

EXECUTIVE SUMMARY

BETTER TOGETHER

*Options for Enhanced Fire Department
Collaboration in the Fox Valley*



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Fire and emergency medical service (EMS) agencies across Wisconsin are stressed, facing fiscal challenges, increasing service demands, tightening labor markets, and upheaval related to the COVID-19 pandemic. These challenges are motivating departments across the state to re-examine their service models and consider greater collaboration with neighboring departments.

While fire departments in Wisconsin's Fox Valley generally enjoy a higher level of staffing and resources when compared to their peers, these departments are not immune to these pressures. They also have a history and a culture of working together to improve response.

Recognizing the strong spirit of cooperation that already exists, several fire chiefs from the Fox Valley approached the Wisconsin Policy Forum (WPF) to help them consider options for enhanced collaboration or new service sharing arrangements as a means of addressing some of their common challenges. This report responds to that request and covers a range of service sharing options for the fire departments serving Appleton, Grand Chute, Kaukauna, Neenah-Menasha, and Oshkosh.

Department Overview

Each of the five fire departments has unique characteristics and strengths. The Oshkosh Fire Department (OFD) is the largest, with 114 full-time equivalent (FTE) employees. Appleton (AFD) trails closely with 96 FTEs, while the Neenah-Menasha department (NMFR) is in the middle with 68 full-time staff positions. The Grand Chute (GCFD) and Kaukauna (KKFD) departments are relatively small with 34 and 20 full-time staff positions respectively. Both of those departments also make some use of part-time staff when needed.

The table below summarizes 2021 budgeted expenditures and revenues for the five departments. Revenues are highest in Oshkosh and Kaukauna because both of those departments provide ambulance transports and receive reimbursement fees for that service.

2021 budgeted revenues and expenditures

	Appleton	Oshkosh	NMFR	Kaukauna	Grand Chute
Revenue	\$435,775	\$1,949,800	\$181,286	\$599,050	\$217,140
Expense	\$13,261,240	\$13,741,100	\$8,784,400	\$2,669,305	\$4,396,858
Net Expense	\$12,825,465	\$11,791,300	\$8,603,114	\$2,070,255	\$4,179,718

Annual calls for service in 2021 ranged from KKFD's 1,558 to OFD's 9,551. The five departments also differ in terms of their EMS licenses (three of the five are licensed at the paramedic level) and in their capability to engage in various forms of special operations, such as hazardous materials (hazmat) responses and water rescues.

Our report also finds several similarities in terms of the needs and activities of the five departments. The departments have similar training and employee recruitment and retention practices, they all need to maintain fleets of expensive vehicles, and they all perform community risk reduction activities like inspections, investigations, and public education.



Current Collaboration

Fire department services are unique among municipal services in that automatic aid and mutual aid are fundamental to response and operations. Consequently, intergovernmental cooperation and collaboration is a must and is broadly accepted and encouraged by most chiefs.

Fire departments in Wisconsin utilize the Mutual Aid Box Alarm System (MABAS), which dictates how resources are deployed within regions for major fire or EMS incidents. Many departments also have additional mutual aid arrangements with neighboring departments. For example, the Appleton and Grand Chute departments have an automatic aid agreement for fire response only, which means that certain equipment is dispatched simultaneously from both departments when a call comes in from either jurisdiction. AFD and NMFR recently resumed a similar automatic aid agreement.

One consequence of the culture of cooperation and strong relationships between departments in the region is that several of the most obvious opportunities for regional collaboration are already happening. For example, extensive cooperation is already in place for ongoing fire training for existing staff, as some larger training activities conducted by individual departments are open to all of the other departments in the region. NMFR and AFD have even covered each other's stations during training to allow more on-duty firefighters to attend. Also, for the past two years, OFD, GCFD, and NMFR have collaborated on training for new recruits.

In consultation with the chiefs, our analysis focused on five specific areas of fire department operations that may hold potential to pursue even greater levels of collaboration in the future. Our findings in those five areas are summarized below.

Collaboration Area #1: Training

Training in most fire and EMS agencies occurs on a weekly, if not daily, basis. In the Fox Valley, each of the five departments has a designated training officer who manages and documents training activities within their department. The five training officers also meet regularly to organize joint trainings and collaborate in other ways. We found that 5.25 FTEs are dedicated to training functions across all departments, at an estimated cost of \$670,000.

Our analysis finds there may be opportunity to enhance existing collaborations through a cooperative agreement that divides responsibility for major training areas between existing training officers. This option has the advantage of maintaining existing staffing within each department, although it may require added time spent on discussion and planning.

We also modeled two options for a more comprehensive merger of training functions. The first is a Regional Training Bureau (RTB), which would have a limited scope of services that would not fully replace the training function in each department. Instead, the RTB would employ a small staff to address regional issues such as standardizing protocols and procedures (SOPs) that might ensure better coordination and cohesion at the scene of major incidents. This approach also could reduce the time spent by existing staff on planning for joint and specialized trainings. The downside is that while this option could produce service-level improvements and free up some existing command staff time for other priorities, it also could result in an added cost for each department.



The Regional Training Office (RTO) approach is a more comprehensive model with a larger staff that would assume much responsibility for training functions for participating departments. This approach could be costlier but would likely create a more coordinated and effective training program for all.

Under this approach, the three larger departments would transfer existing positions to the RTO and all departments would give up sole control of most of their own training activities. The positions and estimated costs are shown in the adjacent table. While the nearly \$905,000 cost seems like a hefty price tag, a substantial portion of the current expense of \$670,000 potentially could be eliminated.

Staffing and cost of regional training office

Staff	Est FTE	Cost
Assistant Chief	1.0	108,000
Battalion Chief	2.5	242,500
Captain	1.0	89,000
Lieutenant	1.0	85,000
Driver/OE	1.0	80,000
Admin Support	0.50	27,500
Total Salaries		632,000
Fringe Benefits		252,800
Non-personnel costs		20,000
Grand Total	7.0	904,800

Collaboration Area #2: Special operations

All five departments in this study are prepared to carry out special operations, including hazmat response and technical rescues. Technical rescues include several types of water rescues, confined space and trench rescues, structural collapses, and others. Also, each county has its own coordinated approach to special operations and regional collaborations for such incidents are already organized through the Wisconsin Department of Emergency Management.

Based on discussions with the chiefs and other staff, we explored a cooperative model of special operations rather than more formal consolidation options. In a cooperative model, each department would maintain its existing teams, programs, and training. Departments could explore mutual or automatic aid agreements for particular special operations responses and, more generally, could explore sharing of equipment, personnel, training, and resources. Those departments that do not function at the technical level would either provide operational support or coverage to other jurisdictions.

In order to succeed, a cooperative model optimally would have each member provide a similar contribution in terms of resources and also receive a similar benefit. In other words, each department might be the designated response team for one or two types of special operations while receiving service from other departments for the remainder. If either obligations or benefits are lopsided, then some type of reimbursement mechanism may need to be developed for departments that have more technical rescue capabilities.

The table on the following page shows how each department ranked each type of special operation based on frequency and overall risk. Based on each department's responses, we can begin to identify some areas where technical rescue specialization by department may make sense. For example, because AFD ranked confined space and structural collapse as high-need relative to the other departments, and because it also has designated teams for these types of technical rescue, that department would be the logical entity to house those capabilities for the entire region. Water/ice rescue was ranked highly by NMFR compared with AFD and GCFD, so it might be the designated specialist in that area.



Rankings of special operation types by frequency and overall risk

	AFD	OFD	GCFD	NMFR	KKFD
Swiftwater	High	Low	Med	High	High
Hazmat	High	High	Med	Med	High
Active Shooter	High	Med	High	Med	Med
Water/Ice	Med	High	Med	High	Med
Airport Fire	Low	High	Low	Low	Low
Dive Team	Low	High	Low	High	Low
Search and rescue	Med	Med	Med	Med	Med
Confined space	High	Low	Med	Low	Med
Structure collapse	High	Low	Med	Low	Low
High angle/low angle	Med	Low	Med	Low	Low
Rope	Med	Med	Med	Med	Low
Trench	Low	Low	Med	Low	High
Radiological	Med	Low	Low	Low	Low

Collaboration Area #3: Community Risk Reduction

Each of the five Fox Valley departments conducts a variety of community risk reduction (CRR) activities. These include enforcement of fire code regulations through regular inspections of commercial properties as well as investigations of fires after they occur. Departments also provide public education on fire safety and more general health and safety issues, such as proper installation of car seats, fall prevention for seniors, water safety, etc.

Inspections are a part of daily operations at each department. In addition to ensuring public safety, they give firefighters a chance to learn the layout of buildings in their jurisdictions. Fire investigations occur much more rarely but are an important CRR function for any department, as they help to identify improvements needed for fire safety.

Public education is similar to inspections in that departments have personnel who specialize in education activities, but those activities also are supported by front-line staff. A common component of public education is programming for elementary schools, but broader community risk reduction activities include programs that focus on specialized populations, such as college students living in dorms, seniors at risk for falls, recreational swimmers, etc. These activities also bolster community relations for fire departments.

Because a large part of the workload associated with inspections and education is conducted by firefighters during their regular shifts, even under new service sharing arrangements, major portions of those duties logically would remain with individual departments. However, fire investigations is a logical function to consider for regional collaboration given that investigations are relatively infrequent and require specialized staff. In addition, a regional approach for repeat or complex inspections, such as for industrial facilities or new restaurants, might be considered.

With regard to public education, collaboration on certain specialized elements of that function might be considered. For example, the departments could work together to develop public education curricula and materials for school programs. Departments also could share instructors and equipment for community programs, such as CPR and fire extinguisher training.



If the departments wish to consider more comprehensive options, then we suggest they consider the creation of a regional bureau focused on fire investigations and complex inspections, or a larger bureau that would add public education and public information functions. One advantage of approaching CRR collectively is that it opens up opportunities to expand it in the region.

Estimated staffing and costs for the larger bureau are shown in the table below. To determine a net cost, each department would need to consider the responsibilities that could be transferred to a regional bureau and what workload, staffing, and costs would remain. To the extent that existing departmental personnel could be transferred to the bureau, such as fire inspector or community program educator positions, departments would realize offsetting savings.

Staffing and estimated costs for hypothetical CRR Bureau

	Annual Cost
Asst Chief/Investigator	\$108,000
Batt Chief/Inspector	\$97,000
Inspector	\$80,000
Rotating Departmental Personnel	
Education Coordinator	\$65,000
Public Information Officer	\$80,000
Admin Support	\$55,000
Total Salaries	\$485,000
Fringe Benefits	\$194,500
Non-Personnel	\$30,000
Grand Total	\$709,000

Collaboration Area #4: Fleet Maintenance

A fire department's ability to appropriately maintain its fleet of vehicles is central to its operations. Fleet maintenance activities include regular or scheduled maintenance, emergency repairs, and extensive testing of pumps, hoses, and other equipment located on apparatus. Reserve engines are another important component of fleet operations, since they allow for front line vehicles to receive regular (and emergency) maintenance without reducing the department's response capabilities.

The table below shows how each department manages fleet maintenance and cites capacity challenges noted by chiefs. It is noteworthy that AFD, OFD, and GCFD all reported that their municipal garages have reached capacity in terms of their ability to handle fire vehicle maintenance needs. Across all five departments, there are 4.2 FTE mechanics exclusively involved in fleet maintenance duties at a current estimated annual expense of \$660,000.

Fleet maintenance service models and challenges

Department	Service Model	Capacity Challenges/Notes
NMFR*	4 fire department mechanics on shift	Have some space in Station 35
GCFD	Town DPW	At capacity, having to outsource work although another half-time mechanic position was approved in the 2022 budget
OFD	City DPW	Have 4 trained mechanics but having staffing issues
AFD	City DPW	Dedicated mechanic who works out of fire station; at capacity
KKFD	Outsourced	

* NMFR has four mechanics who work 8-hour shifts as part of their 24-hour firefighting shift.



Our discussions with the chiefs and fleet maintenance personnel yielded several potential options for greater collaboration and/or consolidation of fleet maintenance in the Fox Valley. Those include creation of a shared fire maintenance garage and the possibility of expanding the capacity of NMFR to handle fleet maintenance for other departments. We selected NMFR because it is the only department that currently appears to have such capability.

One potential benefit of a consolidated garage would be greater staffing expertise given that fire vehicle maintenance would be the sole responsibility of garage personnel. It is also possible that the dedicated fire vehicle staff could be more efficient and produce quicker turnaround times for maintenance and repairs given their singular focus. Setting up an entirely new garage, however, also would involve considerable overhead costs, and we estimate that the annual cost of operating a stand-alone fire garage would be around \$1 million. Because of that potential cost, other options, such as having NMFR provide fleet maintenance services for the smaller departments, could be pursued as starting points.

A shared reserve fleet also could be a first step towards greater collaboration in this area. Given that departments already borrow reserve vehicles from each other, a more coordinated program would provide a dependable supply of reserve vehicles. If the departments do move forward with sharing of reserve vehicles, it may make sense to house that program at NMFR, which has garage capacity and its own mechanics. Regardless, they should consider immediately formalizing existing vehicle borrowing practices with intergovernmental agreements that address issues like liability.

Collaboration Area #5: EMS Quality Control & Oversight

All five of the Fox Valley departments in this study provide both fire protection and emergency medical services (EMS), although there are differences in the types and levels of EMS provided. For example, while all provide basic emergency medical response, two of the five departments are not licensed to provide a paramedic level of service and three of the five rely on a private ambulance company to provide medical transport from the site of an incident to the hospital.

While the differences in EMS service levels and models make collaboration less practical than for other fire department functions, there are still some potential steps that could be taken by the Fox Valley departments to foster greater coordination. Those include the sharing of data collection and analysis; consolidating medical direction; and agreeing to a common set of EMS protocols that could help to lay the foundation for a regional EMS system. It is also worth noting that AFD plans to move to a paramedic license level within the next few years, at which time four of the five departments will be licensed at that level and prospects for greater collaboration will improve.

Rather than proposing specific regional collaboration models for EMS, we suggest that a possible next step would be to develop a formal intergovernmental agreement that would guide the creation and activities of a regional EMS committee to oversee EMS quality and coordination. The committee might consist of senior EMS officials from each department, medical directors, county emergency management and public health officials, representatives from private sector health care entities, and other stakeholders. This formalized committee would evaluate EMS systems, operational policies, guidelines, and protocols and make suggestions to the medical directors. The committee also could review equipment and practices and help to identify system problems that may adversely impact patient care or system operations.



Conclusion

Our analysis of enhanced service sharing opportunities for the Appleton, Grand Chute, Kaukauna, Neenah-Menasha, and Oshkosh fire departments has found several potential opportunities to build on the strong framework of collaboration and cooperation that currently exists between the five departments. However, as was the case with many of the other fire and EMS service sharing studies we have conducted over the past several years, a key takeaway is that these opportunities are geared more toward enhancing the quality of service than reducing fire department expenditures.

For example, we find that regionalizing services in areas like training, community risk reduction, and fleet maintenance by creating regional bureaus with dedicated staff could produce greater coordination, capacity, and effectiveness, while also freeing up some existing staff resources for other activities. However, there would be an added cost because the creation of shared regional staff positions would not allow departments to eliminate existing staff positions in most instances.

In the two other areas where we saw the greatest potential for enhanced collaboration – special operations and EMS quality control and oversight – we suggest that rather than looking at a regional bureau model, the five departments instead should consider less comprehensive means of sharing resources. Examples would be to designate specific departments to take responsibility for certain special operations activities on behalf of all five, and forming a regional committee with participation from each department and their medical directors to oversee EMS data collection and standardize EMS protocols.

Within each functional area we considered, we present options that would allow the departments to “start small” and build over time toward more comprehensive collaborations. We also note that the five departments could get started right away by negotiating intergovernmental agreements (IGAs) to solidify existing “handshake” arrangements that exist in several functional areas and to formalize the interoperability of existing resources in areas like fire investigations and training.

On the other end of the spectrum, should the five departments and the municipalities that house them ultimately wish to “go big,” then they might consider a single Fox Valley Fire Resources Bureau to regionalize the large array of support or specialized services that are addressed in this report. An independent bureau of this nature could be governed by a board that has representation from each municipality and funded by a single cost allocation approach. It could manage or provide all or some of the services associated with each of the functional areas we discuss, as well as look for opportunities for new forms of regional collaboration.

Overall, it is clear that the five departments already work well together, while their experience with COVID-19 has made it even more evident that there is value in considering their operations in a more regionalized fashion. We would suggest they start with the relatively simple steps we have outlined to formalize service sharing where it is already budding or occurring, and then consider more concrete options as the benefits of enhanced cooperation can be measured and delineated, and as areas that require more extensive planning and negotiation become more pronounced.

Intergovernmental cooperation can be time consuming and requires an investment of resources even in the initiation phase. Yet, our previous work on service sharing has demonstrated to us that it is worth the investment, particularly in regions like the Fox Valley where trust and positive working relationships already provide a foundation for doing more.

