

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.

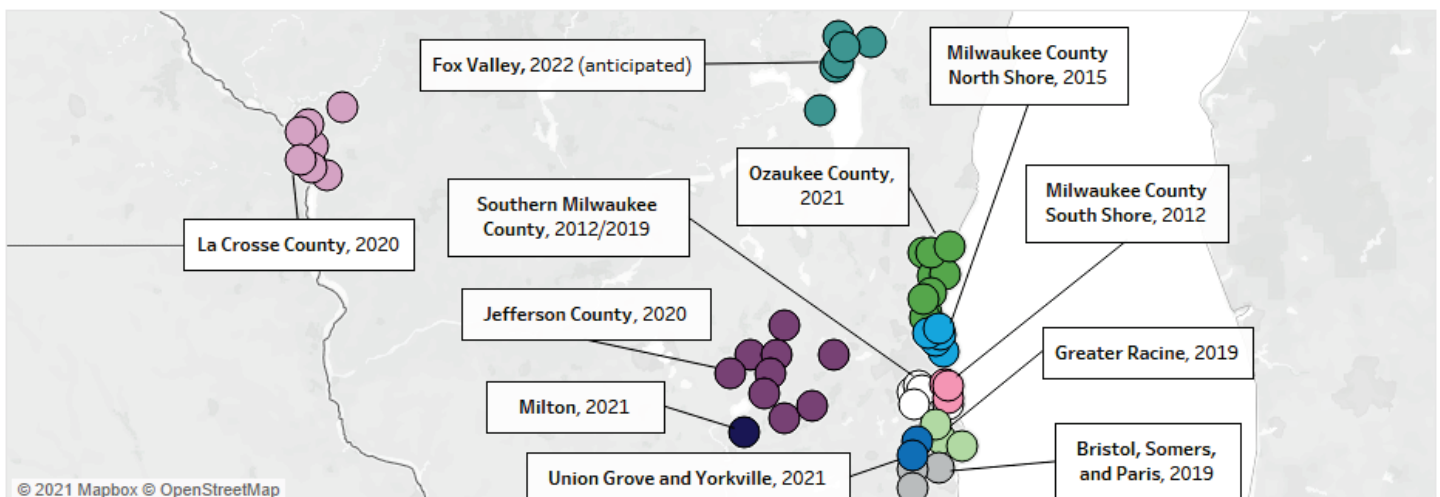
In the broadest sense, our studies consider whether greater collaboration and service coordination among multiple agencies – or perhaps full consolidation of neighboring departments – would address service challenges in a more cost efficient manner than if individual departments acted alone.

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 to refuse requests for mutual aid more frequently in recent years due to their own staffing shortages.

STAFFING DIFFERS BY COMMUNITY

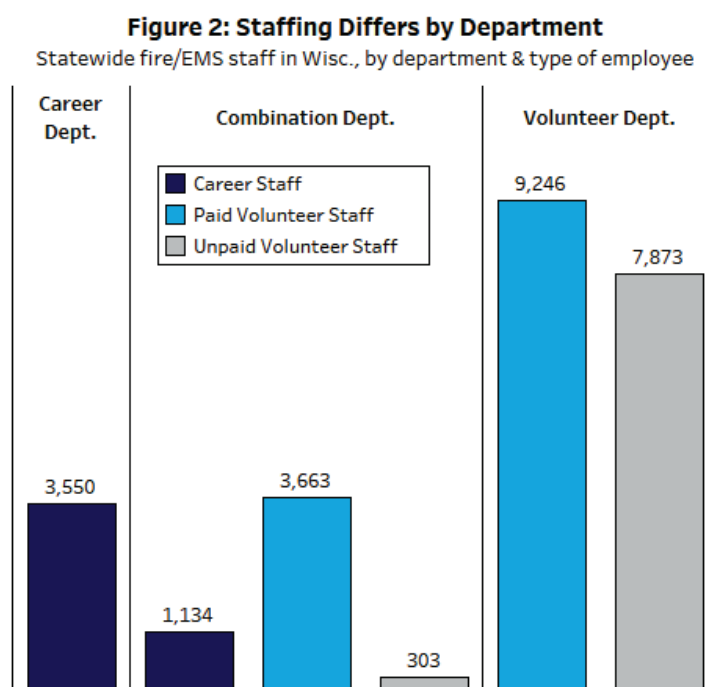
Whether they provide a full range of basic and advanced EMS or simply fire protection and emergency first response, fire departments in Wisconsin operate under three basic types of staffing models. The model is generally dictated by call volumes and geography, although financial considerations also can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



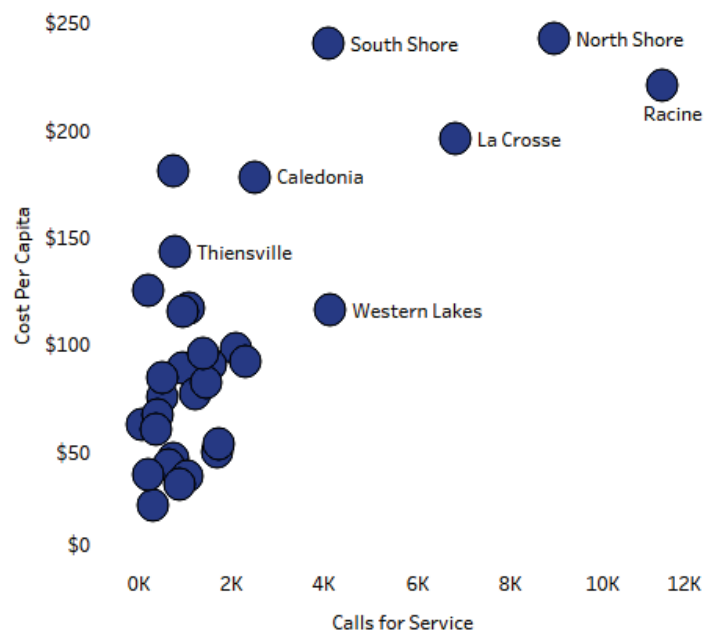
departments in the state, as reported by the Wisconsin Department of Safety and Professional Services. Most “volunteer” departments have at least some paid staff, even if it is only the chief, a deputy chief, or an inspector.

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



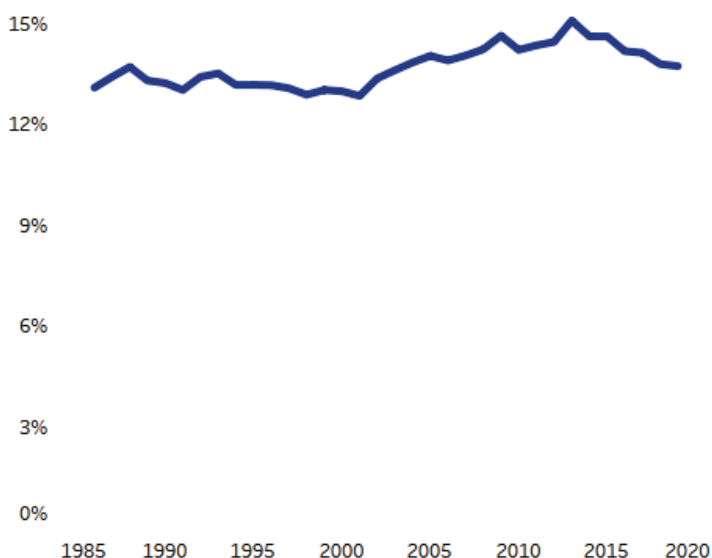
management of heavy EMS utilizers. Another option would be to explore a change in the state Medicaid plan to take advantage of a Ground Emergency Medical Transportation provision in federal law that allows Medicaid reimbursement for the full cost of an ambulance transport.

- 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

Municipal and town spending on fire and ambulance services as % of operating and capital spending, 1986-2019



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.

