Specified Fire Investigators	None	None	None	Initial fire cause and origin Arson detection and investigation
Investigation Program Guided by NFPA 921	No	No	No	No
Juvenile Firesetter Program	Referred to state	No formal	No formal	Referred to state

Opportunities for Cooperative Efforts

The previous section of this document provides an overview and baseline assessment of the emergency services delivery system within Chokio, Donnelly, Hancock and Morris and each department's primary response areas outside their respective municipal boundaries. This section uses that assessment of baseline conditions to develop scenarios for future service delivery utilizing the concept of shared or cooperative services.

During the past three decades, fire protection in America has undergone a process of remarkable transformation. Change began in the early 1970s, roughly corresponding with the publication of the *America Burning* report by the National Commission on Fire Prevention and Control (published in 1973). About that time, fire departments across the nation began to assume a greater role in the protection of citizens from more hazards — quickly expanding from fire suppression to greater emphasis on fire prevention, emergency medical service, ambulance transport, hazardous materials, specialized rescue, and natural disaster. The process of change continues today, although some authorities feel not in the spirit of the 1973 report.

While many of the goals of the *America Burning* report and the subsequent *Fire Prevention and Control Act of 1974* have not materialized, the responsibilities of community fire departments continue to increase. Urban and suburban expansion have reached unprecedented levels across America, yet laws that limit the funding of public services increasingly restrict emergency services in those same communities. Nearly all such tax limit laws trace their roots to California's Proposition 13 (passed by voters in 1978; also referred to as the California tax revolt).

Well before the release of *America Burning* and the California tax revolt, private sector businesses recognized the benefit of merger and collaboration as a means to increase efficiency. For years, critics have advised government to "reinvent itself" and to administer programs more "like a business." Many elected policymakers of counties, cities, and fire departments list personal business acumen as an asset that they bring to the office. An increasing number of fire chiefs and policymakers accept the moral imperative to maximize the efficiency and effectiveness of emergency service resources through a process of strategic cooperation.

Consequently, what was once relatively uncommon in the fire protection industry has become more widespread as fire department leaders react to internal forces promoting maximization of resources due to external drivers (i.e., expanding scope of service, increased populations, rapid economic growth, and limited capital). More and more, local fire organizations join in partnership with other jurisdictions to eliminate service duplication and to focus resources on providing essential services. Such strategic alliances between fire protection agencies began in areas experiencing rapid economic development, primarily surrounding western cities like Los Angeles, Denver, Seattle, Salt Lake City, and Portland. Now, as the economic development that so characterized metropolitan centers during the last two decades spreads and external forces act to limit the ability of the once outlying suburban and rural communities to unilaterally react to the change, the strategic partnership of emergency service organizations becomes an alternative more frequently considered by policymakers.

General Partnering Strategies

Four basic strategies are generally available when considering consolidation of services, beginning with a do-nothing approach and ending with complete unification of the organizations into what is, essentially, a new emergency service provider. A description of the four methodologies is found below:

<u>Autonomy</u>

The departments can decide to continue as separate organizations by not taking advantage of any further partnering opportunities. Autonomy provides each governing board with the most organizational control because, under this strategy, the agencies continue to make decisions considering only unilateral issues. The strategy represents a perpetuation of the status quo, and it is useful as a means by which to measure the other strategies.

Functional Consolidation

Public entities usually have broad authority under law to enter intergovernmental agreements (IGAs) for the purpose of cost and service efficiency. Minnesota is no different in this regard. The laws of the State of Minnesota address the issue, allowing intergovernmental contracts for any lawfully authorized

Operational Consolidation

This strategy joins two or more entities, in their entirety, through the execution of an intergovernmental agreement (IGA). The resulting organization features a single organizational structure and chain of command. Depending on the form of the agreement(s) establishing the organization, members may

remain with the original agency, transfer to one of the other agencies, or transfer to an entirely new entity.

Legal Unification

Under certain circumstances in law, fire departments can join into a single entity. This formal approach unites not only the programs but also the organizations themselves. State laws addressing political subdivisions usually detail a process for legal unification.

Typically, state laws draw a distinction between words like *annexation*, *merger*, and *consolidation* when speaking of legal unification. Organizationally, however, the outcome of any such legal process results in one unified organization. The major differences between the legal strategies relate to governance and taxation issues. In many states, some process of *inclusion* exists that essentially involves the annexation of one entity to another, preserving the governing board and taxing authority of the surviving agency. A legal merger, on the other hand, usually entails the complete dissolution of two or more agencies with the concurrent formation of a single new entity (and board) in place of the former.

In identifying potential cooperative opportunities, the project team considered the key issues now challenging each agency. Some issues represent roadblocks to integration, while others provide a unique chance for improvement. As an element of the review, affected staff and other officials provided local and internal perspective on organizational culture, community expectation, and other significant matters.

The following paragraphs provide a summary of all potential shared services strategies available within the study region. Although every attempt has been made to identify all the areas of potential, intimate knowledge of the current system may allow for other areas to be explored outside the parameters of this report. It is important to point out that some study agencies are already working to implement select concepts. Regardless of the existing level of implementation, ESCI provides detailed information on all strategies to provide the reader with a complete picture of full cooperative potential.

Consolidation of Chokio, Donnelly, Hancock and Morris Fire Departments

Level of Cooperation

Operational

Timeline for Completion

Long Term

Section

Administration and Operations

Affected Stakeholders

All Agencies

Objective

- Consolidate fire and EMS entities into a single operational unit, either through the establishment
 of a new special fire district or under the provisions of an extensive intergovernmental agreement
 or joint powers agreement.
- Provide increased fire and emergency service efficiency in the areas served by the Chokio,
 Donnelly, Hancock and Morris fire departments.

Summary

The fire departments within Stevens County already benefit from some collaborative programs such as mutual and automatic aid, therefore it is natural that continuing the long-term strategy of cooperation should eventually lead to the whole area forming a single fire agency. Since each department within Stevens County is volunteer in the way that they delivery services, the total budget for fire protection is extremely low at \$270,388. The greatest savings from consolidations and/or mergers are typically found in personnel costs. This is not the case with Stevens County. Volunteers would presumably still receive incentive pay for incident response, training sessions and meetings and would likely see an overall increase in these incentives based on the highest current incentive paid (\$10.00 – MFD), and the consolidated system could potentially employ a full- or part-time Chief to oversee the entire operation. These changes could result in an increase in the overall cost of providing fire protection to the county through a consolidated system.

Discussion and Financial Analysis

The present system of providing emergency services by the different agencies throughout the county has limited continuity. This unification strategy expands on the current efforts and places operation of the departments under a single governance. In the existing situation, the governing body of each municipality prepares and adopts separate budgets, and policies. Previous sections of this report presented recommendations for each of the fire departments individually and, in some cases, in concert with one another. Deciding which recommendations to enact is the responsibility of the governing bodies of the departments. If the various departments' management and operational structures are merged, planning and executing change becomes more efficient and effective.

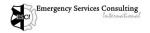
ESCI believes that efficiencies may be found with the consolidation of the administrative and operational functions. Combining all functions of the departments can be accomplished by creating a single fire/EMS budget and apportioning cost in accordance with a predetermined formula. In ESCI's experience with other such partnerships, it has been noted that organizational pairings resulting in one operational structure seem to be more successful over the long term. ESCI recommends a complete consolidation of all fire department functions.

To fix the parameters of analysis, ESCI assumes that an operational consolidation of the departments will result in a single organization administered by one fire chief and governed by a single oversight authority; in this case, Stevens County. The administrative and operational makeup of the organization includes the equivalent number of personnel as the combined departments. It should be understood that this is where ESCI chose to lay the foundation. The end result of any consolidation and how the management and oversight of such a single agency develops will be determined through a lengthy process of negotiation and compromise.

Cost is always a key factor when deciding to enact organizational partnerships. To that end, ESCI created a model budget for the fire departments designed to fairly represent the monetary policies of each agency equally, to neutralize the normal differences usually found in unilateral fiscal practices, and to account for any financial peculiarities (such as budgetary back loading).

In calculating a model budget for a unified organization, ESCI made several assumptions in regards to personnel:

• One Fire Chief would be required. This could be a full-time or part-time position



- One part-time administrative assistant would be required
- The number of Assistant Chiefs would be reduced to four one at each station
- The number of line officers would be increased to eight two at each station
- The total number of personnel within the system would remain the same

ESCI was unable to generate a baseline model budget that breaks out personnel, operations, and materials due to the way that some of the study departments maintain their budgets. However, ESCI was able to make some generalizations about the total budget and generate a model consolidated budget estimate of \$270,406. This is without an adjustment for an increase in the incentive pay to the current MFD \$10.00 rate and associated training and meeting pay rates. When these adjustments are added, the total model budget is calculated to be approximately \$285,000.

Analysis of specific cost changes for any existing tax entity will be dependent upon the method that is selected to fund the new consolidated system. Once a determination is made as to what revenue source or combination of sources are to be used in funding the consolidated system, specific comparisons can be developed to demonstrate the individual cost impact to participating communities. As noted above, however, overall system cost is projected to decrease.

Benchmarks

A study jointly conducted by NFPA and the Federal Emergency Management Agency (FEMA) examined the emergency workload, capital resources, and the numbers of firefighters (career and volunteer) in communities across the United States. In addition, a previous NFPA study provides other information about U.S. fire department staffing and resources.¹¹ ESCI uses data from the two related studies to develop a series of comparative benchmarks for fire protection organizations. It should be emphasized, however, that the benchmarks used in this section *do not* represent standards of service. The measurements are intended only as references to assist policymakers in comparing the organizations with others in a similar demographic or region. Some benchmarks use a regional point of reference (i.e., Midwest United States) while others compare the departments with a national sample.

Emergency Services Consulting

¹¹ FEMA/NFPA, "A Needs Assessment of the U.S. Fire Service", FA-240/December. NFPA, "U.S. Fire Department Profile through 2001", December 2002. The study divides the U.S. into Northeast, North Central, South, and Western regions. Fire departments within each of the four regions are categorized by service area population.

The figure below shows that a consolidated department would have more volunteer firefighters per 1,000 residents than the median of other Midwestern fire departments serving a similar population base. This disparity is likely due to the small size of the individual communities and the high number of volunteers in each department as compared to municipal population. ESCI believes that the need for volunteers will continue long into the foreseeable future.

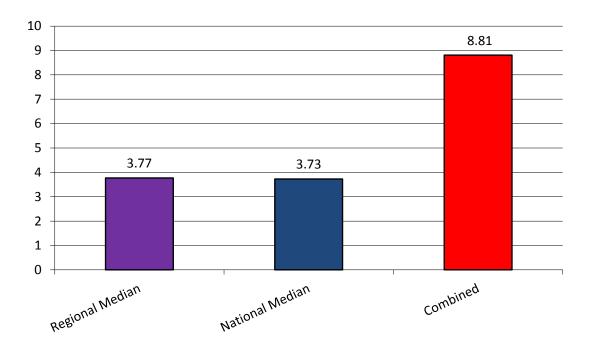


Figure 55: Consolidated Comparison of Firefighters per 1,000 Population

Regardless of the raw number of personnel available to a fire department, what matters most is the actual number of emergency responders the agency is able to produce at an emergency scene. This almost always relates to the actual number of emergency responders available for immediate deployment.

The following figure provides an overview of a consolidated comparison of fire suppression resources and compares these with the median rate of resource allocation in other communities of similar size within the Midwest United States.

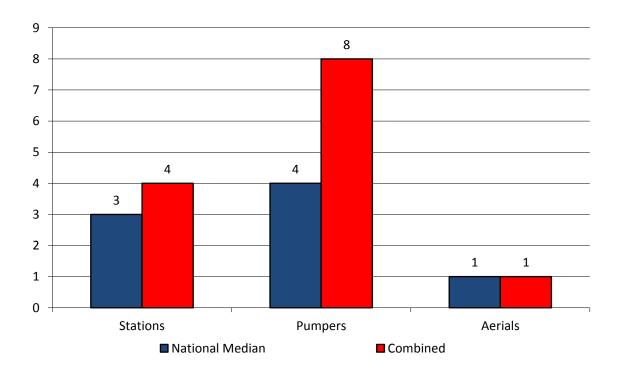


Figure 56: Consolidated Comparison of Resource per 1,000 Population

The chart above does not illustrate the extent that geography plays in determining the resources that are necessary to protect the service area with a consolidated fire department. The only factor for comparison in this graphic is population. The consolidated department would maintain slightly more stations, a significantly higher number of pumpers, and an equal number of aerial apparatus as the median of other Midwestern fire departments serving similar populations.

The figure below compares the response workload of a consolidated department to the median workload of other similar Midwest region fire departments and shows the national range for incidents in communities with a population similar to that served by the combined departments.

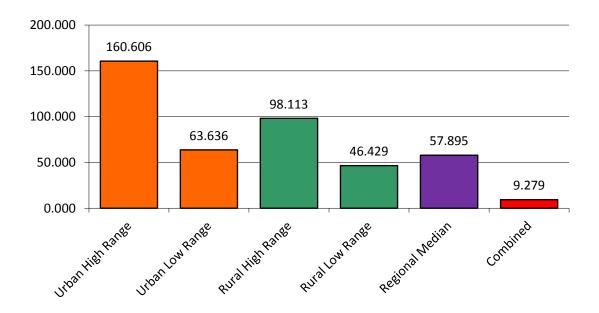


Figure 57: Comparison of Incidents per 1,000 Population

As illustrated above, the emergency workload of the consolidated fire department is significantly lower than the urban and rural ranges of other similar-sized communities as well as significantly lower than the regional median of incidents per 1,000 population.

As illustrated in the figure below, the consolidated fire department could expect a fire incidence rate that is much lower than the median of other Midwestern fire departments serving similar populations.

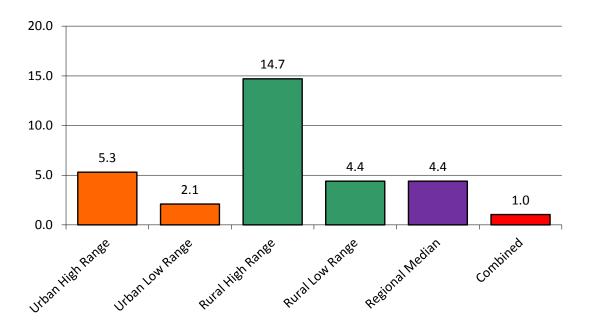


Figure 58: Comparison of Fires per 1,000 Population

Firefighter Relief Associations

One issue that could be a major factor in the decision to enter into a shared services or other cooperative services agreement between the fire departments concerns each agency's Fire Relief Association. A 2011 report issued by the Minnesota Office of the State Auditor found that 717 relief associations were in existence in Minnesota during 2009. Those 717 relief associations held nearly \$403 million in net assets, which represents accrued benefits for 20,812 firefighters statewide. During 2009, relief association received \$15.4 million in fire state aid and received \$7.8 million in municipal contributions. During that same year, \$30.8 million in service pensions was paid out by 444 different relief associations.

Chokio, Hancock and Morris each have individual fire relief associations that benefit their volunteer members. Each of these three agencies participate in a lump sum plan, which means that, at the appropriate time, eligible members receive a one-time payment from the association based on set criteria. Donnelly participates in a Defined-Contribution Plan. A Defined-Contribution plan is always fully funded based on the fact that assets are always equal to liabilities. All assets are divided among plan members, and the value of each member's account rises or falls based on revenues and expenditures to

¹² Financial and Investment Report of Volunteer Fire Relief Associations. March 2011.



or from the plan. The following figure illustrates the differences in each relief association's net assets, accrued liabilities and funding ratios.

Figure 59: Comparison of Assets, Liabilities and Funding

	Net Assets	Accrued Liabilities	Funding Ratio
Chokio FRA	\$128,444	\$84,410	152%
Donnelly FRA	\$134,755	\$134,755	100%
Hancock FRA	\$218,369	\$204,101	107%
Morris FRA	\$684,727	\$670,225	102%

The following figure compares each association's revenues during 2009.

Figure 60: Comparison of Fund Revenues

	State Aid	Supplemental Benefit Reimb.	Municipal Contributions	Investment Earnings	Other	Total 2009 Revenue
Chokio FRA	\$7,030	\$2,828	\$0	\$20,171	\$0	\$30,029
Donnelly FRA	\$6,980	\$730	\$0	\$23,127	\$516	\$31,353
Hancock FRA	\$7,016	\$630	\$0	\$14,415	\$0	\$22,061
Morris FRA	\$20,701	\$1,000	\$21,750	\$135,919	\$3,000	\$182,370

Expenditures from each fund were also varied as illustrated below.

Figure 61: Comparison of Fund Expenditures

	Administration	Service Pensions	Other
Chokio FRA	\$839	\$17,500	\$0
Donnelly FRA	\$1,959	\$8,032	\$0
Hancock FRA	\$0	\$1,200	\$0
Morris FRA	\$3,630	\$29,361	\$0

Aside from the fiscal differences between the plans, the qualifying criteria between the three agencies also vary. The figure below summarizes the qualifying criteria for each relief association.

Figure 62: Relief Association Qualifying Criteria Summary

Relief Association	Retirement Age	Years of Active Service	Years of Membership
Chokio FRA	50	10	10
Donnelly FRA	50	10	5
Hancock FRA	50	10	10
Morris FRA	50	15	15



Consolidation of the relief associations would require policy makers to determine the most appropriate qualifying criteria from the variables.

Benefits offered under each plan also differ as illustrated in the figure below.

Figure 63: Comparison of Fund Benefits¹³

	Annual Benefit	Long-Term Disability	Short-Term Disability	Survivor Benefit
Chokio FRA	\$500	\$300	None	\$500
Donnelly FRA	Balanced	Balanced	None	Balanced
Hancock FRA	\$600	None	None	\$600
Morris	\$1,500	\$1,500	None	\$1,500

In determining what impact a shared or cooperative service model would have on the relief associations, ESCI evaluated the current liabilities of each fund and applied the highest level of benefit to assess future fiscal implications. Based on the auditor's report, the three agencies currently have 97 active members and 9 deferred members. At an assumed \$1,500 per year of service payment, the total liability would currently calculate to approximately \$1,590,000 compared to a current asset value of all three funds of \$1,166,295 for a net deficit of \$423,705, or a funding ratio of 73.4 percent. The median funding ratio of all Minnesota lump sum plans in 2009 was 98.0 percent, while defined-contribution plans are always balanced.

If the decision is made to move forward with the consolidation of the three study agencies, a decision will need to be made at the elected official level as to how to handle the consolidation of the respective relief associations. The current \$1,000 difference between the lowest and highest benefit levels creates a significant deficit as described above. Efforts to reduce the deficit could include reducing the annual benefit to a lower level, such as an average of the three current benefits. An annual benefit of \$1,000 would create a funding ratio of 123 percent based on a 10 year minimum membership and active service requirement.

Policy Action

A number of policy options exist for integrating the fire and emergency services of the fire departments. Some of the following options might be deemed inappropriate in this situation by the local elected

¹³ Long-Term Disability and Survivor Benefits are calculated on a per year of service basis.



officials who are much more in touch with local political will and culture, but these options are worthy of discussing for future opportunities. The options include the following:

- Form a consolidated fire department through intergovernmental agreements only, and the establishment of a Joint Powers Agreement (JPA). This would leave all existing funding and governance mechanisms in place and require extensive negotiation of intergovernmental agreements for the formation, governance, and operation of a regional fire and EMS department. Equitable funding would be negotiated through the JPA. This policy option would only functionally merge the fire protection system of the cities, requiring local action and proper notification for reversal.
- Form a consolidated fire department through the creation of a special fire service district. This would transfer the authority and responsibility of fire protection from the three existing cities to a newly created board to oversee the district creating a new unit of government and a new taxing authority. Funding would, in all likelihood, come solely from ad valorem taxation and, although a commensurate reduction in the individual cities' tax rates may result, the total tax passed onto the citizens may be higher than current rates.

Critical Issues

Organizational consolidations and mergers fail for many reasons. Sometimes law prohibits the idea at the outset. Other times the proposal may be doomed by the unfavorable outcome of a public election, or the reality of finance. These issues aside however, four major pitfalls can cause even the most feasible consolidation to go wrong. We think of these pitfalls as the "Four Horsemen" of failed partnerships. Specifically, the four are command, communication, control, and culture.

- Command: Undertaking any partnership as complex as a consolidation absolutely requires effective leadership be demonstrated consistently at all levels. Policymakers and administrators must guide their respective agencies, yet (at the same time) they must cooperate with partner organizations. Differing leadership styles may cause repressed friction at best and open conflict at worst. Problems with sharing control and making decisions sends the wrong message to the members of the organization, which can lead to an unraveling of even the best proposal.
- Communication: Silence or limited information from leaders about potential or upcoming partnerships breeds fear, mistrust, and misinformation among affected persons. The leadership of

collaborating organizations must agree to communicate actively with all affected groups. Everyone must be provided the same information at the same time. Most importantly, leaders must demonstrate two-way communication skills by carefully listening to (and acting on) the concerns of all constituents.

- Control: Frequently, the consolidation process is compared to a marriage. As the saying goes, "Marriage is when two people become as one; the trouble starts when they try to decide which one." As in marriage, consolidation often fails because of organizational or personal ego issues. The tenets of leadership require that someone be in charge; but in the interest of the greater good, some of those in leadership positions must agree to yield power. Some who are used to operating in a position of control may have trouble adjusting to new roles that require more collaboration. Personal sacrifice in the interest of community good may not always win out.
- Culture: Two schools of thought exist regarding organizational culture. The first camp views culture as implicit in social life, naturally emerging as individuals transform themselves into social groups (tribes, organizations, communities, and nations). The second camp offers that culture is comprised of distinct observable forms (language, use of symbols, customs, methods of problem solving, and design of work settings) that people create and use to confront the broader social environment. This second view is most widely used in the evaluation and management of organizational culture, but the first is no less important when considering bringing two discrete organizations into a closer relationship.
- The general characteristics of a fire department encourage the creation of a culture unique to that organization. The paramilitary structure, the reliance on teamwork, and the hazards of the work builds strong bonds between the members who tend to share group behaviors, assumptions, beliefs, and values. Bringing multiple groups together with cultures formed through different experiences always results in a change to both organizational cultures. If the partnership is successful, no one culture will overcome the other instead, a new culture will evolve from the two. If the organizational cultures are incompatible well, frankly, the partnership will often fail.
- Leaders must be aware of organizational culture and its role in the wellness of the agency's heart and soul. Early recognition by leadership of the importance of culture to the success of a partnership can help to overcome differences and build on strengths.

¹⁴ Source unknown.

Guidance

- Consult with service partners. The city councils of each city should begin a dialog with each other and with service partners and neighboring fire agencies regarding the proposed consolidation. Establish which agencies are likely to actively participate in reaching the goal.
- Consult with legal counsel. The individual city councils should consult with legal counsel regarding the statutory options and requirements for consolidation.
- Joint Adoption of a Regional Fire and EMS Vision. Each city council should formally adopt a Regional Fire and EMS Vision to set the course for any future cooperative service or consolidation.
- Organize the Steering Committee. Representatives from each city council should form a joint fire
 and EMS planning committee to formulate and report on all elements of a consolidation plan.
 Establish leadership roles of the chair and other committee members. Create meeting guidelines
 and elect leadership. Set meeting dates and times. Review and adopt the work plan. Meetings
 are ongoing, as is the review and revision of the work plan. The Committee performs as a
 clearinghouse for all information concerning the effort so that service partners speak with a
 unified voice.
- Name the consolidated department. As an element of the work plan, the Steering Committee should establish a suitable name for the consolidated fire department. The name should reflect the identity of the whole protected area.

Functional Cooperative Efforts

Aside from an operational consolidation of the four study agencies, there are other functional components of each department that could be operated in a cooperative manner. As was shown during the evaluation phase of this report, apart from automatic and mutual aid, each department operates independently. Little in the way of standard operating guidelines, training, recordkeeping, unit staffing, etc. is coordinated amongst the departments. This produces inefficiencies throughout the system. In the absence of consolidation of the study agencies, ESCI makes the following recommendations in regards to functional cooperative efforts that should improve efficiency and the overall level of service to the community as well as an increased level of safety for department personnel.

A – Develop Standard Operating Guidelines

Level of Cooperation

Functional

Timeline for Completion

• Short Term

Section

Emergency Operations

Affected Stakeholders

All Agencies

Objective

• Provide guidelines for operation during emergencies, emergent, and non-emergent incidents.

Summary

Standard operating guidelines are used at the operations level of the fire department. They are analogous to a playbook, providing direction yet allowing for individualized company officer adjustments to situations. Currently each fire agency in this study is responsible for developing a unique set of standard operating guidelines for their organization.

Discussion

Standard operating guidelines will improve on-scene safety, efficiency, and effectiveness of personnel. With personnel from all agencies trained in using the same procedures, they can approach an incident with an understanding that everyone will proceed in a similar fashion. This will greatly reduce or eliminate the confusion that can lead to delays in the delivery of service.

Guidance

- Keep the guidelines in electronic format for ease of updating.
- Give initial and recurring education to personnel in their use.
- Provide for continual use of the standard operating guidelines during routine incidents and at each training session.
- Provide for a periodic appraisal of the guidelines to maintain currency with changes in tactics, strategy, and equipment.
- Consciously keep guidelines non-specific to allow for adaptation to particular incidents by the supervisor.

Fiscal Considerations

- The elimination of duplicated staff effort in the creation and updating of standard operating guidelines will reduce soft costs.
- Instructional time optimized during multi-agency training sessions by excluding time devoted to adapting to differing procedures.

B – Create a Unified Occupational Medicine Program

Level of Cooperation

Functional

Timeline for Completion

• Middle Term

Section

Administration

Affected Stakeholders

All Agencies

Objective

• Provide a fire-service related occupational and health program.

Summary

A single method and source for providing occupational and health services may provide savings through economies of scale. NFPA 1500, Standard on Fire Department Occupational Safety and Health Programs, provides the minimum requirements for a fire-service related occupational safety and health program. Along with NFPA 1500, NFPA 1582, the Standard on Comprehensive Occupational Medicine Programs for Fire Departments, and related documents, provide guidance for the creation of occupational health programs and for establishing medical requirements for current and future firefighters.

Discussion

There is a need for all fire departments to have access to a group of professionals with expertise in the occupational medicine field. Occupational medicine is dedicated to promoting and protecting the health of workers through preventive services, clinical care, research, and educational programs. One aspect of a program is keeping up to date with health and safety regulations, standards, and current practices. Occupational medicine specialists review current practices to see if the agencies meet new regulations, make modifications if needed, and assist the departments in adopting any changes.

The importance of employee health and welfare, and the potential liability associated with the lack of such programs, necessitates that fire departments establish close professional relationships with

occupational medicine specialists to assure that emergency workers are protected by the most up-todate occupational health and safety programs possible.

Occupational safety and health programs (sometimes referred to as Industrial Medicine) vary in depth, form, and delivery. A fire department may employ a physician full time, contract with a provider organization, or conduct part of a program in-house while contracting for the remaining services. Any number of providers throughout the region could provide these services to the departments.

The legal requirements for a fire department occupational safety and health program have been established. How a fire department administers and supports the program determines the success and the resultant benefit. An additional advantage of using a local occupational safety and health provider is the ability to quickly evaluate and treat non-threatening injuries suffered by employees.

Guidance

- Determine required and desired specifications for an occupational safety and health program.
- Create a single personnel policy for occupational safety and health.
- Develop an RFP for soliciting vendors to supply occupational safety and health services.
- Conduct baseline testing for firefighters without previous audio and lung function baseline records.

Fiscal Considerations

Occupational medicine programs are often menu driven. Items selected for inclusion in the
program determine the final cost. Additional financial factors involve whether the fire
departments elect to exceed mandated requirements, perform some of the occupational medicine
functions internally, or consolidate the occupational medicine program with interrelated
programs. Interrelated programs that share functions include wellness, infectious disease, FIT
testing, EMS, and hazardous materials.

C – Create a Unified Wellness and Fitness Program

Level of Cooperation

Functional

Timeline for Completion

• Middle Term

Section

Administration

Affected Stakeholders

All Agencies

Objective

- Provide a wellness and fitness program that promotes the improved health and well-being of personnel at all ranks.
- Increase fitness levels and decrease injuries.
- Reduce frequency and number of sick/injury incidents.
- Reduce the number of days used for sick/injury leave.

Summary

Wellness and fitness programs have proven beneficial to employers and employees alike. Onsite visits by licensed wellness experts are part of an all-inclusive program. Services offered under a comprehensive wellness program may include:

- Wellness screening
- Health coaching
- Wellness and fitness educational materials
- Support groups
- Presentations
- Fitness evaluations
- Newsletters
- Nutritional information
- Health risk assessment
- Fitness training

Discussion

The benefits of wellness and fitness programs have, in some instances, been quantified anecdotally without specific documentation. Documented individual incidents and case studies over a longer period of time have now yielded conclusive data as to their benefits. Two case studies are used here to illustrate this point.

First, during an annual visit for his medical and fitness evaluation, a battalion chief with the Indianapolis, Indiana fire department was found to have an abnormal heart rhythm. He had considered himself to be in excellent condition, competing in track and field events since 1996. He was immediately removed from duty and sent to a cardiologist for a heart catheterization. He was diagnosed with severe blockages in four coronary arteries. Within two days of his medical evaluation, he underwent quadruple bypass surgery. His cardiologist told him he wouldn't have lived another two weeks without intervention. Remarkably, the battalion chief returned to work and was back exercising within six weeks of surgery.

The second example involves a mid-sized fire department employing both career and volunteer personnel. The department was in need of a fitness/wellness program and subsequently contracted with Oregon Health Sciences University to provide an evidence-based program custom tailored for its diverse group of firefighters. The primary goals of the program were to "increase fitness levels and decrease injuries." Results of the study spanning seven years conducted by OHSU Health Management Services included these findings:

- Greater than 30 percent increase in the number of participants.
- A decrease in average total cholesterol.
- A decrease in average LDL cholesterol from 130 to 120.
- Participants with BP in the high normal range or above dropped from 18.3 percent to 8.5 percent.
- Participants with moderate or high coronary risk dropped from 61.7 percent to 35.4 percent.
- Participants with an overall wellness score of good or excellent increased from 41.7 percent to 58.5 percent.

 Annual number of days lost (workers compensation days) dropped from a high of nearly 300 days to below 50 days. During the study period, the fire department increased the number of career personnel two-fold.

Guidance

- Determine the components of a wellness and fitness program that would best benefit all departments.
- Involve a broad cross section of employees in the development process.
- Investigate multiple programs and providers for best fit.
- Coordinate activities with established fitness and safety committees.
- Train in-house peer fitness trainer/coaches.
- Incorporate wellness and fitness services as an element of recruit academies.
- Include volunteers, staff, and support personnel in wellness and fitness services.
- Provide initial and recurring wellness education to personnel.
- Provide a newsletter (paper or virtual) for all personnel.
- Incorporate wellness in training sessions.
- Provide for a periodic appraisal of the wellness and fitness program.

Fiscal Considerations

- The cost per employee of a wellness and fitness program can vary widely. An annual per employee cost may range from as low as \$25 to as high as \$100 depending on many factors, such as:
 - Frequency of employee contact
 - Range of services desired
 - Equipment need
 - o Inclusion of ancillary offerings (newsletter, peer fitness coach training)
- The soft costs associated with on-duty time required for wellness and fitness instruction needs to be addressed before carrying out a plan.
- Potential cost savings may result from:

- o Reduced work related injury leave days
- o Reduced sick leave usage
- o Reduction in medical benefits used
- o Improvement in employee fitness and morale



D – Develop and Adopt Common Training Standards

Level of Cooperation

Functional

Timeline for Completion

Short Term

Section

Training

Affected Stakeholders

All Agencies

Objective

- Adopt uniform training guidelines.
- Adopt uniform certification standards.

Summary

Training standards provide the benchmark for training. They define and specify the quantity and quality of training for achieving levels of competency and certification. Certain standards are mandated by governing or regulating agencies such as OSHA (Occupational Safety and Health Administration). Others are considered industry standards developed by organizations like the National Fire Protection Association (NFPA). Occasionally, locally developed standards are adopted to address circumstances unique to that area. Private vendor standards and certifications are often applicable to specialized training.

Training records should consist of:

- Daily training records
- Company training records
- Individual training records
- An inventory of equipment assigned to the training department
- A complete reference library

Discussion

By collectively adopting a set of training standards (IFSTA, for example), fire departments are foundationally prepared to provide uniformity throughout the training delivery system and would

improve inter-agency compatibility. It would further simplify development of a regional training manual, annual training plan, and data entry and retrieval of computerized training records. Adoption will provide for uniformly trained and certified responders and will assure increased emergency scene compatibility, efficiency, effectiveness, personnel confidence, and safety.

Guidance

- Establish a work group including at least one training representative from each department.
 - o Identify mandated training standards affecting all departments.
 - Assess all standards used by the departments, including rationale for their use.
 - Consider any unique local issues.
 - Develop a process for the adoption of training standards.
 - o Adopt training standards to which all departments will adhere.
 - o Provide for continuous review and updating of training standards.
- Educate personnel on the purpose and application of the standards.
- Provide for continual use of training standards throughout the training delivery system.
- Maintain standards in a readily available format.
- Provide for frequent evaluation and updating of training standards.
- Address and resolve personnel certification issues (address through reciprocity) created by new standards and certifications.

Fiscal Considerations

- A reduction in duplicated staff effort (reduces soft costs) and training staff to develop similar but separate programs based on the same or differing standards.
- A potential for reduced specialized training costs through a larger pool of personnel.
- Responders trained to the same standard provide a more cohesive workforce, increasing efficiencies.

E – Create a Regional Training Manual

Level of Cooperation

Functional

Timeline for Completion

Short Term

Section

Training

Affected Stakeholders

All Agencies

Objective

• Provide consistent, standardized training procedures.

Summary

Fire department instructors use manuals based on national, state, and local standards as a resource to develop lesson plans for classroom and field training. Training sessions provide students with the knowledge, skills, and abilities to perform in emergency and non-emergency situations.

Discussion

Each fire department unilaterally selects training materials from a variety of options. Not surprisingly, training and performance varies across the region. The creation and use of a standard training manual will provide for more consistent training, better on-scene coordination, and improved firefighter safety.

As the firefighters of each department are trained in the same procedures, each can respond to an emergency with the confidence that all responders are prepared to work effectively as a team. This will improve the willingness of firefighters from different departments to work together as a coordinated emergency workforce. Standardized training procedures improve on-scene safety, efficiency, and effectiveness.

Care should be exercised to prevent the development process from taking too long. To expedite progress, ESCI recommend adopting material from existing model training manuals, hose evolutions, and standard operating guidelines.

Model fire department training material is readily available through non-profit organizations and private companies. Sources for commercially available training material include the Fire Department Training Network (FDTN), Thomson DelMar, and Oklahoma State University. The International Fire Service Training Association (through Oklahoma State University) and Fire Protection Publications (FPP) have been longstanding producers of training manuals, course curricula, and audiovisual aids for fire departments.

NFPA recommended practices and standards can also assist with the development of the training manual. Relevant standards include:

- NFPA 1401, Recommended Practice for Fire Service Training Reports and Records
- NFPA 1403, Standard on Live Fire Training Evolutions
- NFPA 1404, Standard for Fire Service Respiratory Protection Training
- NFPA 1410, Standard on Training for Initial Emergency Scene Operations
- NFPA 1451, Standard for a Fire Service Vehicle Operations Training Program

The need for training of personnel with specialized duties should be included in the regional training manual. Assistance is available through the BFST Fire Standards Section.

Guidance

- Establish and maintain a user group that meets regularly.
- Include at least one training representative from each department.
- Develop and adopt a single training manual.
- Place the training manual in electronic format for easier updating and to allow access by firefighters.
- Provide for coordinated training of all agencies.
- Provide for regularly scheduled multi-agency drills.
- Provide for a regular evaluation and review of the training manual for applicability to pertinent laws, industry standards, and regional standard operating guidelines.
- Seek out existing procedures for use in development of the training manual.

Fiscal Considerations

- The elimination of duplicated staff effort (reduces soft costs) in the selection, development, and updating of separate training manuals.
- Instructional time is likely impacted during multi-agency training sessions by reducing or eliminating the time devoted to adaptive or remedial training.
- An emergency workforce trained under a cooperative system is more efficient and effective in reducing property damage and loss during emergency incidents.
- A workforce trained to operate under universal standards will experience fewer emergency scene injuries.

F - Develop an Annual Regional Training Plan

Level of Cooperation

Functional

Timeline for Completion

Short Term

Section

Training

Affected Stakeholders

All Agencies

Objectives

- Provide standardized and consistent training.
- Provide a well-trained emergency workforce.
- Provide long-term vision and direction for training delivery.

Summary

The 2007 version of NFPA 1500 states, "The fire department shall provide training and education for all department members commensurate with the duties and functions that they are expected to perform." Two fire departments in this study address annual planning for fire and EMS training. A formalized training plan provides the guidance for meeting training requirements. The plan and subsequent training is used to ensure that firefighters are competent, certified, and possess the ability to safely deal with emergencies. Training priorities are established by evaluating responder competencies to training mandates, requirements, desired training, and with the emergency services being delivered. Contemporary training delivery often revolves around performance or outcome-based training.

An annual training plan should reflect priorities by identifying the training that will occur. Training topics, general subject matter, required resources, responsible party, tentative schedule, and instructors are all covered in the plan. Rationale for why certain topics were chosen (or not chosen) is also included in the plan.

¹⁵ National Fire Protection Association Standard 1500 *Standard for Fire Department Occupational Safety and Health Programs*, Training and Education, 2007 Edition.



_

Discussion

To efficiently plan the direction of a training program, complex factors must be considered, including: training mandates, department type, personnel career development, unanticipated need, priorities, and finite training time. Successfully charting a course through such issues can be a daunting and overwhelming task for the lone training officer.

Currently, each fire department individually deals with the same or similar fire training responsibilities and issues — inefficiencies exist as a result. A single training plan is an opportunity to combine intellectual resources to exploit the strengths and assets of each department for mutual benefit.

"Efficient training systems are those that identify what they do well and take advantage of the opportunities provided by other systems to supplement their efforts. Inefficient systems are those that try to be all things to all people, and in doing so, squander resources." ¹⁶

Determining the level of training that will be supported is crucial. Develop the annual training plan accordingly and deliver the training that directly supports those levels. For example, training could be directed at supporting certifications of Firefighter I, Fire Officer I, and Apparatus and Pump Operator. A pool of instructors who are experts in that subject can be developed from those with the interest, qualifications, and expertise.

Developing and carrying through with a well-conceived and coordinated training plan can improve onscene safety, efficiency, and effectiveness of personnel. With personnel from all agencies trained from the same plan, an emergency incident may be attacked with an expectation as to the level of training and skill set of the responders. The training plan will also assist in the planning and tracking of employee development and certifications.

Guidance

- Provide a coordinated training plan including:
 - All agencies.
 - o Plan regular use of training facilities by all departments.
 - Schedule regular single agency manipulative single and multi-company drills.
 - o Schedule regular multi-agency, multi-company manipulative drills.

¹⁶ Department of Homeland Security, FEMA, U.S. Fire Administration, *The Future of Fire Service Training and Education Professional Status*: Part Two – Training and Education, page 1.



- Establish and maintain a training committee that meets regularly. Include at least one training representative from each department:
 - Develop an annual training plan.
 - o Publish, distribute, and implement the plan.
 - Provide an orientation for personnel of each department regarding the plan's purpose and contents.
 - o Publish monthly training schedules based on the plan.
- Place the annual plan and monthly schedules in electronic format for distribution and ease of updating.
- Provide for periodic reviews and adjustments to the plan.
- Direct all curricula towards risk management.
- Include all hazards in the training plan rather than solely fire-related incidents. The fire service's
 response and mitigation missions have expanded greatly over the years and now include all
 disasters, natural and manmade.

Fiscal Considerations

- An elimination or reduction in duplicated staff effort (reduced soft costs) in the creation and updating of multiple training plans.
- Instructional time is increased during multi-agency training sessions with personnel trained to selected certification levels.
- A reduction in costs through coordination of shared training resources and equipment.

G – Purchase Uniform Emergency Apparatus

Level of Cooperation

Functional

Timeline for Completion

Long Term

Section

Emergency Operations

Affected Stakeholders

All Agencies

Objective

- Create a single set of emergency apparatus specifications.
- Provide single-source uniform emergency apparatus for all fire agencies.

Summary

The study fire departments use and maintain a variety of emergency apparatus types. Among the common types of apparatus (such as pumpers), each department uses equipment of different makes, models, and configurations. A standard specification and procurement process for each apparatus type would result in lower cost, faster production, and training efficiencies.

Procurement of uniform fire apparatus can translate into lower purchase prices; reduction in parts warehousing; and less money, time, and effort spent training drivers and maintenance personnel. Other benefits include greater interoperability, a potential for reducing driver training, and greater confidence and skill level among operators.

Discussion

The apparatus fleet of the individual fire departments is diverse. Fire apparatus are categorized by function, including pumpers, aerial devices, water tenders/tankers, wildland units, rescue units, and ambulances. While there is an identifiable need for vehicles from each category in more than one configuration, acquiring and maintaining standard apparatus creates desirable efficiencies. Dissimilar apparatus tends to increase purchase cost, requires additional initial and recurrent training, and results in the need to warehouse a larger parts supply.

The cash price of a pumper frequently exceeds \$600,000; the cost of an aerial unit may easily exceed twice that amount. The reasons for such prices are due to the specialized nature of fire apparatus. However, customization, add-ons, and options tend to make each fire apparatus a "one of a kind" vehicle. The costs to equip, maintain, repair, train operators and mechanics, and to warehouse parts only adds to the overall expenditure.

Fire apparatus useful service life varies generally depending on the rate of use, the environment, operating conditions, and the frequency and level of preventive maintenance. A fire pumper with average to heavy use can reasonably be expected to have a ten to fifteen year service life. With light to very light use, service life can reach 20 years; very heavy use may reduce service life to as few as ten years. Aerial devices are often operated less frequently and have a useful life of between 15 and 20 years.

Factors influencing fire apparatus service life include technology and economics. At a given time the cost to operate and maintain a fire apparatus passes the economics of rehabilitation, refurbishment, or replacement.

A trend is developing within the fire apparatus manufacturing industry. Several manufacturers now offer a line of stock fire apparatus built on custom chassis in addition to a more traditional line of fully custom units. The cost savings of purchasing a stock unit is often 20 percent or more when compared to a custom unit.

Some fire departments use the option of lease purchasing to fill emergency apparatus need. Some of the benefits associated with leasing are:

- Leasing may provide a cost advantage over conventional financing by transferring tax incentives (accelerated depreciation) associated with the equipment ownership from the Lessor (the owner) to the Lessee (the user) in the form of lower lease payments.
- Leasing can provide one hundred percent financing, conserving cash.
- Leasing can provide a close matching of the lease term and payments to the revenue available to the fire department.

Safety should always be the main consideration when purchasing and operating emergency fire apparatus. When developing emergency fire apparatus specifications and operational procedures, NFPA and other industry standards should be used. Additional guidance on fire apparatus safety devices, response, and training can be found in the *Emergency Vehicle Safety Initiative*.¹⁷

Guidance

- Determine the replacement interval and projected life expectancy of each apparatus.
- Examine the merits of extending the useful service life of apparatus through rehabilitation and refurbishment.
- Consider the option of purchasing all categories of fire apparatus from a sole source.
- Develop an emergency apparatus prescribed load list for use by all agencies.
- Mark apparatus in a standard format with striping, decals, and department name following NFPA standards and recommendations from the Emergency Vehicle Safety Initiative.¹⁸
- Develop mobile apparatus repair and service response unit(s).
- Develop central facilities for maintenance and repairs for all emergency apparatus.
- Create Standard Operating Guidelines for the operation, maintenance, and recordkeeping of apparatus. A resource for obtaining sample documents may be found at the National Fire Service Library website.
- Outfit reserve apparatus with the same compliment of equipment as frontline units.

Fiscal Considerations

- Time and effort savings by preparing fewer bid specifications.
- The prospect for conducting fewer bid processes.
- Investigate the letting of apparatus bids for periods longer than one year.
- Cost savings in acquiring emergency fire apparatus.
- Consider the purchase of stock versus custom apparatus.
- Consider leasing versus outright purchase of emergency apparatus.

¹⁸ Western Fire Chiefs Association, National Fire Service Library, www.wfca.com.



¹⁷ Department of Homeland Security, FEMA, U.S. Fire Administration, Emergency Vehicle Safety Initiative.FA-272, August 2004, pages iii, iv.

H - Provide for Joint Incident Command and Operations Supervision

Level of Cooperation

Functional

Timeline for Completion

Short Term

Section

• EMS and Emergency Operations

Affected Stakeholders

All agencies

Objective

- Provide for IC (Incident Command) supervision of emergency operations.
- Provide for supervision of on-duty personnel during routine operations.

Summary

Deputy Chiefs (DCs, also referred to as battalion chiefs, incident commanders or shift supervisors) routinely have authority and responsibility for all aspects of day-to-day operations and personnel management of the fire department. DCs assume command of emergency incidents and may also be assigned for the management of various fire department programs.

Discussion

Little is currently provided in the way of oversight, supervision, and leadership to the operations personnel of the fire department with the exception of day-time administrative personnel. Most fire departments maintain a span of control of five or six stations per supervisor. Occasionally, line supervisors may oversee as many as eight fire stations. The total number of units, personnel, and emergency responses usually determines the reasonableness of the span of control. The more stations, units, and personnel under direct supervision, usually reduces their ability to conduct activities outside of incident command, and may negatively impact response times to emergencies. A point is reached where proper supervision cannot be accomplished with large spans of control. In that case, some tasks will be overlooked or work will not be completed.

A supervisor usually responds as incident commander to emergencies requiring multiple fire department units, hazardous materials incidents, or emergencies involving special circumstances. The incident commander is responsible for all aspects of the response including the development of incident objectives and management of all incident operations. The three command-level positions directly under supervision of the incident commander are the safety officer, information officer, and liaison officer.

The role of the safety officer is to develop and recommend actions to assure the health and safety of emergency workers. The role of the information officer is to develop and release incident information to the media, incident personnel, and appropriate agencies and organizations. The role of the liaison officer is to serve as the point of contact for coordinating activities between the various agencies and groups that may be involved in an incident.

The general staff under the incident commander includes operations, planning, logistics, and finance. These responsibilities (as with those of the command staff) remain with the incident commander until such time that they may be assigned to another qualified individual.

Benchmarks

Assembling an effective response force on the scene of an emergency incident in a timely manner will often lead to a successful outcome. To assemble enough personnel to complete the tasks of extinguishing a moderate-risk structural fire may require fifteen fire suppression personnel. One of those tasks is command. A supervisor in the command role is the officer assigned to remain outside of the structure to coordinate the attack, evaluate results and redirect the attack, arrange for more resources, and monitor conditions that might jeopardize crew safety.

In lieu of complete unification between the fire departments, an agreement to share incident command staff across the region could result in efficiencies not possible individually.

Guidance

- Use standards of coverage and deployment documents to determine an appropriate level and number of incident commanders for the region.
- Create a formula for allocating the cost of a regional incident command program. Examples of factors for costing include: population, incidents, valuation, and coverage desired.
- Develop a job description for the position of shift commander/deputy chief that includes duties and responsibilities.



Fiscal Considerations

No significant financial considerations.



Findings, Recommendations and Plan of Implementation

It is common for those in the fire service to tout themselves, or their department, in terms such as "a pride-driven organization that is at their best every day," or more simply, "the best." The true mark of quality of the best fire departments, however, is one that works continuously for measurable improvement in organizational performance. By undertaking this study of collaborative opportunities, the leadership of Chokio, Donnelly, Hancock and Morris, and their respective fire departments, have begun the task of organizational and system evaluation that is necessary to plan for and reach the goal of truly being the best.

This is not to say that the current fire departments are not already operating at a high level. In fact, ESCI is pleased to report all available evidence shows that the fire departments consistently provide excellent service to the citizens of the protected communities. However, in keeping with the notion of continuous improvement wherein an unending loop of performance, measurement, and evaluation leads to system enhancements that would otherwise be impossible, we offer recommendations to assist Chokio, Donnelly, Hancock and Morris in implementing the collaborative strategies that will best benefit the public.

The success of adopting and implementing change, improvement, or cooperative opportunities depends on many things. In our experience with dozens of functional, operational, and legal unifications, leadership is the single factor that most frequently determines success. Nearly always, a key staff, councilor, or board member champions the concept garnering the support of the various affected groups (political, labor, member, and community). In addition, good leadership fosters an organizational culture receptive to planning, calculated risk taking, and flexibility. The manner in which leaders promote a trusting relationship between all groups and aid two-way communication between them is essential.

The following list is a compilation of short and mid-term recommendation found throughout the body of this report.

- Each department needs to improve the quality and content of their standard operating guidelines, particularly in the area of response operations. Additional guidelines are needed to

operational functions
CFD, DFD, and HFD should review organizational structures to ensure the fire chief does not
exceed a reasonable span of control, typically considered to be between three and seven
 CFD, HFD, and MFD should formally adopt a local policy that is compliant with the "two-ing
two-out" OSHA regulations for operating in hazardous atmospheres, including structure fires 98
CFD, HFD, and MFD should adopt minimum hazardous material training requirements of
Operations Level for all persons responding to incidents involving leaks or spills of fuels or other
hazardous substances
CFD, DFD and HFD should adopt a formal NIMS-compliant Incident Command System for all
emergency responses
CFD, DFD and HFD should adopt a formal personnel accountability system and initiate it for all
high-risk emergency responses
CFD, DFD and HFD should initiate the use of a safety officer assignment for all high-risk
emergency responses
Each department should formally adopt a policy that requires a minimum level of training
prior to allowing new personnel to respond to incident scenes
• Each department should develop a standard training manual that ensure new personnel have
met minimum requirements before leaving probationary status
CFD and HFD should adopt minimum annual training requirements for all personnel
 CFD, DFD and MFD should establish consistent officer training programs to encourage member
advancement
CFD, DFD and HFD should each adopt a standard training curriculum to ensure that each
member is being trained consistently across each department
 Each training session, regardless of instructor, should follow a formal lesson plan and have a
safety office appointed to oversee any manipulative sessions
 CFD, DFD and HFD should institute a program mirroring MFD that evaluates personnel physica
abilities and capacities
CFD, DFD and HFD should institute a program to periodically conduct skills competency for all
members
All departments should work together to implement a computerized training records
management system to track individual training, departmental training, and individual certification
requirements

The remainder of this report describes a recommended process for moving forward with the potential implementation of a cooperative service delivery effort. The word potential is used here because a part of this process includes the policy decisions necessary to determine, based on the results of the study, whether there is sufficient desire among the political bodies of the organization to continue with the process or not. The implementation begins with that step.

Conduct Vision Session(s) with Policy-Makers

The initial stage of implementation begins with the most elementary decision: "Do we want to move forward or not?" It is extremely important that at this stage of the process it is clearly recognized that this is a public policy decision on the part of the governing entities involved. A decision to consider altering the way in which a critical public safety service is provided, in some cases even permanently altering the governance of those services, is clearly in the purview of the elected bodies. While senior management input should be considered, the final decision should not rest at any level lower in the organization than those who are elected to represent the customers.

For this reason, it is recommended that the elected bodies meet together for the initial discussion of the feasibility study and its projected operational and fiscal outcomes. Depending on the number of elected officials, the policy-makers can decide whether to include all elected officials or a representative group assigned to represent each governing entity. During this policy stage, involvement by additional staff should be kept to a minimum, perhaps at the senior management level and then for the sole purpose of providing technical support. It is important to limit the ability for the process to be "hijacked" at this point by strenuous arguments for or against the idea from those operations level personnel whose opinions may be influenced by turf, power, or control issues. Stakeholder input is important, but plentiful opportunity can be provided for this once the policy-makers have determined what is in the best interest of their citizens as a matter of public policy.

It is equally important that the policy-makers recognize exactly what decision is being considered in the initial vision meetings. The purpose is to weigh the strategies, operational advantages, fiscal outcomes, and potential impediments of the feasibility to determine whether to commit local resources to move the process forward. The decision is not, at this point, a final decision to "flip the switch". The final commitment to take legal actions necessary to finalize implementation of any given strategy will come much further into the process.

This initial vision meeting can be likened to the court process known as a probable cause hearing. The purpose of such a hearing is for a judge or grand jury to determine if sufficient evidence exists to warrant an arrest and a trial. The probable cause hearing does not determine the final verdict or sentence. That occurs after the much more thorough process and deliberation of the trial. Likewise, the vision meetings are for the policy-makers to judge whether sufficient evidence exists to warrant moving forward. The final verdict on whether to take legal or contractual actions to implement will come after

weeks, months, or even years of additional detailed planning work involving stakeholders, operations staff, legal counsel, finance personnel, and others. As this actual implementation planning work moves forward, there may be several points at which new information or undefeatable obstacles arise that cause one community or the other to decide not to finalize and implement the plan.

The term "vision session" is used here because the policy-makers will be determining their joint decision on a future vision toward which the additional work of implementation will be directed. In many cases, several legal, operational, or functional strategies are presented as being feasible in the study. These may involve various options for governance, finance, and organizational structure. Which one or ones should the entities pursue, if any? This will become the joint vision of the policy-makers.

One of the best methods for initiating this vision process is to begin with policy-makers sharing an open discussion of critical issues. Each entity's representative can present a short description of those critical issues, service gaps, or service redundancies that might be concerning them relative to their provision of public safety services. As each entity takes its turn presenting these issues, a picture typically emerges of those shared critical issues that two or more of the entities have in common. This assists in focusing the discussion on which of the feasible options from the study best address those critical common issues and how.

As the discussion focuses on those feasible options with the greatest opportunity to positively impact shared critical issues, the discussion can expand to the strengths and weakness of the strategies relative to the conditions, financial abilities, and cultural attitudes of the communities involved. There should be a concerted effort to remain at a policy level without becoming overly embroiled in operational discussions of implementation details. Those will be addressed once a common vision has been established for a future strategy that is in the best interest of all the communities involved.

This is also the time that communities may make the decision to opt out of further involvement. This may occur for a number of reasons. There may be legitimate concern that an individual community does not truly share an adequate number of common critical issues with the other communities. There may also be a legitimate concern that the feasible strategies do not do enough to benefit a given community and would leave it with too many remaining critical issues. And, of course, there is always the possibility that a given community will not feel that the projected financial outcome is within their ability or provides a cost-benefit that is better than their current situation. Any such decisions by one or more communities should not be considered a discouraging factor, for that is the very purpose of the vision

sessions. In many cases, other remaining entities continue moving forward with a shared vision for cooperative service delivery even after one or more communities determine not to.

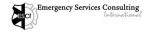
The goal of the vision session(s) is to develop a decision by the policy-makers on whether to continue with the next steps and, if so, what direction those steps should take. The vision should be sufficiently decisive as to be actionable by senior appointed officials and staff. While there will be many, many details to work out in the implementation process, the vision should clearly articulate the intention of the agreeing policy bodies on the desired outcome from the specified cooperative service strategy or strategies. Once this occurs, the real work begins.

After setting the joint vision, this policy-maker group should meet together at set intervals or as needed to hear the progress of the Joint Implementation Committee and its Working Groups and refine direction when necessary. The appropriate interval will depend on the situation and the complexity and length of the process itself, but often a quarterly meeting is sufficient.

Establish a Joint Implementation Committee

The next step in the process is to establish a Joint Implementation Committee that will be given the overall responsibility with leadership and management of the planning and implementation process. This will be the "nuts and bolts" group that works through the details, overcomes the challenges, reacts to new information, and makes many of the actual decisions on the implementation plan. This group should have much wider representation from stakeholders both inside and outside of the individual organizations involved. Membership in the Joint Implementation Committee may include senior management personnel and, where appropriate, labor representatives. The following is an example of a Joint Implementation Committee:

- City/District Manager (or equivalent) from each community
- Fire Chief from each community
- Finance Director from each community
- Labor Representative from each bargaining group involved
- Volunteer Representatives from each volunteer organization involved
- Community Representative from each community (Chamber of Commerce or similar)



The Joint Implementation Committee should select a chair or co-chairs to function as organizers and facilitators for the committee meetings. In addition, their first order of business should be to determine the rules and procedures of this committee. This should include such items as:

- How often does this group meet (monthly is typical)?
- How are absences handled (assigned alternates are recommended)?
- How does communication (occasionally secure) within this committee take place?
- How will meetings be conducted? Are there "rules of conduct" for the meetings?
- Under what circumstances will the meetings be opened to attendance by non-members?
- How will the group pursue consensus? When voting is necessary and how will that occur?

Develop an Implementation Strategic Plan

Once the ground rules have been set, the Joint Implementation Committee should schedule a strategic planning process. Consideration should be given to having this strategic planning process directed by neutral outside professionals trained in strategic planning facilitation. The strategic planning process should be held in a neutral setting away from the daily activities and noise of the usual office environment. It need not be an expensive retreat, but it should be organized in a way to focus energy and attention exclusively to the planning process for its duration. The purpose of the initial strategic planning session should be as follows:

- To further articulate and refine the joint vision set by the policy bodies.
- To identify critical issues that will be met as the implementation process unfolds.
- To identify potential impediments to implementation from:
 - Organizational culture
 - o Availability of data and information
 - o Lack of sufficient staff to carry through implementation processes
 - Outside influences and time demands
- To set the specific goals and objectives of the implementation process and the timelines for accomplishment.
- To establish the necessary Implementation Working Groups.

This process should result in the preparation of an implementation planning document that can be shared with the policy body, stakeholders, and others who will be involved in or affected by the implementation process. The document should provide the joint vision, describe the cooperative service

strategy or strategies being pursued, the desired outcome, the goals that must be met in order for implementation to be achieved and the individual objectives, tasks, and timelines for accomplishment. When fully and adequately prepared, this document will serve as the master "road map" for the process and will help guide the next steps of developing working groups and assigning responsibilities.

Establish Implementation Working Groups

As part of the implementation strategic planning process, various Implementation Working Groups should be established that will be charged with responsibility for performing the necessary detailed work involved in analyzing, weighing, and deciding on specific processes. Membership for these Implementation Working Groups should be roughly identified as part of that process as well.

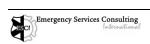
The number and titles of the working groups will vary depending on the type and complexity of the strategies begin pursued. However, the following list provides some typical working groups used in most consolidation processes and a description of some of their primary assigned functions and responsibilities.

Governance Working Group

This group will be assigned to examine and evaluate various governance options for the cooperative service effort. A recommendation and process steps will be provided back to the Joint Implementation Committee and the Policy-Maker Group. Once approved, this working group is typically assigned the task of shepherding the governance establishment through to completion. The membership of this group typically involves one or more elected officials and senior city/district and agency management.

Finance Working Group

This group will be assigned to review the financial projections contained in the feasibility study and complete any refinements or updating necessary. The group will look at all possible funding mechanisms and will work in partnership with the Governance Working Group to determine impact on local revenue sources and options. Where revenue is to be determined by formula rather than a property tax rate, such as in a contractual cooperative venture, this group will evaluate various formula components and model the outcomes, resulting in recommendations for a final funding methodology and cost distribution formula. The membership of this group typically involves senior financial managers and staff analysts, and may also include representatives from the agencies' administrative staffs.



Legal Working Group

Working in partnership with the Governance Working Group, this group will study all of the legal aspects of the selected strategy and will identify steps to ensure the process meets all legal obligations of process and law. Where necessary, this group will oversee the preparation and presentation of policy actions such as ordinances, joint resolutions, dissolutions, and enabling legislation. The group will also be responsible for working with other elected bodies, such as State Legislatures, when necessary to accomplish establishment of local selected governance. The membership of this group typically involves legal counsel from the various entities involved and may also include senior city/district management staff.

Operations Working Group

This group will be responsible for an extensive amount of work and may need to establish multiple subgroups to accommodate its workload. The group will work out all of the details of necessary operational changes required by the strategy. This involves detailed analysis of assets, processes, procedures, service delivery methods, deployment, and operational staffing. Detailed integration plans, steps, and timelines will be developed. The group will coordinate closely with the Support Services and Logistics Working Group. The membership of this group typically involves senior agency management, mid-level officers, training staff, and labor representatives. This list often expands with the complexity of the services being provided by the agencies.

Support Services and Logistics Working Group

This group will be responsible for any required blending of capital assets, disposition of surplus, upgrades necessary to accommodate operational changes, and the preparation for ongoing administration and logistics of the cooperative effort. The membership of this group typically involves mid-level agency management, administrative, and support staffs. Where involved, support divisions such as Maintenance, Fire Prevention, and others may also be represented.

Labor Working Group

This group will have the responsibility, where necessary, for blending the workforces involved. This often includes the analysis of differences between collective bargaining agreements, shifts schedules, policies, and working conditions. The process also includes work toward developing a consensus among

the various bargaining units on any unified agreement that would be proposed for the future. Often, once the future vision is articulated by the policy-makers, labor representatives are willing to step up and work together as a team to identify challenges presented by differing labor agreements and offer potential consensus solutions. The membership of this group typically involves labor representatives from each bargaining unit, senior agency management and, as needed, legal counsel.

Communications Working Group

Perhaps one of the most important, this group will be charged with developing an internal and external communication policy and procedure to ensure consistent, reliable, and timely distribution of information related to the cooperative effort. The group will develop public information releases to the media and will select one or more spokespersons to represent the communities in their communication with the public on this particular process. The importance of speaking with a common voice and theme, both internally and externally, cannot be overemphasized. Fear of change can be a strong force in motivating a group of people to oppose that which they do not clearly understand. A well informed workforce and public will reduce conflict. The membership of the group typically involves public information officers and senior city or agency management.

Meet, Identify, Challenge, Refine, and Overcome

Once the working groups are established, meeting, and completing their various responsibilities and assignments, it will be important to maintain organized communication up and down the chain. The working group chairs should report regularly to the Joint Implementation Committee. When new challenges, issues, impediments, or opportunities are identified by the working groups, this needs to be communicated to the Joint Implementation Committee so that the information can be coordinated with findings and processes of the other working groups. Where necessary, the Joint Implementation Committee and a working group chairperson can meet with the policy-makers to discuss significant issues that may precipitate a refinement of the original joint vision.

The process is continual as the objectives of the strategic plan are accomplished one by one. When sufficient objectives have been met, the Joint Implementation Committee can declare various goals as having been fully met until the point comes when the actual implementation approval needs to be sought from the policy bodies. This formal "flipping of the switch" will mark the point at which

implementation ends and integration of the agencies begins. The following flowchart is provided as an example of how the implementation of this process should work.

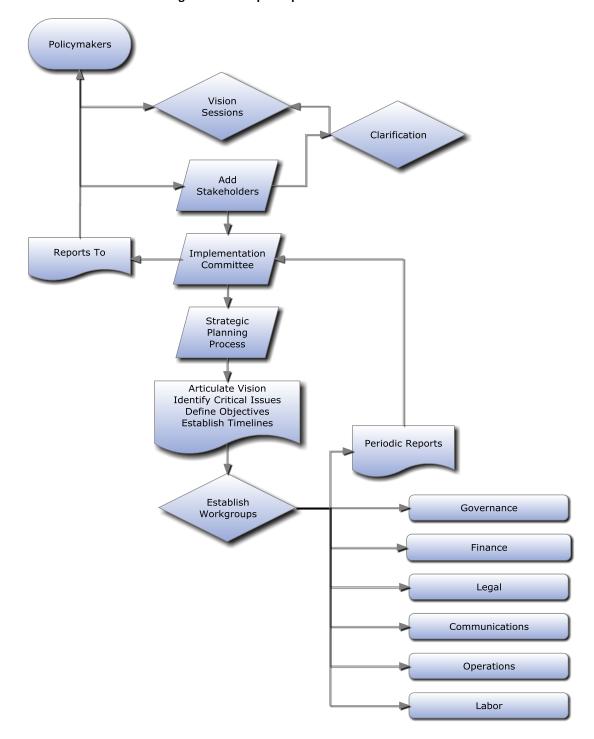


Figure 64: Example Implementation Flowchart

As an additional guideline, the implementation process and flowchart provided above have been broken down into a potential timeline for implementation. This is provided only as an example as implementation for any specific agency will be highly variable and depend on a number of factors including willingness of stakeholders to proceed, fiscal resources, timing, etc.

Conclusion

The ESCI project team began collecting information concerning the fire and emergency services for Chokio, Donnelly, Hancock and Morris in May 2011. The team members recognize that the report contains a large quantity of information and ESCI would like to thank the elected officials of each organization involved as well as the officers, employees and volunteers of the four fire departments for their tireless efforts in bringing this project to fruition. ESCI would also like to thank the various individuals and external organizations for their input, opinions, and candid conversations throughout this process. It is ESCI's sincere hope that the information contained in this report is utilized to its fullest extent and that the emergency services provided to the citizens of Chokio, Donnelly, Hancock and Morris, as well as the surrounding areas, are improved by its implementation.



Corporate Offices 25200 SW Parkway Avenue, Suite 3 Wilsonville, Oregon 97070 800.757.3724 Eastern Region Office 249 Normandy Road Mooresville, North Carolina 28117 704.660.8027 National Capital Region Office 4025 Fair Ridge Drive Fairfax, Virginia 22033 703.273.0911