

Central Essex Regional EMS Project

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Prepared by:

The Metropolitan Area Planning Council

60 Temple Place, 6th Floor

Boston, MA 02111

Tel. 617-451-2770

www.mapc.org

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Executive Summary

The Central Essex EMS Project was initiated at the request of the town managers and administrators of six North Shore communities - Georgetown, Hamilton, Ipswich, Rowley, Topsfield and Wenham - that had begun a conversation about the feasibility of developing a merged ambulance service to serve the region. After initially scoping the work on the project, Hamilton and Wenham opted out of the project and MAPC began working in earnest with Georgetown, Ipswich, Rowley and Topsfield.

The communities' conversation began with their concern that they were not getting an appropriate level of emergency medical services for their residents and there additional concern with the lack of cost certainty for providing service through private vendors, working under contracts with the towns. The four communities had four different EMS delivery models, with a wide range of costs based on the level of service they were trying to provide and whether or not they had any municipally-based component to augment the service. One of the communities did not have a contract to provide full time EMS service and had to rely on mutual aid agreements on nights and weekends.

To assist in analyzing the system and making recommendations, MAPC hired an outside consultant with experience in developing EMS delivery models for municipalities, Municipal Resources Incorporated met with the fire chiefs and town representatives from each community in the study and collected data on the town's service zone plans for EMS service. MAPC used response time mapping software to help identify options for deploying EMS equipment across the four towns. The result of the study and response time mapping is that MAPC, in concurrence with MRI, is recommending a two-step approach to providing improved EMS services to the four communities.

Step 1 calls for the four communities to jointly procure a private vendor to provide full-time, around the clock (i.e. 24/7) Emergency Medical Technician and Paramedic level service to all four towns. For a period of 2 to 3 years. Under this approach, the vendor would provide all necessary equipment and deploy it in three strategic locations across the four town region with an allowance to use municipally owned spaces to garage and

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maintain its vehicles. The proposed multi-year contract would provide a reasonable degree of service stability and cost certainty to the EMS delivery model while Step 2 is in process.

To bolster service levels, the initial contracted service would be augmented by fire-based ambulances and qualified personnel currently in service, or that may be placed in service, in the future. This potential to augment the contract with fire-based ALS or BLS service (advanced and basic life support) could also help to keep the cost of the service down, by allowing the private vendor to control its costs for providing service and by giving them additional time to get extra equipment into the region during high volume emergencies.

Discussion between the four towns as to which community will advertise or host the RFP and manage the contract on behalf of the four communities, must still take place. Additionally, some kind of inter-municipal agreement uniting the four towns to the regional service may also be advisable, if only to protect the interests of all four partner communities during the regional contract phase.

In Step 2, the four towns would establish a Joint Steering Committee to evaluate the benefits and feasibility of moving away from outsourced EMS services to a joint services model using municipal staff operating out of municipal departments. The timetable to sufficiently evaluate this course of action is likely to be two years so as to allow adequate time to develop budget and funding scenarios, governance documents and staffing plans. If the conclusion derived from Step 2 is that outsourcing should continue, then the model established in Step 1 will already be in place and sustainable.

Introduction:

The Central Essex Regional EMS Project

The goal of the Central Essex EMS Project is to improve delivery of Emergency Medical Services to the residents of the four communities in the study, while controlling the costs. Currently the four communities have different systems, under different contracts and service agreements, and with varying financial obligations. The main goal of this study is to find a way to improve service delivery and efficiency through inter-municipal collaboration, and provide a better standard of service for the residents of all four communities.

The four communities are also interested in the possibility of offering fire-based EMS service to their communities, if it can be shown that the EMS service can be self-sufficient through revenue streams that would be developed by billing insurance providers for patient transports. The potential for this type of regional system could in the long run also provide the basis for regional fire services delivery for the four communities, in a regional department that would be at least partially funded by the revenue generated by the in-house provision of EMS services. Therefore, the EMS study can also be looked at as a way for the four communities to pursue enhancements to the fire service model across the region, without the need to substantially invest in new staff, equipment, or facilities in each community.

With that in mind, there are still a wide range of issues that need to be resolved and obstacles to overcome before the four towns can transition to a permanent, fire-based EMS delivery model, much less a regional fire service model. The work of this project seeks to give the four communities a clear strategy for achieving both their short-term goals – to improve EMS service and control costs throughout the region – and their long-term goal of a permanent regional fire and EMS service for all four communities.

Assisting MAPC in its analysis of the data, service zone plans and other factors surrounding the four Essex County communities was private contractor, Municipal Resources Incorporated (MRI), which has had extensive experience in providing the type of analysis and expertise that was necessary to make sound recommendations from a

service-based perspective. MRI employs a number of professionals from a wide range of municipal career fields including EMS and Fire service leaders, who were able to bring their knowledge and background in those fields to the project and offer experienced insight into what would be needed to improve EMS delivery in the region.

Part I:

Existing EMS Services

Based on information provided to MAPC and MRI by the four towns, the current EMS service level in each varies widely with the models they use to provide service.

Georgetown receives EMS service from a volunteer fire company in neighboring Boxford. The service level in the community varies and response times, especially at nights and on weekend, are marginal. An association supporting one of the two Georgetown fire companies has also recently purchased two Class 1 ambulances and has plans to equip the vehicles and offer them as gifts to the town.

Ipswich is under direct contract with a private vendor, which provides coverage using two ambulances based in the community. Their contract also allows the vendor to provide coverage to neighboring Rowley that has its own contract with the same vendor, but has no facility in town from which to deploy an ambulance.

Topsfield has a combination service with a fire based paramedic or ALS level vehicle and trained paramedics on staff and a contract with a second private ambulance vendor. Topsfield's vendor does not have a location within the town to use as a deployment location for its vehicle (ambulance?).

Information on call volumes, level of service and number of transports within their communities and estimated billing charges by the ambulance providers based on the transports was provided by each of the four towns.

Georgetown reported an average of 507 calls per year, with 407 (80%) patient transports. Ipswich estimated 1,000 calls and 728 (73%) patient transports. Rowley had

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265 calls and 172 (65%) patient transports. Topsfield recorded 583 calls and 430 (74%) transports..

With a total of 2,355 calls for service and 1,737 patient transports across the four towns, MRI was able to estimate an average of 6.7 calls per day with two to three overlapping calls, depending on the community where the calls originated. Of all ambulance deployments, 65% resulted in patient transports. Overall, 73% of patient transports warranted paramedic administered Advanced Life Support (ALS) service. This volume is difficult to support with the only EMS dedicated fire service paramedics currently working in the region being based in Topsfield. Although there are trained medics on the other three fire departments, they do not fill that role in their capacity as firefighters.

MRI also estimated the potential for revenue from the current EMS delivery models based on feedback from three of the four towns. Georgetown, which is primarily served by the Boxford/Byfield fire service, was not able to provide revenue collection information. Among the other three towns there was a total of \$943,345 in collected revenue reported. The three communities averaged 65 to 70 percent collection rates, suggesting significant room for improvement. Based on these reported figures, MRI estimated that system wide revenue potential for the four towns at approximately \$1,231,000, with \$1,207 of that being new revenue, less the reported revenue by Topsfield.

All revenue projections are subject to change based on changes to the Medicare billing rate.

Given the existing situation, MRI was able to determine that there are multiple possibilities for providing an enhanced EMS delivery service through a regional model depending on the four communities' willingness to work together. By their own assessment, the towns agree that the current approach is not providing comparable service levels across the four towns. All four acknowledge that there would be benefits to their residents through an alternative approach.

MAPC's and MRI's assessment is that there appears to be sufficient capacity across the four town region to support either an enhanced private vendor service or to develop the backbone of a fire service based EMS delivery model. Given the stated long-range goals of the four communities and the challenges that lie ahead, MAPC and MRI propose a two step approach to developing a regional solution for the immediate future to the shared challenges of providing and adequate EMS service for the four communities and their

residents while examining the potential for an alternative, longer range service delivery model.

Part II:

Opportunities for Regional EMS Cooperation

MAPC and MRI, using Response Time Mapping software and GIS layered mapping tools, were able to show that key elements are present among the four communities for them to consider forming a regional EMS district through which they could provide EMS response times conforming to national standards to nearly all portions of the four town region and certainly at a higher performance level than at present. Although the exact location of deployment points to achieve this still need to be identified, the range of available options affords a satisfactory degree of flexibility.

By looking at both the short-term and long-term goals of the four communities, MAPC recommends that the four communities embrace a two-step approach to achieving their goals for regionalized, enhanced EMS service.

Step 1 will have the four communities beginning to plan together and simultaneously collect data from which to analyze how responses across the four communities could best be accomplished through a common private EMS service provider. MAPC recommends a two-year contract for service with no out of pocket cost for the four communities. A third year option would provide a buffer period to allow sufficient time for all four towns to work through required local processes to determine and implement a successor method of service delivery.

By procuring the provider together, the towns will be able to offer the private vendor an opportunity to manage its equipment within the region from multiple deployment points and give it access to multiple local and regional hospitals in order to meet the performance goals upon which the contract would be based. As an incentive to vendors, the towns should consider offering no-cost use of existing and available municipal quarters from which EMS vehicles could be launched. Fire-based resources already in place in Topsfield and in the development stage in Georgetown could be employed to compliment the

vendor's resources if stretched during multiple injury or simultaneous incidents – an approach that could help build a foundation for the future. In all, it will prove to be to the towns' advantage to construct the service solicitation in a way that minimizes the financial risk to the vendor.

Effective management of the contract by the vendor is expected to provide adequate transport revenues to allay the need for subsidy by the towns. The vendor will have an additional incentive to perform better than adequately so as to position itself to continue in service to the four towns if the concept of bringing EMS services in-house on a regional scale fails to materialize.

Step 2 addresses the longer term approach to the region's EMS service delivery model. It begins with the establishment of a Steering Committee that would thoroughly evaluate the in-house regional service model and, after obtaining appropriate authority to proceed from their respective governing bodies, begin to develop an implementation and transition plan to stand up a regional fire-based EMS district.

A major consideration of the steering committee will be addressing and resolving the array of issues and potential obstacles to first, establishing a regional fire-based EMS district, and then to look beyond to the concept of providing fire services on a regional scale. Significant among EMS stage matters the committee will need to address will be ...

1. Developing a truer estimate of the potential for revenue generation in the region
2. Formulating a plan for staffing and administration of the EMS service
3. Drafting a governance agreement that is acceptable to all four communities, and
4. Assembling operating and capital budgets for the new service.

As a starting point, it is important to note that there is no appetite among the four municipalities' town managers and administrators to create a new service that increases costs to their taxpayers. Joint budget development will likely be complicated and could test the commitment of all four towns. It will be critical for all to be forthright with their governing bodies' and communities' concerns and to work toward consensus that almost assuredly will be the result of compromise.

We recommend that the Steering Committee be comprised of at least three representatives from each community and include the fire chiefs, or their designees, the chief administrative officer, or his representative, and one other who is not an employee of

the town, all appointed and commonly charged by their respective Boards of Selectmen. The communities may also wish to engage an outside party who can provide or facilitate expert assistance and keep the committee working toward the common goal.

MAPC also recommends that the four towns research private and public grant opportunities that would help them complete the implementation phase at a reduced or no cost to their residents. The four towns may also choose to equip the steering committee with a reasonable budget to enable it to engage professional services or perform studies as the need arises.

The Steering Committee should coordinate its efforts with the 2 to 3 year duration of the vendor provided service. It will need to plan carefully and move effectively along the timeline it establishes to allow sufficient time to navigate all necessary local approval processes and to advocate for their proposed plan of action.

Part III:

In Closing

MAPC believes that the direction the four towns are pursuing can be productive, controlling costs, providing a better level of services and, most importantly, response times within the four town region. Success will require careful and thorough planning, effective and occasionally innovative problem solving, commitment by the respective governing bodies, a willingness to campaign for successful local legislative endorsement, and above all, the requisite political will to work in concert to make and stand behind the decisions that will need to be made.

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