

3.02 ORGANIZATION.

1. The Board shall, as provided by s. 59.11, Wis. Stats., organize at the April meeting in even-numbered years by electing a Chair, a First Vice Chair and a Second Vice Chair by secret ballot. The Clerk shall preside until the Chair has been elected. Nominations shall be made by written ballot. In the event more than two persons are nominated for a position, a primary ballot shall be prepared. Prior to the primary election, or the final election if no primary is required, each nominee shall be provided up to three minutes to address the Board. A person receiving a majority of votes of the entire membership of the County Board on the primary ballot shall be declared elected. Otherwise, the two persons receiving the greatest number of votes for a position on the primary ballot shall be placed on the final ballot. In the event two persons receive the second greatest number of votes, those two persons shall be the subject of a vote for the second position on the final ballot. The Clerk shall prepare a final ballot for the position. The person receiving the most votes shall be elected to the position. Persons elected in accordance with this paragraph may be removed by the Board by majority vote. [Am. 03/12/02, Ord. No. 2001- 29; 06/13/06, Ord. 2006-08; 03/11/08, Ord. 2007-35; Ord. 2016-01, 04/19/2016; Ord. No. 2018-01, 04/17/2018]

Current County Board rules regarding election of County Board officers:

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Current procedures utilized for election of County Board officers:

The County Clerk appoints ballot clerks (usually 3 to 5 persons, none being County Board supervisors), who handle the distribution, collection, counting, and tallying of the secret ballots at the April meeting. Nominations proceed as indicated in 3.02 (1) above.

Presently, primary vote tallies/numbers (if primary elections take place) are not announced, nor are they recorded in the meeting minutes/official proceedings. Final election vote tallies are not announced, nor are they recorded in the meeting minutes/official proceedings. (Summary sheet provides history of how tallies were handled in elections from 2000-2022.)

Ballots are not retained and are destroyed after the election (that evening.) The County Clerk does not verify ballot tallies before ballots are destroyed.

The Wisconsin Counties Association recommends that procedures for the election of board officers be codified in County Board Rules.

Items to discuss/consider:

1. Is it a good idea to state in the County Board rules that the County Clerk is responsible for appointing ballot clerks? And to specify that County Board Supervisors are not eligible to serve as ballot clerks due to potential conflict of interest? (Note: Supervisors did serve in this capacity some years back.)
2. To promote public trust and election integrity, should the board rules require one of the ballot clerks to be a deputized clerk—and that the deputy clerk or County Clerk verify primary and final ballot tallies?
3. What tallies will be announced and recorded in the official meeting minutes—final results as well as primary tallies? Just final tally numbers?
4. Should paper ballots be dated after collection and retained for a specified period (time limited)?
5. Is campaigning or caucusing for officer positions allowed? (The rules are not clear, and this can be confusing, especially for new board members.)

Historic information on election of Co. Board officers, Jefferson County

2000- Primary vote numbers were announced & recorded in mtg. minutes. Final ballot tallies were also announced at the April 18, 2000 County Board meeting, & recorded in the official meeting minutes. <Source: Official Proceedings of the Board of Supervisors of Jefferson County Wisconsin, 2001-2001 book>

2002- Primary vote numbers were announced at the April 16, 2002 County Board mtg.& recorded in mtg. minutes. Final ballot tallies also announced & recorded. <Source: Official Proceedings book, 2002-2003>

2004- Primary vote numbers were announced at the 4/20/2004 County Board mtg. & recorded. Final ballot tallies also announced & recorded in official meeting minutes. (Note: One supervisor received 1 vote for board chair & another nominee received 2 votes for the 2nd Vice Chair position. <Source: Official Proceedings book, 2004-2005>

2006- Primary vote numbers were announced at the 4/18/2006 County Board mtg. & recorded. Final ballot tallies were also announced & recorded in official meeting minutes. <Source: Official Proceedings book, 2006-2007>>

***2008—**Primary votes not recoded nor announced. Final vote tallies were announced & recorded in the official mtg. minutes. (Note: There was one supervisor who received 3 votes for an officer position.)

2010— Primary vote numbers not announced at the April County Board mtg., nor recorded in mtg. minutes. Final ballot tallies were announced & recorded in the official meeting minutes.

2012- Primary vote numbers not announced at the April County Board mtg., nor recorded in mtg. minutes. Final ballot tallies were announced & recorded in the official meeting minutes. (Note: Two supervisors received 2 votes for an officer position; one supervisor received 3 votes.)

2014- Primary vote numbers were announced & recorded in mtg. minutes. Final ballot tallies were announced & recorded in the official meeting minutes. (Note: Two supervisors received 1 vote for an officer position in the primary; two supervisors received 3 votes in the primary.)

Procedural changes enacted starting the 2016 election...

2016- Primary vote numbers not announced, nor recorded in mtg. minutes. Final vote tallies not announced, nor recorded in meeting minutes. Winning nominees'/candidates' announced.

2018- Primary vote numbers not announced, nor recoded in mtg. minutes. Final ballot tallies not announced, nor were numbers recorded in meeting minutes. Names of winners announced.

2020- Primary vote numbers not announced, nor recorded in minutes. Final ballot tallies not announced, nor were numbers recorded in meeting minutes. Winners' names announced.

2022- Primary vote numbers and final ballot tallies were not announced, nor were ballot tallies for primary or final voting recorded in meeting minutes. Names of winners announced.

****Note: County Board mtg. minutes starting in 2008 are currently posted online.***

EMS Guidance



Past History – Intergovernmental Cooperation

- County Strategic Plan – based on community feedback/policy direction – greater efforts for intergovernmental cooperation for services; Reinforced with Comp Plan feedback
- Municipal Leadership requested or agreeable to discuss/explore opportunities related to services– brainstorming session resulted in desire to develop two studies:
 - Broad Shared Service Study – “Greater Than the Sum”
 - Published **Jan 2020**; Presentation **Feb 2020**
 - Emergency Medical Services (EMS) specific – “Taking the Pulse”
 - Published and presented – **Oct 2020**

Greater Than The Sum

- Six Service/Functions were identified to explore
 - Assessment
 - Building Inspections
 - Dispatch Services
 - Fire and Rescue Services
 - Police Services
 - Public Works
- Other areas discussed – parks and recreations; municipal courts; solid waste; sewer utilities and back-office services (human resources, benefit administration, accounting, joint procurement and information technology)

Greater Than the Sum

- What it was:
 - Intention of study was to identify “potential” areas for shared efforts
 - Sample size of 7 largest municipalities
- What it was not:
 - Detailed cost plan
 - Staffing model
 - Finance model

Greater Than the Sum – Summary

FACTOR	FIRE	DISPATCH	POLICE	PUBLIC WORKS
High cost of new technology				
Pending retirements/organizational changes				
Cost inefficiency/redundancies				
Potential for service enhancements				
Single municipality providing service beneficial to the larger region				
High capital replacement costs				

Conclusion

While this analysis involves seven Jefferson County municipalities, others share similar challenges and may benefit from inclusion in any activities pursued.

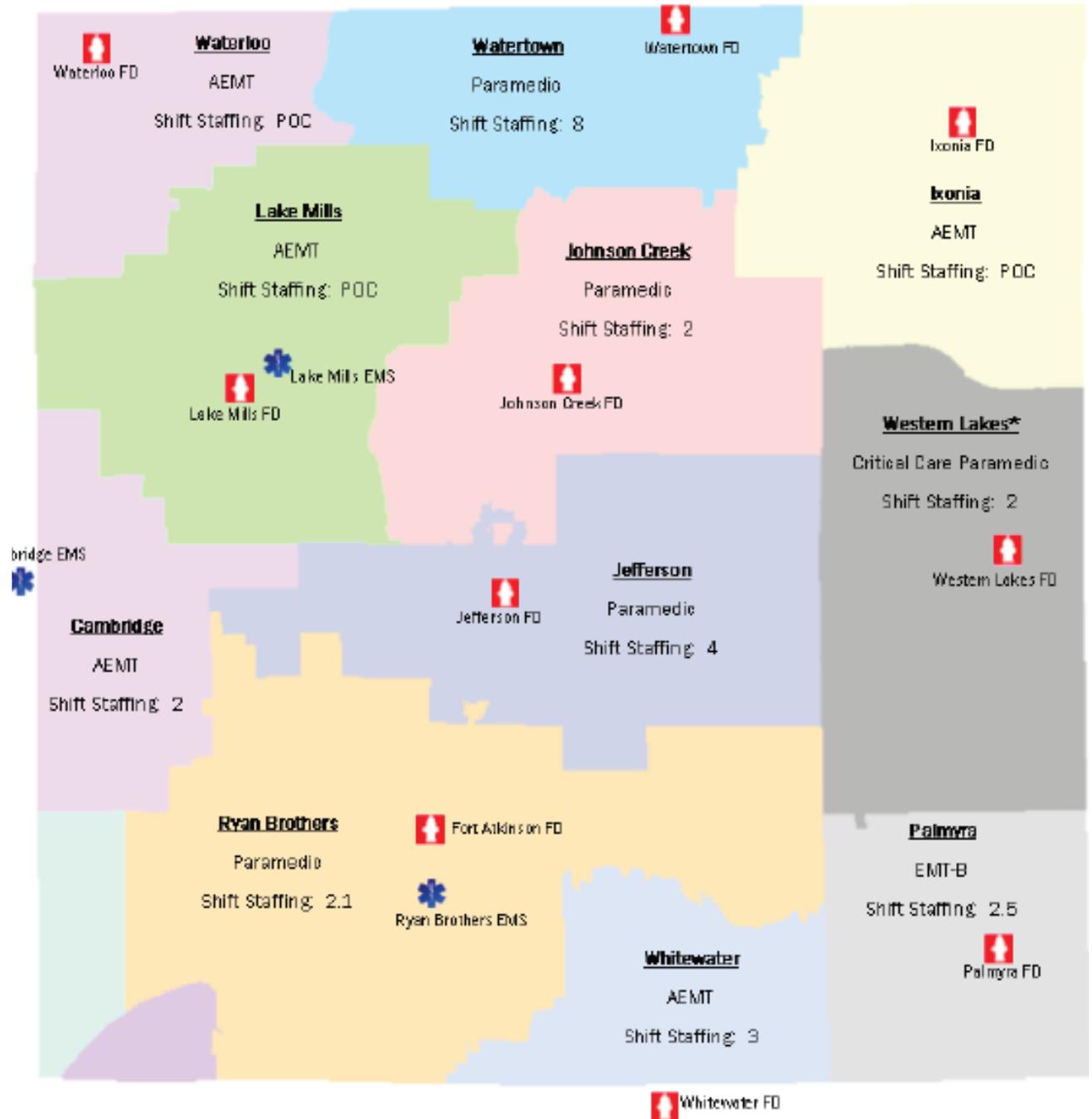
Fire, dispatch, police, and public works all involve core services that are relatively consistent across municipalities and do not logically end at municipal borders.

Each requires staff with special levels of training and knowledge that often are in short supply in a tight labor market, as well as high capital replacement costs.

Fire and dispatch had the highest scores and should be considered for further detailed analysis; shared services possibilities cited for police and public works may be achievable through immediate intergovernmental discussion & negotiation.

Taking the Pulse

- Call for service
- Provider type
- Reviewed EMS provider profile
- Medical direction
- Dispatch Center
- Response times
- Future Challenges



Taking the Pulse – Potential Recommendations for Greater Collaborations

- Small Scale Collaboration
 - Regional meetings of EMS Provider (already occurring- unified Fire/EMS)
 - Joint Training
 - Joint Legislative Advocacy
 - Consolidated dispatch
 - (NG 911, new center, etc....)
 - Joint quality/Case management
- Sub-Regional Collaboration
- County Supported System

County EMS Involvement Examples – per study - 2020

- **Milwaukee County** - Admin oversight and coordination; service provision left to municipal fire and ambulance providers. Coordination includes continuing education, protocols, medical direction and coordination of EMS Council. Provides supplemental funding to supplement local budgets.
- **Portage County** – Both local and county EMS response, with EMS, medical direction and dispatch coordination at county level. Grant funding for local departments. County also has an EMS service that works large events and provides supplemental service when local resources are impacted.
- **Waushera County** – Both local and county EMS response; County as a fleet of 6 ambulance and one quick response at four stations. County is supported by local from eight departments with mixed models for compensation. This is a department of the county with oversight by supervisors and direct report to Administrator.
- **Door County** – County provides reimbursement to local communities for responders at a set rate, covers state mandated refresher training, protocols and cost of medical director. System overseen by county board committee.
- **Fond du Lac County** – County provides broad oversight and funding. County is split into five ambulance districts. The county allocates about \$330,000 based on a formulas. County has an advisory committee that oversees jurisdictional changes. Also are contracts that look at service level and equipment check. County provides EMS dispatch for all except Ripon.

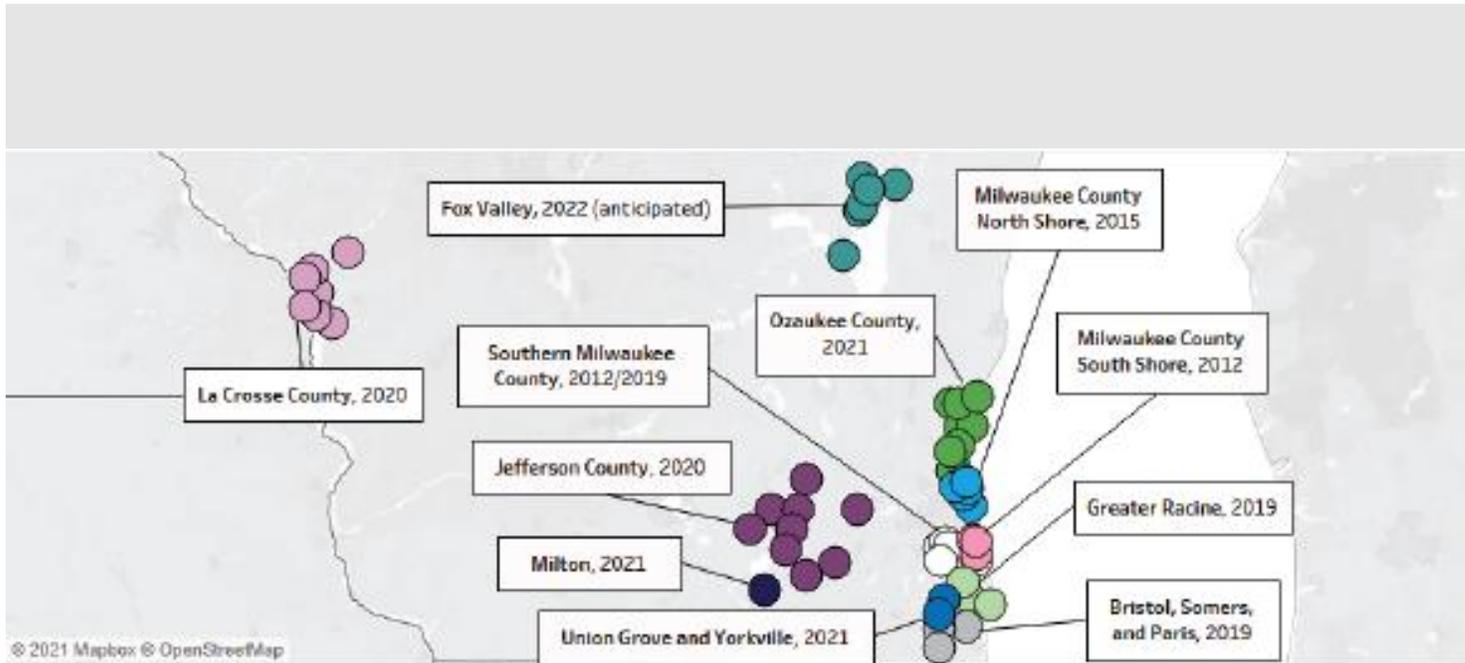
What has changed? (general)

- Mutual Aid Box Alarm Systems (MABAS)
 - Greater use in general
 - Developed a model for “working stills” notice with dispatch to accelerate call outs; majority of jurisdiction working together
- Deficit of staff – more departments can not provide coverage (impacts adjoining jurisdictions); pressure points on providing services to jurisdiction; beyond MABAS
- Greater impacts of medical transports from licensed facilities versus 911 calls
- Initial focus on efforts EMS; fire concerns become a factor as well

What has changed? (model)

- 799 intercept moved from Fort Healthcare to Jefferson
- Fort Atkinson moved from contract EMS to inhouse combined EMS with Fire; approved referendum for FT staff
- Lake Mills EMS will cease operations in mid-2023; appears to move on a temp basis for contracted services
- Western Lakes – went to referendum
- Other considerations – referendum; licensing level, etc...

“Ecosystem” Factors



IN NEED OF RESUSCITATION?
Wisconsin's fire and EMS agencies face looming challenges

Sept 2021 – (summary of issue – 30 studies over 8 years)

- Model Change – movement from traditional method of volunteer, paid on call and paid on premise to a hybrid to professional department; how does service get provided from a business operations
- Our county/region is not alone; many communities are looking at staffing challenges and options
 - Example – recent department indicated SE region has 10-20 FTE openings; now expecting over 100 in 2023. (TMJ 4 report – Jan 5 2023)
 - Other counties going through similar conversations
- Money may not be enough; “supply and demand”
- Training/License Requirements

Fire Fighter Training

- Entry Level – 60 hour course
- Fire Fighter I Certification Course – 96 hour course
- Hazardous Material Operations level – 20 hour course
- Fire Fighter II – 42 Hour Course
- Fire Apparatus Driver/Operator- Pumper – 66 hour course
- Fire Apparatus Driver/Operator – Aerial – 36 hour course
- Fire Inspector – 60 course
- Fire Officer I – 40 hour course

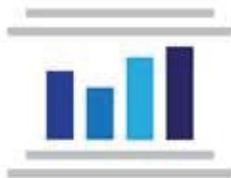
Potential Options – County Guidance

- Facilitation; legal reviews; fiscal analysis; pending legislative action/State Budget
- Continue investment in dispatch – note NG 911 will specifically require enhancement for EMD; other options for mutual aid enhancements
- Use of property tax exemption for Countywide EMS
 - Assistance in uniformity of costs
 - Some contractual parameters with funding formula
 - Does not assist with Fire
- Options to assist in centralization of certain functions
- Ongoing formal advocacy at state and local level
- Work for a uniform “per-capita” rate; ensures uniformed model that assist in budget planning and predictability for service provider and those receiving services
- Aspects to other first responder services – fire
- Recognize contributions of those who served

GREATER THAN THE SUM



*A Scan of Municipal Service Sharing
Opportunities in Jefferson County*



WISCONSIN

POLICY FORUM

ABOUT THE WISCONSIN POLICY FORUM

The Wisconsin Policy Forum was created on January 1, 2018, by the merger of the Milwaukee-based Public Policy Forum and the Madison-based Wisconsin Taxpayers Alliance. Throughout their lengthy histories, both organizations engaged in nonpartisan, independent research and civic education on fiscal and policy issues affecting state and local governments and school districts in Wisconsin. WPF is committed to those same activities and that spirit of nonpartisanship.

PREFACE AND ACKNOWLEDGMENTS

This report was undertaken to provide citizens and policymakers in Jefferson County with information on municipal and county service areas where enhanced service sharing or consolidation might be pursued. The intent was to lay out fiscal and programmatic data – with a specific focus on the larger municipalities of Watertown, Whitewater, Fort Atkinson, Jefferson, Lake Mills, Waterloo, and Johnson Creek – that would allow policymakers to determine whether further research or action is warranted. The purpose was not to make recommendations on the future of those services in the respective communities.

Report authors would like to thank police, fire, dispatch, and public works officials – as well as administrators – for their assistance in providing information, and for patiently answering our questions.

In addition, we wish to acknowledge and thank Jefferson County, which provided partial underwriting for this research and hosted numerous meetings throughout the project.

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INTRODUCTION

In Wisconsin and across the nation, local governments are increasingly challenged by enhanced service demands and expectations produced by new technologies, aging populations, and economic growth. Yet, at the same time, many face service constraints resulting from stagnant state and federal aids, limits on local taxation, and human resources limitations.

Municipalities in Jefferson County are not immune from these challenges. In fact, municipal officials have expressed concern over the sufficiency of resources to hire new employees, the availability of workers, and the hindrance that geographic distance between communities creates in their ability to offer timely support to one another. These growing issues have generated interest among local governments in considering possibilities for enhanced collaboration in the provision of key municipal services.

In response, leaders from Jefferson County commissioned the Wisconsin Policy Forum to conduct a high-level scan of municipal services in the county. This report describes the results of our analysis, which is intended to convey to policymakers those service areas that hold the greatest potential for service sharing or consolidation.

We limit our analysis to the seven largest municipalities in Jefferson County by population – Watertown, Whitewater, Fort Atkinson, Jefferson, Lake Mills, Waterloo, and Johnson Creek – as well as Jefferson County services where relevant. This does not reflect a lack of interest on the part of the county or the Forum in considering service sharing opportunities that may involve the smaller municipalities, but simply reflects the broad nature of this initial foray into service sharing possibilities and our desire to maintain a manageable project scope.

Similarly, this analysis is limited to major municipal service areas that were determined in consultation with administrators from the seven municipalities and the county. Our omission of other service areas – including parks and recreation, municipal courts, solid waste, sewer utilities, and back office services (e.g. human resources, benefits administration, accounting, joint procurement and information technology) – does not mean that possibilities for enhanced service sharing do not exist for those areas. Rather, it reflects either limited interest in considering such service areas by the municipal administrators, or our view that pursuit of such possibilities likely could occur without the assistance of a third-party entity to provide both initial and detailed analysis.

Data and Methodology

In conducting the review, we used the most recent data available. For example, population data was for 2017 and comes from the U.S. Census Bureau American Community Survey database. Unless otherwise noted, fiscal data in tables throughout this report come from the municipalities or their published budget documents. **Table 1** provides basic population and budget data for the communities.



Table 1: Population and 2019 general fund budgeted expenditures

Municipality	Population	% of Total	2019 General Fund Budget	% of Total
Watertown	23,730	33%	\$ 17,019,051	32%
Whitewater	14,762	21%	\$ 9,629,179	18%
Fort Atkinson	12,429	18%	\$ 9,229,407	18%
Jefferson	7,975	11%	\$ 6,017,025	11%
Lake Mills	5,816	8%	\$ 5,279,800	10%
Waterloo*	3,345	5%	\$ 2,370,503	5%
Johnson Creek*	2,931	4%	\$ 2,908,873	6%
Total	70,988	100%	\$52,453,838	100%

Sources: U.S. Census Bureau American Community Survey and 2019 budget documents

*Waterloo and Johnson Creek are adjusted to include Fire/EMS, which are accounted for in separate funds. This allows for a more even comparison, as the other municipalities include Fire/EMS in their general fund budgets.

Service areas considered in the review include: property assessments, fire, inspections, dispatch, police, and public works. Emergency Medical Services are not covered in this report but are the subject of a separate service sharing analysis that was launched late in 2019. For each of the covered services, the report includes basic data on budget, cost per capita, and full-time equivalent workers (FTEs), as well as a discussion of the services offered and identification of potential collaboration or service sharing opportunities.

It is important to note that in collecting expenditure information from budget documents, we did not have the capacity to attempt to adjust for differences in budgeting methodology. Such differences may include distinctions in the way certain administrative overhead, fringe benefit, or legacy costs are allocated to departments. Consequently, while we cite total and per capita expenditure amounts for the various service areas, those should be used for context and not for comparative conclusions.

In evaluating service sharing potential, we are most interested in whether the service area lends itself to “comprehensive” service sharing or consolidation among municipalities in Jefferson County. In other words, while we may cite potential for sharing among a smaller grouping of municipalities – or potential for relatively simple forms of collaboration like joint contracting – our evaluation is designed to determine the potential for more enhanced forms of sharing or consolidation among the government services studied.



We consider the following six factors as our criteria for determining service sharing potential and whether to recommend a functional area for in-depth analysis:

1. Is demand for **new** technology/equipment or **new** state/federal regulations causing costs to become unaffordable for the municipality?
2. Are key staff scheduled for retirement or are there other organizational developments suggesting an opportunity for new service models?
3. Are there areas of clear cost inefficiency or redundancies among neighboring municipalities that suggest potential for cost savings through shared services?
4. Could service sharing improve the level, type, or mix of services?
5. Is one municipality providing a service that benefits the larger region?
6. Are capital **replacement** needs intensive?

The purpose of this study is to identify collaborative opportunities among communities in Jefferson County. It is important to note that while this research project conducts a broad review of municipal services in the region, it is not designed to provide analysis of the feasibility and/or implementation of specific service sharing and consolidation options. Instead, we hope our findings will be used by the leaders of those communities to determine where and how to invest in more detailed analysis.

Finally, this study does not evaluate whether a service should be privatized or whether existing contracts should be renegotiated. Communities sometimes seek fiscal savings by contracting for or privatizing services that previously had been provided by public employees. While it is often taken as a given that a private contractor can perform a job at less cost than a public employee, the question of outsourcing is much more complicated and must consider other factors beyond cost.¹ Such analysis is beyond the scope of this report.

Findings

Previous service sharing studies conducted by the Wisconsin Policy Forum have found that demographic, economic, and geographic differences between municipalities become apparent when comparing public services and can impact the potential for collaboration. For example, density and geography play a large role in some municipal services, such as waste collection and fire protection, and communities that differ in those characteristics may not be suitable collaborators. Similarly, social and economic characteristics can affect service levels and expectations in different communities and may make the notion of sharing or consolidation more challenging.

¹ Nichols, Russell, "The Pros and Cons of Privatizing Government," *Governing*, December 2010. Found at <http://www.governing.com/topics/mgmt/pros-cons-privatizing-government-functions.html>.



Several such differences were noted in our analysis of the seven largest municipalities in Jefferson County. Nevertheless, based on our review, we give a “thumbs up” to two municipal service areas with high potential for comprehensive service sharing or consolidation. We believe each of these merits further analysis with an eye toward developing detailed options and implementation plans.

- Fire
- Dispatch

In addition, while not meriting consideration of full scale functional consolidation, we give a positive rating to two service areas that offer significant potential for service sharing opportunities that would reduce cost, improve service, or a combination of the two. Further research and facilitation could ensure movement on service sharing activities for various components of these two functions:

- Police
- Public Works



ASSESSMENT

Municipalities are required to assess individual properties within their boundaries for the purposes of property tax collection. In terms of frequency, municipalities are not required to update assessments annually, but each year without a revaluation allows assessed values to potentially deviate farther from fair market value.

The Wisconsin Department of Revenue (DOR) conducts its own valuation process to determine *equalized* values, or the value of property in each taxing entity by class of property. Equalized values are updated annually, and the ratio of assessed value to equalized value gives an indication of the accuracy of local property assessments. State law requires that the municipality's assessments must be within 10% of the state's equalized values.

Service Levels

The level of service provided by the municipal assessor – or the contractor selected by the municipality to conduct assessments – is predicated on the number of taxable land parcels that must be assessed and by the frequency of revaluations. Generally, assessors in Jefferson County make updates to property records on an annual basis for activities like new construction, remodeling, and demolitions. This explains the infrequent nature of the full revaluation policy for some of the municipalities listed in **Table 2**; frequent full revaluations (which are costly and more time consuming) generally are not needed since assessments are kept fairly close to the state's equalized value calculations through the annual updates.

All of the municipalities use outside contractors to conduct their assessments; most use Associate Appraisal, Inc., or Accurate Appraisal, Inc. In most cases, the contractor is available by phone as needed but has no set office hours at the municipality. An exception is Lake Mills, where the assessment contractor is present for two hours, once per week. The contractors are responsible solely for assessment-related activities and do not perform clerical work (although they may send out assessment notices).

Table 2: Taxable land parcels and full revaluation policy by municipality

Assessment Office	Taxable Land Parcels	Full Revaluation
Watertown	5,012	As needed; last done in 2012
Whitewater	2,983	Annually
Fort Atkinson	4,602	Every 10 years; last done in 2017
Jefferson	2,667	As needed; last done in 2003
Lake Mills	2,233	As needed; last done in 2019
Waterloo	1,363	As needed; last done in 2003
Johnson Creek	1,148	As needed; last done in 2019

Source: Wisconsin Department of Revenue



Table 3 provides basic demographic and fiscal data related to assessment services in the seven municipalities. It should be noted that Johnson Creek had a full revaluation in 2019, which accounts for its much higher per capita and per parcel cost when compared with the other municipalities. If the per capita cost in Johnson Creek is adjusted to reflect the planned \$17,125 budget for 2020, which is not a full revaluation year, then the cost drops down to \$6 per capita and \$15 per parcel. Similarly, Lake Mills had a revaluation in 2019; when adjusted to reflect the 2020 budget, the cost drops down to \$3 per capita and \$8 per parcel.

Taking into account the adjusted numbers, Watertown and Whitewater show the highest per parcel costs while also exhibiting the lowest per capita costs. This suggests that these larger communities are

able to enjoy a degree of efficiency that is less available to the smaller municipalities. One city official shared that communities that are large geographically but small in population size may experience higher per capita personnel costs due to the need to staff beyond one assessor to cover the geographic area. This can lead to instances where a second assessor develops market knowledge to provide service but has less than a full workload.

Table 3: 2019 fiscal data for assessment services

Municipality	2019 Budgeted Expenditures	Expenditures Per Capita	Expenditures Per Parcel
Watertown	\$75,225	\$3	\$15
Whitewater	\$38,550	\$3	\$13
Fort Atkinson	\$43,985	\$4	\$10
Jefferson	\$27,000	\$3	\$10
Lake Mills	\$29,600	\$5	\$13
Waterloo	\$10,770	\$3	\$8
Johnson Creek	\$51,982	\$18	\$45

Expenditure Trends

Table 4 provides expenditure trend data for assessment services for the seven municipalities from 2017 to 2019. Again, large annual swings from year to year may be attributed to whether a revaluation occurred that year for the entire tax base. Some municipalities spread the cost of a full revaluation over multiple years, as was the case for Johnson Creek, which shows higher spending amounts for 2018 and 2019. Similarly, Fort Atkinson had a full revaluation in 2017 and is spreading the cost over six years, with the bulk of the payment made in 2017.



Table 4: Assessment services expenditure trends 2017 – 2019

Assessment Office	2017 Actual	2018 Actual	2019 Budget	% Change
Watertown	\$70,152	\$74,070	\$75,225	7%
Whitewater	\$56,166	\$38,550	\$38,550	-31%
Fort Atkinson	\$98,128	\$45,815	\$43,985	-55%
Jefferson	\$27,926	\$26,944	\$27,000	-3%
Lake Mills	\$25,549	\$14,945	\$29,600	16%
Waterloo	\$10,759	\$10,728	\$10,770	0%
Johnson Creek	\$11,152	\$45,216	\$51,892	365%
Total	\$299,832	\$256,268	\$277,022	-8%

Service Sharing Assessment

Property assessment services are not currently shared by any of the seven municipalities. Using our six criteria, **Table 5** summarizes our view of service sharing potential for those services.

Table 5: Property assessment service sharing potential

FACTOR	RATING
High cost of new technology	
Pending retirements/organizational changes	
Cost inefficiency/redundancies	
Potential for service enhancements	
Single municipality providing service beneficial to the larger region	
High capital replacement costs	

Property assessment is a function that is not staff intensive and is not highly dependent on technology or equipment. Consequently, our evaluation indicates that property assessment services show limited potential to benefit from comprehensive or enhanced service sharing among the seven communities. However, we do give a “thumbs up” for the cost inefficiency/redundancy criterion:

Cost inefficiency/redundancies: The seven municipalities all contract for assessment services. While per capita costs are difficult to compare given variability in the scheduling of revaluations, it appears there may be significant differences in contract costs. It is possible that a combined procurement process to secure a single vendor to provide assessment services across the seven municipalities may reduce combined contract costs and individual costs for at least some of the municipalities. Using a single contractor might also produce better consistency in property assessment methodologies and timing across the communities, which could produce greater transparency and understanding for county residents and businesses.



BUILDING INSPECTION

Building inspections are a municipal service that ensures new construction and remodeling projects conform to state and municipal building codes. A strong inspection program also ensures structures within each municipality meet basic safety standards and are suitable for occupancy. Building inspection is required of all property types: industrial, commercial, and residential.

The inspection departments or contractors of each municipality also provide some level of code compliance services for existing properties. Code compliance is oriented to ensuring that existing structures meet building, electrical, and fire codes. Code compliance services also can address issues that detract from neighborhood value, such as broken windows, overgrown grass, etc.

Building inspection services are not easily comparable across municipalities for several reasons. For example, building inspection and code compliance services relate to the age, condition, and type of housing (single family versus multi-family), which can differ significantly by community. The mix of residential, commercial, industrial, and agricultural areas in a municipality also impacts the scope and nature of inspection services.

Just as important, building inspection workload is correlated to the amount of new development. Rates of new development vary between municipalities and also can vary from year to year. Because of this variability, a simple comparison of per capita expenditures can be misleading.

The primary workload statistic for building inspection services is the number of permits issued, which we show in **Table 6** for 2018. Permit data are divided into permits for new structures and for electrical and plumbing work. It should be noted that these are very general indicators of workload or service levels, since a permit for a large residential or commercial project entails much more in the way of inspections than a permit to install a pool or make plumbing improvements. In addition, building permit data does not reflect time spent on code compliance.

Table 6: Building permits and electrical/plumbing permits, 2018

Municipality	Building Permits	Electrical Permits	Plumbing Permits
Watertown	305	348	177
Whitewater	107	93	57
Fort Atkinson	157	174	86
Jefferson	109	69	52
Lake Mills	120	100	66
Waterloo	69	55	25
Johnson Creek	71	59	62
Total	938	898	525



Table 7 provides basic fiscal and staffing data for building inspection services among the Jefferson County municipalities. Watertown and Fort Atkinson have internal building inspection staff, while Jefferson, Lake Mills, Waterloo, and Johnson Creek use contracted services. Whitewater uses a contracted inspector but also has an in-house code enforcement inspector. Lake Mills also has a part-time building inspector and zoning administrator at 0.15 FTE.

As shown in **Table 7**, building inspection expenditures vary widely among the municipalities. Such variances may be attributed to factors like the number and types of permits covered by building inspectors in the different communities and whether inspection services are provided by contract or in-house staff. There also may be differences in the extent to which municipalities cover the cost of inspections through inspection fees or supplement such fees with property tax revenues. Consequently, the per capita assessment shown here should be considered as context but does not provide the full picture of the impact on taxpayers.

Table 7: Fiscal and staffing data for building inspection services

Building Inspection	2019 Budgeted Expenditures	Expenditure per Capita	FTE*	PT Positions
Watertown**	\$262,040	\$11	2	2
Whitewater	\$70,000	\$5	contract	n/a
Fort Atkinson	\$106,365	\$9	1	0
Jefferson	\$70,000	\$9	contract	n/a
Lake Mills	\$75,700	\$13	contract	n/a
Waterloo	\$11,000	\$3	contract	n/a
Johnson Creek	\$33,750	\$12	contract	n/a
Total	\$628,855	\$9	n/a	n/a

*FTE amounts do not include contract inspection services because data was not available and varies by year/project.

** Watertown's FTEs reflect one full-time building inspector and one full-time building administrator. The city also employs a couple of part-time inspectors.

Across the board, municipalities reported that most inspector time is devoted to new development. Code compliance and coverage of city- or village- owned properties are also generally consistent. However, there is some variance in the duties of inspectors that also may impact comparison of inspection service costs. For example, in the city of Jefferson, the contractors are part of the planning commission and help with the regulatory committee. At Lake Mills, the contracted inspector issues permits for city-owned properties, but in-house architects and engineers perform the inspections. Whitewater has a planner and code enforcement inspector, which relieves the contractor from performing that work.

Given that new construction has a significant impact on building inspection service levels and expenditures, **Table 8** shows net new construction trends from 2017-2019. Johnson Creek had the highest average growth in new construction over that time frame, at 2.06%, while Waterloo exhibited



the lowest at 0.69%. The other municipalities ranged from 0.85% to 1.31%. Communities with higher growth are likely to experience a greater workload for building inspectors than those with slower growth.

Table 8: Net new construction trends, 2017-19

Municipality	2017	2018	2019	Average
Watertown*	0.80%	1.10%	1.20%	1.03%
Whitewater*	1.11%	1.02%	1.33%	1.15%
Fort Atkinson	0.84%	0.60%	1.37%	0.94%
Jefferson	1.07%	0.81%	0.68%	0.85%
Lake Mills	1.88%	0.79%	1.26%	1.31%
Waterloo	0.49%	0.28%	1.30%	0.69%
Johnson Creek	2.63%	1.76%	1.78%	2.06%

Source: WI Department of Revenue, Net New Construction Reports

*Watertown and Whitewater numbers reflect the total net new construction across more than one county.

Expenditure Trends

Table 9 shows inspection expenditure trends from 2017-2019. The contracts are generally set up on a multi-year basis per an agreed-upon cost and do not account for changes in permit applications or growth in net new construction, which can vary year to year. Use of in-house inspectors similarly protects the municipalities from wide annual expenditure swings. There are exceptions, however. Waterloo's actual costs in 2018 were \$11,500 higher than budgeted due to a number of development projects in the area. Whitewater shows the most significant change, with a 47% decrease in inspection services expenditures caused by the completion of a large school project in 2017.

Table 9: Expenditure trends 2017 - 2019

Municipality	2017 Actual	2018 Actual	2019 Budget	% Change
Watertown	\$237,583	\$253,775	\$262,040	10%
Whitewater	\$133,006	\$57,931	\$70,000	-47%
Fort Atkinson	\$104,224	\$107,342	\$106,365	2%
Jefferson	\$69,999	\$69,999	\$70,000	0%
Lake Mills	\$70,540	\$74,700	\$75,700	7%
Waterloo	\$14,000	\$22,497	\$11,000	-21%
Johnson Creek	\$37,869	\$44,010	\$33,750	-11%
Total	\$667,221	\$511,545	\$628,855	-6%



Service Sharing Assessment

Using our six-factor assessment tool, **Table 10** identifies our assessment of service sharing potential for inspections.

Table 10: Inspections service sharing potential

FACTOR	RATING
High cost of new technology	
Pending retirements/organizational changes	
Cost inefficiency/redundancies	
Potential for service enhancements	
Single municipality providing service beneficial to the larger region	
High capital replacement costs	

Inspection services appear to have limited potential for comprehensive service sharing or consolidation for most of our listed indicators, and their relatively low cost and staffing levels (both in-house and contract) may make this a less appealing service area for which to attempt service sharing strategies in the near term. Nevertheless, we do assign a “thumbs up” to cost inefficiency/redundancies because there may be cost-saving opportunities in a joint approach to securing contracted inspection services, which might also include a shift to contracting with a municipal service provider instead of a private sector entity.

Cost inefficiency/redundancies: While per capita costs are not a perfect measure of comparison given variability in the work performed by contracted inspectors, we do find that there may be significant differences in contract costs. A combined procurement process may lower costs for some of the municipalities, without causing a change in service levels. It is possible that differing code ordinances across municipalities might hinder cooperation in this regard, although it is also worth noting that Whitewater, Jefferson, and Lake Mills all hold separate contracts with the same contractor, and that contractor is able to accommodate the differing ordinances.

Alternatively, the municipalities may wish to consider whether Watertown’s larger staff could handle increased responsibility on a contract or fee-for-service basis for inspection services in the surrounding municipalities. This could produce a “win-win” by providing a new source of revenue for Watertown while also possibly lowering contractual costs for the other municipalities. Again, we cannot determine the extent to which Watertown could accommodate a larger workload and whether differing building codes across municipalities would pose a challenge here, as well.



DISPATCH SERVICES

Public safety dispatch services in Jefferson County are provided at both the municipal and county level, with some municipalities relying exclusively on the county, and some larger communities maintaining their own dispatch centers (though some of those also receive some level of support from the county). With regard to the seven municipalities that are the focus of this analysis, Watertown, Whitewater, Fort Atkinson, and Jefferson all show that they spend resources on some form of public safety dispatch services in their budget documents. Lake Mills, Johnson Creek, and Waterloo have no dispatch budget allocation and rely solely on the Jefferson County dispatch center for emergency dispatch services, though all three have clerical staff who may occasionally perform non-emergency dispatch services.

Fort Atkinson, Watertown, Whitewater, and Jefferson County have dispatch centers with dedicated dispatch staff that take emergency calls for both police and fire/EMS. The city of Jefferson also has a dispatch center, though that center only handles police calls; the county dispatches for all emergency fire/EMS calls. The county receives all 911 cell phone calls dialed from within the county and provides primary coverage to 19 municipalities for both police and fire/EMS activities.

Table 11 shows budgeted and per capita costs for dispatch services for the entities that maintain their own dispatch centers. Of those municipalities, Jefferson has the lowest per capita cost at \$23, which is likely due to the fact that its dispatch center is not a full-time operation (calls are dispatched by the county when the center is closed). Whitewater sits at the other end of the spectrum at \$35 per capita. Jefferson County dispatch and communications houses 10 FTEs and several part-time staff with a per capita cost of \$12.

Table 11: Demographic and fiscal data for dispatch services

Municipality	2019 Budgeted Expenditures	Expenditures per Capita	FTEs
Watertown	\$666,519	\$28	9
Whitewater	\$516,814	\$35	7.5
Fort Atkinson	\$321,368	\$26	5
Jefferson*	\$186,054	\$23	3.5
Jefferson County**	\$980,426	\$12	10

*Benefits information for the three full-time, hourly employees at the city of Jefferson were not easily available. We estimated benefits at 32% of salaries to allow for a closer comparison with the other municipalities in this table.

**Jefferson County includes one supervisor and 9 full-time dispatchers. Four part-time staff are not included in the 10 FTE count. Per capita costs include the full county population, given that the costs are primarily covered by the property tax levy and therefore shared by all county taxpayers regardless of whether their municipality operates a dispatch center.

In addition to being the sole dispatch provider to 19 municipalities within Jefferson County and receiving all 911 cell phone calls from within the county (as noted above), the Jefferson County dispatch operation provides service to the Sheriff’s Office, the Jefferson County Drug Task Force, and the Medical Examiner. It is funded primarily through general property taxes and occasional support from operating reserves.



This is a fiscally beneficial arrangement for municipalities that partially or fully rely on the county’s dispatch services. For example, Jefferson operates its own dispatch center during the day and switches to the county at night.² For context, many other county dispatch offices (like Racine County Joint Dispatch) are funded both through municipal contributions and county property taxes; Jefferson County does not require municipal financial assistance and instead uses county resources (primarily property tax levy) to cover the full cost.

In recent years, most dispatch centers in Jefferson County have had little to no capital outlay costs. When capital spending is required, the costs can be high, but on a one-time basis. For instance, Watertown’s 2019 capital budget includes \$110,000 for a program upgrade for Wisconsin Incident-Based Reporting System (WIBRS) compliance and Whitewater budgeted over \$110,000 in 2018 to install a P25 radio system. Jefferson County has had higher capital expenditures for dispatch than its municipal counterparts (averaging in the \$70,000 range annually).

Service Sharing Assessment

Using the six-factor methodology in **Table 12**, we find that dispatch is an area with high potential for consolidation or service sharing. Specifically, we give “thumbs up” with regard to the opportunity to enhance services, address cost inefficiency and redundancies, and reduce high capital replacement and new technology costs.

Table 12: Dispatch service sharing potential

FACTOR	RATING
High cost of new technology	
Pending retirements/organizational changes	
Cost inefficiency/redundancies	
Potential for service enhancements	
Single municipality providing service beneficial to the larger region	
High capital replacement costs	

Cost inefficiencies/redundancies: While recognizing that municipal governments realize some benefits from maintaining local control over dispatch centers,³ there are some clear inefficiencies in this functional area in Jefferson County due to the presence of a county-wide dispatch system that already offers full or partial service to each municipality through evening, cell phone, or backup dispatch services. Jefferson County residents with local dispatch services pay property taxes to support both the county and their municipal dispatch centers. Given that the four municipalities with dispatch centers spend an average of \$423,000 annually to support them, transfer of their dispatch

² The city of Jefferson and Jefferson County have an arrangement where the county provides dispatch services in lieu of leasing space for a tower.

³ For example, local dispatch offices are able to answer non-emergency questions related to local services.



services to the county or consolidation of dispatch centers among groups of municipalities could offer significant savings.

If all dispatch services were consolidated at the county level, then the county would need to create additional capacity to serve municipalities that currently operate their own dispatch centers. County officials indicate that for this to occur, two or three more dispatch positions would likely be needed, and new arrangements would be required for municipalities whose boundaries fall across two counties. It is possible that Jefferson County may wish to charge for some or all of the added cost it would incur to be the county's main or exclusive dispatch center, but such charges could be considerably lower than the amounts currently paid by municipalities to operate independent dispatch operations.

Alternatively, the existing municipal dispatch centers in Watertown, Whitewater, Fort Atkinson, and Jefferson might explore consolidation among themselves. Due to proximity, consolidation of dispatch operations among Whitewater, Fort Atkinson, and Jefferson might be most logical. It also might be logical for Watertown to retain its own independent dispatch center in light of its larger population and higher fire department call volumes. Also, Watertown currently provides backup to the Jefferson County dispatch center, a factor that might also support maintaining its independent dispatch center. Nevertheless, similar-sized or larger municipalities in Wisconsin have transferred their dispatch functions to a county dispatch center and those factors should not preclude consideration of shifting Watertown's dispatch services to the county or consolidating them with other municipalities.

Finally, while a county-wide consolidated dispatch model likely would offer the most savings, an intermediate alternative that would move toward consolidation could be shifting all calls to the county after a certain time of day as well as times that generally involve overtime pay, which could reduce costs for existing 24/7 municipal dispatch centers in the county.

A possible barrier to pursuit of these options is that dispatch personnel in a number of communities also perform clerical and administrative work. If a consolidated dispatch model is pursued, the work assigned to those positions would still need to be handled at the municipal level, which may require the retention of some positions or the re-assignment of work to other municipal employees. This could reduce cost savings and gains in efficiency.

Potential for service enhancements: There are cases where service inefficiencies occur in Jefferson County for 911 calls made from cell phones. These calls automatically go to the county, regardless of the location in the county from which they originate. How the county dispatches or transfers the call varies by municipality. In the cases of Watertown, Fort Atkinson, and Whitewater, most police, fire, and EMS calls are transferred to the city dispatch center, although the county handles dispatch for calls from rural areas in Watertown and Fort Atkinson. Service response times can be slowed because of the time needed for call processing and transfers.

High capital replacement costs: While none of the municipalities reported imminent capital replacement costs, past service sharing studies conducted by WPF found that dispatch consoles and their equipment can cost upwards of \$200,000 for a larger replacement



project. This represents an area for considerable cost savings in a consolidated dispatch model, as fewer consoles (as well as other equipment) would need to be replaced.

High cost of new technology: Advancements in mobile technology as well as in the software and hardware available to public safety dispatch centers can produce pressure to purchase new equipment on a regular basis. At times, such pressure comes in the form of mandates from the state or federal government. For example, in September, the state of Wisconsin released an RFP for a statewide ESInet and NextGen Core Services system, which will provide the network necessary for implementation of emergency text messaging, video, photos, and enhanced location determination via NextGeneration 911. The timeline and cost to the county and municipalities is unknown (as are the municipalities that would implement the technology). Obviously, if software and equipment purchases required by new technologies or mandates only needed to occur at a single dispatch center or at fewer dispatch centers throughout Jefferson County, then costs could be reduced.



FIRE AND RESCUE SERVICES

Six of the seven municipalities considered in this report provide fire protection⁴ via traditional municipal fire departments. The seventh – Whitewater – has an unusual arrangement under which the fire department (Whitewater Fire Department, Inc.) operates as a distinct entity with its own governing board and provides services under contract to Whitewater and several surrounding communities. This section focuses on the six traditional municipal fire departments but does include consideration of the Whitewater department’s capital program, as the city continues to purchase and own capital equipment used by the department.

Most municipal fire departments also provide some level of emergency medical services (EMS). The most basic form of EMS often is referred to as basic life support, which typically involves personnel trained at the Emergency Medical Responder (EMR) or Emergency Medical Technician (EMT Basic) levels. Higher levels of service include those provided by Advanced Emergency Medical Technicians (Advanced EMTs) or Paramedics.⁵

Those without personnel trained at higher levels often rely on separate EMS departments or regional entities to provide advanced life support services. For those that do provide EMS, some use personnel who are cross-trained in both fire suppression and emergency medical response, while others have EMS-trained responders accompany firefighter first responders on emergency medical calls. The way a department chooses to respond to these various demands affects its staffing, as well as training requirements and cost.

In this section, despite the close connection between fire and EMS, **we focus primarily on potential for enhanced service sharing in the area of fire suppression and related fire services.** County, municipal, and private health care leaders already have agreed that detailed study of enhanced service sharing or consolidation of EMS is warranted and such a study recently was launched independently of this analysis.

Our analysis in this section isolates fire staffing and costs to the greatest extent possible. As **Table 13** shows, Jefferson, Lake Mills, and Fort Atkinson budget fire departments separately from EMS functions; in the case of the latter two, EMS is a contracted service. Watertown, Waterloo, and Johnson Creek have combined fire/EMS budgets, which makes it exceedingly difficult to distinguish fire from EMS expenditures. This fact skews comparison of per capita fire

Table 13: Municipal Fire and EMS budgeting practices

Municipality	Fire Department Budget	EMS Department Budget	Combined Fire/EMS Budgets
Watertown			X
Fort Atkinson	X	Contract	
Jefferson	X	X	
Lake Mills	X	Contract	
Waterloo			X
Johnson Creek			X

⁴ Fire protection includes inspection and prevention as well as fire suppression.

⁵ As EMS providers are trained to higher levels, they increase knowledge and the ability to use more advanced types of equipment and more advanced medical interventions when providing care.



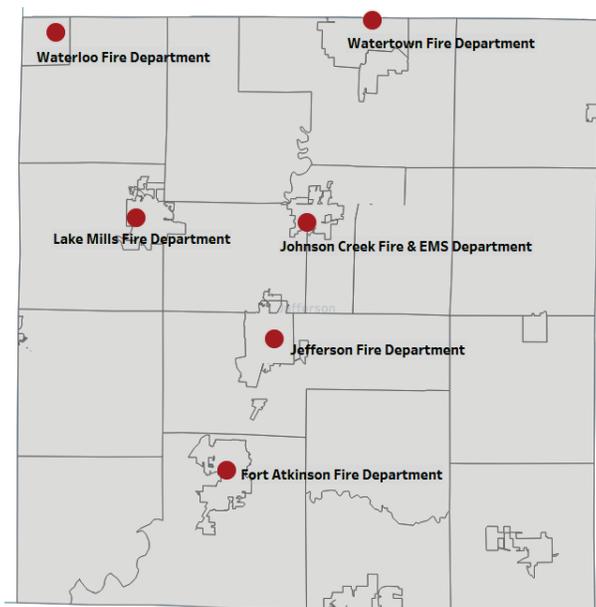
expenditures, making them higher than those for municipalities that segregate spending for the two services.

Table 14 provides basic demographic and budget data for the six municipal fire departments, while **Map 1** shows the location of their fire stations. It is important to note that the table shows only gross operating expenditures and does not reflect capital costs. EMS expenditures were also removed from the budgets where such removal was possible, i.e. for all except Watertown, Waterloo, and Johnson Creek. Finally, per capita expenditures may be somewhat inflated for communities that extend fire department services to neighboring jurisdictions on a contractual basis. The per capita expenditure amounts shown in the table do not factor in the populations of these coverage areas.

Table 14: Fiscal data for fire services

Municipality	2019 Budgeted Expenditures	Expenditures Per Capita
Watertown	\$2,729,263	\$115
Fort Atkinson	\$650,100	\$52
Jefferson	\$247,100	\$31
Lake Mills	\$441,200	\$76
Waterloo	\$479,547	\$143
Johnson Creek	\$580,177	\$198
Total	\$5,127,387	\$91

Map 1: Jefferson County Fire Stations



It is important to note that fire department expenditures are greatly influenced by the department’s staffing model; larger departments tend to make greater (or exclusive) use of career, full-time staff who receive both wages and benefits, while some smaller departments rely heavily on part-time or volunteer staff who are paid when called to respond to an incident but typically receive hourly wages and no benefits. Also, as noted above, departments make varied use of trained paramedics.

The different staffing compositions of the departments – which help explain the wide range in per capita expenditures – are shown in **Table 15**. Notably, Watertown is the only one of the six municipalities that maintains a full-time career level of fire department staffing, while the other five rely mostly on paid-on-call staff (although some have full-time career chiefs or other command staff). The departments also vary in the level of emergency medical training attained by firefighters. Across the municipalities studied, there are 73 firefighters with training at either the EMR, EMT Basic, or Advanced EMT levels, and 31 cross-trained at the paramedic level. Most of the municipalities have anywhere from one to four firefighters cross-trained as paramedics, with Waterloo at zero and Watertown at 22.

All of the departments participate in mutual aid under the Mutual Aid Box Alarm System (MABAS). MABAS allows local fire and rescue departments to share fire and EMS resources when they exhaust their own internal resources during a catastrophic event. The departments in Jefferson County also use MABAS as an enhanced form of mutual aid by calling upon one another to tactically deploy or stage needed resources at an early point, *before* their resources are exhausted. Mutual aid also may occur when a department responds to a call in a neighboring community that does not have the capacity to respond itself because its resources are already committed to another call or it is experiencing other capacity issues.

All of the departments also have the ability to operate on the Jefferson County dispatch channel and radio frequency, though some also use their own. In addition, the communities rely on the Jefferson County dive team (a multi-department dive and rescue team) for underwater recovery of bodies and evidence. The county also houses the Jefferson County Hazardous Materials Team.

Calls for service for each department are shown in **Table 16**. Despite the separate analysis of EMS service sharing noted above, we considered it appropriate to show both fire and EMS calls in the table, as the complete picture is required to get a true sense of fire department activity levels. Each of the departments in this study has only one fire station, and no reserve vehicles are kept at locations outside of their municipalities. Watertown is the only department that reported keeping a reserve vehicle outside of the fire station, though the location is still within city limits.

Table 15: Staffing levels

Fire Departments	Salaried FTEs*	Paid-on-Call Volunteers
Watertown	26	4
Fort Atkinson	4	38
Jefferson	0	47
Lake Mills	2	36
Waterloo	2**	50
Johnson Creek	1	26
Total	35	201

*Includes salaried command staff.

**Command staff in Waterloo work full-time on a stipend.



Also, it should be noted that EMS call numbers are impacted by the manner in which advanced life support services are provided. From 2000 to 2018, Fort HealthCare administered an intercept program in which the health care provider’s licensed paramedics would meet local rescue services on route to the hospital to provide potential life-saving services. That program was transitioned to the city of Jefferson in 2018 and provided services to Jefferson, Lake Mills, Whitewater, Cambridge, Palmyra, and Fort Atkinson (if Ryan Brothers Ambulance was unavailable). However, due to unsustainable costs, the program was discontinued as a round-the-clock service beginning January 1, 2020. Jefferson is pursuing state approval to transition to an “as-available” intercept program and there are other intercepts in adjacent counties that municipalities may also call upon under the appropriate circumstances, such as the Western Lakes intercept.

Table 16: Fire and EMS service levels

Municipality	2018 Calls for Fire Service	2018 Calls for EMS Service	Fire as a % of All Calls
Watertown	644	1,952	25%
Fort Atkinson	345	149*	70%
Jefferson	149	1,642**	8%
Lake Mills	140	contract	100%
Waterloo	90	242	27%
Johnson Creek***	122	356	26%

*This is the number of calls that Fort Atkinson FD performed as backup to contracted Ryan Brothers Ambulance.

**Includes both EMS and paramedic intercept calls.

***Johnson Creek includes 49 calls that were categorized as Fire/EMS and are therefore listed in both columns.

Geographic location and staffing models are two important considerations in determining the potential efficacy of fire department consolidation or service sharing. Jefferson County spans over 500 square miles. Consequently, the ability to achieve efficiencies (including the possible closure of stations) by consolidating service responsibility in one or more of the larger municipal departments may be precluded by the need to achieve reasonable response times across the entire county.

On the staffing side, differences in how the municipalities staff with full time or paid-on-call volunteers (and even differences in what “paid-on-call” means) also impact the potential ability to consolidate or share services. As noted above, Watertown is the only city with a full-time, salaried fire department (at 26 full-time firefighters and four paid-on-call volunteers). An effort to use consolidation as a means of providing a full-time level of service to the entire county – which may be desirable in light of recruitment/retention and service-level challenges associated with the part-time approach – also would likely require those communities currently using part-time staff to pay considerably more for the higher level of service.

Another important fiscal consideration for consolidation is the structure of wages for paid-on-call employees. Both dollar amounts and the manner in which pay is allocated can vary greatly. For example, Waterloo pays volunteers \$18 per fire call, while Lake Mills pays \$10-12 per hour.⁶

⁶ If a Lake Mills firefighter is also a city employee who works 40 or more hours per week within his or her department, then he or she receives time and a half for fire-related calls, training, and activities.



Meanwhile, Jefferson uses a point system that distributes a flat dollar amount from the city (around \$50,000) across the volunteers based on points earned for calls responded to, trainings, and events attended. Service sharing or consolidation likely would require standardization of these approaches.

The separation or integration of fire and EMS functions within a municipality must also be considered. Watertown and Waterloo firefighters also are EMS responders, while the other municipalities have separate EMS operations or contract for the service. While it is beyond the scope of this study to address the fiscal pros and cons of all departments moving to a consolidated fire/EMS structure, it must be noted that any such effort would need to reconcile these difference and may create fiscal “winners and losers” depending on the structure that is selected.

Expenditure Trends

As shown in **Table 17**, combined fire operational expenditures increased 9% from 2017 to 2019. The Fort Atkinson and Jefferson fire departments experienced minimal growth, while Watertown, Lake Mills, and Johnson Creek experienced higher growth. Waterloo saw expenditures decrease by 7%.

Table 17: Fire expenditure trends 2017 – 2019

Municipality	2017 Actual	2018 Actual	2019 Budget	% Change
Watertown*	\$2,450,615	\$2,689,602	\$2,729,263	10%
Fort Atkinson	\$632,413	\$640,172	\$650,100	3%
Jefferson	\$238,225	\$240,050	\$247,100	4%
Lake Mills	\$372,967	\$386,337	\$441,200	15%
Waterloo*	\$516,370	\$480,322	\$479,547	-7%
Johnson Creek*	\$484,274	\$543,841	\$580,177	20%
Total	\$4,694,864	\$4,979,723	\$5,127,387	9%

**Waterloo, Watertown, and Johnson Creek expenditures also include EMS expenditures; the budgets cannot be easily separated.*

As one of the most capital-intensive areas in municipal government, fire services often offer the greatest opportunity for cost reductions through service sharing or consolidation. For example, other communities have found mutually beneficial ways to share certain equipment, which can obviate the need for each jurisdiction to bear the full cost of equipment purchase and maintenance. **Table 18** tracks capital expenditures from 2017-2019 and shows how those expenditures can vary widely from year to year. Notably, nearly all of the departments have capital purchases planned in the next five years that will cost upwards of \$100,000.⁷

⁷ Some examples include a planned \$1.4 million ladder truck purchase in Whitewater; \$335,000 planned in Waterloo to purchase a grass truck, a roof replacement, and other facility improvements; and potentially \$400,000 in Johnson Creek to purchase two trucks and a self-contained breathing apparatus (pending village board approval).



Table 18: Fire capital expenditure trends 2017–2019

Municipality	2017 Actual	2018 Actual	2019 Budget
Watertown	\$46,366	\$323,000	\$ 54,600
Whitewater*	\$346,953	\$0	\$184,625
Fort Atkinson	\$422,650	\$23,000	\$21,500
Jefferson	\$61,039	\$54,129	\$24,500
Lake Mills	\$43,900	\$37,542	\$43,000
Waterloo	\$48,297	\$0	\$45,000
Johnson Creek	\$32,131	\$52,000	\$19,650

**Whitewater is included because it purchases and retains ownership of capital assets despite contracting out operations.*

Service Sharing Assessment

Notwithstanding some of the cautionary points made above, sharing or consolidation of fire and rescue services among multiple municipalities often holds potential for service level improvements and cost efficiencies for a variety of reasons. Those typically include:

- A consolidated department's larger workforce can reduce the need for overtime to cover for injury, illness, and vacation; aid in recruitment and retention by providing greater opportunities for career ladders; and reduce or eliminate the need for paid-on-call staff, who are increasingly difficult to recruit and retain.
- Consolidation or cooperation on a "closest and most appropriate response" framework or a formalized approach for backfilling stations in neighboring jurisdictions during times of high service demand can improve response times and enhance public safety.
- Consolidation or enhanced sharing of training and other specialized functions can produce greater cohesion at the scene of incidents and eliminate redundancy.
- A consolidated department offers opportunity to redeploy the existing workforce based on actual demand, thus possibly eliminating the need to add staff to serve areas that are currently under-resourced.
- Consolidation can reduce the number of leadership positions while enhancing the effectiveness of command by allowing leaders to strategically manage and deploy staff and apparatus on a regional level.
- Potential cost savings can arise through more efficient procurement and possible reduction of apparatus and backup apparatus.

In addition, while fire and rescue services necessitate staffing and equipment levels to meet service demands under intense emergency situations, in some departments there can be "down time" in which such full staffing and equipment are not being fully utilized (though such time can be utilized for tasks such as staff training, maintenance of apparatus and equipment, and fire prevention and community relations activities). Consequently, service sharing often is a natural for this municipal operation.





In Jefferson County, little service sharing among the departments currently exists outside of MABAS, although the way in which the departments use MABAS to tactically deploy needed resources *before* they are exhausted means that supportive relationships exist. Our discussions with the chiefs indicate an openness for some sort of change that would increase staffing availability and improve response times. For example, both Jefferson and Waterloo report a strain on available daytime volunteers, as the potential pool is filled

with individuals who work outside of the area during the day and are available only at night. In fact, one of the chiefs asserts that such strain is faced by each of the volunteer-based fire departments in the region. Chiefs also expressed concern that towns within the county who contract for services with the municipal departments have begun to look for the department that offers the least expensive contract (as opposed to the closest), which comes at the cost of lengthier response times and can also drain the resources of the department responding from further away.

Often, fire department service sharing can take the form of a formal closest- or fastest- unit response approach. Under such an approach, the department with the closest available engine or ambulance would respond to an incident regardless of municipal boundaries; or the department that could mobilize its staff or on-call volunteers most quickly would respond. Given that Watertown is the one department that typically does not have to call in staff to respond to incidents, it would logically be called upon to respond to incidents in other municipalities on a relatively frequent basis under a closest/fastest unit response approach.⁸ Whether that would be palatable to elected officials, or whether it would require a financial reimbursement mechanism, would need to be determined.

Another possible approach would be for some or all of the municipalities with largely part-time staff to disband their operations and contract for service with Watertown. It is possible that those departments could retain ownership of their stations and apparatus and simply have personnel from Watertown staff the stations. This and other detailed operational and cost allocation questions would need to be answered with far more extensive analysis than is possible within the scope of this study.

The same would be true for any discussion of a single consolidated department to serve all of Jefferson County. Several of the benefits cited above might be achieved through such a scenario, but challenging questions would need to be resolved, including those related to personnel policies, incident response protocols, staffing frameworks, governance, and cost allocation.⁹ Several municipalities in this study also obtain financial support from smaller nearby jurisdictions which rely on their fire services; any framework involving a new strategy for consolidation or service sharing of volunteers might complicate those arrangements and reimbursement structures.

⁸ While the Watertown department's career staffing framework may allow it to provide the closest and most appropriate response in many instances, it does need to call in staff (similar to a largely volunteer department) to backfill its station when personnel on regular shifts are out on calls. Consequently, in these few instances, Watertown may not be able to provide a faster response than neighboring departments.

⁹ It should be mentioned that consolidation would require an Insurance Services Office (ISO) audit to determine a rating for the new department. The ISO rating impacts property insurance rates for property owners covered by the department.



Overall, despite the myriad challenges, we see strong potential for enhanced sharing and/or consolidation of fire department services in Jefferson County, as shown in **Table 19**.

Table 19: Fire service sharing potential

FACTOR	RATING
High cost of new technology	
Pending retirements/organizational changes	
Cost inefficiency/redundancies	
Potential for service enhancements	
Single municipality providing service beneficial to the larger region	
High capital replacement costs	

Pending retirements: The fire chief at Johnson Creek is retiring and an interim chief will take his place for the next year. Other fire chiefs may be near retirement, but have not confirmed. As leadership transitions, this is an area that might create an opening for conversations to merge departments.

Cost inefficiency/redundancies: While our analysis did not uncover any glaring areas of inefficiency or redundancy, we did collect anecdotal stories of struggles in some areas to recruit, train, outfit, and retain volunteers. This leads to cost inefficiencies that might be avoided in a consolidated department that has the ability to deploy its workforce to areas that are under-resourced or under new contractual arrangements. A consolidated department would also have greater capacity to efficiently manage staff deployment and respond to vacation and unplanned sick leave.

Potential for service enhancements: A version of closest or fastest unit response may allow for reduced response times and costs. For example, the Watertown Fire Department, which is staffed with full-time firefighters, may be able to respond to certain calls in nearby municipalities faster than the department that serves that municipality, which must wait for volunteers to be called in and arrive on the scene. In addition, since most of the fire departments rely heavily on paid-on-call volunteers, a service sharing or consolidation agreement might level the playing field regarding volunteer wages or stipends. The fact that departments can monitor calls on the same radio frequency and share common dispatch channels and other interoperable frequencies also supports greater cooperation. Finally, agreement to cooperate in non-response areas like training, procurement, and fire prevention might yield both service enhancements and cost efficiencies; such cooperation would necessarily occur with a consolidated department but could also be pursued independently.

High capital replacement costs: Fire engines, ladder trucks, and other emergency vehicles require costly capital investment, and consolidation or service sharing could offer the opportunity to strategically deploy vehicles in a manner that would reduce the overall fleet and eliminate certain replacement costs.



POLICE SERVICES

Each jurisdiction studied in this analysis maintains full service police departments consisting of sworn and civilian support staff. Sworn staff typically includes patrol officers, investigators, detectives, and command staff, up to and including the police chief. The functions of support staff vary, but generally include crime reporting data entry, warrant entries, license suspensions, fee/forfeiture payments, and clerical duties. In some instances, dispatchers provide clerical or administrative support.

It is important to note that based on discussions with leaders from the seven municipalities, we did not consider the possibility of full consolidation of police departments in Jefferson County. Instead, our focus was on specialized law enforcement functions common to each municipality, as well as support services.

Service-Related Data

Tables 20 and 21 demonstrate the volume of and need for law enforcement activity in the region. These tables are not intended for use as a measure of the effectiveness of policing in the area, as such an evaluation is well beyond the scope of our assessment. Rather, arrest and offense data help to highlight the main activity drivers for a police department and its staffing requirements, including patrol, investigations, and the support services provided (generally) by non-sworn civilians. **Table 20** shows arrest activity data for 2018 for violent, property, drug, and society crimes. **Table 21** reports the number of offenses in 2018 for only violent crime and property crime.

Table 20: Arrest activity 2018

	Violent	Property	Drug	Society	Total	Arrests per 1,000 Population
Watertown	55	154	107	353	669	28
Whitewater	15	85	114	645	859	58
Fort Atkinson	22	118	83	289	512	41
Jefferson	11	100	12	144	267	33
Lake Mills	7	14	10	35	66	11
Waterloo	5	9	4	18	36	11
Johnson Creek	5	61	18	138	222	76

Source: Wisconsin Department of Justice Uniform Crime Reporting Data Dashboard. Found at: <https://www.doj.state.wi.us/dles/bjia/ucr-offense-and-arrest-data-agency>.

*Johnson Creek totals were provided by the Johnson Creek Police Department.



Table 21: 2018 offenses known to law enforcement

Municipality	Violent Crime	Property Crime	Crime Rate Per 1,000
Watertown	46	220	11.2
Whitewater	24	104	8.7
Fort Atkinson	25	169	15.6
Jefferson	13	141	19.3
Lake Mills	9	14	4.0
Waterloo	8	24	9.6
Johnson Creek	5	231	80.5

Source: 2017 FBI Uniform Crime Reporting Data. Found at: ucr.fbi.gov/crime-in-the-u.s/

Note: Population data for this table came from the FBI Uniform Crime Reporting data and varies slightly from the Census Data used elsewhere in the report.

*The higher property crime rates in Johnson Creek (as compared to its small population) may be attributed to the large regional shopping center located in that community.

Table 22 provides basic fiscal and staffing data for the seven municipal police departments. As would be expected, municipalities with smaller populations generally have a higher per capita police cost.

Table 22: Fiscal and staffing data for police services

Police Service	2019 Budgeted Expenditures	Expenditure Per Capita	2019 Sworn Staff FTE	2019 PT Sworn Positions*	2019 Civilian Positions
Watertown	\$4,254,078	\$179	40		6
Whitewater	\$2,906,656	\$197	24		4.5
Fort Atkinson	\$2,273,986	\$183	20		1
Jefferson	\$1,692,625	\$212	14	4	6
Lake Mills	\$1,205,400	\$207	10	4	2
Waterloo	\$818,561	\$245	8		1
Johnson Creek	\$422,941	\$144	4.3		1
Total	\$13,574,247	\$191	120.3	8	21.5

*Part-time staff that provide occasional support at events are not included.

*Part-time positions reflect budget capacity and not actual hires.

The Jefferson County Sheriff's Office also provides law enforcement services that benefit the Greater Jefferson region, including hosting police dispatch services, providing mutual aid, and occasional specialized support such as accident reconstruction, drones, K-9s, a SWAT team, and a dive team.



The county also belongs to the Suburban Mutual Assistance Response Teams (SMART), which is the law enforcement equivalent to MABAS.

The Wisconsin State Patrol provides additional support services, such as the State of Wisconsin Air Support Program. Services include fixed wing aircraft, helicopters, and drones with no charge to the municipality using them. The state patrol also provides K9s, a SWAT team, a crash reconstruction specialist, crime scene mapping, and regular backup to the municipal police departments.

Expenditure Trends

Table 23 shows that police department budgets in the region have experienced moderate growth since 2017 with the exception of Jefferson and Waterloo, where funding was relatively flat. In general, and likely consistent with other jurisdictions, 80-90% of the expenditures of each police department are allocated to personnel costs.

Table 23: Police services expenditure trends 2017 – 2019

Police Services	2017 Actual	2018 Actual	2019 Budget	% Change
Watertown	\$3,885,259	\$3,963,237	\$4,254,078	10%
Whitewater	\$2,693,792	\$2,642,581	\$2,906,656	8%
Fort Atkinson	\$2,127,073	\$2,172,373	\$2,273,986	7%
Jefferson	\$1,678,194	\$1,730,824	\$1,692,625	1%
Lake Mills	\$1,127,657	\$1,080,919	\$1,205,400	7%
Waterloo	\$821,236	\$763,928	\$818,561	0%
Johnson Creek	\$383,755	\$427,576	\$422,941	10%
Total	\$12,716,966	\$12,781,438	\$13,574,247	7%

Each department also has capital expenditures that are generally tied to vehicle replacement schedules or communication/radio system maintenance and upgrades. As can be seen in **Table 24**, there is no consistent pattern across the municipalities for capital spending. Some municipalities, such as Jefferson and Fort Atkinson, seem to have consistent spending, while others experience low- and high-spending years. This is likely reflective of different budgeting practices for replacement and maintenance of capital equipment.



Table 24: Police services capital expenditure trends 2017 – 2019

Municipality	2017 Actual	2018 Actual	2019 Budget
Watertown	\$1,623	\$40,000	\$108,700
Whitewater	\$45,167	\$53,842	\$90,000
Fort Atkinson	\$86,575	\$108,835	\$115,690
Jefferson	\$73,516	\$1,160,707*	\$76,000
Lake Mills	\$53,000	\$54,790	\$54,900
Waterloo	\$12,556	\$5,266	\$36,000
Johnson Creek	\$0	\$617	\$45,000

*Includes \$1,079,991 for police facility expenses.

Existing Shared Services

A multi-jurisdictional drug task force, occasional training opportunities, shared use of the county’s firing range, and reliance on state patrol and the county sheriff as backup are among the only existing shared services across law enforcement departments in Jefferson County. While the police department leadership with whom we met expressed concern at the idea of consolidation, several opportunities for enhanced service sharing were identified.

Service Sharing Assessment

Using our six-factor assessment tool, **Table 25** identifies our assessment of service sharing potential for police support functions.

Table 25: Police support function service sharing potential

FACTOR	RATING
High cost of new technology	
Pending retirements/organizational changes	
Cost inefficiency/redundancies	
Potential for service enhancements	
Single municipality providing service beneficial to the larger region	
High capital replacement costs	



This broad scan did not reveal potential for comprehensive service sharing of police functions in Jefferson County. However, there may be opportunities for smaller-scale collaboration that could produce tangible efficiencies or savings. We give an intermediate score or a full “thumbs up” for the following criteria:

Cost inefficiencies/redundancies: Law enforcement leaders from the communities suggest that inefficiencies could be reduced via greater cooperation in a few areas. For example:

- Each department uses several data entry systems, as required by the FBI or the Department of Justice, to report or log offenses, arrests, and police activity. It’s conceivable that this data entry, and perhaps even data analysis at the local level, could be cooperatively performed on a regional basis. At the moment, the departments do not have staff specifically trained in IT skills or crime analysis, but instead assign these duties to staff based on availability. Consolidation of these functions among several municipalities could allow for the hiring of an individual with analytical skills who could better serve the departments collectively. Similarly, sharing technology and staff resources for GIS capabilities holds potential to enhance data collection, analysis, and effective deployment of law enforcement resources.
- Law enforcement leaders also indicated support for collaboration on training. They suggested shared instructors for county-wide training sessions and the potential for jointly purchasing training equipment. They also noted that joint county-wide training sessions would allow for attendance at such sessions throughout the year, which puts less pressure on once-annual training attendance.
- The resources spent on mental health-related calls are a growing challenge for Jefferson County police departments because of increases in these types of calls and the time it takes to serve them. Police chiefs suggested that greater collaboration among departments in responding to these types of calls and securing appropriate non-police community resources to assist them would provide for greater efficiency.

Potential for service enhancements: Police chiefs expressed interest in potential pursuit of a multi-jurisdictional tactical team that could benefit the region. They also indicated that currently, officers who are close to a scene located in another jurisdiction must go through a chain of command process for permission to respond. An operating memorandum of understanding across the departments potentially could eliminate time spent on this chain-of-command process, thereby allowing for faster incident response times. Also, the collaborative data collection and analysis option discussed above could produce enhancements in the quality of law enforcement and crime prevention functions.

High Capital Replacement Costs: While police departments have some capital replacement costs that cannot be shared, such as for squad cars, there is the possibility that departments could work together to jointly research and procure other types of capital equipment and technologies, such as camera equipment or information technology. That, in turn, could lower costs.



PUBLIC WORKS

The seven municipalities in the study each provide public works services that are relatively typical for most communities. The municipalities do not all provide the exact same services through their public works departments, however.

For example, public works departments in Watertown and Fort Atkinson are responsible for local airports. Also, Watertown is the only department we reviewed that provides garbage and recycling services (the other municipalities contract for these functions). In analyzing DPW activities and budgets, we removed costs associated with these unique functions from DPW budgets to provide a more consistent comparison across the communities. Consequently, for the purposes of this report, municipal public works budgets were normalized to include only street/highway maintenance, administration, engineering, and equipment maintenance.

Description of Services

The bulk of the public works activities in each of the municipalities involves maintenance and upkeep of non-highway streets and roads. This includes snow removal, pothole repair, paving and repaving, road construction, and traffic operations. Construction and major repair initiatives generally are coordinated through planning and/or engineering staff who may be municipal employees, private sector employees working under a service contract, or a combination of both as projects require.

In addition, the Jefferson County Highway Department is responsible for maintenance and upkeep on 911 lane-miles of state and county trunk highways, and on additional town highways as requested.

While some counties focus on road maintenance and bid out construction projects, Jefferson County does its own road construction with its own heavy equipment, such as excavators and pavers. Although the state has placed some constraints on the county's capacity to assist communities with road construction in recent years, its highway department is still able to perform some maintenance for cities and some major reconstruction for towns.

Table 26 details miles of roads serviced for each municipal jurisdiction, while **Table 27** shows demographic and fiscal data.

Table 26: Miles of roads serviced

Public Works	Miles of Road Serviced
Watertown	125
Whitewater	50
Fort Atkinson	70
Jefferson	53
Lake Mills	32
Waterloo	18
Johnson Creek	21
Total	369



Table 27: Demographic and fiscal data for public works services

Public Works Department	2019 Budgeted Expenditures	Expenditures Per Capita	Expenditures Per Mile	2018 FTE	2018 Temp
Watertown	\$3,005,570	\$127	\$24,045	34	3-4
Whitewater	\$985,495	\$67	\$19,710	10	14
Fort Atkinson	\$1,569,746	\$126	\$22,425	14	3
Jefferson	\$1,081,350	\$136	\$20,403	7	2
Lake Mills	\$977,800	\$168	\$30,556	7	0
Waterloo	\$472,716	\$141	\$26,262	4	3
Johnson Creek	\$324,928	\$111	\$15,473	4	1-2
Total	\$8,417,605	\$119	\$22,812	80	26

Expenditure Trends

Each municipality funds public works operations through a combination of locally generated resources (e.g. property tax levy) and revenue from the Wisconsin Department of Transportation (DOT).¹⁰ The bulk of DOT aid is from the General Transportation Aid (GTA) program, which uses a formula based on municipal reported transportation expenditures to determine annual allocations. DOT also provides additional, more limited funding to some of these communities through the Connecting Highway Aids program, as well as smaller grant-based opportunities, some of which are distributed through the county.

Table 28 reflects expenditure trends for the region and shows considerable variation in public works operational spending since 2017. At the high end in the area, Jefferson and Fort Atkinson have seen increases of 21% and 10%, respectively; on the other hand, Whitewater has reduced spending by 8%. Overall, combined expenditures have risen just over 4% in the last two years, if not uniformly across the seven communities.

¹⁰ Fort Atkinson has a \$20 motor vehicle registration fee (“wheel tax”) projected to generate \$235,000 in 2019 for its segregated capital Transportation Improvements Fund.



Table 28: Public works operational expenditure trends 2017 – 2019

Public Works	2017 Actual	2018 Actual	2019 Budget	% Change
Watertown	\$2,988,140	\$3,060,441	\$3,005,570	0.6%
Whitewater	\$1,066,558	\$972,373	\$985,495	-8%
Fort Atkinson	\$1,424,187	1,560,583	\$1,569,746	10%
Jefferson	\$894,606	\$932,688	\$1,081,350	21%
Lake Mills	\$915,270	\$962,587	\$977,800	7%
Waterloo	\$466,433	\$465,984	\$472,716	1%
Johnson Creek	\$307,792	\$327,136	\$324,928	5.6%
Total	\$8,062,986	\$8,281,792	\$8,417,605	4.4%

Table 29 shows the revenue received by each community through the General Transportation and Connecting Highway aid programs. For 2019, state aid accounts for between a third and two thirds of the public works budgets we studied.

Table 29: State Transportation Aid trends 2017 – 2019*

State Transportation Aids	2017 Actual	2018 Actual	2019 Budget	% of 2019 Expenditures
Watertown	\$ 968,963	\$1,041,110	\$1,029,220	34%
Whitewater	\$ 716,370	\$723,038	\$653,541	66%
Fort Atkinson	\$ 525,818	\$587,154	\$583,000	37%
Jefferson	\$362,359	\$408,385	\$404,325	37%
Lake Mills	\$315,359	\$353,359	\$396,700	41%
Waterloo	\$205,911	\$224,303	\$227,743	48%
Johnson Creek	\$142,894	\$133,685	\$138,646	43%
Total	\$3,237,674	\$3,471,034	\$3,433,175	41%

* Includes General Transportation Aids and Connecting Highway Aids. Source: Wisconsin Dept. of Transportation. Found at <http://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/highway/gta.aspx>



Public works services also require the acquisition and maintenance of a variety of costly equipment. In the Jefferson County municipalities we reviewed, vehicle or equipment purchases are made with general operating funds, monies set aside in segregated capital equipment accounts for future anticipated purchases, and through borrowing by issuing general obligation bonds. Often, such acquisitions are made pursuant to a planned replacement schedule, although unexpected or exigent circumstances may require unplanned purchases.

As shown in **Table 30**, while it is hard to discern a trend in equipment and vehicle costs, this is a cost center of some significance. It should be noted that Jefferson County operates similarly and has its own fleet of equipment and vehicles. As is sometimes the case with neighboring fire departments, it is possible that there is equipment duplication amongst the communities, with some possibly spending resources on seldom-used equipment that may be available for use from a neighboring community.

Table 30: Capital equipment/vehicle purchases 2017-2019

Public Works Equipment/Vehicles	2017 Actual	2018 Actual	2019 Budget	% Change
Watertown	\$168,870	\$162,598	\$148,226	-12%
Whitewater	\$200,806	\$71,922	\$106,500	-47%
Fort Atkinson	\$207,810	\$352,572	\$219,000	5%
Jefferson	\$156,184	\$1,663	\$65,000	-58%
Lake Mills	\$197,500	\$220,000	\$237,000	20%
Waterloo	\$144,985	\$22,753	\$145,000	0%
Johnson Creek	\$3,639	\$8,800	\$8,000	120%
Total	\$1,079,794	\$840,308	\$928,726	-14%

Service Sharing Assessment

The Jefferson County communities we considered do not have formal service sharing agreements in place for public works services, but instead meet their individual needs primarily with their own staff, professional services contracts, and equipment. While public works is viewed as a core municipal function that local citizens may not wish to share or relinquish, there nevertheless may be opportunities for these municipalities to enhance service levels through greater collaboration.

For example, one local DPW official mentioned another state's program that fosters DPW resource sharing among communities in the event of an infrastructure-damaging emergency or natural disaster that exhausts their response capabilities. Municipalities pay member dues to participate as a potential service/equipment provider, as well as a beneficiary. This type of intergovernmental



cooperation could be a model for routine, non-emergency service and equipment sharing in Jefferson County.

We are also aware of an arrangement in Monmouth County, New Jersey, under which the county offers its DPW equipment and equipment operators for charge to municipalities that may be seeking specialized services (such as street striping or tree removal) but do not wish to purchase the equipment themselves. While a municipality also could opt to contract for the service with a private sector entity, Monmouth County often is able to offer a better price. The county has established a special web page that municipalities can use to make requests and determine the availability and cost of county equipment and services.

Jefferson and other Wisconsin counties already are moving toward such partnerships, encouraged by state law. Under Wis. Stats. 59.03(2), counties have broad authority to provide many local public works services – such as water, sewers, streets and highways and others – to municipalities within their border by request. Further, Wis. Stats. 66.0301(2) also authorizes counties and local governments to contract with each other for services. For example, Jefferson County currently performs chip sealing and signing in other counties, while Dodge County has a paint line machine that is used by surrounding counties and municipalities. These collaborative efforts provide a base for further cooperative service enhancements between Jefferson County and the communities, should they so choose.

Using our six-factor assessment tool, **Table 31** identifies our assessment of service sharing potential for public works.

Table 31: Public works service sharing potential

FACTOR	RATING
High cost of new technology	
Pending retirements/organizational changes	
Cost inefficiency/redundancies	
Potential for service enhancements	
Single municipality providing service beneficial to the larger region	
High capital replacement costs	

Our review shows some potential for these communities to enhance public works services through greater sharing and collaboration, though it is important to note that the notion of fully consolidating one or more municipal public works departments is not supported by our analysis. We give positive ratings with regard to the following criteria:

Pending retirements/organizational changes: Several of the Jefferson County communities anticipate vacancies in key leadership positions either through retirements or staff moving on to other opportunities. The challenge of replacing this institutional knowledge may allow the municipalities to consider sharing engineers, mechanics, and other key staff in order to limit the cost and operational impact on each DPW.



Cost inefficiency/redundancies: The similarity of public works operations in each community suggests there may be opportunities to gain efficiencies through service sharing in certain areas. For example, although municipal sewer utilities were outside the bounds of this review, one staff member said all communities may benefit by sharing a backup standby staffer should a locality need assistance after hours with overflows, sewer backups, or other emergencies (provided the problem is not a countywide flooding event). Also, if weather trends continue or state rules require more sludge storage in the future, a regional storage or processing agreement might be an idea worth pursuing.

Further, county and municipal DPW officials agree they are currently not making full use of their GIS capabilities to access information and plan work efficiently because they lack staff expertise. While each department may not require full-time GIS staff, they have also had a difficult time contracting for that service and may wish to share a GIS position (or positions) with neighboring jurisdictions, again including municipal sewer utilities.

Potential for service enhancements: As mentioned above, there may be opportunities for the municipalities to consolidate certain specialized DPW skills in one department and to have that department contract those services with other jurisdictions. This could not only address staffing challenges, but also produce improved service in communities that currently lack certain expertise. For example, some DPWs might have highly-skilled mechanics, while others might have staff with strong skills in engineering, construction, road design, water main replacement, etc. Each municipality could identify particular areas of expertise and pool and leverage that expertise for their mutual benefit.

High capital replacement costs: The high value of DPW equipment also may present service sharing opportunities that could lower costs, either through joint purchasing, sharing specialized pieces of equipment, or more efficient fleet management generally, such as storage of backup equipment at the county level in the event of a mechanical breakdown. To be sure, not every vehicle can be shared; snow usually needs to be plowed in multiple jurisdictions at the same time, for example, which would preclude the sharing of snow plow equipment. However, the departments did identify machinery that could possibly be shared, including: brine makers (the county currently uses its brine maker to sell brine to some municipalities), leaf suckers, street sweepers (if they could be transported), cherry-pickers, pavement markers, sewer cameras and televising trucks, excavators, easement machines, and chip spreaders, to name a few.

The county also could play a role, similar perhaps to Monmouth County. For example, one of the municipalities indicated it would look to perform its own infrastructure replacement if it could borrow large construction equipment owned by the county highway department, with or without an operator.

Overall, this general, high-level assessment does reveal some possibilities for service sharing among the municipal DPWs, provided they are able to reach formal agreements by which the communities could identify, leverage, and allocate these resources collectively with an eye toward greater efficiency and service enhancement. Of course, any arrangements to share or co-own equipment among the communities would need to include provisions for managing availability, accountability, and costs of maintenance.

CONCLUSION

The intent of our broad scan of municipal services among the largest local governments in Jefferson County was to provide initial guidance for local government officials in the region, who are facing service-related challenges of varying degrees. While the study was limited to seven municipalities, our sense is that the other municipalities in the region share similar operational challenges and may benefit from inclusion in any service sharing activities that may be pursued.

Implementation of comprehensive forms of service sharing or full functional consolidation takes considerable planning and negotiation. Conversely, basic service sharing can be relatively easy to implement, often depending on the extent to which formal agreements need to be reached to share costs. We hope this analysis will provide insight to local officials as to which functional areas lend themselves to more intense planning, as well as where relatively simple service sharing initiatives may bear fruit.

Overall, our analysis reveals two opportunities with high potential for comprehensive service sharing or consolidation, as well as two areas with narrower opportunities for functional service sharing. The four functions for which we would recommend further analysis are **fire, dispatch, police, and public works**. These are the only services we reviewed that received three or more affirmative ratings on items in our assessment tool, as shown in **Table 32**.

Table 32: Fire, dispatch, police, and public works service sharing potential

FACTOR	FIRE	DISPATCH	POLICE	PUBLIC WORKS
High cost of new technology				
Pending retirements/organizational changes				
Cost inefficiency/redundancies				
Potential for service enhancements				
Single municipality providing service beneficial to the larger region				
High capital replacement costs				

For each of the four service areas, we gave affirmative scores with regard to potential to reduce cost inefficiency/service redundancies, potential for service enhancements, and mitigation of high capital replacement costs. The opportunity to provide more efficient service at reduced cost is a strong benchmark for service sharing consideration. Our analysis suggests that in Jefferson County, capital replacement costs could be more easily borne under a scenario in which multiple communities share in the acquisition, maintenance, and use of expensive vehicles and equipment.

These four service areas all involve core services that are relatively consistent across municipalities. They also involve activities that do not logically end at municipal borders. For example; fire service routinely requires assistance from neighboring communities; and dispatch services are in some



cases provided by both municipalities and the county. The fundamental nature of these similarly-provided services make them ripe for consideration of intergovernmental sharing or consolidation.

Finally, fire, police, and public works services (as well as dispatch to a lower degree) require staff with special levels of training and knowledge that often are in short supply for local governments in a tight labor market. Consolidation or service sharing could enhance both recruitment and retention of staff in these areas by providing a more robust work environment with diverse opportunities for professional fulfillment and increased possibilities for advancement.

It should be noted that of all these services, fire and dispatch have the highest number of “thumbs up” scores for service sharing or consolidation potential, and each would benefit from further analysis that would aid in developing detailed options and implementation plans. Such an analysis may exceed the capacity of any individual municipality to conduct on its own and may benefit from outside assistance.

Police and public works services have similarly affirmative scores, but the areas where we find potential for service sharing or consolidation are more limited and likely do not extend to consideration of full consolidation. Consequently, the research and facilitation required to ensure consideration of options would be less comprehensive in nature and might be conducted solely by departmental staff among the municipalities and/or the county.

In addition to the four functional areas we have identified that hold potential for further study and consideration of service sharing options, we find other municipal service areas where more limited (but still valuable) potential exists. For example, our analyses of property assessment and inspections suggests possible benefit from joint procurement of contracted service providers as a means of securing better pricing and/or efficiencies in contract monitoring. Other functional areas not covered in this study may also benefit from joint contract procurement.

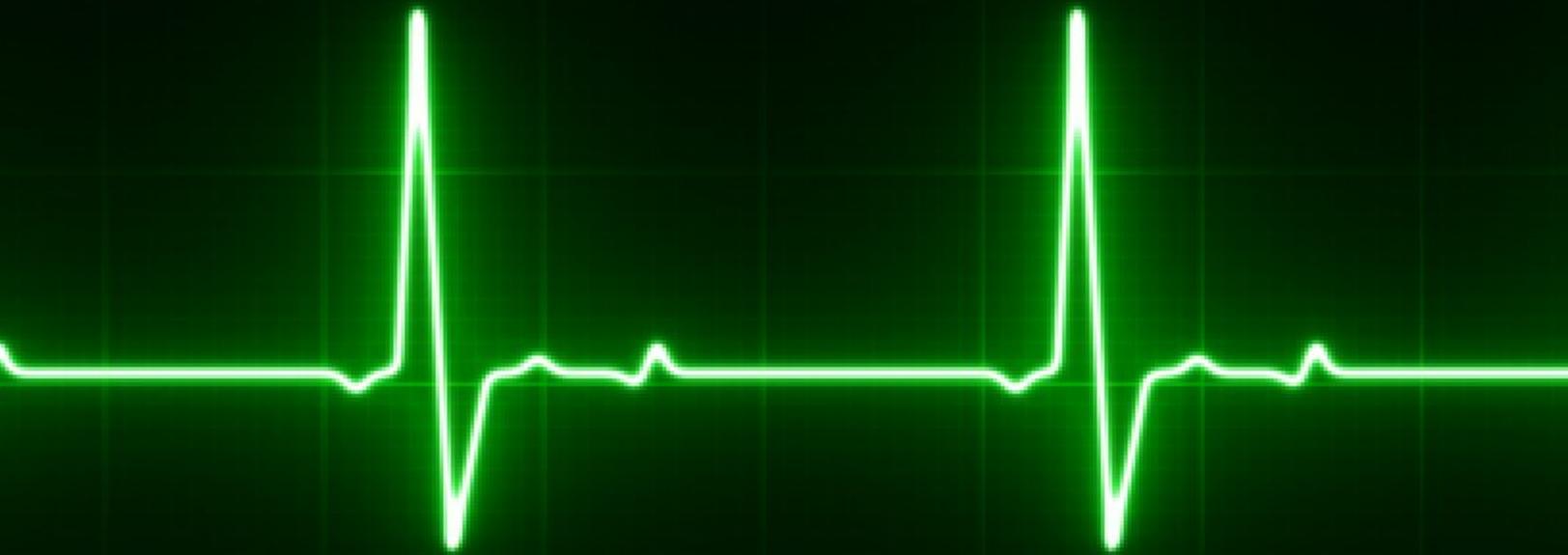
Also, certain technology-related needs might be considered for sharing both among multiple governments and among multiple functions within those governments. GIS and various other data collection and information technology activities may be ripe for position sharing, and the benefits of such sharing could be spread among various functions – like law enforcement and public works – that have need for advanced services like mapping and rigorous data collection and analysis.

Identification of service sharing or consolidation potential for various municipal service areas is only a first step. Far more time intensive and politically difficult steps that would move these functional areas toward consolidation or enhanced service sharing may include advanced data collection and analysis of cost centers and service standards; research on state law and potential impacts on state funding streams; consideration of human resource policies and labor contracts; and development of cost sharing methodologies and governance structures.

The daunting nature of those steps should not preclude further consideration of the promising opportunities for greater intergovernmental cooperation that exist within Jefferson County. Indeed, as this report has conveyed, leaders already have expressed interest in working more closely together on a range of issues. This report should be seen as an encouraging sign that such opportunities exist and as an impetus for further action.

TAKING THE PULSE

*EMS Collaboration Opportunities
in Jefferson County*



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PREFACE AND ACKNOWLEDGMENTS

This report was undertaken to provide citizens and policymakers in Jefferson County with information on the state of EMS service provision across the region and assessment of what lies ahead and how future challenges may be addressed. The intent was to lay out programmatic data and key challenges to allow policymakers to determine whether further action is warranted. The purpose was not to make recommendations on the future of those services for individual communities. Report authors would like to thank Fire/EMS chiefs, EMS directors, the county dispatch office, medical directors, and administrators in Jefferson County for their assistance in providing information, and for patiently answering our questions.

In addition, we wish to acknowledge and thank Jefferson County, which provided partial underwriting for this research and hosted numerous meetings throughout the project.



TAKING THE PULSE

EMS Collaboration Opportunities in Jefferson County

October 2020

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INTRODUCTION

This study was launched in January 2020 to examine the state of Emergency Medical Services (EMS) in Jefferson County and possible options to enhance regional collaboration and service levels. The study was commissioned by Jefferson County as a follow-up to a similar research project in 2019 that explored the potential for service sharing among all of the major municipal functions in the county, based on functional areas identified by county and municipal administrators. That project resulted in the release of [Greater Than the Sum](#) in February 2020, a report that found particular opportunities in the area of fire and rescue services and that further supported the deeper dive into EMS that is undertaken in this report.

Consideration of shared or consolidated local government services has become commonplace in recent years across the state of Wisconsin. In light of strict property tax levy limits facing Wisconsin municipalities and increasing costs associated with new technologies and service expectations, many communities are facing difficult decisions regarding their ability to maintain their existing array of services. Consolidation or enhanced service sharing with neighboring municipalities may offer an opportunity to spread the cost of certain municipal services across multiple jurisdictions while increasing administrative efficiency and achieving even higher service levels.

EMS is a service area that is experiencing particular strain in light of growing calls for service, technological advances that may require increased investment, and the difficulty of attracting and retaining highly-trained personnel. Also, Jefferson County was particularly eager to consider its EMS delivery system in light of the elimination of a paramedic intercept program that was operated from 2000 to 2018 by Fort HealthCare. Under that program, the health system provided licensed paramedics to meet local rescue services on route to the hospital as a free service. The program was transitioned to the city of Jefferson in 2019 using a fee-for-service model. Its usage has diminished in 2020 due to funding constraints, generating new questions about how best to provide both basic and advanced life support services across the county going forward.

This report does not offer a single recommended solution to the various challenges identified. Rather, it lays out a range of options for decision makers to consider. The options included both changes that could be implemented relatively quickly and easily as well as long-term solutions that may require more comprehensive changes to existing operations and governance structures. We also offer some potential policy changes that could be pursued at the state level to further enhance EMS services in Jefferson County and other parts of the state.

Data and Methodology

While we originally intended to include all 13 EMS service providers in Jefferson County, we were unable to gather adequate information from the Waterloo and Ixonia Fire/EMS departments. Thus, while they are included in some of the analysis where we were able to gather information online, those departments are largely omitted from tables that offer comparisons between departments.

The 11 participating EMS providers in the study were:

- City of Jefferson Fire/EMS
- Western Lakes Fire Department



- Whitewater Fire Department
- Ryan Brothers Ambulance
- Fort Atkinson Fire Department
- Watertown Fire Department
- Lake Mills EMS
- Lake Mills Fire Department
- Palmyra Fire and EMS
- Johnson Creek Fire Department
- Cambridge Area EMS

The data presented in this report are based primarily on information gathered from surveys, phone calls, and group meetings, as well as supporting documentation regarding budgets, apparatus, and call volumes. Where needed, individual phone calls and emails were used to gather missing pieces of information or to gain clarification. The Forum also conducted a series of group meetings to review data findings, identify and discuss key challenges, and solicit feedback on a draft report.

It should be noted that we were not always successful in receiving responses from the departments (or, in many cases, we may have received only partial information or information that was provided in inconsistent ways). The data we were able to collect allows us to paint an accurate and insightful picture of EMS service levels throughout the county, but we were unable to compile some useful comparative tables that we would typically include in this type of report. We certainly recognize that the departments had many higher priorities than responding to our information requests and we are grateful for the time and support given by the EMS directors, fire chiefs, and their staffs who participated, particularly after the onset of the COVID-19 pandemic.



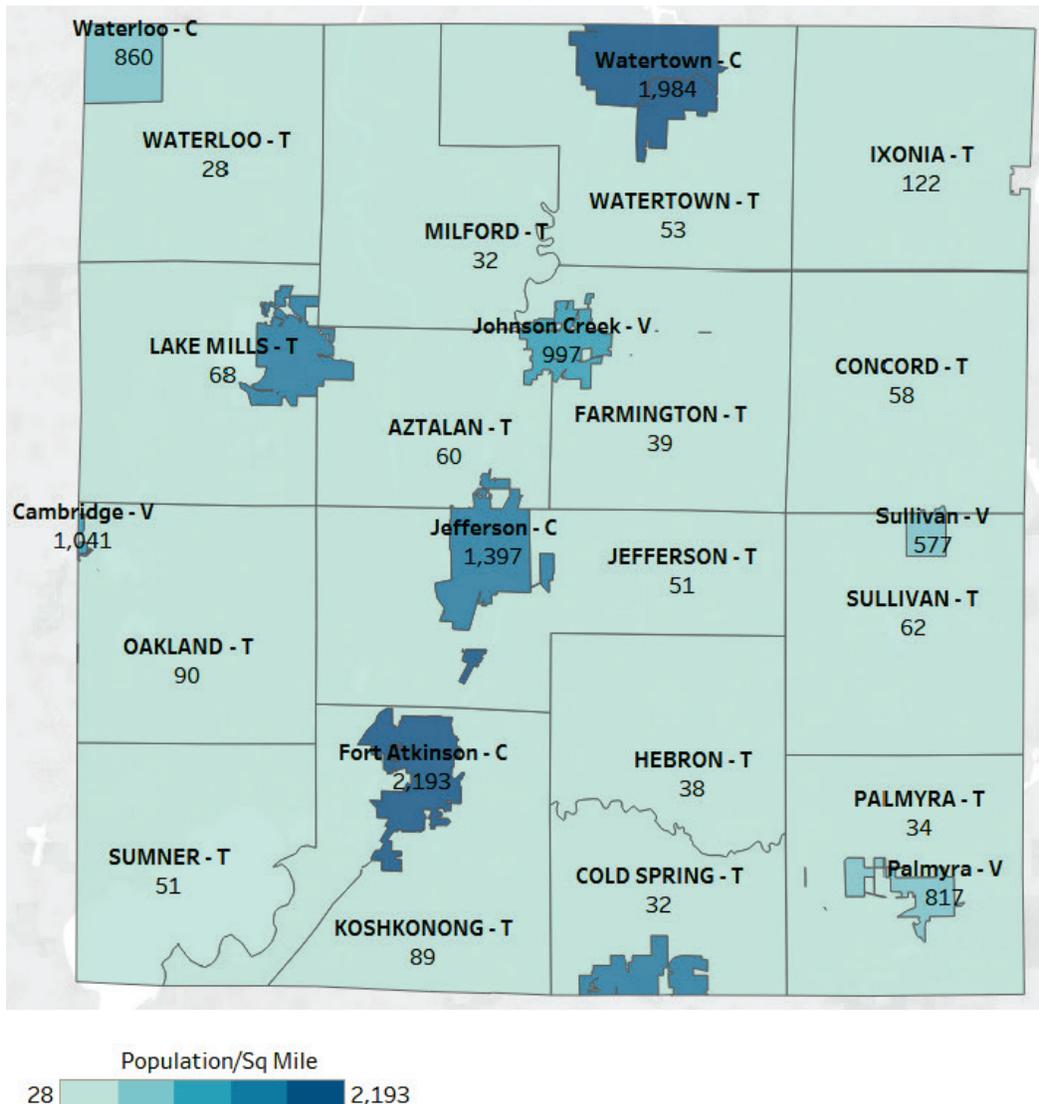
BACKGROUND

To understand the challenges facing Jefferson County's EMS providers – as well as their strengths – it is important to have a basic understanding of various demographic and economic indicators that may be impacting service capacity and demands. This section discusses those factors and how they are projected to change in the future while also providing a broad description of the study participants and their service characteristics.

Demographic and Economic Indicators

Sitting between Milwaukee and Madison, and spanning just over 500 square miles, Jefferson County is home to about 84,600 people. **Map 1** shows that the highest population density in the county is focused in Watertown, Johnson Creek, Lake Mills, Jefferson, Fort Atkinson, and Whitewater, which are situated along the North/South Highway 26 and East/West I-94 corridors,

Map 1: Jefferson County population density per square mile (2019)

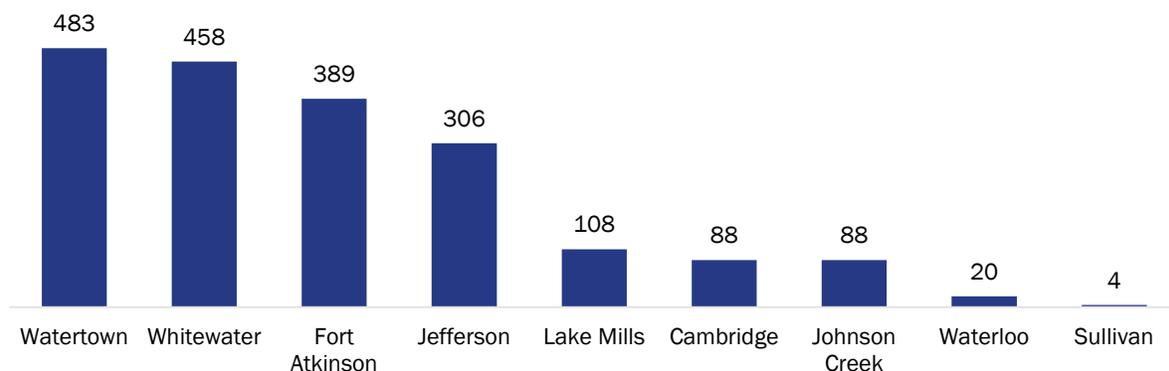


The Wisconsin Department of Administration (DOA) projects that the county's population will grow by 10,180 by 2040. As shown in **Table 1**, the population changes are anticipated to largely occur in the more urban cities and villages, though outlying towns are projected to still see some growth in terms of overall percentage of the population. Johnson Creek and Ixonia are anticipated to experience the largest growth as a percentage of total population, at 47.5% and 46.1%, respectively.

Currently, people age 65 and older comprise about 15.4% of the county's population. This means the county has a somewhat younger population than the state as a whole, which has a senior population of about 17%. Notably, this same demographic is projected to grow by 7,130 individuals and would account for 70% of the county's population growth over the next 20 years. This is significant for EMS providers because senior citizens tend to be the heaviest users of EMS services.

Watertown, Whitewater, Fort Atkinson, and Jefferson may be particularly impacted by this change. With over 300 beds each, these cities are home to the greatest concentration of senior living facilities, as shown in **Chart 1**.

Chart 1: Number of beds in nursing homes, residential care apartments, adult family homes, and community-based residential facilities*



*Only facilities with advanced age, memory, or brain trauma residents are included, as they are the most likely to need EMS support. Also, figures for Watertown, Whitewater, and Cambridge include all facilities within those jurisdictions (including those not located in in Jefferson County) to more fully reflect EMS service needs.

Table 1: Population change projection 2019-2040

	2019	2040	% Change
South			
Fort Atkinson C	12,437	14,020	12.7%
Whitewater C*	14,923	19,250	29%
Palmyra V	1,756	1,915	9.1%
Towns	7,550	8,305	10.0%
Mid County			
Jefferson C	7,989	9,080	13.7%
Lake Mills C	6,022	7,380	22.6%
Johnson Creek V	3,021	4,455	47.5%
Sullivan V	658	740	12.5%
Towns	14,572	15,970	9.6%
North			
Waterloo C	3,363	3,685	9.6%
Watertown C*	23,952	27,960	16.7%
Ixonia T	4,891	7,145	46.1%
Other Towns	4,025	4,385	8.9%

Source: Wisconsin Department of Administration
 *Watertown and Whitewater include the full population, and not just the population within Jefferson County borders, to provide a full sense of future EMS service needs.



As shown in **Table 2**, total employment in Jefferson County in 2018 was 33,243. According to the Wisconsin Department of Workforce Development, 47% of employed residents commute out of Jefferson County for work, with the largest share going to Waukesha County. Employment has not grown markedly since 2013, at only 1.6%.

Manufacturing is the largest single employer (at 26.5%), with retail and health care a relatively distant second and third at 11.8% and 10.2%, respectively. Manufacturing is an industry with higher risk of serious injury that might require EMS services. Other high-risk industries like construction and transportation are less prevalent in the county, with each comprising about 4% of employment.

Overview of EMS Services in Jefferson County

Emergency medical services are provided at different levels and by different types of trained and licensed personnel. Some of the EMS providers in Jefferson County play the role of “first responders” to emergency medical incidents and possess staff only capable of providing **basic life support** (BLS), which typically consists of first aid services for

Table 2: Jefferson County employment by industry (2018)

Industry	# Employed	% of Total
Manufacturing	8,812	26.5%
Retail	3,909	11.8%
Health Care	3,397	10.2%
Accommodation/Food	2,564	7.7%
Education	1,959	5.9%
Wholesale Trade	1,497	4.5%
Construction	1,451	4.4%
Public Admin	1,370	4.1%
Transportation/Warehousing	1,306	3.9%
Arts/Entertainment/Recreation	723	2.2%
Other Services	672	2.0%
Fire	638	1.9%
Professional, Scientific, Technical	530	1.6%
Information	476	1.4%
Other	3,939	11.9%
Total	33,243	100.00%

Source: Wisconsin Department of Workforce Development

TYPES OF EMS PERSONNEL

Emergency Medical Responder (EMR): An individual who is trained and licensed to provide immediate life-saving care to critical patients while awaiting the arrival of an ambulance and higher-level personnel. EMRs perform basic interventions with minimal equipment.

Emergency Medical Technician-Basic (EMT-B): An individual trained and licensed to provide basic emergency medical care and transportation of critical and emergent patients. Interventions are performed with basic equipment typically found on an ambulance.

Advanced Emergency Medical Technician (AEMT): An individual trained and licensed to provide basic and limited advanced emergency medical care and transportation of critical and emergent patients. Interventions are performed with basic and advanced equipment typically found on an ambulance under medical oversight.

Paramedic: An individual trained and licensed to provide advanced emergency medical care for critical and transportation emergent patients. Paramedics possess complex knowledge and skills necessary for advanced response and operate under medical oversight. Interventions are performed with basic and advanced equipment typically found on an ambulance.

Critical Care Paramedic: An individual trained and licensed to perform all the duties of a paramedic plus an expanded scope of practice which includes the ability to administer more medications than a paramedic. Critical care paramedics also provide inter-facility transports.



individuals with relatively minor needs (like broken limbs). These staff – typically trained at the Emergency Medical Responder (EMR) or Emergency Medical Technician–Basic (EMT-B) levels – are not allowed to give injections, administer medications, or engage in other advanced procedures. If more serious immediate attention is needed, BLS responders may need to await the arrival of more highly trained personnel (though in many cases both are dispatched simultaneously).

Other EMS providers in the county – both public and private – have staff who are trained and licensed to provide **advanced life support** (ALS) services. Such services – which can include various forms of urgent treatment for cardiac conditions like heart attacks and strokes – are provided by advanced EMTs (AEMTs) and paramedics (see text box for description of EMS personnel).

In addition to differing in terms of the level of care they are licensed to provide, Jefferson County EMS providers also use a variety of staffing models. Some of the larger departments employ mostly full-time, career staff who are available on shifts 24 hours a day. This is the optimal model because staff are ready to respond from their base at a moment’s notice and because career positions with salaries, benefits, and promotional opportunities tend to produce higher employee retention. It is also the most expensive, however, and may not be appropriate for many municipalities because of low call volumes.

Other departments rely mostly on part-time staff (though their directors and other senior staff may be full-time). These staff can be paid-on-premises (POP) employees who work part-time but are assigned to regular shifts (meaning they, too, work out of stations and can respond to calls immediately); or they may be paid-on-call (POC) employees who are called in to respond to emergencies when they arise but are not stationed at fire houses or ambulance bases.

POP and POC employees typically receive hourly compensation or stipends, do not receive benefits, and must be available to work at odd hours and comply with extensive requirements to maintain their license levels. Consequently, EMS service providers using these models can have a difficult time recruiting and retaining staff. On the positive side, this model has a lower budget impact than that of a full-time career department.

Table 4: EMS department staffing and operating models

Community	Staffing	Type
Jefferson Fire/EMS	Combination, mostly POP	EMS
Western Lakes FD	Combination full-time, part-time, POP and POC	Combined Fire/EMS
Lake Mills EMS	POC	EMS
Watertown FD	Career	Combined Fire/EMS
Palmyra PSD	Combination, mostly full-time	Combined Fire/EMS/law enforcement
Waterloo FD	POC	Combined Fire/EMS
Johnson Creek Fire/EMS	Combination, mostly POP	Combined Fire/EMS
Whitewater FD	Combination, mostly POP and POC	Combined, EMS operates separately
Ryan Brothers Ambulance	Career	EMS
Cambridge Area EMS	Combination, mostly full-time	EMS
Ixonia Fire/EMS	POC	Combined Fire/EMS

Table 4 shows the different service and/or organizational models used by the 11 EMS agencies in Jefferson County. Five of the EMS providers are combined fire department/EMS agencies (and one is a combined police/fire/EMS agency). These departments include both “career” departments such as



the Watertown and Western Lakes fire departments as well as several departments that rely primarily on POC or POP staff.

Several other EMS providers in Jefferson County focus exclusively on EMS response. Their corresponding fire departments are generally trained for emergency response and support EMS providers with lift assists and other assistance if needed (these include the Fort Atkinson and Lake Mills fire departments). Several Jefferson County communities also contract for EMS with Ryan Brothers, a for-profit ambulance provider.

Calls for Service

As shown in **Table 5**, call volumes can average from several per day for some of the larger municipalities to only three or four per week for some of the smaller communities. Notably, calls increased for nearly all EMS providers between 2016 and 2019, with most growing by more than 10%.¹ For those areas projected to see population growth, increases in call volumes likely will continue, particularly since 70% of the growth is projected to be comprised of older residents who are more likely to use EMS services.

Table 5: Calls for service, 2016 to 2019

Community	Calls for Service (2019)	% Change in Calls 2016-19	Calls per 1,000 population	Average No. Calls per Day
Jefferson	1,236	9%	117	3.4
Whitewater*	1,701	12%	90	4.7
Watertown*	2,092	26%	80	5.7
Lake Mills EMS	655	5%	71	1.8
Johnson Creek	414	1%	71	1.1
Palmyra	203	42%	69	0.6
RBA	1,246	17%	68	3.4
Western Lakes*	245	22%	58	0.2
Cambridge EMS	170	-17%	33	0.5

*Whitewater and Watertown include calls for their full service areas, and not just those within Jefferson County.

¹ The call volumes reflected in the chart do not include paramedic intercept calls fielded by the Jefferson Fire Department. There were 461 calls for the intercept service in 2018 and 473 calls for service in 2019.



A MORE DETAILED LOOK AT EMS OPERATIONS IN JEFFERSON CO

This section is designed to provide a more descriptive overview of EMS operations across Jefferson County. As will be discussed, there are important differences in service capacity and operational models across the various EMS providers in the county. While there is some cooperation among adjacent communities, the individual providers function as such and not as part of a county-wide “system.”

Licensing and Staffing Models

Map 2 displays EMS provider locations along with their license levels and shift staffing practices. Provider locations are fairly well dispersed across the major population centers and travel corridors in the county. Notably, nearly all providers are licensed for responses at either the AEMT or paramedic levels. The exceptions are Palmyra (EMT-Basic license) and the Lake Mills and Fort Atkinson fire departments, both of which provide first response but rely on other agencies to arrive on the scene when an ALS response is needed. Occasionally, the ALS response is provided through paramedic intercept (i.e. a paramedic meets up with a BLS ambulance and gets on the ambulance to care for the patient until they arrive at the hospital).

Most of the providers have full-time shifts of staff housed at their station locations, with between two and three staff on a given shift. The exceptions are Lake Mills EMS, Waterloo, and Ixonia, which use a POC model. Watertown is the only full-time career department in the region and averages six individuals on duty per shift to serve a considerably higher call volume than most of the other providers.

Those that use a POP or POC model vary widely in hourly wages. For instance, Jefferson Fire/EMS pays its POP staff \$17 per hour, while Palmyra pays between \$9 and \$12 per hour, and Waterloo pays \$14 per call. Hourly wages for POC staff range from \$7.25 to \$9 per hour spent responding to a call, and a couple of providers pay an additional \$3 per hour to POC personnel for being available to respond to a call.



Map 2: EMS provider locations, license levels, and shift staffing practices



Legend

-  Fire Station
-  EMS Only Station

* Western Lakes also uses a 2-person “chase vehicle” to supplement station staff in responding to calls



EMS Provider Profiles

Each EMS provider has a different operating model. Below we provide snapshots of each provider, focusing on their staffing, license levels, and 2020 expenditure budgets. Following the provider profiles are high-level descriptions of how those departments operate in other key operating areas, including apparatus, medical direction, dispatch, and response times.

Watertown Fire Department

The Watertown Fire Department is the only career department in Jefferson County. First response and paramedic-level ALS services are provided to the city of Watertown and four surrounding townships. The department employs 26.9 FTEs, with six staff on duty at all times. The department is heavily relied on for mutual aid services in surrounding areas. It responded to 120 EMS calls for mutual aid in 2019.

Type	Combined Fire/EMS
Staffing Model	Full-time, career
License Level	Paramedic
Total FTE (including hourly)	26.9
Total Budget	\$2.9 million (combined Fire/EMS budget)
Cost/capita (EMS only)*	\$74

The combined Fire/EMS cost per capita is \$98.

Western Lakes Fire Department

Western Lakes Fire Department (WLFD) is a joint fire district serving 11 municipalities in Waukesha, Dodge, and Jefferson counties. Across its six stations, 20 FTEs, six ambulances, and four chase vehicles are available district-wide at all times. A chase vehicle with two staff members is dispatched along with an ambulance for every call. The district owns 10 ambulances.

Type	Combined Fire/EMS
Staffing Model	Combination of career full-time along with POP and POC staff
License Level	Critical Care Paramedic
Total FTE (including hourly)	67.5
Total Budget* (Combined Fire/EMS budget)	\$5.5 million
Cost/capita**	\$116

*The budget includes costs such as rent, utilities, and depreciation, which are typically not shown in municipal fire/EMS department budgets.

**The cost/capita for only the service population within Jefferson County is \$29.22, per contract agreements.

In Jefferson County, WLFD has an EMS station in the village of Sullivan that houses two staff at all times and provides ALS-level paramedic services to approximately 4,250 people living in the village of Sullivan, town of Sullivan, and town of Concord. Nearby WLFD stations from outside of Jefferson County also respond when needed. As the only ALS resource in the eastern part of Jefferson County, WLFD provides paramedic intercept and paramedic mutual aid to Ixonia and Palmyra.



Whitewater Fire Department

The Whitewater Fire Department is a nonprofit, primarily part-time department that provides fire and EMS services by contract to the city of Whitewater, the University of Wisconsin-Whitewater, and six surrounding townships. EMS services are scheduled and managed separately from fire services, although some fire department personnel are cross-trained with EMS staff. The department is licensed at an Advanced EMT level and staffs four 12-hour shifts on weekends. On weekdays, the department uses a POC model. ALS response is handled by either Ryan Brothers Ambulance or the Janesville Fire Department.

Type	EMS
Staffing Model	POP on weekends; POC on weekdays
License Level	Advanced EMT
Total FTE (including hourly)	4.47
Total Budget (Combined Fire/EMS budget)	\$1.0 million
Cost/capita*	\$50

*Reflects the total city of Whitewater population, plus service areas that include parts of Koshkonong and Cold Spring and towns in Walworth and Rock counties.

Ryan Brothers Ambulance

Ryan Brothers Ambulance (RBA) is a private, for-profit company that provides paramedic-level ALS response to the city of Fort Atkinson, the town of Koshkonong, and portions of four other towns in Jefferson County. In total, RBA has 140 staff that may be assigned to shifts at any of seven locations spanning parts of Dane, Rock, and Jefferson counties. Ryan Brothers staffs two ambulances at all times, one of which is dedicated to 911 calls. The second ambulance provides backup to the 911 service but spends the vast majority of its time on inter-facility transports.

Type	EMS
Staffing Model	Paid-on-premise
License Level	Paramedic
Total FTE (including hourly)	6
Total Budget	\$580,257**
Cost/capita*	\$31

*Includes the city of Fort Atkinson, plus parts of towns of Oakland, Sumner, Koshkonong, Hebron, and Jefferson.

**The budget includes costs such as rent, taxes, and depreciation, which are typically not shown in municipal fire/EMS department budgets.

The Fort Atkinson Fire Department (FAFD) is licensed at the EMT-B level and provides backup EMS services to RBA for instances when RBA is unable to respond to a call. The two service providers have a unique cooperation arrangement which allows for joint credentialing of paramedics, shared training, and joint medical direction. The four FAFD paramedics are also employed by RBA and are required to work a minimum number of shifts a month. The two service providers are dispatched simultaneously for motor vehicle accidents or high acuity calls such as heart attacks.



Cambridge Area EMS

Cambridge Area EMS (CAEMS) is a joint municipal agency serving five municipalities in Dane and Jefferson counties. The agency is governed by a commission with representatives from the five jurisdictions. Its service population in Jefferson County is approximately

7,000 people living in the villages of Cambridge and Rockdale and three adjacent townships plus the town of Christiana and villages of Rockdale in Dane County. Although licensed at the AEMT level, CAEMS can provide ALS-level paramedic service per recent state legislation.

Type	EMS
Staffing Model	Combination of career full-time along with POP and POC
License Level	Advanced EMT
Total FTE (including hourly)	10.94
Total Budget	\$480,405
Cost/capita	\$84

Johnson Creek Fire/EMS Department

Johnson Creek Fire/EMS Department is a municipal department that provides both fire and paramedic-level ALS services to residents and businesses in Johnson Creek and portions of four surrounding towns. EMS has a separate command structure and the majority of EMS personnel are not firefighters.

Type	Combined Fire/EMS
Staffing Model	A combination department that is staffed with some full-time members but also includes POC/POP staff
License Level	Paramedic
Total FTE (including hourly)	8.84
Total Budget	\$395,651*
Cost/capita	\$67

*This budget includes EMS plus half of the administrative budget reflected within the Fire-EMS department

Lake Mills EMS

Lake Mills EMS is a private, non-profit EMS provider under contract to Lake Mills that also serves portions of four surrounding townships. The agency is licensed at the AEMT level and ambulance crews generally consist of a combination of POP staff from the station and POC staff who can respond from their homes or offices within

Type	EMS
Staffing Model	Combination of POP and POC
License Level	AEMT
Total FTE (including hourly)	11.5
Total Budget	\$418,378**
Cost/Capita	\$44

*The population served includes the city of Lake Mills, and parts of the towns of Waterloo, Lake Mills, Milford, and Aztalan.

**Unlike municipal department budgets, the Lake Mills EMS budget includes items like asset depreciation.



four minutes. Backup EMS response is provided by the Lake Mills Fire Department (which has EMR but no transport capabilities) or another department, such as Jefferson Fire/EMS or Johnson Creek Fire/EMS. The Lake Mills Fire Department may be dispatched simultaneously with Lake Mills EMS to a variety of incidents, such as motor vehicle accidents on the highway.

Jefferson Fire Department

The city of Jefferson funds a stand-alone EMS Department with a service population of approximately 10,400 residents in Jefferson and four surrounding townships. Jefferson EMS staffs four people per shift and offers ALS service at the paramedic level. Jefferson also operates a paramedic intercept program on an as-needed basis; there were 473 calls for the intercept service in 2019. Fire protection in the city of Jefferson is provided by a separate municipal department, staffed primarily through part-time staff. Some members of the fire department are also trained as EMTs or paramedics.

Type	EMS
Staffing Model	A combination department that is staffed with some full-time members but also includes POC/POP staff
EMT License Level	Paramedic
Total FTE (including hourly)	16.6
Total Budget	\$808,400
Cost/capita	\$77

*The population includes the city of Jefferson and parts of the towns of Jefferson, Hebron, Farmington, and Oakland.

Palmyra Public Safety Department

Since 2017, the village of Palmyra has operated a public safety department. Under this somewhat unique operational model, six full-time public safety officers (PSOs) are cross-trained as police officers, firefighters, and EMTs. The department has between two and four officers on duty at any time. In addition to the PSOs, the department has POP employees who are assigned to shifts for 24 hours per week. There is an additional roster of POC members, some of whom can also work shifts.

Type	Combined Fire/EMS/Police
Staffing Model	A combination department that is staffed with some full-time members but also includes POC/POP staff
License Level	EMT-B
Total FTE (including hourly)	6.97
Total Budget	\$360,407**
Cost/capita*	\$125

*The population includes the Village of Palmyra and Town of Palmyra.

**This table reflects only fire/EMS costs as described in the budget, though overall public safety expenditures per capita are likely lower than other communities due to the village's combined police/fire/EMS public safety model.

Police services are limited to the village itself, but fire/EMS services are provided to both the village and township of Palmyra. The department is licensed at the EMT-Basic level. Western Lakes Fire Department provides ALS service to Palmyra when requested. Depending on incident location and hospital destination, Palmyra may also use Mukwonago for ALS support.



Apparatus

Most EMS providers in the region have two or three ambulances. For those with three, the third tends to serve a backup role should another ambulance go out of service, or be on hand at large events. Jefferson Fire/EMS is the sole provider within the county that operates a paramedic intercept chase vehicle, though others exist across county borders and are often called upon due to their proximity to an incident. **Map 3** shows the number of ambulances within each EMS jurisdiction.

Map 3: Number of ambulances within each EMS jurisdiction



Legend

-  Fire Station
-  EMS Only Station



Medical Direction

Medical direction is the oversight of EMS operations, procedures, and medical protocols by a physician at a hospital. Medical directors may be involved in transportation and destination patient care decisions, creating patient treatment guidelines, giving verbal medical treatment orders, ensuring procedural competency of EMS personnel, approving individuals for inclusion on an EMS team, and leading medical care quality management activities.

In Jefferson County, medical direction is fragmented across the county (**Table 7**), with six different medical directors providing oversight. This may pose some challenges with regard to service sharing opportunities like joint trainings or cross-credentialing of staff across departments that have different medical directors and protocols, as will be discussed later in this report.

Table 7: Medical direction providers for Jefferson County EMS agencies

	Medical Direction
City of Jefferson EMS	Mercy Hospital, Janesville
Western Lakes FD	ProHealth Care
Lake Mills EMS	Aurora Summit
Watertown FD	Watertown Regional Medical Center
Palmyra PSD	Aurora Summit
Waterloo FD	Aurora Summit
Johnson Creek Fire/EMS	Aurora Summit
Whitewater FD	Aurora Health, Elkhorn
Ryan Bros	In-house Doctor
Cambridge Area EMS	Mercy Hospital, Janesville
Ixonia Fire/EMS	Aurora Summit

Dispatch

Similar to medical direction, dispatch is an essential component of EMS responses. When a municipal or county communications center receives a 911 emergency call, trained dispatchers dispatch responders from the appropriate EMS department or departments.

Dispatch centers vary in the services they are able to provide. For instance, some track the availability of ambulances across a jurisdiction and dispatch the nearest available provider to an incident, while others lack that capability and dispatch according to approved procedures and protocols. Dispatch centers also collect data that are central to EMS operations, including number of calls and calls by type, location, and time of day. Data collection practices may vary between dispatch centers.

Table 8: Dispatch communication centers for EMS agencies in Jefferson County

	Dispatch
City of Jefferson EMS	Jefferson County
Western Lakes FD	Jefferson County; Waukesha County is primary PSAP and tracks response
Lake Mills EMS	Jefferson County
Watertown FD	Watertown City
Palmyra PSD	Jefferson County
Waterloo FD	Jefferson County
Johnson Creek Fire/EMS	Jefferson County
Whitewater FD	Whitewater City
Ryan Bros	City of Fort Atkinson
Cambridge Area EMS	Dane County
Ixonia Fire/EMS	Jefferson County



In Jefferson County, the county communications department provides dispatch services for most EMS providers, but not all. As shown in **Table 8**, Watertown, Fort Atkinson, and Whitewater provide their own EMS dispatch. Cambridge EMS and Western Lakes Fire Department cross county borders and receive primary dispatch service from the other county they cover, though both work with the Jefferson County communications center. For both of these service providers, Jefferson County represents less than one-third of their service areas.

The Jefferson County dispatch center does not track nearest available resources to a 911 incident at any given time. Consequently, while the county dispatch provides service to most EMS providers in the area, it does not oversee dispatches for mutual aid. Instead, once a local jurisdiction determines it cannot respond to a call, it tells the dispatch center which EMS provider to dispatch for mutual aid. This practice can take up valuable time if the first mutual aid request is not answered and a department must look elsewhere. It also means that the nearest available provider is not always called.

Response Times

Response times are a useful metric for measuring EMS performance. While there are not federal standards for EMS response times, a common guide for municipal and career fire departments comes from the National Fire Protection Association (NFPA).

According to the EMS World website, NFPA suggests that for all EMS calls involving career fire departments, turnout time (i.e.

the time between receipt of a call from dispatch and departure of the responders from the station) should be within one minute. Four minutes or less should then elapse for the arrival of a unit with first responder (or higher) capability at the scene of the emergency medical incident. For a department that provides ALS services, the arrival time should be within eight minutes. For both, this objective should be met 90% of the time.²

Table 9: Average response times for EMS agencies in Jefferson County

	Time from Dispatch to Turnout	Travel Time from Station to Incident	Total Time from Dispatch to Incident
Shift Staffing			
Watertown	1 min	3.6 min	4.6 min
Whitewater	N/A	N/A	6 min
RBA	1.4 min	5 min	6.4 min
Jefferson	2 min	4 min	6 min
Johnson Creek	3.5 min	8-11 min	11.5-14.5 min
Cambridge EMS	2.7-3 min	0-10 min	58% are 2.7-8 min
Western Lakes	1.4 min	4.6 min	6 min
Palmyra	2 min	3 min	5 min
Fort Atkinson FD	3 min	7 min	10 min
Paid on Call			
Lake Mills EMS*	4.7 min	6 min	10.7 min
Ixonia*	7.5 min	4 min	11.5 min
Waterloo*	5.6 min	3 min	8.6 min

*Ixonia, Waterloo, and Lake Mills EMS data were provided by the county dispatch office and reflect average response times for 2020. All other response times listed are for 2019.

² Information retrieved on July 29, 2020, from <https://www.emsworld.com/article/10324786/ems-response-time-standards>.



For further context, the Wisconsin Department of Health Services produced a report showing total and average response times for EMS agencies across the state in 2015. That report indicates that the average EMS response time across all agencies for 2016 (measured as the time from dispatch to arrival on the scene) was 8 minutes and 6 seconds.³

Also, in 2017, the American Medical Association compiled EMS response times for 485 agencies across the U.S. (totaling 1.8 million 911 transport calls). It found that suburban areas with populations of 2,500 to 50,000 average 7.7 minutes from dispatch to arrival on scene. Rural areas with populations of less than 2,500 average 14.5 minutes. These same rural areas had response times within 26 minutes for 90% of calls.⁴

For rural areas with longer driving times, it is commonly accepted that optimal response time standards can be lengthened. Also, it is acknowledged that stations that have shift staffing will be able to achieve faster response times than those relying on POC staff, as EMS responders do not have to be called in from home or work.

As shown in **Table 9**, Jefferson County EMS responders that operate on a shift staffing model reported that the average time between dispatch and turnout is generally within 3 minutes. The agencies that use POC models – Lake Mills, Ixonia, and Waterloo – reported average turnout times ranging from 5.6 to 7.7 minutes. Average travel times from stations to the scene varied between three and seven minutes for most providers.

While our survey requested average drive times from a station to an incident, it must be noted that averages encompass both the faster and slower sides of the response spectrum. Average responses also hide the fact that benchmarks for response times set by the NFPA are for 80% to 90% of responses. The average response times shown in **Table 9** suggest that there is a relatively wide variation in response times across the county and that in some regions, improvement may be merited – particularly for those whose average times indicate that they do not fall within the NFPA 8-minute response time benchmark for 90% of calls. Indeed, expressions by stakeholders indicating concern with high ambulance response times in some parts of the county was an impetus for this study.

Summary

For the most part, EMS providers in Jefferson County operate independently and without county-wide consistency, employing staffing and operational models that meet their perceived needs and objectives. They also receive medical direction from different sources, do not use a common dispatch center, and have varying response times that do not always fall within NFPA recommendations for 90% of calls. A key question is whether municipal leaders are satisfied with this approach going forward and, if so, what it will take to sustain it in the face of staffing and operational challenges; or whether, instead, there is a desire for more countywide coordination and uniformity.

³ 2015 [Fractile Response Report](#), Wisconsin Department of Health Services

⁴ Mel, Howard, et al (2017). EMS Response Times in Rural, Suburban, and Urban Areas. *JAMA Surgery*, 152(10), 983-984. Accessed August 12, 2020 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5831456/#:~:text=Zip%20Code%20Classification,.Discussion,the%20arrival%20of%20EMS%20personnel.>



A recent development that may signal movement toward the latter scenario is an EMS and fire service sharing agreement that was recently discussed between the fire departments in Watertown, Johnson Creek, and Lake Mills. Under the proposed agreement, the three communities would implement an enhanced level of mutual aid and service sharing. Examples include joint responses to structure fires, coordinated responses to certain EMS calls, greater use of back-up by neighboring departments during times of high call volumes, and enhanced equipment sharing.

The agreement has not yet been implemented, however, as it has not been approved by elected officials from each of the communities. Also, it does not currently include the private Lake Mills EMS department. Nevertheless, this form of proposed sub-regional collaboration could be a model for broader collaboration across the county or for sub-regions as we will discuss later in this report.

Specific findings from our collection and analysis of service models and operational data from the various providers include the following:

- Most providers operate using shift staffing, though some rely on a POC model and almost all make some use of POC or POP staff who are paid an hourly wage. Wages vary widely across providers and several report challenges recruiting and retaining POC and POP staff.
- EMS provider locations are dispersed fairly evenly across the county, with many licensed to provide ALS-level service. Nevertheless, there are differences in ALS capacity and responsiveness in different parts of the county.
- Medical direction is provided by six different medical directors, which may result in inconsistent protocols and standards of care and which may impede efforts to cross-credential personnel to work in different departments if such a strategy is desired.
- Because EMS dispatch is fragmented across the county, mutual aid efforts may not be as effective as they could be and data collection is not standardized.
- Average response times reported from individual providers vary, which is understandable given the different operational and service models employed. Nevertheless, it appears that strategies to improve response times in some areas of the county may be merited. That impression is fortified by the comments of some municipal administrators we interviewed who expressed a pressing need to improve both response times and staffing capacity.

The next section will draw upon these findings to identify the key EMS challenges facing the region, which may merit enhanced attention from policymakers in light of growing populations and call volumes.



FUTURE CHALLENGES

The picture of EMS services in Jefferson County that we glean from our data collection and key informant interviews does not raise immediate, glaring red flags. Departments have been able to reasonably accommodate growing call volumes thus far. Station locations are distributed evenly across the region and most are able to provide an ALS response at either the AEMT or paramedic license level.

There is also some emerging cooperation between a few departments on the operating side. And, while response coordination could be improved, current support through mutual aid is working relatively well.

However, some challenges and opportunities for improvement have surfaced in the areas of staffing, consistency in service provision across the region, fragmented dispatch and medical direction, and the cooperative spirit across departments. While these challenges are not severe at this time, they may intensify in the future and they may limit the ability of the county's providers to keep pace with the expectations of citizens and to improve overall service for the region as a whole. This section summarizes those challenges and will be followed by an analysis of options to address them.

Staffing

While the POC and POP models have accommodated the ability of individual agencies to attract, recruit, and retain staff at adequate levels for decades, this ability has been dwindling in recent years. In fact, some of our interviewees expressed concern that with the loss of even one or two additional POC or POP staff they may be unable to respond to calls at certain times of day.

Inadequate pay is a primary reported weakness for POC and POP providers. Differences in hourly wages have created circumstances where volunteers leave departments for slightly higher pay at other EMS agencies. A larger concern is that – prior to the pandemic – the low wages and high training costs were not competitive with other employers in the area that offer higher-wage jobs, normal work hours, require less training, and have fewer skill maintenance requirements. There is strong incentive for people in the workforce to not consider EMS as a profession, or to leave the profession for jobs that support a higher standard of living and less stress.

Consistency in quality of care

The residents of Jefferson County likely would expect that a 911 call in any part of the county would produce the same, high-quality EMS response regardless of where in the county the call may originate. We find, however, that there is a lack of consistency on a number of fronts. For example, response times differ in different parts of the county and may not be satisfactory in all communities. Also, while there have been improvements in recent months in light of enhanced coordination between some medical directors, the fact that medical direction is provided by physicians from six different entities means there may be inconsistencies in training expectations and protocols.

Finally, we note that there are inconsistencies across the board regarding skill maintenance. While EMT and paramedic licensing requirements set a foundation, a combination of consistent training and use of EMS skills is needed to keep skills fresh. Some EMS providers may have paramedic personnel who rarely respond to calls that require paramedic-level expertise, thus threatening the



deterioration of those skills. Similarly, without consistent training standards for skill maintenance and updates, all levels of EMS personnel are at risk of becoming “rusty” or not having the ability to keep up with advancing protocols.⁵

Coverage during busy times & for higher call volumes in the future

As mentioned above, some departments have shrinking rosters of volunteers, to the point that it may be difficult to staff more than one vehicle during busy call times. For instance, while most departments have two or three ambulances, they may not be able to send out the second or third when multiple calls arrive at the same time. Consequently, mutual aid may at times be called upon when it would not be needed under better staffing circumstances. In turn, any department providing mutual aid that is similarly short-staffed is at risk of not being able to respond to calls from its own jurisdiction. For this reason, departments may sometimes need to turn down mutual aid requests, which prolongs response times while a different department with the capacity to respond is identified.

Call volumes are also anticipated to increase in the coming years, particularly for senior populations who tend to be the most frequent users of EMS services. Dwindling department rosters may create a scenario in which departments cannot provide adequate services for growing call volumes or in some cases may not be able to respond at all.

Fragmented dispatch

As previously mentioned, the county communications center handles dispatch for five of the EMS providers in the study, while Fort Atkinson, Watertown, and Whitewater use their own dispatch centers. Cambridge EMS relies on the Dodge County communications center while Western Lakes primarily uses Waukesha County’s dispatch center but switches to Jefferson County for calls within that county. This fragmentation may pose an obstacle to enhanced service sharing efforts involving “closest unit responds” or joint response frameworks and also prevents uniform data collection and analysis that could be used by decision-makers to monitor response times and other performance elements. It can also lend itself to slowed response times in regular mutual aid scenarios.

Mutual aid

Our analysis of mutual aid – both through survey and in-person responses – found that while the provision of such aid often functions cohesively, there are times when a department seeking mutual aid may not reach out to the closest available neighboring provider. Instead, calls for mutual aid may be based on the strength of relationships between various providers or communities as opposed to geographical proximity. To the extent this may be occurring, it obviously is not a sound approach.

⁵A couple of medical directors are collaborating to make skill maintenance trainings available to any EMS provider interested in joining (such as changes in hyperthermia treatment or intubation standards). The involvement of EMS volunteers with rustier skill sets is not guaranteed and not all departments have shown interest in sending their staff to the trainings.



Finally, we would note that some EMS providers appear reluctant to pursue collaborative strategies to address common challenges – not because they lack a cooperative spirit, but because they believe their challenges are manageable and that, consequently, there is no need to seek greater partnership with their neighbors. While we are in no position to dispute that assessment based on current circumstances, we would suggest that growing EMS call volumes, intensifying staffing and financial challenges, and quality of care concerns may soon be cause for reconsideration. We also note that municipal administrators in the county appear eager to pursue a range of service sharing opportunities and could play a leading role with regard to future EMS collaboration.

Also, collaboration can take several different forms and some may be more appropriate at the sub-regional rather than the county level. However, given the interest of leaders from Jefferson County government in considering where the county might play a larger role in elevating EMS service levels, a real opportunity exists for the county to take the lead in strengthening relationships among the individual EMS providers and instituting collective strategies to ensure that desired service levels are maintained across the county.

In the following sections, we outline several areas where enhanced collaboration might make a difference in improving EMS quality and responsiveness and standardizing the quality of care across all of Jefferson County.



OPTIONS FOR GREATER COLLABORATION

EMS providers in Jefferson County could consider various forms of enhanced collaboration to help address key service provision challenges. These options range from small-scale activities that could be implemented relatively easily on a consensus basis to larger service sharing arrangements that may require intergovernmental agreements among individual municipalities and/or the county. None are mutually exclusive, though they also could be pursued as a progression from smaller-scale initiatives designed to create a stronger framework for collaboration to more in-depth service sharing initiatives that could be pursued over the longer term should the initial initiatives begin to produce favorable outcomes.

Small-Scale Collaboration

While comprehensive solutions may be required to fully address some of the challenges laid out in the previous section, others could benefit from some relatively simple actions. Such small-scale options may be a preferred approach if policymakers are concerned about possible costs associated with larger options or if they do not feel that the severity of the challenges merits significant additional expenditures.

The following are some examples of small-scale collaboration that EMS providers in Jefferson County could immediately seek to implement:

- **Regular countywide meetings of EMS providers.** The EMS administrators and medical directors could strengthen efforts to meet regularly to discuss common challenges (involving areas like staff recruitment and retention, compliance with new state or federal guidelines, advances in practice, etc.) and opportunities for collaboration. An informal body incorporated as a nonprofit – the Jefferson County EMS Association – already exists and meets every four months but would benefit from enhancements. According to key informants, meeting attendees typically include hospital representatives, county emergency management and dispatch officials, and some EMS providers. Meetings are not designed to create or tackle overriding goals, but rather to keep everyone on the same page for activities taking place, such as changes at hospitals or upcoming classes.
- **Joint training.** The conduct of joint training sessions involving multiple departments could be an important step toward the implementation of consistent quality of care protocols across the county. Over the longer term, they also could make it easier for agencies to consider sharing staff. Joint training sessions planned by a single training administrator also could relieve the administrative burden on individual departments for planning and implementing training sessions.

The individual taking on this responsibility could be rotated among participating departments or medical directors; or, conversely, a permanent countywide EMS training administrator could be selected from existing staff by the participating agencies (in which case there may be justification for some form of financial reimbursement for the selected agency). The participants also could



elect to hire a new individual for that task who could be housed in one of the municipal agencies (with the cost shared by all), or the position could be housed at the county with possible county financial support or cost sharing.

- **Joint legislative advocacy.** In conjunction with pursuing service sharing activities, EMS providers may find value in jointly advocating for changes in state laws and policies that would address some of their mutual challenges. The most prominent such change would be an increase in reimbursement for EMS responses to patients who are enrolled in Medicaid. According to the Wisconsin EMS Association,⁶ Medicaid reimbursement for ambulance services falls well below the actual cost and the state has not increased its reimbursement rate in more than a decade.⁷

Other potential issues that could involve joint advocacy include:

- Seeking changes in Medicaid, Medicare, and private insurance reimbursement policies to specifically allow payment for community paramedicine activities, which reduce strain on the EMS system caused by non-emergency, non-transport 911 calls (see further discussion of community paramedicine below). Related to such an effort could be advocacy to enhance the ability of EMS providers to receive reimbursement for no-transport EMS responses as well as transport to more appropriate patient care facilities than hospital emergency rooms, such as primary care, urgent care, or mental health and substance abuse treatment centers.⁸
 - Defining EMS as an essential municipal service in State statutes, similar to that same designation for police and fire services. This definition would not guarantee more state funding, but could help EMS providers make the case for it at the local level.
- **Consolidated dispatch.** Consolidating all EMS dispatching for Jefferson County-based providers at the Jefferson County communications center arguably would not be a small-scale endeavor, as it likely would entail the need for negotiation and formal agreement between the county and those providers that currently dispatch themselves or rely on another entity besides the county. Also, whether to seek to include EMS providers who are based in other counties but provide services in Jefferson County would need to be determined, and cost sharing for additional dispatch staff would need to be considered.

Nevertheless, while involving more time, effort, and possibly expense than other small-scale options, such a move should be considered in light of the improvements it could generate in terms of mutual aid responses and data collection. Also, if there is interest in such an approach, then technological upgrades for the Jefferson County communications center also could be contemplated, including implementation of computer automated dispatch (CAD) technologies that could provide for automatic EMS vehicle location by dispatchers as well as the ability for

⁶ The WEMSA promotes education, shares information, and facilitates legislative action on behalf of its members.

⁷ More information can be found in a [2020 Medicaid Reimbursement issue brief](#) by the Wisconsin EMS Association.

⁸ The federal Centers for Medicare and Medicaid Services (CMS) recently initiated a five-year “ET-3” pilot program (Emergency Triage, Treat, and Transport). Beginning in the fall of 2020, CMS will allow for reimbursement to EMS providers who “1) transport an individual to a hospital emergency department (ED) or other destination covered under the regulations, 2) transport to an alternative destination partner (such as a primary care doctor’s office or an urgent care clinic), or 3) provide treatment in place with a qualified health care partner, either on the scene or connected using telehealth.” First round applications are closed but EMS providers in Jefferson County may wish to determine if and how they may be eligible to apply, and subsequently advocating to their state and federal legislators to open another application period for the program.



local departments to view response time and other data available to the center. Such upgrades also could pave the way for consideration of enhanced mutual aid or automatic aid agreements between groups of municipalities or across the entire county. Upgrades of this nature would need to account for the cost to the county to add the capabilities, local costs in upgrading the communication equipment on their ambulances to match the county's, one-time licensing fees, and increased annual maintenance costs.

- **Joint quality and/or case management.** While maintaining their independence, the EMS providers could collaborate to hire one or more staff to collect various forms of operational performance data that would be shared with each of them. This effort also could involve data analysis and regular reports that could be used to maintain and enhance quality management and control.

Similarly, the municipalities and county could consider jointly using such staff – or jointly hiring separate staff – to conduct “community paramedicine” services that involve using EMS staff to proactively serve heavy users of 911 services and hospital emergency rooms. Community paramedics perform a range of services outside of emergency care, such as providing or connecting patients to primary care services, completing post-hospital follow-up care, providing health education programs, and helping patients integrate with local health care systems and providers. An EMS position stationed at dispatch centers also could support paramedicine activities by acting as medical triage for low-acuity 911 calls.

The city of Greenfield in Milwaukee County is an example of a combined fire/EMS department that has hired a case management officer to conduct such follow-up to reduce service calls among heavy users, as well as to conduct educational activities aimed at promoting health and safety and discouraging 911 calls for non-emergency medical issues. An EMS case manager or case managers also could work more closely with senior facilities to reduce usage by those facilities. Similar to the training officer, quality and/or case management staff could be housed in one of the participating agencies with the cost shared by all, or potentially housed at the county (with potential county cost sharing).

Sub-Regional Collaboration

As noted in an earlier section, Watertown, Lake Mills, and Johnson Creek discussed a potential agreement in early 2020 to initiate a formal fire and EMS service sharing framework. While the agreement has not been ratified by the three municipalities and does not include the private Lake Mills EMS agency, it could serve as a model for municipalities in other parts of the county to engage in sub-regional collaboration.

On the EMS side, the proposed agreement stipulates the following cooperative activities between the Watertown, Johnson Creek, and Lake Mills fire departments:

- Creating standard operating procedures that allow paramedics from one department to use medical equipment and supplies of another department.



- Allowing for patient transport services from another department if the department where the incident occurs is stretched too thin.
- Allowing for operations under the direction of an already-on-scene paramedic from another department.
- Allowing a department to request that equipment and personnel from a neighboring department be temporarily transferred to its station in cases where the department has depleted its resources or is otherwise temporarily unable to respond to emergency incidents.

The agreement also calls on the departments “to work together to facilitate other forms of providing shared services, including joint staffing, shared equipment, community risk analysis, creation of standard operating procedures, and joint training, administration, fire prevention and education.”

Other Jefferson County departments and jurisdictions could consider similar service sharing agreements with neighboring communities that mirror the proposed contract between these municipalities, or that incorporate at least some of the items from the bulleted list above. There may also be opportunities for private EMS providers to be part of such agreements, or for others to join an agreement between Johnson Creek, Watertown, and Lake Mills if it is effectuated.

While some of the service sharing stipulations in the agreement already are taking place on an informal basis in other parts of the county, there could be great value in formalizing such arrangements to ensure that there is clear understanding of the role that neighboring communities can and will play in providing back-up and mutual aid. Also, the proposed Watertown-Lake Mills-Johnson Creek agreement clearly takes steps beyond the informal agreements currently in place elsewhere in the county with regard to items like “change of quarters” requests to neighboring departments during times of depleted resources, as well as shared patient transport.

Communities also could seek to build upon the vague commitment in the proposed agreement to work together on creation of joint training and staffing, standard operating procedures, shared equipment, etc. For example, the following features could be included in any new sub-regional service sharing agreements:

- Cross-credentialing of AEMT and paramedic level personnel across departments, which would make more people available to staff shifts and to respond during times of high call volumes. This would also help ensure that the skills of individuals trained to those levels in smaller communities do not become rusty through lack of consistent use.⁹
- Consolidating administrative and leadership functions across several departments, which would provide uniformity in operational activities as well as possible budget savings. Often,

⁹ Cross-credentialed staff may also resolve concerns regarding the administrative and financial burden of getting an AEMT licensed department up to the paramedic license level, as paramedics may be able to operate under the highest medical license among the providers for which they are on the department roster.



retirements of people in leadership positions provide a window for such consolidated administration or leadership.

- Consolidating dispatch at the county level as described above and creating dispatch protocols that would ensure responses from the closest and most appropriate agency regardless of municipal boundaries. If consolidation is accompanied by investment in enhanced dispatch technology, then automatic aid agreements also could be considered, under which multiple agencies would be dispatched simultaneously to respond to certain EMS incidents.
- Leveling POC and POP pay across departments, and at a rate more competitive with other regional employers.
- Moving toward shared full-time and part-time staff in areas experiencing particular recruitment challenges.

County-Supported System

The most extensive set of options for addressing the challenges facing Jefferson County EMS providers would involve the creation of a coordinating and oversight role within county government that could also extend to administrative and financial roles. While such a concept was by no means an impetus for this study, it would be logical to consider such an approach if there is a desire among policymakers to ensure consistency in EMS service quality and responsiveness across the county.

County government also may be better resourced or better able to generate resources than individual municipalities; it could be instrumental, therefore, in helping municipalities achieve desired and consistent levels of service and appropriately compensate their part-time staff.

Carving out a greater role for Jefferson County could involve some of the smaller-scale options cited above – like housing quality management, case management, or training administrator positions within county government and consolidating EMS dispatch within the county communications center. The county also could play a lead role in establishing countywide standards and protocols and could assume responsibility for data collection and monitoring to ensure standards are being met.

More comprehensive options to enhance the county role even further would be creation of a countywide EMS director and/or other administrative staff within county government and/or having the county hire and pay for a single medical director to be used by all municipal and private providers in the county. Some Wisconsin counties also function as actual EMS providers, though that is less common and we do not detect interest in such an arrangement in Jefferson County.

This range of activities is not uncommon for county governments in other parts of the state, and we describe a few examples in **Appendix A**. Some of the specific forms of support that might be offered by Jefferson County include:

- Hiring an **EMS Coordinator** who would work with the municipal and private providers to establish regional standards for first response and ALS response times, quality of care,



staffing and training requirements, etc. The position also could coordinate and oversee training and continuing education and could be the direct report for a countywide EMS medical director hired or contracted by the county. Depending on the coordinator's precise responsibilities, support staff (both administrative and data/IT) may be required, as well.

- Coordinating and staffing an **EMS Council** with representation from municipalities, private ambulance companies, and hospitals, as well as county supervisors and citizens. Such a council could broadly monitor and enforce compliance with countywide protocols and response time standards, receive reports on and respond to data trends, and provide guidance and input to municipal and county elected officials to ensure there is sufficient funding to support the level of services desired in the county. The council also could play a role in strategic planning and in monitoring municipal or sub-regional contracts with private providers.
- Providing **supplemental financial support** to municipal EMS providers within the county that would be designed to ensure that each maintains a level and quality of service that is mutually determined by the county and its municipalities. Such support could be in the form of an annual stipend that is allocated to individual providers based on a mutually agreed-upon formula (that is the approach used by Milwaukee County) or it could consist of direct county investment in countywide services or capital needs. The range of uses for such support could include assistance to implement more competitive pay scales for part-time EMS personnel; investments in new technology (including for dispatch), equipment, or apparatus; or direct payment for medical direction, training, dispatching, and other joint services.

The county may be especially well-positioned to provide financial support given that there is an exemption in state property tax levy limits for EMS that would allow for the enactment of a new property tax levy add-on at the county level to finance such improvements.¹⁰ Municipalities also could avail themselves of this option but would possibly run into challenges with statutory expenditure restraint provisions if trying to generate the extra funds themselves or if they received and spent direct support from the county.

Also, implementing such a tax at the county level could be a means of ensuring equity across all cities, villages, and towns in supporting EMS. Some municipal officials have expressed concern that currently, contractual arrangements between towns and larger municipalities for EMS may not be providing reimbursement for the full cost of the services received. Of course, county policymakers would need to approve such a tax and would need to gauge public support for such an approach.

As mentioned above, some counties have become the providers of EMS themselves, employing their own EMTs and paramedics and purchasing and housing their own ambulances. This model typically relies on the support of POC responders living throughout the county who arrive at a scene and begin

¹⁰ Per Wisconsin Statute 66.0602(3)(e)6, counties may use a levy limit exemption to raise levy in support of EMS services. However, legal counsel would be required to determine the specific nature of how this exemption could be utilized by Jefferson County and whether expenditure restraint provisions of state law might impact the practicality of using this exemption if direct payments are made by the county to municipalities.



care prior to the arrival of an ambulance. This approach could be used solely for ALS or for all emergency medical responses, thus eliminating the role of municipal EMS agencies entirely.

Such a scenario would be the most comprehensive approach for addressing the challenges faced by municipal providers and ensuring a level of consistency across the county, though policymakers may not be ready to embrace it given the pride taken by municipalities in their first response capabilities and the approaches they have developed for providing or contracting for paramedic-level services. It should also be noted that county-run models that make use of local POC personnel also struggle with dwindling rosters. Thus, moving toward career models – an action most plausibly supported by county financing – may be a necessary step to maintain and improve quality of care in the long term.

Summary

Each of the collaboration options discussed in this section would help Jefferson County communities respond to the challenges facing their EMS departments and further efforts to produce consistent and higher quality service. While some could be added at no cost or with minimal expense, however, others would require considerable new investment.

In fact, some of the enhancements that could be implemented at the county level – including the hiring of staff like a new coordinator and case manager(s), investment in new dispatch equipment and technology, and direct county fiscal support to enhance staff salaries and capacity – could run into the hundreds of thousands of dollars or more. Consequently, elected leaders could opt to start small – perhaps with a mix of small-scale and sub-regional collaborations. Conversely, given the importance of EMS to the region’s well-being, they may see the value of immediately moving toward countywide enhancement and consistency and waste no time in launching discussions at the county level.



CONCLUSION

Our examination of EMS capabilities and challenges in Jefferson County finds that greater collaboration among existing providers – and potential involvement by county government – could be useful mechanisms for addressing common challenges and preparing for the future. While county residents, for the most part, should not be highly alarmed about the quality and availability of current emergency medical services, evidence of strain has surfaced in some communities. In addition, fragmentation of service delivery, dispatch, and medical direction means that there is some inconsistency in service levels across the county’s cities, villages, and towns.

On the positive side, we find that Jefferson County municipalities have identified approaches to both first response and advanced life support services that they believe meet their individual needs. Most also appear largely satisfied with current response times and service quality. Indeed, the question of whether change and increased investment are necessary may be predicated on each community’s own service expectations and its individual judgement as to whether those expectations are currently being met.

Efforts to answer that question, however, should not just consider current conditions, but also must take into account what the future may bring. While acceptable levels of service may be the norm today, growing call volumes and concerns about the ability of agencies to recruit and retain part-time staff may necessitate new service models. At the very least, those factors are likely to require a far greater degree of mutual aid and cooperation among neighboring jurisdictions, as evidenced by an intergovernmental agreement that was recently discussed by fire departments in Watertown, Johnson Creek, and Lake Mills.

As municipal and county leaders in Jefferson County consider the steps needed to provide high-quality EMS in the future, we would urge them to contemplate the possible benefits that could emerge from the range of new service sharing possibilities we present in this report:

1. Each of the EMS agencies could benefit from certain “small-scale” service sharing steps, including joint training, quality management, case management, dispatch, and advocacy. Some of these steps could be initiated simply through establishment of regular joint meetings among the county’s EMS leaders and enhancement of recent efforts to promote greater coordination among its medical directors. Fully and optimally implementing them, however, likely would require the hiring of a limited number of new staff who could be housed in municipal agencies or perhaps in county government.
2. A higher level of collaboration would involve the spread and expansion of formal service sharing agreements among groups of neighboring jurisdictions similar to the one discussed for Watertown, Johnson Creek, and Lake Mills. The development and ratification of such agreements would be an improvement over current informal mutual aid agreements by laying out specific commitments and forms of cooperation, including guidelines for how multiple communities would respond to calls and provide various forms of back-up. Just as important, such formal agreements would take political considerations out of mutual aid decisions and standardize operational protocols among different agencies when jointly responding to medical emergencies. Such enhanced sub-regional collaboration does not



need to preclude the small-scale options cited above but would actually be made easier because of them.

3. The most ambitious approach would be to consolidate some administrative control for EMS at the county level. A model in which Jefferson County coordinated countywide EMS standards and protocols, training, medical direction, and dispatching – while also providing financial support to raise the pay of part-time staff and otherwise support enhanced staff capacity – would constitute a comprehensive strategy for addressing the challenges identified in this report. Of course, this also would be the most expensive approach and would necessitate a willingness among the individual agencies to relinquish some of their own administrative control, although the latter issue could be addressed somewhat via the creation of a countywide EMS Council with appropriate municipal representation.

We hope this analysis sheds further light on the current state and future challenges associated with EMS in Jefferson County. Going forward, we would be pleased to provide technical support for any efforts to implement the policy options cited in this report or otherwise assist the county and its public and private EMS providers in pursuing greater service sharing and collaboration.



APPENDIX A

Examples of Wisconsin Counties with a Role in EMS

Milwaukee County

Milwaukee County provides administrative oversight and coordination for EMS while leaving service provision to municipal fire departments and ambulance providers. The county's role includes providing for the continuing education of paramedics and EMS technicians, administering protocols and standards of care delivered by paramedics, securing and paying for medical direction, conducting quality management and control, maintaining a data repository of patient care records, and coordinating an EMS Council consisting of county, municipal, medical, and citizen representatives. The county also distributes funds to the various municipal departments per a formula approved by them to supplement local budgets. In 2020, the budgeted distribution was \$1.5 million.

Portage County

Portage County's model involves local and county EMS response, an EMS Coordinator housed at the county, region-wide medical direction and dispatch coordination, and grant funding for local departments.

Three fire departments provide paramedic-level care and transports. These departments are supported by EMR volunteers across the county, who are dispatched from their communities when an ambulance is called and usually arrive on scene and start administering care before the ambulance arrives. The county itself operates an EMS service that serves large events, special events, and provides assistance when local fire department resources are overwhelmed.

The county also plays a role in region-wide coordination; a medical director provides direction for the entire region and all emergency calls are dispatched from the county's communications center. Finally, an EMS Coordinator housed at the county supports EMS providers in achieving performance benchmarks such as response time reliability, operational safety, and an organizational culture of cooperation and mutual support. The county offers grants to support local departments in achieving the quality initiatives driven by the EMS Coordinator.

Waushera County

Waushera County EMS (WCEMS) operates a fleet of six ambulances and one quick response vehicle. Ambulances are based in four stations licensed at the critical care paramedic level. They are staffed by a mix of full- and part-time personnel with licensure levels ranging from EMT to Critical Care Paramedic.

The county ambulance service is also supported by first responders in eight local fire departments that operate using first response groups comprised of volunteers; some have true "volunteers" who receive no wages for responding to a call, while others compensate on a per call basis. The county supports these groups by providing EMS supplies, and all of the groups share the same medical



director with the county. This means that while the county has no direct control over the operations of the fire department EMS responders, they can effectively rely on shared protocols through the medical director.

The county's model is enhanced through the existence of these volunteers, who may or may not arrive on scene and begin giving care prior to the county ambulance or paramedic fly vehicle. However, similar to Jefferson County, volunteer numbers have been dwindling. Fortunately, the county model is designed such that the EMS volunteers enhance their services but are not relied on to operate.

WCEMS operates under a five-member public safety committee, which meets monthly. The members are County Board supervisors. The EMS answers to the county Administrator and the committee plays an advisory role.

Door County

Door County is one of two counties in Wisconsin that offers a countywide paramedic service. A mix of full- and part-time paramedics and EMTs are used to provide primary ambulance staffing. Eleven EMR groups with more than 170 emergency medical responders support the ambulance service. These responders are not county employees, but rather employees of the local fire department or municipality who are paid per call. These responders are heavily relied on by the county, typically arriving at a scene and beginning care prior to the arrival of an ambulance, often within five minutes of being dispatched. The county supports the existence of these responders by reimbursing each municipality \$150 per licensed EMR annually, as well as covering state-mandated refresher trainings, protocols, and the cost of a county-wide medical director. The county also provides county-wide dispatch services. Door County EMS operations are overseen by the county's public safety committee, which is comprised of seven county board supervisors.

Fond du Lac County

Fond du Lac County primarily contributes to the EMS system by providing broad oversight and funding. There are five ambulance districts in Fond du Lac County. The different ambulance companies, some of which are municipal and some independent, serve all or part of a district. The county allocates about \$330,000 that is distributed across the EMS providers depending on what percentage of each district they serve and the size of their service population. The subsidy typically increases by 2 or 3% annually.

For oversight, the county uses an advisory committee comprised of 10 members appointed by the county executive, including six from the six communities conducting an ambulance program, two providers of ambulance service (one privately-operated and one volunteer system), and two citizens. The committee meets once per year and primarily discusses jurisdictional changes. The county also has contracts with each provider which define the level of services and require an annual equipment check. The county communications center provides EMS dispatch service for the entire county, with the exception of the city of Ripon.



IN NEED OF RESUSCITATION?

Wisconsin’s fire and EMS agencies face looming challenges

The Forum has recently studied dozens of fire and emergency medical services (EMS) agencies in Wisconsin and found many are struggling to maintain their existing staffing models as EMS call volumes rise and rosters of part-time staff decline. The situation may demand greater consideration of consolidation as well as a response from state policymakers given the implications for local government finances and the threat to public safety.

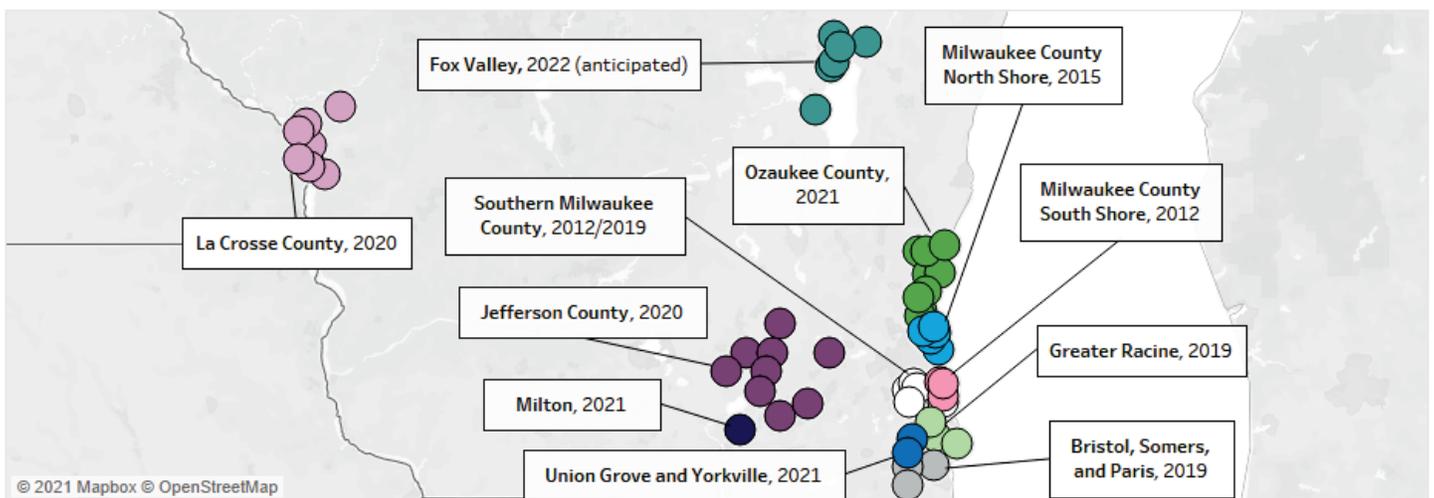
Over the past eight years, the Wisconsin Policy Forum has studied 30 fire and EMS providers throughout the state as part of a dozen distinct service sharing studies. Our work has taken us from Milwaukee County north to Ozaukee County, south to Racine and Kenosha counties, and west to Jefferson, Rock, and La Crosse counties (see Figure 1). These studies have ranged from regional or county-level analyses to more basic studies undertaken for single departments.

In the broadest sense, our studies consider whether greater collaboration and service coordination among multiple agencies – or perhaps full consolidation of neighboring departments – would address service challenges in a more cost efficient manner than if individual departments acted alone.

These studies look at services that are among the most essential and costly that local governments deliver. If EMS or fire department services are inefficient or ineffective, then taxpayers face considerable risk to their pocketbooks and those needing emergency assistance face the even more sobering risk of a response that is slow and unsuccessful.

We have learned several lessons. One is that while consolidation seems good in theory and could produce long-term savings, cost efficiencies, and service improvements in practice, implementing such an option is almost always much harder than it looks. We have also learned that many fire and EMS agencies are finding it harder to operate each year due to increasing service calls from an aging population and staff recruitment and retention difficulties. Lagging state aid

Figure 1: WPF Explores Fire & EMS Service Sharing Statewide
 Shared services studies, 2012-2021; dots represent individual departments studied



and state-imposed limits on local property taxes often compound the problem, creating a difficult road ahead for many local governments throughout Wisconsin.

In this report, we review some general findings from our work with fire and EMS agencies, briefly assess how fire services and EMS fit into a statewide context, and consider how other states regulate these services and assist their local governments in planning and administering service delivery. Finally, we make suggestions for policy changes at the state level that might help local agencies with their growing challenges.

FIRE AND EMS FACE UNIQUE CHALLENGES

Few would argue with the contention that fire and EMS are critical public services in line with those like schools, roads, or police. Fire services and EMS in Wisconsin are somewhat distinct from these other public services, however, in that they can vary substantially depending on geographic location.

In an urban area, an individual needing emergency medical assistance may be cared for by a professional paramedic who arrives within four minutes of the initial call to provide care at the scene as well as in the ambulance during transport to the hospital (if such a transport is needed). Conversely, in rural areas, the initial response may take up to 30 minutes or more, and it is likely that care initially will be provided by an Emergency Medical Responder (EMR) who responds to the call from another job or home, instead of a full-time Emergency Medical Technician (EMT) or paramedic (see box for definitions). A separate, more advanced EMS response may arrive from another agency to transport the patient to the nearest hospital.

In firefighting as well, operations, capabilities, and response can differ significantly between departments of different sizes and geographic locations, and between areas that have hydrants and those that do not. In fact, all but the largest local fire departments lack the capacity to respond to a major fire call themselves and must be joined at the fire scene by neighboring departments.

Some other unique aspects of fire services and EMS include:

- Fire and EMS are the only common public services that rely on volunteers in many

EMS LICENSE LEVELS

Emergency Medical Responder - EMRs are trained to provide non-invasive first aid. This includes clearing airways manually, CPR, controlling bleeding, and taking vital signs. EMRs are trained in the use of portable defibrillator devices.

Emergency Medical Technician-Basic - in addition to all of the skills of an EMR, EMT-Bs are trained to perform more invasive medical skills such as tracheotomies, and in the use of tourniquets and cervical collars. They are also able to administer oxygen and can provide more types of medications, including Narcan for opioid overdoses.

Advanced EMT - all of the skills of EMT-B and also can start an IV and administer a wider range of medications.

Paramedic - all of the skills of Advanced EMT with the addition of invasive procedures such as using a needle for chest decompression and intubation. Paramedics are also able to administer the widest variety of medications.

Source: WI EMS Scope of Practice, Wisconsin Department of Health Services

departments and that hold fundraisers to support basic operations. In fact, many fire departments date from the founding of cities, towns, and villages. Perhaps because of their dependence on volunteer organizations, they have deep roots in their communities and are closely linked to community pride and identity in many locales.

- While fire and EMS are now commonly linked, they are quite different from an operational perspective. Fires are infrequent, but when they occur they are destructive and they can easily escalate to nearby properties, which means they demand substantial numbers of responders and apparatus. EMS incidents, on the other hand, are generally more contained, occur at least daily in most jurisdictions, and often are handled by two-person crews. Training and licensing/certification for EMS and fire also are different. While combining fire and EMS works well for many reasons, there are still many fire departments that provide a basic EMR response only and leave advanced life support and ambulance transport to a separate public or private agency. According to data from the U.S.



Fire Administration, 35% of Wisconsin fire departments do not transport patients.

- Unlike most local government services, fire departments almost always are part of an interconnected regional system. These bonds are formalized through a Mutual Aid Box Alarm System (MABAS), which dictates how resources are deployed within regions for major fire or EMS incidents. Most departments also have less formal mutual aid arrangements with neighboring departments for even the most basic calls or back-up. While mutual aid is a foundation of fire response in particular, this close connection also means that if one department begins to falter because of staffing or financial challenges, then nearby departments also are affected. In fact, some chiefs say they have had refuse requests for mutual aid more frequently in recent years due to their own staffing shortages.

STAFFING DIFFERS BY COMMUNITY

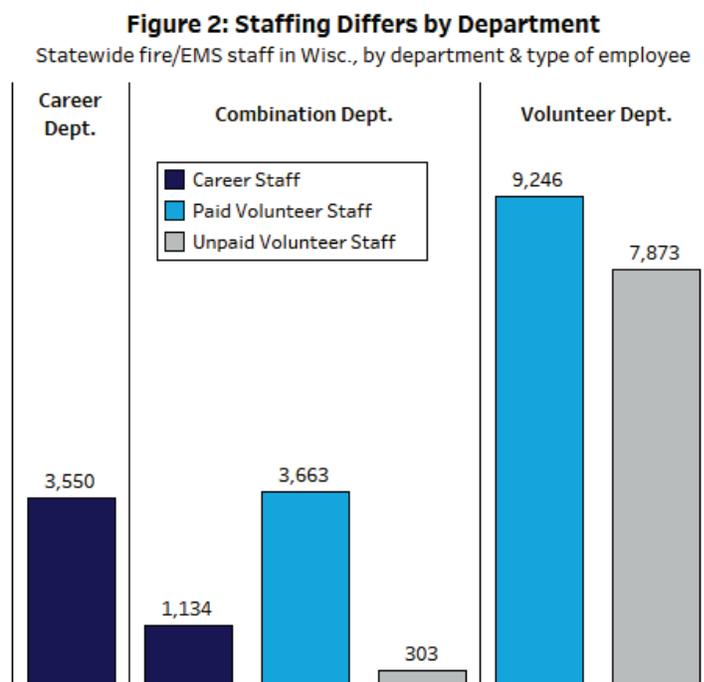
Whether they provide a full range of basic and advanced EMS or simply fire protection and emergency first response, fire departments in Wisconsin operate under three basic types of staffing models. The model is generally dictated by call volumes and geography, although financial considerations also can play a role.

- **Volunteer model** – most departments in Wisconsin make extensive use of “volunteers” per data from the U.S. Fire Administration. Volunteers can be truly that and serve completely without pay for some or all types of calls, or they can be paid per call or on an hourly basis (these are often referred to as paid-on-call responders). As might be assumed, volunteer departments predominate in rural areas with low call volumes, as it makes little sense to pay responders to be physically present at fire stations when few calls are coming in. Instead, responders are paged and respond from home or work when they are available. EMS in this model can be provided by the fire department under the same approach or can be run by a separate EMS agency, either public or private. As we will discuss in detail later in this report, recruitment and retention of paid and unpaid volunteers has become increasingly difficult for

many departments for a variety of reasons, and this challenge is intensifying at the very time that EMS calls are rising in light of an aging population.

- **Combination model** – as departments face higher call volumes (commonly exceeding 1,000 per year), a purely volunteer response can be ineffective or unsustainable. Instead, departments find they need to have full-time salaried staff present at the station or, at minimum, have volunteer staff assigned specific hours when they guarantee their availability to respond from work or home. Some departments also use part-time staff who are assigned to work occasional shifts at fire stations (these are referred to as paid-on-premises staff). Many use a mix of full-time and part-time or volunteer staff to guarantee a timely response and the ability to respond to multiple calls simultaneously.
- **Career model** – career departments employ mostly or exclusively full-time responders with salaried pay and benefits who are assigned to work shifts at fire stations. Departments using this model typically are located in urbanized areas and receive several calls per day.

Figure 2 shows the distribution of different types of staff (dedicated to fire, EMS, or both) among the 812 fire



Source: Wisconsin Department of Safety and Professional Services



departments in the state, as reported by the Wisconsin Department of Safety and Professional Services. Most “volunteer” departments have at least some paid staff, even if it is only the chief, a deputy chief, or an inspector.

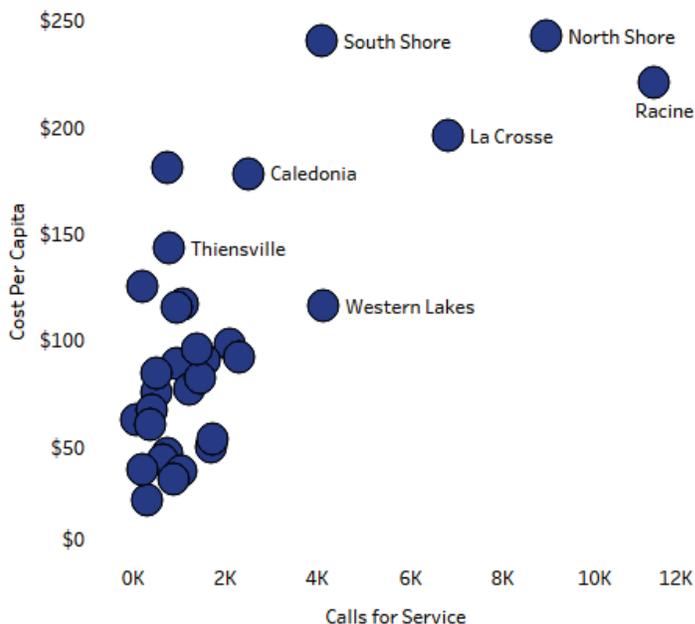
The type of service model is frequently determined, or at least heavily influenced, by available funding for fire and EMS. That, in turn, can be influenced by other municipal needs and priorities and by a jurisdiction’s ability to absorb increased fire and EMS spending without exceeding state-imposed property tax limits. Funding for fire and EMS is almost entirely locally-based with little direct support from the state or federal governments (though some state aid such as shared revenue can be used for a variety of purposes, including fire and EMS); local property taxes and ambulance revenues are the two largest local revenue sources.

Our January 2021 study, *Dollar for Dollar*, found that Wisconsin’s local government spending on fire department services is slightly below the national average. That is in part because, according to the U.S. Fire Administration, 92.5% of Wisconsin fire departments that reported data to the administration are volunteer or mostly volunteer – the 14th-highest share in the country.

Figure 3 compares data from previous WPF studies on per capita fire and EMS costs and shows those costs in the context of calls for service. Those departments with the highest per capita costs tend to be those with the heaviest call volumes; that makes sense since the largest cost category for fire departments is personnel and those departments make greatest use of full-time, salaried staff. Departments that respond to less than 2,500 calls per year tend to have a much wider range of per capita costs, as their use of full-time staff varies.

Figure 3: Larger Departments Mean More Spending

Calls for service vs. cost per capita, Fire/EMS departments in WPF studies



**RECENT WPF RESEARCH HIGHLIGHTS
DIFFICULT STAFFING CHALLENGES**

WPF’s recent fire and EMS analyses have included ones that have examined the potential for broader collaboration within entire counties or regions as well as analyses that have addressed the needs of single departments. The following highlights four recent reports and shows the similar challenges facing fire and EMS providers in different parts of Wisconsin.

- In [Ozaukee County](#), we studied the potential for collaboration among all nine fire departments in the county. Those ranged from rural, volunteer companies to departments serving more urbanized areas using a mix of full-time and part-time staff (see Table 1). We found all of the

Table 1: Overview of Ozaukee County Departments

	FTE	Service Population	2019 Calls for Service	Net Cost/Capita
Mequon Fire Department	28.8	24,806	2,323	52.06
Grafton Fire Department	15.0	16,216	1,471	53.58
Port Washington Fire Department	11.2	14,173	1,748	9.23
Cedarburg Fire Department	3.8	18,153	1,162	8.86
Thiensville Fire Department	5.4	3,164	777	84.49
Saukville Fire Department	6.0	5,604	506	42.10
Fredonia Fire Department	2.4	6,027	381	39.36
Belgium Fire Department	Volunteer	3,882	229	34.54
Waubeka Fire Department	Volunteer	2,063	98	41.71



departments were severely challenged by recruitment and retention of part-time and volunteer staff, yet elected leaders in few of those communities seemed open to the idea of spending substantially more to move to combination or full-time models. We suggested a range of options, including a jointly funded county-wide paramedic intercept system to boost EMS service levels across the county, jointly supported full-time staffing at strategically located stations, and several consolidation options.

- Our study in [Jefferson County](#) considered EMS services only and included 11 agencies, ranging from career fire departments to EMS-only agencies and one private ambulance provider. Given a diversity of service models but common challenges related to reliance on part-time and volunteer staff, our recommendations started with improved coordination, such as joint planning and training and the establishment of a county-wide EMS Council. We also looked at a variety of ways that an EMS model coordinated by Jefferson County government could improve and standardize service levels across the county and provide enhanced financial support without exceeding local property tax limits.
- In [La Crosse County](#) we focused on five fire departments in the western part of the region (including one in La Crescent, MN) that included volunteer, combination, and career staffing models. We found that the three departments that relied largely on part-time volunteers were experiencing recruitment and retention challenges. One of those – the Holmen Area Fire Department – was particularly stretched in light

of increased development and rising call volumes. We also found that the full-time La Crosse Department was heavily resourced and could possibly play a greater role in serving the region. Our conclusion cited an array of collaboration options that included joint financing and staffing of new stations to serve the region’s increased service demands. Subsequent to our report’s release, the Holmen Area and La Crosse departments took a step toward consolidation by agreeing to have the La Crosse chief manage both departments.

- Facing growing call volumes and a potential need to turn toward more full-time staffing, the [Union Grove/Yorkville](#) Fire Department in Racine County asked WPF to provide context for its decision-making by researching the staffing models of departments with comparable calls for service and service areas. We identified six comparable departments throughout Wisconsin (see Table 2), each of which (with the exception of the Cedarburg Fire Department) used combination staffing models with significantly more career staff than Union Grove/Yorkville. Expenditures per capita varied from \$35 in Cedarburg and \$47 in Union Grove/Yorkville to \$181 in Somers. This research showed that while there are a variety of service models for smaller departments, once call volumes approach a rate of three or more per day there is a need for greater use of career staff.

KEY TAKEAWAYS FROM OUR WORK

These and our other fire and EMS service sharing studies reveal a set of common themes and takeaways:

Table 2: Union Grove-Yorkville Peer Department Characteristics

	Service Area (sq. miles)	Service Population	Expenditures/Capita	2019 Calls for Service
UGYFD	36.2	11,265	\$47	1,112
City of Burlington FD	40.3	17,000	\$96	1,773
Cedarburg FD	29.5	18,153	\$35	1,162
Milton FD	90.0	11,523	\$117	927
Mount Horeb FD	131.9	12,500	\$89	1,292
North Fond du Lac FD	90.7	11,670	\$117	1,235
Somers FD	29.2	9,840	\$181	1,162



- 1) **Recruitment is a major issue for all types of departments but is reaching a crisis point for many volunteer and combination departments.** For small communities whose departments receive no more than a call or two per day, relying heavily on volunteer or part-time staff makes sense. Instead of paying full-time wages and benefits to have crews of responders stationed at the fire house waiting for an infrequent call to come in, these departments have relied on robust rosters of individuals who live or work nearby and can drop what they are doing to respond when needed. Unfortunately, this model is now becoming very difficult for many departments to sustain. A particular challenge involves EMS calls, which increase as populations age and which are most frequent during daytime hours, when volunteers are least likely to be available to respond. EMS personnel also have licensing and training requirements that can be a significant burden; combined with the busy lifestyles of today's society, these factors have produced shrunken volunteer rosters for many departments.
- 2) **In many cases, consolidation does not produce immediate financial savings, but it offers advantages when looking toward future financial challenges.** This is particularly true when consolidation offers opportunities to reduce apparatus and/or stations. Those departments that need to transition from volunteer to combination staffing models or from combination to career models may also find that consolidation with nearby departments offers a more cost effective way to manage that change. Consolidation also offers improvements in service levels in many cases, as larger departments have more command staff and battalion chiefs and offer opportunities to strategically deploy staff during times of high call volumes without relying on neighboring departments or expensive overtime payments.
- 3) **While consolidation may be beneficial, the odds are against it in most cases.** Some of the reasons include geography that is not conducive to consolidation, conflicts between municipalities that are rooted in other issues, and differences in circumstances between departments (perceived as “winners” and

“losers” if consolidation were to occur). Many chiefs acknowledge this reality and look to other ways to collaborate with neighboring departments through formal mutual aid agreements, joint trainings, and equipment sharing. Others go further by seeking automatic aid agreements, in which two or more departments agree to be dispatched simultaneously to fire calls in each community covered by the agreement; or “closest unit responds” frameworks in which dispatchers call on the closest available unit regardless of municipal boundaries.

But perhaps our most important finding – and one that state and local policymakers cannot afford to overlook – is that unless fire and EMS financial and staffing challenges are appropriately addressed, they may soon have a real impact on public safety. As discussed above, while paid-on-call staffing models have served many communities well in the past, rising EMS call volumes and staffing challenges are causing many to re-think this approach and strive to house at least some full-time staff at stations. Such a move can allow the initial response to occur almost immediately after the call arrives instead of being delayed as staff are pulled in to respond from remote locations. It also can ensure that smaller departments maintain the capacity to respond to all calls, instead of having to rely on neighboring departments to respond during busy times from greater distances. For some medical emergencies such as cardiac arrest, response times can make a critical difference in the outcome for the patient.

Even when the political will exists among local leaders to raise property taxes to pay for more full-time staff, doing so will cause some communities to exceed state property tax levy limits. In that case, a citizen referendum is required, as has been the case recently in Beaver Dam, Grand Chute, and Greenfield. In other cases, paying for more full-time staff could cause local governments to exceed state expenditure restraint limits, which results in a cut in their shared revenue allocation. Whatever their cause, these financial barriers to more full-time staffing can impact emergency response times and jeopardize public health and safety.

While our purpose here is not to provide a detailed analysis of state levy and expenditure restraint limits (such an analysis can be found in this [Legislative Fiscal Bureau paper](#)), a few points are worth mentioning.



First, there are exemptions in the levy limits for fire and EMS, but they are tied to consolidation. For example, when the charges assessed by a joint fire or EMS department would cause one of the participating municipalities to exceed its levy limit, then an exemption can be granted if the percentage increase in the total charges does not exceed the change in the prior year's Consumer Price Index plus two percentage points. Also, in counties where a countywide EMS system exists, the county government can exclude expenditures from its levy limit. Levy limit adjustments also are allowed to fund services transferred from one government to another.

As noted above, we have witnessed the real benefits that can be produced by consolidation of multiple fire and EMS departments. Consequently, it could be argued that using levy limit exemptions as a carrot to encourage consolidation is a reasonable approach. However, as we will discuss below, other exemptions might be considered for those departments that do not intend to pursue consolidation for valid reasons.

Finally, one chief conveyed to us his experience with a recent U.S. Department of Labor audit that resulted in new and costly interpretations about the treatment of interns and volunteers for payroll purposes. Changes needed to comply with newly interpreted DOL standards could have significant financial impacts on other combination and volunteer departments, as well.

OTHER STATES MAY OFFER INSIGHTS

As noted earlier, state government provides little in the way of direct financial support to local fire and EMS agencies in Wisconsin. Meanwhile, the most important form of indirect support – state shared revenue – has been stagnant for years.

Still, state agencies have tools to promote change since they are responsible for licensing EMS staff, recognizing exclusive response areas for fire departments, inspecting ambulances, and organizing wildland fire response. This oversight is fragmented between several state agencies, including the Department of Safety and Professional Services, which has a regulatory role with regard to fire protection operations; the Department of Health Services, which plays a similar role with regard to EMS; and the Department of Natural Resources, which takes the lead on wildfire management. Even the Department of Justice, which oversees arson

investigations, and the Department of Transportation, which manages ambulance inspections, get into the act.

We conducted a high-level review to see how fire and EMS are organized in other states and found some possible food for thought for Wisconsin policymakers. For example, in Ohio, a single division of the Department of Public Safety covers both fire and EMS regulations and oversight. We also found that many states have created regional agencies to address issues of planning and service design and provide state resources to support such activities. For example:

- In Minnesota, the State EMS Regulatory Board funds eight regional EMS agencies that have responsibility for provider education, public education, conferences, critical incident review, a rehab team, and EMS resource coordination.
- In Michigan, 61 local Medical Control Authorities are organized into eight regions. The authorities have broad authority to set and enforce EMS protocols and standards. They are hospital-based and each has its own medical director. Fire is regulated separately.
- Washington state also is divided into eight EMS regions, which have agencies charged with developing regional plans as well as public education and prevention programs (see Figure 4). Regional plans can identify areas of need, particularly in smaller jurisdictions with inadequate resources, and they are charged with building local fire capacity.

Figure 4: Washington's EMS & Trauma Response Areas



Source: Washington State Department of Health



Tennessee is an example of a state that emphasizes both regionalism and greater responsibility for fire department capacity and quality at the state level. The state allows for the formation of countywide fire departments and for additional property tax levies to support them. The state statutes set out a detailed process for establishing need and then for master planning. An investigating committee documents existing conditions, including water supply, availability of paid and volunteer responders, budgets, and overall fire risk. Organizers then proceed to a formal master planning process.

California also designates Local EMS Agencies to oversee service delivery. The Local EMS Agencies, not municipalities, contract for EMS service within defined areas, although local fire departments are grandfathered into the system. The Local EMS Agencies also set deployment zones that require agencies within the same zone to backfill each other during times of high call volumes.

In terms of service planning, California's Local Agency Commissions (LAFCO) develop service plans for fire and EMS, similar to sewer service planning in Wisconsin. Each county's LAFCO sets a sphere of influence for individual departments that considers future consolidations and the impact of projected growth on service demand. These plans consider opportunities for shared services and services to disadvantaged communities.

POLICY INSIGHTS AND CONCLUSION

Our experience working with fire and EMS agencies in Wisconsin and our broad overview of other states suggest that increased attention by state government leaders is both warranted and likely required to effectively address the growing challenges faced by many fire and EMS agencies in the state.

It seems intuitive that local governments facing challenges with recruitment of both part-time and full-time responders will need to examine their pay structures and consider increasing rates of pay to attract greater numbers of applicants. Yet, that notion is problematic on two counts: 1) the ability to do so may produce budget increases that conflict with state-imposed property tax levy or expenditure restraint limits; and 2) the state EMS Association reports that even with

higher rates of pay, staffing shortages are a problem at most departments.

With regard to the latter, we have heard anecdotally that more people are leaving the fire and EMS field, whether due to the impacts of the pandemic, job stress, or other factors. Meanwhile, many chiefs report that fewer people are choosing to volunteer, either because of today's busier lifestyles or reduced interest in volunteering among younger generations.

Options for reversing these trends with regard to the pipeline for new paid and career responder positions could take years to effectuate. In the shorter term, greater financial assistance from the state or adjustments to financial constraints on local governments could be helpful. Specific options that might be considered include:

- Establishing direct state aid (either grants or loans) to help prospective fire and EMS professionals pay for education and licensing costs. A more ambitious option would be to create a service corps where young people can earn free or reduced college tuition at public colleges and universities while working in the fire and EMS field.
- Creating opportunities for part-time fire and EMS responders to enroll in health care and retirement plans offered to state employees or enhancing state-administered longevity bonus programs for such workers.
- Increasing Medicaid reimbursement for ambulance transports to 100% of the Medicare rate. As of January 2022, reimbursement under the state's Medicaid program will rise to 80% of the Medicare rate. This was significant in light of the many competing health-related entities and initiatives that could benefit from greater Medicaid reimbursement and it would be a heavy lift politically to increase it further, but doing so would provide additional revenues to fire departments and EMS agencies that could be used to boost responder compensation. A related option could be to explore options for state reimbursement for non-transport emergency medical response and related activities like community paramedicine, in which fire department personnel engage in case

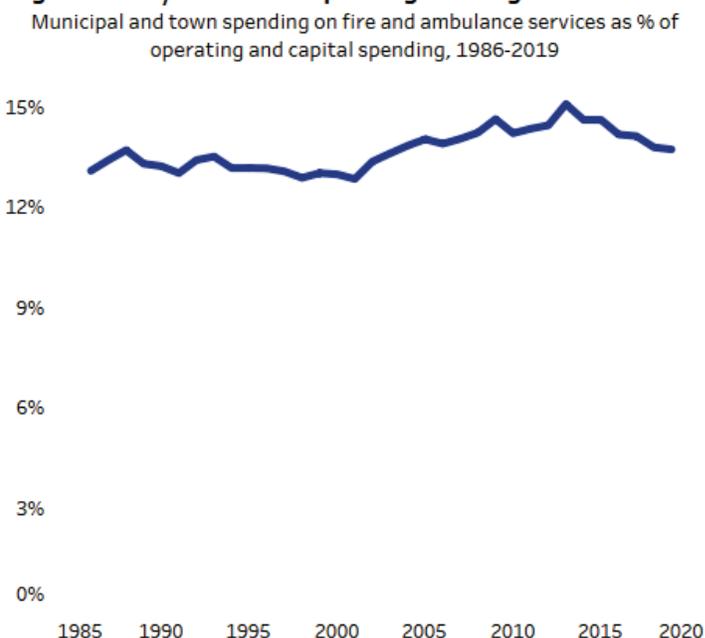


management of heavy EMS utilizers. Another option would be to explore a change in the state Medicaid plan to take advantage of a Ground Emergency Medical Transportation provision in federal law that allows Medicaid reimbursement for the full cost of an ambulance transport.

- Allowing localities more flexibility in terms of revenue and expenditure restraint limits (other than referendum) when addressing documented fire and EMS service challenges that need to be addressed with greater financial resources. As discussed earlier, state law does currently allow some exemptions for joint fire departments and joint or countywide EMS agencies. While these provisions may offer relief for those that elect to form joint departments or have their counties administer EMS, that may not be a feasible approach for many jurisdictions. Consequently, extensions to other types of departments or municipal agencies could be considered. The exemptions might even be tied specifically to those communities that desire and can document the need to move to a new and more expensive staffing model.
- Establishing a formal role for counties or regional entities in governing and setting standards for fire protection services and EMS throughout the state and providing state financial assistance to ensure standards can be appropriately monitored and met. We observed that in some states, regional entities assist in planning for future service delivery, coordinating services and service sharing, and providing other technical assistance to support local fire and EMS agencies. Counties, regional planning commissions, or new regional bodies could identify areas with service gaps and review the financial and service capability of local agencies. They could also encourage dispatch improvements and other changes that would remove obstacles to greater coordination or consolidation.

Finally, given that moving to a larger mix of full-time staff appears to be a must for many small departments, efforts to encourage consolidation among such departments appear to be in order. Proportional spending on fire and EMS by municipal governments is already trending downward (see Figure 5), suggesting

Figure 5: Fire/Ambulance Spending Starting to Trend Down



Source: Wisconsin Department of Revenue

little capacity for local governments to increase spending to pay for full-time staff. That is why – barring new forms of state aid or relaxation of levy limits – teaming up with neighboring departments may be the best solution given the opportunity it provides to share the cost of full-time staff and expensive vehicle replacements across a broader population.

It also could be argued that one of the fundamental challenges for EMS in Wisconsin is that system design decisions would most appropriately be made regionally, but under the state’s current structure most EMS delivery systems are funded and “owned” locally. This disconnect can lead to questionable policy decisions and might similarly be addressed by more extensive consolidation of EMS agencies at the county or regional level or by establishing a greater role for the state, counties, or regional bodies in setting standards for quality of care and responsiveness.

Overall, we hope state and local elected officials are paying attention to our recent reports and the overriding message they’re sending: the ability of many communities to provide an appropriate level of fire and emergency medical services is in jeopardy and may soon necessitate an emergency response of its own.

