

# GeoComm

## Southeastern Regional Planning and Economic Development District

Draft Feasibility Report and Implementation  
Plan

June 2011



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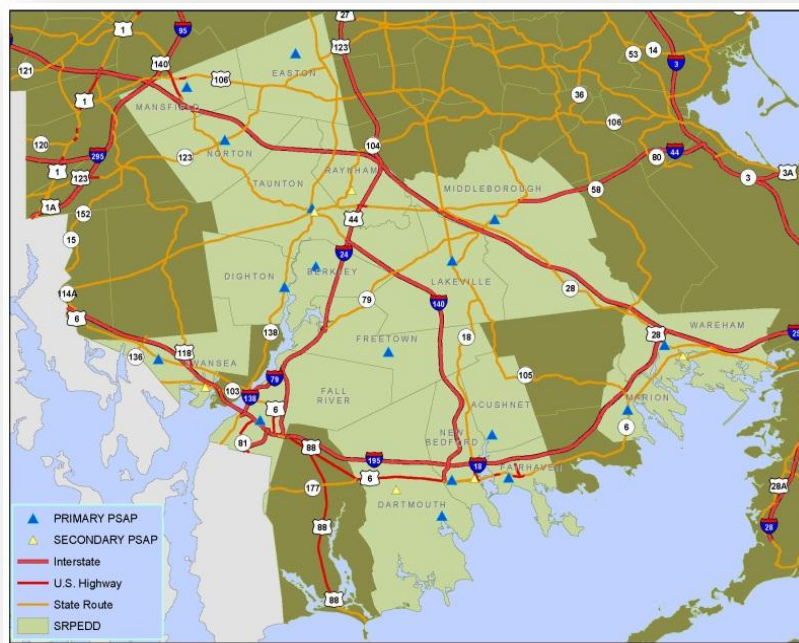
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## Overview

In January 2011, GeoComm began a partnership with public safety agencies within the Southeastern Regional Planning and Economic Development District (SRPEDD) community to conduct a comprehensive review of existing Public Safety Answering Point (PSAP) operations and technology with a goal of determining the feasibility of consolidating none, some or all of the 9-1-1 emergency dispatch centers and public safety communications functions serving the region. The 18 cities and towns and one university represented in the project include:

City of Fall River	Town of Lakeville
City of New Bedford	Town of Mansfield
City of Taunton	Town of Marion
Town of Acushnet	Town of Middleborough
Town of Berkley	Town of Norton
Town of Dartmouth	Town of Raynham
Town of Dighton	Town of Swansea
Town of Easton	Town of Wareham
Town of Fairhaven	University of Massachusetts-Dartmouth Campus
Town of Freetown	



Feasibility in the project is defined by the participating communities, through the 9-1-1 Steering Committee, as enhancing public safety services to the citizens of the region and maintaining or reducing the overall cost of providing public safety services. GeoComm has examined and presented options for the region to ensure the highest quality of emergency communications services while identifying potential cost efficiencies to the community taxpayers.

The project has consisted of data collection tools, interviews, observations, PSAP visits, consideration of industry standards and best practices, and stakeholder meetings to ensure consolidation feasibility was thoroughly examined.

GeoComm has determined through this project that consolidation is feasible through validation of several improvements to public safety and cost projections conservatively saving more than \$1.7 million in operational throughout the region. As discussed in the Feasibility Assessment and Financial Analysis Report and further detailed in this report, there are a number of advantages to regional consolidation, such as:

- Transition to consistent service levels across the entire region by improving the quality of service to the highest levels.
- Reduction in the transfer of 9-1-1 calls between PSAPs, resulting in quicker call processing, dispatch and response times, as well as reducing the potential for dropped calls, information loss on transfer and confusion to the callers.
- Enhanced resource management during large-scale incidents, natural disasters, and multi-jurisdiction/multi-agency and discipline incidents from a single point of control.
- Improved supervision and management structures providing enhanced employment opportunities for incumbent personnel.
- Improved services and cost efficiencies for all agencies through economies of scale. Long-term cost efficiencies from eliminating duplicate and expensive technology such as Computer Aided Dispatch (CAD), Record Management Systems (RMS), 9-1-1 answering equipment, radio consoles, logging recorders, etc.

GeoComm has identified several implementation activities to further define the technical roadmap to consolidation and identify start-up technical costs. Upon completion of these tasks and thorough review of findings, GeoComm offers the overall recommendations for the region on the following page.



Recommendation 1: Adoption of a long-term goal of full Public Safety Answering Point (PSAP) consolidation and synergy derived from more efficient use of resources.

Recommendation 2: Establishment of a regional public safety communications governance structure that is representative of the agencies in the region.

Recommendation 3: Formation of a regional administrative agency.

Recommendation 4: Formation of a regional training program.

Recommendation 5: Implementation of a regional trunked public safety radio system.

Recommendation 6: Implementation of a regional Computer Aided Dispatch (CAD) system.

Recommendation 7: Consolidation of the current primary and secondary PSAPs into two Regional Emergency Communications Centers with community distribution.

Recommendation 8: Staffing structure be adopted for the new consolidated operation that ensures effective long-term management, supervision, and staffing.

Recommendation 9: Each agency implements a plan to transition the current ancillary duties performed by PSAP staff.

Recommendation one is critical to the success of a regional plan of action; the recommendations that follow build upon this primary concept. All participating agencies must agree that while there will be challenges and successes along the way, the ultimate goal is working together to improve service delivery and share knowledge and resources.

### **Governing Board**

The political environment in which the consolidation will occur is a vital factor to consider in the development of implementation plans. In all PSAP consolidation efforts, the establishment of an appropriate, effective, and balanced governance structure is the key to long-term success. The degree of commitment to success must be shared by members and cannot be over-emphasized; therefore, GeoComm offers the recommendation: Establishment of a politically and operationally acceptable governance structure that is representative of the agencies in the region.

The governance structure of a fully consolidated communications center is the most important factor in its political success. Each participating entity must have full confidence in its call taking and dispatch service provider.



The participating entity must have equal access and authority to influence the policy and procedural decisions affecting the combined operation, and there must be a commitment to success. This final report discusses the benefit of a regional Public Safety Communications Board (PSCB) as well as high level implementation recommendations for regional governance. The PSCB should be created through an official interlocal cooperation agreement authorizing the creation of bylaws and operating protocol. The PSCB will provide policy direction to the regional consolidation and efforts through staff support received from a regional administrative agency focused on supporting shared public safety communications activities.

### **Regional Administrative Agency**

Regardless of the final regional decision on whether or not to implement full consolidation, GeoComm recommends the creation of a regional administrative agency to provide coordination and staff support to shared public safety communications activities. The participating agencies and stakeholders would provide policy guidance to the agency through the Public Safety Communications Board.

The administrative agency would be subordinate to the participating local governments and would serve the public safety agencies technical expertise and regional coordination in areas such as:

- Ensuring basic and advanced training opportunities for 9-1-1 personnel to ensure compliance with state/federal requirements and industry best practices
- Operational and policy level coordination with 9-1-1 service providers, wireless service providers, and Massachusetts State 9-1-1 Department
- Coordination of regional Master Street Address Guide (MSAG) and Geographic Information System (GIS) data sets in preparation for Next Generation 9-1-1 (NG9-1-1)
- Provide management of regional grants, assist with cooperative purchasing efforts for equipment, resources, etc., that support the Regional Emergency Communications Centers (RECCs)
- Coordination of operational interoperability planning between agencies to include regional Standard Operating Procedures (SOPs), Memorandum of Understandings (MOUs), etc.
- Regional Continuity of Operations Planning (COOP)
- Public education and media coordination

As reported in the Feasibility Assessment and Financial Analysis Report, many of the functions needed to provide successful public safety communications operations are duplicated by the multiple PSAPs in the region. This results in limited staff and expertise available at each PSAP hampering the ability of agencies to reach full operational potential. The regional administrative agency would provide significant benefit for all public safety agencies regardless of consolidation and allow agencies to receive a consistent level of benefit when examining consolidation coordination, future technologies, dispatcher training, and more.



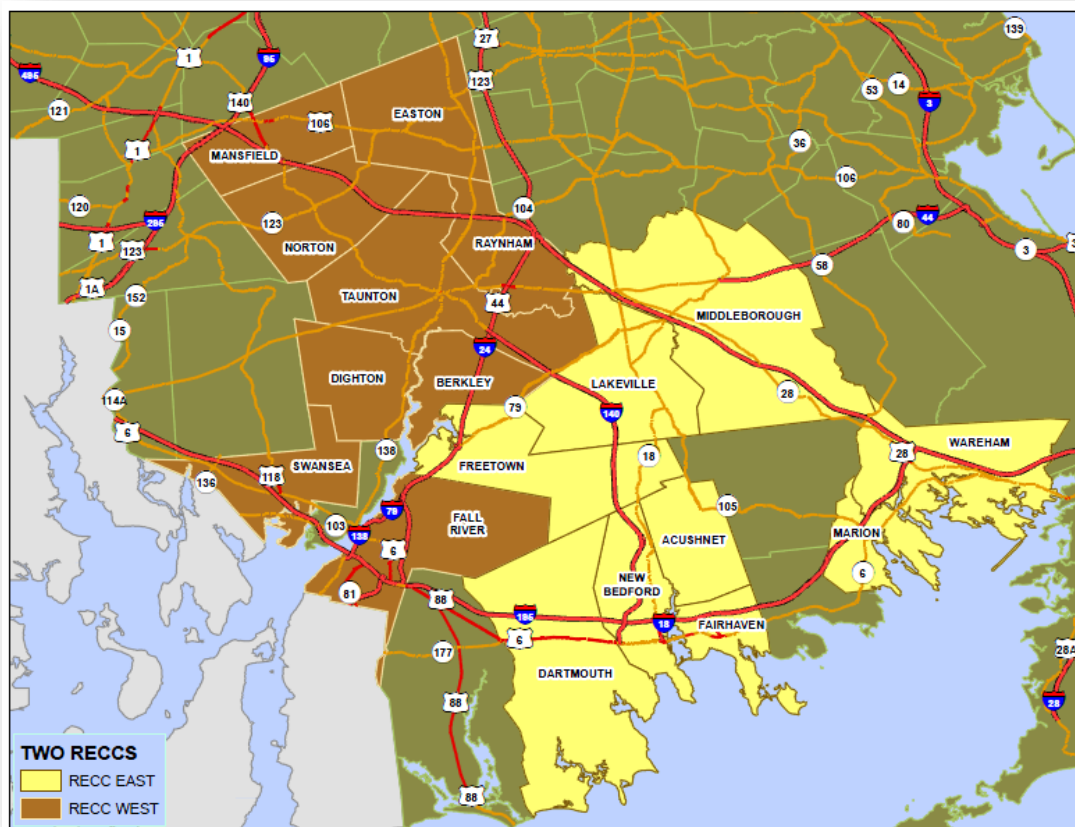
As discussed with the 9-1-1 steering committee and Massachusetts State 9-1-1 Department, there are many highly successful agencies that provide this coordination expertise to regional 9-1-1 systems.

Two examples include the Metropolitan Emergency Services Board (MESB) in Minneapolis-St. Paul and Mid-America Regional Council (MARC) in Kansas City, MO.

## RECCs

After analyzing the data, interviewing stakeholders, visiting PSAPs, and observing public safety communications operations in the region, GeoComm offers the recommendation of consolidating the current primary and secondary PSAPs into two RECCs.

The two RECC facilities should be located in the region yet geographically separated to provide an appropriate backup. Each RECC would serve as backup or alternate PSAP facility during service interruption. The RECCs would serve as the primary PSAP for all wire line and wireless 9-1-1 callers and would perform all dispatch services within the respective communities for Police, Fire, and Emergency Medical Services (EMS).



RECC West	RECC East
<ul style="list-style-type: none"> <li>■ Berkley</li> </ul>	<ul style="list-style-type: none"> <li>■ Acushnet</li> </ul>
<ul style="list-style-type: none"> <li>■ Dighton</li> </ul>	<ul style="list-style-type: none"> <li>■ Dartmouth</li> </ul>
<ul style="list-style-type: none"> <li>■ Easton</li> </ul>	<ul style="list-style-type: none"> <li>■ Fairhaven</li> </ul>
<ul style="list-style-type: none"> <li>■ Fall River</li> </ul>	<ul style="list-style-type: none"> <li>■ Freetown</li> </ul>
<ul style="list-style-type: none"> <li>■ Mansfield</li> </ul>	<ul style="list-style-type: none"> <li>■ Lakeville</li> </ul>
<ul style="list-style-type: none"> <li>■ Norton</li> </ul>	<ul style="list-style-type: none"> <li>■ Marion</li> </ul>
<ul style="list-style-type: none"> <li>■ Raynham</li> </ul>	<ul style="list-style-type: none"> <li>■ Middleborough</li> </ul>
<ul style="list-style-type: none"> <li>■ Swansea</li> </ul>	<ul style="list-style-type: none"> <li>■ New Bedford</li> </ul>
<ul style="list-style-type: none"> <li>■ Taunton</li> </ul>	<ul style="list-style-type: none"> <li>■ Wareham</li> </ul>

### Financial Impact

The goal of the financial impact information presented in the report is to provide a high level overview sufficient for local agencies to evaluate the anticipated financial impact of moving forward with consolidation and development of a detailed implementation planning process.

As reported in the financial section of this report, GeoComm finds that full consolidation would have the following financial impact on the participating agencies:

- Development of a start-up financial plan identifying revenue sources to support construction of two state-of-the-art public safety communications facilities, a regional trunked radio system and a regional CAD/RMS system.
- Authorization of up to 78 full-time staff positions within the regional administrative agency and RECCs. This authorized staffing represents a decrease of 103 full-time positions and numerous part-time positions within the current PSAPs.
- More than \$1.7 million in local savings resulting from shared services and enhanced efficiencies.
- Expense projection of \$6 million for total personnel and operational cost of the administrative agency and two RECCs, partially offset by \$1.4 million in state 9-1-1 revenue.



## Summary

GeoComm realizes that transition to a fully consolidated public safety communications system will require significant planning over a period of several years. In addition to a regional governance structure, regional administrative agency, and full consolidation resulting in two RECCs, this final report identifies implementation recommendations and steps towards enhanced regional coordination of public safety services.

This final report lays the foundation for implementation; short, medium, and long-term benefits for the region to be realized through regional coordination and consolidation; and the expected financial impacts of consolidation. The information is presented with the intent that 9-1-1 Steering Committee and the participating communities in Southeastern Massachusetts can review these recommendations and make informed decisions regarding the future operational and technical structure of 9-1-1 and public safety dispatch services.



Through extensive data collection, interviews, and observations, GeoComm finds the following conditions present within the region:

### **Decentralized 9-1-1/Dispatching Services Causes Response Delays**

Many Public Safety Answering Points (PSAPs) transfer 9-1-1 calls to a secondary PSAP or remote dispatch point.

- Transferring emergency calls adds to the response time, results in repeated questions/responses, can add to potential failure points in the delivery of 9-1-1 calls, and can cause unnecessary stress during the course of a 9-1-1 call for both the dispatcher and the citizen requesting assistance.
- In many cases, the 9-1-1 caller is not transferred to the secondary PSAP or remote dispatch point. When the caller is not transferred, a summary of the call information is verbally relayed to the secondary PSAP or remote dispatch point via a phone call from the primary PSAP. In some instances, the secondary PSAP has a remote terminal and printer that receives the 9-1-1 ALI location information for the call. Unfortunately, the lack of voice contact with the caller can degrade the level of service. Valuable resources or emergency instruction opportunities are missed and cost the citizen efficient and effective response time to their emergency.
- Currently, all wireless 9-1-1 calls in Massachusetts are first delivered to a designated, regional State Police PSAP. Calls are intercepted, screened, and transferred to a local PSAP based on the location being reported by the caller. Depending upon the location information that is available to the Massachusetts State Police, wireless 9-1-1 calls are often transferred without the benefit of enhanced call features, such as location information.

### **Inadequate Operational Staffing**

Many PSAPs in the region are inadequately staffed for effective operations, particularly for peak call times.

- More than 70 percent of PSAPs in the region have only one dispatcher on duty at any given time. Just a few of the inherent risks for this operational structure include lack of security, insufficient coverage for sudden onset illness, and no backup option should a PSAP employee become unresponsive.
- Inadequate staffing also impacts the PSAP with regard to the upcoming changes to the Massachusetts 9-1-1 regulations governing the provision of Emergency Medical Dispatch (EMD). The regulations require each PSAP to implement an internal EMD program or use an external resource for delivery of EMD services. In GeoComm's professional judgment, implementation of a consistent and effective EMD program necessitates a minimum staffing of two dispatchers to permit appropriate focus and handling of emergency medical calls.
- The current number of 9-1-1 personnel in the region is a direct result of the current number of PSAPs. The wireline 9-1-1 call volume within the region, does not justify the number of PSAPs or the number of personnel handling the 9-1-1 call taking functions. This situation creates an awkward reality whereby the region as a whole is dramatically overstaffed yet each individual PSAP is facing staffing challenges.



- The low call volume at many of the PSAPs results in less experienced personnel. For example, a somewhat complex task such as conversing with a barricaded subject or suicidal caller is done by one dispatcher only a few times per year in a small PSAP that skill set may either not develop or become stale from underuse. Conversely, in a larger, busier environment personnel will have more opportunity to develop and maintain expert skills in a better trained and supervised environment, resulting in a higher likelihood of successful performance.
- Small staff size can result in excessive overtime costs due to the lack of employee depth. GeoComm's data collection findings revealed 229 full-time and part-time staff at the participating PSAPs. In comparison, the consolidated structure would require 78 staff members to allow for appropriate coverage, supervision, and decreased overtime costs.

### Inadequate Supervision

Many PSAPs are not adequately supervised, particularly after normal business hours.

- PSAP staff supervision practices and dispatching specific proficiencies varied widely across the region. Eighty-one percent of participating agencies have no direct supervision assigned during 9-1-1 call taking. This situation occurs most commonly during evening and night shifts. While some agencies report shared supervision between field units and PSAP personnel, this situation is inconsistent with best practices.
- Inadequate staffing and supervision levels create risk and liability concerns for public safety agencies in the region. Agencies lacking effective 9-1-1 and dispatch supervision accept inherent risks for the staff and agency overall, as well as the recipients of 9-1-1 service, whether the field personnel or the public. Regardless of whether consolidation of services is accepted, GeoComm recommends trained, focused supervision of the 9-1-1 and dispatch functions at all times.
- Many PSAPs do not have adequate management resources. The small staffing size at the current PSAPs results in lack of career development opportunities for personnel.
- A lack of dedicated PSAP management staff results in insufficient ability to properly focus on administrative issues to:
  - Coordinate with 9-1-1 service providers, wireless service providers, and Massachusetts State 9-1-1 Department. Many of the state services and benefits are currently unrealized or under-utilized; agencies should work with Massachusetts State 9-1-1 Department to coordinate resolution of 9-1-1 issues with service providers.
  - Plan for emerging technologies and interoperability between agencies and preparation for the NG9-1-1 services.
  - Focus on and coordinate regional Standard Operating Procedures (SOPs), Memorandum of Understandings (MOUs), etc., even in jurisdictions where technical interoperability exists.
  - Develop planning for continuity of operations, disaster operations, and backup functions and facilities consistent with industry best practices.



### **Inconsistent and Inadequate Training**

Training of 9-1-1 staff across the region is inconsistent and many PSAPs provide inadequate training opportunities to staff.

- 9-1-1 personnel do not take advantage of training opportunities. The Massachusetts State 9-1-1 Department offers numerous training courses and advancement of skill and knowledge opportunities for PSAP staff, but the lack of staffing depth at small PSAPs prohibits them from taking meaningful advantage of this training.
- The Massachusetts State 9-1-1 Department provides basic dispatcher training standards but in most cases throughout the region, only the newly hired dispatchers receive training.
- Field responders (Police Officers and Firefighters) who are assigned to PSAPs for shift rotations and temporary assignment have not necessarily received any formal training for working within the PSAP environment. When untrained personnel fulfill a call taking role, the “standard of care” to the 9-1-1 caller is diminished.
- There is inconsistent compliance with minimum training standards throughout the region. None of the participating PSAPs have a dedicated training coordinator whose primary role is to assess the training needs of the PSAP and coordinate a training plan for personnel.

### **Inadequate Facility and Security**

Many PSAPs provide inadequate security for 9-1-1 staff.

- In many agencies, dispatchers are also responsible for monitoring of prisoners. When this responsibility is placed on dispatchers in PSAPs and there is only one dispatcher on duty, it is impossible for the dispatcher to be totally attentive to prisoner issues, as well as 9-1-1 calls and radio activity.
- Many of the PSAPs have dispatchers and 9-1-1 equipment in an unsecured front office environment. If a citizen poses any kind of threat upon entering the building, it jeopardizes the dispatcher and allows an opportunity for 9-1-1 and dispatch services to be impaired.

### **Ancillary Duties**

Most PSAPs provide services for the local public safety department that go well beyond the receipt and dispatch of 9-1-1 calls.

- A significantly high number of employees, (181 full-time and 48 part-time) are committed to processing a relatively moderate number of 9-1-1 calls within the region. Much of this is attributed to the fact that 9-1-1 operates more as an “additional duty” at many of the facilities in the region, rather than a primary mission.
- GeoComm noted over 21 duties being performed at the participating PSAPs that are not directly related to the receiving and dispatching of 9-1-1 calls. If agencies consolidate PSAP operations, these responsibilities potentially become “leave behind duties,” also known as “closed station issues.” Some of these duties can be absorbed by the new RECC, but many must be addressed within the individual agencies and implementation planning. GeoComm offers additional detail concerning the closed station impact in section three of this report.



### Inefficient Use of Financial Resources

The number and structure of PSAPs across the region creates inefficient use of valuable public resources.

- Massachusetts State 9-1-1 Department provides consistent call processing equipment for primary PSAPs but at a cost that exceeds efficiency. There are too many trunks, call answering workstations, and staff for the volume of calls for service in the region.
- The cost per 9-1-1 call varies greatly across agencies. Based on the reported 2010 9-1-1 call volume of 154,776 for the region, all agencies are collectively paying \$58.89 per 9-1-1 call in personnel costs. When examined more closely, the range of cost per 9-1-1 call varies from a low of \$31.57 to a high of \$182.35 depending on the community being examined. While it is acknowledged that each agency performs significant activity beyond processing 9-1-1 calls, this consistent measure is an appropriate comparison of efficiencies across the region. In general, larger agencies are more cost effective than smaller agencies.
- The cost-savings identified in this report are very conservative and do not include current inefficiencies in the cost of facilities, training, equipment and maintenance. The actual cost impact of consolidation has the potential to go well beyond the initial \$1.7 million in identified personnel savings. GeoComm observations, data collection, and interviews found that throughout the region there are inconsistent facilities and equipment.
- Some agencies utilize modern facilities and dispatch equipment and dispatch equipment while other agencies are in facilities that do not comply with industry standards and utilize obsolete technology.
- GeoComm observed and reviewed many systems that will need to be upgraded, improved, or replaced in the near future regardless of any move toward consolidation. The costs associated with moving toward a consolidated operation cannot be viewed in comparison to “zero-cost” as there are dramatic improvements needed, at significant cost, regardless of consolidation.

Each of the findings described above were assessed as part of this consolidation feasibility study process with the underlying goal of any subsequent recommendations will enhance the delivery of public safety services to the citizens in the region.



GeoComm recognizes the importance of a local public safety presence in each of the participating communities. Each local agency plays a large role in providing community services in addition to answering and dispatching 9-1-1 calls.

Across the region Public Safety Answering Point (PSAP) personnel are involved in a variety of activities that are unrelated to the effective delivery of 9-1-1 service. Some of these services could be provided to citizens and first responders through the Regional Emergency Communications Centers (RECCs); however, some services would need to be handled by the local community even after consolidation. Each local community must make its own determination for handling these tasks consistent with the community standard of care, service level expectations, and available resources. While some agencies may elect to add staff to perform continuing activities, other agencies will modify the procedures for providing governmental services. During the transition period, local communities will have the opportunity to educate their citizens on new service methods. GeoComm outlines the following “closed station issues” that are of concern to local agencies and provides recommendations and solutions.

Issue	Response
<p>Do the LEAPS Terminals need to be in both the regional dispatch center and individual Police Department?</p>	<p>Dispatchers can provide responders with critical information from the Registry of Motor Vehicles, the Massachusetts State Police, the Criminal History Systems Board, the National Crime Information Center, FBI, and any other Police Department in the United States via the Law Enforcement Automated Processing System (LEAPS) terminal computer. The LEAPS terminals should be in both the RECC and individual Police Departments. The access to computerized criminal history, motor vehicle, warrant, and associated record databases is controlled in large part by the extant rules promulgated by federal and state repository authorities. If local Police Departments elect to retain a LEAPS terminal on-site the agency will be responsible for complying with LEAPS Terminal security, training, and management requirements. As mentioned in the previous reports, security issues are defined, costs and conditions of connectivity are</p>



Issue	Response
	<p>regulated, and the actual placement of equipment (hardware/software) is controlled. The RECCs may house and utilize the LEAPS platform on behalf of local Law Enforcement agencies as long as there is a formal demonstration that the Law Enforcement community members endorse and support the access to and use of such public and or restricted data, including criminal intelligence information.</p>
<p>How will <b><u>weapons control</u></b> be accomplished if the dispatch function moves to a regional location? Will <b><u>added security</u></b> be needed when the Police Department is closed?</p>	<p>Some Police Stations will have sufficient security but others will require increased security measures, such as door alarms and intruder detection system. These measures are needed because of inherent issues with the building structure and the age of several buildings contributing to diminished security. In addition to door alarms and intruder detection system, there should be on site security measures (i.e., surveillance cameras) to protect weapons, records, and other equipment.</p> <p>Surveillance cameras are available as an enhancement to the systems mentioned above. The number of facilities across the region would prohibit effective real-time monitoring by the RECCs unless additional staff is allocated. However, on-demand monitoring would be available through web-link. All cameras should record to a digital medium capable of recall.</p>
<p>How will '<b><u>walk-in</u></b>' requests for information be handled? How will <b><u>emergency refuge</u></b> be handled if the dispatch function moves to a regional location?</p>	<p>GeoComm recommends non-emergency walk-in requests be handled during hours the station is open. This should be publicized and signage available at the station. Agencies will need to make appropriate changes to policies and procedures to adapt for the revised service hours.</p> <p>GeoComm recommends that a hot-dial telephone that automatically connects to the appropriate RECC be installed at the entrance to each closed station for</p>



Issue	Response
	<p>use by citizens who arrive at the station to request assistance or report an emergency. The RECC will receive the call via the 9-1-1 system and will handle it in accordance with standard operating procedures for any 9-1-1 call.</p>
<p>How will <b><u>baby safe haven</u></b> be handled if the dispatch function moves to a regional location?</p>	<p>The Safe Haven Act of Massachusetts (2004) allows a parent or guardian to legally abandon newborn infants seven days old or younger at a hospital, Police Station, or manned Fire Station without facing criminal prosecution. The Safe Haven Act requires leaving the newborn infant with an "appropriate person" at a designated facility defined as someone "who is able to ensure that the newborn infant is safe." GeoComm recommend use of the previously described hot-dial telephone to request dispatch of local Law Enforcement personnel for the purpose of accepting the voluntary abandonment of the newborn infant.</p>
<p>How will <b><u>domestic situations</u></b> and <b><u>drop off of children</u></b> for court imposed custody be handled if the dispatch function moves to a regional location?</p>	<p>GeoComm recommends use of the previously described hot-dial telephone to request dispatch of local Law Enforcement personnel for the purpose of responding to a domestic situation. The RECC will receive the call via the 9-1-1 system and will handle it in accordance with standard operating procedures for any 9-1-1 call.</p> <p>If a citizen needs to arrange for a drop off of children for court imposed custody, it should be properly scheduled with the Police Department during times when there are personnel to support the activities. If Police Department personnel are not available, an alternate safe and staffed location should be designated.</p>
<p>How will <b><u>lock-up supervision</u></b> be handled if the dispatch function moves to a regional location?</p>	<p>The detention supervision and monitoring function will remain the responsibility of the local Law Enforcement agency in compliance with appropriate</p>



Issue	Response
	state guidelines and regulations for detention and jail facilities. While beyond the scope of this project, GeoComm acknowledges opportunities for local agencies to work together to consolidate booking, holding and jail facilities. The RECCs would not be expected to monitor prisoners remotely.
Who will handle <b><u>24x7 209A restraining order processing</u></b> if the dispatch function moves to a regional location?	In Massachusetts M.G.L. c. 209A sets the standards for obtaining a Restraining Order, also called an Order for Protection from Abuse. M.G.L. c. 209A authorizes the Court to create orders that protect people from abuse has very specific requirements for obtaining a restraining order. After normal business hours, victims who call or visit the local Police Station and use the hot-dial telephone will have the call processed in accordance with standard operating procedures. A local Law Enforcement officer will be dispatched to the victim's location and then follow standard procedures for obtaining emergency restraining orders.
Who will handle <b><u>section 12 processing</u></b> if the dispatch function moves to a regional location?	Section 12 procedures are currently in place to hospitalize an individual believed to meet the criteria for civil commitment. Certain individuals may be restrained and taken to a hospital in the belief that failure to hospitalize would create a likelihood of serious harm by reason of mental illness. These procedures would continue to be followed with minor communications alternations to account for the implementation of RECCs. It is not expected that significant procedural changes will be required.
Who will <b><u>issue and report burn permits</u></b> if the dispatch function moves to a regional location?	GeoComm recommends that burn permits be issued during normal business hours through the Police and/or Fire Department administrative offices. Agencies should explore an online interface for enhanced customer service and 24-hour processing.
Who will handle <b><u>citation data reports</u></b> if the dispatch function moves to a regional location?	GeoComm recommends citation data reports be requested at the local Police Department during



Issue	Response
	normal business hours.
Who will handle <b><u>work detail assignments</u></b> if the dispatch function moves to a regional location?	GeoComm recommends work detail assignments be requested and processed at the local Police Department during normal business hours.
Who will handle call-in for open shifts if the dispatch function moves to a regional location?	GeoComm recommends that field personnel who need to call in sick be instructed to notify the on-duty supervisor of the impacted agency. This call could be facilitated through RECC messaging, as defined by standard operating procedure.
<p>Who will handle <b><u>non-emergency calls</u></b> to the Police and Fire Departments if the dispatch function moves to a regional location?</p> <p>Who will handle <b><u>business calls</u></b> to the Police and Fire Departments if the dispatch function moves to a regional location?</p>	<p>There must be a distinction between non-emergency requests for response and business calls. Non-emergency calls that require a public safety response, such as a property break-in, should be handled by the RECC in accordance with standard operating procedures. The RECC will dispatch the local department to respond to the incident. It is generally acceptable that anyone desiring a response from Police, Fire, or EMS should call 9-1-1 in which case the caller would be connected with the RECC. Those who only want information or who need to conduct “business” such as an insurance company seeking a copy of an accident report should call the seven-digit number of the local Police or Fire Department during regular business hours. GeoComm recommends a simple recording on business lines after hours directing callers to dial 9-1-1 if they need Police, Fire, or ambulance assistance and to call back during normal business hours for administrative requests.</p>
Who will process <b><u>warrant inquiries</u></b> if the dispatch function moves to a regional location?	GeoComm recommends the RECC maintain a database of outstanding warrants with hard copy at local agency. Standard operating procedures should be developed to validate the actual warrant exists and is in-hand at the local agency. This procedure could be result in dispatch of a local Law Enforcement officer to validate the warrant. Alternatively, the



Issue	Response
	RECCs could become the local warrant depository for the region.
<p>Who will handle <b><u>notification to all relevant public safety entities</u></b> when roads are closed and work details are present?</p>	<p>The RECC dispatcher will be responsible for notifying all relevant public safety entities when roads are closed.</p> <p>Policies and procedures can be developed that allow local agencies to report daily to the RECC for such conditions that require status monitoring.</p>
<p>How will the <b><u>integration of Record Management Systems</u></b> between communications and between the RECC and the local agency be handled if the dispatch function moves to a regional location?</p>	<p>There are a number of acceptable alternatives to achieve technical integration of records in a manner that protects the security and integrity of databases. Throughout the implementation process, this issue will need to be explored from a technical, operational and policy perspective.</p>
<p>Will there be <b><u>increased clerical work</u></b> assigned to patrol officers to make up for work no longer done by dispatchers? If so, how will <b><u>union resistance</u></b> be handled?</p>	<p>As noted elsewhere in this report and in all previous reports, there are a substantial number of ancillary duties completed within each of the existing PSAPs. Each local community must go through the decision making process of determining the resolution of each ancillary duty. GeoComm is convinced that acceptable alternatives exist although each community must develop its plan of action based on the standard of care, community expectations of service, and available resources.</p> <p>Some of the functions currently performed by PSAP staff will need to be reassigned either to the RECC through interagency agreement and additional staff allocations, or to someone at the local agency, which may also require the agency to hire additional personnel to provide this service.</p>
<p>Will wired and wireless <b><u>fire alarms</u></b> be connected to the new regional dispatch location?</p>	<p>Fire alarms should be covered by a clear policy established for the region. The reduction of direct connect systems has been in place for a long time as adequate central station (private) services are</p>



Issue	Response
	<p>available today.</p> <p>Special exceptions may apply, however the dynamics must be defined by policies and procedures.</p>
<p>How will <b><i>after hours calls</i></b> be routed to appropriate municipal departments or persons?</p>	<p>After hours business calls should be handled through a telephone system in the local community, as noted above.</p>



## Implementation Recommendations

Based on professional observations, interviews, and analysis of operations and financial data, GeoComm recommends all agencies participating in the feasibility study conceptually agree to eventual consolidation of 9-1-1, non-emergency call processing and public safety dispatch for Law Enforcement, Fire, and Emergency Medical Services (EMS) operations. Such a complete consolidation results in the greatest service enhancement for citizens, visitors, and responders of the region, and ultimately results in much more efficient services from a cost standpoint. As participating agencies consider committing to consolidation, success must be built on a spirit of collaboration and trust.

Transition to a fully consolidated public safety communications system will require significant planning over a period of several years. This final feasibility and implementation report provides recommendations that should be enacted immediately, as well as recommendations that should be phased in over the near, medium, and long-term implementation.

GeoComm offers the following specific recommendations based on the assessments conducted in the SRPEDD region:

### **Recommendation 1: GeoComm recommends adoption of a long-term goal of full Public Safety Answering Point (PSAP) consolidation.**

- GeoComm has identified a significant number of public safety benefits to be achieved through consolidation. Fully consolidated Regional Emergency Communications Centers will provide enhanced public safety services to citizens and public safety agencies. Benefits include:
  - Transition to consistent service levels across the entire region by improving the quality of service to the highest levels.
  - Reduction in the transfer of 9-1-1 calls between PSAPs, resulting in quicker call processing, dispatch and response times, as well as reducing the potential for dropped calls, information loss on transfer and confusion to the callers.
  - Enhanced resource management during large-scale incidents, natural disasters, and multi-jurisdiction/multi-agency and discipline incidents from a single point of control.
  - Improved supervision and management structures providing enhanced employment opportunities for incumbent personnel.
  - Improved services and cost efficiencies for all agencies through economies of scale. Long-term cost efficiencies from eliminating duplicate and expensive technology such as Computer Aided Dispatch (CAD), Record Management Systems (RMS), 9-1-1 answering equipment, radio consoles, logging recorders, etc.
- By creating the synergy and resource sharing possible through consolidation, the local governments in the region will enhance public safety services while maintaining and in some cases, reducing costs



over the long-term. There are significant start-up costs that will require capital outlay through local or grant resources.

- All participating jurisdictions should accept that significant obstacles must be addressed before consolidation can be fully implemented. However, political acceptance of the final destination is required before the path forward can be adequately planned. Based on the present situation, GeoComm believes the implementation planning and execution will take years to complete. However, all agencies participating in this feasibility study are encouraged to adopt the goal in concept and collaborate in further planning efforts.
- GeoComm recommends participating agencies sign an interlocal cooperation agreement, which will allow agencies further opportunity to collaborate and cooperatively share resources for mutual benefit. The agreement will formalize the relationship for emergency services in the region and should include operational, technical, governance, and equitable cost-sharing language.

**Recommendation 2: GeoComm recommends establishment of a regional public safety communications governance structure that is representative of the agencies in the region.**

- The regional Public Safety Communications Board (PSCB) should consist of direct and indirect representation from the participating entities.
- The PSCB should adopt a mission statement and strategic planning framework that includes goals, objectives, and actions plans to formalize service delivery standards, staffing models, minimum technology requirements, funding sources, and cost-sharing methodologies that would apply to a consolidated communications operation.
- The PSCB should appoint a steering committee to begin the necessary implementation and transition planning at the operational and technical level.
- Participating agencies should be prepared to have personnel resources with sufficient expertise and time availability to participate on a committee focused on evaluating technology needs and solutions.

**Recommendation 3: GeoComm recommends formation of a regional administrative agency.**

- GeoComm recommends the PSCB enter into a contract with SRPEDD to provide the regional administrative agency. The structure of the regional administrative agency should initially include a small scope of services to support existing PSAP operations; consolidation implementation planning and coordination items detailed in this report. The first position hired within this administrative program should be a regional director with extensive 9-1-1 expertise. SRPEDD will provide accounting, purchasing, payroll, office space, etc., for the regional public safety program.
- The regional administrative agency will coordinate the extensive planning and support activities necessary for successful implementation. The process of transition planning is complex and time consuming. Transition and implementation planning leadership within this agency will bring supplemental expertise to the project and will ensure that the project stays on-track without perceived bias toward any specific participant.



- The regional administrative agency will develop a comprehensive funding plan based on solicitation of grant support for the construction of two Regional Emergency Communications Center (RECC) facilities based on the specifications provided earlier in this project. In addition, funding to support a regional trunked radio system should be included.
- The regional administrative agency should immediately provide support and coordination of crucial public safety communications needs on a regional basis while simultaneously coordinating implementation of long-term consolidation.
- The regional administrative agency should provide policy level coordination with 9-1-1 service providers, wireless service providers, and Massachusetts State 9-1-1 Department.
- The regional administrative agency should coordinate the regional Master Street Address Guide (MSAG) and Geographic Information system (GIS) datasets in preparation for Next Generation 9-1-1 (NG9-1-1), and work with the local jurisdictions to establish regional MSAG standards, taking into account the local practices.
- The regional administrative agency should establish a training program for local 9-1-1 liaisons on the new standards.
- The regional administrative agency should coordinate technology needs to allow for a consistent use of technology in the region. Consistent use of technology and systems in a consolidated environment allows for reduced costs associated with procurement, connectivity, and maintenance.
- The regional administrative agency should provide guidance for Regional Continuity of Operations Planning (COOP) for the RECCs. This is necessary since the RECCs will be responsible for providing effective resource management during large-scale incidents, natural disasters, and multi-jurisdiction/multi-agency and discipline incidents from a single point of control rather than fragmenting control among multiple PSAPs.
- The regional administrative agency should undertake the development of standardized job descriptions for all participants. Following development of the staffing structure, examination of union contracts for 9-1-1 personnel should be conducted so that an appropriate and attractive compensation and benefit structure is implemented. Detailed personnel planning should include examination of existing collective bargaining agreements, personnel policies, compensation and benefits, career paths, and training.
  - It is GeoComm's view that the question of whether or not the dispatch center employees of this new entity are to be organized into a union is a question for those employees to answer for themselves. The employing entity would not be one of the current employers, therefore existing contracts (which are between those existing employers and their employees) ought not apply. Clearly, if the employees of the new dispatching entity chose to organize, the new entity would then negotiate appropriate contracts with the said union(s).

**Recommendation 4: GeoComm recommends formation of a regional training program.**

- An immediate concern, even prior to consolidation, is the PSAPs that have individuals assigned to perform 9-1-1 call taking and dispatching duties but have never had any formal training. If a PSAP staff member has not completed minimum training requirements of the state, GeoComm strongly encourages the PSAP to send the personnel to the two-day 9-1-1 course offered by the Massachusetts State 9-1-1 Department, at a minimum. Ideally, those people who are permanently



assigned to work inside a PSAP should attend and successfully complete the five-week training academy as well.

- GeoComm recommends that each PSAP immediately comply with federal laws identified in the Title II regulations of the Americans with Disabilities Act (ADA) as it relates to the provision of telephone emergency services to people who are deaf, deaf-blind, hard of hearing, or have a speech impairment. PSAPs are required to provide each person assigned within a PSAP who has the responsibility to answer emergency calls with comprehensive training on effectively recognizing and handling teletypewriter (TTY) calls. This is a federal law in effect since 1990 and applies to primary and secondary PSAPs. Further, the Department of Justice requires that each person assigned within a PSAP also receive refresher TTY training as often as other training but at a minimum of every six months.
- GeoComm recommends that specific training is formulated to address other duties as assigned to PSAP personnel during the transitional period, which may include jail training, customer interaction, booking procedures, etc. While PSAP personnel would not be assigned these ancillary duties in a perfect environment, it is critical to train the personnel with these multiple, and at times, competing priorities, on how the agency directs the employee to respond. Since the timeline for consolidation is extended, enhanced training for current duties is recommended as a priority. An example is when a jail incident occurs at the same time as an emergency call is received and how the single employee is directed to act in terms of priority of incidents.
- GeoComm recommends that PSAPs acquire formal training for its trainers and adopt a formal Communications Training Officer (CTO) program to begin standardized training and/or strengthen existing in-house training. The CTO training program should at a minimum meet the Minimum Training Standards for Public Safety Communications Training Officer - APCO ANS 3.101.1-2007.
- Once trainers have been trained and a formal CTO program has been adopted, GeoComm recommends that each PSAP develop or acquire a training course for all PSAP personnel which meets or exceeds the Minimum Training Standards for Public Safety Telecommunicators - APCO ANS 3.103.1-2010. The standard identifies minimum training requirements for public safety call takers, Fire service dispatchers, Law Enforcement dispatchers, and EMS dispatchers.
- In addition, GeoComm recommends that PSAPs adopt a formal training program for supervisors which meets or exceeds APCO's Minimum Training Standards for Public Safety Communications First-Level Supervisor.

**Recommendation 5: GeoComm recommends implementation of a regional trunked public safety radio system.**

- GeoComm recommends the establishment of a technical subcommittee to examine the issues impacting implementation of a new regional trunked public safety radio system. The committee, through the regional administrative agency, should begin dialog with the Massachusetts State Police (MSP) to determine the viability, capacity and cost of extending/expanding the state radio system to local agencies in the region. The MSP trunked radio system provides 95 percent portable coverage on- the-street and should provide high levels of in-building service although the systems has not been rated for in-building coverage. The MSP has permitted local agencies to use the radio system where it is determined that there is sufficient capacity to handle the additional radios local participation would imply. The MSP does not currently have and has no plans to charge ongoing fees for use of the radio system by local governments.



Local governments interested in using the system are responsible for contributing the required capital support for infrastructure for capacity expansion necessary to join the system. In other words, if added transmitters/receivers are needed in a given area to beef up the system's capacity, the local participants would have to purchase them.

- In order to proceed with appropriate planning activities, the technical subcommittee must develop performance specifications for a regional trunked radio system. A full and accurate inventory of assets (subscriber; base; repeater; fixed) needs to be conducted along with a coverage and capacity study.
- GeoComm recommends improved regional interoperability through the use of a modern and coordinated system. The system should conserve scarce radio spectrum and provide for rapid and very flexible interoperability across the region. In addition, regionalized trunking systems with interoperability overlays should be developed and appropriate interoperability channels assigned as part of the consolidation planning. Any regional public safety radio system should encompass the Project 25 (P25) digital radio national standards. These standards allow interoperability between various vendor radios, as well as backward compatibility with analog radio systems.
- Modern radio systems will have a significant cost for ongoing maintenance. These radios, from the tower site to the subscriber unit, are complex, computerized systems. With proper maintenance, they can be continually upgraded and modernized and will operate at peak system efficiency. In addition, the ongoing maintenance program will minimize emergency situations and if properly administered provide for systematic and incremental upgrading. Past experience shows that the system maintenance cost is approximately five percent of the original total price. This cost includes both hardware and software maintenance and software upgrades. Trunking radio systems, either analog or digital, are based on very sophisticated software which must be regularly managed and maintained. Software is a necessary part of the system and often accounts for approximately one-third of the maintenance cost.
- The technical subcommittee should develop a plan with the ultimate goal of meeting Executive Office of Public Safety and Security (EOPSS) Statewide Interoperability Emergency Communications (SIEC) guidelines and achieving SAFECOM Level 5. The GeoComm recommendations and enhancement discussed would meet this level of a standards based (P25) shared system. In addition, as the region looks at funding use of the P25 standard matches federal funding requirements for many grant programs and provides interoperability with federal radio operations.

**Recommendation 6: GeoComm recommends implementation of a regional Computer Aided Dispatch (CAD) system.**

- GeoComm recommends the establishment of a CAD task force to examine the issues impacting implementation of a new regional CAD system, including determination of the appropriate technical standards for any coordinated system. The task force should detail the functional requirements of the system, technical needs, and parameters to ensure that the goal of a centralized single CAD system is met.
- Once the technical CAD task force determines technical needs and parameters, activities should include planning toward a centralized single system. The CAD task force needs to determine whether to sole-source the CAD procurement for the RECCs or to go through a competitive process. GeoComm found that IMC (TriTech) CAD is used at most existing PSAPs and this system should be able to be leveraged for use region wide and at the RECCs, using an existing system



would allow for a simpler transition and less configuration time. However, consolidation also provides an opportunity for a new CAD system to be chosen and installed if the region so desires. Regardless of the path chosen by the CAD task force, the region’s cost will be significant and the choice is that of the region’s stakeholders.

- The CAD task force will need to develop detailed transition planning with the goal that ensures that agencies dispatched by a consolidated PSAP will continue to be able to access call reports, either through local access to a records management systems (RMS) supplied by the RECC, or through an interface between the CAD system at the RECC and the individual agency RMS. The final step in the plan is the completion of a fully migrated CAD and subsidiary programs such as RMS on a common platform that has sufficient security measures included to allow access to only authorized users.

**Recommendation 7: GeoComm recommends consolidation of the current primary and secondary PSAPs into two Regional Emergency Communications Centers with community distribution as follows:**

RECC West	RECC East
▪ Berkley	▪ Acushnet
▪ Dighton	▪ Dartmouth
▪ Easton	▪ Fairhaven
▪ Fall River	▪ Freetown
▪ Mansfield	▪ Lakeville
▪ Norton	▪ Marion
▪ Raynham	▪ Middleborough
▪ Swansea	▪ New Bedford
▪ Taunton	▪ Wareham

GeoComm recommends creation of a RECC West and RECC East to provide call taking and dispatch for the entire subset of current PSAPs serving the communities. The RECCs would become the principal recipient of Massachusetts State 9-1-1 grant funds. The construction of new public safety communications facilities is a long-term project with significant financial implications. GeoComm’s findings show that none of the current facilities are appropriate for housing a consolidated center without extensive renovation. Therefore, GeoComm recommends that the region commit to the construction of two new public safety communications facilities to accommodate the unique needs of the region.



The new facilities should be constructed in geographically diverse areas and in locations that provide both the technical and operational requirements necessary to effectively serve all public safety agencies and PSAPs employees today and into the future. The advantages of two RECCs include:

- **Redundancy:** The RECCs would serve as backup or alternate PSAP facility for each, during period of extended service interruption at either site.
- **Geographic location:** The RECCs would be physically located within the region served yet sufficiently removed from the other RECC to appropriately serve as backup.
- **Primary PSAPs:** Each communications center serves as a Primary PSAP for wireline 9-1-1, non-emergency calls and dispatch services within the respective communities. There would be no secondary PSAPs thereby eliminating the need to transfer 9-1-1 callers. By not transferring an emergency call, the risk of disconnection due to technical failure is reduced as is the risk of a misrouted transfer. In addition, the elimination of call transfer can save as much as 30 seconds in the time between call receipt and dispatch of emergency responders.<sup>1</sup>
- **Shared Technology:** Long-term cost efficiencies from eliminating duplicate and expensive technology such as CAD, Record Management Systems (RMS), 9-1-1 answering equipment, radio consoles, logging recorders, etc.

**Recommendation 8: GeoComm recommends a staffing structure be adopted for the new consolidated operation that ensures effective long-term management, supervision and staffing.**

- The Public Safety Communications Director employed by the regional administrative agency should become the executive officer of the RECCs.
- Each RECC should be managed by a high skilled, professional manager reporting to the Public Safety Communications Director.
- Supervisory and operational personnel structures should be established to provide employment opportunities for incumbent personnel and a challenging career ladder for professional telecommunicators. As noted above, following development of the staffing structure, examination of union contracts for 9-1-1 personnel should be conducted so that an appropriate and attractive compensation and benefit structure is implemented. Detailed personnel planning should include examination of existing collective bargaining agreements, personnel policies, compensation and benefits, career paths, and training.
- The region's transition plan will need to include a budget for start-up costs of two new facilities real estate, construction, equipment procurement, and project management funded through grants or equitable agency contributions. Financial impact is offered in section five of this report.

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<sup>1</sup> | NFPA Standard 1221, section 7.4



**Recommendation 9: GeoComm recommends each agency implement a plan to transition the current ancillary duties performed by PSAP staff.**

GeoComm provides the following recommendations for closed station issues. A matrix of specific issues and solutions is provided in section three.

- Each closed station will need to determine which functions can be assimilated into its residual operation and which functions need an alternative local solution.
- GeoComm recommends an aggressive public education effort to instruct people to call 9-1-1 when a public safety **response** is required, and to identify the situations that merit a response and/or constitute an emergency. GeoComm recommends installing a hot-dial at each previous PSAP location. If a citizen responded to a previous PSAP location and needed assistance, the hot-dial telephone would connect them to the appropriate RECC and the call would be handled in accordance with standard operation procedures for any 9-1-1 call.
- In order to monitor property such as weapons and other sensitive material at to-be-closed PSAPs, said agencies should consider installing building security systems at any station that will be unstaffed. The security system can consist of door alarms, intruder detection system, and other technology, as appropriate. In some cases, current facilities may need to improve building security through construction enhancements. Security issues must be evaluated by the local government on a case-by-case basis.
- Policy and procedures should be developed that direct basic citizens requests to normal business hours. Examples of these citizen requests include general data reporting, issuing burn permits, or citizen fingerprinting can be performed from weekdays from 8 a.m. - 5 p.m.



This section of the feasibility report is intended to provide the 9-1-1 Steering Committee and the participating communities with a cost summary involved in implementation of the recommendations contained within the report. The purpose of this financial overview is not to provide precise budgetary information but rather to provide a high level overview sufficient for local agencies to evaluate the anticipated financial impact of moving forward with consolidation and development of a detailed implementation planning process.

In the previous reports, GeoComm acknowledged that while many agencies provided the budgetary and cost information requested, others provided no financial data or limited information that is impossible to assess in a consistent manner. As a result, this financial overview is based on the following foundation:

1. Comparison of current personnel related costs of the participating agencies and personnel related costs of the consolidation model recommended.
2. Identification of budget estimates for general operations of the consolidation model recommended.
3. Identification of budgetary estimates for facility construction.
4. Identification of the costs associated with the basic “closed station” issues identified in the report along with the acknowledgement that select agencies will make decisions to go beyond the basic recommendations at their own cost.

GeoComm determined that the financial assessment utilizing the above principles presents a compelling case for full consolidation considering the public safety enhancements expected. While it is acknowledged that a more robust assessment, beyond the scope of this project, would focus on further identification and analysis of current operational, training, and maintenance costs, it is highly likely the resulting data would further support consolidation due to additional economies of scale.

As noted in the previous memoranda, most agencies in the region are experiencing a budget crisis and must explore innovative, cost-effective processes for delivering public safety services. This situation is not unique to the public safety agencies in the SRPEDD region. On April 27, 2011, the International Association of Chiefs of Police (IACP) released the results of a comprehensive survey of Law Enforcement leaders on the impact the new economy is having on their ability to deliver services. According to the IACP, 94 percent of respondents said they are seeing a “new reality” in American policing. In addition, according to the survey, over 85 percent of agencies reported that they were forced to reduce their budget over the last year with nearly half of agencies surveyed reporting that they had to lay-off or furlough staff in the past 12 months. Most agencies participating in the survey do not anticipate the reductions or the seriousness of the problem to end soon with over 40 percent said the coming year presented a serious or severe problem to their agency.



Early in the data collection process and during interviews with agency personnel it became obvious that there are significant inconsistencies in the financial tracking procedures of the participating agencies. Several of the agencies were unable to produce accurate financial numbers as operational costs are contained in a larger department budget. These inconsistencies contributed to an inability to effectively assess and compare cost implications across all PSAPs. As part of this assessment, GeoComm accepted the financial data provided by participating agencies for the "personnel" line item without further independent validation. This financial information is used as a comparison tool only to examine the financial feasibility of consolidation options.

GeoComm has projected the staff support that would be needed to operate the regional administrative agency and the Regional Emergency Communications Centers (RECCs). Assumptions have been made regarding equipment and maintenance costs to be used for comparative purposes. GeoComm has developed facility recommendations and an equitable cost-sharing model for further consideration during the implementation planning phase.

One of the most controversial issues impacted by the consolidation recommendation is the disposition of ancillary or "closed station" duties. In all cases, telecommunications personnel provide local services beyond the processing of 9-1-1 calls and dispatching responders. GeoComm has provided recommendations for the closed station issues identified in the original request for proposals associated with this project along with issues identified during site visits and interviews.

### **Current Budget Snapshot**

As noted above, a consistent comparison of the existing PSAP expenditures is extremely difficult to produce. Among the 26 participating primary and secondary agencies, it is reported that approximately \$9,114,746 is spent in total for personnel, of which \$7,741,812 were local funds and \$1,372,934 was state 9-1-1 department contributions. This personnel cost includes 181 full-time and 48 part-time dispatch personnel supporting all of the agencies. Based on the reported 2010 9-1-1 call volume of 154,776 for the region, all agencies are collectively paying \$58.89 per 9-1-1 call in personnel costs. When examined more closely, the range of cost per 9-1-1 call varies from a low of \$31.57 to a high of \$182.35 depending on the community being examined. Calculations using non-emergency call volume are equally interesting. However, due to the inconsistent mechanisms for tracking non-emergency and business telephone calls the reported volume lacks sufficient credibility to be a part of the financial assessment. Reported non-emergency call volume is used as a basis for projecting PSAP staffing needs.



While some costs are currently being incurred for supervision and management functions performed at the various PSAPs, this is extremely difficult to quantify due to the organizational structures and budgetary processes in each agency. Further, important administrative activities are either not performed or the cost of those activities are imbedded in a larger department budget.

### **Recommendation 1: GeoComm recommends adoption of a long-term goal of full Public Safety Answering Point (PSAP) consolidation**

GeoComm's recommendation number one is adoption of a long-term goal of full consolidation of 9-1-1 call receipt and dispatching services for Police, Fire, and EMS. Adoption of the goal is suggested as an agency commitment to the principles of enhancing public safety services in the region and for participation in additional implementation planning. There are no direct expenditures associated with implementation of recommendation number one.

### **Recommendation 2: GeoComm recommends establishment of a regional public safety communications governance structure that is representative of the agencies in the region.**

GeoComm recommends the establishment of a representative governance structure through interlocal cooperation agreement. There are no direct expenditures associated with implementation of recommendation number two.

### **Recommendation 3: GeoComm recommends formation of a regional administrative agency.**

While the primary objective of GeoComm's recommendation for a regional administrative agency is to coordinate and facilitate the implementation of recommendations resulting from this feasibility study, the secondary objectives to support regional public safety communications justify the agency regardless of any move toward operational consolidation. The benefits associated with this recommendation are detailed in previous reports and previous sections of this Draft Feasibility Report and Implementation Plan.

GeoComm recommends an existing agency, such as SRPEDD, provide the necessary administrative structure (payroll, executive leadership, purchasing, human resources coordination, etc.) in exchange for a contracted service fee. The budgetary costs associated with operation of the regional administrative agency are summarized on the following page:



<b>Regional Administrative Agency</b>	
<b>Expense Category</b>	<b>Annual Budget</b>
<b>Personnel Expense</b>	
Public Safety Communications Director	\$93,000
Administrative Assistant	\$35,000
Benefits (35%)	\$45,000
<b>Subtotal</b>	<b>\$173,000</b>
<b>Operating Expense</b>	
Supplies, Office Space, Utilities, Legal, Professional Fees (38% of staff)	\$65,000
Travel, Training, Mileage	\$10,000
<b>Subtotal</b>	<b>\$75,000</b>
<b>Totals</b>	<b>\$248,000</b>

GeoComm recommends the Massachusetts State 9-1-1 Department provide financial support for the regional administrative agency through an existing or new grant program. SRPEDD appears to be an eligible entity to receive funding (as the recipient of the grant supporting this feasibility study) on behalf of the local communities. Although GeoComm asserts state financial support of the regional administrative agency is highly justified, in order to complete the assessment utilizing a worst-case scenario, GeoComm assumed the state would not provide funding to support the administrative agency. Therefore, the funds needed to support the agency are indicated as a cost-shared local expense agreed to by each of the participating communities.

There are a number of acceptable methods for determining an equitable cost-sharing mechanism. For simplicity, GeoComm recommends this fee should initially be based on the percentage of population served until such time as more sophisticated cost-sharing models can take advantage of accurate, consistent workload reporting through the PSAPs.

Based on the projected costs of the administrative agency and the recommended cost-share methodology, each agency would be responsible for the indicated coordination fee in 2012:



Community	Population	Percentage	Admin Agency Cost-share (Population)
Acushnet	10,607	2.23%	\$5,536
Berkley	6,498	1.37%	\$3,392
Dartmouth	33,154	6.98%	\$17,304
Dighton	6,175	1.30%	\$3,223
Easton	23,352	4.91%	\$12,188
Fairhaven	16,111	3.39%	\$8,409
Fall River	91,938	19.35%	\$47,985
Freetown	9,076	1.91%	\$4,737
Lakeville	9,829	2.07%	\$5,130
Mansfield	23,303	4.90%	\$12,163
Marion	5,183	1.09%	\$2,705
Middleborough	22,207	4.67%	\$11,591
New Bedford	91,550	19.27%	\$47,783
Norton	19,315	4.06%	\$10,081
Raynham	13,648	2.87%	\$7,123
Swansea	16,175	3.40%	\$8,442
Taunton	55,815	11.75%	\$29,132
Wareham	21,221	4.47%	\$11,076
<b>Totals</b>	<b>475,157</b>	<b>100.00%</b>	<b>\$248,000</b>

#### **Recommendation 4: GeoComm recommends formation of a regional training program.**

GeoComm recommends the regional administrative agency identified in recommendation three assume coordination responsibility for creating and facilitating high quality public safety communications training in the SRPEDD region. The primary costs associated with this recommendation are personnel costs to support a regional training manager totaling \$104,500. These costs would be added to the regional administrative agency budget detailed in recommendation three, resulting in an increase in agency coordination fees, as follows on the next page:



Community	Population	Percentage	Admin Agency Cost-share (Population)
Acushnet	10,607	2.23%	\$2,333
Berkley	6,498	1.37%	\$1,429
Dartmouth	33,154	6.98%	\$7,291
Dighton	6,175	1.30%	\$1,358
Easton	23,352	4.91%	\$5,136
Fairhaven	16,111	3.39%	\$3,543
Fall River	91,938	19.35%	\$20,220
Freetown	9,076	1.91%	\$1,996
Lakeville	9,829	2.07%	\$2,162
Mansfield	23,303	4.90%	\$5,125
Marion	5,183	1.09%	\$1,140
Middleborough	22,207	4.67%	\$4,884
New Bedford	91,550	19.27%	\$20,134
Norton	19,315	4.06%	\$4,248
Raynham	13,648	2.87%	\$3,002
Swansea	16,175	3.40%	\$3,557
Taunton	55,815	11.75%	\$12,275
Wareham	21,221	4.47%	\$4,667
<b>Totals</b>	<b>475,157</b>	<b>100.00%</b>	<b>\$104,500</b>

### **Recommendation 5: GeoComm recommends implementation of a regional trunked public safety radio system.**

As noted in the report, consolidation requires a significant change to the current radio system design. None of the existing systems would provide sufficient capacity or coverage for agencies served by either consolidated center. GeoComm recommends a technical committee be established to determine the best option for transition to a trunked public safety radio system. The region would either design and implement a new trunked system or join an existing system such as the one operated by the Massachusetts State Police. There are major cost considerations of both approaches, but those cost impacts are dramatically different.



Given the current financial condition of local governments in the SRPEDD region, it is highly questionable whether consolidation could move forward without financial support for public safety radio system development. GeoComm recommends pursuit of technology grants to offset radio system design and implementation. As noted previously, the current effort by the Southeast Regional Homeland Security Advisory Council to develop a multi-county wireless infrastructure is a promising undertaking designed to enhance public safety communications and interoperability throughout the region. GeoComm strongly recommends the issue of consolidation be considered as part of this regional wireless communications system planning effort. It is entirely possible to synergize these efforts in a manner that leverages the success of both projects and maximizes the investment of public funds.

There are no direct expenditures associated with development of the recommended committee which should be charged with development of a financial plan to support any committee recommendations.

#### **Recommendation 6: GeoComm recommends implementation of a regional Computer Aided Dispatch (CAD) system.**

GeoComm recommends the establishment of a CAD task force to examine the issues impacting implementation of a new regional CAD system, including determination of the appropriate technical standards for any coordinated system. The committee should detail the functional requirements of the system, technical needs, and parameters to ensure that goal of a centralized single CAD system are met.

Most of the participating agencies in the region currently operate the TriTech Imc CAD. During GeoComm's site visits and observation time, there appeared to be general satisfaction with this product. IMC is able to transition its product for use at the RECCs by aggregating much of the applicable configuration information from the existing individual CAD systems into a single larger system.

While there will be significant cost involved, the approach will be much faster and less costly than designing and procuring a new large CAD. All participating agencies currently using the IMC CAD would see a reduction in software maintenance. There are no direct expenditures associated with development of the recommended committee which should be charged with development of a financial plan to support any committee recommendations.

#### **Recommendation 7: GeoComm recommends consolidation of the current primary and secondary PSAPs into two Regional Emergency Communications Centers.**

GeoComm recommends that two redundant RECCs be constructed. Both facilities would be sized and equipped to accommodate the activity in the entire region should there be a failure of either facility.



GeoComm estimates the total construction cost of the two facilities to be \$4.4 million, with administrative agency office space contained within one of the RECC facilities. GeoComm recommends the region apply for Massachusetts State 9-1-1 Development Grants to fund all initial construction and start-up costs. Without a supplemental funding source for start-up costs, it is unlikely any of the agencies could participate due to the financial burden of front-loaded capital costs.

**Recommendation 8: GeoComm recommends a staffing structure be adopted for the new consolidated operation that ensures effective long-term management, supervision, and staffing.**

As detailed in the previous reports and contained within Appendix A, GeoComm uses a complex methodology for calculating PSAP staffing needs. The results of our analysis is based on a total call volume of 390,969, which includes all reported 9-1-1 and non-emergency calls for service.

GeoComm recommends allocation of a full-time professional manager and technology coordinator for each RECC. The operational coverage positions recommended for each of the RECCs are commonly referred to as “staffing structure” since these positions must be filled on a continuous basis. The other factor in staffing structure relates to dispatch workflow. Most of the current PSAPs operate in an environment where the same person processes the call from a citizen and dispatches appropriate field responders. In the RECC environment, workflow would be handled in the more efficient "two stage dispatch" model where the call taker enters information into the CAD system to be dispatched by a colleague. The recommended coverage positions or staffing structure for each RECC is:

- Shift Supervisor
- Police Dispatcher
- Fire Dispatcher
- 9-1-1 Call Taker

GeoComm analyzed the reported calls for service to include dispatched incidents and made the determination that a second Police dispatcher position is needed in the West RECC to accommodate the heavy call volume.

In addition, GeoComm used the Erlang-C and Project RETAINS processes to provide input to determine if anticipated call volume is sufficient to warrant additional 9-1-1 call taker staffing. This analysis utilized 2010 call volume totals for the agencies allocated to the East and West Regional Emergency Communications Centers and the call parameters described in GeoComm’s staffing methodology.



Based on the allocation of agencies to the two RECCs, the resulting call volume and call duration factors, the following number of workload positions would be required to achieve the performance standard of 9-1-1 calls being answered in ten seconds or less 90 percent of the time:

<b>Regional Emergency Communications Center Minimum Staffing</b>					
	<b>Annual Call Volume</b>	<b>Supervisor Per Shift</b>	<b>Police Dispatcher Per Shift</b>	<b>Fire/EMS Dispatcher Per Shift</b>	<b>Call Taker Positions Per Shift</b>
<b>West</b>	261,779	1	2	1	3
<b>East</b>	121,190	1	1	1	2

The staffing reflected in the above chart should not be perceived as “minimum staffing” per shift. Due to the fluctuation of call volume, management should have the flexibility to schedule staff as needed to appropriately handle peak workload. GeoComm further recommends that staff be cross-trained so that any telecommunicator could adequately perform within any line-position. This level of cross training is more staff efficient.

Utilizing this analysis and the net available work hours calculation, the following personnel allocation levels are required for each RECC under the partial consolidation model:

<b>RECC WEST</b>	<b>Supervisor</b>	<b>Police Dispatcher</b>	<b>Fire/EMS Dispatcher</b>	<b>9-1-1 Call Taker</b>
<b>Coverage Positions</b>	1	2	1	3
<b>Personnel</b>	5.7	11.4	5.7	17.1
<b>RECC EAST</b>	<b>Supervisor</b>	<b>Police Dispatcher</b>	<b>Fire/EMS Dispatcher</b>	<b>9-1-1 Call Taker</b>
<b>Coverage Positions</b>	1	1	1	2
<b>Personnel</b>	5.7	5.7	5.7	11.4

Therefore, based on required staffing and net available work hours, GeoComm recommends six authorized shift supervisors for each of the RECCs. The RECC West requires 35 non-supervisory line personnel and the RECC East requires 23 non-supervisory line personnel. This staffing assessment is based on processing 9-1-1 and non-emergency calls and dispatching calls to appropriate field responders along with the corresponding support activity. If ancillary duties are assigned to the RECCs, the impact on staffing must be assessed in addition to these core duties. Below is a summary of the total recommended personnel allocation:



<b>Personnel Allocation Summary</b>				
<b>Position</b>	<b>Regional Administrative Agency</b>	<b>RECC West</b>	<b>RECC East</b>	<b>Total</b>
Director	1			1
Administrative Assistant	1			1
Training Manager	1			1
Technology Manager	1			1
RECC Manager		1	1	2
Technician		1	1	2
Shift Supervisor		6	6	12
Operations Personnel		35	23	58
<b>Total</b>	<b>4</b>	<b>43</b>	<b>31</b>	<b>78</b>

**Recommendation 9: GeoComm recommends each agency implement a plan to transition the current ancillary duties performed by PSAP staff.**

There are many functions being performed by the PSAP personnel in each center that will need to be reassigned, modified, or eliminated upon full consolidation. While some of the ancillary duties identified in the current operations could be assimilated into an RECC with proper training on community policies, procedures, and resources – additional staffing may be required. In other sections of this report, GeoComm has identified technical security needs for closed stations including intruder alarms and security camera/recording equipment along with hot-dial telephone technology for citizen walk-ins. Based on these recommendations, GeoComm has allocated a total cost of \$4,000 per closed station for installation of the security system, telephone enhancements and appropriate signage along with one year of alarm monitoring and a dedicated hot-dial telephone line.

Specific agency solutions for the myriad of administrative and clerical functions currently performed by PSAP personnel is beyond the scope of this project. While some agencies may decide to alter the service hours available for certain functions other agencies may reassign staff or create new positions. The local cost of resources should be considered when evaluating the overall financial impact of consolidation.



## Conclusion

GeoComm has identified just over \$6 million in annual recurring expense projections for the personnel and operational cost of the regional administrative agency, two RECCs, and basic common issues pertaining to closing current PSAPs. For comparison purposes, these expenses are analyzed against only the reported current personnel costs. This results in very conservative financial assessments. Agencies report a total 2011 personnel cost of \$9.1 million, of which \$7.7 million was budgeted through local funding.

Aside from service improvements and cost-savings, there are impacts of this strategy that must be acknowledged. Obviously, some citizens will be inconvenienced with the local agency only being open for business during normal business hours. The staffing recommendations represent a total of 78 full-time employees, a net decrease of 103 full-time personnel positions and approximately 48 part-time personnel positions across the region which will likely be met with some political resistance.

The primary goal of the feasibility study; however is to enhance public safety in the region. Service enhancements are clear and immediate. A secondary goal is to reduce or maintain costs. It is obvious that both medium term and long-term cost-savings can be achieved if the region is successful in obtaining start-up funding from various potential grant sources. Even if grant funding is not obtained, local agencies will see financial benefit to consolidation. It simply extends the timeline for financial advantage and complicates the start-up costs associated with regional facilities, trunked radio, and CAD.

In addition to the public safety enhancements and the financial benefits summarized in this report, consolidation of the PSAPs would result in a significant reduction of 9-1-1 answering workstations in the region. This workstation reduction results in dramatic cost-savings associated with 9-1-1 answering equipment, 9-1-1 trunks for call delivery, and Computer Aided Dispatch (CAD) maintenance. The 9-1-1 answering equipment and telephone trunk savings would be realized in the state 9-1-1 expenditures rather than local budgets. For this reason, the 9-1-1 cost-savings are not a local driver but should be considered when determining the overall feasibility of consolidation.



## Appendix A – Staffing Determination Methodology

The methodology is based on our consultant's decades of public safety communications experience, local observations, and assessment and supplemented by two common industry processes. GeoComm uses a combination of the Erlang-C and APCO Project RETAINS tools as inputs into this staff calculation process. Erlang-C is a widely accepted model for establishing appropriate call center staffing needs based on acceptable waiting times for callers. The Erlang-C model uses important criteria for determining the recommended number of 9-1-1 call takers needed to achieve the desired level of service.

The second component to the GeoComm formula for recommending PSAP staffing is APCO's project RETAINS. In addition to examining 9-1-1 turnover and retention issues, the project developed formulas and processes to estimate PSAP staffing needs based on important factors such as the net available hours, turnover rates, hours, and positions that must be covered, agency calls for service, etc. An important factor in both the Project RETAINS and Erlang-C models is the average 9-1-1 call duration. This information is not readily available in each PSAP across the region. Therefore, GeoComm has estimated the average call duration based on our experience and observations. It should be noted that call durations, post initial dispatch of resources, can dramatically increase with the implementation of formalized Emergency Medical Dispatching systems as defined by local protocols. Calculations contained in this analysis do not include formalized EMD procedures as local decisions need to dictate if this is an RECC function or a separate agency contracted service. If EMD is implemented a staffing assessment should be included to determine if additional call taker positions are necessary. The Erlang-C and Project RETAINS calculations are tools used by GeoComm's subject matter experts to determine final staffing recommendations for the RECCs.

There are two approaches to considering PSAP staffing needs. The first approach is to determine the number of positions or workstations that must be covered on a continual basis, regardless of calls for service. For example, a primary Police dispatch console must be staffed on a 24-hour per day basis even if there are no external calls for service. The Police dispatch position must be staffed in readiness to deploy Law Enforcement services in addition to providing a control point for radio traffic from field-initiated activity.

Based on the structure of the regional RECCs, GeoComm has identified the following coverage positions at each center, commonly referred to as "staffing structure:"

- Shift Supervisor
- Police Dispatcher
- Fire Dispatcher
- 9-1-1 Call Taker



In addition, GeoComm's subject matter experts used the Erlang-C and Project RETAINS processes to provide input to determine if anticipated call volume is sufficient to warrant additional 9-1-1 call taker staffing. This analysis utilized 2010 call volume totals for the agencies allocated to the East and West Regional Emergency Communications Centers. Further, the analysis applied the NFPA, NENA, and SETA standard for 9-1-1 caller wait times, which establishes a target of 90 percent of all 9-1-1 calls being answered in ten seconds or less. Finally, absent specific local workload assessment data, an average call duration time is estimated to be approximately 120 seconds from start to finish including call wrap-up time.

The next step to determine the actual staffing levels involves an analysis of the staffing pattern and job classification of the employee. In order to complete this assessment, decisions are necessary regarding the structure of staffing with regard to discipline specialist or generalist positions. For example, generalist employees are cross-trained to provide both Police and Fire/EMS dispatching while specialists are trained only to dispatch a single type agency. Customarily, all dispatch personnel are trained in processing 9-1-1 calls and can assist with peak call loads. There are advantages and disadvantages to each structure. A primary advantage to generalist positions is increased management flexibility with assignments.

To determine the number of personnel needed to fill a position, a net-available work hour calculation must be performed. Again, some basic assumptions must be made at this stage of the process. Specific vacation, sick leave, holiday, and training time allocations must be assumed. Based on our overview of the existing information, we are projecting the following benefit impact:

<b>Net Available Work Hours Per Coverage Position</b>	
Full Year Full-Time Coverage	2,080 hours
Vacation/PTO	120 hours
Sick Leave	80 hours
Holiday	80 hours
Training	40 hours
Meals/Breaks	225 hours
<b>Total Net Available Work Hours</b>	<b>1,535 hours</b>

Each coverage position requires 8,760 hours annually for continuous staffing. Based on the above assumptions relative to net available work hours, it requires 5.7 full-time equivalent personnel positions to provide continuous staffing for each coverage position.

It should be noted that the Erlang-C model assumes a consistent call volume throughout the entire 24-hour period. As this is not the nature of public safety, scheduling adjustments must be made to accommodate peak and low-volume time periods.



Agency management should be vested with the authority to schedule resources as needed to effectively provide public safety services. The staff calculations utilized by GeoComm are intended to provide adequate management resources.

The final step is to determine function positions. Function positions are held by one individual and are not covered when that individual is absent. For example, the RECC manager, IT specialist, and the Human Resources manager in most organizations are considered function positions.

In addition to the Public Safety Communications Director, Training Manager, and Administrative Assistant already established within the regional administrative agency, GeoComm identifies the following function positions to support both RECCs:

<b>Regional Function Position</b>	<b>Total</b>
RECC Manager	2
Technology Supervisor	1
Technicians	2



## Appendix B – Cost-Sharing Methodology

In order for any potential consolidation to be successful, an equitable cost-sharing methodology must exist. There are a number of cost-sharing criteria that could support funding methodology for regional public safety communications such as allocating responsibility for percentages of total costs based on:

- Population
- 9-1-1 Call Volume
- Events Dispatched
- Assessed Valuation

For the purposes of this report and assessing initial feasibility, GeoComm calculated individual contributions on the percentage of population served.

The agency costs indicated in the report is based on the projected costs of the RECCs, the impact of current Massachusetts State 9-1-1 Department support, and current population percentages. Upon further examination of Massachusetts statutes, regulations and practices, establishment of a special service district with taxing authority may be an eventual path for the region.



## Appendix C – Operational Revenue and Expenses

Revenue for a full consolidation would consist of operational grants from the State of Massachusetts 9-1-1 program and service fees assessed against the participating agencies. The projected budget for personnel and operations for full consolidation scenario is summarized as follows:

<b>Regional Emergency Communications</b>			
<b>Revenue Category</b>	<b>RECC EAST</b>	<b>RECC WEST</b>	<b>Total</b>
State of Massachusetts E9-1-1 Grant	\$691,048	\$681,886	\$1,372,934
Agency Contributions/Service Fees	\$1,714,334	\$2,533,352	\$4,247,686
<b>Revenue Total</b>	<b>\$2,405,382</b>	<b>\$3,215,238</b>	<b>\$5,620,620</b>
<b>Expense Category</b>	<b>RECC EAST</b>	<b>RECC WEST</b>	<b>Total</b>
<b>Personnel Expense</b>			
RECC Manager (2)	\$79,000	\$79,000	\$158,000
Technology Manager (1)	\$32,500	\$32,500	\$65,000
Technicians (2)	\$45,000	\$45,000	\$90,000
Shift Supervisor (12)	\$330,000	\$330,000	\$660,000
Dispatcher/Call Taker (58)	\$897,000	\$1,365,000	\$2,262,000
Payroll Expenses (SS, Unemployment, Medicare)	\$124,515	\$166,635	\$291,150
Benefits (Insurance, Retirement)	\$484,225	\$648,025	\$1,132,250
<b>Subtotal</b>	<b>\$1,992,240</b>	<b>\$2,666,160</b>	<b>\$4,658,400</b>
<b>Operating Expense</b>			
Supplies	\$29,884	\$39,992	\$69,876
Training and Travel	\$31,000	\$43,000	\$74,000
Utilities (Electricity, Water, Sewer, Gas)	\$12,000	\$12,000	\$24,000
Maintenance (Radio, CAD, Telephone, Building)	\$298,836	\$399,924	\$698,760
Professional fees (Janitorial, Snow Removal)	\$6,000	\$6,000	\$12,000
Miscellaneous (Headsets, Chairs, Other)	\$35,422	\$48,162	\$83,584
<b>Subtotal</b>	<b>\$413,142</b>	<b>\$549,078</b>	<b>\$962,220</b>
<b>Recurring Annual Total</b>	<b>\$2,405,382</b>	<b>\$3,215,238</b>	<b>\$5,620,620</b>



GeoComm has examined the impact of a full consolidation of participating public safety agencies into two RECCs. The estimate of staffing, training, technology, and facility operating expenses of the two RECCs is projected to be \$5,620,620, which combined with the administrative agency and basic closed station improvements results in a total operational expense projection of slightly more than \$6 million.



## Appendix D – Agency Financial Impact

<b>RECC EAST</b>							
<b>Agency</b>	<b>Population</b>	<b>Cost-Share</b>	<b>RECC</b>	<b>Admin Agency</b>	<b>Regional Training</b>	<b>Closed Station</b>	<b>Total Annual Cost</b>
Acushnet	10,607	4.84%	\$116,535	\$5,536	\$2,333	\$4,000	\$128,404
Dartmouth	33,154	15.14%	\$364,249	\$17,304	\$7,291	\$4,000	\$392,845
Fairhaven	16,111	7.36%	\$177,005	\$8,409	\$3,543	\$4,000	\$192,957
Freetown	9,076	4.15%	\$99,714	\$4,737	\$1,996	\$4,000	\$110,447
Lakeville	9,829	4.49%	\$107,987	\$5,130	\$2,162	\$4,000	\$119,279
Marion	5,183	2.37%	\$56,943	\$2,705	\$1,140	\$4,000	\$64,789
Middleborough	22,207	10.14%	\$243,979	\$11,591	\$4,884	\$4,000	\$264,454
New Bedford	91,550	41.82%	\$1,005,822	\$47,783	\$20,134	\$4,000	\$1,077,740
Wareham	21,221	9.69%	\$233,146	\$11,076	\$4,667	\$4,000	\$252,889
<b>Totals</b>	<b>218,938</b>	<b>100.00%</b>	<b>\$2,405,382</b>	<b>\$114,271</b>	<b>\$48,150</b>	<b>\$36,000</b>	<b>\$2,603,803</b>
<b>RECC WEST</b>							
<b>Agency</b>	<b>Population</b>	<b>Cost-Share</b>	<b>RECC Cost Share</b>	<b>Admin Agency</b>	<b>Regional Training</b>	<b>Closed Station</b>	<b>Total Annual Cost</b>
Berkley	6,498	2.54%	\$81,542	\$3,392	\$1,429	\$4,000	\$90,363
Dighton	6,175	2.41%	\$77,489	\$3,223	\$1,358	\$4,000	\$86,070
Easton	23,352	9.11%	\$293,039	\$12,188	\$5,136	\$4,000	\$314,363
Fall River	91,938	35.88%	\$1,153,711	\$47,985	\$20,220	\$4,000	\$1,225,916
Mansfield	23,303	9.09%	\$292,424	\$12,163	\$5,125	\$4,000	\$313,712
Norton	19,315	7.54%	\$242,380	\$10,081	\$4,248	\$4,000	\$260,709
Raynham	13,648	5.33%	\$171,266	\$7,123	\$3,002	\$4,000	\$185,391
Swansea	16,175	6.31%	\$202,977	\$8,442	\$3,557	\$4,000	\$218,976
Taunton	55,815	21.78%	\$700,411	\$29,132	\$12,275	\$4,000	\$745,818
<b>Totals</b>	<b>256,219</b>	<b>100.00%</b>	<b>\$3,215,238</b>	<b>\$133,729</b>	<b>\$56,350</b>	<b>\$36,000</b>	<b>\$3,441,317</b>



The \$6 million expense projection is significant as it includes the total personnel and operational cost of the administrative agency and both RECCs. Due to the challenges in obtaining accurate financial information relative to the current operation, the figures used in the assessment are very conservative. Agencies report 2011 personnel costs of \$9.1 million including calculated minimums for the two non-reporting agencies, of which \$7.7 million was budgeted through local funding. This conservatively leaves nearly \$1.7 million in local savings from personnel costs, in addition to operational cost-savings to address important issues such as:

- Agency leave-behind duties
- Radio and CAD system improvements and procurements
- Furniture and appliances for the RECCs
- Possible matching funds to secure higher facility grant scoring

Based on the population cost-share methodology, the chart on the following page represents the financial responsibility of each participating agency for funding the administrative agency, RECCs, and basic security/telephone enhancements at closed stations assuming State 9-1-1 grant funding remains constant:



<b>Community</b>	<b>Total Annual Cost</b>	<b>Local Personnel Costs</b>	<b>Agency Cost-Savings</b>
Acushnet	\$128,404	\$63,180	\$(65,224)
Berkley	\$90,363	\$170,242	\$79,879
Dartmouth	\$392,845	\$686,603	\$293,758
Dighton	\$86,070	\$177,282	\$91,212
Easton	\$314,363	\$232,091	\$(82,272)
Fairhaven	\$192,957	\$49,146 <sup>1</sup>	\$(143,811)
Fall River	\$1,225,916	\$995,143	\$(230,773)
Freetown	\$110,447	\$151,371	\$40,924
Lakeville	\$119,279	\$177,915	\$58,636
Mansfield	\$313,712	\$509,942	\$196,230
Marion	\$64,789	\$77,628 <sup>2</sup>	\$12,839
Middleborough	\$264,454	\$625,084	\$360,630
New Bedford	\$1,077,740	\$1,166,967	\$89,227
Norton	\$260,709	\$303,174	\$42,465
Raynham	\$185,391	\$519,827	\$334,436
Swansea	\$218,976	\$344,949	\$125,973
Taunton	\$745,818	\$743,419	\$(2,399)
Wareham	\$252,889	\$670,659	\$417,770
<b>Totals</b>	<b>\$6,045,122</b>	<b>\$7,664,622</b>	<b>\$1,696,690</b>

<sup>1</sup> Current personnel costs not reported; represents calculated minimum as impacted by state 9-1-1 allocation.

<sup>2</sup> Current personnel costs not reported; represents calculated minimum as impacted by state 9-1-1 allocation.



## Appendix E – Regional Emergency Communications Center Facility Specifications

Area	Quantity	Size (square feet)	Total
Public Safety Communications Director	1	320	320
Training Manager	1	240	240
Technology Manager	1	240	240
Administrative Assistant	1	120	120
<b>RECC Manager's Office</b>			
RECC Manager's Office	1	230	230
Shared Supervisor's Office	1	140	140
Technology Coordinator	1	140	140
Supervisor Position	1	140	140
Dispatch/Call Taker Positions	8	100	800
Kitchen/Break Room	1	640	640
Small Conference	1	140	140
Training Room/Training Simulator Room	1	640	640
Copy, File, Work Room	1	120	120
Equipment Room (IT and Radio)	1	320	320
Restroom, Lockers, and Showers	2	900	1,800
Storage	1	140	140
<b>Total</b>			<b>6,170</b>
<b>Building Circulation 15%</b>			<b>926</b>
<b>Building Services 10%</b>			<b>617</b>
<b>Gross Building Spaces</b>			<b>7,713</b>
<b>Total Vehicles</b>		<b>25</b>	
<b>Parking Spaces</b>		<b>46<sup>3</sup></b>	<b>5,980</b>
<b>Parking Circulation 15%</b>			<b>897</b>
<b>Parking Lot Space</b>			<b>6,877</b>

<sup>3</sup> Parking to accommodate shift change, administrative staff, and off-duty training attendees.



<b>Description</b>	<b>Size (square feet)</b>	<b>Price (square feet)</b>	<b>Subtotal</b>
Facility	7,713	\$250	\$1,928,250
Parking Lot and Exterior	6,877	\$30	\$206,310
<b>Total Facility Cost</b>			<b>\$2,134,560</b>
<b>Architectural and Engineering Cost</b>			<b>\$213,456</b>
<b>RECC East Total</b>			<b>\$2,348,016</b>
<b>RECC West Total</b>			<b>\$2,012,032</b>
<b>RECC Extended Total</b>			<b>\$4,360,048</b>

The RECC facility construction totals presented in this report do not include real estate acquisition nor land preparation. Regional administrative offices are included in one of the RECC facilities.

