

Shared Services Study
Feasibility of a Work Week – Day Time
Duty Crew
For the Fire Departments serving the Communities
of

Bethel
East Bethel
Linwood
Oak Grove
St. Francis*

Prepared by



May 6, 2019

*Footnote Page 2

Executive Summary:

In response to national, state and local trends specific to daytime available volunteers; the communities of Bethel, East Bethel, Linwood, Oak Grove and St. Francis¹ endeavored to fashion a system in which Fire and EMS response would deliver effective and efficient services to their respective residents; specifically during the work day work week.

Simultaneous with the decline in daytime volunteers are changes in response with fire emergencies declining and EMS calls increasing. Additionally, all five subject communities are experiencing some level of population increase as well as aging demographics.

Evidence of these aforementioned trends can be found locally citing examples such as Roseville, Lake Johana (Shoreview, North Oaks, Arden Hills), Brooklyn Park, Eagan, Maplewood, Eden Prairie, and SBM (Spring Lake Park, Blaine, Mounds View) all of which have or are transitioning from wholly volunteer models to duty crews and eventually to all career/full time (Brooklyn Park, Maplewood, Roseville, and Eagan).

Recruitment and Retention of individuals serving as voluntary emergency responders, especially day available is no longer feasible due to the simple fact that an inadequate number of eligible/available individuals no longer exist as a function of changing demographics and workforce issues².

Alternatives to this, assuming a desire to provide services (Fire and EMS Services are not mandated under state or federal law) include; Duty Crews/Part Time, Full Time, Cross Trained Full Time City Employees, or a hybrid of one or more of these.

Of primary concern are EMS related calls and serious fire/hazardous emergencies such as working structure fires, large wildland fires, and rare but major events such as weather related disasters and/or train derailment.

While the Anoka County Sheriff's Office provides law enforcement patrol and subsequent medical assistance, their level of training combined with the limited number of deputy's result in limited and unpredictable response.

Allina Emergency Transport Services by law has the Primary Service Contract for all but Linwood Township which is covered by North Ambulance. Both services respond to their respective areas with an Advanced Life Support (ALS) capable vehicle and at least one Paramedic and one Emergency Medical Technician within 10 minutes of receipt of a call 90% of the time.

While fire and hazardous emergencies continue to decline nationally as well as at the state and local level, the resource requirements necessary to mitigate these types of emergencies are stable or increasing. While two responders, in support/conjunction with Sherriff Deputies and Allina personnel can successfully intercede in the vast majority of medical emergencies, a compliment of 12 to 20 responders are necessary to effectively address a working structure fire or similar/greater emergency. A crew of two can, in the right combination of circumstances; contain a working residential (one/two

¹ Due to changing circumstances, St. Francis withdrew from the study consortium on April 5, 2019.

² See Section 1

family) to the area of origin but more likely, to the structure of origin – thus a defensive response. Preservation of life would unlikely occur.

In the course of this study, based on the review of budget challenges and numerous conversations, the practicable options to consider include a duty crew and/or hybrid model of duty crew augmented by City staff cross trained. The former more immediate, the latter occurring continuously over time.

The study concludes that a shared services duty crew is feasible and the most cost efficient. Unified training of all responders already occurs via the Anoka County Fire Academy, a “Mutual Aid Agreement” will address the cost sharing formula along with equipment liability (personnel liability is borne by the respective employer), and operational standards will be governed by the consensus decisions of the five chiefs.

The geography and current station locations self-select a two station model, East Bethel Station 1 located on Viking Blvd. and Oak Grove Station 1 located on Nightingale Street. St. Francis has a greater present and likely future call volume which argues for the location there, however – assuming no daytime responders are available, the Oak Grove location has greater overall justification and response time will be for the majority of calls, similar to present given the crew is already at the station.

The model is scalable on staffing starting with part time/duty crews of at least one per station but strongly recommend beginning with two in each station with growth potential for more duty crew members but eventually some or all to full time. The first full time person may not be for years but there will be administrative burden on one of the agencies specific to personal management that must be undertaken.

The cost from a two person duty crew in aggregate numbers or at least 40 hours of coverage during the workday approximates at \$125,000 depending on wages and hours and for the most part, doubles when going to 4 duty crew members. The cost for two full time begins at \$250,000 and similarly, doubles when going to four. The Cities of St. Francis and Bethel along with the Linwood Township would pay mileage fees to the respective base cities for use of their apparatus when responding into their community.

Cost include payroll, insurances, equipment costs (apparatus fee, fuel, insurance). Consumable such as foam, medical supplies would be borne by, directly billed back to City in which emergency occurred. Similarly, damage equipment would be responsibility of Community with emergency.

The recommended formula includes using a three year running call volume, immediate past year population, and immediate past year market value. The variance between using just two factors versus three is less than 2% (assuming call volume as a constant) and therefore; strongly suggests using all three as a stabilizer.

Section One – Determine current fire service response conditions for the communities

Identify local recruitment and retention trends:

Note – Recruitment and Retention of Volunteer Firefighters for day availability is a nation, state and local problem. For night/weekend volunteers, the issue is geographic specific but a fraction of the problem for daytime.

Few subjects have been studied and evaluated more than the issue of recruitment and retention of volunteer firefighters over the past 15 years. Demographics and socio-economic forces (two worker families, loss of manufacturing jobs – 3rd shifts) combined with increasing training and response demands have combined to create a “perfect storm.” Exacerbating the problem was the decline in fire calls but absent elimination; a similar resourced force was necessary should an organization only have one or even no calls in a year. Finally, we happen to be in that moment in time in which, after 200+ years of benefiting from a major public service being provided at substantially reduced cost (as compared to other public safety services), these various forces have come to bear where past models simply do not exist.

Shortages began to arise in the late 1990’s/early 2000’s resulting in the Volunteer Combination Officers Section (VCOS) of the International Association of Fire Chief to issue “A Call to Action - The Blue Ribbon Report” Preserving and Improving the Future of The Volunteer Fire Serviceⁱ. The report provides in-depth information to the variety of challenges from fiscal resources to leadership/management to state and federal protections for responders. Five departments are highlighted illuminating best practices and examples of which, paradoxley enough – Roseville, MN is one of. Now a full time operation just 14 years later.

Shortly after this, the United State Fire Administration in conjunction with the National Volunteer Fire Council published a 261 tome “Retention and Recruitment for the Volunteer Emergency Service” Challenges and Solutions in May of 2007.ⁱⁱ While much more in-depth than the VCOS report, the primary issues remained the same; fiscal resources, training demands, leadership and management issues. Implied in both, was the demographic and socio economic realities dramatically reducing the number of individuals available to volunteer and server their community. The emergency of two-worker families for either fiscal needs or ambition combined with the transition from a manufacturing society with voluminous 3 shift factories devastated the number of available individuals.

Jumping ahead to a more recent study done at the local level, the Minnesota State Fire Chiefs Association partnered with the University of Minnesota Humphrey Institute to study the issue specific to our state. “Empty Boots and Quiet Sirens”ⁱⁱⁱ was released August, 2014 emphasizing the aforementioned barriers. The authors examined neighboring state firefighter demographics, and along with comparison to the, provided comparisons to US data.

Lastly, the just released 2017 National Fire Protection Association U.S Fire Department Profile Report shows the lowest number of volunteers recorded since data collection began in 1983. At that time 884,600 volunteer firefighters were reported with 682,600 reported in 2017, a 29% decline!

Compared to our neighboring states of North and South Dakota, Wisconsin, Iowa and one removed Michigan, Minnesota has fewest career firefighters in the area and in fact, the entire nation. Minnesota has 3.57 career firefighter per 10,000 population compared to Iowa at 6.2 and South Dakota at 6.31. The US average is 10.44.

Conversely, Minnesota has the second highest number of volunteer (non-career) fire departments in the nation and ranks 21st in the nation for volunteer firefighters (coincidentally the same rank as the state population for the nation). This anomaly is easily explained by two primary factors and one secondary factors. While the vast majority of our departments are volunteer (there are only 18 full time departments out of the 782 in the state) they are not overpopulated with firefighters. This is due to the volunteer pension system originally funded in the late 1800's and the predominance of fire codes. Secondary to these is our education system that produces well trained and trainable individuals.

The Volunteer Relief Pension system is unique to Minnesota when evaluated critical indisputably demonstrates a shining example of legislative success. Enacted into law after WWII as a mechanism to recruit and retain volunteer firefighters, it has done nearly exactly that. The divergence is specific to the recruitment side as the vast majority of departments did not illustrate the pension program in their marketing efforts. The true success lies in the retention value, which; if resolved substantively reduced the recruitment problem. Additionally, the legislation allows for minimum requirements and in fact, active service is awarded based on meeting those training, response and other related demands.

Contrary to the vast majority of volunteer department in other states who have huge rosters, resplendent with only a fraction of those being "active", Minnesota volunteer fire departments, as a function of the pension law – minimum requirements (MN Statute 424.A02) are able to achieve high levels of participation, thus reducing the number of individuals needed.

This success further saves taxpayer dollars in the recruitment, training, equipment and all other costs still association with a volunteer firefighter.

Minnesota is also a very strong code state that has, over time, reduced our fire problem in urban and suburban areas to working house fires and in the rural area to wildland and house fires. Large commercial fires and/or multifamily structure fires are a welcome fraction of other states. Thus, can operated with fewer personnel.

Finally, we are a highly educated state and our post-secondary systems, including those that provide fire related training course have a high degree of success in turning out qualified individuals to serve as their volunteer or career firefighters.

Volumes of other reports, studies, research papers, articles and such exist. Minnesota remains a leader in volunteer fire departments, despite some of the recent transitions, due to continue focus on volunteer pensions, codes, leadership and management training and investments in education.

Other strategies employed by various departments include forming a Fire Explorer post, additional incentives, non-traditional roles (EMS only or Apparatus Driver only), however, none of these can overcome the socio-economic realities.

Data from the five communities provide evidence the problem is entrenched deeply, just as it is throughout the nation. Currently, the number of volunteers “rostered/assigned” for daytime response is;

Bethel – 2

East Bethel – 5

Linwood – 2

Oak Grove – 2

However, and more importantly; for each department the actual number may range from 0 to as many as 8 depending on the day, time of call, and type of call. Generally speaking, there is a very low confidence of any predictable staffing at any of the departments for daytime response. It literally is “hit and miss.”

Location of any and all firefighters whose homes are in the communities:

Data changes and is available via the respective agencies. Timeline to adopt study recommendations likely not to occur until 2020 or after. Combination of study recommendation to adopt duty crew and timeline for adoption negates value of current data.

Population Density:

The population density (Appendix A) for Bethel = 549, East Bethel = 271, Linwood = 150, Oak Grove = 253, and St. Francis = 320.^{iv} Thus Linwood has the least density and East Bethel the most with the other three between 253 and 320 people per square mile. This data, along with projected growth (from comprehensive plan data) reinforces duty crew location in the East Bethel Station as well as a second station on the West side, arguably in the Oak Grove Station as recommended.

Land Use:

Appendix B provides current land use data for all the five communities based on data from their draft Comprehensive Plans. For , Bethel, East Bethel, Oak Grove and St. Francis – data was obtained from the draft 2040 Comprehensive Plans. For Linwood, data was obtained from their 2014 Comprehensive Plan. The narratives for each community are as follows;

Bethel (Page 14)

Bethel’s future land use plan reflects its community designation as a rural center. The phasing of this development will be important to ensure effective scaling of the public services and infrastructure.

East Bethel (Page 3-10)

The Future Land Use Plan provides a guide for managing development pressure and growth by determining future land uses, development intensity, and areas for environmental protection. The Land Use Plan also ensures that adequate infrastructure is in place to accommodate new growth as it occurs. The City supports new development but wants to ensure that growth can be accommodated wisely and in an orderly fashion, while protecting the many natural resources that make East Bethel a unique community.

Linwood (Pages 4-5)

Maintain and improve a safe, viable, orderly, productive and enhanced environment for all residents of the community. CONCEPT PLAN Linwood Township Comprehensive Plan Page 5

Explanation: The community should provide for the development and maintenance of functional land use and structural patterns and the establishment of an orderly and functional transportation system to serve and connect, but not disrupt, various use concentrations. Moreover, the community should provide and properly maintain those resources, facilities and services essential for the protection of the health, safety and general welfare of the individual and community and necessary for improvement of the individual.

Oak Grove (Page 4-6)

The Oak Grove Land Use Plan promotes very low density rural growth patterns characterized by large lots, conservation subdivision design, individual wells and septic systems, and a rural level of community services. This rural land use pattern is reflective of the City's growth history and the City's goal of retaining its rural character.

The 2040 Land Use Plan outlines land use patterns and development strategies reflective of Oak Grove's vision for a rural community throughout most of the City.

St. Francis (Page 3-11)

The future land use plan for the City of St. Francis accommodates residential land uses at various densities to accommodate and support various life-cycle housing options. The largest residential category is Low Density Residential, at nearly 3,600 acres. The purpose of the Rural Residential classification is to ensure that particular areas of the City are protected for their rural and natural character. This classification primarily includes areas to the east and west of the primary area of development in St. Francis

To further the goal of providing for anticipated population and household growth through 2040, the majority of new growth is anticipated to occur in areas with the most direct access to utility extensions, mainly in areas on either side of Highway 47, to the north, and in an area between the Rum River and Rum River Boulevard, to the north. As outlined in the separate St. Francis Forward document, the City is also guiding redevelopment to existing areas along the Highway 47 and Bridge Street corridors, in order to maximize the efficiency of existing infrastructure facilities in St. Francis.

Response Time:

Response time is the most misused and misunderstood component of emergency response. To begin to understand the issue requires an understanding of the definition of which there is no national standard on what it encompasses.

From a user (resident/victim) standpoint it begins with the medical or other emergency and logically – when they make their initial effort requesting help. It ends when that aid begins being administered. For emergency services, the nominal answer is it cannot begin until that agency is notified – typically by the 911 calling system and ends, but with some debate; with the first arriving unit. The difference

between these two may be only seconds but is more often than naught, minutes and sometimes even more than an hour.

If response time is the determinate factor that supersedes all others, that forces the logical conclusion that fire stations needs to be built every mile and staffed with full time personnel. However, urban and some suburban models already enjoy/employ this system yet still experience loss of life and property damage from fire, despite having far lower response times. Why?

The answer lies within a number of factors; pre-notification time or how long the fire was burning before it was detected AND reported. Current day lightweight construction which promotes rapid fire spread and current day fire loads, exponentially greater than fire loads from the pre 1980's.

Recent studies, too numerous to mention, quantify that current fire growth has reduced escape time to as little as two minutes. The Federal Emergency Management Agency web site Ready.gov states that in less than 2 minutes fires can become life-threatening and in less than 5, the home can be engulfed.

Absent a near perfect situation, the reality is most life is lost prior to arrival of first responders and the goal/strategy is one of containment to the room or structure of origin.

With respect to medical calls, heart attacks, stroke, and severe bleeding have similar short windows 4 to 6 minutes. However, all other injuries (for the most part) have a much longer window before they become life threatening.

Medical responses comprise the majority of the call volume in all five communities and can be successfully dealt with or aid rendered with as little as one person (cardiac would be an exception though one person can start CPR). The combination of the duty crew, sheriff deputy response, and ambulance service provides a broad diverse coverage option.

Budget Planning:

Northern Anoka County communities are, as compared to their central and southern counterparts – property poor resulting in limited tax base. This in turn creates significant challenges for policy makers with respect to budget. Exacerbating the issue is the high capital and labor costs associated with providing emergency services.

Exploring a shared services is a viable and trending option. Seeking grants (Fire Act SAFER) can also aid with the transition. The recommended model of a part time duty crew of at least one person in two stations with as rapid a transition as possible to two duty crew in each of the two stations allows policy makers to transition and absorb the impact. The sharing of resources and equipment, already available and arguable underused, results in minimal additional burden. It is probable that the first full time position is several years away, however, the hiring of at least one full-time is desirable and recommended as soon as possible to deal with the administration of personnel resources. Until that time, the burden will and should fall upon the five Fire Chiefs in a proportion equal to the budget formula. Recommendation is for them to divide the workload; logistics, training, scheduling, etc. amongst themselves consistent with the formula.

While the criteria for SAFER Grants changes slightly from year to year, the primary or base components have not and include:

1. Project Description.
2. How Community and Firefighters are at risk without the grant.
3. Financial Need.
4. Cost Benefit.

Of these, the last three are the most critical and measure against national standards specific to number of personnel needed. The combination of the demographic profile (low density/property market value) resulting in both limited fiscal resources and volunteers positions the group in a favorable position to obtain a grant. For 2018, SAFER Funding provided 75% of compensation and benefits for years 1 and 2 and 35% for year three.

As indicated prior, the criteria does change slightly along with the number of years provided and percentage of covered expenses. Nevertheless, the shared services group will remain a viable recipient as the primary criteria, financial need and community risk; remain high within your group.

Section Summary:

- The shared services study genesis was daytime (workweek) volunteer fire/emergency responders were presently nor in the future a viable option for staffing the current agencies. The combination of the literature search and present staffing challenges validate a need for a shared solution.
- An analysis of current and future land use and population trends indicated all communities expect some growth with East Bethel and St. Frances expecting the greatest growth followed by Oak Grove. Linwood Township and Bethel expect low to very moderate growth.
- The growth in East Bethel, St. France and Oak Grove reinforces Duty Crew Stations locations on the east side and west side of the district.
- The modest growth in population and development suggest a continued need for emergency services while simultaneously suggesting an adequate pool of volunteers for day and weekend response assuming future social-economic forces are similar to current in restricting availability of daytime available responders.
- Response time is an important consideration for medical emergencies but given modern day furnishings and the rapid growth of fire, building a model around fire suppression response is not cost beneficial.
- The turnout time (time from pager activation to apparatus responding) needed under the current volunteer model will be offset by the duty crew resulting in near similar response times to St. Francis, Bethel, and Linwood given crews already will be in station.
- The recommended model is scalable and usable for several years into the future allowing budget planning and integration.

Section Two – Challenges and Solutions Associated with Shared Services

Funding:

The greatest funding challenge is dealing with realization that similar services offered at minimal cost due to volunteer labor are no longer viable – it will cost more to deliver the same. Consultant met with chief officers, five city administrators and visited each of the councils to share estimated labor costs which comprise the majority of the need.

Funding will be the greatest challenge but can be handled via the use of a combination of grants and phasing of the model.

HR issues including but not limited to payroll, policy, hire/fire, discipline, Workers Comp, policies and pensions.

The recommendation, based on the fact it resolves all of the above issues, is to have all members of the duty crew program be an employee of at least one of the political subdivisions and that the relationship is one of being a part-time employee.

This model negates the volunteer pension complication and tracking call percentages, drill activity, etc. The employer/employee relationship also provides the workers compensation coverage as well as the remaining concerns identified. As employees, they will fall under all of the regulations, payroll, etc. of that employer.

At some point, if a JPA or Fire Taxing District is constructed, all would transfer over to that entity.

Ideally, one of the five communities would employ any additional members currently outside the five partners. If the five current fire departments can provide the adequate personnel to cover the duty shifts, the employer/employee issues are non-existent as it related to this section.

Equipment:

The recommended model requires all PPE (Personal Protective Equipment) come from/with the responder. This leaves the apparatus and loose equipment which will be East Bethel and Oak Groves. The Mutual Aid Agreement can be constructed so that property damaged, destroyed/lost can be formula replaced/repared or community receiving request for service based.

This is an issue with low probability but high consequence (although minimized by insurance) that Policy Makers will have to decide.

Training Requirements:

A major advantage allowing this model to have a high degree of success is the unprecedented sharing of services that already exists in Anoka County. Specifically the Anoka County Fire Academy has for the past seven years and for the foreseeable future, been and will be training all new firefighters (volunteer and career) in the county. Dispatch has been centralized for over 4 decades, and the adjacent northern Anoka County Fire Departments share a high degree of mutual aid.

The only major difference is in medical response with Oak Grove just starting to respond to more medicals.

Thus, training needs are limited to apparatus and equipment use and familiarity and EMS upgrades for Oak Grove responders. Individuals hired from outside the five agencies (if needed) can be required to have the requisite EMS training.

Thus, what would normally be a major concern/component is significantly diminished. The greatest challenge will lie with Apparatus and Officer training. Ideally, each duty crew would have individuals with both skills; however, there will be circumstances in which that is not the case and adaptation will have to occur. The most critical task though is getting the equipment to the scene which is basic training as compared to pumping and taking command. The reality is the current models already possess this challenge.

Operations

While this was not included in the RFP in this section, a discussion on operations is beneficial to the study. The study does not nor should it seek operational direction. However, how that occurs is within the scope of the project in the consultant's opinion. The best possible solution is to embed a operation group composed of the fire chiefs, or their designee, to draft and maintain Standard Operation Policy/Guide for the Duty Crews.

Section Summary:

- Funding poses the greatest challenge. It will cost more to deliver the same services. The recommended model is scalable and has a shelf life of a number of years. Finally, SAFER Grants should be applied for and will provide a measure of relief to the funding challenge.
- The recommended model requires all participants in the Duty Crew program to part time employees of one of the five partnership communities. This will address the numerous HR issues such as volunteer pensions and workers compensation. Of note, they will be serving in a part time employee/employer role versus as part of their volunteer service.
- Equipment will be addressed via the written "Mutual Aid/Partnership Agreement" with option of making the responding city wholly responsible for damage/repair or option of using formula.
- Training requirements will be minimized due to current shared services activities in Anoka County but EMS, FAO (apparatus), and Officer/Command Training will need to be supplemented on a case-by-case basis.
- Fire Chiefs to develop Standard Operating Policy of Duty Crew to address all operations/tactical issues.

Section 3 – Determine Cost Share Model – Demonstrate fairness and future equity/fairness

Funding formulas typically contain the following components, population, market value, and call volume. Population and market value are often, if not always used as they are highly measurable and both theory and reality quantify emergency calls occurring where people and real property exist. Call volume is an actual measurement and is also highly measurable and since it demonstrates actual usage, should be a component.

Using call volume as the base component, a mathematical analysis of call volume and market value as compared to call volume and population and finally compared to all three factors reveals a maximum variance throughout the five communities of less than 2% difference in all but one scenario.

Given that small difference and the goal of fairness and equity, using all three makes the most sense with one condition, call volume should be averaged over a three year period as statistical anomalies can occur in a single given year.

Policy makers should also consider normalizing call volume when an event such as a summer storm results in a concentrated geographic area resulting in a high number of calls, many of them unlikely to be true emergencies such as power out and/or trees down.

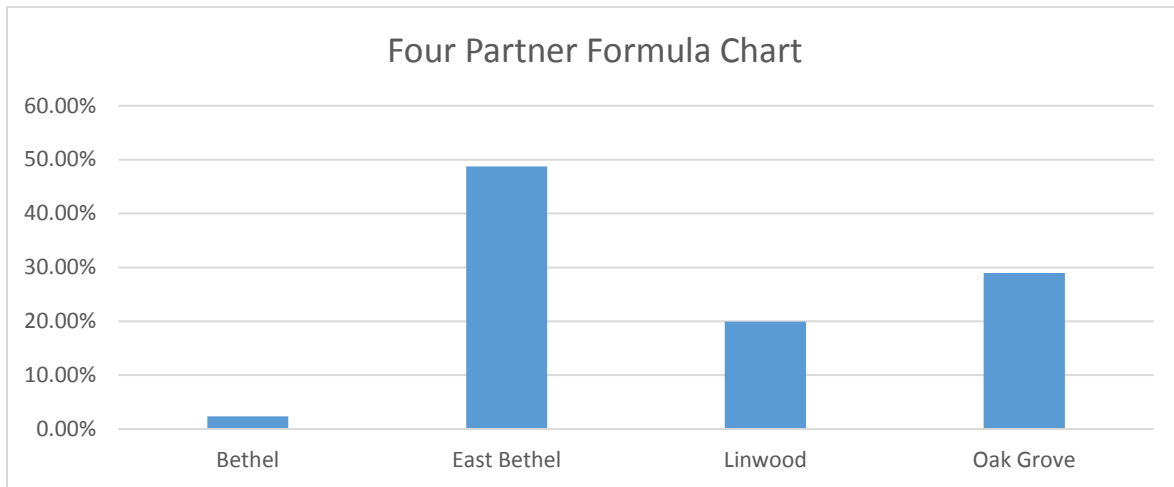
By using call volume as a base component it also allows each community to establish their own Standard of Cover (what do we respond to) and ensures the remaining communities to not shoulder the burden of that decision. An example would be where one or more communities chose to respond to all medical calls and others choose to only respond to life threatening/critical calls.

Using 2018 Anoka County property tax/market value data, 2017 Met Council population estimates, and 2015 thru 2017 call volume data provided by the partner fire departments, the formula calculates as shown in the table below. NOTE – For the purpose of the study and illustration, total call volume for each department was used. The recommendation will be for call data that occurs during the duty crew coverage time, however, absent establishing that time and the difficulty in obtaining exacting records for that specified period, the yearly totals were used. It is possible and likely the final formula may shift but unlikely more than 5-10% of the final formula share.

Note – Formula share tables for both 4 and 5 community partners are included for reference and to illustrate impact if situation in St. Francis should change.

Four Partner Formula and Cost Share

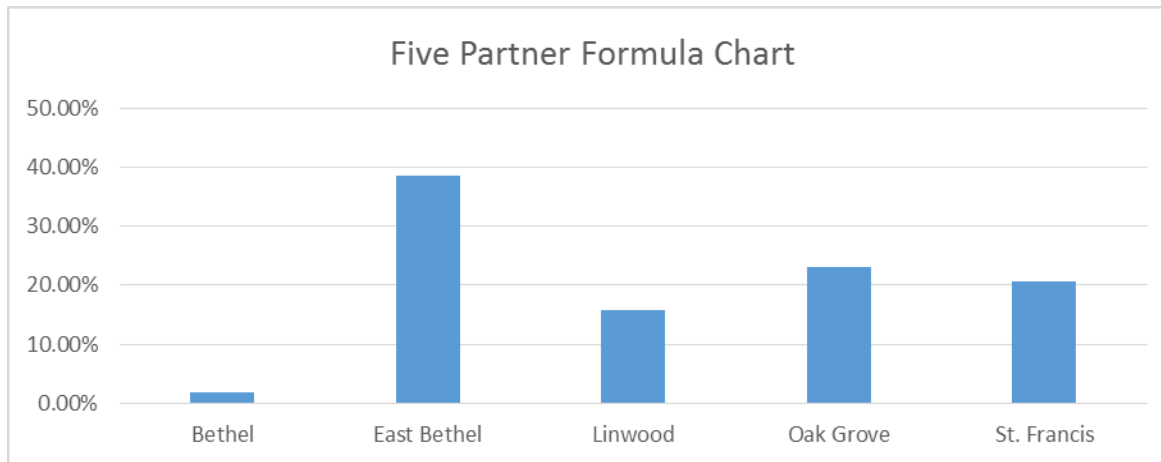
	Population %	Market Value %	Year Call Avg. %	Formula Share
Bethel	1.880%	1.328%	3.807%	2.34%
East Bethel	45.490%	43.600%	57.202%	48.76%
Linwood	20.296%	18.961%	20.473%	19.91%
Oak Grove	32.334%	36.111%	18.519%	28.99%



Predicted Cost	\$125,000	\$250,000	\$250,000	\$500,000
Staffing Level	2 Part Time Duty	4 Part Time Duty	2 Full Time	4 Full Time
Bethel	\$2,923	\$5,846	\$5,846	\$11,691
East Bethel	\$60,955	\$121,909	\$121,909	\$243,819
Linwood	\$24,536	\$49,776	\$49,776	\$99,551
Oak Grove	\$36,235	\$72,469	\$72,469	\$144,939

Five Partner Formula and Cost Share

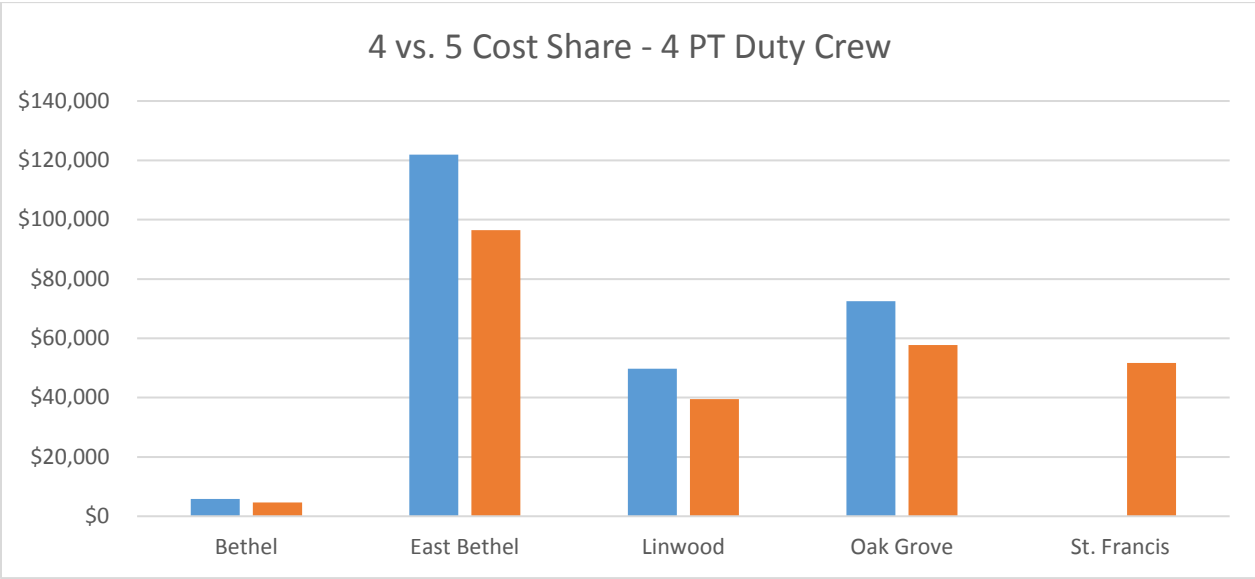
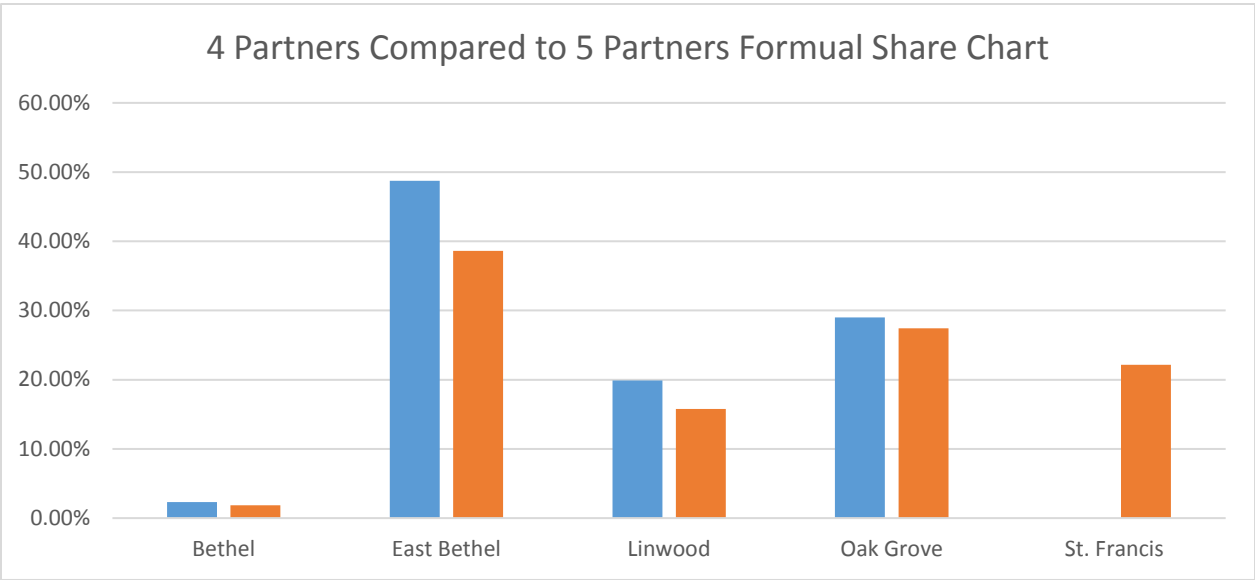
Community	Population %	Market Value %	3 Year Call Avg. %	Formula Share
Bethel	1.464%	1.092%	2.962%	1.84%
East Bethel	35.429%	35.855%	44.516%	38.60%
Linwood	15.807%	15.593%	15.933%	15.78%
Oak Grove	25.183%	29.696%	14.412%	23.10%
St. Francis	22.116%	17.764%	22.178%	20.69%



Predicted Cost	\$125,000	\$250,000	\$250,000	\$500,000
Staffing Level	2 Part Time Duty	4 Part Time Duty	2 Full Time	4 Full Time
Bethel	\$2,299	\$4,599	\$4,599	\$9,197
East Bethel	\$48,250	\$96,500	\$96,500	\$192,999
Linwood	\$19,625	\$39,444	\$39,444	\$78,888
Oak Grove	\$28,871	\$57,742	\$57,742	\$115,484
St. Francis	\$25,857	\$51,715	\$51,715	\$103,430

This data illustrates and confirms the need to include all three in the formula as it reinforces the impact of each category. Looking at call volume first it is apparent that Oak Grove does not have the same Standard of Cover which is/has been true for EMS Calls. While population and market value are close, call volume is significantly lower reinforcing that while calls occur where people and property exist, responding to medicals will clearly increase the use and thus, formula as illustrated by St. Francis, East Bethel and to a lesser degree, Bethel.

Linwood also responds to medicals but shows that in their case, the volume is not higher. Another argument to keep all three as an assurance of capturing all data. If Market Value alone were used Bethel and St. Francis would benefit and if Population was the sole criteria Bethel and East Bethel would both benefit given their population share is lower than their actual usage/call volume share.



Section Summary:

- The most equitable formula is one that uses an agreed upon population figure on an annual basis (Met Council or State Demographer), Anoka County Property Tax/Market value figure, and at least the past three calendar years actual call volume data for the Duty Crew coverage period.
- Policy makers should consider normalizing anomalies in the call volume portion of the formula for such things a storm related events if calls are not of a true emergency nature such as trees down.

Section 4 – Determine, compare, contrast current and future budget models including pension programs with recommendations.

Based on the numerous meetings, data collected, analysis of that data, and the combination of all the recommendation is for a four person, two station duty crew that begins and operates as long as staffing is available on a part-time, employee employer relationship as compared to a volunteer fire, employer relationship.

Duty crews built upon the volunteer fire, employer relationship have shown to result in volunteers responding to less calls during their “off shift” time as the duty crew shift qualifies them or their minimum active service to get their volunteer pension. In effect you rob Peter to pay Paul.

By setting up a Duty Crew under the part-time, employer relationship you maintain the volunteer component which covers 70% of the mathematical hours that occur in a seven day week period. While you may incur pension cost in the coordinated plan, the assurance of carrying on with the volunteer model remains the most cost effective. Attention to the Affordable Care Act and FLSA will be required to ensure participants remain below the triggering thresholds.

At some point, the part-time duty crew model may become unworkable due to availability of staffing at which time a transition to full time will be needed. Again, this is scalable starting with one and adding when the situation demands.

That said, given the administrative burden on managing the staff and schedule issues, the transition to at least one full time will be welcomed by the Fire Chiefs and Administrators and should be viewed as a goal versus potential cost hardship. Ensuring high quality, well trained individuals, who report for their shifts and perform well requires attention that only a full time person can provide.

The primary budget components under the recommended model of working under a “Mutual Aid Agreement” as compared to a Joint Powers or Fire Taxing District (which still requires legislation) will be employee compensation, training, and for those cities without a base station, mileage charge on apparatus to offset repairs/maintenance, depreciation and fuel costs.

Since the model is scalable in terms of how many hours of coverage are provide, hourly rates paid, and number of employees assigned there are too many permutations to detail all. Furthermore, the model allows setting of a budget that is agreed upon and then providing coverage within that budget parameter.

Using an hourly pay rate of \$16 hour and 30% additional for coordinated pension cost and workers comp, payroll taxes, etc.; and covering 60 hours a week (6AM to 6PM Monday thru Friday) will incur \$86,528 in labor costs. Adding \$13,472 (estimated) for training results in an annual cost of under \$100,000. Going to four members or two in each station – which should be the goal will obviously double that. The training number estimated and used for simplicity to allow easy calculation of the formula. Training dollars figure is likely high.

For Career payroll, a base salary of \$22 per hour along with \$11,000 for health care will result in personnel compensation of approximately \$100,000 per person for the same 60 hours (assume some overtime versus hiring of additional staff) or \$200,000 for a two person crew and \$400,000 for four

person crew. Adding in training and other costs a budget of \$250,000 for two and \$500,000 for four would be adequate on likely on the high side.

In addition to this, at least three communities, Bethel, Linwood and St. Francis will incur a surcharge for apparatus use when responding into their communities during the Duty Crew time period. A \$10 per mile surcharge, based on 40% of the three year average of calls being workday workweek results in \$400,000 being generated over a 15 year period. This would be on the low end of actual cost of a present day modern fire apparatus. Thus, the \$10 arguably covers the depreciation cost, however, maintenance, repair and fuel also needs to be addressed with at least \$2.50 needed which would generate \$6,600 a year to cover fuel, maintenance and repair.

The surcharge could also focus solely on fuel with an agreement that maintenance costs can be settled up early as well as repair. However, this sets up an environment for disputes as to when and where it occurred and who is at fault. The recommendation is to agree upon a set charge and also agree to review it on some regular interval.

Section Summary:

- A budget of \$125,000 per year for a two person part-time duty crew (one per station) and \$250,000 for a four person part-time duty crew (two per station) will cover 60 hours using a base hourly rate of \$16 per hour and sufficient dollars for training.
- A budget of \$250,000 per year for a two person full-time duty crew and \$500,000 per year for a four person full-time duty crew will cover 60 hours using a base salary of \$22 per hour (\$45,000 year) and cover limited overtime, provide \$11,000 per year in health care, and provide sufficient dollars for training.
- A mileage surcharge of at least \$10 per mile is required to be paid by the three communities to the two communities where the duty crews are based. This surcharge is calculated to cover the depreciation cost of the apparatus.
- A additional mileage surcharge of at least \$2.50 per mile is required to cover the fuel, maintenance and repair of apparatus. This fee should be reviewed and adjusted on an agreed upon regular interval (every two years for example).

Section Five – Determine Best Practices for Funding and Benchmarking

Funding Best Practices

- An analysis using the Office of the State Auditor City/County Comparison tools provides overwhelming evidence that volunteer and shared service Fire & Emergency Services models are significantly more fiscally efficient than stand-alone models. For career departments such as Edina, Coon Rapids, St. Cloud and similar the range per capita for fire protection is \$59.43 to \$145.94.

For a shared services model such as Spring Lake Park – Blaine – Mounds View the range for the three cities is \$27.69 per capita to \$43.23. For the five partner cities, currently operating all volunteer systems the range per capita of \$30.70 (St. Francis) to \$77.62 (Bethel). However, Bethel is skewed simply due to size and lack of economies of scale, the next highest is both East Bethel and Linwood at \$43.30.

- Fire Act Grants – Specifically SAFER (Staffing Assistance Fire Emergency Response) can substantially fund 2-4 years of the program and the partner cities represent strong criteria for likely selection.
- Establishing a formula that uses updated data every year as well as a review process will diminish the environment for future disputes.
- While not directly related to funding, committing to the model/pilot for at least two years with a review at the end of each year increases the possibility of success.
- Each community should consider and endeavor to educate their community on the challenges and obtain feedback to the proposed model.
- To offset or aid in funding, each community should consider amending their fee schedule and ordinances to “impose fees for emergency services”, especially for non-residents. Examples included crash rescue where medical aid is rendered, utility strikes by construction crews, and hazardous material spills.

Benchmarking Targets/Goals

- Stable staffing for daytime response.
- Predictable service level with specific emergencies, medicals, structure fire, crash rescue, etc.
- Operate within funding parameter established.
- Joint policies for all partners entities
- Consistent delivery of services across all entities

ⁱ <https://www.iafc.org/topics-and-tools/resources/resource/vcos-blue-ribbon-report-preserving-and-improving-the-future-of-the-volunteer-fire-service>

ⁱⁱ <https://www.usfa.fema.gov/downloads/pdf/publications/fa-310.pdf>

ⁱⁱⁱhttps://conservancy.umn.edu/bitstream/handle/11299/164931/Hasskamp_etal_Firefighting.pdf?sequence=1&isAllowed=y

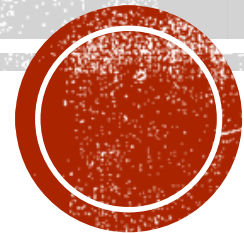
^{iv} <http://www.usa.com/rank/minnesota-state--land-area--city-rank.htm>

NORTHERN ANOKA COUNTY FIRE DEPARTMENT DUTY CREW SHARED SERVICES STUDY DRAFT REPORT UPDATE

April 17, 2019

East Bethel Fire Station One

Nyle Zikmund, Consultant



SCOPE OF PROJECT

Detailed in RFP released fall of 2017, proposal submitted January 2018, contract let fall 2018. Five major sections

Study specific to daytime, workweek, staffing – Using Duty Crew Model

1. Determine current fire service response conditions for the communities

Recruitment and Retention Needs, Community Profiles, Response Times,
and Budget Planning

2. Challenges and Solutions

Funding, HR Issues, Equipment, Training Requirements, Operations

3. Cost Share Model

4. Determine, Compare, Contrast Current and Future Budget Models

5. Determine Best Practices



STUDY METHODOLOGY

- **Combination of**
 - Literature Review – Sections One Four, and Five
 - Data collection and analysis – Sections Two Four and Five
 - Site Visits/Individual and Group Conversations – All Sections
 - Individual Council/Town Board Meetings – Four of Five Partners
 - City Administrator Group – Two Meetings
 - Fire Chiefs Group – 5 Meetings
 - Joint Administrator and Fire Chiefs – 1 Meeting
 - Joint Council/Board – 1 Meeting
 - Proposed – Individual Council/Township Board, Joint Administrator/Chiefs and Entire Group



SECTION ONE — CURRENT CONDITIONS

- The shared services study genesis was daytime (workweek) volunteer fire/emergency responders were presently nor in the future a viable option for staffing the current agencies. The combination of the literature search and present staffing challenges validate a need for a shared solution.
- An analysis of current and future land use and population trends indicated all communities expect some growth with East Bethel and St. Frances expecting the greatest growth followed by Oak Grove. Linwood Township and Bethel expect low to very moderate growth.
- The growth in East Bethel, St. France and Oak Grove reinforces Duty Crew Stations locations on the east side and west side of the district.
- The modest growth in population and development suggest a continued need for emergency services while simultaneously suggesting an adequate pool of volunteers for day and weekend response assuming future social-economic forces are similar to current in restricting availability of daytime available responders.
- Response time is an important consideration for medical emergencies but given modern day furnishings and the rapid growth of fire, building a model around fire suppression response is not cost beneficial.
- The turnout time (time from pager activation to apparatus responding) needed under the current volunteer model will be offset by the duty crew resulting in near similar response times to St. Francis, Bethel, and Linwood given crews already will be in station.
- The recommended model is scalable and usable for several years into the future allowing budget planning and integration.



SECTION TWO — CHALLENGES/SOLUTIONS

- Funding poses the greatest challenge. It will cost more to deliver the same services. The recommended model is scalable and has a shelf life of a number of years. Finally, SAFER Grants should be applied for and will provide a measure of relief to the funding challenge.
- The recommended model requires all participants in the Duty Crew program to part time employees of one of the five partnership communities. This will address the numerous HR issues such as volunteer pensions and workers compensation. Of note, they will be serving in a part time employee/employer role versus as part of their volunteer service.
- Equipment will be addressed via the written “Mutual Aid/Partnership Agreement” with option of making the responding city wholly responsible for damage/repair or option of using formula.
- Training requirements will be minimized due to current shared services activities in Anoka County but EMS, FAO (apparatus), and Officer/Command Training will need to be supplemented on a case-by-case basis.
- Fire Chiefs to develop Standard Operating Policy of Duty Crew to address all operations/tactical issues.



SECTION THREE — COST SHARE MODEL

- The most equitable formula is one that uses an agreed upon population figure on an annual basis (Met Council or State Demographer), Anoka County Property Tax/Market value figure, and at least the past three calendar years actual call volume data for the Duty Crew coverage period.
- Policy makers should consider normalizing anomalies in the call volume portion of the formula for such things a storm related events if calls are not of a true emergency nature such as trees down.



Four Partner Formula

	Population %	Market Value %	Year Call Avg. %	Formula Share
Bethel	1.880%	1.328%	3.807%	2.34%
East Bethel	45.490%	43.600%	57.202%	48.76%
Linwood	20.296%	18.961%	20.473%	19.91%
Oak Grove	32.334%	36.111%	18.519%	28.99%



Four Partner Formula Cost Share

Predicted Cost	\$125,000	\$250,000	\$250,000	\$500,000
Staffing Level	2 Part Time Duty Crew	4 Part Time Duty Crew	2 Full Time Duty Crew	4 Full Time Duty Crew
Bethel	\$2,923	\$5,846	\$5,846	\$11,691
East Bethel	\$60,955	\$121,909	\$121,909	\$243,819
Linwood	\$24,536	\$49,776	\$49,776	\$99,551
Oak Grove	\$36,235	\$72,469	\$72,469	\$144,939

SECTION FOUR — COMPARE/CONTRAST

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- A additional mileage surcharge of at least \$2.50 per mile is required to cover the fuel, maintenance and repair of apparatus. This fee should be reviewed and adjusted on an agreed upon regular interview (every two years for example).



SECTION 5 — BEST PRACTICES

- An analysis using the Office of the State Auditor City/County Comparison tools provides overwhelming evidence that volunteer and shared service Fire & Emergency Services models are significantly more fiscally efficient than stand-alone models. For career departments such as Edina, Coon Rapids, St. Cloud and similar the range per capita for fire protection is \$59.43 to \$145.94.
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