

Oceana County

Michigan

Fire Department Cooperative Efforts

Feasibility Study

October 2015



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Executive Summary

In an effort to identify opportunities for the delivery of cooperative fire and emergency medical service delivery, the leadership of Oceana County, Michigan asked Emergency Services Consulting International (ESCI) to complete a Cooperative Efforts Feasibility Study in the summer of 2015, working with seven fire departments in the county. The agencies include Crystal Township Fire Department, Ferry Township Fire Department, Grant Township Fire Department, Hart Area Fire Department, Pentwater Fire Department, Shelby-Benona Fire Department, Walkerville Area Fire & Rescue. This executive summary provides a brief overview of the study process and report findings.

In the report, the reader will find a detailed assessment of current conditions existing in the study agencies, along with the options that ESCI identifies for their future consideration and assessment of the feasibility of the identified options. First, ESCI evaluates the current conditions that exist in each agency in terms of programmatic, financial, service level, and infrastructure considerations; comparing their existing processes independently, from which a baseline is established to evaluate opportunities for future collaboration.

Following the evaluation of current conditions, the report identifies each of the potential partnership opportunities that are available to the agencies in this instance, along with a discussion of each strategy and its feasibility in Oceana County. Finally, the most feasible integration options are analyzed and presented in detail, recommending those with the greatest opportunity for success.

The first section of the report is an *Evaluation of Current Conditions*. In this section the ESCI has completed an analysis of each of the seven agencies as they operate today, as separate organizations. The discussion compares the organizational components in a side by side appraisal. In doing so, the project team considers the relativity of each agency's current practices to those of the other participants to identify duplication and opportunities for greater collaboration, up to and including full integration of agencies. Included in the *Evaluation of Current Conditions* is a comparison of:

- Organizational Composition, Design, Funding and Governance
- Management Components
- Capital Assets and Capital Improvement Planning
- Staffing and Personnel Management
- Service Delivery and Response Performance
- Training Programs
- Fire Prevention Programs

Using this comparison as a baseline, the report identifies the options that are available in the study area in the *Opportunities for Cooperative Efforts* section of the report. The discussion follows a continuum, beginning with a status-quo approach that maintains full autonomy of the existing entities, as well as

identification of various administrative, functional, and operational contractual consolidation initiatives. The report continues to explore the opportunities that exist for a more formal unification of the fire departments in the form of merger or legal integration. Specifically, the identified options are:

- Complete Autonomy
- Administrative Consolidation
- Functional Consolidation
- Operational Consolidation
- Legal Unification

ESCI has observed that the combining of fire departments and emergency medical systems has become a popular and effective option nationwide, in many instances, as elected officials strive to ensure that efficiencies are being captured, operations are as cost effective as possible, and innovation and technologies are being utilized successfully. In most situations, the motivation to consider cooperative efforts with neighboring jurisdictions is undertaken for reasons including the desire to maintain or enhance current services or service levels, reduce or eliminate future costs, or to avoid duplication.

Having been involved in many consolidation processes in their various forms, ESCI has seen multiple successes. However, we also caution clients that consolidation for the sole purpose of saving money has risk. It is critical that, aside from financial considerations, organizations fit well together, have similar service delivery needs, and share a common vision for how services are to be provided to the citizenry.

In many instances, long-term costs savings through regional cooperation are realized, but not all consolidations ultimately result in saving money. Careful analysis is needed to determine what cost reductions can be gained and whether doing so will maintain or enhance services to the public.

The report continues to identify which of the options listed above prove to be feasible in Oceana County, as well as beneficial in terms of gains that may be expected if shared initiatives are undertaken. The *Feasible Options for Shared Services* section provides a detailed analysis of the identified options.

In evaluating what alternatives may be applicable to the fire departments in this study area, ESCI looked for the following:

- Unnecessary redundancy in station locations
- Duplicative apparatus and staffing deployment approaches
- Administrative staffing overlap and multiple chief officers
- Duplication in support staffing
- Redundancy in support program operations, including training and fire prevention
- Opportunities for substantial economies of scale in regard to purchasing and logistics

Summary of Key Findings

With the above considerations in mind, ESCI evaluated the opportunities that may be found for increased efficiency and reduced cost in Oceana County. It was readily apparent that multiple, valuable, gains can be realized through the implementation of the functional and operational consolidation strategies that are listed. These include shared training, collaborative development of regional operating procedures, enhanced use of mutual and automatic aid and a number of other function and operation approaches that are detailed in the following report section.

However, in looking beyond the approaches above, the question of taking collaborative efforts to a greater level, in the form of a formal legal integration of the fire departments involved in the study, ESCI does not find that there are advantages to be realized that will result in sufficient gains in terms of operational efficiency or financial savings. Because the subject agencies are small, the geographic service area is large and the majority of the personnel involved are volunteers (representing little personnel cost or savings potential), the prospective advantages of a more formalized change in governance do not outweigh the challenges involved. Therefore, ESCI does not recommend that the study agencies pursue a legal integration approach at this time, but rather, implement the functional initiatives identified and revisit the question of integration again in the future.

While ESCI concludes that that legal unification of any two or more of the study agencies does not present sufficient benefits to prove beneficial at this time, a host of other opportunities exist. They are in the form of functional cooperative efforts and include:

- Enhanced Mutual and Automatic Aid Agreements
- Unification of Standard Operating Guidelines
- Implementation of Regional Incident Command and Operational Supervision
- Combining of Administrative and Support Services
- Regional Capital Replacement Planning
- Joint Purchasing of Equipment and Apparatus
- Shared Volunteer Recruitment and Retention Efforts
- Shared Training Practices
- Collaborative Fire Prevention and Public Education

Each of the above is explained in detail, and each is viewed as a feasible approach for these study agencies. ESCI recommends that as many of the functional cooperative strategies be implemented as possible.

Implementation and Next Steps

In closing, ESCI suggests the following next steps to achieve the shared services work moving forward:

- Conduct a visioning session with policymakers to determine whether the organizations want to move forward and, if so, in what manner.
- Invite external stakeholders into the process to advise the policymakers from a community perspective.
- Establish a Joint Implementation Committee (JIC) that will be given the overall responsibility with leadership and management of the planning and implementation process.
- Develop an implementation strategic plan and consider use of neutral third party facilitation.
- Establish implementation planning working groups. Once the working groups are established, they will set their meeting schedules and begin their various responsibilities and assignments. Recommended groups are detailed in the report.
- Establish a regularly scheduled briefing process from the chairs of each working group to the Joint Implementation Committee and from the JIC to the policymakers.
- Establish a communication strategy to keep internal members informed, or act as a clearing house for rumors. Establish a communication strategy to keep the communities and media informed when key milestones have been achieved or a change in direction has occurred. Communication should be positive, transparent, timely, and coordinated.
- Celebrate successes publicly and build momentum.

Section I – Evaluation of Current Conditions

Oceana County, Michigan (County) engaged Emergency Services Consulting International (ESCI) to review the existing conditions within seven of the eight fire departments serving the County and to provide recommendations regarding how the participating agencies may work together more effectively under a cooperative efforts service delivery model. This document serves as the culmination of that process and begins with an assessment of the existing conditions found in each of the organizations that participated in this project.

ORGANIZATION OVERVIEW

Oceana County is served by eight fire departments, seven of which agreed to participate in this project as listed below:

- Crystal Township Fire Department
- Ferry Township Fire Department
- Grant Township Fire Department
- Hart Area Fire Department
- Pentwater Fire Department
- Shelby-Benona Fire Department
- Walkerville Area Fire & Rescue

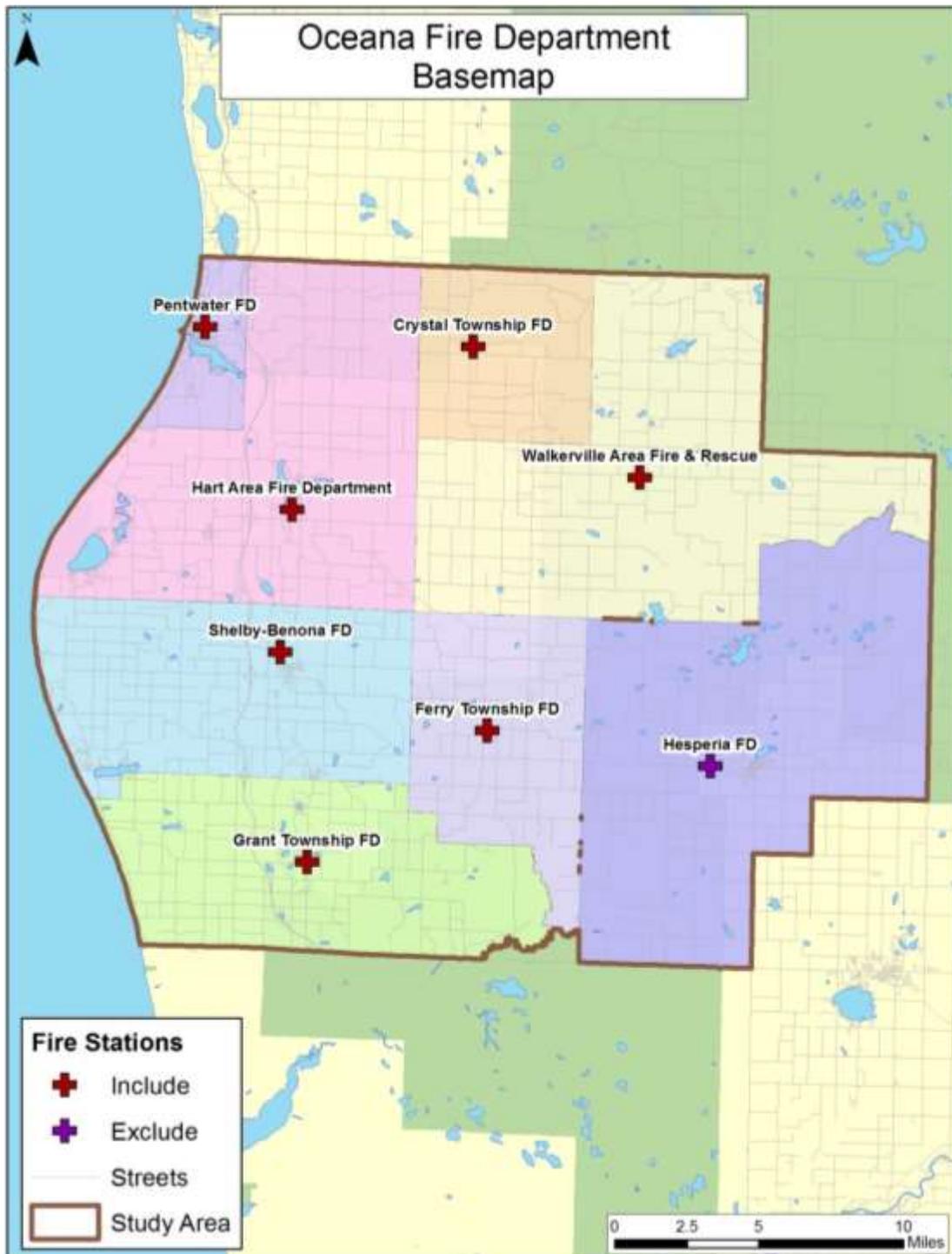
Hesperia Fire Department chose not to participate in this project but may be visible in some analyses due to their existing mutual and automatic aid agreements with adjacent departments.

Each fire department is operated independently as a function of either their respective Township or a Joint Powers Agreement (JPA). The total population served is estimated at 22,305 and the service area is approximately 521 square miles. The county consists of the following municipalities:

- Townships of Benona, Clay Banks, Colfax, Crystal, Elbridge, Ferry, Golden, Grant, Greenwood, Hart, Leavitt, Newfield, Otto, Pentwater, Shelby, and Weare
- City of Hart
- Villages of Hesperia, New Era, Pentwater, Rothbury, Shelby, and Walkerville

The following map illustrates the service area, response zones, and station locations:

Figure 1: Study Area Base Map



As can be seen in the preceding map, Oceana County is located on the shores of Lake Michigan with Mason County to the North, Muskegon County to the South, and Newaygo County to the East. The following figure provides a selected summary of the study departments with regard to organization and service delivery:

Figure 2: Organizational Summary

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Department Name	Crystal Township Fire Department	Ferry Township Fire Department	Grant Township Fire Department	Hart Area Fire Department	Pentwater Fire Department	Shelby-Benona Fire Department	Walkerville Area Fire & Rescue
Preferred Acronym	CTFD	FTFD	GTFD	HAFD	PFD	SBFD	WAFR
Organization Type	Municipal	Municipal	Municipal	Joint Powers	Municipal	Joint Powers	Joint Powers
Municipality Name	Crystal Township	Ferry Township, ½ Otto Township	Clay Banks Township, ½ Otto Township, Grant Township, Village of Rothbury	Weare Township, Golden Township, Hart Township, City of Hart	Pentwater Township, Village of Pentwater	Shelby Township, Benona Township	Colfax Township, Elbridge Township, Leavitt Township, Village of Walkerville, ½ Beaver TWP (by contract)
Year Agency Formed	Unknown	1954	1948	FD organized in 1886, Fire Command Board Formed in 1966	1872	FD organized c. 1880, Fire Board Formed in 1996	FD organized in 1946, Fire Authority formed in 1990
Population Served	1,054	1,509	4,579	5,070	1,513	5,506	3,074
Area Served	35.8	72.0	108.0	105.4	14.2	77.0	125.0
Population Density (per square mile)	29.42	20.96	42.40	48.10	106.55	71.51	24.59
Community Growth	Limited	Limited	Limited	Limited	Limited	Limited	Limited
Primary Risk Types	Residential, agricultural, limited commercial, wildland	Residential, agricultural, wildland	Residential, light commercial, limited industrial/Mfg., agricultural, wildland	Residential, light commercial, agricultural, light manufacturing, wildland	Residential, light commercial, limited industrial, wildland	Residential, light commercial, limited industrial/Mfg., agricultural, wildland	Residential, agricultural, limited light commercial, limited storage/Ind., wildland

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Services Provided	Fire suppression, vehicle extrication assistance	Fire suppression, MFR response, vehicle extrication, farm operations level hazmat, public education and fire prevention	Fire suppression, EMT first response, operational level hazmat, operations level ice/water rescue, public education and fire prevention	Fire suppression, limited medical first response, vehicle extrication, operations-level hazmat, ice/surface water rescue, public education	Fire suppression, MFR medical first response, surface/ice rescue, operations-level hazmat, fire prevention, public education	Fire suppression, vehicle extrication, limited medical first response, public education, fire prevention, limited occupancy inspection	Fire suppression, EMT medical first response, operations level hazmat, awareness level confined space, vehicle extrication, ice/surface water rescue, public education
ISO Rating	9/10	9	6/7	5/7/9	6/9	6/9/10	9/10
Year of Last Review	Unknown	Unknown	2008	2004	2004	2004	Unknown



Governance and Lines of Authority

All organizations, regardless of size or mission, must have a structured line of authority and governance to ensure that the mission is successfully carried out by line personnel. For the fire departments in Oceana County, several types of governance are in place.

Three of the study departments (CTFD, FTFD, and GTFD) are municipal departments that provide services within their respective Townships as well as other areas. These departments operate as a function of their respective Townships, and all personnel are considered Township employees. PFD, however, operates as a department that has reporting requirements to both the Township and Village of Pentwater equally. The remaining three departments (HAFD, SBFD, and WAFR) operate under various forms of joint powers agreements. HAFD operates under a Fire Command Board that oversees administrative and budgetary functions of the organization. SBFD operates under the Shelby-Benona Fire Board, comprised of representatives of both Townships. All personnel are considered employees of the Fire Board. WAFR operates under a Fire Authority Board with representation from each of the municipalities served (Colfax, Elbridge, and Leavitt, and the Village of Walkerville). Personnel are considered employees of the Fire Board.

Foundational Policy Documents

Emergency services organizations must maintain certain documents that provide for oversight and direction. Within fire departments, these documents typically begin with municipal policies and/or ordinances that give the organization the authority to function. In addition, fire departments quite commonly have comprehensive standard operating guidelines and internal policies and procedures that give employees direction regarding personnel, operations, and general rules and regulations. Foundational policy documents are those books, manuals, and handbooks that provide personnel with written and formal direction on how the department operates as well as to guide personnel issues, routine behavior, and scene command and control.

The study departments have various forms of foundational policy documents, and these documents are in multiple stages of completeness. The figure below summarizes the foundational policy elements of the study departments:

Figure 3: Summary of Foundational Policy Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Agency Authorization Documents	Township	Township	Township	Joint Fire Administrative Board Agreement	Formal Agreement	Formal Agreement	Fire Authority Agreement
List Foundational Policy Documents	FD Policy Book	Bylaws, working on SOGs/SOPs, Township Policy Manual, Fire Department Rules, Township Employee Handbook	SOG's	Fire Command Board Agreement, By-Laws	Bylaws, SOG's/SOPs	Policies and Procedures Manual, Joint Agreement	Bylaws, Policy Manual, Department Rules, Employee Manual
Quality of Administrative Policy Documents	Very good but need to be updated	Need to be updated	Very good and up-to-date	Limited	Outdated	Currently being updated	need to be updated
Policy Documents Contain Civil Liability and Risk Management Policies	Yes	Yes	No	No	Yes	Partial	Yes
Adequate Scene Guidance Contained within Policy Documents	Yes	No	Yes	No	No	Yes	Working on
Job Descriptions	Good	Good	Good	Limited to By-Laws	Yes	Working	Good
Administrative Policies Available to All Members	No	Yes	Yes	No	Yes	Yes	No
Receipt Verification Process for Critical Information	Occasionally	Yes	Yes	No	Yes	No	No



In today's emergency services environment, it is important that all agencies have formally adopted policies and procedures that provide personnel with administrative guidance. These policies and procedures should include expectations, job descriptions, and civil liability documents (sexual harassment, workplace violence, drug/alcohol use, etc.).

Although the study departments operate independently of one another administratively, they often work together on incident scenes. For this reason, it is important that all personnel have clear direction and are comfortable working with other agencies. One way to accomplish this is to have consistent operational guidelines, commonly referred to as standard operating guidelines or procedures (SOG/SOP). Understanding that each department is different and responds to various types of incidents and risks, customization will be necessary; but a firm base should be provided that includes important operational guidance.

All foundational policy documents should be distributed to every member of the organization, and verification received that they have read and understand them. This may prevent future legal issues if someone is injured while serving the community.

Organizational Design

Fire departments, dependent upon size, typically follow a fairly narrow, top-down organizational structure. This type of structure ensures that chain of command is clear and that each member knows to whom they should report. In most organizational theory models, span of control for any supervisor should be limited to between four and six individuals. This model evolved from historical military command structures and is intended for high-stress environments. Many emergency services organizations have adopted this model for reducing span of control with significant success.

The study departments vary in how they are organized, as already eluded to. Volunteer organizations, however, tend to have a much broader span of control during non-emergency periods. For instance, the Fire Chief of each organization, although other program managers may be assigned, is typically responsible for all personnel within the organization. Larger volunteer departments may divide the membership among several command-level officers for supervision and chain of command. Regardless of how the organization is designed, it should be kept in mind that no one individual can accomplish all the functions necessary for the organization to successfully complete its mission. Therefore, work and responsibility should be delegated to those with specific interests and abilities such as training, prevention, maintenance, etc. The following figure summarizes the organization design and delegation of certain authorities:

Figure 4: Summary of Organizational Design Elements

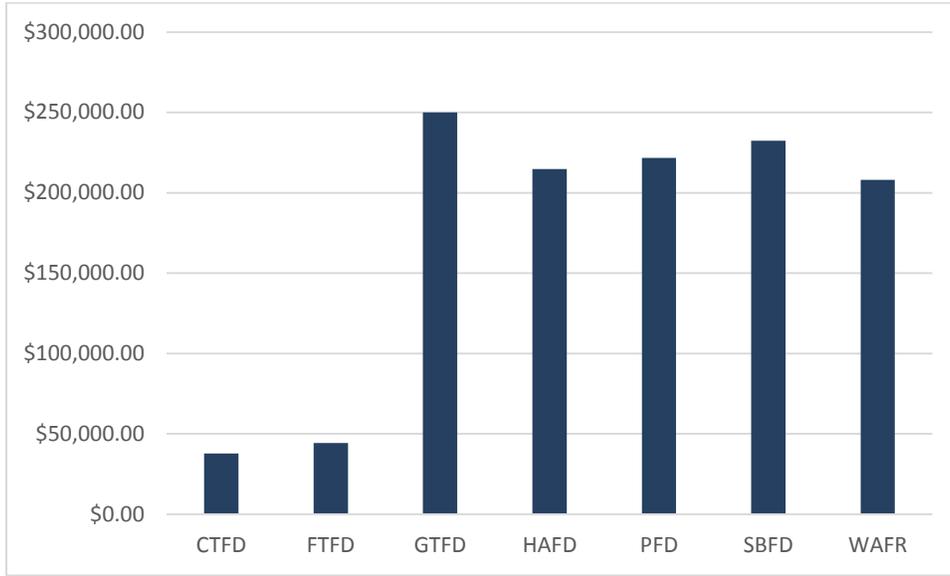
	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Chief's Span of Control	All	All	All	All	All	All	All
Clear Unity of Command	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Specific Program Managers Assigned	Yes, Officers assigned specific responsibilities	Yes, Officers assigned to specific responsibilities	Yes, Officers assigned to specific responsibilities	Yes, Officers assigned to specific responsibilities	Asst. Chief is Training Officer	Yes, Officers assigned to specific responsibilities	Yes, Offices assigned to specific responsibilities



Operating Budget, Funding, Fees, and Taxation

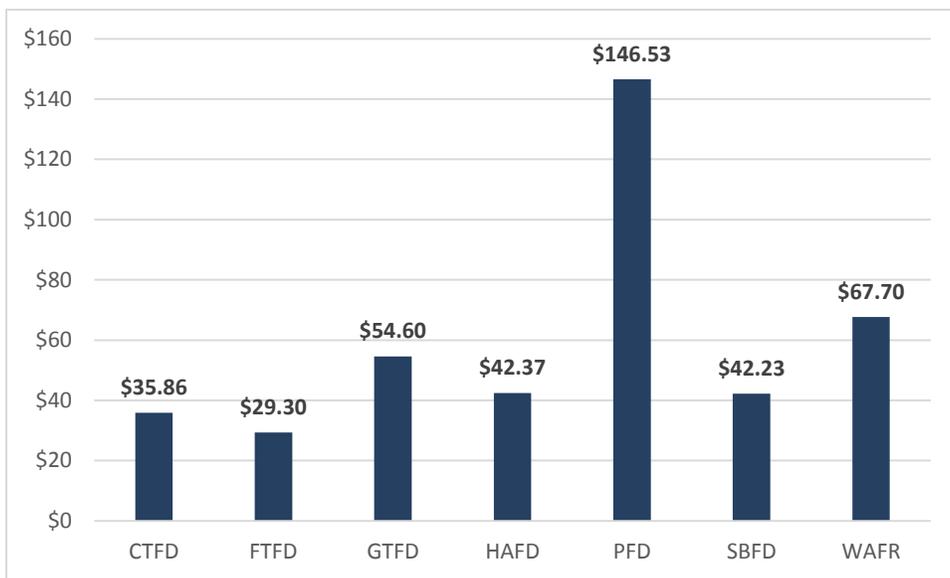
The fire service is dependent upon sufficient funding to provide the appropriate facilities, apparatus, and staffing to support service delivery. ESCI reviewed financial information provided by each department to determine the adequacy of each organization’s funding. The following figure illustrates each study department’s most recent fiscal year budget in comparison to the other study agencies:

Figure 5: Current Budget by Department



Although the budgets of the study agencies are widely variable, evaluating the total cost of services on a per capita basis provides a better perspective in regards to departmental funding. The following figure compares each study agency on a cost per capita basis:

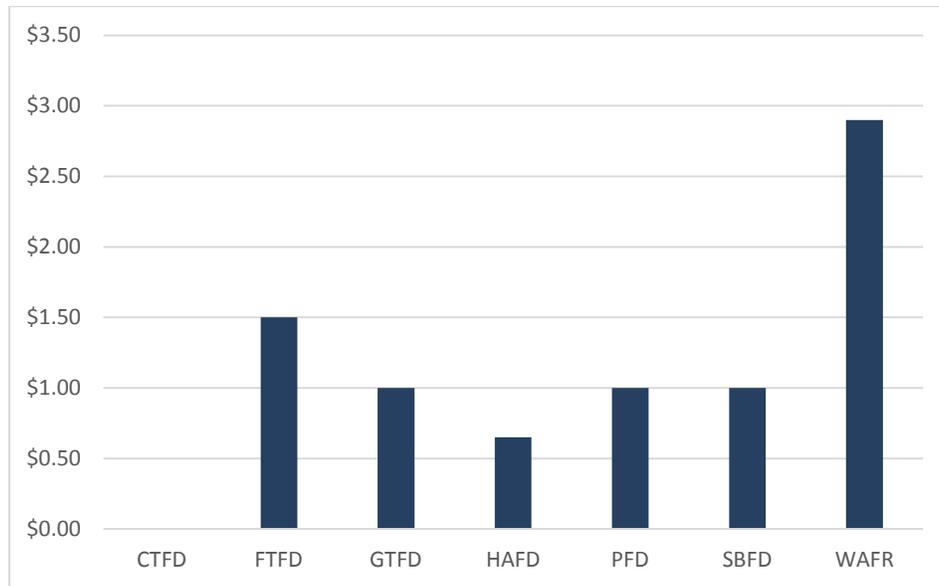
Figure 6: Cost per Capita Comparison



The national average for fire protection cost per capita calculates to \$135.60, based purely on total budget divided by population served. The Michigan average calculates to \$95.48 under the same criteria. However, it should be noted that these calculations do not consider the geography of the organizations, nor do they consider services provided or additional revenue sources.

In order to pay for services, each respective area levies a tax to support the fire departments within their areas. The figure below summarizes the millage rates for the study agencies:

Figure 7: Millage Rates



In general, the levy rates across Oceana County are consistent within the \$1.00 to \$1.50 range, with the exception of HAFD, which is currently at \$0.65, the lowest of the study departments, and WAFD, which has two millages: \$0.91 for apparatus/equipment, and \$2.00 for department operations. As illustrated, the millages across the study area are widely varied. This is due in part to the differences in valuation within each of the departments' response areas. The figure below summarizes each department's valuation and associated levy rate.

Figure 8: Valuation Compared to Levy Rate and Budget

	CTFD	FTFD	GTFD	HAFD	PFD	SBFD	WAFR
Valuation				\$303,034,763.00	\$199,104,869.00	\$233,298,161.00	\$72,344,911.00
Millage Rate		\$1.50	\$1.00	\$0.65	\$1.00	\$1.00	\$2.90
Budget	\$37,800.00	\$44,208.00	\$250,000.00	\$214,830.00	\$221,696.00	\$232,500.00	\$208,100.00

This information is presented here to establish a baseline from which future service delivery and cooperative efforts options may be analyzed.

MANAGEMENT COMPONENTS

As with most emergency services agencies, the study departments face challenges to organizational processes and management. In addition to the operational challenges of emergency response, the management of the business of a fire department presents unique issues involving the administration of financial resources, the setting of goals and objectives, internal and external communications, information management, and security. This section of the report examines each department's efforts in this area and preparation for the future health of the organization.

Mission, Vision, and Strategic Planning

While the mission of a fire department can be viewed as the primary duties and responsibilities of the organization, formally stating that mission in a detailed mission statement is important so that members know exactly what their purpose is during their daily activities. The vision of the department is a way for members to know the direction of the organization, as well as what they hope to accomplish in the future. These two elements, as well as future goals and objectives, are commonly determined through a customer-centered strategic planning process that involves a wide cross-section of departmental members as well as policy makers and the general public.

To date, none of the study departments have completed a formal strategic planning process, either independently or collectively. This should be one of the primary initiatives in the near future and will be discussed in more detail in the future opportunities section of this report.

Critical Issues and Future Challenges

During interviews with elected officials, appointed staff, and fire department personnel, questions were posed as to what the current critical issues the departments are facing today. In addition, the stakeholders were asked their opinion of the main future challenges of the organization. The following were the predominant responses to each question:

Critical Issues

- Insufficient personnel for daytime responses.
- Declining volunteer levels

Future Challenges

- Future sustainability of volunteers
- Future capital replacement planning

ESCI will attempt to address each of these issues and challenges through recommendations contained throughout this document.

Other management components include internal and external communications processes, records management and security, and information technology. The following figure provides a summary of these elements in order to evaluate potential future shared services and cooperative efforts:

Figure 9: Summary of Management Component Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Public Newsletter Published Regularly	No	No	No	No	No	No	Periodically
Active Website	No	No	No	Yes	Yes	Yes	Outdated
Formal Public Input Survey Conducted	No	No	No	No	No	No	Yes
Type of Computer Network Used	Windows Based Non-Networked	Windows Based Non-Networked	Windows Based Networked to Township	Windows Based Non-Networked	Windows Based Non-Networked	Windows Based Non-Networked	Windows Based - On Site Networked
Redundant Services in Place	None	None	None	None	No	No	No. Reports entered manually from individual field reports
Computer Files Backed-Up Periodically	No	No	No	Yes	No	No	Yes
Types of Records Fully Computerized	Fire Incident Reports	Fire Incidents	Fire Incidents, Medical Incidents, Training Records, Maintenance	Fire Incident Reports, Board Information	Fire Incidents	Fire Incidents, payroll, activity logs, dollar loss, personnel hours/activity, inventory of equipment	EMS Incidents, Fire Incidents, Equipment and Apparatus Maintenance in Progress
Formal Strategic Plan Conducted	No	No	No	No	No	No	No

All of the study departments could benefit by publishing a joint periodic newsletter to the community. This type of external communication can relay to the community the difficulties that the departments may be experiencing and may open the eyes of some residents to the need to volunteer. In today's technology heavy society, having an active website is an important method to communicate with the service area. Posting news, events, and calls for volunteers are just a few of the ways a website can be used.

Each of the fire departments, in their own way, use some sort of technology to record and track various pieces of information. The most critical are the incident reports that are recorded and then uploaded to the state for statistical analysis. Although most of the departments are not networked to a server, work should be done to ensure that data is secured and, in the event of a disaster, backed up on another server off-site.

One way for fire departments to plan for the future in an attainable way is to conduct a formal strategic plan. This process would solidify the organization's mission, vision, and goals for the future. Working collaboratively can also result in a more joint vision of what the fire service should look like in the future.

CAPITAL ASSETS AND CAPITAL IMPROVEMENT PROGRAMS

Three basic resources are required to successfully carry out the mission of a fire department — trained personnel, firefighting equipment, and fire stations. No matter how competent or numerous the firefighters, if appropriate capital equipment is not available for use by responders, it is impossible for a fire department to deliver services effectively. The capital assets that are most essential to the provision of emergency response are facilities and apparatus (response vehicles).

Facilities

Fire stations play an integral role in the delivery of emergency services for a number of reasons. A station's location will dictate, to a large degree, response times to emergencies. A poorly located station can mean the difference between confining a fire to a single room and losing the structure. Fire stations also need to be designed to adequately house equipment and apparatus, as well as meet the needs of the organization, its workers, and/or its members. It is important to research need based on call volume, response time, types of emergencies, and projected growth prior to making a station placement commitment.

Consideration should be given to a fire station's ability to support the fire department's mission as it exists today and into the future. The activities that take place within the fire station should be closely examined to ensure the structure is adequate in both size and function.

More importantly, in the case of Oceana County fire agencies, careful consideration should be given to both the location and the condition of fire stations in the study area. Consideration of station locations will identify possible areas of redundancy in coverage and/or resource deployment that might be eliminated if a shared strategy is employed. Station condition is also important to assure that, should one agency absorb another in a legal integration, it does not unknowingly inherit a financial liability by taking ownership of a facility that represents a future financial liability.

In the following tables, ESCI details its review of the fire stations observed in the study area:

Figure 10: Walkerville Area Fire Department Station

The Walkerville Area Fire Department operates from a single fire station that consists of three, back-in style apparatus bays that are double in depth. The station was constructed in 1981 and is well constructed and maintained.

The station houses two engines, a tender (tanker) pumper, two brush vehicles, a rescue truck, and an all-terrain vehicle.

There are no major maintenance concerns reported with the building, and it will remain serviceable for the foreseeable future. However, space for storage and apparatus is maximized, but there is room on the property available for future expansion.

Structure	
A. Construction type	Post frame
B. Date built	1981
C. Seismic protection/energy audits	None
D. Auxiliary power	A manual started, automatic transfer generator is in place
E. Condition	Good
F. Special considerations (American with Disabilities Act of 1990 (ADA), mixed gender appropriate, storage, etc.)	Station is ADA compliant. Storage space is maximized
Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	Kitchen only
C. Lockers/showers	Yes
D. Training/meetings	A well-equipped classroom seats 25 students, confined space training area
E. Washer/dryer	Yes
Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Combination door locks are present
D. Apparatus exhaust system	None

Figure 11: Crystal Township Fire Department Station

The Crystal Township is served by the Crystal Fire Department from one fire station. A pumper/tanker, a tanker, and a grass vehicle are housed in a two single depth apparatus bays.

The station was constructed in approximately 1980 and is in generally good condition. There are no sleeping quarters or other accommodations in the station. However, the fire department has access to the city hall, which is immediately next door and includes a good sized meeting room and small kitchen area.

The fire department reports that there are no major maintenance issues with the facility. However, the space in the station is completely full, and there is no room for future expansion. Storage space is fully maximized.

Structure	
A. Construction type	Steel frame building with steel siding and roofing system
B. Date built	1980
C. Seismic protection/energy audits	None
D. Auxiliary power	Portable generator only
E. Condition	Fair but aging
F. Special considerations (American with Disabilities Act of 1990 (ADA), mixed gender appropriate, storage, etc.)	Station is Not ADA compliant. Storage space is very limited.
Facilities available	
A. Exercise/workout	None
B. Kitchen/dormitory	A small kitchen is available in the city hall, next door to the fire station
C. Lockers/showers	None
D. Training/meetings	A classroom is available for use in the city hall, which is next door and seats approximately 25 students
E. Washer/dryer	None
Protection systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	
D. Apparatus exhaust system	None

Figure 12: Hart Area Fire Department Station

The Hart Area Fire Department serves the city of Hart and the surrounding area of its jurisdiction from a station located in central Hart. The station is large and contemporary in design, with four double depth, back-in apparatus bays.

Built in 1979, the station also includes a good sized meeting/training area. There are no residential accommodations. The Hart station is well constructed and is clearly well cared for and meticulously maintained. No significant maintenance concerns were reported.

Structure	
A. Construction type	Steel frame building with steel siding and roofing system
B. Date built	1979
C. Seismic protection/energy audits	When originally designed only
D. Auxiliary power	A manual started, automatic transfer generator is in place
E. Condition	Very good
F. Special considerations (American with Disabilities Act of 1990 (ADA), mixed gender appropriate, storage, etc.)	Station is ADA compliant. Storage space is adequate.
Facilities Available	
A. Exercise/workout	Some exercise equipment is in the meeting room
B. Kitchen/dormitory	A small kitchen is located in the meeting room area
C. Lockers/showers	None
D. Training/meetings	A classroom is well appointed and seats up to approximately 50 students
E. Washer/dryer	Yes
Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	None
D. Apparatus exhaust system	None

Figure 13: Grant Township Fire Department Station

The Grant Township Fire Department shares a building with the Grant Township administrative offices. The facility was constructed in 2000 and is in excellent condition, capable of continuing to serve the Township well into the future.

The fire department portion of the building includes four double-depth apparatus bays, designed in a drive-through configuration. In the station are two engines, two tankers, two grass vehicles, and a rescue vehicle.

As a volunteer/paid-per-call department, there are no residential quarters. There is a good-sized, well-equipped meeting room in the fire department portion of the building, as well as a larger meeting room with a seating capacity of 90 in the Township offices, which is available to the fire department. The building is nearly new and presents no maintenance concerns.

Structure	
A. Construction type	Steel frame building with composition roofing system
B. Date built	2000
C. Seismic protection/energy audits	When originally designed
D. Auxiliary power	
E. Condition	Excellent
F. Special considerations (American with Disabilities Act of 1990 (ADA), mixed gender appropriate, storage, etc.)	Station is fully ADA compliant, and storage space is adequate
Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	A small kitchen is located in the township office area
C. Lockers/showers	None
D. Training/meetings	A good sized classroom can accommodate approximately 20 students, and a large meeting room in the township office area has a capacity of 90
E. Washer/dryer	None
Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Doors are secured with combination locks
D. Apparatus exhaust system	None



Figure 14: Ferry Township Fire Department Station

The Ferry Township station is a smaller, four-bay facility that was constructed in the 1950's. Equipment contained in the station includes two engines, a water tender, and two brush vehicles. There is no medical first responder unit.

The station has a small meeting area in the back of the apparatus bays for training and a small office area. There are no crew quarters or other living accommodations, as the department does not have on-duty personnel in the station.

The station is older and shows some signs of aging. However, it appears to be well cared for, and no significant maintenance problems were reported.

Structure	
A. Construction type	Steel frame building with steel siding and roofing system
B. Date built	1950's
C. Seismic protection/energy audits	None
D. Auxiliary power	None
E. Condition	Fair but Aging
F. Special considerations (American with Disabilities Act of 1990 (ADA), mixed gender appropriate, storage, etc.)	Station is not ADA compliant. Storage space is very limited. There is no room for additional apparatus.
Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	None
C. Lockers/showers	None
D. Training/meetings	A small meeting area in the apparatus bays
E. Washer/dryer	No
Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Doors are secured with keyed locks
D. Apparatus exhaust system	None

Figure 15: Shelby-Benona Fire Department Station

Shelby-Benona serves its jurisdiction from a station located in the Village of Shelby. The facility is large and in excellent condition, having been constructed in 1975. There are four apparatus bays, all of which are double in depth. Two are configured as drive through bays, and the others are back-in only. In the bays are two engines, a water tanker, two brush vehicles, an air and support unit, and a pickup (squad) truck.

There is a training/meeting room that is adequately sized, a single office, and exercise room. There are no residential quarters.

The station is relatively new and in very good condition overall. The fire chief reports no serious maintenance concerns.

Structure	
A. Construction type	Steel frame structure with steel siding and roof
B. Date built	1975
C. Seismic protection/energy audits	Only when originally designed
D. Auxiliary power	Manually started generator is in place
E. Condition	Very good
F. Special considerations (American with Disabilities Act of 1990 (ADA), mixed gender appropriate, storage, etc.)	Station is ADA compliant. Storage space is maximized. There is limited room for additional apparatus.
Facilities Available	
A. Exercise/workout	A well-equipped exercise area is in the station
B. Kitchen/dormitory	None
C. Lockers/showers	Shower Only
D. Training/meetings	A meeting room is well appointed and with an occupancy maximum of 40
E. Washer/dryer	Yes
Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detectors, not monitored
C. Security	Doors are secured with combination locks
D. Apparatus exhaust system	None

Figure 16: Pentwater Fire Department Station

Pentwater’s fire station is a good sized station, consisting of four back-in apparatus bays that are double in depth. The facility is in generally good condition and appears to be well cared for. However, the space in the station is maximized, and there is no room for additional apparatus, nor is there any remaining storage space.

Located in the station are two structural engine and two brush units, along with a water tender, a rescue, a Ranger ATV, and a large, well configured air trailer.

The station has a good sized meeting area, which includes a small kitchen. Being volunteer staffed, there are no crew quarters or other living accommodations for on-duty personnel in the station.

The station is somewhat older, and its space is maximized. However, it appears to be well cared for, and no significant maintenance problems were reported.

Structure	
A. Construction type	Steel frame building with steel siding and roofing system
B. Date built	1984
C. Seismic protection/energy audits	None
D. Auxiliary power	A manual started, automatic transfer generator is in place
E. Condition	Good
F. Special considerations (American with Disabilities Act of 1990 (ADA), mixed gender appropriate, storage, etc.)	Station is not ADA compliant. Storage space is limited and filled. There is no room for additional apparatus.
Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	A small kitchen is located in the meeting area. There are not crew quarters.
C. Lockers/showers	A single shower/bathroom is located in the apparatus bays
D. Training/meetings	An adequate and well-appointed meeting room is present
E. Washer/dryer	Yes
Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Doors are secured with combination locks
D. Apparatus exhaust system	None

Discussion

When considering fire stations in the context of potential unification of fire departments in any form, ESCI looks for significant concerns with facilities that may adversely affect cooperative efforts. Should a fire department enter into a formal unification with one or more others, they may inadvertently inherit future financial liabilities associated with facility condition issues such as deferred maintenance, abandoned fuel storage tanks, or inadequate design for current use.

The fire stations in the study area were found to fall in a range from marginal to excellent condition overall. Some stations are relatively new and offer excellent future viability. Others, primarily in the smaller agencies, are older and represent future financial liabilities. Should any of the participants elect to enter into a formal assimilation of one into the other, facility conditions and future costs must be carefully considered.

Apparatus

Other than the emergency responders, response vehicles are the next most important resource of the emergency response system. If emergency personnel cannot arrive quickly due to unreliable transportation, or if the equipment does not function properly, then the delivery of emergency service is compromised.

Fire apparatus are unique and specialized pieces of equipment, customized to operate efficiently for a narrowly defined mission. For this reason, they are very expensive and offer little flexibility in use and reassignment. As a result, communities always seek to achieve the longest life span possible for these vehicles.

A summary of the participating agencies' emergency response vehicle fleet is provided in the following tables:

Figure 17: Walkerville Area Fire Department Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
441	Engine	2002	Pierce	Good		1,000	2,000
442	Engine	1991	FMC	Fair		1,000	1,000
451	Rescue	2010	Spencer Mfg.	Excellent		N/A	N/A
461	Pumper/Tanker	2006	Central States	Excellent		1,250	2,500
470	Ranger ATV	2005	Polaris	Good		100	75
471	Brush	2012	Spencer Mfg.	Excellent		350	350
472	Brush	2007	Ford F350	Scheduled for refurbishment		350	250

WAFD has established a solid fleet of fire apparatus, most found to be in very good to excellent condition. Walkerville's major apparatus range in age from 3 to 24 years with an average age of 10.3 years. The primary units are newer and in good condition. The 1991 engine is approaching its expected service life.

Figure 18: Crystal Township Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
541	Pumper/Tanker	1987	FMC	Fair	1	1,250	1,500
561	Tanker	2009	Darley	Good	1	500	2,000
571	Brush	1987	Chevrolet	Fair	1	250	250

Crystal’s major apparatus range in age from 6 to 28 years with an average age of 20.7 years. The water tanker is newer and in good condition. However, both of the other pieces of apparatus are 28 years of age and are reaching, or have reached, their expected service lives.

Figure 19: Hart Area Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Engine 141	Engine	1992	GMC	Excellent	2	1,000	1,000
Engine 142	Engine	2004	GMC	Excellent	2	1,250	1,000
Engine 143	Mini-pumper	2009	Chevrolet	Excellent	2	500	315
Squad 151	Squad	1994	Freightliner	Excellent	2	N/A	N/A
Tender 161	Water tender	2015	International	Excellent	2	250	2,000
Brush 171	Brush	1979	Chevrolet	Fair	2	250	250
Brush 172	Brush	1984	Ford	Fair	2	250	250

Averaging 22.9 years overall, Hart Area Fire Department’s primary apparatus range from 6 to 36 years. The primary units are newer and in good condition.

Figure 20: Grant Township Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
776	Engine	2007	Peterbilt	Good	2	1,500	1,000
770	Engine	1989	GMC	Fair	2	750	1,000
775	Tanker	1984	Chevrolet	Fair	1	300	2,000
771	Tanker	1994	GMC	Good	1	N/A	2,000
774	Brush	2003	Dodge	Good	2	250	185
772	Brush	2015	Chevrolet	New	2	250	185
773	Rescue	2015	Chevrolet	New	1	N/A	N/A

Grant Township’s major apparatus range in age from new to 31 years with an average age of 14 years. The primary engine and brush units are newer and in good to excellent condition. The tankers are older, and the 1984 tanker is approaching its maximum acceptable service life.

Figure 21: Ferry Township Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Engine 641	Engine	1997	Pierce	Good	1	1,500	750
Engine 642	Engine	2000	GMC	Good	1	1,250	1,500
Tanker 661	Tanker	2003	Freightliner	Good	1	450	3,000
Brush 671	Brush	1986	GMC	Fair but aging	1	50	290
Brush 672	Brush	1986	GMC	Fair but aging	1	50	230

Ferry Township’s major apparatus range in age from 12 to 29 years with an average age of 20.6 years. The two brush units, dated 1986, are aging and will be due for replacement in the foreseeable future.

Figure 22: Shelby-Benona Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Engine 242	Engine	1997	Freightliner	Very good	2	1,500	1,000
Rescue Engine 243	Engine	2008	HME/Alexis	Very good	3	1,500	1,000
Tender 261	Tender	2003	Freightliner	Very good	1	1,000	2,000
Brush 271	Brush	1987	Chevrolet	Fair	1	50	200
Brush 272	ATV	2015	Polaris	Excellent	1	50	70
Squad 280	Pickup	2005	Ford	Good	2	200	300
Air/support 254	Van	1997	Ford	Good	2	N/A	N/A

Shelby-Benona has a fleet of newer apparatus, ranging from new to 28 years with an average of 13.3 years.

Figure 23: Pentwater Fire Department Major Apparatus

Apparatus Name	Type	Year	Make/Model	Condition	Minimum Response Staffing	Pump Capacity (GPM)	Tank Capacity (GAL)
Engine 241	Engine	2002	Spartan	Excellent	4	1,500	1,000
Tender 361	Tender	2009	International	Excellent	2	N/A	2,400
Engine 342	Mini-pumper	2013	Ford	Excellent	2	1,500	300
Brush 373	Brush	1998	Ford F350	Good	2	150	300
Brush 371	Brush	2006	Ford F350	Excellent	2	150	200
Rescue 351	Rescue	2008	Ford Expedition	Excellent	1	N/A	N/A
-	Ranger	2011	Polaris	Excellent	1	12	35
Air Supply Trailer	Air supply	2011	Trailer	Excellent	1	N/A	N/A

Pentwater has one of the newer fleets in the study are, with its newest piece of equipment dating 2 years of age and its oldest at 17. The average is 7.8 years.

Future Apparatus Serviceability

A key consideration in evaluating the feasibility of combining agencies into one or more consolidated entities is the cost that can be expected to be incurred for future replacement of major equipment. Apparatus service lives can be readily predicted based on factors including vehicle type, call volume, age, and maintenance considerations. Looking at the combined fleet of apparatus that is in place in all of the study agencies, ESCI found that vehicles range from new to an age of 36 years. However, the numbers must be put in perspective, understanding that many of the vehicles are in reserve status. If only front line vehicles are considered, the average age is considerably newer.

There is no standard or requirement as to when fire apparatus should be replaced. Calculation of acceptable service lives for fire apparatus varies widely between fire departments, due to differing uses, road conditions, maintenance practices, and other variables. In larger, busy fire departments, a front-line service life of 10 to 15 years is commonly combined with a five-year reserve status. In smaller agencies, 15 to 25 years is more commonly found, a portion of which may be in reserve.

Considering fire apparatus replacement from a regional perspective offers opportunities that warrant consideration. Typically, most agencies maintain extra fire engines, often to hold one in reserve for use when the primary engine is out of service for maintenance. Sharing of reserve apparatus can result in reduced numbers of engines overall and subsequent financial savings in replacement, maintenance, and insurance costs. Even as stand-alone fire departments, the Oceana County agencies should consider inventorying and identifying opportunities to share reserve equipment where possible.

Capital Replacement Planning

When considering joining multiple agencies into a single entity, it is important to evaluate the future costs that can be anticipated for the replacement of major capital assets. The most expensive capital items that make up a fire department are facilities (fire stations) and major apparatus, including fire engines and aerial ladder trucks.

ESCI reviewed capital replacement planning methods in the participating agencies. WAFD and SBFD were the only agencies that reported having a formal and funded apparatus replacement schedule and plan in place. Their plans include apparatus and the associated small equipment, turnout gear and related items. The replacement schedules are funded on a 10 year schedule.

The Hart Area Fire Department also maintains a capital replacement schedule. However, in this instance, the schedule is not funded with dedicated financial commitment. Instead, replacement is either financed or funded from within available operational budget resources.

Pentwater does not have a structured replacement schedule in place. However, they do consider future needs and set aside funding with which to meet them. The approach is informal but meets current needs.

The remaining participants do not maintain a capital replacement plan or funding method. Instead, they simply meet capital needs with available operations budget, funding apparatus replacements on an as-needed basis.

Looking forward, should a change in governance of the fire departments be undertaken as a shared service delivery initiative, apparatus and facility replacement planning should be considered. All of the agencies are advised to establish a structured replacement plan with calculated future costs and identified funding strategies, viewed in light of any shared service initiatives that may be undertaken moving forward.

STAFFING AND PERSONNEL MANAGEMENT

Without proper levels of personnel, apparatus and stations will sit idle and may not be readily available for emergency response. This section is intended to provide the reader with a review of the system’s personnel management practices as compared to industry standards and to examine the department’s ability to provide sufficient staffing resources for the risks that exist throughout each community.

Administrative and Support Staff

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 their mission at an emergency incident. Efficient and effective administration and support are critical to the department’s success. Without adequate oversight, planning, documentation, and training, the operational capabilities of the department may suffer and ultimately fail operational testing. Administration and support require appropriate resources to function effectively.

Figure 24: Administrative and Support Complement

	CTFD	FTFD	GTFD	HAFD	PFD	SBFD	WAFR
Administrator							1
Fire Chief	1	1	1	1	1	1	1
Assistant Chief	1	1	1	1	1	1	1
Educator						1	
Investigator						1	
Total	2	2	2	2	2	4	3

In career organizations, administrative and support staff are commonly separated from operational staff. However, in volunteer or combination departments, these administrative and support personnel will commonly be operational as well. All personnel identified in the preceding figure are also operational with minor exceptions. They are separated out here simply to illustrate what positions are contained within each organization.

Operational Staffing

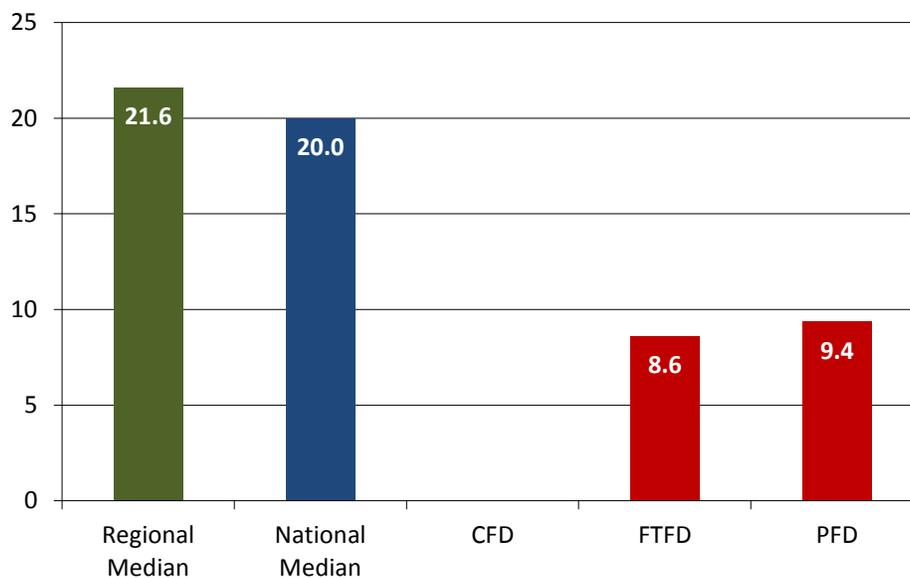
It takes an adequate and well-trained staff of emergency responders to put the appropriate emergency apparatus and equipment to its best use in mitigating incidents. Insufficient staffing at an operational scene decreases the effectiveness of the response and increases the risk of injury to all individuals involved.

Figure 25: Operations Complement

	CTFD	FTFD	GTFD	HAFD	PFD	SBFD	WAFR
Captain		1	1	1	1	1	1
Lieutenant		2	3	3	2	2	2
Firefighter		8	10	18	12	16	15
Total		11	14	22	15	19	18

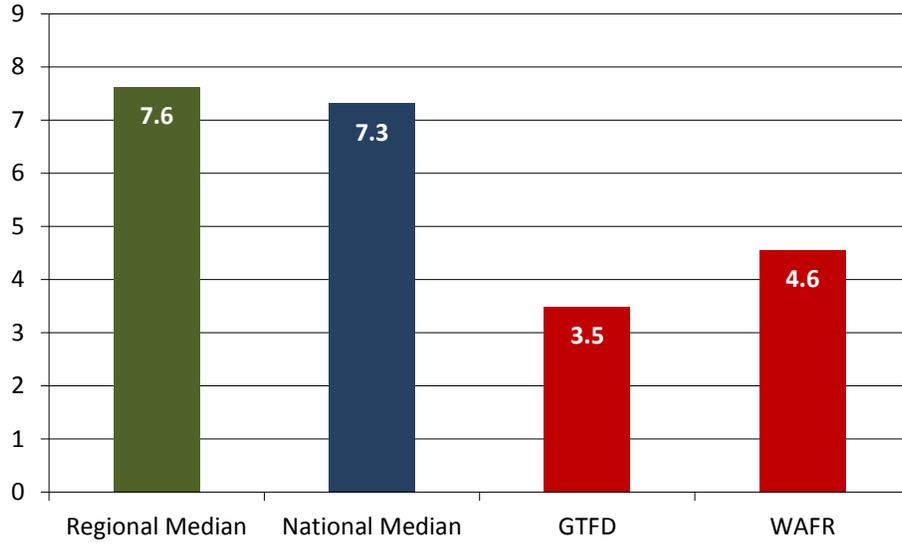
The National Fire Protection Association (NFPA) provides benchmark data for fire departments in regards to staffing levels. Although these benchmark data are gleaned from peer-provided surveys and the data is not validated, it does provide departments with a glimpse of how they compare with others their size. The benchmarks are segregated based on population ranges and do not take into account geography, demographics, or community risk. The population ranges that apply to the study agencies are “under 2,500”, “2,500 to 4,999”, and “5,000 to 9,999.” The departments that fall into these categories are grouped together in the following figures:

Figure 26: Volunteers per 1,000 Population (Under 2,500 Population)



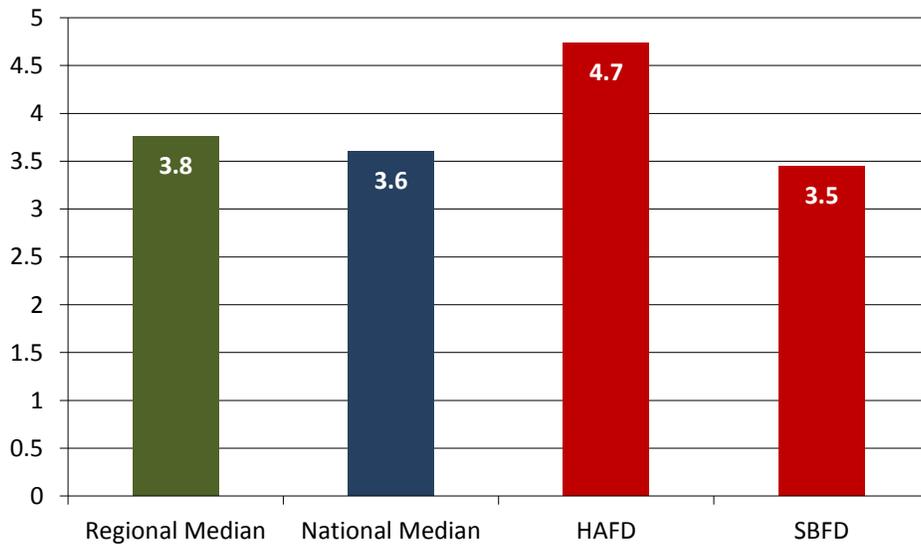
Based on the NFPA benchmark data, all three of the departments in this category are below the regional and national medians for volunteer firefighters per 1,000-population.

Figure 27: Volunteers per 1,000 Population (2,500 to 4,999 Population)



Based on the NFPA benchmark data, both departments in this category are below the regional and national medians for volunteer firefighters per 1,000-population.

Figure 28: Volunteers per 1,000 Population (5,000 to 9,999 Population)



Based on the NFPA benchmark data, the departments in this category are either above or very near the regional and national medians for volunteer firefighters per 1,000-population.

Human Resources Policies and Manuals

It is important that members of the organization know to whom they should go when they have a problem, question, or issue related to their relationship to the department. In large companies, this function is typically handled by a human resource department. Staff within such a department handles questions, issues, and tasks related to appointment, benefits, performance, discipline, promotion, or termination.

Each of the study agencies has some form of human resources policy in place. In some cases, those policies are contained within Township documents. In others, bylaws are in place that govern human resources practices. In still others, there is little in the way of human resource oversight. In most cases, however, these documents are outdated or incomplete. As part of a comprehensive set of consistent policy documents, the study agencies should work together to ensure that all personnel within the system have the same human resources applied to them equally and consistently.

Compensation Systems

Perhaps the most important of all employment elements is that of compensation. While a positive work environment and an appropriate workload are beneficial, most individuals would endure substantial differences in those areas if pay and benefits were sufficient to retain personnel. The fire service is widely varied in how it pays and provides benefits to its members, ranging from a volunteer with little or no pay to relatively highly paid career personnel.

Geography and politics have a significant impact on the pay and benefits provided to emergency personnel. For instance, states such as North Carolina (right-to-work state) provide significantly lower salaries and benefits than those states that have a strong union presence. This is not to say that one is better or worse than the other or that anything is wrong with either practice, but simply to highlight the difference across the country.

Figure 29: Summary Compensation Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Retirement Plan	None	No	Township Fund	None	LOSAP	No	LOSAP
Medical Insurance	No	No	No	No	No	No	No
Dental Insurance	No	No	No	No	No	No	No
Vision Insurance	No	No	No	No	No	No	No
Officer Stipends							
Administrator							\$7,000
Fire Chief	\$2,700	\$3,000		\$5,000	\$3,000	\$5,000	\$3,000
Assistant Chief	\$1,020	\$500		\$2,500	\$2,500	\$2,500	\$1,600
Captain	\$600			\$1,200	\$1,000	\$1,000	\$1,200
Lieutenant				\$450	\$1,000	\$500	\$800
Record-keeper	\$420			\$2,500	\$2,000	\$1,200	
Maintenance	\$420				\$750	\$700	
Training Officer						\$1,000	\$600
Fire Prevention				\$200		\$1,400	\$400
Rates of Pay							
Meeting Rate	\$20	\$10	\$18	\$15	\$25	\$13	\$20
Non-Certified	\$12		\$18	\$20		\$13	
Certified	\$14.50	\$9	\$18	\$20	\$25	\$13	
FFI							\$9
FFII							\$12
FFII/FOI & II							\$15
FFII/FOIII							\$17.50

Disciplinary Processes

Although often an unpleasant task, disciplinary proceedings are a necessary part of an organization that involves people. Career fire departments often have detailed disciplinary policies spelled out in municipal personnel manuals or within collective bargaining agreements. Volunteer fire departments, however, are far more likely to handle discipline on an informal basis. In some cases, discipline is not applied, out of fear of losing personnel in a system that is already short-staffed.

It has been long-proven that personnel, regardless of status, desire to have formal disciplinary processes detailed and followed in a consistent manner. This prevents the arbitrary application of discipline and allows all personnel to know their duties, roles, responsibilities, and if necessary, consequences for failing to meet them. The following figure summarizes the disciplinary programs elements of the study agencies.

Figure 30: Summary of Disciplinary Programs Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Disciplinary Policy in Place	Yes	Yes	Yes	No	No	Working	Yes
Disciplinary Appeals Process in Place	Yes	Yes	Yes	No	No	Yes	Yes
Chief's Disciplinary Authority	Suspend and Recommend Termination	Suspend and Recommend Termination	Terminate with Cause	Suspend and Recommend Termination	Terminate	Suspend and Recommend Termination	Suspend and Recommend Termination

Each of the study agencies has termination clauses within their respective foundational policy documents, but there is little in the way of formality. In most cases, dismissal from a study agency is based on lack of attendance at meetings, trainings, and incidents; and there is little in the way of guidance on how to discipline members for other infractions.

As a part of the comprehensive standard operating guidelines that should be developed for all the study agencies, the study departments should work with policymakers to establish a formal disciplinary policy.

Testing, Measurement, and Promotional Processes

Once achieving active employment, individuals should be evaluated periodically to ensure their continued ability to perform their duties safely and efficiently. Technical and manipulative skills should be evaluated on a regular basis. This provides documentation about an employee's ability to perform their responsibilities and provides valuable input into the training and education development process.

Regular evaluation and feedback for personnel is critical to behavior modification and improvement. It has long been proven that employees sincerely wish to perform well and wish to be a contributing part of an organization. This desire to succeed is best cultivated through effective feedback that allows an employee to know whether they are doing well and, if not, where they can improve. The honest and effective presentation of this feedback encourages the member to reinforce those talents and abilities in which they already excel and to work harder to improve the areas where they fail to perform as desired.

At present, the only individual that receives periodic performance evaluations is the Sbfd Fire Chief; and that was at his request. Volunteer personnel do not receive formal evaluations, but performance is evaluated on an informal basis during training evolutions and other activities.

Promotional processes vary by department as summarized in the following figure:

Figure 31: Summary of Testing and Promotion Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Formal Promotional Testing	No	Yes	No	No	No	No	No
Types of Promotional Testing	All officers elected by the membership	Interview process for officers by Fire Chief and Assistant Chief	All officers elected by the membership with specific qualifications for each position	All officers elected by the membership with specific qualifications for each position	All officers elected by the membership and approved by Village and Township officials	All officers elected by the membership with specific qualifications for each position	Fire Chief and Officer appointed by Fire Board Based on specific training requirements

Application, Recruitment, and Retention

Successful emergency services agencies strive to ensure that their recruitment efforts are focused on the specific demographics of the population served, combined with streamlined application processes and formalized retention programs. This is especially critical for fire departments that rely on volunteer firefighters. The community places a tremendous amount of trust in fire department personnel. The need for a comprehensive, seamless, and effective selection, retention, and recruitment process is paramount to maintaining a healthy, efficient, responsive fire department.

For volunteer and combination fire departments across the United States, recruitment and retention of volunteer members has been one area that has suffered far more than actual service delivery. Several articles of research have been published over the past decade in an attempt to assist volunteer and combination departments in addressing the issue of declining numbers of volunteer or POC personnel. One such study, conducted by the National Volunteer Fire Council, as mentioned in the body of this report, offered an extensive list of statistics and suggestions focusing on the following issues:

- What makes members want to volunteer?
- What keeps volunteers serving?
- What makes your members leave your organization?

The study evaluated these questions and offered a vast array of information, but little in the way of solid suggestions on how to address these issues.

It is no secret within the fire service, as well as other industries that rely on volunteer members, that volunteerism has been on the decline for many years. Since September 11, 2001, however, volunteerism, in general, saw an enormous increase – from 59.8 million in 2002 to 65.4 million Americans in 2005, but that surge has since subsided to 62.6 in 2013. During that time frame, only 22.9 percent of males volunteered compared to 29.3 percent of females. In addition, the age with the highest percentage of volunteerism was the 35 to 44 years of age bracket. Unfortunately, only 1.3 percent of all volunteerism goes into public safety organizations, of which fire departments comprise only a fraction.¹

In the Midwestern United States, including Michigan, volunteer rates are somewhat higher than the national average of 25.4 percent. The 2013 rate of volunteerism in the Midwest was estimated at 30.0 percent overall. Subsequently, public safety only accounted for 2.2 percent of the total volunteerism rate in 2013. In fact, for 2013, Michigan ranked 25th out of all 50 states plus the District of Columbia, with an overall volunteerism rate of 28.0 percent.²

With a shift in demographics throughout the United States, the groups that we have relied upon for decades are no longer available, or no longer have the desire, to volunteer. As shown from the statistics noted above, public safety organizations, including fire departments, must be willing to thoroughly evaluate the demographics of their communities and then to take an in-depth look at the organization to identify what they have to offer, as well as incentives that could be implemented and/or improved.

¹ Corporation for National and Community Service. *Volunteering and Civic Life in America 2014*.

² Ibid.

Based on the report issued by the National Volunteer Fire Council, individuals are generally willing to volunteer when:

- The experience is rewarding and worth their time
- The training requirements are not excessive
- The time demands are not excessive
- They feel valued
- Conflict is minimized

There are caveats, however, attached to these generalizations. As we all know, time is a precious commodity in today's society, as many of us work more hours at one, two, or three jobs in order to offset the rising cost of living and inability of most salaries to keep up with the current rates of inflation. With this in mind, fire departments must be able to make any time commitment by their members worthwhile and ensure that time is not wasted on repetitive or needless exercises that serve little purpose other than to occupy time meant for practical training. This is increasingly important as training requirements continue to rise, as does call volume, particularly in those departments participating in Emergency Medical Services activities.

Individuals charged with operating emergency services agencies with an ever-increasing level of efficiency must realize that, in today's economic environment, volunteerism may be the best method for accomplishing a mission that is vital to community sustainability. Administrators must be able to recognize and swiftly deal with factors that cause a decline in volunteerism, among which are:

- Abuse of the emergency services system
- Sociological conditions
- Internal leadership problems, either in the administrative or field operational ranks
- Community demographics, such as an aging community

In an environment of tax roll-backs, property tax capping, hiring freezes due to local government budgetary overruns, and an overall decrease in fires throughout the country, emergency services administrators may be better served to bolster the volunteer ranks of their departments rather than continuing the push for more career personnel.

With these issues in mind, combined with the statistics noted at the beginning of this section, ESCI suggests that the study agencies consider the demographics of the community as noted below to develop a sustainable volunteer/POC recruitment and retention program:

- Largest percentage of population: 15.16 percent (age 45-54, median age 41.8)
- Percentage of two-person households: 56.62 percent (89.8 percent married couples)
- Male-to-female ratio: 1.0 males to every 0.89 females (50.22 percent male)

One of the easiest ways to reach people in a community the size of Oceana County is through direct mailings or flyers that are contained within utility or tax bills. These mailings and/or fliers should identify

the needs of the community, the cost of current services compared to what that cost might be if career personnel were implemented, the benefits of being a volunteer, and how to go about joining the volunteer ranks at the various fire departments.

Once an effective recruitment program has been implemented, tested, evaluated, and modified based on results, the departments should then focus on retention of those volunteers. As mentioned earlier, in today's economic environment, monetary incentives are becoming increasingly rare. Many departments rely on the formal paid-on-call staff (those that receive a standard rate of pay for work performed, whether per hour or per call) rather than the typical volunteer member that works in a strictly volunteer (no-pay) status. Which option to utilize rests with the community officials and jurisdictional authorities with insight and control of the budget.

Regardless of which compensatory mechanism is, there are other, non-monetary aspects that tend to maintain a volunteer's interest in the organization. As indicated in the report issued by the National Volunteer Fire Council, department leadership is a major factor in a member's decision to leave an organization. Conflicts between members and leadership cause tension throughout the organization and tend to increase anxiety, even among those members not directly involved in the conflict. It is beneficial, therefore, for leadership to recognize that conflict resolution is essential to maintaining an effective organization. Routine and frequent leadership training should be provided to those individuals that are charged with operating the daily functions of the fire company, and member surveys should be used to allow personnel to anonymously identify problem areas.

It has also been determined that, once individuals become part of an organization, those who truly are volunteering for the good of the community take a great deal of pride in the organization and expect the same from other members. This takes form in many ways, including pride in the uniform, public outreach through education and/or demonstrations and fundraising, pride in the building and apparatus, and involvement in organizational development and advancement.

Another important aspect of retaining volunteers is recognition. Most individuals that volunteer do not expect any compensation for their time and efforts, but many express the desire that their dedication be acknowledged. This can be accomplished through informal programs such as a simple "thank you," or cards and letters that recognize individuals for special contributions. Formal programs can also be initiated where members are recognized for completion of various courses or awarded for years of service. The use of the local media is a key component to this aspect of retention. Although members build respect for one another internally, the use of local newspapers, television, and radio can bring external positive recognition to departments. This can also, in turn, have the effect of producing more members as the image of the organization is positively portrayed in the media.

As mentioned previously, many volunteers do not expect monetary compensation. This does not mean that monetary compensation cannot be used as an incentive to both recruit and retain volunteers. Many organizations have developed programs to make volunteering more attractive through the use of either direct or indirect monetary incentives. Some examples are listed below:

- Indirect Monetary Incentives
 - Retirement plans
 - Pension plans
 - IRAs
 - Tax exemptions (local, state, and federal)
 - Tuition assistance
 - Health club memberships
 - Local business gift certificates
- Direct Monetary Incentives
 - Length of service bonus plans
 - Pay-per-call or pay-by-hour
 - Annual reimbursement for time

Currently, the departments use both indirect and direct monetary incentives to entice new members and retain existing members. Indirect monetary incentives used include:

- Free enrollment in a retirement program for volunteers (Grant, Pentwater, Walkerville)
- Free complete medical examinations at hire
- Free uniforms

Direct monetary incentives used include reimbursing members for their time away from their normal jobs and families through stipends or hourly rates.

On the federal level, the Supporting Emergency Responders Volunteer Efforts (SERVE) Act, introduced in 2005, would have given members of volunteer fire and EMS organizations a \$1,000.00 tax credit. Unfortunately, this legislation was not enacted, but this type of incentive was revived during 2007 as the Volunteer Responder Incentive Protection Act, providing volunteer firefighters and emergency medical responders with property tax rebates and other benefits as well as excluding them from income and employment taxes and wage withholding.

There is little doubt that recruitment and retention of volunteers has become difficult for many organizations. The demands of today's society and a shift in demographics have made it harder to find individuals willing to contribute the necessary time and energy to an organization that offers little tangible return. Although there are many resources available that identify the issues with attracting volunteers, it is impossible to define a specific set of incentives and programs that work for every jurisdiction. Each organization must evaluate its own internal needs and then match those to the demographics of the community it serves to maximize its abilities to recruit and retain volunteer personnel. This section is intended to highlight some of those issues specific to Oceana County in hopes of increasing the district's ability to develop a sustainable volunteer emergency response force.

Health and Wellness Programs

Health and wellness with an emergency services organization can serve many purposes, including adherence to state and federal laws, rules, and regulations regarding respiratory protection, medical examinations for specific positions and required training, reduction in workplace injuries through period training, and disease prevention and detection through mandatory periodic medical examinations. While many departments fail to provide a comprehensive health and wellness program, those that do often see the benefits in near real-time. The figure below summarizes the health and wellness elements for the study agencies:

Figure 32: Summary of Health and Wellness Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Minimum Physical Standards in Place	Yes	No	No	No	No	Yes	Yes
Pre-Hire Medical Physical Required	Yes	Yes	No	Yes	Yes	Yes	Yes
Post-Hire Medical Physicals Required	No	Voluntary	No	No	No	No	No
CISD Availability	By request from County EMS						

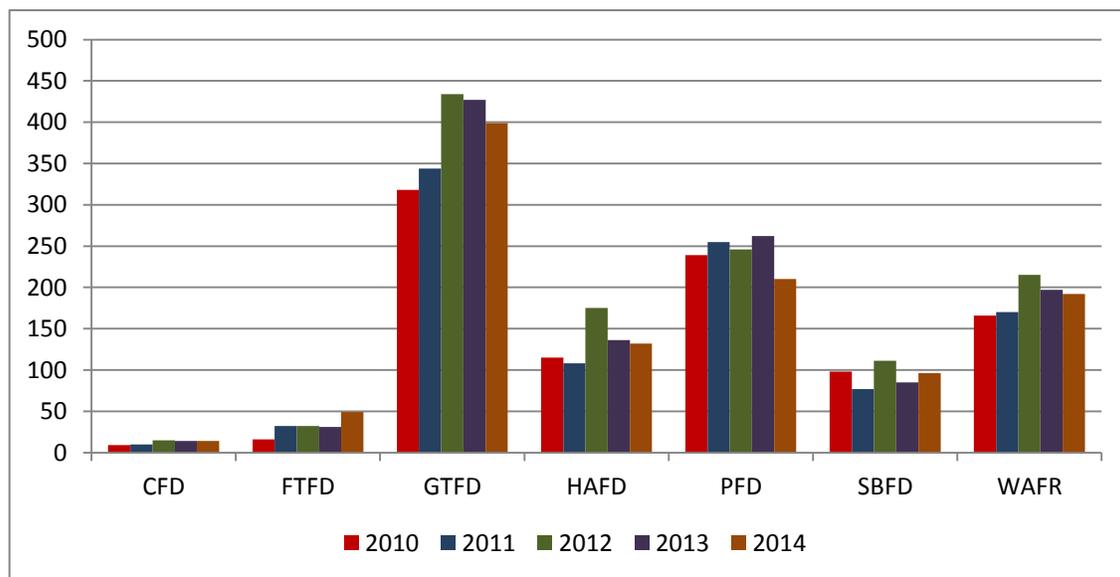
SERVICE DELIVERY AND PERFORMANCE

The previous sections of this report provide the reader with general information about how each study department is organized and managed from a non-operational perspective. It is, however, the primary responsibility of an emergency services provider to deliver operational services to the community served. This section of the report evaluates each department's operational service delivery and performance regarding service demand, distribution of resources, concentration capabilities, unit reliability, and overall response performance.

Service Demand

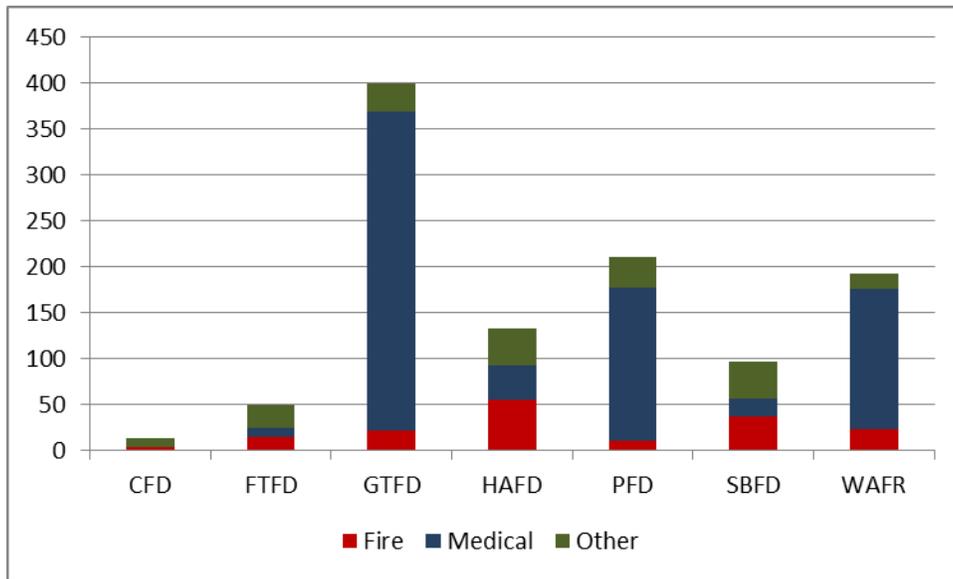
Service demand can be defined in a number of ways depending on the types of services provided by the organization. For the purposes of this report, service demand is defined as any and all incidents where emergency resources are utilized to resolve the situation. These may also include non-emergency incidents where resources are simply provided in a support role, but the primary goal is to show how busy the department is over a given period of time.

Figure 33: Overall Service Demand



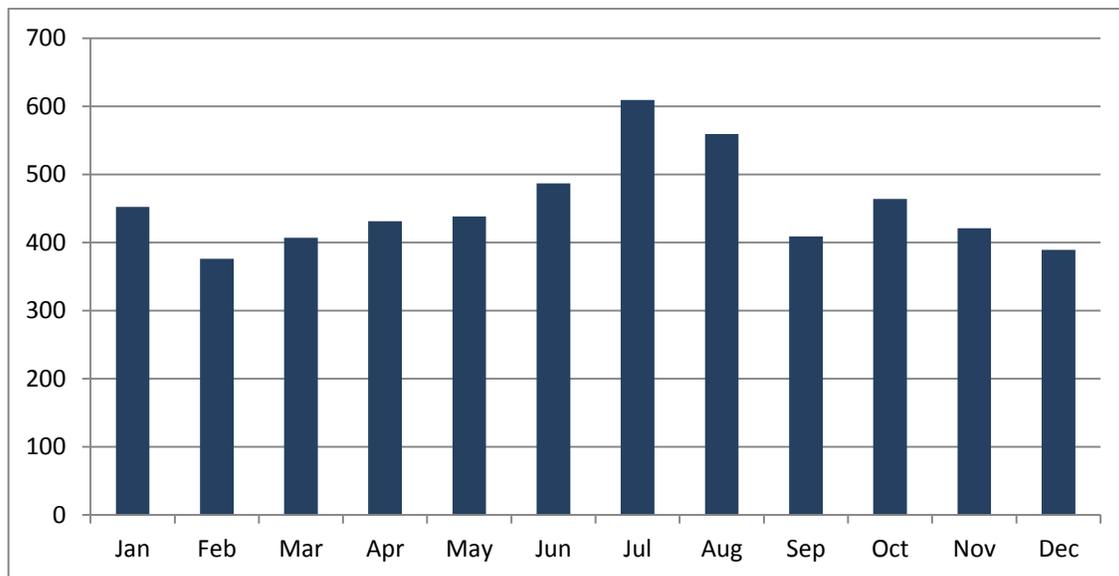
Based on this analysis, GTFD is the busiest of the seven study departments followed by PFD, WAFR, and HAFD. For each department, service demand appears to be increasing slightly, except for PFD, which saw a decrease in overall demand between 2013 and 2014. It should be noted that not all of the study departments participate in medical responses, which drastically increase overall service demand. The figure below illustrates each study department's 2014 service demand allocated by general type of incident.

Figure 34: Service Demand by Incident Type



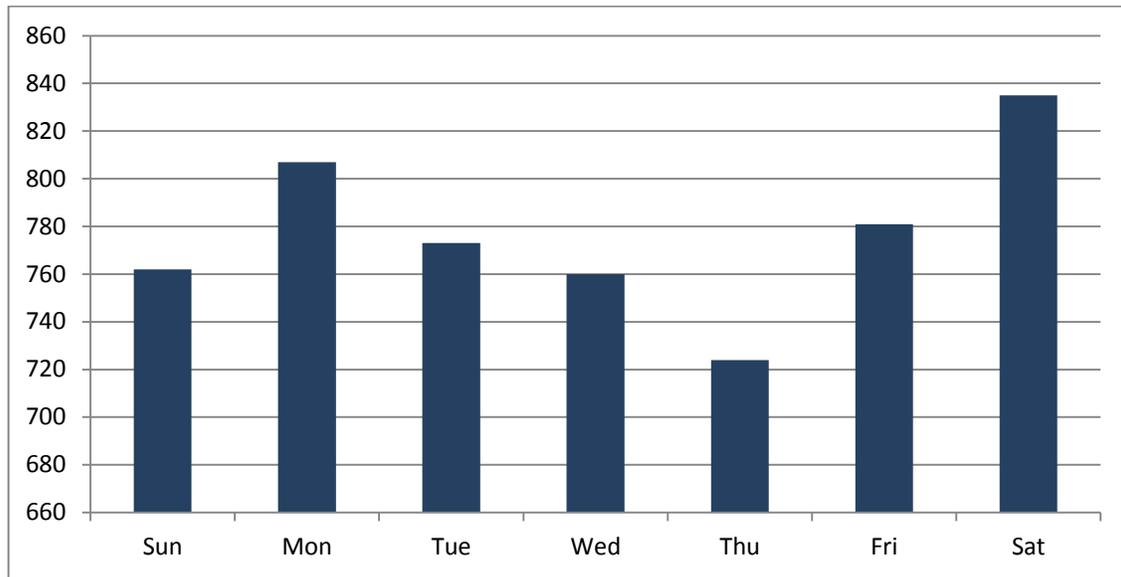
For the remainder of the analysis, ESCI grouped all the study data together in order to present a system-wide perspective of service demand. This is particularly important since the study agencies often work together on major incidents. This temporal analysis of service demand begins with an evaluation of demand by month:

Figure 35: Service Demand by Month (2010-2014)



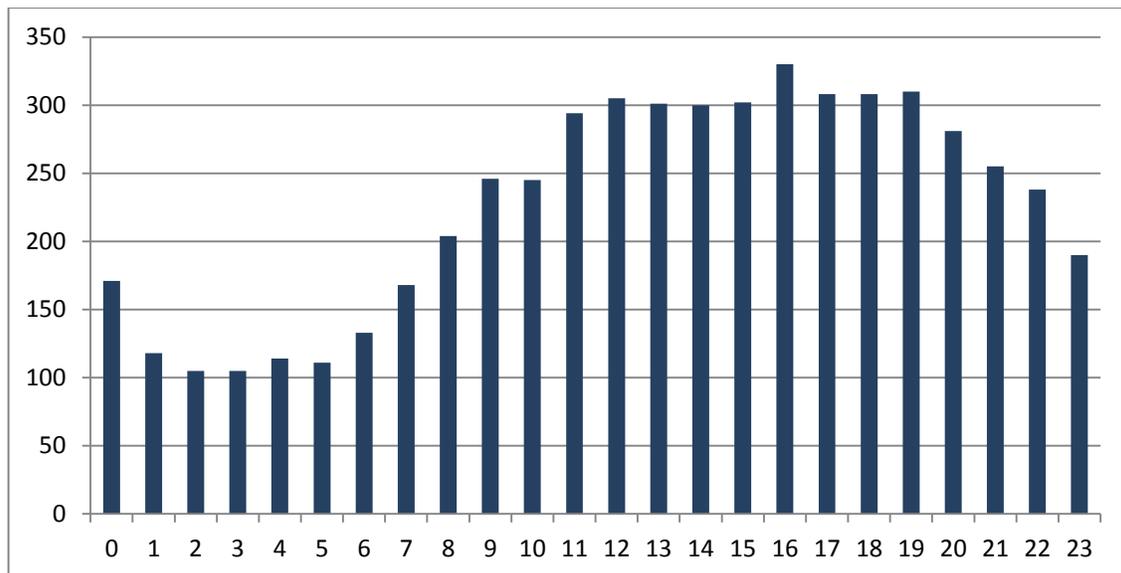
As represented in the preceding figure, July is the busiest month for the system following closely by June, August, January, and October. Given the climate of the Oceana County area and the tourist influx during the summer months, this spike in summer demand would be expected. The next analysis reviews service demand by day of week:

Figure 36: Service Demand by Day of Week (2010-2014)



As is common in many emergency services organizations, service demand tends to increase on the weekends as the population is more active, particularly in areas that have recreational opportunities such as Oceana County. The increase on Mondays can be attributed to people returning to work and resulting in potential vehicle accidents or other non-fire incidents. The most telling temporal analysis is that of demand by hour of day, represented below:

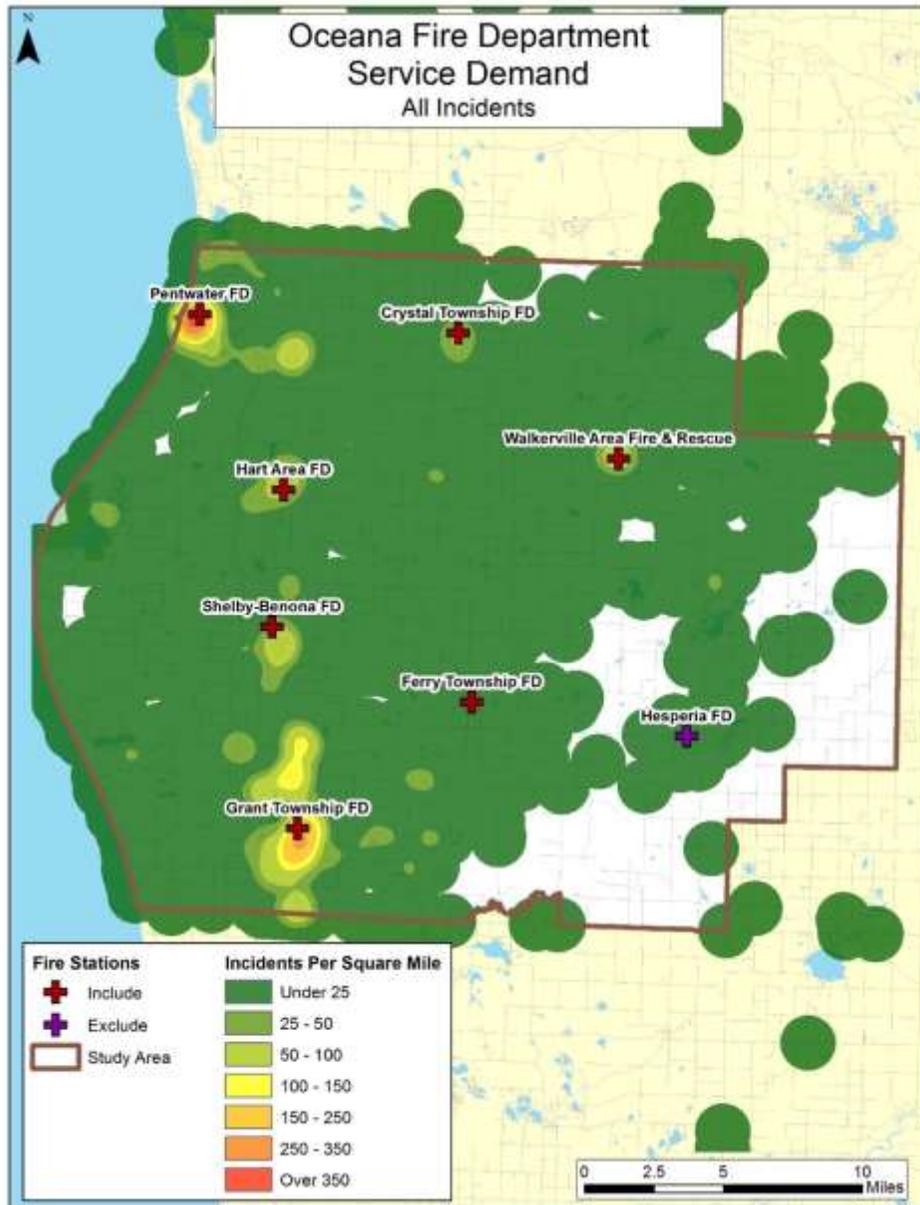
Figure 37: Service Demand by Hour of Day (2010-2014)



In emergency services organizations, particularly those involved in the provision of emergency medical services, demand is often driven by human activity. Oceana County is no different. As the population becomes more active during daytime hours, service demand correspondingly increases. This is an

expected change in hourly demand for a system of this size. The next analysis reviews service demand geographically and begins with a general representation of all service demand:

Figure 38: Geographic Service Demand - All Incidents

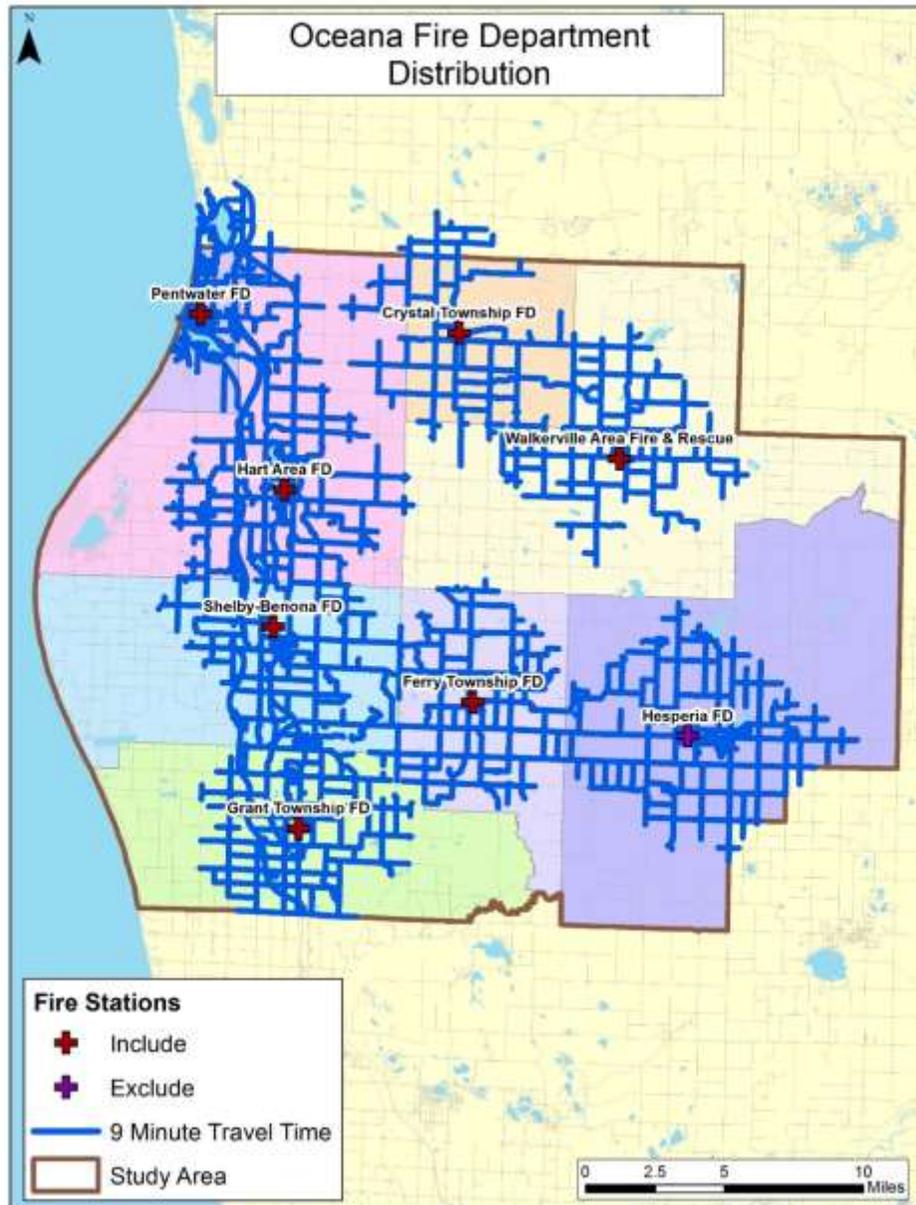


Resource Distribution

Distribution analysis is an evaluation of how well physical resources (facilities) are deployed across a specific geographic area. For medical incidents, there is little in the way of guidance on how well resources should be distributed because these incidents are primarily driven by human activity. For fire protection, however, there are several industry standards that specify how fire stations should be distributed. The National Fire Protection Association (NFPA) recommends that fire departments serving rural areas with volunteer personnel be able to respond to 80 percent of emergency incidents within 14

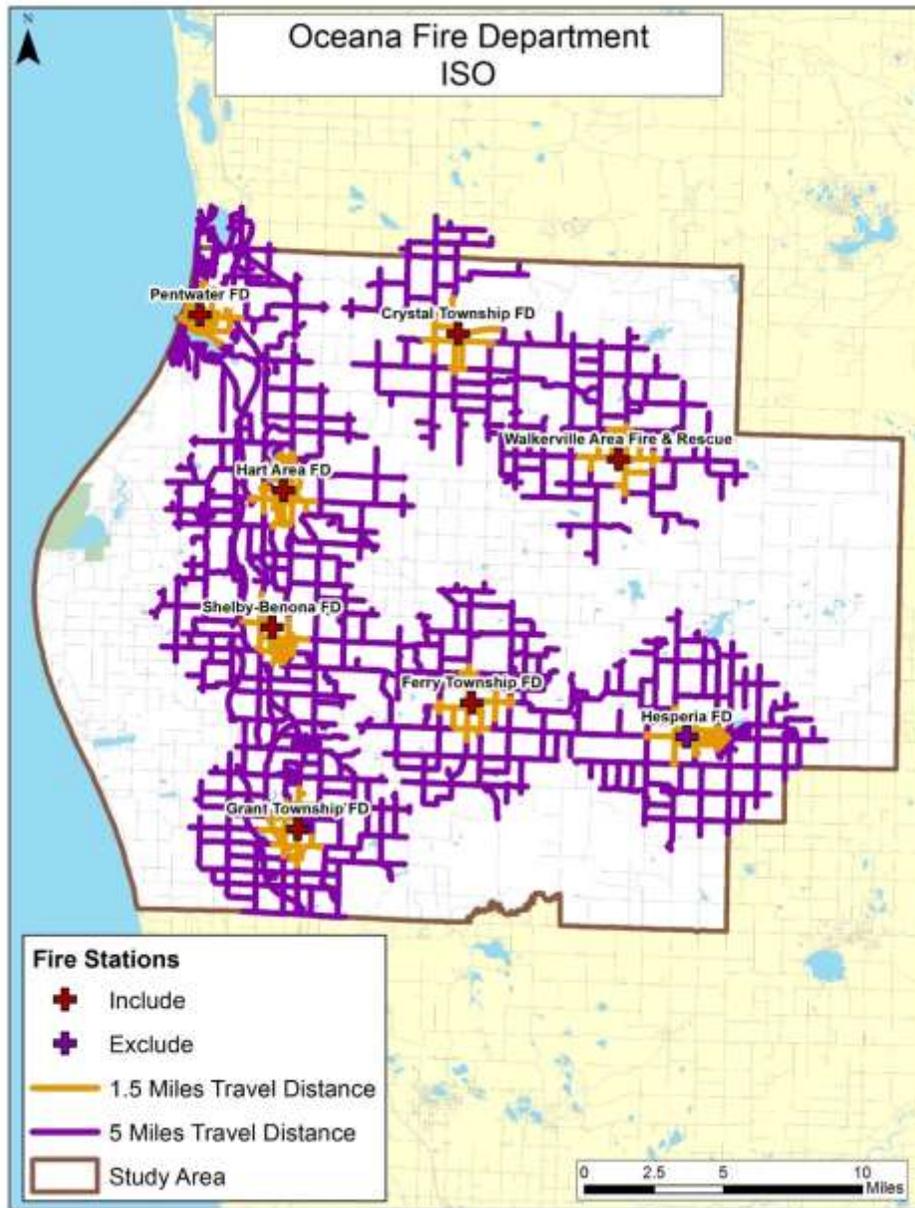
minutes of total response time. The following figure illustrates how well the study departments' distribution of resources can reach historic service demand from existing locations:

Figure 39: Resource Distribution Capability



Another method to evaluate distribution is in regard to Insurance Services Office (ISO) distances. ISO provides communities with a Public Protection Classification (PPC) that rates fire departments on their ability to provide service. The lower the PPC classification, the better the insurance rates for home and business owners. To achieve the best PPC for distribution, properties should be within 1,000 feet of a hydrant, 1.5 miles from an engine, 2.5 miles from an aerial ladder, and five miles from the nearest fire station. The following figure illustrates the 1.5 mile ISO distance. Data was not available to illustrate hydrant distance, and there are no aerial apparatus within Oceana County.

Figure 40: ISO 1.5 and 5 Mile Travel Capability

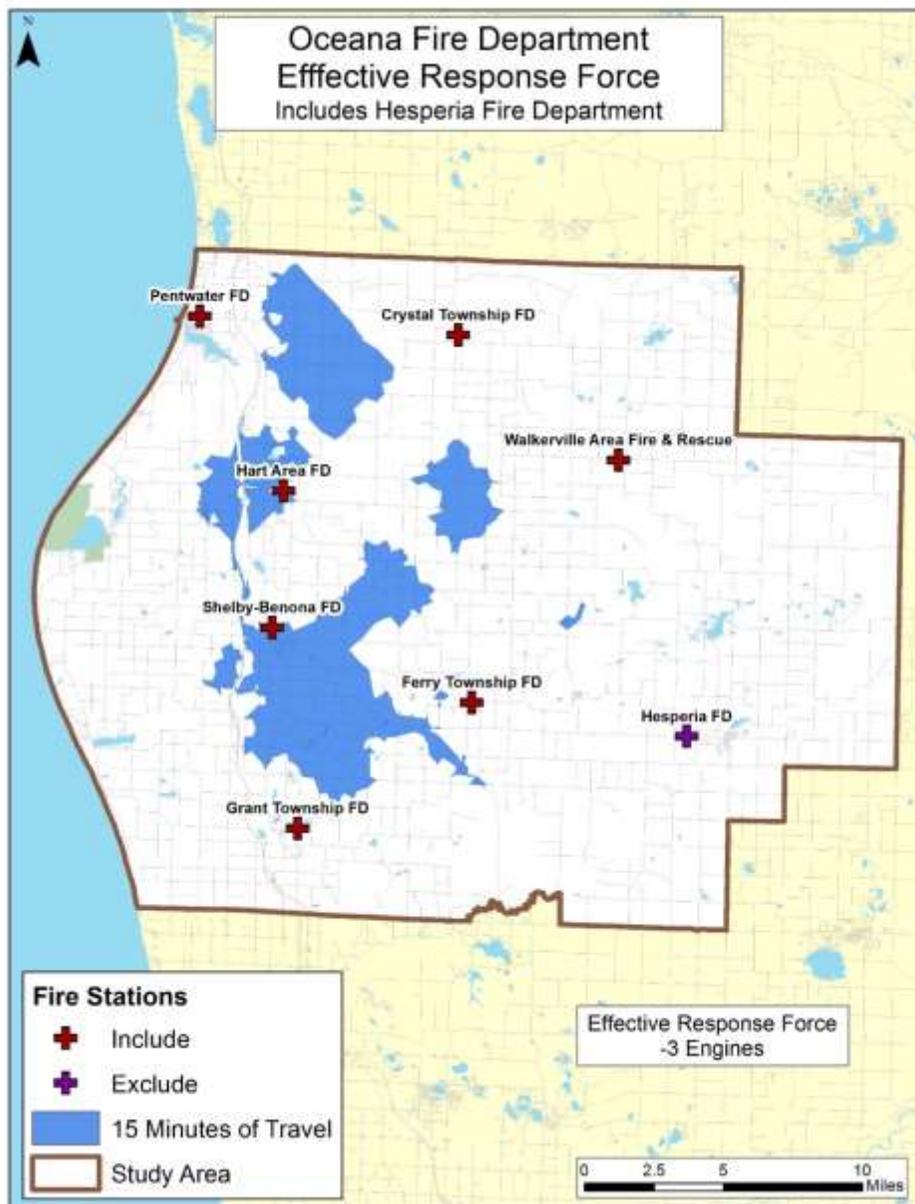


Each station houses at least one engine. Therefore, the distance from each station provides sufficient engine coverage. While not every property is within 1.5 miles of an engine, this is a common deployment of a large geographical area; and typically, jurisdictions are rated as a whole rather than by individual property in this regard.

Resource Concentration

Concentration is an analysis of the department’s ability to assemble an adequate amount of resources, personnel and/or apparatus, within a sufficient amount of time to effectively mitigate specific incidents, particularly structure fires. The following figure illustrates the study area’s modeled concentration abilities, based on the concentration of three engines.

Figure 41: Resource Concentration - Three Engines



Based on the current deployment of resources within Oceana County, only a small portion of the overall county geography can be reached within the 15-minute travel model. However, most of the areas with a higher population density are well-covered within this model.

Response Reliability

The workload on emergency response units can be a factor in response time performance. The busier a given unit, the less available it is for the next emergency. If a response unit is unavailable, then a unit from a more distant station (or mutual aid department) must respond, increasing overall response time. A cushion of surplus response capacity above average values must be maintained, due to less frequent but very critical times when atypical demand patterns appear in the system. Multiple medical calls and multi-casualty events are examples.

In many larger systems, multiple simultaneous incidents are a common occurrence. However, based on the data provided by Mason-Oceana County 9-1-1, over the last five years (2010-2014), no simultaneous incidents were recorded. This is good news for the emergency services providers serving Oceana County in that resources are not at risk for depletion due to simultaneous incidents.

Response Performance

When discussing emergency services organizations, the primary issue of question is response performance. Response performance analysis evaluates how quickly an organization responds to an incident and is more commonly known as response time. The response time continuum, the time between when the caller dials 9-1-1 and when assistance arrives, is comprised of several components:

- Processing Time – The amount of time between when a dispatcher answers the 9-1-1 call and resources are dispatched.
- Turnout Time – The amount of time between when units are notified of the incident and when they are en route.
- Travel Time – The amount of time the responding unit actually spends on the road to the incident.
- Response Time – A combination of turnout time and travel time and generally accepted as the most measurable element.

Other performance measurements are also valuable but not utilized in this analysis of staffing and deployment, such as:

- Patient Contact Time – The actual time personnel arrived at the patient and began treatment.
- Scene Time – The total amount of time resources have spent on the emergency scene prior to transport or clearing the incident.
- Transport Time – The total amount of travel time spent transporting the patient to a definitive care facility.
- Hospital Time – The total amount of time the transporting unit spent at the receiving facility before returning to service.
- Total Commit Time – The total amount of time between dispatch and clearing the incident.

As previously mentioned, a consolidated communications center serves as the Public Safety Answering Point (PSAP) for all emergency calls within the city. Requests for fire or medical resources are then transferred to the appropriate telecommunicator, where emergency medical dispatch (EMD) is administered if necessary and the appropriate units dispatched. Before entering this discussion, however, it is important to provide a brief discussion about how the statistical information is presented, particularly in regard to average versus percentile measures.

The “average” measure is a commonly used descriptive statistic also called the mean of a data set. It is a measure to describe the central tendency, or the center of a data set. The average is the sum of all the points of data in a set divided by the total number of data points. In this measurement, each data point is counted and the value of each data point has an impact on the overall performance. Averages should be viewed with a certain amount of caution because the average measure can be skewed if an unusual data point, known as an outlier, is present within the data set. Depending on the sample size of the data set, this skewing can be either very large or very small.

As an example, assume that a particular station with a response time objective of six minutes or less had five calls on a particular day. If four of the calls had a response time of eight minutes while the other call was across the street and only a few seconds away, the average would indicate the station was achieving its performance goal. However, four of the five calls, or 80 percent, were beyond the stated response time performance objective.

The reason for computing the average is because of its common use and ease of understanding. The most important reason for not using averages for performance standards is that it does not accurately reflect the performance for the entire data set.

With the average measure, it is recognized that some data points are below the average and some are above the average. The same is true for a median measure, which simply arranges the data set in order and finds the value in which 50 percent of the data points are below the median and the other half are above the median value. This is also called the 50th percentile.

When dealing with percentiles, the actual value of the individual data does not have the same impact as it did in the average. The reason for this is that the percentile is nothing more than the ranking of the data set. The 90th percentile means that 10 percent of the data is greater than the value stated and all other data is at or below this level.

Higher percentile measurements are normally used for performance objectives and performance measurement because they show that the large majority of the data set has achieved a particular level of performance. This can then be compared to the desired performance objective to determine the degree of success in achieving the goal.

For this analysis, ESCI was most interested in the ability to respond with the appropriate resources to the highest percentage of incidents. For this reason, ESCI analyzed National Fire Incident Reporting System (NFIRS) and computer aided dispatch (CAD) data and generated average and 90th percentile response performance for emergency incidents only.

Although not overseen by the fire departments, NFPA 1221: Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, recommends that emergency incidents be received and dispatched (processed) by communications centers in 60 seconds or less when measured at the 90th percentile. The following figure represents the last five years' performance for Mason-Oceana County 9-1-1 for call processing:

Figure 42: Historical Call Processing Performance (All Incidents)

	Average	90th
2010	0:01:24	0:03:00
2011	0:01:17	0:02:45
2012	0:01:22	0:03:06
2013	0:01:18	0:03:04
2014	0:01:13	0:02:51

Although the standard recommends performance for emergency incidents, the data provided to ESCI did not indicate a priority; so the performance indicated in the previous figures is for all incidents, both emergency and non-emergency for the study fire departments.

The second measure of performance is turnout, the period of time between when an incident is dispatched and when a unit is en route. The difficulty in this particular system is that individual units are not tracked, only incidents. Therefore, the first unit that responds (checks en route) is recorded as the first response regardless of the unit type. In theory, only apparatus should be tracked and recorded as responding units so that the time more accurately reflects the most appropriate unit that is responding. The figure below summarizes each study department's average and 90th percentile turnout time performance over the last five full years:

Figure 43: Historical Turnout Time Performance (All Incidents)

	CFD		FTFD		GTFD		HAFD		PFD		SBFD		WAFR	
	Avg	90th	Avg	90th	Avg	90th	Avg	90th	Avg	90th	Avg	90th	Avg	90th
2010	7:37	7:17	2:41	7:20	4:21	7:53	2:56	8:19	5:22	7:06	3:36	6:37	3:50	7:22
2011	4:21	7:04	2:20	7:07	4:28	7:25	2:50	7:37	4:42	6:57	3:26	6:41	3:46	7:04
2012	3:33	7:31	2:10	7:36	4:19	8:21	3:00	9:13	5:51	6:26	3:05	6:28	3:26	7:31
2013	4:56	8:38	4:18	8:39	5:00	9:25	2:39	0:03	6:33	7:20	3:32	7:13	3:42	8:38
2014	3:11	8:32	4:03	8:28	5:26	9:34	2:59	10:26	06:36	7:41	3:38	6:43	3:37	8:34

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 provides recommendations for turnout time performance for career organizations. That recommendation states that resources should be en route to an emergency incident within 60 seconds for medical responses and 80 seconds for fire responses, both when measured at the 90th percentile. NFPA 1720: Standard for

the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments, however, does not provide such a recommendation for volunteer and/or combination departments. Rather, total response is the performance measure for volunteer organizations.

NFPA 1720 provides tiered response performance objectives for volunteer fire departments based on population density, as illustrated in the following figure:

Figure 44: NFPA 1720 Response Performance Objectives

	Population Density	Response Time Performance Target	Percentile
Urban	>1,000	9:00	90 th
Suburban	500-999	10:00	80 th
Rural	<500	14:00	80 th
Remote	499 or less	None	90 th

Based on the cumulative population density of Oceana County (41.5 per square mile), the appropriate response performance objective for the study departments would fall within the rural zone and should be established at 14:00 when measured at the 80th percentile. Actual performance of the study departments is provided in the following figure:

Figure 45: Historical Total Response Performance - First Arriving (All Incidents)

	CFD		FTFD		GTFD		HAFD		PFD		SBFD		WAFR	
	Avg	80 th												
2010	13:46	16:01	08:24	11:35	10:06	13:21	07:50	11:32	09:06	13:22	08:26	12:05	10:54	15:38
2011	15:04	18:47	06:39	10:24	09:20	11:47	07:13	10:20	08:06	11:24	10:04	12:59	11:18	15:39
2012	10:14	12:08	07:44	10:29	09:40	13:00	07:33	11:02	08:52	12:53	08:38	13:15	10:20	14:47
2013	13:28	17:52	10:53	14:43	09:58	12:32	07:24	10:19	10:30	14:14	09:09	13:02	10:51	15:17
2014	13:21	17:36	10:56	15:05	10:53	13:47	07:38	11:03	10:43	14:11	09:37	13:55	11:21	15:51

Based on this analysis, some of the study departments are meeting the NFPA 1720 recommended performance objective, while others are not. It should be understood, however, that the published performance objective is a “recommendation” and should not be considered rule or law. The Authority Having Jurisdiction (AHJ) has the ability to set performance objectives in their respective communities that match local risks and community expectations.

Community Risk Analysis

The fire service assesses the relative risk of properties based on a number of factors. Properties with high fire and life risk often require greater numbers of personnel and apparatus to effectively mitigate a fire emergency. Staffing and deployment decisions should be made with consideration of the level of risk within geographic sub-areas of a community. Unlike medical responses that focus on human life, fire



incidents are intended to protect property in addition to life. Property values translate into tax revenue for municipalities, and the protection of that valuation is often imperative to the success of a fire department.

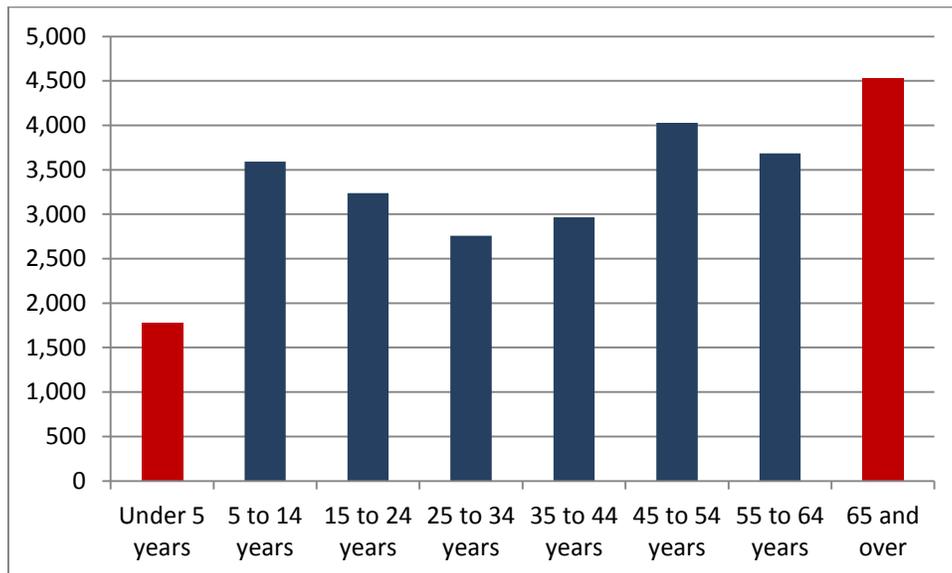
The following translates land use (potential scale and type of development within geographic sub-areas) to categories of relative fire and life risk:

- Low risk – Areas zoned and used for agricultural purposes, open space, low-density residential, and other low intensity uses.
- Moderate risk – Areas zoned for medium-density single family properties, small commercial and office uses, low-intensity retail sales, and equivalently-sized business activities.
- High risk – Higher-intensity business districts, mixed use areas, high-density residential, industrial, warehousing, and large mercantile centers.

Oceana County has a diverse mix of risk across the jurisdiction, including some limited high risk industrial occupancies. Proper code enforcement and fire prevention efforts will assist the fire departments in ensuring that these properties are operating safely.

In addition to occupancy risk, the relative age of a population can impact service demand and service delivery. Studies have shown that departments that participate in emergency medical services generally see utilization rates higher in certain age groups, typically those under the age of five and those over the age of 65. The following figure illustrates how the population in the County is distributed across the various age groups:

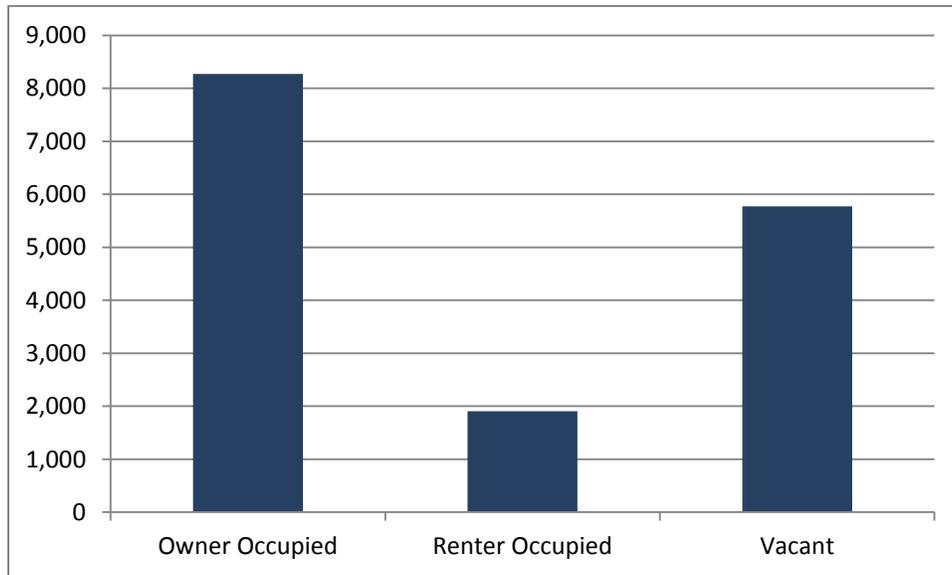
Figure 46: Population Distribution by Age



Based on 2010 Census data, 23.74 percent of the total population falls into the two higher risk categories. Public education efforts are one of the best ways to ensure that residents are aware of home dangers, and emphasis should be placed on those populations.

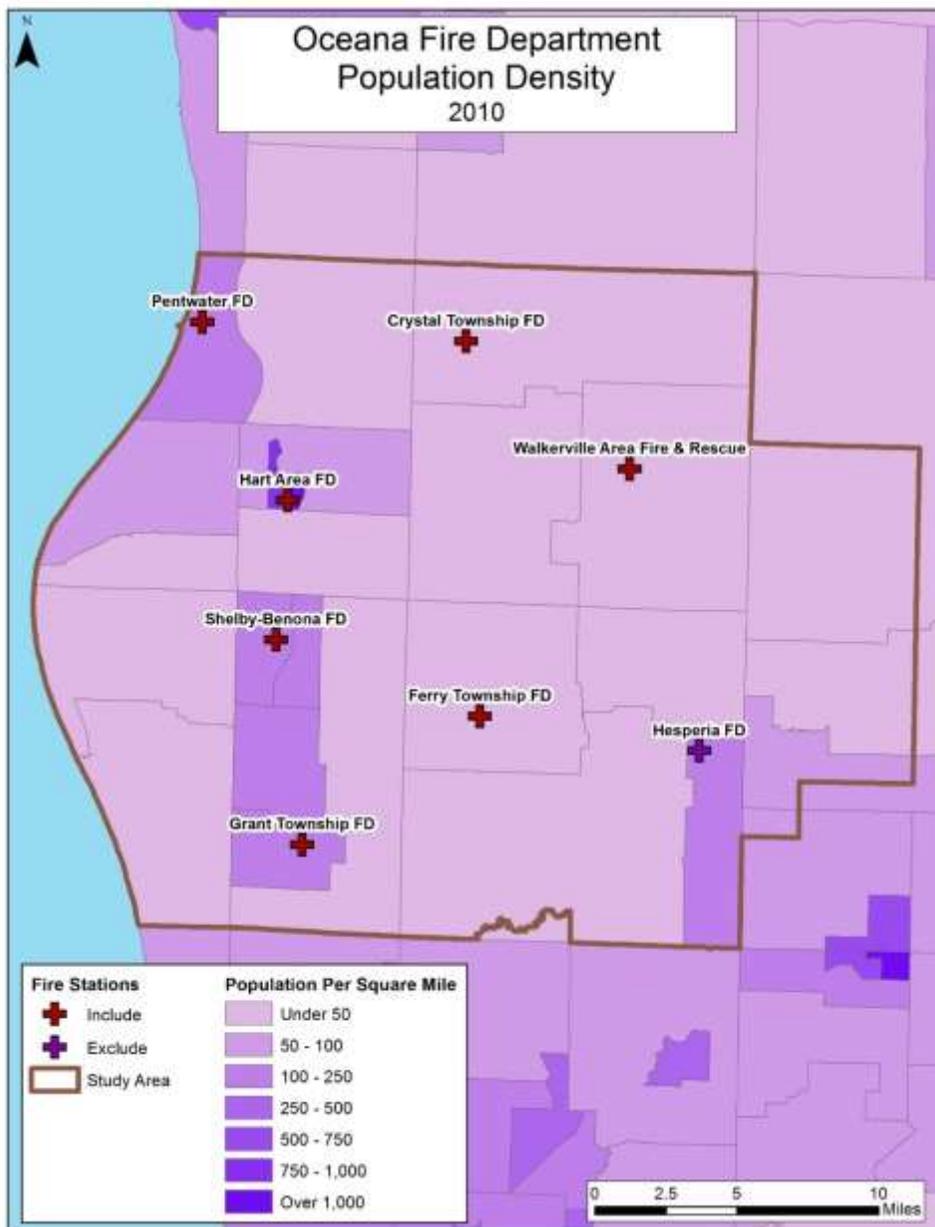
In some areas of the country, economic conditions have increased service demand, whether it be due to medically related issues or vacant properties that are damaged by vandalism. In some cases, high vacancy rates or high renter-occupancy rates can translate into higher service demand. Fortunately for the County, renter-occupancy rates are low in comparison to owner-occupied properties. However, there are a number of vacant properties scattered across the County, which could pose an increased risk for the fire departments.

Figure 47: Housing Occupancy Rates



As previously discussed, population density can also impact service demand and delivery. Although the County is considered rural as a whole (less than 500 population per square mile), there are a number of “pockets” within the County that have higher population levels, particularly along the lakeshore. The following figure illustrates the population density of the County, based on the previously discussed categories:

Figure 48: Population Density



As can be seen in the figure above, a majority of the county falls into the rural category, with a small pocket of higher population density in the Hart area. This will be considered in a later section when determining an appropriate set of response performance objectives for the overall system.

Water Supply and Incident Command and Control

For fire suppression, the most critical component is having sufficient water to effectively mitigate a fire incident. The water supply system throughout Oceana County is primarily located within the populated areas of the various Townships. In addition, each fire department has at least one water tanker/tender that can shuttle water from designated water points during an incident. These water points can be hydrants, which are only located within close proximity of a water tower and are usually associated with a municipal water system, or dry hydrants that are located near bodies of water where apparatus can draft from.

Additional water points have recently been designated that are primarily used for agricultural irrigation. Agreements have been reached with several property owners for the fire departments to use these resources as an additional means of water supply. The figure below summarizes the water supply and overall command and operations elements of the study departments:

Figure 49: Summary of Command and Operations Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Levels of Tactical Pre-Incident Planning	No	Limited pre-planning	Walk-through	Annually for larger facilities	Outdated	Working on developing Pre-plans	Limited
Levels of Operational Planning	None	None	None	None	None	None	Limited
Hydrant Locations Mapped	N/A	No	Yes	Yes	Yes	Yes	N/A
Static Water Points Mapped	No	No	N/A	Yes	No	Yes	Dry Hydrants and Irrigation Wells
Maps Available in All Vehicles	No	Yes	Yes	No	Yes	Yes	Yes
Standard Response Recommendation Based on Call Type	Yes	Yes	Yes	Yes	No	Yes	Yes
Minimum Number of Responders Per Apparatus	No	No	2-Engine, 1-Tanker, 1-2-Brush	No	No	Variable	2
Turnout Time Standards Established	No	No	No	No	No	No	No
Total Response Time Standards Established	No	No	No	No	No	No	1720 compliant due to SAFER
Simultaneous Incident Cover Plans	Yes, Auto-aid	Yes, Auto-aid	Yes, Auto-aid	Yes, Auto-aid	Yes, Auto-aid	Yes, Auto-aid	Yes, Auto-aid
24-Hour Duty Office in Place	No	No	No	No	No	No	No
Incident Command System Used	Yes, ICS	Yes, ICS	Yes, ICS	Yes, ICS	Yes, ICS	Yes, ICS	Yes, ICS
Incident Arrival Size-Up Required	No	No	No	No	No	No	No
Initial Strategy Declaration Required	No	No	No	NO	No	No	No
Accountability System	Tag	Tag	Tag	Tag	Tag	Tag	Tag

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Used							
Command Officers Have Formal Strategy and Tactics Training	Yes	No	Most	No	Yes	Yes	Yes
Command Officers Have Formal Building Construction Training	Yes	Yes	Yes	No	Yes	Yes	Yes
Minimum Level of Hazmat Certification for Response Personnel	Operations	Operations	Operations	Operations	Operations	Operations	Operations
Formal Safety Officer Assigned	No	Yes	Yes, sometimes combined with Accountability	Yes	Yes	Yes	Yes, sometimes combined with Accountability
Two-In, Two-Out Compliance	Most of the time	Yes	Yes	Most of the time, RIC established	Yes	Yes	Most of the time. establishing RIT



Given the critical importance of access to firefighting water, combined with the fact that new water points have recently been designated in the county and that agreements for their use have been reached with property owners, it is important that steps be taken to assure that all fire personnel know about the presence of water supply options. ESCI recommends that all of the Oceana County fire departments collaboratively develop a centralized inventory of available water sources and make it readily available to all responders.

Mutual and Automatic Aid Systems

Communities have traditionally forged limited agreements to share resources under circumstances of extreme emergencies or disasters. These agreements, known as mutual aid agreements, allow one community to request the resources of another in order to mitigate an emergency situation or disaster that threatens lives or property. There are numerous mutual aid agreements, both formal and informal, in place between fire, police, and emergency medical agencies within the study area, both with participating departments and those surrounding the study area.

However, it is important to define the level of mutual aid systems in place in this region. Mutual aid can take several forms, and this analysis of mutual aid programs will begin with a brief explanation of the various types of mutual aid systems used by the fire service in various parts of North America.

Basic Mutual Aid upon Request

This form of mutual aid is the most basic and is typically permitted under broad public laws that allow communities to share resources upon request during times of disaster or during local and regional emergencies. Often, these broad laws permit communities to make decisions quickly regarding mutual aid under specified limitations of liability. These broad laws can allow a community to tap into resources from their immediate neighbors, as well as very distant resources in communities with which they have very little day-to-day contact otherwise. Under this level of mutual aid, specific resources are typically requested by the fire department, through the appropriate chain of command, and sometimes coordinated by local or regional emergency management personnel. Depending on the level of the request, the response can sometimes be slow and the authorization process may be cumbersome due to the exchange of official information or even elected official's approval that may be required.

Written Mutual Aid Agreements

This form of mutual aid takes the previous form one step further by formalizing written agreements between communities, typically immediate neighbors in a region, in an effort to simplify the procedures and, thus, cut response time. Usually, these written agreements include a process that takes the request and response authorization down to a lower level in the organization, such as the Fire Chief or other incident commander. By signing such agreements, communities are "pre-authorizing" the deployment of their resources under specified circumstances, as spelled out in the agreement. Most often, these agreements are generally reciprocal in nature and rarely involve an exchange of money for service, though they may include methods for reimbursement of unusual expenses for long deployments.

Automatic Aid Agreements

Once again, this form of mutual aid takes the process an additional step further by spelling out certain circumstances under which one or more community's specific resources will respond automatically upon notification of a reported incident in the neighboring community. In essence, automatic aid agreements expand a community's initial first alarm response to certain types of incidents by adding resources from a neighbor to that response protocol. Typically, such agreements are only for specific types of incidents and for specific geographic areas where the neighbor's resources can be expected to have a reasonable response time. An example of such an agreement would be having a neighboring community's engine respond to all reported structure fires in an area where it would be closer than the second- or third-due engine from the home community. In other cases, the agreement might cover a type of resource, such as a water tender or aerial ladder, which the home community does not possess. An example of this would be having a neighboring community's water tender respond to all reported structure fires in the areas of the home community that do not have pressurized hydrants.

SUPPORT PROGRAMS

Although the delivery of fire suppression and emergency medical services is at the core of each department's mission, additional core activities are necessary to support every emergency services agency. These activities provide the basis for employee training and education, career development, public safety education, fire prevention, code enforcement, hazardous materials response, and technical rescue.

Training

Providing safe and quality fire and emergency services requires a well-trained workforce. Training and education of personnel are critical functions for each study agency. Without quality, comprehensive training programs, emergency outcomes are compromised and emergency personnel are at risk. "One of the most important jobs in any department is the thorough training of personnel. The personnel have the right to demand good training and the department has the obligation to provide it."³

Proper training of emergency services personnel starts prior to being hired or joining an agency. Specific knowledge and skills must be obtained to achieve a basic understanding of the roles and responsibilities of an emergency responder. Personnel should be actively engaged in training and tested regularly to ensure that skills and knowledge are maintained. In order to accomplish this task, agencies must either have a sufficient number of instructors within their own organization or be able to tap those resources elsewhere. Training sessions should be formal and follow a prescribed lesson plan that meets specific objectives. In addition, a safety officer should be dedicated to all training sessions that involve manipulative exercises.

Beyond the regular training offered to general staff, certain individuals should be offered specific officer development training in order to prepare them for more responsibility as they progress through the agency's command structure. Placing individuals in positions of authority without first giving them the tools to succeed often ends in failure and discouragement, both by the officer and their subordinates. The following figure summarizes the training elements of the study departments:

³ Klinoff, Robert. *Introduction to Fire Protection*, Delmar Publishers, 1997. New York, NY.

Figure 50: Summary of Training Program Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Initial Training Provided By	State	State	State	State	State	State	State
Training Required Prior to Scene Response	Basic Knowledge with Limited Scene Response	Basic Knowledge IDLH entrance with an Officer	Basic Knowledge with Limited Scene Response	Basic Knowledge with Limited Scene Response	Basic Knowledge with Limited Scene Response, must be enrolled in class	Basic Knowledge with Limited Scene Response	Basic Knowledge with Limited Scene Response
Training Required to Leave Probation	FFII Minimum	FFI Minimum	FFII Minimum	FFII Minimum	FFI Minimum	FFII Minimum	FFII Minimum
Established Minimum Training Hours Annually	Yes, Michigan Part 74	Yes, Michigan Part 74	Yes, Michigan Part 74	Yes, Michigan Part 74	Yes, Michigan Part 74	Yes, Michigan Part 74	Yes, Michigan Part 74
All Position Minimum Requirements Follow NFPA Standards	No	No	No	No	No	No	No
Consistent Officer Training Provided	Not required but available	Yes	Yes	Not required	Yes	Yes	Yes
Consistent Driver/Operator Training Provided	Yes, every two years	Yes, annually	Yes, annually	No	Yes, every two years	Yes, annually	yes, every two years
Individual Responsible for Training Program	Training Officer (Captain)	Training Officer (Lieutenant)	Training Officer (Lieutenant)	Training Officer (Lieutenant)	Training Officer (Asst. Chief)	Training Officer (Chief)	Training Officer to be appointed soon. Fire Chief until then
Number of Certified Instructors Per Discipline	Five, countywide	Five, countywide	Five, countywide	Five, countywide	Five, countywide	Five, countywide	Five, countywide
Company Officers Trained in Instructional Techniques	No	Yes	Yes	No	Yes	Yes	Yes
Annual Training Plan Developed and Followed	No	Yes	Yes	Yes	No	Yes	Yes
Software Support for Training Program	No	No	Yes	No	No	No	No



	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Training Program Dedicated Budget	No	No	No	Yes	No	Yes	Yes
Training Resources Available	Classroom, smoke trailer available for Pentwater	Classroom, Oceana County Fire Trailer	Classroom, AV equipment, Oceana County Kiddie Fire Trailer	Classroom, smoke trailer available, Elbridge training facilities available	Classroom, AV equipment	Classroom, AV equipment, fire simulator trailer	Training facility, Classrooms, Search and Rescue Area, Oceana County Kiddie Fire Trailer, Elbridge Fire Training Center
Standard Training Curriculum Manuals Used	Unknown	None	None	Unknown	None	Jones and Bartlett	Jones and Bartlett
Lesson Plans Used	No	No	Yes	No	No	Occasionally	Yes
Night Drills Conducted	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Multi-Company Drills Conducted	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally	Occasionally
Regional Disaster Drills Conducted	Annually	Bi-annually	Annually	Bi-annually	Bi-annually	Occasionally	Occasionally
Periodic Performance Evaluations for Critical Duties in Place	Unknown	No	No	No	No	No	Informal. working toward formal program
Periodic Skills Evaluations for Critical Duties in Place	No	No	Informally	No	No	SCBA only	SCBA, Pump Operations, Extrication Equipment
Post Incident Analysis Used to Lead Training	As needed	As needed	As needed	As needed	As needed	As needed	As needed
Safety Officer Present for All Drills	Instructor serves as Safety Officer	Yes	Yes	Instructor serves as Safety Officer	Yes	Yes	Instructor serves as Safety Officer
Training Records Maintained	Hard-copy only	Hard-copy only	Hard-copy and electronic	Hard-copy only	Hard-copy only	Hard-copy only	Hard-copy but soon to be electronic
Recertification Requirements	No	MFR, CPR	MFR, EMT, CPR	CPR, MFR, EMT	MFR, CPR	CPR/First Aid	EMT, MFR, CPR

Life Safety Services

An aggressive risk management program, through active fire and life safety education and prevention services, is a fire department's best opportunity to minimize the losses and human trauma associated with fires and other community risks.

The National Fire Protection Association recommends a multifaceted, coordinated risk reduction process at the community level to address local risks. This requires engaging all segments of the community, identifying the highest priority risks, and then developing and implementing strategies designed to mitigate the risks.

A fire department should actively promote fire resistive construction, built-in warning and fire suppression systems, and an educated public, trained to minimize their exposure to fire and health issues and to respond effectively when faced with an emergency. The following figures detail the fire prevention and public education efforts that are put forth by the agencies:

Figure 51: Summary of Life Safety Service Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Applicable Fire Code	ICC	ICC	ICC	ICC	ICC	ICC	ICC
Local Sprinkler Ordinance Exceeding Model Code	No	No	No	No	No	NO	No
Agency Involvement in New Commercial Construction	None	None	None	None	None	Limited	None
Key-Vault Entry Box Program	No	No	No	No	No	No	No
Types of Inspections Conducted	None	None	None	None	None	Limited	None
Number of Occupancies on Inspection List	N/A	N/A	N/A	N/A	N/A	Limited	N/A
Self-Inspection Incentive Program in Place	N/A	N/A	N/A	N/A	N/A	No	N/A
Inspection Frequency of High-Risk Occupancies	N/A	N/A	N/A	N/A	N/A	Variable	Annual tour of Arbre Farms/Willow
Inspection Frequency of Moderate-Risk Occupancies	N/A	N/A	N/A	N/A	N/A	Variable	N/A
Inspection Frequency of Low-Risk Occupancies	N/A	N/A	N/A	N/A	N/A	Variable	N/A
Number of Initial Inspections Conducted Previous Year	N/A	N/A	N/A	N/A	N/A	Unknown	N/A
Number of Re-Inspections Conducted Previous Year	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Formal Citation Process	N/A	N/A	N/A	N/A	N/A	No	N/A

Oceana County, Michigan Fire Departments
Cooperative Efforts Feasibility Study

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Number of Full-Time Personnel Assigned Solely to Inspection Function	None	N/A	Yes	N/A	N/A	None	None
Company Inspection Program in Place	N/A	N/A	N/A	N/A	N/A	None	N/A
Formal Training for Inspectors	N/A	N/A	N/A			No	N/A
Public Education Manager Assigned	No	Shared responsibility	Yes	Yes	Fire Chief	Fire Safety Educator	Fire Prevention Supervisor
Topics Included in Public Education Program	General safety	Fire safety, general safety	Fire safety, general safety, fire extinguisher training, Home Escape, BP Clinics	Fire prevention program in local schools	Fire safety, fire extinguisher training	Fire safety, general safety, safe at home program, senior safety, school programs, smoke detector installation program	Fire safety trailer, CPR, fire extinguisher, fire safety, smoke detector testing, Annual Fire Prevention Program in local school
Publications Stocked and Distributed	No	Yes	Yes	Yes	Yes	Yes	Yes
Bilingual Publications Available	No	No	Yes	No	No	Yes	Yes
Formal Public Education Training Provided to All Personnel	No	No	Yes	No	No	No	Yes
Level of Fire Investigation Provided by Agency	Initial Scene Control and Evidence Preservation	Initial Scene Control and Evidence Preservation	Initial Scene Control and Evidence Preservation	Initial Scene Control and Evidence Preservation	Initial Scene Control and Evidence Preservation	Initial Scene Control and Evidence Preservation	Initial Scene Control and Evidence Preservation
Additional Fire Investigation Resources Available	County Sheriff	County Sheriff	County Sheriff	County Sheriff	County Sheriff	County Sheriff	County Sheriff
Individual Responsible	County Sheriff	County Sheriff	County Sheriff	County Sheriff	County Sheriff	County Sheriff	County Sheriff



	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
for Fire Investigations							
Formal Investigation Training for All Personnel	Yes, in Sheriff's Office						
Formal Training for Specified Investigators	Yes, in Sheriff's Office						
Investigation Program Guided by NFPA 921	No						

Hazardous Materials Response and Support

Hazardous materials response is a specialization in which several of the study departments are participating at Awareness and Operations levels. In review of the compliance with OSHA Section 1910.120, the most significant finding was the lack of personnel trained to the “Operations” level, specified by the OSHA rules. While all specialists and technicians involved in the special hazardous materials response programs across the study agencies were properly certified at their respective levels, many remaining firefighters receive training only to the “Awareness” level.

A 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 to hazardous materials incident dispatches, 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 else⁴. 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”⁵. 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.

In addition, unless suitable equipment and supplies are readily available, all hazardous materials responses that require active mitigation should receive responses from external dedicated hazardous materials teams from Muskegon County. The following figure summarizes each agency’s capability regarding hazardous materials responses:

⁴ OSHA CFR 1910.120(q)(6)(i)

⁵ OSHA CFR 1910.120(q)(6)(ii)

Figure 52: Summary of Hazardous Materials Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Level of Service	Operations	Operations	Operations	Operations	Operations	Operations	Operations
Initial Training Provided by	State	State	State	State	State	State	State and external contractors
Ongoing Training Provided by	Department	Department, County	Department Officer	Department Officers	County	County	Department and external contractors
Equipment Inventory and Replacement Plan	No	No	No	No	No	No	Yes
Materials and Supplies	No	No	Yes	No	No	Yes	Yes

Technical Rescue Response and Support

Technical rescue, like hazardous materials, is a highly specialized discipline with emergency services organizations. Technical rescue, within that broad definition, includes high/low angle rope rescue, confined space rescue, trench rescue, structural collapse rescue, swift/surface/ice water rescue, and specialized extrication.

A formal countywide technical rescue risk assessment should be conducted to determine the need for each specific discipline. History, frequency, and potential of technical rescue events should be part of the assessment. Specific attention should be given to the feasibility of delivering these services, based on the number of trained rescuers and time commitment required for skills maintenance. Although the intention to provide all of these services is genuine, the demand of initial and continued education is difficult for an organization to maintain in addition to fire suppression and medical response responsibilities. A comprehensive assessment should evaluate the feasibility of sharing some of these specialized services with other departments or the elimination of some services. The following figure summarizes the technical rescue elements of the study departments:

Figure 53: Summary of Technical Rescue Elements

	Crystal	Ferry Township	Grant Township	Hart	Pentwater	Shelby-Benona	Walkerville
Service Level	None	None	Operations	Technician	Technician	Operations	Technician
Services Provided	N/A	N/A	Ice/Surface Water	Ice/Surface Water	Ice/Surface Water	Ice	Confined Space, Ice
Technical Rescue Team	Muskegon, Grand Rapids or White Lake FA	Muskegon County SOT	Muskegon County SOT	Muskegon County SOT	Muskegon County SOT	Muskegon County SOT	Muskegon or Grand Rapids
Technical Rescue Director			Yes	No	Yes		No
Dedicated Budget for Technical Rescue			No	No	No		Yes
Training Certification Obtained by:			Third Party Vendor	Third Party Vendor	Third Party Vendor		Third Party Vendor
SOG/SOPs in Place			Yes	No	No		Being Developed
Response SOG for Technical Rescue			Yes	No	No		Being Developed
Back-Up Technical Rescue Provided by:			Muskegon	Muskegon	Muskegon		Muskegon or Grand Rapids
Accurate Records of Life Safety Rope			No	No	No		No
Tactical Worksheets for All Disciplines Provided			No	No	No		No
Documentation for Confined Space Entries			No	No			Yes, in place to do so
Resource List Available			Yes	Yes	Yes		No
Equipment Inventory and Replacement Plan			Inventory only. Replacement as needed	Yes	Yes		Yes
Adequate Supplies and Materials			Yes	No	Yes		Yes
Critique and Review Policy in Place			Yes	No	No		No
Periodic Program Review			Yes	Yes	Yes		Yes, not regular

Section II – Opportunities for Cooperative Efforts and Shared Services

Having completed the Evaluation of Current Conditions process above, ESCI is now armed with the information necessary to effectively evaluate the opportunities that exist in the Oceana County area for shared service delivery opportunities between the participating agencies.

GENERAL PARTNERING STRATEGIES

It is often assumed that legal merger of agencies is the only alternative that is available. However, in reality, multiple different strategies are available to the fire and EMS agencies in Oceana County when considering shared services. The options that are available range from a “do-nothing” approach to a complete unification of the organizations into what is, essentially, a new emergency service provider. The balance of this report examines the multiple options that are available to the study agencies and provides insight and guidance where appropriate.

In the State of Michigan, there are a finite number of ways in which fire departments can collaborate, both formally and informally, generally driven by state and local statutory authority as well as the will and desire of local units of government. The strategies available for consideration are listed below:

- Status Quo
- Administrative Consolidation
- Functional Consolidation
- Advanced Automatic Aid Systems
- Operational Consolidation
- Legal Unification or Merger

Following is a discussion of the primary methodologies.

Status Quo - Autonomy

The status quo approach is one in which nothing changes. While often viewed negatively, in some cases, the best action is no action. In this case, the seven Oceana County fire agencies simply continue to do business as usual, cooperating with and supporting each other as they do today, but with no change to governance, staffing, or deployment of resources.

This approach is the easiest to accomplish and maintains the independence of the organizations and local control. It creates the least stress on the organizations and does not necessitate reorganization. However, it also lacks long term commitment as well as the virtues that can be gained in terms of increased efficiency that is realized in a shared service delivery environment.

In today’s environment, taxpayers typically hold their elected officials accountable for delivering a quality level of service at an affordable rate and expect creative thinking to solve problems or achieve

those ends. While “maintaining the status quo” is easy and involves the least amount of impact to the agencies, it may well be one of the riskier decisions to make politically.

Administrative Consolidation

Under an administrative consolidation, two or more agencies remain independent of each other from a governance standpoint, but they blend some or all of their administrative functions. The result is often one of increased efficiency in the use of administrative and support personnel. Overhead costs are typically reduced, and duplication of efforts is eliminated. However, it is noted that in the case of all volunteer or paid-on-call agencies like those in Oceana County, where few have paid administrative staff members, the potential for significant cost savings is small. Even so, the approach may offer opportunities to increase efficiency.

ESCI interviewed representatives from all seven of the fire departments involved in the study. All expressed challenges with meeting administrative needs, including general department administration, training program planning and execution, record keeping and reporting, and other areas. Some form of administrative consolidation, whether in the form of sharing various administrative tasks or even contracting with a shared administrative coordinator, would clearly be beneficial to all of the study agencies.

Functional Consolidation

The term “consolidation” is often assumed to have the same meaning as “merger” or other unification alternatives. In fact, the definition by statute varies widely from state to state, and definition of the terms often cross over. In many states, the cities, townships, fire districts, and fire/EMS authorities, like those in Oceana County, have broad authority under law to enter intergovernmental agreements (IGAs) for the purpose of cost and service efficiency. Michigan is no different in this regard. The laws of the State of Michigan address the issue, allowing intergovernmental contracts for any lawfully authorized function, service, or facility.

Functional consolidation, as the term is used here, would enable any two or more of the Oceana County fire departments to work together closely, while remaining separate organizations. Under Michigan statutes, governmental entities are allowed to share resources, improve service, and save money at the program level. Most commonly, fire departments enter partnering agreements for programs such as firefighter training, fire prevention, closest force response, and administrative/support services. As will be discussed in further detail later in the report, ESCI has identified a number of program level activities that can, and should, be undertaken collaboratively between the seven fire departments involved in this study, regardless of future decisions regarding a higher level of unification.

In many cases, functional unification is sufficient to accomplish the cooperative goals of the agencies without considering operational agreements or legal mergers. It is common in the industry to functionally join such activities as purchasing, firefighter training, fire prevention, public education, apparatus maintenance, and command standby. The keys to success of a functional unification strategy lie in a trusting relationship between partner agencies, the completeness of the agreement that sets up the program, and a cooperative approach to the management of the program.

It is ESCI's finding that functional consolidation approaches are viable and readily feasible in Oceana County. The subject is explored in additional detail in the following report sections.

Advanced Automatic Aid Systems

Automatic aid agreements may be purely reciprocal, or they may involve the exchange of money for the services provided. Purely reciprocal agreements are common but are typically used where each community has some resource or service it can provide to the benefit of the other. These services or resources need not be identical. For instance, one community may send an engine to the other community on automatic response to structure fires, while the second community agrees to send a water tender to the first community's structure fire calls in exchange. These reciprocal agreements are sometimes made without detailed concern over quantification of the equality of the services exchanged, since they promote the effectiveness of overall services in both communities. In other cases, the written agreements spell out costs that one community can charge the other for services, typically where no reasonable reciprocation can be anticipated.

One primary purpose of automatic aid agreements is to improve the regional application of resources and staffing. Since fire protection resources are most frequently established because of the occupancy risks in a community and not necessarily a heavy workload, these resources may be idle during frequent periods of time. While fire departments make productive use of this time through training, drills, pre-incident planning, and other functions, the fact is that these expensive resources of apparatus and staff are not heavily tied up on emergency incidents. Communities that share certain resources back and forth are, in essence, expanding the emergency response workload of those units across a larger geographic area that generally ignores jurisdictional lines. This expanded use of resources can strongly benefit both communities that might otherwise have significantly increased costs if they had to procure and establish all the same resources alone. Automatic aid can be used effectively to bolster a community's fire protection resources or to reduce unnecessary redundancy and overlap between communities.

Operational Consolidation

Under an operational consolidation, governance of the study agencies would remain as it is at the city council and township level in the case of the four municipal departments and at the board level in terms of the three that are configured under joint powers configurations. However, this strategy largely joins two or more entities, operationally, through the execution of a more comprehensive intergovernmental agreement (IGA). The resulting organization features a single organizational structure and single chain of command.

Depending on the form of the agreement(s) establishing the organization, employees and members of each organization may remain with the original agency, or alternatively, they may be transferred to one of the other agencies or to an entirely new entity.

Operational consolidation means that, regardless of their overarching governance structure, the two or more agencies become one in terms of how day-to-day operations are performed. One fire chief oversees a larger, blended organization.

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.

To evaluate the *Opportunities for Cooperative Efforts* effectively, a basic understanding of the methods for collaboration available to the agencies is necessary. The information provided here should be considered for what it is: a primer regarding the legal aspects of collaborating public agencies. At the point where policymakers have decided to pursue any of the cooperative efforts, the advice of legal counsel should be sought in order to ensure that the appropriate procedures are followed.

A number of potential policy options exist for integrating the fire and emergency services in Oceana County. These options are detailed in the following report section.

GOVERNANCE OPTIONS AND STRATEGIES

While the emergency operations component of a fire department is an important element of the overall emergency services system, no organization can properly function without some form of governance and authority to act. This report section provides policymakers with information regarding several potential options for governance of the fire protection system serving the study area. 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 of 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, to some degree, the 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.

Status Quo

Any discussion of potential feasible governance options would be remiss if it did not consider continuation of the current model as it is today. In this study area, the current model of service delivery is viable and can be continued.

The status quo approach is clearly the easiest to implement and represents the least disruption to the organizations as they exist today. However, what it does not do is address any concerns with regard to financial challenges that the organizations face, currently or in the future, nor does it improve the positioning of any of the entities to prepare for addressing future community growth and increasing service demand.

Further, multiple opportunities are discussed in this report in the context of cooperative service delivery. Most represent means by which Oceana County fire departments can increase efficiency, contain costs, and achieve future cost avoidance. The status quo, or do-nothing approach, fails to leverage the opportunities that can be gained by a collaborative approach.

Joint Power Agreement via Intergovernmental Agreement

Under Michigan law, local units of government are authorized broadly to enter into one of several forms of general agreements under *inter alia*, Act 7 (Urban Cooperation Act), Act 8 (Intergovernmental Transfers of Functions and Responsibilities Act) of 1967, and Act 292 of 1989 (Metropolitan Councils Act). The Citizens Research Council of Michigan, in a 2007 report, details the provisions of no less than 77 Michigan statutes enabling governmental cooperation of some sort.⁶

JPAs (Joint Power Agreements – sometimes referred to as intergovernmental agreements) allow jurisdictions to pool resources without disposing of local authority and control. A joint power agreement can be viewed as a fractional consolidation of services or functions between two or more jurisdictions. JPAs may involve a wholly separate organization being established to provide a service on behalf of the

⁶ *Authorization for Interlocal Agreements and Intergovernmental Cooperation in Michigan*, Citizens Research Council of Michigan, April 2007, Report 346.

participants. This is not unlike the current case with the JPAs that exist in Hart, Shelby-Benona, and Walkerville, serving their respective townships.

Creation of an Authority or Expansion of the Existing Authority

Governance can also be configured under what is called an “authority” under Michigan law, as allowed under *Emergency Services to Municipalities, Act 57 of 1988, Chapter 124*. This act allows two or more municipalities to incorporate an authority for the purpose of providing emergency services to the incorporating municipalities. A municipality is defined as a county, city, village or township; and an authority is able to provide “emergency services” which are broadly defined to include “fire protection, emergency medical services, police protection, and any other emergency health or safety services designated in the articles of incorporation of an authority.”⁷

Any of the incorporating municipalities may transfer into the authority. This approach could, conceivably, be applied to any two or more of the participating agencies or, potentially, to all.

Further, section 124.603 of chapter 124 of Act 57 states that:

Any county, city, village, or township may become a part of an existing authority by amendment to the authority's articles of incorporation, adopted by the legislative body of the county, city, village, or township and by the legislative body of every other county, city, village, or township of which the existing authority is composed.

Creation of a fire authority essentially absolves the member municipalities of the authority and responsibility of providing fire and emergency medical services and transfers that authority and responsibility to the new authority. It may also be viewed as a loss of local control of service delivery. Implementing an action such as this should be done only after careful consideration of the pros and cons of such a decision and how it will affect the general public, particularly in regards to taxation and service delivery.

Shared Service Delivery via Functional Consolidation Strategies

Historically, while fire departments have been managed and operated quite independently of one another, they have shared services to some extent. Shared services may include: personnel, apparatus, equipment, and expertise. Opportunities of cooperation include: joint training manual, standard operating guidelines, joint purchasing, and a partnership for sharing training equipment and facilities.

The concept of shared resources is the most basic level of cooperation that can, to a large extent, improve efficiencies of the study fire and EMS providers. This approach is often viewed as more desirable than a complete integration because it enables the agencies to remain autonomous, absent a more permanent long term commitment. However, the lack of permanence may also be viewed negatively because a participant can readily withdraw from the strategy.

Short of creating a single service provider, ESCI believes that collaboration offers the best prospect for the existing fire departments involved in this study.

⁷ Michigan Act 57, Chapter 124, Section 124.601.

Fire District with Taxing Authority

What makes a district vastly different from an authority or Joint Powers Authority is that a district is an independent quasi-governmental entity with taxing authority granted by the state. In other words, it would stand as a separate unit of local government. The primary advantage to this type of governance model is that the cities or townships involved would no longer be responsible for fire protection. Rather, the newly created district would have that responsibility, as outlined in the enabling legislation. In addition, the covered municipalities would no longer be responsible for *funding* fire protection in their communities. This would lie with the taxing authority of the district.

However, the State of Michigan gives little guidance to how a fire district may be formed or how the governance of an independent taxing fire district should be determined. Given the lack of guidance, local officials are left with the responsibility to determine how the board of a taxing fire district will be determined. It is likely that special legislation would be required to create an entity of this nature, and legislative authority does not exist in Michigan at this time.

In some districts, the initial board members are selected based on representation from the participating agencies. Others maintain representation from member communities in a more controlled distribution. The creation of a taxing district allows that entity to hold elections at large as part of the general community election. The downside to this method of staffing governing positions is that some communities, particularly those with less dense populations, will not be afforded equal representation given the drastic differences in population levels among the member organizations.

Still, districts with taxing authority can blend the aforementioned methods of governance and have a constant representation from predetermined participants as well as members selected during at-large elections. Unlike JPA's, taxing districts do not have the general option of how to produce revenue. Funding for the fire district is generally realized for ad valorem taxes levied on commercial and residential properties located within the district. The same issues with tax-exempt properties would remain in this situation, where risk may be higher but little revenue is realized.

Consolidation under a Single Entity and Contracting for Services

Consolidation of existing fire resources under a single entity is the final option evaluated here, regarding the future delivery of emergency services throughout the region. In essence, this type of consolidation would eliminate one or more of the existing departments, and another would provide fire protection to that entity through contract. While this would reduce the layers of governance by one, a contract would be required with each participant.

This type of arrangement would effectively place all governance, control, and funding in the hands of the entity providing fire protection. The surrounding townships could also contract with that entity but would have the option of contracting with any other department in the future, if they chose to do so.

FEASIBLE OPTIONS FOR SHARED SERVICES

In identifying potential cooperative and shared services opportunities, the project team considered the key issues now challenging each agency and community in Oceana County. Some issues represent roadblocks to integration, while others provide a unique chance for improvement.

As an element of the review, affected staff and officials provided local and internal perspective on organizational culture, community expectations, and other considerations that may be specific to the Oceana County study area. Some specific considerations and concerns raised include:

- Concept of a single, regional fire department
- Retention of local identity, tradition, individuality
- Avoidance of the perception of a “takeover” by any single agency
- Importance of personnel recruitment and retention
 - Challenges with keeping personnel
 - Concept of shared recruitment, training efforts
- Cost effectiveness, efficiency of current/future practices
- Perceived imbalance of mutual aid provided vs. received
- Need to enhance training, share resources
- Importance of and desire for collaborative training county-wide
- Increased frequency of shared, multi-agency training exercises
- Regional desire by all participants to explore opportunities for increase efficiency and enhanced service delivery

Legal Unification Considerations

As already mentioned, legal unification would create a single new entity, tasked with providing fire protection and other emergency services to a majority of Oceana County. In many cases, legal unification is implemented to reduce costs and streamline operations. For example, consolidating a number of career fire departments into a single service provider allows governmental entities to reduce the number of administrative staff or, perhaps, move previously administrative staff into more operations roles. This reduces duplicity and lowers total operating costs.

In volunteer organizations, however, no such costs would be saved since all personnel are operational. No full time career operational personnel are currently functioning within the Oceana County system. Therefore, a legal merger of the study agencies would not result in appreciable savings. However, there are advantages to bringing the study organizations together, primarily in regards to operations. As already mentioned, the study departments rely on each other through mutual and automatic aid during

emergency responses. Personnel from one agency may be employed and work in the response area of another, which could cause a delayed response. A unified organization would allow personnel to respond to the closest station and provide an overall better level of response. In addition, a unified organization would have a single set of standard operating guidelines, a single organizational command structure, more buying power for equipment and apparatus, and an overall efficiency in working and training together.

The biggest issue in this type of legal unification, typically, is control and funding. Traditionally, fire departments, particularly volunteer and paid-on-call departments, have been community oriented; and many were created to provide service to a relatively small area. As the industry has progressed, however, fire departments are being called on for every sort of task, including rescues, medical incidents, traffic control, basement pump-outs, etc. These additional responsibilities tax many departments and, in a time where volunteerism is in decline, many find it more difficult to provide their desired level of service. Having a single command structure with paid administrative and support staff would allow the departments to focus on the delivery of services rather than having to handle the day-to-day administrative functions that are required.

Rather than one agency “taking over” and operating the system, if this strategy is chosen, the new department should be operated as a regionally developed collaborative effort. Governance could be in the form of a new single agency, or as an independent taxing district as previously discussed. Although an independent taxing district would allow for more independent control, the primary disadvantage to this structure is the inability to fund the system through means other than property tax. In this economic environment, it may be difficult for residents to accept another layer of government and another layer of taxation.

Prior to discussing alternative assessments, fees, or other increases to the current revenue stream, the governing boards of the participating municipalities should clearly define the level of community emergency service in measurable terms. Policymakers should specify the service (fire protection), the quantity (a fire pumper and four firefighters), the quality (within 10 minutes of dispatch), and the accuracy (80 percent of the time), for example. Once service is defined in specific and measurable terms, the tasks of determining cost and the consideration of funding alternatives become more focused.

In discussing potential funding alternatives, it should be understood that these options would only apply to a JPA or contractual arrangement. The creation of an all-encompassing fire protection district would allow that district to levy its own tax for operational funding.

There are essentially three methods that can be used to redirect public funding: 1) proving that money could be spent more effectively, 2) showing that a population or area is not receiving its fair share of service, and 3) changing a policy so that a program can access a funding stream that currently exists.⁸ In order to redirect funding, leadership researches what funding is there, who controls the funding, what the policies are, and whether or not allocation patterns can be changed.

⁸ *Sustainable Funding for Program Strategies: Lessons Learned from an Ambitious Community Change Effort*. Urban Health Initiative: Seattle, WA, June 2005.

For the study region, this would involve altering the methodology for calculating the cost of serving the region. A formula for apportioning service cost may factor in assessed valuation, population (residents and employees), service demand, level of service, and area size. One option for leveling cost fluctuations is to employ a formula using multiple factors (e.g., population and assessed valuation).

What follows is a listing of system variables that can be used (singly or in combination) to allocate cost between allied fire departments. Each option is summarized by the concept, its advantages and disadvantages, and other factors that should be considered. Regardless of the option(s) chosen to share the cost of fire protection, the resulting intergovernmental agreement needs to address the issues of full cost versus marginal cost and should be clear about the inclusion of administrative or overhead cost. In addition, service contracts often must reconcile the exchange of in-kind services between the participating agencies.

Area

Concept:

The cost of emergency service can be apportioned based on the geographic area served relative to the whole. Apportionment founded on service area alone may work best in areas that are geographically and developmentally similar.

Pro:

Service area is easily calculable from a variety of sources.

Con:

Service area does not necessarily equate to greater risk or to greater workload.

Consider:

Service area may be combined with other variables (assessed value and number of emergencies) to express a compound variable (such as assessed value per square mile and emergencies per square mile).

Taxable Value

Concept:

The taxable value of municipalities is established by the local tax assessor under laws of the state. Usually, higher-valued structures and complexes carry a greater risk to the community from loss by fire. Consequently, tax capacity also tends to approximate the property at risk within a municipality. Fire departments are charged with being sufficiently prepared to prevent property loss by fire. Therefore, the cost of contracted fire protection may be apportioned relative to the assessed value of the allied jurisdictions. Typically, tax capacity is used to apportion cost of shared service by applying the percentage of each partner's taxable value to the whole.

Pro:

Taxable value is updated regularly, helping to assure that adjustments for changes relative to new construction, annexation, and inflation are included. Because a third party (the assessor) establishes taxable value in accordance with state law, it is generally viewed as an impartial and fair measurement for cost apportionment. Fire protection is typically considered a *property-related service*, and thus, apportionment tied directly to property value has merit.

Con:

Taxable value may not reflect the property risk associated with certain exempt property, such as schools, hospitals, universities, government facilities, churches, and other institutions. Taxable value may not always represent the life risk of certain properties, such as nursing homes or places of assembly, which might dictate more significant use of resources. In addition, some large facilities may seek economic development incentives through tax capacity exemptions or reductions. Adjustments may need to be made to tax capacity if such large tracts of exempt property in one jurisdiction cause an imbalance in the calculation. Last, taxable value typically includes the value of land, which is not usually at risk of loss by fire. Depending on the local circumstance, however, this may not be a significant factor if the relative proportion of land value to structure value is reasonably uniform over the whole of the territory.

Consider:

Some states discount taxable value depending on the class of property (commercial or residential), which may skew the overall proportion of those properties compared to risk. As an additional consideration, county assessors usually establish the tax capacity in accordance with the property tax cycle, which can lag somewhat behind the budget cycle of local agencies and the time when service contracts are reviewed or negotiated.

Service Demand

Concept:

Service demand may be used as an expression of the workload of a fire department or geographical area. Cost allocation based on emergencies would consider the total emergency response of the service area and apportion system cost relative to the percentage of emergencies occurring in the jurisdictions.

Pro:

Easily expressed and understood. Changes in the workload over the long term tend to mirror the amount of human activity (such as commerce, transportation, and recreation) in the corresponding area.

Con:

Emergency response fluctuates from year to year depending on environmental and other factors not directly related to risk, which can cause dependent allocation to fluctuate as well. Further, the number of alarms may not be representative of actual workload; for example, one large emergency event requiring many emergency workers and lasting many hours or days versus another response lasting only minutes and resulting in no actual work. Last, emergency response is open to (intentional and/or unintentional) manipulation by selectively downgrading minor responses, by responding off the air, or by the use of mutual aid. Unintentional skewing of response is most often found in volunteer fire systems, where dispatch and radio procedures may be imprecisely followed. Further, service demand does not follow a predetermined ratio to land area. As such, the service demand per square mile ratios may produce large variations.

Consider:

Using a rolling average of alarms over several years can help to suppress the normal tendency for the year-to-year fluctuation of emergencies. Combining the number of emergencies with the number of emergency units and/or personnel required may help to align alarms with actual workload more closely; however, doing so adds to the complexity of documentation. In a similar manner (and if accurate documentation is maintained), the agencies could consider using the total time required on emergencies as an aid to establish the comparative workload represented by each jurisdictional area.

Population

Concept:

Payment for service can be based on the proportion of residential population to a given service area.

Pro:

Residential population is frequently used by governmental agencies to measure and evaluate programs. The U.S. Bureau of Census maintains an easily accessible database of the population and demographics of cities, counties, and states. Estimates of population are updated regularly. Layspersons intuitively equate residential population to the workload of fire departments.

Con:

The accurate population of partially covered areas is often difficult to establish. Census tract boundaries and response area boundaries infrequently match, forcing extrapolated estimates, which can fail to take into account pockets of concentrated population inside or outside of the response areas. Residential population does not include the daily and seasonal movement of a transient population caused by commerce, industry, transport, and recreation. Depending on the local situation, the transients coming in (or going out) of an area can be very significant, which can tend to skew community risk. Residential population does not statistically link with emergency workload; rather, human activities tend to be the linchpin that connects people to requests for emergency assistance.

For example, if residential population actually determined emergency workload, emergencies would peak when population was highest within a geographic area. However, in many communities where the residential population is highest from about midnight to about 6:00 a.m. (bedroom

communities), that time is exactly when the demand for emergency response is lowest. It turns out that emergency demand is highest when people are involved in the activities of daily life — traveling, working, shopping, and recreating. Often, the persons involved in such activities do not reside in the same area.

Consider:

The residential population of partially covered areas can sometimes be estimated by using the GIS mapping capability now maintained by most counties. By counting the residential households within the area in question, then applying demographic estimates of persons per household, it may be possible to reach a relatively accurate estimate of population within the area in question. Alternately, residential population can be estimated by using information obtainable from some public utility districts by tallying residential electrical meters within a geographic area and then multiplying by the persons per household.

Some areas experience a daily or seasonal influx of people who are not counted as residential population. This transient population can be estimated by referring to traffic counts, jobs data, hotel/motel occupancy rates, and, in some cases, state or national park administrators. Residential population plus transient population is referred to as *functional population*. Where functional population is significantly different from residential population, service agreements based on population should be adjusted to account for it.

Frequently, even though everyone may agree on the benefit of allied fire protection, officials find it difficult to reach an agreement on the cost and the allocation of those costs. The differences between community demographics and development, along with changes that occur within the system over the long term, can cause the perception of winners and losers. This can be especially prevalent when a single variable is used to apportion cost. A service contract based on more than one allocation determinate may help solve these problems.

By apportioning costs over multiple variables, members of an alliance have been able to reach a long-term agreement that fits the diversity of the partnering agencies. Other partnerships in other geographical areas may require a different solution involving different combinations of variables. In addition, the assumed tax burden can be used to determine potential impact to each entity based on a JPA or contractual arrangement.

Functional Cooperative Efforts

Elsewhere in this report, ESCI evaluates and discusses the potential options that are available for combining the study departments into a single organization. However, ESCI also understands that cooperative efforts and shared services can take on a much different look, not limited to fully combining the agencies. As mentioned previously, there are various methods, including contracted services, by which to cooperate between departments and improve the overall efficiency of the organizations within a given region. This section will present various functional shared services options that the two departments may participate in to gain efficiencies, contain costs, and increase effectiveness.

The following strategies are those that ESCI has identified as potentially applicable, specifically to the Oceana County fire departments, and are ones that may be implemented while remaining as separate, stand-alone agencies, absent legal merger or other formal integration. They may be accomplished singly or in multiples, and the effort may be viewed as a pre-cursor to future, more formal consolidation and/or merger initiatives.

Enhanced Use of Mutual and Automatic Aid

The study agencies have already implemented a number of mutual and automatic aid programs. While the system is working, when it is more closely examined, opportunities to further enhance existing practices may be recognized.

Enhanced Mutual and Automatic Aid Agreements		Timeline: Short term
<p>Objective: Establish written agreements and enhance existing mutual and automatic aid agreements, and formalize those agreements with appropriate approval.</p>		
<p>Summary Background: One of the most elemental levels of cooperative service delivery is that of the sharing of valuable resources, both equipment and people. A primary means for sharing resources is the use of mutual aid and automatic aid, as is currently done between all of the Oceana County study agencies. Mutual aid necessitates formal agreements under which a fire department can request and receive equipment and personnel support for an emergency incident from a neighboring fire department. Automatic aid is the same, with the exception that it is automated, establishing pre-planned dispatch protocols, absent the need for a responder or incident commander to request the assistance.</p>		
<p>Policy Action: Review mutual aid and automatic aid procedures that are currently in place to identify opportunities to increase effectiveness. Review response times, including the maps provided in this report, to identify areas in which automatic aid can be initiated to enhance response. Do not limit consideration to the study agencies, but include review of station locations and travel times from other neighboring fire departments. Create written agreements and dispatch center protocols.</p>		
<p>Pro:</p> <ul style="list-style-type: none"> • Establishment of proper agreements • Identification of responsibilities, duties, and liabilities • More efficient response • Reduced requirements on command personnel (automatic dispatch) • Increased interdepartmental cooperation 	<p>Con:</p> <ul style="list-style-type: none"> • Potential of imbalance in responses • Substantial differences in current equipment load lists, compartmentation, and staffing models can be problematic 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • Number and frequency of responses may increase. • Volume of equipment and personnel sent to incidents outside of the agencies' jurisdictions may increase. • The cost of implementing these practices is generally offset by the fact that a similar level of assistance is provided by another agency in return. As a result, an organization may be able to avoid costs if mutual or automatic aid resources are made available instead of adding new stations, apparatus, and personnel to provide coverage in a response area. 		

Unification of Standard Operating Guidelines

Some of the agencies have established Standard Operating Guidelines (SOGs) that are well established, while others are less fully developed. While the existing SOGs are generally acceptable as they stand, they differ considerably and were all developed separately. Efforts to standardize the procedures regionally will accomplish two things: 1) it will assist those agencies that have limited SOGs manuals in place to develop them, and 2) it will improve operating efficiency and, most importantly, enhance firefighter safety.

Unified Standard Operating Guidelines/Procedures		Timeline: Short term
<p>Objective: Provide consistent guidelines for operations during emergencies, emergent, and non-emergent incidents.</p>		
<p>Summary Background: Currently only some of the study agencies have developed a set of SOGs for their organization. However, firefighters from all of the communities in Oceana County may find themselves working together on emergency scenes, underscoring the importance that personnel are working from the same operating guidelines.</p>		
<p>Policy Action: Blend and adopt common operational guidelines that are kept in electronic format for ease of updating and distribution. Give initial and recurring education to personnel on the use of the joint guidelines. Provide for periodic review of manuals, and update as necessary. Incorporate SOGs routinely into training.</p>		
<p>Pro:</p> <ul style="list-style-type: none"> • Improvement in on-scene safety, efficiency, and effectiveness of personnel • Reduced confusion in the delivery of service • Common methods of approach 	<p>Con:</p> <ul style="list-style-type: none"> • Reduced individuality in specific administrative policies and procedures 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • The elimination of duplicated staff effort in the creation and updating of SOGs will reduce soft costs. • Instructional time is optimized during multi-agency training sessions by excluding time devoted to adapting to differing procedures. 		

As an additional consideration, development of policy and procedure documents can be completed by organizations that specialize in fire department policy development at a reasonable cost, eliminating the need for time intensive writing. One that ESCI is aware of is Lexipol LLC, which can be found at www.lexipol.com

Enhanced Regional Incident Command

Incident Command (IC) practices vary between the study agencies. Standardization of a regional approach is important, as has been recognized at the state level as well as regionally in Oceana County and the surrounding areas. Because all of the agencies may find themselves responding to the same incidents, any opportunities that may exist to further integrate existing IC practices is important.

Implement Regional Incident Command and Operational Supervision		Timeline: Short term
<p>Objective: Provide standardized IC (Incident Command) supervision during emergency operations. Provide for supervision of volunteer and paid-per-call personnel during routine operations.</p>		
<p>Summary Background: The fire chiefs in the study departments have authority and responsibility for all aspects of day-to-day operations and personnel management. The chief will also assume command of emergency incidents, or the role may be assumed by other trained, command level officers in the department.</p>		
<p>Policy Action: Use coverage and deployment information from this feasibility study in planning to determine an appropriate level and number of incident commanders that may be needed at an incident. Compare current incident command practices and training activities to determine what is needed to combine them. Conduct joint incident command training exercises.</p>		
<p>Pro:</p> <ul style="list-style-type: none"> • Improved communications for scene command and control • Increased efficiency in scene size-up and request for additional resources • Improved interdepartmental cooperation 	<p>Con:</p> <ul style="list-style-type: none"> • None 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • No significant financial considerations. 		

Shared Administrative and Support Services

Administrative services are wholly separated between the study agencies, and yet represent a universally shared need. Each administers their organization independently, and each is strained to varying degrees to do so, given existing staffing capacity. Even as separate agencies, opportunities may be realized in combining certain support services.

Combine Administrative and Support Services		Timeline: Short term
<p>Objective: Combine the administrative and management elements of the agencies to promote improved efficiencies by eliminating duplication.</p>		
<p>Summary Background: An administrative consolidation, as it is sometimes called, occurs when two or more agencies maintain their separate legal status and independent operational elements but combine some or all of their administrative functions. The concept may be applied to nearly any administrative function, including purchasing and financial record keeping, payroll, human resources management, incident records and reporting, to name a few.</p> <p>In the instance of most or all these study agencies, the municipalities are providing some of the administrative services through their finance, human resources, and other departments. However, other needs have to be met by fire personnel, most of whom are volunteers. Many of those tasks are duplicated in each agency.</p>		
<p>Policy Action: Evaluate current administrative and support duties and responsibilities and the capacities of volunteer chiefs to perform them. Identify redundancies and opportunities to share resources.</p>		
<p>Pro:</p> <ul style="list-style-type: none"> • Improved interdepartmental consistency in personnel management and selection, payroll, and other administrative functions • Reduction in redundancy resulting in better efficiency • Potential for moving redundant positions to operational roles 	<p>Con:</p> <ul style="list-style-type: none"> • Potential loss of individual departmental identity • Difficulty in merging payroll and other human resources systems 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • Could result in lower personnel costs by removing redundant positions. • May reduce or eliminate the need to replace vacant administrative positions. 		

Capital Replacement Planning

Planning for long term replacement of capital assets is a shared challenge between all of the agencies. With the exception of WAFD, none of the organizations has a funded replacement plan and schedule in place. Because facilities and equipment are very expensive, approaching capital planning from a regional perspective may offer opportunities for cost savings and operational efficiencies.

Additionally, opportunities should be considered for the sharing of vehicles which may result in some cost savings or future cost avoidance. Most of the fire departments have an extra fire engine in their fleet that serves as a reserve unit when a primary engine needs to be removed from service for maintenance. As a result, agencies incur the cost of maintenance, insurance, and other expenses for a vehicle that is rarely used. Sharing of reserve engines is a recommended practice.

Regional Capital Replacement Planning		Timeline: Short term
<p>Objective: The agencies should work together to adopt a shared capital replacement plan that adequately funds the purchase of future apparatus and replacement or rehabilitation of fixed facilities.</p>		
<p>Summary Background: Each department uses and maintains a variety of emergency apparatus types and maintains a fire station. Among the common types of apparatus, 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.</p>		
<p>Policy Action: Assemble data on department apparatus, including: age, mileage, operating hours, maintenance costs, cumulative down time, and annual test results. Use the information to create a single apparatus refurbishment/replacement plan and schedule. 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. Conduct a similar process for fixed facilities.</p>		
<p>Pro:</p> <ul style="list-style-type: none"> • Formalizes capital replacement and identifies it as a priority. • Allows for long-range planning for facility, apparatus, and equipment replacement • Reduces the need for special financing or bonding to purchase apparatus 	<p>Con:</p> <ul style="list-style-type: none"> • May require a substantial investment to bring current fleet up to necessary levels for future funding • May require additional annual funding to ensure that the plan is fully financed 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • Time and effort savings by preparing fewer bid specifications • Effort avoided by conducting fewer bid processes • Realize the benefits of joint purchasing and economies of scale • Cost savings in acquiring emergency fire apparatus • Consider the purchase of stock versus custom apparatus 		

Apparatus and Equipment Purchasing

In concert with the above initiative, purchasing of fire apparatus and equipment can be shared, often resulting in cost savings and future cost avoidance. It is acknowledged that apparatus needs in one community may differ from those of the others. Even so, much of the apparatus used by the study agencies are similar. Joint purchasing is not limited to fire engines and other apparatus. The same concept, applied to the equipment carried on those vehicles, can result in cost savings.

Further, specialized apparatus, like ladder trucks for example, are extremely expensive vehicles; and, while a highly valuable tool on a large fire incident, they see little routine use overall. While there are no ladder trucks in this study area, the concept of sharing of this kind of high-cost resource is a valuable cost saving practice. In the future, the joint purchase concept is worthy of serious consideration.

Joint Purchasing of Equipment and Apparatus		Timeline: Long term
<p>Objective: Create a single set of emergency apparatus specifications, and provide for single-source uniform emergency apparatus for all study fire agencies.</p>		
<p>Summary Background: The fire departments use and maintain a variety of emergency apparatus types including engines, aerial trucks, brush units and water tankers, as well as small equipment such as self-contained breathing apparatus (SCBA), personal protective equipment, and ancillary equipment. Each department uses different makes, models, and configurations. A standard specification and procurement process for apparatus and equipment would result in lower cost, faster production, training efficiencies, and safer and more efficient scene operations. This could include a joint capital replacement plan that encompasses all heavy rolling stock, expanded throughout the region.</p>		
<p>Policy Action: Use provided data on current multi-agency fleet to generate a comprehensive apparatus replacement schedule including agreed upon replacement intervals and projected life expectancy of all equipment. Examine the potential of refurbishment, rehabilitation, or remounting of apparatus if feasible, and evaluate technological updates necessary in small tools and safety equipment. Develop and follow a prescribed load list for apparatus standard equipment.</p>		
<p>Pro:</p> <ul style="list-style-type: none"> • Cost savings of buying stock units • Consistency in equipment can increase efficiency • Ease of training personnel from multiple agencies on operation of apparatus 	<p>Con:</p> <ul style="list-style-type: none"> • Potential loss of customization by study agencies • Long process of increasing consistency • Specialization of apparatus based on risk will impact certain equipment needs 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • Time and effort savings by preparing fewer bid specifications • Cost savings in acquiring emergency fire apparatus and equipment • Consider the purchase of stock versus custom apparatus 		

Shared Recruitment and Retention Efforts

The participating agencies depend heavily on the use of volunteer/paid-on-call responders. As a result, all share a common need for recruitment and retention of capable personnel. Shared recruitment and retention activities offer the opportunity to pool personnel resources and offer additional gains, as noted below.

Joint Volunteer/Paid On Call Recruitment and Retention Program		Timeline: Short term
<p>Objective: Create a regional recruitment program that draws on the specific demographics of the communities served and coordinates hiring processes that provide for consistent application and evaluation components. Make retention programs (pay, benefits, etc.) consistent in order to prevent personnel from leaving one agency and joining another.</p>		
<p>Summary Background: Considering that the Oceana County fire agencies share common needs, a joint recruitment and retention program would allow the study departments to pool their resources by eliminating the duplication that is found when each organization conducts their own recruitment. In addition, the approach enhances the ability to successfully apply for regional grant opportunities in order to attract more volunteer/paid-on-call personnel to the system. Finally, sharing in the development of incentives, recognition programs, pension plans, and compensation practices can improve retention of members. WAFD was awarded a four-year SAFER Recruitment and Retention grant in 2014 and is using this program to attract new personnel. All departments should consider this type of program on a regional level.</p>		
<p>Policy Action: Evaluate the demographics and potential of each community regarding volunteer/paid-on-call personnel. Work as a region to develop and implement a joint recruitment program. Apply for a joint grant that covers the entire region's recruitment efforts, specifically the Volunteer Recruitment and Retention grants available through the <i>Department of Homeland Security Staffing for Adequate Fire and Emergency Response (SAFER)</i> grants program. Support other fire departments as applications come in through a system of coordinated review. Work together to make pay and benefits more consistent and with each municipality to align relief association benefits across the region.</p>		
<p>Pro:</p> <ul style="list-style-type: none"> • Reduced costs of recruitment and application processes • Potential for regional grants for recruitment and retention programs • Information sharing between departments on potential members • Enhanced ability to recruit and retain personnel 	<p>Con:</p> <ul style="list-style-type: none"> • Potential of increased costs due to alignment of relief association benefits for existing members • Increase in soft costs of coordinating recruitment campaigns and application review processes 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • Time and effort savings by joining recruitment efforts • The prospect of potential grant funding for a regional effort • Potential cost savings in conducting coordinated application reviews and background checks 		

Consolidate Training into a Shared Regional Training Program

All of the Oceana County fire agencies have very similar training needs, and equally similar challenges in meeting those needs. In reviewing the study agencies' training programs earlier in this report, ESCI finds that developing a strategy under which the multiple training programs are combined into a regional, shared approach is one of the most important and potentially beneficial initiatives these fire departments can undertake. The concept should be considered as a high priority.

Consolidate Training into a Shared Regional Training Program		Timeline: Mid term
<p>Objective: Eliminate duplication in training emergency responders to increase effectiveness. Create a single unified training program.</p>		
<p>Summary Background: Each of the study agencies assigns training responsibility to someone in the organization and each develops its own stand-alone training plans and practices. Their training needs and challenges, however, are the same. As a result, multiple opportunities exist to standardize and combine training efforts. This can be best accomplished by creating a county-wide training committee, establishing common training standards and plans, and developing a pool of instructors and a shared approach to scheduling educational outreach. WAFD has previously worked with Elbridge Township to secure additional training space that all departments should work together in utilizing.</p>		
<p>Policy Action:</p> <ul style="list-style-type: none"> • Create a county training committee or task force, charged with developing standards and delivery strategies for training outreach. • Inventory and evaluate current training programs and practices to identify what is working and what is not. • Involve all agencies in the county to establish a fully regional approach. • Create a common list of classes to be offered and a shared class schedule. • Develop the training system to enable personnel from fire departments to attend training at any agency, accommodating make up of missed classes, as well as enabling personnel from different agencies to train together to build relationships and share approaches. • Work closely with city and township building officials in the conduct of code enforcement activities. Work with the State Fire Marshal’s Office to supplement their efforts, where possible. • Establish frequent multi-department training activities. 		
<p>Pro:</p> <ul style="list-style-type: none"> • Development of consistency in training regionally • Establishment of the same level of consistency in emergency operations as a result • Enhanced relationships between agencies by training together • Reduced cost by shared use of resources 	<p>Con:</p> <ul style="list-style-type: none"> • None 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • The elimination of duplicated staff effort in the development of training plans reduces costs. • Elimination of duplicated efforts in training program management is cost effective. 		

Cooperative Fire Prevention and Public Education

Like training, fire prevention and public education needs are similar in the participating agencies. As discussed in the Evaluation of Current Conditions section of this report, a large part of prevention efforts are deferred to the State Fire Marshal’s Office, by necessity. However, the Fire Marshal cannot be expected to meet all of the prevention and public education needs that should be addressed. ESCI identified collaboration in the area of fire prevention and public education as an opportunity to realize multiple advantages, as discussed below.

Collaborative Life Safety Education Program		Timeline: Mid term
<p>Objective: Provide Coordinated public education efforts to deliver more effective prevention programs.</p>		
<p>Summary Background: The agencies all provide public education tasks in a similar manner, to the extent that they are able to do so. Because the State Fire Marshal cannot be expected to inspect all commercial buildings, and because of the importance of delivering as much public education outreach as possible, approaching these needs from a collaborative perspective will help to achieve prevention and education goals. WAFD used grant funds to purchase a Fire/Life Safety trailer that is already cooperatively utilized. This is an excellent example of collaborative training efforts.</p>		
<p>Policy Action:</p> <ul style="list-style-type: none"> • Create a fire prevention coalition, consisting of fire department representatives to develop prevention and education opportunities that can be addressed collaboratively. • Inventory and evaluate current personnel resources and fire prevention efforts. • Involve others from outside the area and from non-traditional groups (insurance industry, educators, State Fire Marshal, media). • Create standardized public education messages that can be used across the region to reduce duplication. • Learn from others. Model the coalition after other successful regional public fire safety education programs. 		
<p>Pro:</p> <ul style="list-style-type: none"> • Fire departments can share resources to ensure that programs are delivered throughout the region • Reduced cost by shared use of resources 	<p>Con:</p> <ul style="list-style-type: none"> • Potential loss of municipality-specific education programs 	
<p>Fiscal Considerations:</p> <ul style="list-style-type: none"> • The elimination of duplicated staff effort in the creation and distribution of public fire safety education messages reduces soft costs. • Cost savings can be achieved through group purchasing of materials and other media. 		



FISCAL ANALYSIS

Frequently, even though everyone may agree on the benefit of allied fire protection, officials find it difficult to reach an agreement on the cost and the allocation of those costs. The differences between community demographics and development, along with changes that occur within the system over the long term, can cause the perception of winners and losers. This can be especially prevalent when a single variable is used to apportion cost. A service contract based on more than one allocation determinate may help solve these problems.

By apportioning costs over multiple variables, members of an alliance have been able to reach a long-term agreement that fits the diversity of the partnering agencies. Other partnerships in other geographical areas may require a different solution involving different combinations of variables.

Allocation Summary

The information provided above serves as a detail of each funding alternative presented. Given the lengthy discussion provided with each alternative, ESCI has compiled the information into a summary table, illustrating how each funding alternative would be distributed among the member departments/service areas. In addition to the individual funding alternatives, several multiple-variable scenarios are also provided as an example of how this type of methodology can be applied and modified.

Figure 54: Single Variable Allocation Summary

Jurisdiction	Area	Service Demand	Population
Crystal	6.7%	1.2%	4.7%
Ferry	13.4%	3.2%	6.8%
Grant	20.1%	36.2%	20.5%
Hart	19.6%	13.0%	22.7%
Pentwater	2.6%	20.6%	6.8%
Shelby-Benona	14.3%	8.4%	24.7%
Walkerville	23.3%	17.3%	13.8%
	100.00%	100.0%	100.00%

Combining these variables into a weighted system of allocation allows organizations to blend the data based on a pre-determined set of criteria. For the example below, three scenarios are used to illustrate how simply changing certain weights can impact the overall allocation model:

Figure 55: Multi-Variable Allocation Model

Jurisdiction	Multiple Variable #1	Multiple Variable #2	Multiple Variable #3
Crystal	4.2%	3.4%	4.1%
Ferry	7.8%	5.9%	6.8%
Grant	25.5%	27.4%	24.5%
Hart	18.5%	18.1%	19.8%
Pentwater	10.0%	12.4%	9.8%
Shelby-Benona	15.9%	16.3%	18.9%
Walkerville	18.1%	16.4%	16.1%
	100.0%	100.0%	100.0%

This multi-variable model is derived from the weights applied in the following figure but should be considered as a final recommendation on cost allocation. Policymakers, during detailed discussions and negotiations, will need to adopt a model that is fair and equitable based on the chosen variables.

Figure 56: Multi-Variable Weighting Example

Multiple Variable Weights	
Multiple Variable #1	
Area	33%
Service Demand	33%
Population	34%
	100%
Multiple Variable #2	
Area	25%
Service Demand	60%
Population	15%
	100%
Multiple Variable #3	
Area	50%
Service Demand	25%
Population	25%
	100%

In addition, the assumed tax burden can be used to determine potential impact to each entity based on a JPA or contractual arrangement.

Section III – Findings, Recommendations, and Plan of Implementation

FINDINGS AND RECOMMENDATIONS

This section 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. Implementation begins with that step.

Findings

Based on the analysis completed by ESCI during this process, it is apparent that the Oceana County fire departments have historically worked well together and continue to do so today, as witnessed by the fact that all but one agency in the county elected to participate in this study process. While a spirit of cooperative effort is in effect currently, opportunities exist for further improvement and increased efficiency. It would make sense that the organizations continue efforts to work more closely together. This can be accomplished by any of the methods discussed previously. Which method is ultimately chosen is a policy decision placed squarely in the hands of the board members or other elected officials that oversee each of the involved fire agencies.

Using the information developed, ESCI draws certain conclusions regarding the participants and the opportunities for collaboration. A summary of those findings follows:

All of the Oceana County Fire Departments Are Interdependent – The fire departments depend upon each other and other neighbors for mutual aid and automatic aid assistance during emergency incidents. As stand-alone agencies, each would be challenged to effectively combat a significant, multiple alarm fire or other major incident without assistance.

Each Agency Values Customer Service – During the work leading to this report, each fire department consistently demonstrated a focus toward serving those who live, work, and play in the area. Each agency is proud of its community and works hard to care for it.

Each Agency Strives to Meet the Expectations of its Customers – The departments each display considerable efforts to assure that they provide acceptable levels of service to their communities.

Each Agency Needs Infrastructure Improvements – Although the need varies between the agencies, important gaps were identified in each organization. Those needs are identified in the Evaluation of Current Conditions section of the report. Some of the improvements identified in this report may be more readily achievable by sharing effort in some manner with the other agencies.

Communication between Agencies is Effective – As a result of the close collaboration on numerous operational issues, dialogue is effective between all of the agencies. It is essential that the current level of communication be maintained and further enhanced in the future.

Multiple Functional and Operational Cooperative Efforts Are Feasible – ESCI has identified multiple opportunities for functional cooperation in this report. These undertakings can be accomplished while the organizations remain separate from a governance standpoint – the only requirement to move forward with them is an agreement to do so. At a minimum, it is recommended that as many of the identified functional strategies as possible be evaluated and implemented.

Combining All of the Participating Agencies is Theoretically Feasible, but Gains May Be Minimal– All of the strategies presented in this report are feasible. Each presented strategy moves across the spectrum of partnership options, from maintaining status quo at the low end of the scale to full integration of all of the agencies. However, while the establishment of a single, county-wide, fire agency may be advantageous in the long term and can be accomplished from a technical standpoint, the gains that can be achieved as a result of doing so do not offset the cost and complexity.

PREFERRED STRATEGY

ESCI finds that the preferred and most appropriate strategy at this time is for the study agencies to evaluate, prioritize, and implement as many of the functional cooperative efforts as found to be feasible at this time. It is understood that these undertakings will be accomplished, enabling the organizations to capitalize on the benefits identified, while still retaining their independent status from a governance standpoint.

The approach should be viewed as a first step to what may, at some point, become a more formalized unification. ESCI does not feel that it is advantageous to do so at this time, but once this step is taken and in place for a period of time, the participants will learn more about how well they work together and the advantages to be gained. From there, they will know what, if any, more formalized forms of unification will be beneficial.

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.

Although the cost savings from a consolidated organization may be minimal, at least in the beginning, it is apparent that efficiencies can be gained within each organization from cooperative efforts with neighboring agencies. The intent of this project was to evaluate the feasibility of cooperative efforts among the study agencies and provide policymakers with information relative to the future of emergency services within their respective areas. The goal was to identify strategies that either reduces costs without reducing service or to increase service without increasing costs. As outlined in the body of this report, all of the functional efforts will improve efficiency and have the potential of reducing costs through economies of scale and bulk purchasing power.

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 system 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 addresses 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:

- Elected representative from each community
- Fire Chief from each community
- Finance Director from each community
- 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 is voting 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
 - Availability of data and information
 - 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.

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.

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 a continual one, 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.

Conclusion

A tremendous amount of data and information is contained within this document, much of which was supplied by the agencies involved and then analyzed and evaluated by the ESCI project team. In the end, the study departments, like many other fire departments across North America, are operating at a level that is currently meeting the expectations of the communities served but realize that there is always room for improvement. Regardless of the path that policymakers choose moving forward, the information contained with this report is intended to be used by the fire departments to follow a process of continuous quality improvement in a non-ending cycle of self-evaluation.

ESCI began collecting data and working with Oceana County stakeholders for this project in August 2015, and the data and stakeholder input was analyzed over a period of nearly three months to develop options for future service delivery within the study area. It is ESCI's sincere hope that the information contained within this document is seen as useful in enhancing the way in which fire and emergency services are delivered throughout the area.

Appendix A – Training Requirements

The following appendix is a guideline listing mandatory and non-mandatory training provisions from a number of state requirements and is intended to assist employers and employees in complying with these requirements.

TRAINING / REFERENCE	LINE PERSONNEL			COMMAND PERSONNEL		
	FIRE FIGHTER (FULL-TIME)	FIRE FIGHTER (PART-TIME; FOR PAY OR VOLUNTEER)	APPARATUS DRIVER/OPERATOR	COMPANY OFFICER	SUPERVISORY OFFICER	ADMINISTRATIVE OFFICER
Personal Protective Equipment – MIOSHA OH Part 33 and MIOSHA GI Part 74						
Initial Training: Provide basic training for understanding, knowledge, and skills	X	X	X	X	X	X
Continuing Education: As often as necessary	X	X	X	X	X	X
Respiratory Protection - MIOSHA OH Part 451 and MIOSHA GI Part 74						
Initial Training: Evaluation required to ensure safe usage	X	X	X	X	X	X
Continuing Training: At least annually	X	X	X	X	X	X
Hazardous Waste Operations and Emergency Response – MIOSHA OH Part 432						
Initial Training: 24 hours	X	X	X	X	X	X
Annual Training: As required to maintain competency	X	X	X	X	X	X
Bloodborne Infectious Diseases - MIOSHA OH Part 554						
Initial Training: As required	X	X	X	X	X	X
Annual Training: As required	X	X	X	X	X	X
Fire Fighter I - 1966 Public Act 291 29.369 (6)						
Initial Training: 152 hours	X	X	X	X	X	X
Fire Fighter II - 1966 Public Act 291 29.369 (5)						
Initial Training: 75 hours	X			X	X	X
Federal OSHA Respiratory Protection Standard, 29 CFR 1910.134(g)(4) and 29 CFR 1910.155(c)(26):Two-in/Two-out Rule						
Initial Training: As required	X	X	X	X	X	X
Annual Training: As required	X	X	X	X	X	X
Fire Fighting – MIOSHA GI Part 74, Rule 408.17411						
Initial Training: Fire Fighter I / Fire Fighter II	X	X	X	X	X	X
Continued training to cover all expected duties on a 3 year cycle, unless otherwise specified	X	X	X	X	X	X
MFFTC Drivers Training - ACT 300 of 1949 and Act 346						
Initial Training: 6 hrs. + practical road test + 10 hrs. supervised driving			X	X	X	X
Annual Training: As needed to maintain competency			X	X	X	X

TRAINING / REFERENCE	LINE PERSONNEL			COMMAND PERSONNEL		
	FIRE FIGHTER (FULL-TIME)	FIRE FIGHTER (PART-TIME, FOR PAY OR VOLUNTEER)	APPARATUS DRIVER/OPERATOR	COMPANY OFFICER	SUPERVISORY OFFICER	ADMINISTRATIVE OFFICER
NIMS IS 700						
Initial Training: 3 hours	X	X	X	X	X	X
NIMS IS 800						
Initial Training: 3 hours	X	X	X	X	X	X
NIMS 300						
Initial Training: 24 hours				X	X	X
NIMS 400						
Initial Training: 20 hours					X	X
NIMS ICS for the Fire Service						
Initial Training: 16 hours.	X	X	X	X	X	X
Annual Training: As required to maintain competency	X	X	X	X	X	X
MFFTC Company Officer I and II Program						
Initial Training: As required and prerequisites				X	X	X
Annual Training: As needed				X	X	X
MFFTC Fire Officer III Program						
Initial Training: As required					X	X
Annual Training: As needed					X	X
MFFTC Fire Officer IV Program						
Initial Training: As adopted						X
Annual Training: As adopted						X
Recognition of High Voltage						
Initial Training: As necessary	X	X	X	X	X	X
Annual Training: Yes	X	X	X	X	X	X
Review of NFPA Safety Standards - NFPA 1500						
Initial Training: As necessary for safety					X	X
Annual Training: As necessary for safety					X	X
Michigan Fire Prevention Code - Public Act 207 of 1941						
Initial Training: General review					X	X
Annual Training: General review					X	X
Permit-Required Confined Spaces – MIOSHA GI Part 90						
Initial Training: Provide basic training for understanding, knowledge, skills and locations	X	X	X	X	X	X
Annual Training: As needed	X	X	X	X	X	X
Review of MIOSHA General Industry Safety Part 74						
Initial Training: Knowledge and review	X	X	X	X	X	X
Annual Training: As needed	X	X	X	X	X	X

TRAINING / REFERENCE	LINE PERSONNEL			COMMAND PERSONNEL		
	FIRE FIGHTER (FULL-TIME)	FIRE FIGHTER (PART-TIME; FOR PAY OR VOLUNTEER)	APPARATUS DRIVER/OPERATOR	COMPANY OFFICER	SUPERVISORY OFFICER	ADMINISTRATIVE OFFICER
Hazard Materials Site Specific Response Plan - Hazwoper 1910.120, PA 154, Sara Title III						
Initial Training: If applicable, on all sites	X	X	X	X	X	X
Annual Training: As required	X	X	X	X	X	X
Terrorism Awareness						
Initial Training: 4 hours	X	X	X	X	X	X
Annual Training: As needed	X	X	X	X	X	X
Hazard Communication – MIOSHA OH Part 430 - Employee Right to Know						
Initial Training: As required	X	X	X	X	X	X
Annual Training: As needed	X	X	X	X	X	X
Hazard Communication – MIOSHA OH Part 430 – Fire Fighter Right to Know						
Initial Training: As required – See Fire Marshal Bulletin 9	X	X	X	X	X	X
Annual Training: As needed	X	X	X	X	X	X
CPR and AED						
Initial Training: As required	X	X	X	X	X	X
Annual Training: As needed for recertification	X	X	X	X	X	X

Job Duties Defined:

- Fire Fighter (Full-Time) - An individual who is a career fire fighter.
- Fire Fighter (Part-Time; For Pay or Volunteer) -An individual who is not a career fire fighter.
- Apparatus Driver/Operator - An individual who drives, operates, or both emergency apparatus.
- Company Officer- is a supervisor of a crew or company of personnel.
- Supervisory Officer - is responsible for assuming command to allow company officers to directly supervise personnel.
- Administrative Officer - this duty involves general administrative functions and the development, implementation, or both, of departmental policies and procedures.

