

EVOLVING POSSIBILITIES

*Fire and EMS service sharing options
in Somers, Bristol, and Paris*



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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. The Wisconsin Policy Forum is committed to those same activities and to that spirit of nonpartisanship.

PREFACE AND ACKNOWLEDGMENTS

This report was undertaken to provide citizens and policymakers in the Village of Bristol, the Village and Town of Somers, and the Town of Paris with information on possible service sharing and consolidation options that might improve the quality and cost effectiveness of fire and emergency medical services in their communities. The intent was to lay out a series of options for their consideration, but not to make recommendations on the future of those services in the respective communities.

We would like to thank the three communities for commissioning this research and their fire chiefs and administrators for providing information and patiently answering our questions.



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May 2019

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BACKGROUND AND INTRODUCTION

Consideration of shared or consolidated fire and emergency medical services (EMS) has become commonplace in recent years in Wisconsin and across the nation. In the southeast Wisconsin region, the North Shore Fire Department in Milwaukee County has received national attention as an example of a highly successful consolidated fire department that has seen improved service at a lower cost since its creation in 1995. The South Shore Fire Department in Racine County also has demonstrated the benefits that can accrue from fire and rescue consolidation.

One of the most important potential benefits is the opportunity to preserve or enhance fire and EMS service levels in a difficult fiscal climate. In light of strict municipal property tax levy limits in Wisconsin and the substantial share of municipal budgets devoted to fire and EMS services, many communities face challenges in maintaining existing service levels and meeting service-level objectives. Others face challenges associated with growing service demands from new development and demographic factors.

Consolidation or enhanced service sharing may produce cost savings by achieving economies of scale. For smaller communities, it also may offer an opportunity to secure full-time, professional fire and EMS service capacity at a cost that would not be affordable if pursued independently.

At the same time, it is important to recognize that fire and EMS service consolidation may not be a worthwhile pursuit in certain jurisdictions or among certain municipal partners. Potential obstacles include geographic factors that may detract from the service-level benefits often produced by consolidation, different levels of demand and fiscal capacity among potential consolidation partners, and different service priorities among those communities.

Officials from the Town and Village of Somers, the Village of Bristol, and the Town of Paris asked the Wisconsin Policy Forum to analyze potential options for fire and EMS consolidation or enhanced service sharing among their municipalities. The rationale for exploring such options included challenges with current staffing models (including difficulty with recruitment and retention of paid-on-call firefighters); a desire for enhanced EMS service levels; and increased service demands resulting from new development and increased traffic on I-94. Officials also noted that their three fire departments already cooperated in terms of mutual aid agreements and other activities.

The analysis was conducted with the participation of the administrators from Somers and Bristol, an elected representative from Paris, and the three fire chiefs. In fact, while not endorsing any specific approach, the chiefs met or spoke regularly with Forum researchers throughout the study process to share information and discuss operational details of various service sharing options.

In the pages that follow, we lay out the results of our analysis. It is important to note that its purpose was not to recommend a specific consolidation approach and implementation plan. Instead, the intent was to develop a range of potential options and to provide sufficient fiscal and programmatic analysis to allow decision-makers to determine which (if any) of those options should be considered for more detailed analysis and/or implementation.

Early in our research process, it became apparent to us that under current conditions, a three-way consolidation of the departments in Bristol, Somers, and Paris would not produce significant service-level efficiencies. We also discovered, however, that consolidation could be effective as a means of enhancing the affordability and effectiveness of potential service *enhancements* or to meet likely increased *future* service demands.

As a result, while this report provides useful context for local leaders to understand the strengths and weaknesses of their current service models, it does not necessarily suggest immediate action. Its importance, however, lies in its spelling out of the potential new investment required to meet service demands in the not-too-distant future, and its framing of potential benefits that a collaborative approach may produce for service recipients and taxpayers.



DEMOGRAPHICS AND GEOGRAPHY

STUDY AREA DEMOGRAPHICS

The Village and Town of Somers, the Village of Bristol, and the Town of Paris, shown on **Map 1**, are located in southeastern Wisconsin surrounding the City of Kenosha and the Village of Pleasant Prairie. The southern border of Bristol abuts the state line with Illinois. The northern boundary of Somers is adjacent to the Foxconn development site, located in Racine County. Somers is the only one of the three communities with frontage on Lake Michigan.

Map 1: Study Area and Adjacent Kenosha County Municipalities

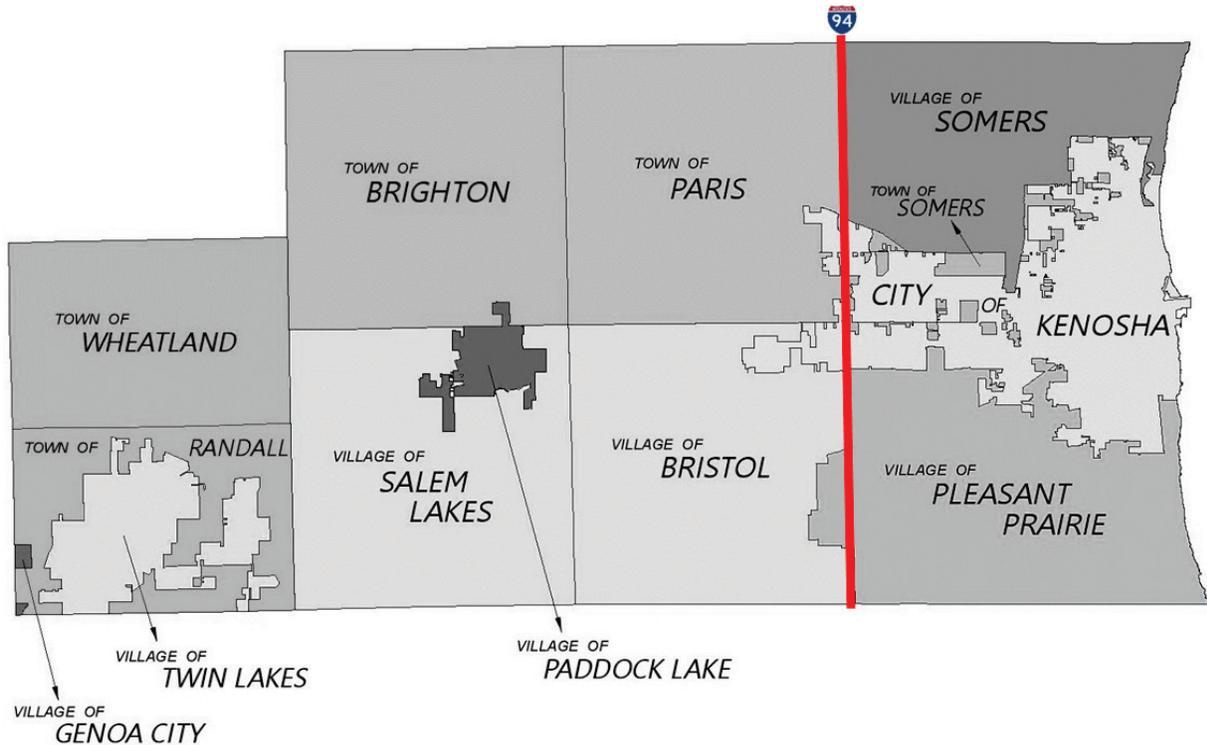


Table 1 presents some basic demographic data on the three municipalities. For the purposes of this report, the Town of Somers and Village of Somers are treated as a single jurisdiction since the fire department serves both areas.

Table 1: Comparative demographic data

	Village of Bristol	Town of Paris	Village/Town of Somers
Area (square miles)	32	35.2	29.2
Population	5,056	1,507	9,840
Population/square mile	158	43	337
Median household income	\$63,642	\$84,833	\$58,009
Total assessed value	\$543,700,200	\$195,048,100	\$814,198,900
Per capita assessed value	\$107,536	\$129,428	\$82,744
Commercial as % of total AV	20%	16%	25%
Population Growth 2010-2017	2.9%	0.2%	2.5%

Sources: 2016 American Community Survey; Wisconsin Department of Administration, Final Population Estimates 2018; Wisconsin Department of Revenue, Final Statement of Assessments 2018.

Although the three communities are approximately the same size in terms of land area, they are quite distinct demographically.

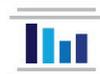
- Somers has a larger total population than either Paris or Bristol, and significantly higher population/housing density. Demographically, Somers has greater similarity to more developed suburban areas such as Mount Pleasant.
- Paris is essentially a rural area that is sparsely populated and has a smaller commercial base. While Paris is largely undeveloped, its household income and housing values are significantly higher than those of either Bristol or Somers. Paris has set aside very little area for development and has had next to no change in population since 2010.
- Bristol represents somewhat of a cross between Paris and Somers. Like Paris, much of the land in Bristol is set aside for natural resource protection and agricultural uses. But Bristol has allowed for some development, including housing projects for senior citizens, and its population density is about half that of Somers. Population growth between 2010 and 2017 in Bristol also is similar to population growth in Somers. Bristol's amount of commercial development as a percentage of total assessed value lands squarely between Paris and Somers.

Table 2 presents some demographic indicators that are related to fire/EMS services. Looked at through this lens, again there are significant differences between Bristol, Paris, and Somers.

Table 2: Demographic data related to fire/EMS services, 2016

	Bristol	Paris	Somers
% of residents 65+	19%	17%	13%
Number of housing units	2,229	678	3,401
Housing units/square miles	63.69	19.26	116.47
Percent of units in multi-unit structures	3%	0%	26%

Source: 2016 American Community Survey



Since almost four fifths of service calls are related to EMS, the age of the population is important when considering demand for services. Bristol and Paris have populations that skew older than that of Somers and that exceed the 15.2% of people 65 and older statewide.

In terms of fire protection, the density of housing units is a main determinant of station location and response times. Somers has a much higher density of housing, which allows for more efficient service provision, at least in terms of cost per household and response times. The amount of multi-family housing, especially high rise apartment buildings, is another factor for fire districts to consider. Multiple unit structures make up about one quarter of housing units in Somers but are negligible in the other two municipalities.

STUDY AREA GEOGRAPHY

Basic geography of the three municipalities also is an important consideration for fire and EMS services. Response times of an ambulance or fire truck depend on road access and geographic barriers, not merely distance as the crow flies. In this regard, the I-94 freeway presents a barrier. There are seven entrances/exits to the freeway in Kenosha County. Three state highways in the study area have no highway access but pass under the freeway.

The orientation of I-94 means that access between Bristol and Paris is simpler than between Somers and Paris or Bristol and Somers. For example, the quickest response between the Bristol and Somers fire stations is via the freeway (about 19 minutes). Avoiding the freeway would add three minutes to that travel time. The National Fire Protection Association standard is an initial fire response within four minutes and a full alarm response within eight minutes. As one chief described it, there's no easy way to get from Bristol to Somers.

The second geographic feature to consider is that Somers is bisected, again on a north/south axis, by three railroads. While there are some railroad bridges, there are also multiple on-grade crossings where a fire truck or ambulance could be delayed by a passing train. The location of the railroads, along with significant housing density near the lake, creates a necessity for a second station in Somers (as compared to the single stations in the other two communities).

Looking Forward

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) recently updated its projections of population and employment in light of the Foxconn industrial development. SEWRPC is projecting an additional 32,400 residents in the entire region as a result of Foxconn. In Kenosha County specifically, SEWRPC now estimates total population growth between 2010 and 2050 of 84,700 people, or a 51% increase. The number of new households, which corresponds roughly to new housing units, is expected to increase by 61%.

Table 3: SEWRPC population and employment projections for Kenosha County, 2010 vs. 2050

	2010	2050	Change	% Change
Population	166,400	251,100	84,700	51%
Households	62,600	100,900	38,300	61%
Employment	74,900	102,700	27,800	37%

These projections are not specific to Somers, Bristol, and Paris, but comprise all of Kenosha County, including Kenosha and Pleasant Prairie. Nevertheless, they do give an indication of the massive tide of real estate development, both commercial and residential, that is anticipated in Kenosha County.

Indications of where growth will occur also can be surmised from annexation agreements in the study area. Paris is committed to preservation of farmland and natural resource areas. While there is little appetite for growth in Paris, the town has entered into an agreement with Somers to allow for annexation of an area just east of I-94, between highway 142 and the Racine County line. Paris also has agreed to an annexation agreement with Kenosha for land on its eastern and southern borders. These agreements were negotiated in anticipation of future growth and to allow for orderly planning of sanitary sewer and water infrastructure.

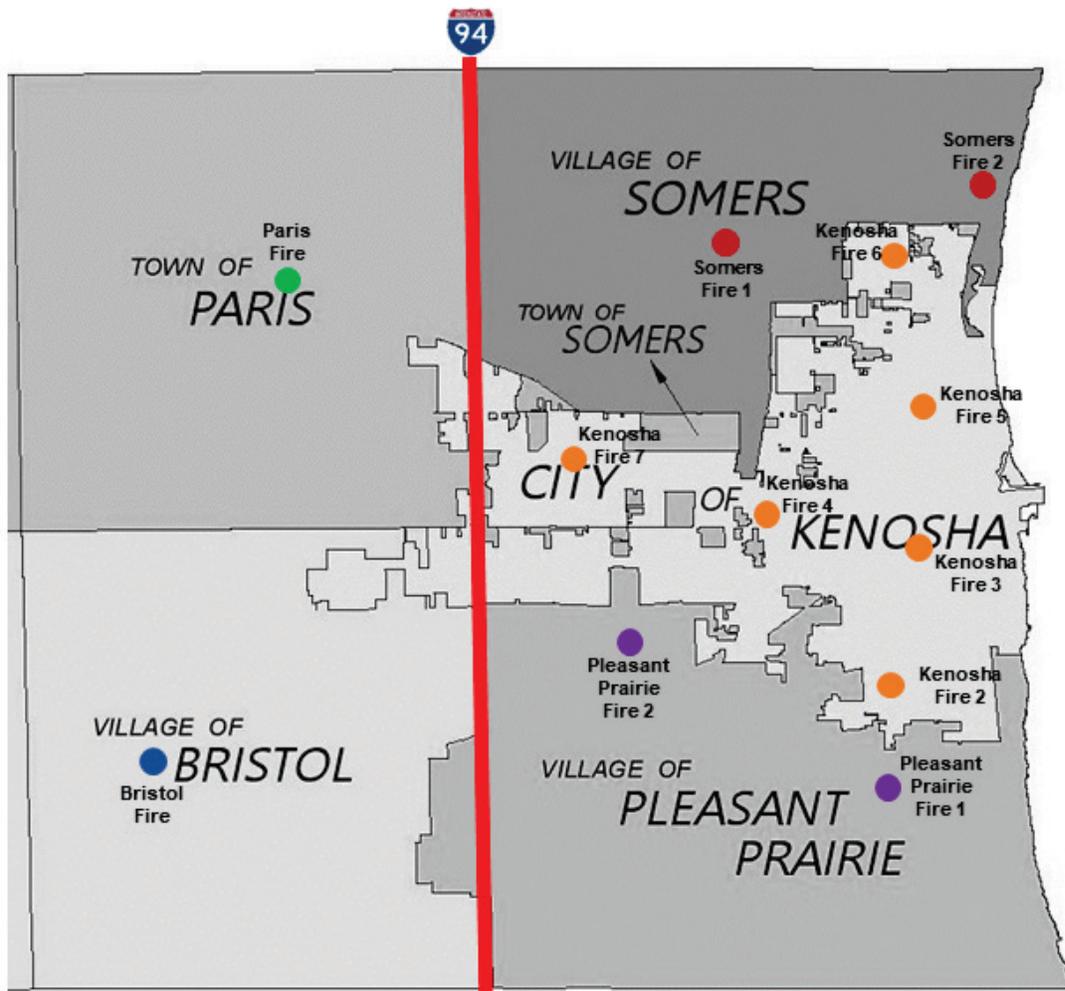
In addition, the Village of Somers has readied itself for development by establishing nine new TIF districts. The two largest are clustered near I-94, with one located on the border with Racine County. Somers also has created a more central TIF district and two on the lakefront. One consideration is how Somers will fund additional municipal services if the vast majority of its new development occurs in TIF districts. Additional tax revenues from such new development would not benefit Somers' general fund for several years.

Based on a review of annexation agreements and other land use plans, we can make some general conclusions about the scale and location of future development in the study area:

- Future development will cluster around the I-94 corridor, but probably will not be limited to that area.
- Paris is not likely to change much in terms of population.
- Because of its proximity to Racine County and Foxconn, Somers will likely experience higher amounts of new development than Bristol.

Given projected growth patterns, a discussion of future fire service in the study area also must take into account the fire and EMS plans of the City of Kenosha and Village of Pleasant Prairie. **Map 2** shows the location of fire stations in the region, including Kenosha Station 7 and Pleasant Prairie Station 2, the two most western stations for each jurisdiction.

Map 2: Location of fire stations in the study area



It should be noted that the Strawberry Creek subdivision, which is part of Kenosha, extends into the Village of Bristol. Strawberry Creek is served by Kenosha Station 7, but Bristol is the second closest station to that development. Pleasant Prairie Station 2 is the western-most station in Pleasant Prairie. If the area of Pleasant Prairie on the west side of the freeway continues to develop, then Bristol would house the closest station on the west side of the freeway, although Pleasant Prairie still has a shorter route assuming the freeway is open.

Kenosha and Pleasant Prairie chose not to participate in this study, but their plans in terms of locating future stations will affect emergency service response to Bristol and Somers, and to a lesser extent Paris. We will consider this when modeling future fire/EMS service scenarios later in this report.

EXISTING FIRE AND EMS SERVICES

As shown in **Map 2** in the previous section, Somers has two fire stations while Bristol and Paris have one apiece. The need for two stations in Somers stems primarily from the higher population density on its east side, which is separated by two sets of railroad tracks from Somers Station 1.

Table 4 details calls for service in 2017 (the latest year for which complete data were available at the time of our study). Consistent with most other fire departments, EMS calls in the three communities make up the vast majority of calls. Nevertheless, while structure fires are relatively infrequent (thanks to improved building standards and codes), they can have devastating consequences in terms of loss of life and property. Consequently, municipalities must staff and equip their departments for such occurrences.

Table 4: Calls for service, 2017

	Village of Somers	Village of Bristol	Town of Paris	Total
Fire	420	87	46	553
EMS	742	437	136	1,315
Other		184	33	217
Total Calls	1,162	708	215	2,085
Population	9,840	5,056	1,507	16,403
EMS Incidents/1000 pop	75.41	86.43	90.25	80.17

Source: Fire departments in Somers, Bristol, and Paris

It should be noted that the three fire departments have different ways of counting and recording calls, which can make comparisons difficult. Still, while these numbers may not be exactly comparable, they do give a general indication of comparative demand for service.

STAFFING

Each of the three fire departments has a different staffing model. Somers employs nine career firefighters but also staffs some of its shifts with hourly firefighters, referred to as Paid on Premises (POP) staff. Bristol does not employ career firefighters itself, but staffs one of its shifts with career firefighters through a contract with Metro Ambulance and also employs 15 part-time firefighters.

Like Bristol, Paris does not employ career firefighters. Instead, it staffs one 10-hour shift during the day with two hourly POP employees, while at night one POP firefighter is on duty. For purposes of this report, we do not consider this night-time operation to be a shift, as the POP firefighter on duty must call in a Paid on Call (POC) firefighter to assist if there is a call for service. (POC staff are hourly employees who are called in and work only when necessary.)

The following points regarding staffing are central to consideration of potential service sharing or consolidation scenarios:



- In general, career firefighters are full-time employees who work 2,520 hours per year in 24-hour shifts. The actual hours worked by career employees is reduced by vacation, sick leave, time off under the Family and Medical Leave Act (FMLA), training, and other paid and unpaid time off. Career employees receive both an annual salary and benefits.
- POP and POC staff are contract workers paid an hourly wage; they are not paid when they are on vacation, out sick, etc., although they are paid for training time.
- Contract firefighters are also full-time employees, but they work for a private sector vendor and not the municipality. The vendor contract supplies labor for one shift, exclusive of time off.

Both Bristol and Somers have developed creative solutions to staffing fire/EMS services. In Bristol, employees of the public works department also serve as POC firefighters and they are available to respond to incidents during their regular working hours. Meanwhile, the Somers Fire Department requires POC staff who live outside of Somers to spend 48 hours on duty in the station as POP.

As described above, while the departments differ in how they staff regular shifts, all three rely, to varying degrees, on hourly staff as a way to manage shift staffing (POP); or as a way to ensure resources are available to assist in larger incidents like a structure fire or major traffic incident (POC). POC may also be called to staff the station when a unit is out on a call. In fact, POC staff are essential to each of the three departments since the total number of firefighters available on any shift is still below the minimum number of 12 needed to respond to a structure fire.

In **Table 5**, we convert the various staff used by the three departments into full-time equivalents (FTEs), which is necessary both to give a complete picture of staffing levels in the three departments and to provide a means of comparison for various consolidation scenarios modeled later in this report. As shown in the table, the three departments (combined) employed 29.27 FTEs as of 2017, including two full-time chiefs (one each in Somers and Bristol) and a part-time chief in Paris.

There are more than 73 hourly contract employees employed by the three departments in total. Using each department’s budget for POC staff, we can determine a full-time equivalent by dividing POC salaries by an average salary amount. Essentially, our calculation of a POC FTE is a way of expressing POC hours as if they were being filled by a regular, full-time firefighter.

Table 5: Full-time equivalent fire department employees, 2017

	Village of Bristol	Town of Paris	Village/Town of Somers	Total
Fire Chief	1.00	0.50	1.00	2.50
FF/Paramedic/EMT	3.00		13.14	16.14
POP Shift Staffing	2.64	2.76	1.48	6.88
POC	2.45	0.85	0.44	3.75
Total FTE	9.09	4.11	16.07	29.27

Source: Fire departments in Somers, Bristol, and Paris; WPF calculations

Table 5 demonstrates the importance of hourly firefighters to fire service in the area, since more than a third of FTEs are either POP or POC. *Each of the three chiefs did express some concerns, however, about their ability to recruit and retain hourly employees in the future.* All mentioned a reduced interest among younger people in serving as firefighters. They also noted that in some instances, hourly employees stay only until they have received necessary training and then move on to career positions at other fire departments.

Employees in each department also take on command, supervisory, and inspection roles. These are treated as add-ons to their basic jobs and are compensated through stipends. **Table 6** shows the number of employees that receive a stipend for command or supervisory roles in each department.

Table 6: Command and supervisory staff

	Village of Bristol	Town of Paris	Village/Town of Somers
Asst Fire Chief	1 - Stipend	2 - Stipend	0.33 - stipend
Captain/Battalion Chief	2 - Stipend	2 - Stipend	3 - Stipend
Other Supervisory staff	3 - Stipend	4 - Stipend	
Inspector		1 - Stipend	0.25 - no extra pay

Source: Fire departments in Somers, Bristol, and Paris; WPF calculations

FIRE AND RESCUE RESPONSE

Shift staffing

The ability of each department to respond to fire and EMS calls is impacted greatly by its shift staffing, which refers to the number of staff on duty at any given time. As described above, shift staffing can be made up of full-time career employees (either contract or municipal employees), or POP/POC employees who are paid hourly as needed but can also be included as part of a shift. **Table 7** shows the average shift staffing for each of the three departments (the higher number for Somers reflects, in part, its need to staff shifts at two stations).

Table 7: Shift staffing

	Village of Bristol	Town of Paris	Village/Town of Somers
Per Shift	1.88	0.92	4.25

Source: Fire departments in Somers, Bristol, and Paris; WPF calculations

Note: At Bristol, shift staffing is from 6-7 AM and 4-6 PM Monday through Friday.

Bristol and Somers staff full 24-hour shifts, while Paris staffs for a 10-hour day shift. As a practical matter, therefore, firefighters from Bristol and/or Somers may be the first to arrive at the scene of an incident in Paris outside of day shift, as it takes longer for Paris to call in staff to respond.

Another important consideration is that for a structure fire, 12 firefighters generally should be in place before the Incident Commander will initiate a response. The response includes not only the necessary fire equipment, but also two ambulances and crews (one for victims of the fire and one in case a firefighter is injured). Consequently, when there is a structure fire in any of the three

municipalities in the region, shift staffing will never be sufficient to handle the response. POC firefighters must be called in and staff and apparatus from neighboring communities also will be dispatched to the scene.

Basic Life Support/ Advanced Life Support

Emergency medical response is provided at several different levels. The most basic level is provided by emergency medical technicians, or EMTs, who complete 180 hours of training for certification. An EMT can provide basic life support (BLS), but cannot intubate a patient or administer certain medications.

Advanced Life Support (ALS) services are provided primarily by paramedics. In Wisconsin, paramedics complete 1,000 hours of training and provide a broad array of medical interventions. All emergency medical response is overseen by a physician in the role of a medical director.

The three departments in the study area provide differing levels of EMS. Paris provides basic life support with a staff of EMTs. Bristol's regular staff is primarily paramedics, while 15 of its 40 POC staff are paramedics. Somers currently staffs with about half EMTs and half paramedics. According to the Somers chief, six of the 9.25 POC employees are paramedics.

ALS response is one example of how the three departments already display a high level of service coordination. Because Paris provides only basic life support, if it is determined that advanced life support is needed for an incident in that town, then the Kenosha Dispatch Center will send the nearest available ALS unit, either from Somers, Bristol, or possibly a different jurisdiction. The request for ALS response is initiated by Paris EMTs when they determine at the scene that paramedics are needed.

Automatic and mutual aid and other shared services

All three departments have automatic aid agreements, meaning they are dispatched jointly to a fire call in any of the neighboring jurisdictions. These automatic aid agreements are significant to our analysis because in a major incident, the three departments essentially already operate as a single department.

The departments also provide mutual aid to each other, which differs from automatic aid in that the responding department arrives at the scene and then contacts dispatch to request additional help from a neighboring department. One example of mutual aid would be an EMT responder who determines that ALS is required and calls dispatch with a request for mutual aid.

While automatic aid agreements allow for a coordinated response, in practice both automatic aid and mutual aid will depend on several factors, such as:

- the shift (day, swing, or night)
- location of the incident
- severity of the incident
- whether a department providing automatic aid has available resources

There are several other areas in which the departments currently work together. Probably the most significant is training, which is essential for all firefighters. The three departments also do some co-purchasing and equipment sharing. In addition, each department participates in countywide coordination of Hazmat response, dive team, technical rescue, and fire investigations.

Response times

The National Fire Protection Association (NFPA) publishes a standard regarding staffing and response time objectives for structural firefighting. For an area with less than 500 people per square mile (which is the entire study area), an adequate response time according to the NFPA is 14 minutes, met 80% of the time. The NFPA standard also sets a minimum number of responders at six, but this includes automatic aid.

All three of the departments meet NFPA standards for response times, as shown in **Table 8**. By way of comparison, for suburban areas, defined as having densities of between 500 and 1,000 people per square mile, the standard response time is 10 minutes 80% of the time, with a minimum staffing of 10.

Table 8: Response times

	Village of Bristol	Town of Paris	Village/Town of Somers
EMS calls			
Call received - out the door		5.6	1.6
Door to Scene		5.3	4.32
Total Response Time	8.9	10.9	5.92
Fire calls			
Call received - out the door		7	2.32
Door to Scene		5.3	4.68
Total Response Time	10.18	12.3	7

Source: Fire departments in Somers, Bristol, and Paris

Note: Bristol only provided total response times

Because Somers has two stations, it makes sense that its response times are lower than those of Bristol or Paris. Given that Paris has staffing available at the station during a 10-hour period during the day, response times likely vary considerably depending on the time of day.

APPARATUS

The staffing levels and capabilities of fire and rescue departments are shaped, in part, by the apparatus they own to respond to fire and EMS calls. **Table 9** shows the apparatus owned by each of the fire departments in the study area. It is not surprising that Somers – with two stations – owns the largest number of vehicles.

Table 9: Apparatus owned by the three departments

	Village of Bristol	Town of Paris	Village/Town of Somers
Tanker/tender	1	1	1
Tanker/pumper	1	1	
Engine	1	1	3
Brush Truck	1	1	1
Ladder Truck	1		1
Ambulance	2	2	3
Command vehicle/Pick ups	2		2
ATV	1		1
Dive team van			1
Quad Rescue Truck	1		
TOTAL	11	6	13

Source: Fire departments in Somers, Bristol, and Paris

Replacement costs for fire apparatus, especially fire trucks, are high, and much of the fleet shown in the table will be due for replacement in the next five- to 10-year period. Estimated replacement costs for Somers in the next 10 years total \$2.3 million, while for Bristol they total \$2.9 million. Based on the age of the fire apparatus in Paris, we estimate their replacement cost to be \$1.6 million in the next 10 years.

DEPARTMENTAL BUDGETS

Table 10 summarizes the most recent annual expenditures and revenues as reported to us by each department.¹ Total annual expenditures for fire/EMS protection by the three municipalities were about \$2.4 million.

¹ Budget information for Somers is from the 2017 amended budget; for Bristol, budget numbers reflect the 2017 actual budget; for Paris, the table is based on the 2016 Budget.

Table 10: Fire department budgets

	Village of Bristol	Town of Paris	Village/Town of Somers
Revenues			
Property Taxes	\$556,070	\$254,500	\$1,038,370
State Rev	\$24,508	\$10,000	\$33,500
Charges	\$149,627	\$15,000	\$313,856
Misc Rev	\$11,980	\$2,000	\$20,066
Total Revenues	\$742,185	\$281,500	\$1,405,792
Expenditures			
Regular Salaries	\$260,001	\$27,400	\$757,209
Contracted personnel/POC	\$217,990	\$151,600	\$67,400
Other Pers Expense	\$67,851		\$406,568
Supplies, Misc	\$73,170	\$82,500	\$90,865
R/M Equipment	\$37,116	\$20,000	\$31,000
R/M Facilities	\$4,327		
Insurance*	\$27,844		
Utilities	\$13,570		\$33,750
Capital Outlay			\$19,000
Total Expenditures	\$701,869	\$281,500	\$1,405,792
Per Capita Expenditures	\$138.82	\$186.79	\$142.87

Source: Fire departments in Somers, Bristol, and Paris

* Somers and Paris show no expenditures for insurance because fire department insurance costs are contained in centrally budgeted municipal-wide insurance accounts and we were unable to isolate amounts attributed to fire and EMS.

When viewed on a per capita basis, Bristol and Somers are spending about the same amount for fire protection. Paris' per capita cost is higher mainly because it is such a small community and costs are spread over a smaller population base.

LOOKING FORWARD

The tidal wave of growth that is just beginning in this corner of Wisconsin will impact the demand for fire/EMS services. Given the location of projected growth – north and near the freeway – Somers likely will need to construct and staff a third fire station to the west to respond to call volume there. Bristol is planning for less growth than Somers, and that growth also will be near the freeway but probably more concentrated to the south near the Illinois border.

Another consideration with regard to station construction is whether Kenosha and Pleasant Prairie plan to build new stations. These communities all work together to provide fire and EMS service even though those two municipalities are not participating in this study.

Currently, the three fire departments are closely intertwined through automatic aid agreements. *The amount of new development that is projected raises the question of whether the departments can effectively maintain their current aid agreements, however.* For example, even though Paris is not planning for growth, the population growth in the broader region likely will affect calls for automatic

aid. Bristol and Somers may experience an increase in the number of simultaneous calls, which could limit their ability to provide aid to Paris.

Another service level consideration is increasing traffic on I-94. The road is being widened through the study area and traffic volumes are projected to increase.

AREAS OF CONCERN/DEFICIENCY WITH CURRENT MODEL

The current fire/EMS model meets the needs of residents and businesses in the area with adequate response times. However, there are some vulnerabilities going forward in light of anticipated growth.

For example, POP/POC employees are integral to staffing for all three departments, and particularly for the Town of Paris. Use of these employees is important not only in terms of mounting a response, but also financially because POP/POC staff do not come with benefit costs and are paid only when their services are required.

One consideration with regard to continued heavy reliance on hourly staff is that such reliance may increase response times when compared to having regular shift staffing. Somers has mitigated this somewhat by requiring POP hours at its stations. In general, however, any improvement in response times – and/or the ability to maintain existing response times in the face of increased numbers of calls for service – likely would be limited with the current model.

Perhaps the foremost concern with the POP/POC model, however, is the departments' continued ability to recruit and retain hourly employees. Current unemployment rates in Wisconsin are at historic lows and wages in the southeastern part of the state are rising. All three departments report that recruitment of POC staff is an issue and is expected to get more difficult in the future. Retaining POC employees is also becoming a problem, as chiefs report that employees sign on as POC and receive training that they then use to move into career firefighting positions in other jurisdictions. The tightening labor market caused by new development is likely to further exacerbate recruitment issues for all three departments.

Consequently, both Bristol and Somers have expressed a desire to move further in the direction of career departments. Fiscal constraints pose a challenge to doing so, but new development may bring the added tax base that allows for additional funding for that purpose. Another benefit of a move to a career firefighter model is that jurisdictions outside the study area would be more likely to enter into automatic aid agreements. For example, South Shore Fire in Racine County has been reluctant to enter into an automatic aid agreement with Somers until it attains regular three-person shifts.

SERVICE SHARING/CONSOLIDATION OPTIONS

In this section, we present and discuss multiple scenarios for future fire and EMS service sharing among the three communities. Our analysis contains both estimates of the combined cost associated with each of the potential service delivery models; and some basic, hypothetical cost allocations to illustrate the specific fiscal impact for each municipality.

It is important to note that our analyses of these sharing/consolidation models are purely illustrative in nature. There are several unknowns that create variability in any attempt to model future costs and service levels. Our intent is to provide a broad level of analysis that will give decision makers a sense of the comparative costs and benefits associated with different options they may wish to consider as the region grows over the next decade, and as the state’s labor market changes in ways that impact their ability to recruit and retain fire and EMS staff. The eight scenarios are summarized in the box below.

NEAR-TERM SERVICE SHARING OPTIONS	
Scenario 1a: Regional EMS	Somers and Bristol jointly provide EMS service in Paris, but Paris retains POC staffing model for first response and fire calls.
Scenario 1b: Full Consolidation with a Small Increase in Staffing	The three departments consolidate into one with 8 shifts, including 7 staffed exclusively with career firefighters.
Scenario 1c: Full Consolidation, Small Increase but Contract Staffing	Mirrors all of the assumptions of Scenario 1b but substitutes contract employees for municipal firefighters.
LONGER-TERM SERVICE SHARING OPTIONS	
Scenario 2a: Full Consolidation with Larger Increase in Staffing	The three departments consolidate into one with 10 shifts, including 9 staffed exclusively with career firefighters.
Scenario 2b: Full Consolidation, Larger Increase but Contract Staffing	Mirrors all of the assumptions of Scenario 2a but substitutes contract employees for municipal firefighters.
OTHER SERVICE SHARING OPTION	
Scenario 3a: Somers Provides Fire/EMS Services in Paris	Somers adds third station west of Station 1 and contracts to serve Paris using that station.
Scenario 3b: Paris Provides Fire/EMS Services in West Somers	Paris increases staffing at its station and contracts with Somers to serve western part of village.
Scenario 3c: Bristol Provides Fire/EMS Services in Paris	Bristol increases staffing at its station and contracts to serve Paris.

The modeling and projections in this section focus primarily on staffing levels, command structure, and related costs, with emphasis on the following variables. The detailed assumptions regarding many of these variables are described in **Appendix A**.

- Use of career, paid on premise (POP) staff, paid on call (POC) staff, or contract staff

- Shift staffing (i.e. coverage)
- Annual cost for apparatus replacement
- Command/administrative staff
- Ratio of benefits to salary
- Estimated increase in call volume (included in cost allocations)

In brief, we model three near-term scenarios that would be appropriate to consider if demand for services remains roughly the same and policymakers do not wish to pursue significant increases in staffing levels; and several longer-term scenarios that policymakers may need to consider given projected increases in call volume associated with anticipated development. These longer-term scenarios include some in which the three departments would consolidate into one, and others involving only two of the three departments.

The scenarios chosen for this analysis were decided in consultation with the fire chiefs and administrators in Paris, Bristol, and Somers. It is important to note that while full consolidation options are considered, the chiefs agree that *under current service demands, a three-way consolidation would be unlikely to produce significant service-level benefits and efficiencies*, mainly due to geographic issues such as the distance between Bristol and Somers. Nevertheless, we believe it is instructive to lay out associated costs for policymakers given that consolidation may become a more attractive option in the future.

There are a few other important points to consider when reviewing our models:

- While we consider overall staffing levels and costs, our modeling does not address certain policy issues that will be decided by future elected officials, administrators, and fire chiefs. For example, each of the three departments has a different approach to utilizing EMTs versus paramedics, and each will face decisions on possible modified approaches to meet growing levels of development and demand for more sophisticated and enhanced EMS service levels. For our modeling, we base the cost per firefighter on the mix of EMTs and paramedics currently utilized in Somers. It is quite possible, however, that future leaders may opt to pursue a force of all paramedics, in which case the costs shown here are understated.
- Similarly, the models do not attempt to project the precise deployment of apparatus and staff among the various fire stations, and they only partially consider the impact of potential new stations. For example, the Somers chief has indicated the likely need for a third station to serve new development in the northwest portion of the village. While several of our scenarios consider additional shifts of firefighters and make assumptions regarding where those new shifts would be located, there would be several options for actual deployment.
- Readers also should keep in mind that both Kenosha and Pleasant Prairie may consider construction of new fire stations to serve development on their western boundaries. That would make it possible to pursue new cooperation agreements or even for any of the three departments to co-locate an ambulance and/or engine in a station in Kenosha or Pleasant

Prairie, similar to an agreement in neighboring Racine County between Caledonia and South Shore Fire. Such possibilities, however, are not incorporated in our modeling.

- Somers' collective bargaining agreement with its firefighters' union addresses both contracting for fire/EMS services and potential mergers with other departments. If Somers chooses to contract for services, the agreement specifies that no employee will be laid off or suffer a reduction in regular hours. If Somers were to pursue consolidation or merge with another department, the agreement provides a guarantee of the wages of affected employees for 18 months or until they are covered by a collective bargaining agreement with the new entity. Our fiscal modeling does not take these provisions into account.

Finally, in discussing potential benefits associated with fire department consolidation, we consider benefits derived in other jurisdictions we have studied, such as the North Shore Fire Department in Milwaukee County and the South Shore Fire Department in Racine County. Those include improved service levels due to more effective deployment of staff and apparatus; enhanced operational efficiency from joint training and unified command; better capability to recruit and retain staff in light of expanded career ladders; and, in the case of the NSFD, substantial cost savings. We have not conducted a rigorous analysis of the opportunity to enjoy similar benefits through consolidation in this study area, but logic would dictate that such potential does exist.

CURRENT SERVICE MODEL

To determine how costs might change under different future scenarios, we first need to establish a baseline that reflects current staffing and costs. In **Table 11**, we show the combined staffing and expenditures of the three departments, based on the latest financial figures that were available to us and using several assumptions and calculations to provide consistency among the three. Our analysis shows that combined, the three departments maintain about 27 full-time equivalent (FTE) positions (excluding 2.5 FTE chief positions) and spend about \$2.3 million on fire and EMS. While not shown in the table, the breakdown per municipality is \$1,189,941 for Somers, \$707,655 for Bristol, and \$362,045 for Paris.

Table 11: Current combined costs and staffing

	Combined
Shift Staffing	7.05
Career Staffing	16.14
POP Staffing	6.88
POC Staffing	3.75
Total Shift FTE	26.77
Career Staffing Cost	\$1,253,529
POP Staffing Cost	\$282,976
POC Staffing Cost	\$154,014
Command Staff Cost	\$265,500
Apparatus Replacement	\$451,017
Other Costs	\$433,142
Total Expense	\$2,840,178
Revenues	(\$580,537)
Net Expense	\$2,259,641

Sources: 2017 Amended Budget Village of Somers; 2017 Actual Expenditures Village of Bristol; 2016 Budget Town of Paris; WPF calculations

Notes: Career staff includes one shift (3.0 FTE) of contracted FF/paramedics in Bristol. Also, apparatus replacement costs reflect estimated annualized replacement cost of the current fleet in the three departments, and not actual or budgeted replacement costs.

A key assumption involves shift staffing, or number of firefighters on duty at any one time, which we estimate to be 7.05 under current operations. Essentially, that means that across the four fire stations, there are 7.05 staff physically on duty (as opposed to available for call-in) when averaged across all shifts.

To provide that level of shift staffing, the three departments currently employ a total of 26.77 full-time equivalent (FTE) firefighters. As discussed in the previous section, this total is comprised of career firefighters employed by the municipality (working regular shifts, part-time, and overtime); Paid on Premise (POP) firefighters working shifts and paid on an hourly basis; Paid on Call (POC) firefighters who report to work when circumstances warrant their being “called in” and who also are paid hourly; and firefighters employed by a private contractor who work regular shifts.

The cost of command staff, currently at 2.5 chiefs, is estimated at \$265,500 including salary and benefits. The “other costs” category includes supplies, insurance, and utilities.

Table 11 differs from actual departmental budgets with regard to equipment replacement costs. In 2017, the three municipalities’ budgets included only \$19,000 for equipment or capital purchases. In any given year, however, that amount may be much higher depending on what is budgeted for replacement that year. To even out capital expenses from year to year, we calculated an average equipment replacement cost of \$451,017 per year, which represents annual debt service on 20-year bond financing assuming the three departments fully meet their identified equipment replacement needs over the next 10 years. Further detail on this calculation can be found in **Appendix A**.

NEAR-TERM SERVICE SHARING OPTIONS

In the near term, before any sizable increase in demand for fire and EMS services occurs due to anticipated development, the primary service-related challenges facing the three communities are difficulty in recruiting and retaining POP and POC staff; and the growing imbalance between EMS and fire calls, which suggests the need for a more highly trained staffing framework with greater numbers of paramedics.

To address these challenges, we consider three scenarios. One would involve creation of a regional EMS service for all three communities, which would be provided by Somers and Bristol while Paris maintains its POP/POC structure for fire suppression; the second considers a consolidation of the three departments with a minor increase in shift staffing and a move toward a career firefighter model; and the third involves three-way consolidation but substitutes contracted for municipal staff.

Scenario 1a: Bristol and Somers Provide EMS Service, Paris Retains Hourly Staffing for Fires

Scenario 1a is an enhanced service sharing approach in which Somers and Bristol would jointly provide BLS and ALS service in Paris, but Paris would retain a POC staffing model for first response and fire calls. This is the most basic and simplest scenario we considered; it is based on a premise that there may be a benefit to having Somers and Bristol, which currently assist with or handle many of the EMS calls in Paris because of their advanced capabilities, provide that service under a formal agreement with Paris.

Under this scenario, Paris would retain its station and hourly staffing model and would provide EMT first response using personal vehicles. Paris also would continue to provide automatic aid for structure fires and major incidents using POC staff. However, ambulance service, at the BLS or ALS level, would be provided by either Somers or Bristol, depending on which department has a station that is nearer to the incident. The cost of this scenario is based on current staffing in Bristol and Somers but POP shift staffing in Paris (0.92 of a shift) is eliminated.

This approach recognizes that the vast majority of service calls in Paris are related to EMS; a more formal collaboration with Bristol and Somers would allow for enhanced EMS services in Paris given that both Bristol and Somers would have a formal arrangement to provide such services, as opposed to the automatic aid agreement that currently dictates such service provision. In addition, it could serve as a more logical means of allocating costs that Somers and Bristol currently are incurring on their own, to some extent, for the automatic aid for EMS incidents they provide in Paris. At the same time, it recognizes that Paris has an investment in its own independent fire suppression capability and a desire to maintain its department.

A key financial element of this scenario is that ambulance revenues generated in Paris would be retained by Somers and Bristol (depending on which department fields the call). Because this scenario would provide a higher level of EMS in Paris, both in terms of response and availability of ALS, it assumes that Paris would be willing to reimburse Bristol and Somers for their added responsibilities. While much of that cost could be recovered by ambulance revenues, the fact that a significant portion of ambulance charges may not be collectable likely would require additional payments. Our model assumes Paris would supplement uncollectable ambulance charges in the

amount of \$30,000 annually and pay an additional annual fee of \$100,000 apiece to Bristol and Somers for EMS services (for a total Paris cost of \$230,000).

Table 12 shows the estimated financial impact of Scenario 1a.² Because the scenario assumes Bristol and Somers could fulfill a formal agreement to provide BLS and ALS service in Paris with *current* staffing levels – and that Paris would be able to reduce its shift staffing and retain only its chief position and 0.85 FTE in POC staffing – there is a reduction in cost for this scenario (from the current combined amount of \$2.3 million to \$2.1 million). For the sake of simplicity, this scenario also assumes that Bristol and Somers split the calls in Paris evenly.

Table 12: Scenario 1a, regional EMS

	Village of Bristol	Town of Paris	Village/Town of Somers	Total
Career Staffing	3	0	13.14	16.14
POP Staffing	2.64		1.48	4.12
POC Staffing	2.45	0.85	0.44	3.75
Total FTE	8.09	0.85	15.07	24.01
Total Expense	\$883,617	\$52,505	\$1,744,636	\$2,680,758
Revenues	(\$196,115)	(\$12,000)	(\$377,422)	(\$585,537)
Paris Subsidy	(\$115,000)	\$230,000	(\$115,000)	\$0
Net Expense	\$572,502	\$270,505	\$1,252,214	\$2,095,221

Notes: 1) Shift staffing is reduced from 7.05 to 6.13 with elimination of Paris shifts; 2) Apparatus costs are reduced by 10% for Bristol and Somers and eliminated for Paris; 3) Other costs are increased by 10% for Bristol and Somers; 4) Revenues are slightly higher because some ALS charges for Paris now are collected by other departments.

Table 13 compares current net expenditures for each of the three communities³ with the net expenditures shown for this scenario. Our modeling shows that Bristol and Paris each would experience a cost savings while Somers would see a small added cost. Given that it would be illogical for one of the municipalities to incur an increased cost in a scenario that reduces overall costs, a different allocation methodology using factors such as population or calls for service could be developed to distribute cost savings in a different manner.

Table 13: Fiscal Impacts for Scenario 1a

	Current	Scenario 1a	Fiscal impact
Somers	\$1,189,941	\$1,252,214	\$62,273
Bristol	\$707,655	\$572,502	(\$135,153)
Paris	\$362,045	\$270,505	(91,540)
TOTAL	\$2,259,641	\$2,095,221	(\$164,420)

² For this and subsequent tables outlining the costs associated with our modeling scenarios, we show an expense summary that combines several individual expenditure categories. More complete expenditure breakdowns for each scenario can be found in **Appendix B**. Also, the source for this and subsequent scenario tables and charts is budget data obtained from public documents or directly from the three municipalities and WPF calculations.

³ Current net expenditure for each municipality are based on our current service model as shown in **Table 11**.

Again, this scenario represents a reduction in shift staffing overall because Paris would no longer be manning regular shifts at its fire station, but instead would rely on Bristol and Paris to provide ambulance service in response to EMS calls. Depending on the time of day, it is possible this arrangement would improve response times in Paris, given that firefighter/EMTs currently may need to be called in to respond to EMS incidents in Paris. Also, unlike several of the scenarios discussed below, Paris also would be able to retain its independent department and POC structure.

A potential disadvantage, however, is that adding this response would take crews from Bristol and Somers a considerable distance from their home service area and may affect readiness in the case of simultaneous calls (especially for Bristol). In addition, given that this scenario lowers overall investment in fire/EMS services, its potential sustainability in the longer term should be carefully considered in light of projected growth in development.

Scenario 1b: Full Consolidation with a Small Increase in Staffing

Scenario 1b outlines a hypothetical model under which the three departments would consolidate into one as a means of improving coordination, providing a small increase in shift staffing, and moving towards a staffing model of primarily career firefighters. The premise behind this scenario is that, even without a desire to significantly increase staffing and service levels, the three communities may wish to join forces in order to grapple collectively with the need to replace a POP/POC staffing model with a career firefighter model.

This scenario assumes a total of 8.0 shifts, a slight increase in shift staffing from the current 7.05 shifts. The more significant difference is that this scenario models seven shifts staffed with career firefighters and only one with POP. Since the eight firefighters that would be distributed across the four stations in the region still would not be sufficient to address a house fire or major incident, however, this scenario assumes the current level of POC hours would not change.

The projection of command staff in Scenario 1b assumes a chief and assistant chief at salaries of \$90,000 and \$80,000 respectively plus benefits (estimated at 40% of salary costs). Command staff costs also include \$50,000 in administrative expenses, including human resources, fiscal/accounting, legal, and clerical needs. In all likelihood, those administrative functions would be handled either by Somers or Bristol, which would serve as fiscal agent for the consolidated department and have their costs factored into a cost allocation formula. It is also possible, however, that separate staff would be hired or professional services contracts used to fulfill those duties.

This scenario also shows a small reduction in apparatus replacement cost in comparison with current projections. A consolidated department would be expected to create some efficiencies in fleet management (including a reduction in reserve vehicles). Based on a cursory review of each department's apparatus, we concluded that such efficiencies would have potential to lower overall replacement costs by 10%.

Table 14 shows the cost of eight shifts in a consolidated department primarily staffed with career firefighters and assisted by POC firefighters for structure fires and major incidents. We estimate that the consolidated department would require 26.53 career FTEs, an increase of 10.39 FTEs (costing approximately \$1.1 million) over current career and contract staff. POP staffing costs would be

reduced, however, from the nearly \$283,000 under the current service delivery model to \$125,000, as only one shift of POP would be utilized under this scenario.

Table 14: Scenario 1b, consolidated department with slight increase in coverage

Scenario 1b	
Career Staffing	26.53
POP Staffing	3.3
POC Staffing	3.75
Total FTE	33.58

Net Expense \$3,223,528

Note: Our net expense total includes an increase in cost for career staff which results, in part, from budgeting all FTEs in this scenario at the Somers expenditure level of \$90,266/FTE. That cost exceeds the average current costs/FTE for the three departments because FTE costs are lower in Bristol and Paris.

Overall, the estimated \$3.2 million annual net cost associated with this scenario exceeds that of the current service delivery model by about \$1.0 million. Part of the cost increase is attributed to the addition of a full shift. Another component is higher salary and benefits from a staffing plan that relies almost entirely on career firefighters rather than a mix of career, contract, and POP staff.

As noted above, while the shift to a career staffing model would cost more, it could help the three municipalities address some of the challenges they face in recruiting and retaining POP/POC staff. Some additional potential benefits of a consolidated department include the potential for more strategic deployment of apparatus; better coordinated command and training (in part because of the addition of the assistant chief); and enhanced ability to recruit and retain staff.

In evaluating this scenario, a key question for each municipality would be the extent to which it would need to pay more on an *individual* basis to derive these potential benefits. To answer that question, each would need to know how costs associated with the merged department would be allocated.

Table 15 breaks down the cost of the consolidated department per municipality using two hypothetical cost allocation methodologies. These methodologies are shown for purposes of illustration only, as the three municipalities could negotiate a variety of cost allocations. The first methodology allocates the cost based on each municipality’s proportion of current fire and EMS spending, while the second allocates the cost by estimated future calls (see **Appendix A** for projection of future calls).

As shown, Somers would assume an estimated annual cost increase of between \$500,000 and \$700,000 from current spending, while Bristol’s annual cost increase would be roughly \$300,000 under either approach. Paris’ costs would decrease under an allocation based on calls, but would increase by about \$150,000 if shared proportionally.

Table 15: Allocation options for increased cost under Scenario 1b

	Current	Scenario 1b Proportional	Scenario 1b by Calls
Somers	\$1,189,941	\$1,697,530	\$1,910,950
Bristol	\$707,655	\$1,009,517	\$1,064,028
Paris	\$362,045	\$516,481	\$248,551
Total	\$2,259,641	\$3,223,528	\$3,223,528

Scenario 1c: Consolidation with Contract Staffing

This scenario mirrors all of the assumptions of Scenario 1b except that it substitutes contract employees for municipal firefighters. Municipal employees still would be used for relatively limited POP and POC staffing. As noted above, Bristol currently uses contracted employees for one of its shifts. We estimate the cost per shift based on that contract plus inflationary increase. The total estimated cost per shift is \$240,000.

As shown in **Table 16**, the net total annual cost of this scenario is \$2.5 million. That is about \$250,000 more than current combined net expenditures but about \$720,000 less than the cost of the previous basic consolidation scenario using municipal firefighters/paramedics. It should be noted that staffing costs are lower under this scenario both because of a reduced cost per FTE (\$80,000 versus \$90,266) and because scheduling is assumed to be a straight 3.0 FTE per shift without adjustment for time off, training, FMLA, etc., as the vendor provides straight shift coverage.

Table 16: Scenario 1c, consolidation with contract staffing

Scenario 1c	
Contract Staffing	21
POP Staffing	3.3
POC Staffing	3.75
Total FTE	28.05
Net Expense	\$2,508,761

Table 17 shows how costs might be allocated between the three municipalities using the same allocation methodologies employed for the previous consolidation scenario (one based on current expenditures and another based on projected call volumes).

Table 17: Allocation options, Scenario 1c

	Current	Proportional	By Calls
Somers	\$1,189,941	\$1,321,129	\$1,487,226
Bristol	\$707,655	\$785,672	\$828,096
Paris	\$362,045	\$401,960	\$193,438
Total	\$2,259,641	\$2,508,761	\$2,508,761

This modeling shows that if the municipalities wish to consider a basic consolidation scenario that would slightly increase staffing levels, then they may be able to do so with a relatively small financial investment if they contract out for fire/EMS staff (though it is impossible to know for certain what the cost of contracting would be prior to negotiations with a contracted vendor). Potential advantages of achieving consolidation with contracted fire and paramedic staff include significantly reduced human resources challenges and responsibilities for the three departments and the potential for reduced costs related to employee benefits, vacation, FMLA, etc.

On the other hand, some of the chiefs expressed concern about potential disadvantages associated with reliance on contract employees, who may not be as familiar with the local community and as personally vested in its well-being. Also, while outsourcing may lower costs, it may present disadvantages in terms of control of service levels, hiring, training, succession planning, etc. If leaders of the three communities wish to further consider this option, then we would strongly recommend that they rigorously analyze the advantages and disadvantages experienced by other communities that have implemented a contract staffing model.

Summary of Near-Term Scenarios

Table 18 summarizes the staffing and fiscal estimates for the three scenarios described above and compares them with current staffing and expenses.

Our modeling of near-term scenarios shows that if the three communities wish to pursue consolidation as a means of addressing staffing concerns, producing a small expansion of shift staffing, and unifying their command structure and apparatus, then there likely would be an added cost involved. It is possible that added cost could be reduced via the use of contracted staff, but we are not equipped to say whether such an approach would be palatable or effective. If there is a desire for cost *savings*, then the regional EMS option (Scenario 1a) may be worth more detailed consideration, though it should be recognized that actual shift staffing would decrease under that scenario.

Table 18: Summary of near-term scenarios

	Current	Scenario 1a	Scenario 1b	Scenario 1c
Shift Staffing	7.05	6.13	8.00	8.00
Total FTE	26.77	24.01	33.58	28.05
Net Expense	\$2,259,641	\$2,095,221	\$3,223,528	\$2,508,761

LONGER-TERM SERVICE SHARING OPTIONS

Future Baseline Model

Before considering several longer-term sharing or consolidation scenarios, it is important to recognize that expenditure levels are likely to change significantly even if the three municipalities continue to provide fire/EMS services independently. How those services will look in the future depends on several factors, such as the pace and location of new development, competing demands for property tax dollars, and the actions of surrounding fire departments.

To be able to compare our longer-term sharing and consolidation scenarios to a future state of enhanced expenditure and staffing levels, we developed a Future Baseline model. The Future Baseline model includes the following assumptions about increased staffing and other expenses if each of the three departments continues to operate independently:

- Somers will need to add two shifts and Bristol eventually will need to add one shift.
- As the number of shifts increases, the availability of POP staff would not increase given a tightening labor market. As a result, this Future Baseline assumes the departments collectively will need to add 11 new career firefighters (or 11.37 FTEs).
- The Future Baseline scenario also assumes the addition of an assistant fire chief in Somers and some increase in supplies and other costs.
- We estimate that ambulance fee revenue will increase by \$183,750 in Somers and \$44,888 in Bristol based on projected growth in EMS calls.
- While it is certainly possible that Paris also will see increased calls for service, we assume no changes in staffing, costs, or revenue, as it is difficult to project how the development impacts from Foxconn and other growth will be felt in that community.

Table 19 lays out the additional staff and net annual costs estimated for Somers and Bristol under our Future Baseline model assuming the three departments remain independent. We estimate that Somers' net fire/EMS costs would grow by about \$670,000 annually in today's dollars, while Bristol's would grow by about \$320,000.

Table 19: Future Baseline Scenario

	Village of Bristol	Village/Town of Somers	Current + FB
Additional Shifts	1.00	2.00	10.05
Additional Career Firefighters	3.79	7.58	27.51
Total FTE	3.79	7.58	38.14
Net Expense	\$320,626	\$671,195	\$3,356,393

Note: Salary costs assume that career firefighters are municipal (not contract) employees, which increased the base cost in addition to the cost of the three additional shifts.

Longer-Term Consolidation Scenarios

Our longer-term scenarios assume a fully consolidated department that serves the three municipalities, but these scenarios also posit a higher level of shift coverage. Under these scenarios, 10 firefighters would be on duty at all times, as compared to the current average of 7.05.

There are a variety of ways that these 10 shifts could be deployed in the region, but we assume this level of shift staffing would allow for shifts of three at each of the Somers stations. This level of coverage would be closer to the shift coverage of surrounding fire departments such as South Shore Fire (in Racine County) and Kenosha. The Somers chief indicated that at this higher staffing level, South Shore Fire and possibly the Kenosha Fire Department would be willing to enter into automatic aid agreements with Somers (and presumably with a future consolidated department). Another important benefit would be greater capacity to respond to simultaneous ambulance and/or ambulance and fire calls.

With higher shift and overall staffing, supplies and other costs are projected to increase. POC expenses are expected to remain the same, however, because even at this higher level of shift staffing, the consolidated department would not have sufficient staff to address a structure fire or other major incident and would have to call for mutual aid from nearby departments as well as POC staff. We model a command structure of a chief, assistant chief, and \$50,000 for administrative expenses as we did for Scenarios 1b and 1c. Assumptions regarding savings from fleet consolidation are also the same as for Scenarios 1b and 1c.

For the longer-term consolidation scenarios, we consider two variations: one in which nine of the shifts would be filled with career firefighters and one shift staffed with POP; and an alternative that relies on nine shifts provided through a contract with a private vendor and one shift of POP.

Scenario 2a: Consolidation with Municipal Firefighters, Limited POP

Table 20 shows that the expansion to 10 shifts for a consolidated department under a career firefighter staffing model would require 34.11 FTE career firefighters, or an increase of 18 above the three departments' current combined career/contract FTEs. The total annual net cost would reach \$4.0 million, which is roughly \$650,000 higher than the Future Baseline and \$800,000 higher than the more modest, short-term consolidation scenario presented earlier (Scenario 1b).

Table 20: Scenario 2a, 9.0 shifts staffed with career firefighters

Scenario 2a	
Career Staffing	34.11
POP Staffing	3.3
POC Staffing	3.75
Total FTE	41.16
<hr/>	
Net Expense	\$4,020,921

In **Table 21**, we use the same hypothetical cost allocation methodologies used in our near-term scenarios (i.e. one based on current spending and one on calls for service). We find that Somers would experience an increased annual cost of between \$1.0 and \$1.2 million when compared to current spending, while Bristol’s increase would range from about \$500,000 to \$600,000. Paris’ cost varies from an increase of \$300,000 to a slight decrease when costs are allocated based on calls. When compared to our Future Baseline scenario, Somers’ costs would increase by about \$200,000 to \$400,000, while Bristol’s costs would increase by about \$200,000 to \$300,000.

Table 21: Allocation options, Scenario 2a

	Current	Future Baseline	Allocated proportionally	Allocated by calls
Somers	\$1,189,941	\$1,972,635	\$2,117,442	\$2,383,654
Bristol	\$707,655	\$1,021,715	\$1,259,237	\$1,327,233
Paris	\$362,045	\$362,044	\$644,241	\$310,034
Total	\$2,259,641	\$3,356,393	\$4,020,921	\$4,020,921

Scenario 2b: Contract Firefighters Plus One Shift of POP

Table 22 incorporates the same assumptions as Scenario 2a (i.e. 10 shifts for a consolidated department), but substitutes contract staff for municipal employees. This reduces the cost of this scenario by about \$900,000 from Scenario 2a, and also places it below the estimated cost of the Future Baseline scenario by about \$250,000. Of course, the same caveats apply as for Scenario 1c – the actual cost of contracting would depend on negotiations with a selected vendor, and it is uncertain whether a contracted service model would be effective and/or palatable.

Table 22: Scenario 2b, 9.0 shifts contract, 1.0 shift POP

Scenario 2b	
Career Staffing	27.00
POP Staffing	3.30
POC Staffing	3.75
Total FTE	34.05
Net Expense	\$3,097,046

When we calculate the cost allocations using our two methodologies, we find that Somers would see an increased annual cost of between \$450,000 and \$600,000 over current spending, while Bristol would see an annual increase of about \$300,000 (**Table 23**). For both municipalities, however, the added cost under this scenario would be comparable to that incurred under the Future Baseline scenario. Paris, meanwhile, would see a lower cost under the call volume methodology and an increase of about \$150,000 under the proportional spending methodology.

Table 23: Allocation options, Scenario 2b

	Current	Future Baseline	Proportional	By Calls
Somers	\$1,189,941	\$1,972,635	\$1,630,924	\$1,835,969
Bristol	\$707,655	\$1,021,715	\$969,906	\$1,022,278
Paris	\$362,045	\$362,044	\$496,216	\$238,798
Total	\$2,259,641	\$3,356,393	\$3,097,046	\$3,097,046

Overall, as shown in **Table 24**, our analysis of both Scenario 2 models shows that if the three communities collectively wish to secure a significant increase in coverage under a consolidated approach, then the added annual cost would be in the \$800,000 to \$1.8 million range, depending on the method of staffing. It should be noted that costs could be reduced further if a larger number of shifts are assumed to be filled with POP staff. For Bristol and Somers, their share of the increased cost under Scenario 2b is comparable to our estimate of future costs without any service sharing. For Paris, costs under these consolidation options may not increase at all, but that would depend on how increased regional costs are allocated.

Table 24: Summary of longer-term scenarios

	Current	Future Baseline	Scenario 2a	Scenario 2b
Shift Staffing	7.05	10.05	10	10
Total FTE	26.77	38.14	41.16	34.05
Net Expense	\$2,259,641	\$3,356,393	\$4,020,921	\$3,097,046

OTHER SERVICE SHARING OPTIONS

As discussed above, consolidation of the three departments could produce improved coordination of fire and EMS response, a better ability to compete with neighboring communities for staff (and elimination of the need to compete with one another), and the opportunity to grapple with increased service demands on a united basis. However, the geographical barriers – including the distance between Somers and Bristol and the location of the freeway – still limit the potential to achieve operational improvements from a three-way consolidation. Also, the fact that a substantial portion of projected future growth would occur at the very northern portion of Somers and the southern part of Bristol adds to the difficulty in achieving improved response times and enhanced service levels through a consolidated department.

It is logical to ask, therefore, whether it would be more appropriate to consider scenarios in which one (or both) of the two larger communities simply assumes responsibility for fire and EMS services for the smaller Town of Paris on a contractual basis. Ostensibly, such scenarios not only could provide Paris with an enhanced level of fire and EMS service, but they also could benefit Somers or Bristol by helping them to defray costs associated with service expansion via the new source of revenue they would receive from Paris. We also look at an option in which Paris maintains its

independence while helping Somers respond to its increased growth and being compensated for doing so.

Specifically, we examine three possible service sharing options: one in which a third station built in the western part of Somers also serves Paris under a contractual arrangement; a second in which Somers avoids construction of a third station but instead uses additional staffing at Paris to serve high growth areas; and a third in which Bristol manages fire and EMS response in Paris under a contractual arrangement.

Scenario 3a: Somers Provides Fire/EMS Services in Paris

Given the high level of anticipated growth in the northwestern portion of Somers, the Somers fire chief has noted that a third station west of Station 1 is likely to be needed at some point in the future. That station, assuming that it is located west of the interstate, ostensibly would be able to serve Paris. Under this scenario, Paris could eliminate its department and contract with Somers for EMS and/or fire response. Another option would be for Somers to respond to EMS calls in Paris while Paris retains its POC program for structure fires and larger incidents, but that option is not modeled here.

Table 25 shows a three-station scenario for the Village of Somers, assuming the western station also serves Paris. Each station is staffed with three full-time shifts, for a total of nine. The table shows one option under which shift staffing is covered entirely with career firefighters, and another in which two of the nine shifts are covered with POP firefighters. (Another alternative is use of contract staff, but it is not shown here due to limitations of the study scope.) This scenario also assumes a 10% savings in apparatus replacement costs. The cost estimate for command staff assumes a chief, an assistant chief, and an additional \$50,000 for administrative support. Under either staffing option, Somers would pay considerably more than the \$1.2 million it is paying for fire and EMS today to staff a third station and to move to nine shifts.

Table 25: Scenario 3a, Somers/Paris service sharing with third Somers station

	Career	Career and POP
Career Staffing	34.11	26.53
POP Staffing	0.00	6.30
POC Staffing	3.10	3.10
Total FTE	37.21	35.93
Net Expense	\$3,482,927	\$3,036,847

Tables 26 and **27** show how the costs could be allocated using both the proportional and calls-based methodologies used for earlier scenarios. In this case, our comparative “future” scenario would be one in which Somers added a third station and moved to a shift staffing level of nine but did not contract with Paris to serve that community. Under such a scenario, Somers would have to incur the entire cost of staffing a third station on its own, instead of receiving some contribution from Paris to offset part of that cost.

Table 26: Allocation options, Scenario 3a.1 career shift staffing

	Current	3 rd Station But No Sharing	Proportional	By Calls
Somers	\$1,189,941	\$3,482,927	\$2,670,435	\$3,082,054
Paris	\$362,045	\$362,045	\$812,492	\$400,872
Total	\$1,551,987	\$3,844,972	\$3,482,927	\$3,482,927

Table 27: Allocation options, Scenario 3a.2 career and POP shift staffing

	Current	3 rd Station But No Sharing	Proportional	By Calls
Somers	\$1,189,941	\$3,482,927	\$2,328,416	\$2,687,317
Paris	\$362,045	\$362,045	\$708,431	\$349,530
Total	\$1,551,987	\$3,844,972	\$3,036,847	\$3,036,847

There is no doubt that Somers could benefit financially from a two-way service sharing scenario by receiving a payment from Paris to defray costs that it may need to incur anyway. The key question, however, is whether Paris would derive sufficient benefit to wish to engage in such a collaboration. It would appear that Paris could secure an enhancement in fire and EMS service via a contractual arrangement with Somers given that it would be served by a western Somers station that would be staffed with three shifts of career firefighters on a 24/7 basis. There may be an additional cost, but that cost could be relatively small depending on the cost allocation methodology and the use of career versus POP staff.

Scenario 3b: Paris Provides Fire/EMS Services in West Somers

Under an alternative two-way service sharing arrangement, Somers would add staff to its existing stations per our original Future Baseline, but instead of constructing a new station to serve development around I-94, it would lean on Paris to increase staffing to two shifts and respond to calls in western areas of Somers. Total shift staffing for the two communities under this scenario is eight. As shown in **Table 28**, the estimated annual combined cost would be \$2.7 million, which is \$300,000 to \$750,000 lower than the previous scenarios under which Somers would build a third station, albeit with reduced shift staffing.

Table 28: Scenario 3b, Somers/Paris service sharing with added Paris staffing

	Somers (current + FB)	Paris, 2 shifts	Total
Career Staffing	20.72	3.79	24.51
POP Staffing	1.48	3.15	4.63
POC Staffing	0.44	0.85	1.29
Total FTE	22.65	7.79	30.44
Net Expense	\$1,972,635	\$759,147	\$2,731,782

With regard to cost allocation, the additional \$450,000 incurred by Paris would need to be shared in some manner with Somers (we assume in the table above that Somers' cost is the same as Future Baseline). It is worth noting that even if Somers funded the entire increased cost to Paris, that subsidy would be substantially less than the cost of staffing its own new station. Of course, Somers officials also might feel that they could better serve the western portion of their community with their own new station, as opposed to a contractual arrangement with Paris.

Table 29 summarizes the three Somers/Paris options outlined above.

Table 29: Comparison of Somers/Paris service sharing options

	Current	Future Baseline	Scenario 3a.1	Scenario 3a.2	Scenario 3b
Shift Staffing	5.17	7.17	9.00	9.00	8.00
Total FTE	26.77	38.14	37.21	35.93	30.44
Net Expense	\$1,551,987	\$2,334,678	\$3,482,927	\$3,036,847	\$2,731,782

Scenario 3c: Bristol Provides Fire/EMS Services in Paris

Another service sharing option would be for Bristol to take over coverage of Paris under a contractual arrangement. This scenario assumes that the Bristol Fire Department would provide such coverage with its current single station but add one additional shift. As with Scenario 3a, while it would be possible for EMS to be provided by Bristol while Paris retains its POC program for structure fires and larger incidents, our modeling assumes Paris contracts with Bristol for the full range of services, allowing Paris to disband its fire department.

Staffing of the additional shift is assumed to be career firefighters. Apparatus costs reflect a 10% reduction in Bristol's replacement cost to account for savings from incorporating Paris' fleet. **Table 30** shows the breakdown of costs. The net expense is lower than the current combined spending of the Bristol and Paris departments and lower than Future Baseline because it is assumed that the Paris department would disband, with those savings fully offsetting the cost of the added shift in Bristol.

Table 30: Scenario 3c, Bristol/Paris service sharing

Scenario 3c	
Career Staffing	6.79
POP Staffing	2.76
POC Staffing	2.45
Total FTE	12.00
Net Expense	\$1,043,942



This approach would allow Bristol to defray the cost of expanding shift staffing to three, which is what we anticipate will be required eventually under the Future Baseline scenario. One concern is that the area covered by Bristol would double, which could affect average response times. For example, if two of the three firefighters on shift respond to a call in the northern reaches of Paris, that would leave only one firefighter/paramedic to cover any additional calls with the assistance of POC staff. However, the low call volume in Paris means that Bristol would also likely realize some benefit from additional shift staffing.

Table 31 shows how costs could be allocated between Paris and Bristol using the two allocation methodologies employed for previous scenarios. Because this scenario is very similar to the Future Baseline, any cost sharing with Paris would help Bristol to offset the cost of expanding its shift staffing.

The benefit to Paris of this approach is difficult to quantify, however. During the day, when EMTs currently are on duty in Paris, it is likely that response times under this scenario would be longer since the response would come from the Bristol station (although at times when Paris has no shift staffing, this scenario could improve service). A bottom line concern is whether Bristol could provide sufficient coverage to Paris even with the additional shift given the geographic distance between the Bristol stations and parts of Paris.

Table 31: Allocation options, Scenario 3c

	Current	Future Baseline	Proportional	By Calls
Bristol	\$707,655	\$1,021,715	\$690,615	\$846,261
Paris	\$362,045	\$362,044	\$353,327	\$197,682
Total	\$1,069,700	\$1,383,758	\$1,043,942	\$1,043,942

CONCLUSION

Most of the options presented in this report would produce increased costs for fire/EMS services in the region. Those increased costs, however, are not a byproduct of sharing or consolidation, but result from assumptions that 1) shift staffing will need to increase as call volume increases with new development; and 2) Somers and Bristol will need to move from a model that depends on hourly staffing to more of a career model over time, whether through hiring firefighters directly or through a staffing contract with a private vendor. As we have noted, the use of contract firefighters can reduce costs, but there are other policy considerations in managing vital public safety services through a contract rather than directly through municipal employees.

While each of the three municipalities likely faces increased fire and EMS costs in the future regardless of whether they seek to share or consolidate services, our modeling suggests that Somers and Bristol may be able to reduce anticipated Future Baseline cost increases by pursuing intergovernmental cooperation. Paris would be unlikely to see reduced costs, but may be able to add a level of fire and EMS service staffed by full-time, career firefighters that it may desire and otherwise would not be able to achieve on its own.

As described above, Somers recognizes that a third station likely will need to be built to serve west side development. Even if the capital costs of a new station are funded with revenue from Tax Incremental Districts, the station would require a minimum of two additional shifts costing about \$670,000 annually. Somers also is facing current staffing challenges and would like to add a third shift to current stations to match the staffing of South Shore and Kenosha.

Development pressures in Bristol are likely to be less severe than in Somers, but they will still be present. While there are no plans for a second Bristol station, moving to three shifts would help address increased calls for service and for mutual aid. We estimate that one additional shift of career firefighters would cost Bristol a minimum of \$320,000 annually.

Even though Paris is not planning for new development, it will find itself surrounded by tract developments and an increasing number of mutual aid calls. The widening of county roads and increased traffic on the Interstate also will impact service demand for the Paris Fire Department. As the region changes around Paris and surrounding departments experience higher service calls and challenges, their ability to maintain mutual aid agreements with Paris also may change.

Our analysis suggests that by joining forces to address these challenges, the three communities could recognize some efficiencies in terms of reduced command staff and apparatus. Depending on the cost allocation methodology used, Somers and Bristol also would likely reduce costs from what they otherwise would incur from adding needed service capacity on their own. What they may need to give up, in return, is complete control of their fire and EMS operations and costs, which would need to be jointly governed under a consolidation scenario.

The cost reductions for Bristol and Somers would result, in part, from sharing service expansion costs with Paris, which would benefit from that expansion by securing enhanced fire and/or EMS service levels. For Paris, the question is to what extent policymakers desire that benefit and whether and how much they are willing to pay for it.

Overall, this report is intended to be instructive to policymakers in the three communities by identifying and broadly analyzing a series of options that may help them grapple with challenges involving their fire/EMS staffing models and increased service demands. Pursuing any of these options will require considerable additional fiscal and programmatic analysis, as well as negotiation regarding cost allocation. It is our hope, however, that by laying out the costs and benefits of several options, we have provided elected officials and administrators with a data-driven framework they can use to consider and determine next steps.



APPENDIX A - DETAILED EXPLANATION OF MODELING ASSUMPTIONS

Ratio of shift staffing to FTE

Shift staffing refers only to the number of firefighters ready to respond to a call on any shift. To staff a single shift of three firefighters/paramedics, for example, requires more than three people because of non-productive time such as vacations, sick leave, FMLA, training, etc. For a shift of three, comparing the ratio of shifts to FTEs in the three fire departments, we derive a ratio of 3.77, meaning a department would need to hire 3.77 firefighters to cover a single shift. As a point of reference, the comparable number for Milwaukee County's consolidated North Shore Fire Department (NSFD) is 3.79. To be conservative in our projections we used the NSFD's higher number.

All three departments also staff some shifts with POP employees. The ratio of shifts to POP FTEs is lower because these staff do not earn vacation and other time off. POP staff are paid for training, however. We assume that a shift staffed entirely with POP/POC would require 3.15 FTE.

Because contracted firefighters are provided on a per shift basis, they are budgeted that way and converted to FTE at a ratio of three per shift in our example.

Cost per firefighter

The cost of one FTE of a firefighter/EMT or firefighter/paramedic is based on the average for Somers of \$60,000 in salary and benefits of \$31,000 for a total of \$91,000. POP and POC staffing costs are projected at \$15 per hour. The cost to contract for a shift of three firefighters is estimated at \$240,000 (i.e. \$80,000 per firefighter) based on Bristol's current contract cost and discussions with vendors.

Cost of command staff

The cost of command staff in **Table xx** reflects actual costs for the 2.5 chief positions for the latest year in which such information was available or provided. Our projections of command staff in various scenarios are based on a chief and an assistant chief, with salaries of \$90,000 and \$80,000 respectively. Staffing costs also include benefits at 40% of salary costs.

Apparatus replacement

In order to annualize and equalize apparatus replacement costs, we first referred back to the apparatus identified in **Table 9**. The following table shows estimated apparatus replacement cost for each municipality in five-year increments.

	Somers	Bristol	Paris
2018-2022	\$985,000	\$1,865,000	\$1,600,000
2023-2027	\$1,270,000	\$990,000	
2028-2032	\$425,000	\$200,000	\$1,025,000
2033 or later	\$2,350,000		

To normalize capital needs, we assumed that the 10-year replacement cost is financed over a 20-year period at a 3% interest rate, as shown in the table below. In other words, this is the debt service that each department would pay to fund its 10-year apparatus replacement needs if it borrowed the entire amount upfront.

	Somers	Bristol	Paris	Total
10 year replacement	\$2,255,000	\$2,855,000	\$1,600,000	\$6,710,000
20 year financing, annual cost	\$151,571	\$191,901	\$107,545	\$451,017
With 10% discount				\$405,916

Note: Totals do not include any funding from FEMA for apparatus replacement

We also assume that consolidation of two or three departments will allow for greater efficiencies in fleet usage and reductions in replacement costs. Those adjustments are generic and are not based on a detailed analysis of each department's fleet. A more detailed fleet study may result in different cost estimates.

Estimated increase in calls

The study estimates that calls will increase as new development occurs in the area. The amount of that increase is based on our general understanding of local and regional projections. For the purposes of this study, we assumed a 50% increase in calls in Somers, a 30% increase in Bristol, and no change in call volume in Paris. This allowed us to come up with a distribution of costs when considering service consolidation options. This percentage increase was also applied to ambulance revenues for each municipality.

	Somers	Bristol	Paris	Total
2017	1,102	708	215	2,025
Estimated 2027	1,653	920	215	2,788
2027 percent of total	59.30%	33.00%	7.70%	100.00%

APPENDIX B - STAFFING & COST BREAKDOWNS FOR EACH SCENARIO

Future Baseline Scenario

	Somers	Bristol	Current + FB
Additional Shifts	2.00	1.00	10.05
Career Firefighters	7.58	3.79	27.51
POP Staffing			6.88
POC Staffing	0.00	0	3.75
Total FTE	7.58	3.79	38.14
Career Staffing Cost	684,219	342,110	2,483,511
POP Staffing Cost			271,601
POC Staffing Cost	0	0	145,266
Command Staff Cost	105,000	0	291,900
Apparatus Replacement	0	0	451,017
Other costs	38,904	23,404	495,450
Total Expense	828,123	365,514	4,138,746
Revenues	(156,928)	(44,888)	(782,353)
Net Expense	671,195	320,626	3,356,393



Scenario 1a, Regional EMS

	Bristol	Somers	Paris	Total
Career Staffing	3	13.14	0	16.14
POP Staffing	2.64	1.48		4.12
POC Staffing	2.45	0.44	0.85	3.75
Total FTE	8.09	15.07	0.85	24.01
Career Staffing Cost	\$270,799	\$1,186,383	\$0	\$1,457,182
POP Staffing Cost	\$99,792	\$56,052	\$0	\$155,844
POC Staffing Cost	\$92,685	\$16,740	\$35,005	\$144,430
Command Staff Cost	\$76,000	\$83,500	\$17,500	\$177,000
Apparatus Replacement	\$172,711	\$209,884		\$382,595
Other costs	\$171,630	\$192,077		\$363,706
Total Expense	\$883,617	\$1,744,636	\$52,505	\$2,680,758
Revenues	(\$196,115)	(\$377,422)	(\$12,000)	(\$585,537)
Paris Subsidy	(\$115,000)	(\$115,000)	\$230,000	\$0
Net Expense	\$572,502	\$1,252,214	\$270,505	\$2,095,221

Scenario 1b, Consolidated department with slight increase in coverage

	Scenario 1b
Career Staffing	26.53
POP Staffing	3.3
POC Staffing	3.75
Total FTE	33.58
Career Staffing Costs	\$2,394,768
POP Staffing Costs	\$124,740
POC Staffing Costs	\$157,500
Command Staff Costs	\$288,000
Apparatus Replacement	\$405,916
Other costs	\$433,142
Total Expense	\$3,804,065
Revenues	(\$580,537)
Net Expense	\$3,223,528



Scenario 1c, Consolidation with Contract Staffing

Scenario 1c	
Contract Staffing	21
POP Staffing	3.3
POC Staffing	3.75
Total FTE	28.05
Contract Staffing Cost	\$1,680,000
POP Staffing Cost	\$124,740
POC Staffing Cost	\$157,500
Command Staff Cost	\$288,000
Apparatus Replacement	\$405,916
Other costs	\$433,142
Total Expense	\$3,089,298
Revenues	(\$580,537)
Net Expense	\$2,508,761

Scenario 2a, Consolidated Department, 9.0 Shifts Staffed with Career Firefighters

Scenario 2a	
Career Staffing	34.11
POP Staffing	3.3
POC Staffing	3.75
Total FTE	41.16
Staffing Costs	\$3,078,987
POP Staffing Cost	\$129,628
POC	\$157,500
Command Staff	\$288,000
Apparatus Replacement	\$405,916
Other costs	\$541,428
Total Expense	\$4,601,458
Revenue	(\$580,537)
Net Expense	\$4,020,921



Scenario 2b, Consolidated Department, 9.0 Shifts Contract, 1.0 Shift POP

Scenario 2b	
Career Staffing	27
POP Staffing	3.3
POC Staffing	3.75
Total FTE	34.05
Staffing Costs	\$2,160,000
POP Staffing Cost	\$124,740
POC Staffing Cost	\$157,500
Command Staff	\$288,000
Apparatus Replacement	\$405,916
Other costs	\$541,428
Total Expense	\$3,677,583
Revenue	(\$580,537)
Net Expense	\$3,097,046

Scenario 3a, Somers/Paris Service Sharing with Third Somers Station

	Career	Career and POP
Career Staffing	34.11	26.53
POP Staffing	0	6.3
POC Staffing	3.1	3.1
Total FTE	37.21	35.93
Staffing Costs	\$3,078,987	\$2,394,768
POP Staffing Cost	\$0	\$238,140
POC Staffing Cost	\$117,000	\$117,000
Command Staff	\$288,000	\$288,000
Apparatus Replacement	\$233,205	\$233,205
Other costs	\$297,019	\$297,019
Total Expense	\$4,014,211	\$3,568,131
Revenues	(\$531,284)	(\$531,284)
Net Expense	\$3,482,927	\$3,036,847



Scenario 3b, Somers/Paris Service Sharing with Added Paris Staffing

	Somers (current + FB)	Paris, 2 shifts	Total
Career Staffing	20.72	3.79	24.51
POP Staffing	1.48	3.15	4.63
POC Staffing	0.44	0.85	1.29
Total FTE	22.65	7.79	30.44
Staffing Costs	\$1,870,603	\$342,110	\$2,212,712
POP Staffing Cost	\$56,052	\$119,070	\$175,122
POC Staffing Cost	\$16,740	\$32,154	\$48,894
Command Staff	\$188,500	\$17,500	\$206,000
Apparatus Replacement	\$151,571	\$107,545	\$259,117
Other costs	\$213,519	\$205,000	\$418,519
Total Expense	\$2,496,985	\$823,379	\$3,320,364
Revenues	(\$524,350)	(\$64,232)	(\$588,582)
Net Expense	\$1,972,635	\$759,147	\$2,731,782

Scenario 3c, Bristol-Paris Service Sharing

Scenario 3c	
Career Staffing	6.79
POP Staffing	2.76
POC Staffing	2.45
Total FTE	12
Career Staffing Cost	\$612,909
POP Staffing Cost	\$60,554
POC Staffing Cost	\$123,483
Command Staff Cost	\$96,000
Apparatus Replacement	\$172,711
Other costs	\$224,289
Total Expense	\$1,289,945
Revenues	(\$246,003)
Net Expense	\$1,043,942

