

Regional Fire and Rescue Study

**COUNTY OF ALBEMARLE, VIRGINIA AND
CITY OF CHARLOTTESVILLE, VIRGINIA**

FINAL REPORT



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1. INTRODUCTION AND EXECUTIVE SUMMARY

This document is the final report of an assessment of the opportunities and challenges the County of Albemarle and the City of Charlottesville could face in creating a consolidated, regional fire and rescue system serving both jurisdictions. The report addresses the manner in which regional consolidation would affect the two career fire/EMS Departments, seven independent volunteer fire Departments and three independent Rescue Squads serving the County and the City.

The County and City jointly retained the Matrix Consulting Group to conduct the consolidation assessment during the fall of 2006. The purpose of the assessment was to evaluate opportunities for regional cooperation that might include a partial or complete consolidation of the fire and rescue services in both jurisdictions. The agencies studied include the Albemarle County Fire and Rescue Department and its volunteer components (ACFRD), the Charlottesville Fire Department (CFD) and the volunteer Charlottesville Ambulance Squad (CARS) that serves the City and the County. The study addresses the following questions defined in the request for proposal:

- Is a multi-jurisdictional approach feasible and appropriate in all areas or just for certain functions?
- What issues or obstacles could affect the development of a more cooperative approach?

Furthermore, the study focused on the key objectives of:

- Improving efficiency.
- Improving effectiveness.

- Reducing duplication.
- Increasing standardization.
- Enhancing the coordination of services.

In order to accomplish the scope of services, the Matrix Consulting Group undertook the following activities:

- Interviews with a broad range of personnel involved in fire and rescue services including:
 - Elected officials from both the City and the County.
 - The City Manager and the County Manager.
 - The Fire / Rescue Chiefs for each of the career and volunteer organizations serving City and County residents.
 - Members of the command staffs of the various Departments as well as employee association representatives serving each agency.
 - Career and volunteer personnel during visits to each of the City and County fire and rescue stations.
 - City and County planning officials.
 - City and County personnel staff.
- Four meetings with the Project Steering Committee to:
 - Initiate the study and discuss the project schedule and activities.
 - Review and discuss the Descriptive Profile of current operations.
 - Review and discuss an Issues Report addressing the 22 key issues listed for investigation in the Request For Proposal.
 - Review and discuss the Draft Final Report
- Gathering detailed operational and service information from each operating agency.
- Analyzing automated data about emergency services provided by the Charlottesville – UVA – Albemarle County Emergency Communications Center.

The next section of this chapter contains an executive summary of our major findings.

EXECUTIVE SUMMARY

The Executive Summary has been divided into five sections addressing the issues and findings of the study team, the economic impact of consolidation, recommendations for improvement and implementation planning.

1. ISSUES

The following points provide a summary of the key issues identified in the course of this assignment:

- There are significant geographic differences between the City and County that affect the delivery of fire and rescue services. The County has more than twice the population of the City, but that population is spread over a 723 square mile area. The City is a compact jurisdiction covering 10.3 square miles.
- The ACFRD and the CFD have different response time goals and there are no specific response time goals for the provision of ambulance services by the Rescue Squads.
- There are significant differences in the cost for services in the City and County. For example:
 - **Per Capita Budget** – The per capita budget for County residents is \$75 compared to \$194 for City residents. The per capita budget for the CFD is 159% greater than the ACFRD per capita budget.
 - **Real Estate Tax Rate** – County residents pay \$0.041 per \$100 of assessed value for fire and emergency medical services compared to a rate of \$0.182 per \$100 of assessed value for City residents. The City tax rate is 340% greater than the County tax rate.
- The City and County have different policies regarding vacation and holiday leave practices such that personnel in the City Fire Department assigned to emergency operations receive considerably more holiday leave than their counterparts in the County Fire Rescue Department.

- Both Departments offer retirement plans for their employees in addition to Social Security benefits. The City has its own retirement system while the County participates in the Virginia Retirement System.
 - The City's retirement plan considerably more expensive than the County's plan. The County contributes 14% of a Firefighter's base pay towards retirement while the City contributes 34.57%. This is a difference of 247%.
 - The City and County offer their active employees similar health benefit packages.
- The CFD is accredited by the Commission of Fire Accreditation International while the ACFRD is not accredited. The CFD's current accreditation would not carry forward to a consolidated agency.
- The City has a lower (i.e., better) Insurance Service Office (ISO) rating than the County. The ISO rates the fire suppression, communications and water supply systems to develop a rating. The City has a rating of 2 on a 10-point scale. The County ratings range from 5 to 10. Some, but not all insurance companies, use the ISO rating to set fire insurance rates.
- The City has had a lower loss of life from fires than the County. During the past five years the City has not had any fire related deaths while the County has had eight.
- The City and County have similar property dollar loss rates from structure fires.
- The City and County provide fire prevention and training programs. However, the ACFRD staffs these functions at a higher level to support the volunteer Departments and because the County has a larger population and covers a larger geographic area.
- All career operations personnel in the CFD are assigned to work a rotating shift of 24-hours on duty and 48-hours off duty. Personnel in the ACFRD's career stations work a similar schedule. However, ACFRD personnel assigned to work in volunteer stations to provide weekday coverage work four, 12-hour day shifts per week.
- The ACFRD is deploying an Advanced Life Support (ALS) level of EMS care on its career staffed fire trucks and ambulances while the CFD provides Basic Life Support (BLS) care and limited ALS care on its fire trucks.
- The City and County have very different approaches to the integration of volunteers into their service delivery systems. Volunteers are the primary service providers in most of the County fire and rescue stations while volunteers backup

career personnel in Charlottesville. The ACFRD has 440 active volunteers while the CFD has 30 active volunteers.

While the differences cited above are not absolute impediments to consolidating the City and County systems they are major hurdles that need to be resolved between the parties before a consolidation could occur. Furthermore, resolution of the impediments could require a significant expenditure of additional resources if a decision is made to provide all employees of a consolidated system with the higher level of benefits paid provided by the Charlottesville Fire Department to its employees.

There are a number of similarities and dependencies between the City and County fire/EMS Departments that underscore the need for both agencies to continue finding ways to work together cooperatively. These include the following:

- Extensive common borders between the jurisdictions and the fact that the City has a station located in the County and plans to move that station to another location in the County.
- The need for the ACFRD to rely on the CFD for first due response in areas of the County's designated development areas surrounding the City that are not served by a fire station. The primary areas are Pantops and Ivy.
- The ACFRD's relies on the City for second and third due apparatus support for working fires and major emergencies. It is very difficult for the ACFRD to service the areas surrounding the City because of the long distances between its stations circling the City and the limited road network connecting the County stations. A service agreement by which the City/County provide emergency backup services to each other will need to be considered.
- The existence of a joint training facility and interest in exploring the development of new shared training facility.
- A long history of the ACFRD, CFD and CARS successfully working together at emergency incidents.
- The existence of a consolidated public safety communications system (9-1-1 and dispatch) in a single dispatch center that serves all of the fire and EMS providers in the City and the County.

- The reliance on the Charlottesville-Albemarle Rescue Squad (CARS) for the provision of ambulance transportation services and advanced life support emergency medical care.
- The continued refinement and extension of a closest unit response policy that the Fire and Rescue Chiefs have been working to implement.

Our analysis of the operations in both jurisdictions did not find any impediments to the development of a consolidated City/County system in terms of either the service provided or the scale of the operation. Interviews with a broad range of managers and line personnel from career and volunteer Departments indicate that the separate agencies work well together at emergency incidents. There is however, a significant difference between working together cooperatively on the one hand and organizationally consolidating services on the other. The following points list key factors, most dealing with funding, personnel and compensation issues, that the City and County would need to address before moving forward with a functional consolidation plan:

- Department funding and the development of equitable tax rates for the various service levels provided in different areas of the jurisdiction.
- Hiring, career development and promotional strategy for officers, Firefighters and emergency medical technicians.
- Development of a common compensation plan for all members of the consolidated Department.
- Development of a common benefit plan for all members of the consolidated Department.
- Defining the role of volunteers in the system, especially the role of volunteers in stations staffed primarily by career personnel.
- Redefining the role of City Firefighters who volunteer in the County Fire Department and Rescue Squads.
- Resolving the use of 48-hour and 56-hour work schedules for career personnel.
- Reconciling the rank structure of the Departments.

- Defining the role of seniority in personnel decisions.
- Reconciling the different retirement system benefits currently offered by the ACFRD and the CFD.

2. KEY FINDINGS

The following points provide a summary of the key findings discussed in the final report:

- Consolidation of the Departments would offer minimal opportunities to reduce staff levels.
 - One of the Fire Chief positions could be eliminated and the chief officers responsible for training and fire prevention, a total of four in the ACFRD and CFD, could be reduced to two.
 - Analysis of the current and proposed fire station locations in the City and the urban development area in the County surrounding the City did not identify any opportunities for the consolidation of City and County fire stations and the fire/EMS personnel that staff the stations.
- The fire station location analysis supports the construction of ACFRD fire stations in the Ivy and Pantops areas of the County and the relocation of the CFD fire station # 10 to Route 29 and Fontaine Avenue.
- The analysis of the ambulance transportation system identified the need for:
 - A minimum of three 24-hour ambulances and one 12-hour peak ambulance in Charlottesville and the urban development areas of the County surrounding the City. A mix of ACFRD, CARS and CFD personnel would staff these ambulances to guarantee coverage.
 - Continued deployment of an ACFRD staffed ambulance in the Hollymead station.
 - Continued deployment of ambulances by the Scottsville and Western Albemarle Rescue Squads.
- There are significant differences in employee benefit costs between the City and County that will require resolution. The report recommends the adoption of the higher benefit costs of the City.

- Consolidation of the Departments will require the new agency to follow the Fair Labor Standards Act and pay career personnel who volunteer with the volunteer Fire Departments and Rescue Squads serving the County.

3. ECONOMIC IMPACT

A consolidation of the Departments would result in additional costs rather than cost saving because of increased wage and benefit costs and an inability to reduce personnel needs through the consolidation of stations and functions. The following points provide a summary of the economic impact of consolidation in the final report.

- Addressing differences in the costs for retirement, retiree medical benefits and holiday pay by adopting the more expensive CFD plan will add approximately \$688,000 annually to the costs for operating a consolidated agency based on current personnel levels. These costs will increase annually by the rate of inflation and by any increases in the number of personnel. The added benefit costs are itemized below.
 - Retirement benefit - \$309,000 annually.
 - Retiree medical benefit - \$307,000 annually.
 - Holiday pay for 56-hour personnel - \$72,000 annually.
- Although the merged Department would yield some minor personnel cost savings through the elimination of a Fire Chief's position and staffing downgrades in Training and Prevention, the total budget for a consolidated department will increase by \$515,000 in its first year of operation over current costs because of the higher retirement and holiday leave benefits. This is a 3.5% increase over the total current operating costs.
- Because of the disparity in operating costs between the ACFRD and the CFD a consolidation of services and the levying of a single property tax rate across both jurisdictions would lead to a shift in the tax burden for fire and EMS from City to County taxpayers. If the ACFRD and CFD merged and operating practices and costs remained unchanged at current budget levels for the jurisdictions:
 - The property tax rate for County residents would increase from 4.1¢ per \$100 of assessed valuation to 8.9¢ - an increase of 117%.
 - The property tax rate for City residents would drop from 18.2¢ per \$100 of assessed value to 8.9¢ - a decrease of 51%.

4. RECOMMENDATIONS

The primary recommendation of this report is that the City and County should not consolidate their fire and EMS Departments but that the service providers should continue to work together to coordinate services and share resources. As an alternative to consolidation the City and County should plan to revisit the “Service Agreement” between the two jurisdictions. The ACFRD, CARS and the CFD should work closely together to monitor ambulance transportation services and to ensure that sufficient career and volunteer personnel are on duty and available to control response times. The tables below summarize the recommendations in the report and contain cost and service impact information about the recommendations. The recommendations have been divided into two tables. The first table lists the recommendations dealing with consolidation issues and the second table lists all other recommendations

Consolidation Recommendations and Cost Impact Summary

Recommendation	Cost Impact
A merged Department would require that the new agency adopt a unified leave plan for all employees. The plan would need to guarantee that no employee lost any paid leave as a result of the merger.	Adoption of the higher CFD’s benefit and wage plan would add \$688,000 annually to personnel costs.
Based on the transfer of costs for a consolidated system from City to County taxpayers and the added cost to provide ACFRD personnel with the CFD’s level of benefits the study does not recommend that the City and County consolidate their fire and EMS systems.	Cost avoidance by the County taxpayers of a property tax increase from 4.1¢ per \$100 of assessed value to 8.9¢ per \$100 of assessed value.
Based on the differences in the ACFRD and CFD work schedules (48-hour and 56-hour shifts) and the extent to which each agency use volunteers the study does not recommend consolidation.	Cost avoidance for 56-hour staffing.
The service providers should set up an EMS steering committee to discuss EMS problems, analyzing operations and developing solutions.	No cost impact.

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Recommendation	Cost Impact
CARS, in conjunction with the ACFRD and the CFD, should deploy three ambulances 24-hours per day, seven days a week and a peak hour ambulance from 8AM to 8PM daily.	Cost will depend on the extent to which career or volunteer personnel staff the ambulances.
CARS and the ACFRD should explore the possibility of assigning a CARS ambulance and one of its volunteers to work with the ACFRD paramedic chase car in the Monticello station.	Cost will depend on the extent to which career or volunteer personnel staff the ambulances.
Do not combine fire prevention services.	Minimal cost impact if services are not consolidated.
Do not combine training services. However, increase efforts to coordinate training and conduct joint training exercises.	Minimal cost impact.
The ACFRD, CARS and the CFD should form a committee to review current training programs and plan for improvements.	No cost impact. Potential training and service improvement.
Coordination of training could be facilitated by the agreement of the Departments to develop a joint fire/EMS training facility.	Costs to develop a new training academy have not been determined.
ACFRD and CFD should continue to develop a joint HazMat response capability.	Cost avoidance for the support of two separate teams.
The Departments should begin development of a shared automated database that uses permits and Material Safety Data Sheets (MSDS) to catalog material risks in the community.	Software acquisition and development cost of approximately \$15,000.
The ACFRD, CARS and the CFD should move forward formally to develop and implement a written "closest unit response" approach to all fire and EMS calls.	No cost impact. Potential service improvement
The ACFRD, CARS and the CFD should form a task force to conduct a policy and procedures needs assessment	No cost impact.
The ACFRD and the CFD should consider merging the purchasing functions of their Departments only as part of City/County effort to merge purchasing.	Cost impact cannot be determined.
Based on the fact that a merger would result in a cost increase of approximately \$515,000 rather than a savings we do not recommend the City and County consolidate the Departments.	Cost increase of \$515,000.
The City and County should revisit the Service Agreement for the exchange of services when it expires in 2010. The agreement should consider joint operation of the planned station for Fontaine and Route 29	No total cost impact. May alter the amount of funds flowing from the County to the City.
The City and County should pursue a broader range of service exchanges between the two Departments in revisiting the Service Agreement to include ambulance service, hazardous materials response and training.	No total cost impact. May alter the amount of funds flowing from the County to the City.

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Recommendation	Cost Impact
If a decision is made to consolidate, the City and County should use the ECC model of governance as a guide for setting up the Department	No cost impact.

Other Recommendations and Cost Impact Summary

Recommendation	Cost Impact
As the County system grows the ACFRD should deploy a 24-hour on-duty Battalion Chief when it opens the Pantops station.	Cost impact of \$360,000 annually in salary and benefits.
The ACFRD should continue to deploy both 56-hour and 48-hour schedules for career personnel assigned to operations as a cost effective measure to support the volunteer Departments and Squads needing weekday coverage.	Cost avoidance by not deploying all personnel on the 56-hour shift.
ACFRD should continue to support a strong role for its volunteers. The County's Volunteer Fire Rescue Advisory Board should be maintained.	Cost avoidance if additional career personnel are not deployed
The ACFRD, CARS and CFD should monitor response times on a monthly basis for all fire and EMS calls.	No cost impact. Identify service gaps and potential service improvements.
Monitor ambulance response times and develop response time goals for incidents in which ambulances are responding to calls in which fire apparatus has been dispatched	Setting response time objectives may result in the need for more ambulances.
The County should construct a station in Pantops on Route 250.	Annual operating cost of \$480,000 for a 3-person 24-hour crew.
The County should construct a station in Ivy on Route 250. Timing of the construction should coincide with the relocation of CFD station # 10.	Annual operating cost of \$480,000 for a 3-person 24-hour crew.
Rescue Squads should be required to register their available units with the ECC for entry into the CAD system.	No Cost impact. Improved coordination of EMS transport and ALS care.
Review the EMS call priority classification system to determine if the classification criteria need to be revised since less than 1% of the calls are classified as Priority 2.	No Cost impact. Improved coordination of EMS transport and ALS care.
Develop a method to track zero ambulance availability information.	No Cost impact. Improved coordination of EMS transport and ALS care.
Although the Hollymead, Scottsville and Western Albemarle squads have a limited call volume, a full time ambulance is needed in each of these stations.	No cost impact if Scottsville and WARS ambulances are staffed by volunteers.

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Recommendation	Cost Impact
The CFD should deploy an ambulance.	Annual cost will vary depending on how the ambulance is staffed Purchase ambulances – \$354,000 Use current staff - \$35,000 Hire additional staff – \$544,727
Involve ACFRD suppression personnel in business inspections.	Minimal cost to train suppression personnel to conduct inspections.
ACFRD should complete the migration of its fire prevention inspection database to the records management system (RMS). CFD should use the RMS Fire Prevention module to automate its fire inspection program.	No cost impact. Departments own the software.
Both Departments should initiate a proactive voluntary inspection of residential smoke detectors.	No cost impact. Departments would use on-duty suppression personnel.
ACFRD and the CFD should consider developing a method and a schedule to enable volunteer units to standby in career stations so that on-duty career units can more readily participate in multi-company drills.	Potential cost savings from reduced overtime for training. Potential service improvement.
The ACFRD should conduct a study of the vehicle maintenance process and maintenance costs for its career and volunteer apparatus.	Approximately \$50,000 for a study.
The ACFRD and the CFD should train all volunteers to the HazMat Awareness level and the ACFRD volunteers in the Earlysville and Scottsville stations to HazMat Operations.	Minimal cost for additional training. Service and safety improvement.
Install Automatic Vehicle Locator (AVL) technology in the ACFRD, CARS and CFD emergency vehicles.	Acquisition costs of \$295,200 for 36 pieces of apparatus plus annual maintenance of \$23,400. Improved apparatus deployment.
Use the policy needs assessment to modify existing policies and procedures, develop new ones and implement training.	No cost impact
The ACFRD should consider the merits of purchasing supplies and materials for the Volunteer Departments and Squads.	Cost impact cannot be determined.
The ACFRD, CFD and the volunteer Rescue Squads should form an ambulance billing committee to develop recommendations regarding ambulance billing and how it might be applied across the range of career and volunteer service providers	Ambulance billing could cover some ambulance costs We estimate that bill would raise approximately \$200,000 per transport.
The ACFRD, CFD and the volunteer Rescue Squads should continue to seek out and apply for Federal and State grant funding for regional services.	No costs to apply for grants. Grants could subsidize some costs. Regional grants are more readily available.

5. IMPLEMENTATION PLANNING

Although the report does not recommend consolidation there are a number of actions, described in the recommendations of the report, that the fire and EMS agencies can do, individually and collectively, to better coordinate their activities and ultimately improve services. We recommend that the fire and EMS agencies work systematically through the report to determine which recommendations will be acted upon and then develop an implementation schedule. The following points outline an implementation strategy.

- Month 1:
 - Establish a multi-agency Steering Committee to oversee the review and implementation of the report's recommendations.
 - The Steering Committee should request each agency to set up a committee to review the report and comment in writing on the recommendations and identify ways in which the agency can support planning and implementation activities.
- Month 2:
 - The Steering Committee should review the written comments and plans submitted by each of the service providers and develop a prioritized list of actions for review by City and County administrators.
 - City and County administrators should meet together to discuss the report and the recommendations, review how the recommendations will affect their respective jurisdictions and map out a strategy of how they would like their fire and EMS administrators to proceed.
- Month 3:
 - Based on feedback from City and County administrators, the Steering Committee should develop an action plan for each recommendation.
 - The ACFRD or CFD should designate a career member to create the action plan in MS Excel or MS Project or recruit a volunteer to develop and maintain the action plan.

- The action plan should identify:
 - What needs to be done? Tasks can range from analyzing information, developing policy and procedures, outlining implementation steps, identifying resource needs to actually implementing change.
 - Who will be responsible for doing it? Committees should be set up to develop action plans for each recommendation or a group of related recommendations. For example, a committee dealing with HazMat issues would include HazMat representatives from the Hazmat team while ambulance transportation issues would involve the ACFRD and CFD as well as the Rescue Squads (CARS, Scottsville and WARS).
- When will the work be done? The report contains a number of recommendations. Hence, it may necessary to phase in the recommendations over a period of time. The Steering Committee should phase the recommendations based on what needs to be done immediately and what the system participants are able to manage in a given period of time. For example, the CFD may want to move forward with planning the deployment of an ambulance quickly so that it can be included in the Department's FY08 while the planning for a joint City-County training academy might be postponed for a later implementation period.
- Month 4:
 - Kick-off implementation of the first set of approved action plans.
 - Monthly update of the action planning tool.
- Months 5 and beyond:
 - Monthly Steering Committee meetings to update the status of the Implementation. The meetings should discuss progress, roadblocks, funding and resource needs.
 - Quarterly reports by the Steering committee to the service provides and to City and County administrators.

The next chapter analyzes the service delivery and cost structures affecting consolidation between the City and the County fire and EMS services.