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**GOVERNMENT COOPERATION AND EFFICIENCY PROJECT**  
**BUSINESS CASE ANALYSIS REPORTS**

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**September 2009**





# **MANAGEMENT PARTNERS**

I N C O R P O R A T E D

To: Government Cooperation and Efficiency Project Funders  
Hamilton County, City of Cincinnati, Cincinnati Business Committee

From: Gerald Newfarmer, Management Partners

Subject: Action Projects

Date: September 25, 2009

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Management Partners has completed the three business case analysis reports on priority projects identified by the Government Cooperation and Efficiency Project (GCEP) as priority areas for attention. They are currently in production and will be available for distribution on Monday (there were a number of last minute changes based on reviews of the drafts). The objective in each of these was to explore the potential for cost savings to taxpayers through consolidation or integration of service delivery among jurisdictions.

The three cases are interesting and offer potential for savings, in quite different ways based on the facts and interest displayed by the involved local governments. In the first case, the potential for the consolidation of Fire/Emergency Medical Service among jurisdictions in central Hamilton County was explored. This project was identified because a group of local governments had previously self-selected to apply for a grant from the State of Ohio to study the issue. Although that application was not selected by the state for funding, the interest it displayed was attractive to GCEP for further exploration.

The result of our analysis studying the potential consolidation of Fire/EMS is that the participants are interested in pursuing limited service integration on a selective basis. They are interested in sharing functions that they each do, and in building enhanced inter-jurisdictional emergency response capabilities, but without actually merging the agencies.

The second project analyzed the potential for merging emergency communication and dispatch services. This project involves two separate potential mergers; an internal merger within the City of Cincinnati of its police and fire dispatch functions, and a second potential project to merge the City of Cincinnati E-911 emergency communications function with the same function operated by Hamilton County. We know from similar mergers in other local governments that the emergency communication function is most amenable to economies of scale, with larger centers offering more cost-effective use of resources.

The City's internal merger is proceeding under the direction of the City Manager who has formed a group to work through the issues involved and prepare a recommended solution for consideration. The option of merging the City and County E-911 functions requires additional analysis to settle on a plan of action to accomplish integration, as well as to develop more detailed cost estimates of the savings involved. The business case report concludes that the City will reduce costs of operation by completing its internal

merger, and that a merger between the City and County E-911 functions will offer substantial savings, in the millions of dollars.

The third project explored as a GCEP business case analysis is the potential for integration of separate tax administration functions. According to our original assessment in the Phase One GCEP report, there were 28 jurisdictions within the county that have tax administration components (in addition to the City of Cincinnati). At the time, four of those contracted with the Regional Tax Administration Agency (RITA). Since then, others may have contracted with RITA.

Our analysis of the tax administration function reflects two interesting findings. The first is that the City of Cincinnati's cost of administration is below 1%, which makes it markedly more attractive to external customers if it is available as a service at such a rate. It is not currently available. The second interesting finding is that the federal Internal Revenue Service has a program that makes its database of tax returns available to a local entity serving a population of greater than 300,000 for use in cross-checking local tax returns. This option produces a significant improvement in taxpayer compliance, increasing revenue on average between 3% and 5% per year. Only the City of Cincinnati and RITA are eligible to use this technique.

Implementing enhanced service integration in tax administration is consistent with the *raison d'être* of GCEP – to provide quality public services at reduced cost to taxpayers. To realize this goal in the tax administration function, an initiative with two discrete dimensions is required. First, the City of Cincinnati must be supported in developing the means and procedures for sharing its service capability with other jurisdictions. Second, other jurisdictions will want to complete their own analysis service if they are to seriously consider it. GCEP is the single entity in a position to support both dimensions of this needed work to move implementation to reality. Without GCEP leadership, integrating the tax administration will either not happen or languish without a clearly defined project completion date because the staff members of all affected agencies are already busy with current priorities and lack the capacity to do this work in a near-term time frame.

### **Next Steps**

We recommend that the GCEP funders approve two follow-up projects: a project to implement tax administration sharing and more detailed study of the potential of a merger of E-911 emergency communications between the City and the County. In making this recommendation, we appreciate that the County is likely to have more interest in pursuing the emergency communications merger and the City is likely to have more interest in pursuing the tax administration option. Both, however, would be major service integration “wins” for GCEP if they could be implemented because together they represent the greatest opportunity for saving taxpayer dollars.

It is important to note that the tax administration project will have more immediate implementation potential than emergency communications. Since the City is taking the important immediate step of internally merging its police and fire emergency communications, it makes sense to anticipate letting that internal merger settle before implementing a second stage merger. (As we note in our report on emergency communications, it makes sense for the City to complete its internal merger but that does not markedly reduce the potential for substantial additional savings from a City-County merger.)

The tax administration project should have goal of near-term activation of the capacity within the City of Cincinnati to serve other local governments with tax administration services. As we point out in the tax administration report, putting this service integration in place is doable within a relatively short term time frame provided we implement a project specifically to do that, including analyses for several pilot local governments who will consider this option.

If the Funders Group agrees with this approach, Management Partners is prepared to implement a plan of work, collaborating with city and county officials regarding its design, within the funds remaining in the GCEP project.



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**GOVERNMENT COOPERATION AND EFFICIENCY PROJECT**

**FIRE/EMS SERVICE CONSOLIDATION  
BUSINESS CASE ANALYSIS**

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**September 2009**



**MANAGEMENT PARTNERS**  
I N C O R P O R A T E D





# **MANAGEMENT PARTNERS**

I N C O R P O R A T E D

September 28, 2009

Government Cooperation and Efficiency Project  
Fundors Committee

The Phase 1 Government Cooperation and Efficiency Project (GCEP) Report, issued in December 2007, identified the Fire/EMS function as one in which there is significant potential for savings in the cost of local government within Hamilton County.

In May 2008, the State of Ohio released information about the Local Government Services and Regional Collaboration Grant Program, an initiative promoting the study of consolidation of individual local government services. GCEP authored two grant applications that were funded, one to Hamilton County to study the potential for consolidation in the code enforcement and permitting process and a second grant to the City of Cincinnati to study the potential for consolidation of heavy equipment operation and maintenance activities among participating local government within the County.

A fire service consolidation grant application proposal was submitted by a group of 12 local jurisdictions led by the City of Wyoming and City of Woodlawn to the Ohio Department of Development for funding under the same program but was not approved. Since, however, the GCEP Phase 1 Report had identified the Fire/EMS function as one with good potential for savings to taxpayers, and given the demonstrated interest among the consortium of governments led by Wyoming and Woodlawn, GCEP offered to assist the group in further exploring opportunities for savings through cooperative effort.

It is important to note that the scope of the GCEP assistance was extremely modest, limited as it was to forty-four hours of Management Partners staff time. The objective of that limited staff assistance was to work with the interested jurisdictions to explore the potential for consolidation or integration of all or part of the Fire/EMS functions that each maintain separately. This report summarizes the results of that initiative to date.

Sincerely,

Gerald E. Newfarmer  
President and CEO



## Current Feasibility Study Environment

In order to assess the level of interest in pursuing some form of collaboration, Management Partners met with the City Managers of the cities of Wyoming and Woodlawn to initiate a continuation of their prior work. With their leadership, the Center for Local Government was asked to invite jurisdictions who had previously expressed interest in collaboration in fire and emergency services to several meetings to discuss what collaboration possibilities there might be.

Management Partners, with the assistance of the Center for Local Government, invited jurisdictions who had previously expressed interest in collaboration in fire and emergency services to an initial meeting to review the process and substance of the business case analysis. Jurisdictions responding were: Glendale, Lockland, North College Hill, Springfield Township, Woodlawn, Wyoming, Mt. Healthy and Elmwood Place. Management Partners developed a survey focusing on the current services profile that was sent to all jurisdictions who had expressed some interest in collaboration in the past. Survey responses were received from Glendale, Lockland, North College Hill, Springfield Township, Wyoming and Woodlawn. Elmwood Place and Mount Healthy also expressed interest but did not return a survey. Management Partners compiled the survey results to provide a profile of current resources devoted by the participating jurisdictions to Fire/EMS service in each community. Management Partners and the Center for Local Government met again with the participating jurisdictions to review and validate the profiles and to develop consensus on the opportunities for service sharing and collaboration. Greenhills was also represented at that meeting and indicated that theirs was an all volunteer service. The Greenhills representative indicated continued interest in mutual aid agreements but saw no advantage at that time to participate in a consolidation effort.

### Current Service Profile

The table below summarizes the current service environment for the five jurisdictions submitting information in response to the survey.

### Fire and EMS Services Indicators

	Glendale	Lockland	North College Hill	Springfield Township	Woodlawn	Wyoming	Total
Resident Population	2,188	3,707	10,100	39,755	2,816	8,362	66,928
# of Occupancies	1,085	2,035	4,598	16,640	1,987	2,300	28,645
# of Fire Stations	1	1	1	2	1	1	7
# of Engine Companies	2	1	1	3	2	2	11
# of Ladder Companies	0	1	1	1	1	1	5
# of EMS Companies	0	1	1	4	2	2	10
# of Specialized Companies	0	1	0	2	1	1	5
# of sworn paid personnel	1	16	25 (PT)	97	30	25	169
# of volunteer personnel	40	15	0	0	0	45	100

	Glendale	Lockland	North College Hill	Springfield Township	Woodlawn	Wyoming	Total
2009 Operating Budget	\$152,000	\$558,984	\$646,488	\$4,868,436	\$1,296,819	\$545,000	\$8,067,727
2009 Capital Budget	\$67,000	\$18,200	\$680,000	\$631,078	\$49,000	\$14,000	\$1,459,278
Total Costs	\$219,000	\$577,184	\$1,326,488	\$5,499,514	\$1,345,819	\$559,000	\$9,527,005
# Apparatus Runs	13	134	107	437	402	587	1,680
# Ambulance Runs	173	911	1,326	3,933	1,025	1,410	8,778
Total All Runs	186	1,045	1,433	4,370	1,427	1,997	10,458
Cost per Run	\$1,177	\$552	\$926	\$1,258	\$943	\$280	\$911
Cost per Resident	\$100	\$156	\$131	\$138	\$478	\$67	\$142
Cost per Station	\$219,000	\$577,184	\$1,326,488	\$2,749,757	\$1,345,819	\$559,000	\$1,361,000
Cost per Occupancy	\$202	\$284	\$288	\$330	\$677	\$243	\$333
Avg. Daily Apparatus Runs	0.03	0.37	0.29	1.2	1.1	1.6	4.6
Avg. Daily Ambulance Runs	0.47	2.5	3.63	11	2.8	3.86	24.04
Fire Response Time	4:00	4:39	4:00	6:00	2:50	5.2	NA
First Responder EMS Runs Response Time	NA	3:58	NA	5:30	2:50	NA	NA
Ambulance Response Time	NA	4:34	4:00	5:30	2:10	3.56	NA

These communities vary in the types of service they provide. While all provide fire service, not all provide EMS and those that provide EMS do not all provide the same level of service. Some provide Advanced Life Support, which requires paramedics, others provide Basic Life Support, which requires only Emergency Medical Technicians, and one community provides no EMS. Costs for operation are different for each.

One of the important facts revealed by the data is that average daily fire apparatus runs are less than one run per station per day. The average cost per station is nearly \$1.4 million a year. Total 2009 budgeted expenses exceed \$9,500,000. If the jurisdictions were able to consolidate fire stations and reduce the number of stations by one, annual costs could be reduced by nearly 17%. Woodlawn reports that it is giving very serious consideration to replacing its current fire station. Since capital investment in a new station may be likely, it would be timely to examine whether a plan could be developed to locate a new station in such a way that Woodlawn's current station and one other station could be closed.

The initial feedback provided by the participants identified several points for consideration. The concept of consolidating fire and emergency medical services is one that often meets with resistance among jurisdictions. There are numerous factors that comprise barriers to consolidation and make it difficult to accomplish: Differing community standards, community service requirements, communities' ability and willingness to pay for fire service, and most importantly, protecting turf and current arrangements. Community pride of ownership often works against this concept. In order to accomplish a full consolidation, it is necessary to reach agreement among political leadership for the consolidation that would be viewed as equitable

among the jurisdictions. New legal structure and governance must be developed and agreement on operational and service standards and equitable financing must be reached.

The appointed administrative leaders of the jurisdictions involved in this current initiative are favorably disposed to coming together and reported that professional leadership in the Fire/EMS service had similar inclination, assuming a study would generate consensus on the issues enumerated above. The participants pointed to the fairly recent consolidation of the Deer Park and Silverton Fire functions as an example of successful consolidation that has reduced cost while improving service.

The interested jurisdictions see many reasons to explore ways to collaborate in providing these services. The jurisdictions who participated in these initial meetings are contiguous to one another and are all from the North Central area of the County. All are dispatched by the Hamilton County Emergency Communications Dispatch Center. Collaboration among these agencies is already a common occurrence, making it more likely to produce positive results. Mutual aid agreements have been standard among fire service providers for decades and can be built upon. These communities have a long history of working together and a high level of professionalism. There are opportunities to reduce costs, standardize hiring, training, and pay of personnel, share equipment and standardize purchasing, reduce capital outlays for facilities and rolling stock, and enhance quality of service.

It was noted that these communities vary in the types of service they provide. While all provide fire service, not all provide EMS and those that provide EMS do not all provide the same level of service. Some provide Advanced Life Support service which requires paramedics, others provide Basic Life Support service which requires only Emergency Medical Technicians. One community provides no EMS. Costs for operation and levels of reimbursement are different for each.

## **Areas for Collaboration**

Because fire service professionals are most appreciative of the differences among the communities they serve and the character of the services they provide, it is accurate to say that there are substantial reservations about moving quickly to consolidation of separate departments. Nonetheless, there are a number of elements of Fire/EMS service that were identified where enhanced cooperative effort will yield payoff.

### Closest Station Response Protocol

Current mutual aid contracts are set up so that fire departments will respond to neighboring requests at no charge. This approach has created a quasi-regional approach to responding to major fires, allowing neighboring jurisdictions to assist each other, yet a call for assistance is typically required before the neighboring department will assist. Identifying areas where responsiveness would be improved by sending units from neighboring agencies could be accomplished and built into dispatch protocols.

A protocol can be developed that would automatically call for response by the closest station regardless of jurisdiction. In several of the communities, there are areas that can be more quickly reached from a neighboring community's fire station. Automatically dispatching a unit from the closest station has the potential to improve the quality of service at no increase in cost.

### Equipment Sharing

ISO ratings are often used to justify the need for certain apparatus. ISO generally requires communities to have a ladder truck if they hope to achieve high fire safety ratings. This requirement leads many communities to have such equipment even though sharing makes far better economic sense. Ladder trucks are extremely expensive items to purchase, often costing in excess of \$1,000,000. If equipment can be shared, equipment costs can be lowered. Lockland, North College Hill, Springfield Township and Woodlawn each have a ladder truck and Woodlawn's is over 11 years old. If the jurisdictions were able to avoid the cost of replacing a ladder truck in the context of consolidating fire stations, a considerable cost avoidance could be realized leading to a reduction of the cost of building a new station. Even without consolidation, it is possible that ladder trucks could be repositioned throughout the area so that fewer trucks are needed.

These localities may also benefit by adopting common standards for breathing apparatus, fire protective gear and other equipment purchases. Bulk purchasing may lower unit costs and enhance operations at fire scenes by being able to share air tanks and other equipment, and enable EMS companies to better support one another.

### Personnel Staffing Sharing

Communities staff their fire and EMS service differently. There are variations in the level of full-time and part-time staffing; one is staffed only by unpaid volunteers. Among those jurisdictions with full and part-time staff, differences in pay, especially for part time staff, create a constant flow of personnel from one jurisdiction to another (indeed, it is possible for one individual to work for more than one fire agency). If common training, pay and staffing patterns can be established, these agencies might be able to share staffing and provide better, more consistent staff coverage of their squads and service areas. Each of the jurisdictions represented expressed that they have an ongoing problem of meeting minimum staffing requirements with part-time professional personnel. If the jurisdictions were able to agree on common employment standards for part-time professional personnel, a pool could be created and part-time personnel assigned on a day-to-day basis to facilities that don't meet minimum staffing standards.

### Capital Investment Sharing

If each community makes fire station location decisions separately, stations can be situated less than optimally for meeting service demands in relation to each other. Indeed, the Phase 1 GCEP report demonstrated the proliferation of excess fire stations within the county as a result of the historical pattern of development. By working with surrounding jurisdictions, these location decisions may lead to better or different station location decisions and substantially reduced cost.

## **Potential for Reducing the Cost of Providing Services**

The areas described above offer opportunities for cost savings through cooperative decision-making and implementation. These jurisdictions may save money by agreeing to common equipment standards that would facilitate higher volume purchases at lower prices. Developing a closest station response protocol might also result in the need for fewer pieces of expensive apparatus. By joint capital planning, these jurisdictions may be able to provide better services while reducing capital outlay.

If the participating jurisdictions were only willing to discuss additional areas of mutual aid and collaboration, which would be something they could do without support of GCEP funding. As noted earlier in this report, the jurisdictions already have a high level of mutual aid and a long history of collaboration.

Consolidation of operations has a high potential for substantial annual cost savings and would more than justify the cost of a consolidation feasibility study. Eliminating just one fire station could save nearly \$1.5 million a year.

## **Summary and Conclusion**

The jurisdictions that we have been assisting in exploring enhanced cooperative efforts in Fire and Emergency Medical Service have made some good progress. Seven of the eight participating jurisdictions seem to be highly motivated to achieve better service sharing levels than currently exist. The eighth jurisdiction, Greenhills, is currently an all volunteer department and community leadership does not seem to be disposed to changing that service delivery structure.

The participating jurisdictions have many mutual aid practices already in place and enjoy a collegial and cooperative working relationship. The senior appointed officials report that they and the senior professional leadership of the Fire/EMS service agencies are favorably disposed toward enhanced collaboration and not opposed to consolidation. The potential for enhanced collaboration short of full consolidation is great and would result in higher quality of service at no increase in cost and hold high potential for avoided future capital cost. The participating jurisdictions are situated in close geographic proximity to one another, making enhanced collaboration easier.

Differing EMS service standards, overall costs and financing structures among the participating jurisdictions will complicate the development of consensus regarding full consolidation. The uncertainty regarding elected officials' appetite for consolidation is also a factor that could inhibit this aspect of the study.

Additional steps to pursue the ideas described in this report are up to the participating jurisdictions themselves. It can be expected that they will build on the momentum that they have established.



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**GOVERNMENT COOPERATION AND EFFICIENCY PROJECT**  
**E-911 EMERGENCY COMMUNICATIONS CONSOLIDATION FEASIBILITY STUDY**  
**BUSINESS CASE ANALYSIS**

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September 2009



**MANAGEMENT PARTNERS**  
I N C O R P O R A T E D





# **MANAGEMENT PARTNERS**

I N C O R P O R A T E D

September 28, 2009

Government Cooperation and Efficiency Project  
Funders Committee

Management Partners has completed a review examining the potential for consolidating the emergency communications and dispatch operations within the City of Cincinnati and, in addition, between Hamilton County and the City of Cincinnati. This review was accomplished with the cooperation of both jurisdictions in fulfillment of the following scope of work authorized by you on July 28, 2009:

Management Partners will complete an analysis of current emergency communications center operations of Hamilton County and the City of Cincinnati. The analysis will describe the nature of current operations, compile information regarding operating cost and current staffing levels, and document recent or planned capital investments.

The analysis will also identify the more important issues or implications that would need to be addressed in merging current operations. An attempt will be made to estimate the time required to merge operations and to estimate the savings if any.

The City Manager has stated that the City's administration is proceeding with a detailed analysis of the benefits and potential savings from consolidating its internal police and fire dispatch operations. Our analysis of that step, as detailed in the report, is that it could result in annual operating savings of as much as \$1 million. We must emphasize that our approved scope of work did not provide for the level of detailed analysis that would normally be required for a full-scale implementation study. A more detailed analysis as is being done by the City administration may establish a different level of potential savings when operations and financial data that were not available to us are taken into consideration.

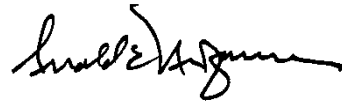
It is important to note that the City's internal consolidation can be accomplished without detracting from the potential payoff of merging the Hamilton County and City of Cincinnati E-911 centers.

Emergency communication center operations offer consistent, reliable opportunities for realizing economies of scale. Typically, the larger the scale, the more cost-effective the operations will be. Our analysis of the City's internal consolidation and the potential county-city consolidation bears out this truism.

In any consolidation, the quality of service subsequent to merger must be a primary focus of attention. There are good opportunities for improving the level and quality of emergency communication services through modernization. However, it is vital that operating protocols for merged functions provide adequate assurance to the public safety personnel (and the public) that service quality will be a primary goal.

There is an extraordinary opportunity to take advantage of these difficult economic times. Given the stress that both the City and the County governments are under to continue to provide core services, implementing improvements in the emergency communications function that save both governments substantial costs and improve service should be given serious consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Gerald E. Newfarmer". The signature is fluid and cursive, with a prominent initial "G" and "N".

Gerald E. Newfarmer  
President and CEO

## **Background**

Several years ago, the City of Cincinnati, Hamilton County and the Cincinnati Business Committee organized and funded the Government Cooperation and Efficiency Project (GCEP). The purpose of the project is to determine the feasibility of reducing the cost of government while improving service quality by implementing shared services among political jurisdictions within Hamilton County.

Cincinnati and Hamilton County each operate an emergency communications center. Cincinnati's center provides emergency communications services to its police and fire departments. Hamilton County provides emergency communication services to 105 police, fire and emergency medical services agencies in 42 different political jurisdictions in Hamilton County.

Management Partners was requested to perform a preliminary analysis of the potential for merging Cincinnati and Hamilton County's emergency communications centers. In addition to analyzing the full merger of the two centers, Cincinnati asked that the analysis include merging the Police and Fire Departments' E-911 center operations in the Cincinnati center. The Police and Fire Departments separately manage their own operations within Cincinnati's center.

The purpose of the analysis is to provide a macro-level view of the advantages and issues attendant to a merger of the two centers rather than a detailed blueprint for merger. The strategy behind this approach is that a reconnaissance level analysis could provide, at an economical cost, the basic information that would help Cincinnati and Hamilton County policy-makers decide whether the potential advantages were such that a detailed full analysis and merger plan should be undertaken.

## **Methodology**

The approach in this review was to develop a profile of how each center operates, compile information regarding operating cost and staffing levels, document recent or planned capital improvements, identify the more important issues that would need to be addressed in merging operations, attempt to estimate the time required to merge operations, and estimate the savings of merged operations, if any.

Management Partners project staff interviewed the senior managers at each of the two centers and reviewed data from each regarding workload, costs, staffing, organization and management structure. Interviews were completed on site and a tour of each jurisdiction's E-911 Center was included.

## Profile of Hamilton County's Public Safety Communications Division

The Hamilton County Public Safety Communications Division is a consolidated E-911 center that serves the emergency communications needs of over 105 police, fire and EMS agencies in 42 political jurisdictions in Hamilton County. Jurisdictions are served by the division through a number of different configurations that are chosen by the jurisdiction. The following array of service levels is available to participating jurisdictions.

- Full User – The division provides 911 and non-emergency call answering services as well as police, fire and EMS dispatch service to these communities.
- Valley User – These jurisdictions use the County 800 MHz radio system but provide their own dispatch services.
- 911 Public Safety Answering Point (PSAP) Associate – The division is the PSAP for these communities and answers all 911 calls, which are then transferred to the dispatch center in the local community.

Full Users pay a minimum fee of \$1,327 per month if they generate 91 dispatched details or fewer per month. If dispatched details exceed 91 per month, the user pays \$14.55 per detail. A chargeable detailed incident is defined as any documented request for service from a citizen or public safety official that requires a radio dispatch of one or more units of police, fire or EMS to the same location or request.

Valley Users and PSAP Associates pay a flat fee of \$1,327 per month.

If a jurisdiction is a Valley User and also either a Full User or PSAP Associate there is no additional charge for being a Valley User.

### ***Personnel***

Table 1 shows the authorized positions that staff the E-911 Center.

**TABLE 1: HAMILTON COUNTY E-911 CENTER 2009 AUTHORIZED POSITIONS**

<b>Position Title</b>	<b>Authorized Number</b>
Director	1
Operations Director	1
Fiscal Officer	1
CAD/RMS Support Specialist	1
Administrative Assistant	1
Communications Supervisor 3	1
Communications Supervisor 2	3
Communications Supervisor 1	6
Communications Officer	67
Total	82

Communications officers are cross-trained to answer telephones and to dispatch emergency service units. Six radio talk groups are staffed around the clock: three police talk groups; one inquiry talk group; one fire/EMS talk group east; and, one fire/EMS talk group west. Minimum staffing is 12 on first shift, 14 on second shift, and 12 on third shift. Personnel work eight-hour shifts on a four-on/two-off rotating schedule.

All 911 incidents are transferred to the division's dispatchers (for full user jurisdictions) or to the jurisdiction's dispatcher (for PSAP Associate jurisdictions). The division does not currently provide a service that would transfer calls to a function such as a telephone reporting unit for police calls.

For emergency medical service calls, call takers transfer the incident to the appropriate dispatcher and then remain on the line to provide pre-arrival instructions to the caller. If requested, they will remain on the line with the caller until the ambulance arrives. Operations personnel maintain certification for emergency medical dispatch.

### ***Call-Answering and Call-Handling Standards***

The National Emergency Number Association (NENA) has established a standard that 90% of 911 calls are answered within 10 seconds during the busiest hour of the day and 95% of all 911 calls be answered within 20 seconds. The division has established a standard that all 911 calls be answered in an average of 9 seconds. In 2008, 911 calls were answered within an average of 2 to 3 seconds, well within the NENA national standard.

Call handling time is measured as the time from when a call is answered until the time the first unit is dispatched. The division standard is to dispatch all EMS calls within a call handling time of 90 seconds or less. In 2008, EMS calls were consistently dispatched well within that standard with a call handling time of 70 to 75 seconds. Call handling duration standards have not been established for police and fire 911 calls since those calls are transferred immediately to the Division's dispatch desks or the jurisdiction's dispatch desk.

### ***Call Volume***

In 2008 the division received 643,194 calls. Table 2 shows the distribution of those calls by type.

**TABLE 2: HAMILTON COUNTY E-911 CENTER CALL VOLUME BY TYPE OF CALL FOR 2008**

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<b>Call Type</b>	<b>Volume</b>
911 Calls	253,925
Police Lines	335,170
Fire/EMS Lines	48,170
Other Lines	5,929
TTY/Administration	28,199
Total	671,393

The division averaged just over 73 calls per hour in 2008, not counting the TTY/Administration calls. Call volume for 2008 was 3% less than 2007 and approximately 9% less than the 2001 ten-year peak of 705,572.

### ***Technology***

Many single-jurisdiction E-911 centers that serve large jurisdictions have developed or are developing automated linkages between the center's computer-automated dispatch (CAD) system and the police agency's records management system (RMS). The division does not provide such an automated link because many of the client jurisdictions served by the division have differing RMS software/hardware configurations. The lack of uniformity among the client jurisdictions makes such an automated link impractical. However, CAD data are available to

each jurisdiction for downloading and manual entry into the jurisdiction's RMS as desired. The division does provide a number of periodic reports to jurisdictions on performance and usage. The division also provides an inquiry talk group and wants and warrants research and verification service. The person staffing the inquiry talk group also provides database update entry service in accordance with established data maintenance protocols for the various databases.

The division is currently working with a vendor to upgrade its telephone communications systems to Voice over Internet Protocol (VoIP) capability. When fully operational, this will allow the division to handle text, data, images and video that are increasingly common in personal communications devices.

The division is also replacing all personal computers used in the center and is replacing the existing fire alert system.

### ***Budget***

The division budget for 2009 is shown in Table 3.

**TABLE 3: PUBLIC SAFETY COMMUNICATIONS DIVISION OPERATING BUDGET FOR 2009**

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<b>Expense Type</b>	<b>Amount</b>
Personnel	\$5,414,827
Other	\$3,438,473
Capital	\$140,000
Total	\$8,993,300

The County general fund provides \$1,700,000 in revenue, \$4.9 million is revenue from detail charges to jurisdictions being served, and \$2.3 million is revenue from miscellaneous other sources.

### **Profile of Cincinnati E-911 Center**

The Cincinnati E-911 Center provides emergency 911 call answering and emergency dispatch service to the Cincinnati Police Department and Cincinnati Fire Department. The Center also provides non-emergency call answering service to Police Department and Fire Department telephone lines.

The Center has two distinct organizational units, one in the Police Department and one in the Fire Department. The organization plan for the Center is that the Police Department staff handles all incoming telephone traffic for both departments and transfers calls according to standard operating procedures. The call taker asks standardized questions to determine the nature of the request for service. If a dispatch is appropriate, the information collected is input into the Computer Aided Dispatch computer for routing to the appropriate entity, be it police or fire (for fire and EMS). These CAD incidents are transferred to the appropriate dispatcher who then sends the appropriate units to handle the call.

If the call fits a pre-determined non-emergency police service profile and is received between 8 a.m. and 5 p.m. Monday through Saturday, the call is transferred to the Police Department Telephone Crime Reporting Unit (TCRU), located at the E-911 Center. Non-emergency police service requests that occur at times other than when the TCRU is staffed are directed to call back on the direct TCRU line during its hours of operation.

Incidents that require dispatch of a fire unit only are handled by the call taker making the appropriate CAD entry and routing the incident to a Fire Department dispatcher. However, emergency medical service 911 calls are initially handled by a Police Department call taker, but once it is established that the call requires EMS response, the Police Department call taker transfers the actual call to a Fire Department dispatcher acting as a medical call taker, if available. If no Fire Department dispatcher is acting as a medical call-taker or if that individual is not available at Fire Dispatch, the call is handled by the original call taker. Calls such as an auto accident with injuries require dispatch of both police and fire units and as such the initial CAD information is entered by the police call taker and routed to both police and fire dispatch, and then transferred to the Fire Department medical call taker.

The Fire Department dispatcher acting as a medical call taker applies medical triage procedures with the caller on the line to provide pre-arrival instructions to the caller. If requested by the caller, the Fire Department dispatcher will remain on the line with the caller until an ambulance arrives on the scene. The Fire Department call taker forwards the EMS call to the Fire Department dispatcher to mobilize the appropriate field unit(s).

There are routinely eight dispatch positions assigned to the six normal radio talk groups used for police dispatch business. Five radio talk groups are used to dispatch police field units. One additional talk group is available for inquiries from field units for such uses as checking warrants and to provide dispatch of tow equipment or message routing to other police or city agencies. Two dispatchers staff this talk group. Additional talk groups are available and routinely staffed by a dedicated dispatcher when special events are in progress, such as sporting events, concerts, dignitary visits or other special operations.

The Fire Department has one radio talk group available for use in dispatching fire suppression and emergency services units, including EMS units.

Police Department

The authorized personnel complement for the Police Department E-911 operation is shown in Table 4.

**TABLE 4: POLICE DEPARTMENT AUTHORIZED E-911 CENTER STAFFING FOR 2009**

Position Title	Authorized Number
Captain	1
Lieutenant	1
Sergeant	1
Officer/Specialist	5*
<b>Total Sworn</b>	<b>8</b>
Supervisor	13
Operator/Dispatcher	52
911 Operator	40
Clerk Typist 3	2
Clerk Typist 2	6
Clerk Typist 1	1
<b>Total Civilian</b>	<b>114</b>
<b>Total (All)</b>	<b>122</b>

\*Officers/specialists staff the Telephone Reporting Unit. As described more fully below, these positions are filled by sworn

personnel who have been temporarily assigned from other duties.

Supervisors, operator/dispatchers, and 911 operators are divided into teams that work 12-hour or 8-hour shifts. Supervisors do not normally take calls or dispatch units. Operator/dispatchers are trained to answer telephone calls and to dispatch police field units. The 911 operators are trained only to handle telephone calls; not to dispatch police field units. Operators/dispatchers and 911 operators are not trained in emergency medical dispatch. Minimum staffing per shift is eight dispatchers. Minimum staffing for call takers is six for the 0300 to 1100 hours shift and eight for the 1100 to 0300 hours shift. Minimum staffing includes one supervisor per shift.

### **Call Volume**

There were 878,011 calls handled by the E-911 Center in 2008 distributed as shown in Table 5.

**TABLE 5: E-911 CENTER CALL VOLUME BY TYPE OF CALL FOR 2008**

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<b>Call Type</b>	<b>2008 Call Volume</b>	<b>Percent of Total Volume</b>
911 Calls	519,254	59%
Non-emergency	358,757	41%
Total	878,011	100%

In addition to the incoming call volume, Center personnel originated 254,923 outgoing calls in 2008. Total ingoing and outgoing call volume in 2008 was 843,353. The center averaged just over 67 incoming calls per hour and just over 29 outgoing calls per hour in 2008.

The most current information on call answering rate (speed) indicates that the average answering time for 2009 calls is 9.7 seconds. The national standard is to answer 90% of calls within 10 seconds during the busiest hours of the day. The Police Department response time for emergency calls for service is slightly better than the national standard.

The average call duration is two minutes and forty-two seconds. That is the amount of time from the moment a call is picked up to the time the operator is available to handle the next call. There is no national standard for call duration since jurisdictions may have different call handling protocols. For example, Cincinnati call handlers go through a triage protocol for non-emergency police calls to decide whether a call should be dispatched or transferred to the TCRU. In addition, for certain incidents such as domestic violence, the call taker remains on the line with the caller until a field unit arrives on the scene. Those protocols extend the conversation between the caller and call taker. Hamilton County does not have a comparable call handling protocol for the TCRU and the average call duration is seventy to seventy-five seconds, nearly a full minute and a half lower than Cincinnati's.

In 2008, there were 302,962 dispatches on calls for service, and 144,778 administrative call dispatches. Dispatches totaled 447,740 in 2008. Calls for service dispatches are typically the result of a 911 call. Administrative call dispatches are typically the result of an internal Police Department call or task such as a traffic stop, directed patrol, attending court etc.

### **Budget**

The Cincinnati Police Department does not separate cost information regarding its E-911 Center from the department's budget. To complete this analysis, Management Partners used data provided by the department and the approach explained herein to estimate the cost.

The department provided Management Partners with information about salary ranges for authorized staff and fringe benefit cost factors, which have been applied to estimate the personnel cost of Police Department E-911 staff. The personnel cost calculation is shown in detail in an attachment to this report. It is noted that this calculation assumes that every authorized position is filled throughout the year and that there are no salary savings from vacancies. That unrealistic assumption is offset elsewhere in this calculation by not including an amount for overtime costs (which presumably wouldn't be required if every position is filled all the time).

The personnel cost for the Police Department E-911 staff for 2009, including fringe benefit cost, is estimated to be \$7,875,000. This estimate does not include sworn positions that staff the Telephone Crime Reporting Unit since the personnel in the TCRU are on temporary assignment from other duties.

The Police Department does not have a specific breakdown of non-personal expense for the E-911 Center, but department staff estimates it to be in the range of \$500,000. That would be low compared with Hamilton County, but is the best estimate available. The total Police Department E-911 Center budget for 2009 is estimated to be \$8,375,000. This does not include overtime cost information or capital equipment expense.

#### Fire Department

Staffing for the Fire Department authorized E-911 Center for 2009 is shown in Table 6.

**TABLE 6: FIRE DEPARTMENT AUTHORIZED E-911 CENTER 2009 STAFFING**

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<b>Position Title</b>	<b>Authorized Number</b>
Supervisor	5
Operator/Dispatcher	14
Total Authorized	19

Supervisors are working supervisors in that they are normally assigned to either take calls or dispatch units in addition to their supervisory duties. Operators/dispatchers are fully trained to either take transferred calls or dispatch units. Work stations are configured so that the call taker function screens and the dispatch function screens are both operational at each station. Both supervisors and operator/dispatchers maintain emergency medical dispatch certification and also emergency medical technician (EMT) certification. Personnel work eight-hour shifts. Minimum staffing is four on first shift, four on second shift and three on third shift including a supervisor for each shift.

#### ***Call Volume***

In 2008, approximately 73,000 911 dispatches were handled by the Fire Department. Of that total, approximately 52,000 were EMS calls and approximately 21,000 were fire or other emergency service calls. EMS calls averaged just fewer than six per hour and fire/emergency services calls averaged just over two per hour in 2008.

#### ***Budget***

Fire Department staff indicated that a line item budget was not readily available for its E-911 Center operations; however, the department provided an estimated cost of approximately \$1,100,000 for personnel that staff its Center operations. Of that amount, \$100,000 is estimated for overtime. Fringe benefits are estimated at 37.4% of base salary cost, or \$374,000, for a total

personnel cost estimate of \$1,474,000. Fire Department staff interviewed was not able to estimate the non-personal cost for its operations.

The following table summarizes the cost of the City of Cincinnati's E-911 Center operations. The Total Estimated E-911 Center Cost is rounded to \$10,000,000 to cover the potential cost of non-personal supplies for the fire component, but it does not include the cost of capital assets (facilities and equipment).

### **Total Estimated Cincinnati E-911 Center 2009 Cost**

Based on the calculations explained previously, Management Partners estimates that the total 2009 Police Department E-911 Center cost is \$8,375,000. The comparable amount for the Fire Department is \$2,063,000. The combined total for the two departments is \$10,438,000. That estimate does not include Police Department overtime cost, equipment cost or capital budget items.

The 2009 estimated E-911 Center budget components are shown in Table 7.

**TABLE 7: 2009 CINCINNATI E-911 CENTER OPERATING BUDGET COMPONENTS**

<b>Budget Component</b>	<b>2009 Budget Estimate</b>
Police Department Staff Cost	\$ 7,875,000
Police Department Non-Personal Expense Estimate	500,000
Total Police Department Estimated Budget	8,375,000
Fire Department Staff Cost	1,474,000
Fire Department Non-Personal Expense Estimate	Not Available
Total Fire Department Estimated Budget	1,474,000
Total E-911 Center Budget	\$9,849,000
<b>RECAP</b>	
Total Staff Cost	\$ 9,349,000
Total Non-personal Expense Estimated Cost	\$ 500,000
<b>Subtotal</b>	<b>\$9,849,000</b>
Estimated City E-911 Center Cost	\$10,000,000

### **Significant Police and Fire E-911 Merger Issues**

There are a number of operating differences between Cincinnati's Police and Fire Departments' E-911 center operations that would need to be addressed in the event of a merger into a single organizational plan for Cincinnati's E-911 center.

#### Emergency Medical Dispatch Qualification

Police Department 911 operators and operator/dispatcher personnel are not trained or certified to provide emergency medical dispatch (EMD). EMD is a written established protocol developed by a trauma care medical doctor and approved by a medical advisory board that gives the staff answering 911 EMS-related calls a list of questions to ask and, based on the answers to the questions, instructions to provide the caller to follow prior to the arrival of the EMS ambulance on the scene.

EMD is considered by the industry to be a critical aspect of emergency medical service delivery. All EMS calls received at the Hamilton County E-911 center receive EMD service level quality. Merging the Cincinnati Police and Fire Departments' E-911 staff would require that EMD training and certification be provided to Police Department 911 operators, operator/dispatchers and supervisors. Training for EMD takes 40 hours and requires 24 hours of refresher training every two years.

The Fire Department also requires that its E-911 center operating personnel be certified as emergency medical technicians (EMT) and maintain that certification. Requiring an EMT certification is a premium level of service quality that is not prevalent in the industry. Hamilton County does not have a similar requirement for its E-911 center staff. If EMT certification is to continue to be a requirement, Police Department E-911 center staff would have to acquire such certification and maintain it. Initial EMT training takes six weeks and requires re-certification once every three years.

#### Shift Schedule Reconciliation

The Police Department E-911 center operating staff works on a twelve-hour schedule and the Fire Department E-911 center operating staff works on an eight-hour schedule. A common shift schedule would have to be applied if the units were to merge.

#### Job Scope Difference

Fire Department E-911 center operating personnel and supervisors are trained to handle transferred calls and provide dispatch services. Some Police Department E-911 center operating personnel are trained only for call taking. Since the Fire Department operation is not very large, cross-training of personnel to provide both call taking and dispatching is sensible and economical.

In a larger operation like the Police Department E-911 center, it is more economical to have some persons trained only to provide call taker service. Since fewer skills are required, call takers are paid less than dispatchers. While there is a current difference in training and skill sets between some of the personnel in the two units, this does not appear to be an issue that could not be readily reconciled.

#### Center Management Responsibility

If Cincinnati were to merge the police and fire components of its E-911 center, responsibility would have to be integrated for planning, managing and operating the merged center. Merging of operations could take the form of either placing the center under the aegis of the Fire Department or under the aegis of the Police Department, or (as is done in some cities) under a General Services Agency. Either organizational placement has advantages and disadvantages that should be examined in detail. Some jurisdictions have placed the emergency communications function within a neutral, internal service-providing department such as a general services agency, in recognition that separate functions are served by the same emergency communication function.

The organizational placement issue must take into account the current protocol used by the Police Department to staff the TCRU. Sworn police personnel in "alternative service" status are temporarily assigned to the TCRU. This practice is not uncommon in police management and is considered to be an appropriate way to deploy sworn personnel who are temporarily unable to be assigned to enforcement activities.

## **Advantages of Merging Police and Fire E-911 Center Operations**

Merging the Police and Fire E-911 Center operations is likely to lead to a reduction in authorized positions needed. Note that as this analysis was being prepared the City was in the process of implementing unusual budget reductions and has been holding positions vacant as possible to reduce spending. Our analysis has necessarily been based on authorized positions absent actual spending information broken out for Center operations.

It is clear, however, that a merged City operation would require less supervisory staff, as well as fewer call takers and operator/dispatchers. Our preliminary analysis is that as many as 14 positions could be reduced at an annual savings of \$1,012,421 including estimated fringe benefits cost.

An additional operational advantage of a consolidation within the City of Cincinnati, assuming that all call takers are EMD qualified, is that EMS calls would not have to be handed off by the original call taker to a second call taker. Currently, this protocol results in some minimal delay in getting an ambulance dispatched and providing instructions to the caller. Given that EMS calls measure quality of service in minutes and seconds to respond, eliminating any delay, even if only a few seconds, is an upgrade in service quality.

Any consolidation should also consider ways to reduce the uniformed staff currently assigned by the Police Department. Many E-911 centers operate with non-uniformed staff or with limited uniformed command presence to address operational issues.

The current total cost of the assigned uniformed positions, including fringe benefits at 40.93% of salary, is \$557,432. Assuming that an alternative model of non-uniformed management with limited operational uniformed support is implemented, it is likely that in excess of \$250,000 could be saved in E-911 operating costs. These numbers may not reflect changes made during the current round of budget adjustments, which is a dynamic process.

## **Merging Cincinnati and Hamilton County E-911 Center Operations**

An alternative scenario for E-911 center operations throughout Hamilton County is for the Cincinnati and Hamilton County centers to merge operations into a single agency. This section of the report analyzes the issues involved in considering such a consolidation.

### Governance and Management Responsibility

A major threshold issue would be to examine the alternative approaches to governance and management of a consolidated enterprise. The simplest approach might be to consolidate into the County-operated center. The County already has a business model for providing emergency communications services to many jurisdictions. For Cincinnati to assume responsibility for merged center management, a business model would have to be developed and new agreements would have to be negotiated with the 100-plus agencies that are currently served by Hamilton County.

On the other hand, the unique operating protocols in use by Cincinnati emergency operations personnel would suggest that the issue of governance, as distinct from management, of a consolidated center might merit separate attention. For example, one alternative might be to arrange a governance structure in an agency that is operated separately from either the County

or City government, such as a general services agency. Such an alternative could afford both agencies (as well as other jurisdictions currently using the County center) with the opportunity to participate in setting center policy and in overseeing center operations.

In any merger or consolidation, whether within the City or between the City and the County, major attention must be given to the ways and means of assuring **quality of service** to those emergency personnel in the field (and through them to the public that is being served). Quality protocols, performance measures and communication processes designed to require and assure the responsiveness of center operating personnel to the needs of emergency personnel must be at the top of the list for attention in any consolidation.

### Cost Analysis

A full cost analysis to integrate the operations of the two existing centers would require a thorough analysis of the staffing patterns required to operate an integrated center, an understanding of the facilities to be used (and whether alternative facilities would be required), an estimate of the cost of integrating operating protocols such as developing automated linkage between the center's computer automated dispatch system and the police agency's records management system (RMS) or extension of the Telephone Crime Reporting Unit technique. Without a doubt, implementation of an integrated center would offer both the occasion and the unique opportunity to implement upgrades to current operations.

Cincinnati currently has an estimated cost of \$ 10,000,000 for operation of its own E-911 Center, not including the capital cost of facilities and equipment. Hamilton County charges its customers a fee of \$14.55 per dispatch. In 2008, Cincinnati recorded a total of 520,740 dispatches of all types (Information supplied by Cincinnati Police Department and Cincinnati Fire Department). Based on this volume of dispatches, Cincinnati's cost for using the Hamilton County E-911 Center in 2008 would have been \$7,576,767; a difference of almost \$2.2 million. While this estimating technique cannot be considered determinative, it is surely the case that the savings from full County-City integration is likely to be between \$1 and \$2 million dollars per year above the internal City consolidation.

### Call Handling Qualifications and Protocols

Hamilton County call takers do not have a protocol for triaging police 911 calls for non-emergencies that can be transferred to a TCRU. The current operations policy for police 911 calls at the County center is that all incidents are transferred for dispatch to the appropriate police jurisdiction. Using a TCRU for non-emergency calls is a recommended best practice for large police agencies because it frees up field units to handle the types of calls that require police training and the application of police powers. A TCRU acts as a force multiplier for large police agencies. Given Cincinnati's recent need to reduce sworn police strength, it is not unlikely that an even more aggressive application of TCRU protocols would be developed.

Accordingly, serious consideration might be given by Hamilton County's E-911 Center to implement a call handling protocol for transfer of appropriate non-emergency calls to a TCRU, although this would involve significant changes for other participating jurisdictions. This would also entail additional training for center staff. More importantly, it would likely mean that the average call handling duration would be longer than the County's current experience of 70 to 75 seconds. In 2008, Cincinnati transferred 6,310 calls to its TCRU. A longer call handling duration could result in a need to increase staffing levels or potentially increase the call abandonment rate.

Hamilton County's call handlers are trained to provide emergency medical dispatch. However, they are not required to be EMT-certified. Cincinnati Fire Department's E-911 staff is both EMD and EMT certified. A determination would have to be made whether or not to continue the premium service quality standard of EMT certification. If so determined, the merged center would have to establish a cost-effective methodology for implementing that service quality standard. If not, there would be no service level discrepancy between Cincinnati and the current Hamilton County training and handling of EMS calls for service.

A potential complication is that Cincinnati has an EMD protocol developed by its medical advisor. This allows dispatchers to determine whether the emergency requires advance or basic life support and to provide pre-arrival instructions. Hamilton County's EMD protocol is only to provide pre-arrival instructions. Developing consensus among all EMS agencies regarding a single EMD protocol could prove time consuming or even elusive. This matter is but one example of the many opportunities for improving the quality of service to all Hamilton County residents that could come from integrating the two centers.

#### Facility Considerations

Cincinnati operates from a facility that is approximately two years old. Hamilton County's facility is older and has no space available for additional staff. Cincinnati's facility also houses the county-wide emergency operations center and the County's Emergency Management Agency staff. Cincinnati's facility appears to have the space available to house the County's E-911 Center staff. It is likely that additional land would be needed at the Cincinnati facility for employee parking. Cincinnati and Hamilton County have a current agreement regarding the use of the Cincinnati facility as an emergency operations center and for redundancy/backup for emergency communications in the County. Cincinnati's facility is reported to be equipped sufficiently with utility capacity to absorb the County's operation.

#### Hardware and Software

To relocate the Hamilton County operation to the Cincinnati facility, it would be necessary to make a one-time capital investment in hardware/equipment for new work stations. Cincinnati and Hamilton County have similar CAD systems but different versions. Placing all systems on the same version would be necessary. However, merger of the two operations would entail a reprogramming of the CAD software codes (an additional one-time labor cost), and might require a software upgrade for the two centers to be exactly compatible.

Cincinnati and Hamilton County are both considering upgrading telephone technology to internet protocol capability. Each is working with a different vendor on the project. It is possible that merging the two centers would lead to a reduction in capital cost for upgraded technology if one of the centers were positioned as a backup center rather than a primary public safety answering point (PSAP).

#### Human Resource Issues

There are several significant human resources differences between Cincinnati's center and Hamilton County's center. Cincinnati's staff is represented by two labor organizations: American Federation of State, County and Municipal Employees (AFSCME) and CODE (a supervisory group). Hamilton County's dispatchers are members of the Fraternal Order of Police (FOP) but other personnel are not represented by a labor organization.

Salary ranges are different, with Cincinnati's pay range being higher than Hamilton County's. Cincinnati's employees belong to the Cincinnati Retirement System while Hamilton County's employees are members of the Ohio Public Employee Retirement System. Most Cincinnati

Police E-911 staff work a twelve-hour shift with a few positions working an eight-hour shift. Hamilton County and Cincinnati Fire Department E-911 staff each works an eight-hour shift, but shift times are different. Cincinnati Police Department E-911 staffing includes positions that are only trained for call taking, not dispatch. Hamilton County and Cincinnati Fire Department E-911 staff is trained for handling transferred calls and dispatch.

While these human resources differences are important to note and plan for, they do not, on face value, seem to be irreconcilable obstacles.

#### Quality Assurance Routines

Each of the three organizational units has a well developed quality assurance routine that has been in place for many years. The routines are similar in methodology, although the substance of the review is different because of the differences in call handling protocols.

#### **Merger Implementation Time Line**

We have analyzed the steps involved in effecting a merger of the City and County operations and believe that it can be completed in one year. This assessment assumes that the City's internal merger of police and fire emergency communications is accomplished reasonably soon, since such a merger would make the subsequent consolidation with Hamilton County somewhat easier. Either way, one year is an expedited time line on the assumption that realizing operating savings as soon as possible is a high priority in the current economic environment. However, such a timeline assumes rapid decision-making and easy implementation, both of which are optimistic.

#### **Conclusion**

The potential economic advantage of merging Cincinnati's Police and Fire Department E-911 units into a single operating unit is substantial: it could produce savings of as much as \$1 million per year. Moreover, although there are many individual issues that would require resolution to implement an internal City merger, as well as significant staff work required, implementation of a merger within the City government should be possible in a matter of months, with a focused well-supported project.

Merging Cincinnati's and Hamilton County's E-911 centers into a single operating entity under the jurisdiction of Hamilton County would be more ambitious because of the potential impacts of such a consolidation, but would offer more significant results. The cost savings for the City-County merger are estimated in this analysis to be at least double the savings of a City-only merger, ranging upward to about \$3 million annually.

Moreover, the likelihood of significant upgrades in the quality of service is high and extremely attractive, as a result of the one-time facilities and equipment capital investment and in conjunction with the fresh consideration of long-standing operating protocols serving emergency public safety personnel throughout the City and the County. Other jurisdictions have used 311 systems innovatively to relieve emergency calls for service (and attendant demand on 911 systems) and to implement a more sophisticated citizen relationship management (CRM) customer service system covering the full range of public services provided by local government. Although such systems are costly, the opportunity they hold for a major upgrade in the responsiveness of government and the quality of public services is substantial.

The conclusion of this review is that it is logical for the City of Cincinnati to proceed immediately to consolidate the separate elements of its E-911 Center. Such a step can be implemented without detracting from the potential of a further consolidation with Hamilton County. Indeed, both projects should be pursued at the same time. To maximize its effectiveness in merging its own operations, the City will need to execute well: assign responsibility for the consolidation, deploy the staff capacity to address the issues that are involved and prepare the actions required to actually implement its internal consolidation. These actions need to be executed against a specific implementation schedule.

While the City is proceeding with its own consolidation, the more detailed analysis of the county-city consolidation can proceed: analyzing demand for service, staffing needs, service levels, and both operating and capital cost requirements to fund and operate a consolidated center. While we know with near certainty that the cost savings to integrate the City and County centers will be substantial, this additional analysis is necessary to finalize the costs and benefits.

**Cincinnati Police Department E-911 Center  
 Estimated 2009 Personnel Cost**

<b>Position Title</b>	<b>Biweekly Range Midpoint</b>	<b>Annual Midpoint Salary</b>	<b>Number Authorized</b>	<b>Annual Amount*</b>	<b>Fringe Benefit Factor**</b>	<b>Total Annual Cost</b>
Captain	\$3,698.78	\$96,908	1	\$96,908	40.93%	\$136,572
Lieutenant	\$3,183.97	\$83,420	1	\$83,420	40.93%	\$117,564
Sergeant	\$2,738.06	\$71,737	3	\$215,211	40.93%	\$303,296
ESDS	\$2,149.26	\$56,309	13	\$732,017	37.4%	\$1,005,791
Operator/Dispatcher	\$1,907.60	\$49,979	52	\$2,598,908	37.4%	\$3,570,899
911 Operator	\$1,641.20	\$42,999	40	\$1,719,960	37.4%	\$2,363,225
Clerk Typist 3	\$1,417.20	\$37,131	2	\$74,262	37.4%	\$102,035
Clerk Typist 2	\$1,298.80	\$34,029	5	\$170,145	37.4%	\$233,779
Clerk Typist 1	\$1,157.60	\$30,329	1	\$30,329	37.4%	\$41,672
<b>Total</b>	NA	NA	118	\$5,721,160	NA	\$7,874,833

\*The annual amount is derived by multiplying the annual midpoint salary by the number authorized and then multiplying that product by the number of pay periods in a year – 26.2.

\*\*The fringe benefit factor was supplied by the Cincinnati Finance Department.



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**GOVERNMENT COOPERATION AND EFFICIENCY PROJECT**

**TAX ADMINISTRATION CONSOLIDATION**

**BUSINESS CASE ANALYSIS**

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September 2009



**MANAGEMENT PARTNERS**  
I N C O R P O R A T E D





# **MANAGEMENT PARTNERS**

I N C O R P O R A T E D

September 28, 2009

Government Cooperation and Efficiency Project  
Fundors Committee

More than two dozen Hamilton County jurisdictions maintain separate staff organizations to administer local earnings taxes. A report developed during Phase 1 of the Government Cooperation and Efficiency Project (GCEP) identified this service as that would produce cost savings from consolidating the function. As a result, GCEP asked Management Partners to conduct additional analysis of the potential savings that could result from the integration of service delivery, thereby reducing the cost of tax administration and the increasing the efficiency of local government.

Management Partners convened an informational meeting of Hamilton County jurisdictions that perform their local tax administration and developed a database regarding earnings tax administration characteristics for local governments interested in participating. Additionally, we conducted a survey of local companies (large and small) who collect and remit earnings taxes to determine cost/effort required for compliance with local income tax collection policies. Finally, we developed information about the two entities with capacity to provide tax administration service on a centralized basis, the Regional Income Tax Agency (RITA) and the City of Cincinnati. We gathered data about their operating parameters and administrative costs.

Our analysis confirms that significant savings can be realized by consolidating separate tax administration activities with either RITA or the City of Cincinnati. Both are more efficient in terms of the cost of collection and the rate of taxes collected.

Beyond this anticipated savings in the cost of tax administration was an important surprise in this analytical work: The United States Internal Revenue Service has a program to share federal tax return data with local tax administrators provided that the tax administration agency is large enough to meet the IRS criteria. Both RITA and the City of Cincinnati qualify, unlike any other Hamilton County taxing agency. Access to the federal data increases tax collection efficiency (the percent of revenue legally owed that is actually collected) because it is possible for the local tax collection agency to compare tax returns submitted to it with the federal tax return database. This technique results in a significant increase in collection efficiency, resulting in additional revenue at a lower cost of collection.

The City of Cincinnati's administrative cost is less than 1% of collections, while RITA's administrative cost varies between 1.5% and 4%. This suggests that an alliance with the City, should it be available would be a first choice for a Hamilton County taxing agency.

In summary, it is highly likely that *every government that is not part of a tax administration enterprise serving over 300,000 people would save money and collect more revenue by consolidating with an integrated service provider.*

Sincerely,

A handwritten signature in black ink, appearing to read "Gerald E. Newfarmer". The signature is fluid and cursive, with a long horizontal stroke at the end.

Gerald E. Newfarmer  
President and CEO

## Background

The Phase 1 GCEP project report issued in December 2007 contained detailed background information about tax administration within Hamilton County. While there have been some changes in administrative practices by individual jurisdictions (for example, additional jurisdictions have contracted with RITA for services since the Phase 1 report was completed), the basic information in that report remains valid and served as the starting point for this analysis.

Within Hamilton County there are 35 jurisdictions that have the ability to levy and collect income taxes, not including the City of Cincinnati. In addition, there are 12 townships within Hamilton County that not permitted to administer any form of income tax according to the Ohio Revised Code (ORC). Management Partners contacted each jurisdiction as well as the Regional Income Tax Agency (RITA) to obtain information about tax administration services and related budget information.

Of the 35 jurisdictions mentioned above, 28 administer and collect their own income taxes (in addition to the City of Cincinnati). Four villages utilize RITA for tax administration services. Three villages do not collect any form of income tax. Although not all jurisdictions responded to our request for specific budget information, we did receive information from 28 of the 35 applicable jurisdictions.

The amounts budgeted for personnel and non-personnel spending among the responding jurisdictions vary greatly. These differences are often based on the amount of revenue collected by the jurisdiction as well as the number of staff employed to perform these duties. Ten jurisdictions supplied revenue information. Those jurisdictions employed an average of two full-time employees to perform tax administration duties. Those employees are compensated at an average of \$62,700 per year.

The cost of personnel spending to administer tax collection is best analyzed as a percentage of the total collected revenues. Of the jurisdictions reporting data, the range is from 1% to 6%. The Village of Fairfax has one full-time staff member who performs tax administration services and the budgeted annual personnel spending for the village is \$30,000. Fairfax spends only 1% of their total collected revenues on personnel costs. The City of Madeira spends 6% of their total collected revenues on personnel costs. Madeira employs two full-time staff members and budgets \$125,100 for annual personnel spending.

In July of 2008, the City of Cincinnati, in partnership with Springdale, Middletown, Montgomery, Mt. Healthy, Springfield Township, Colerain Township and Amberley Village, submitted a grant application to the State of Ohio to fund a study to assess the feasibility of consolidating earnings tax administration and collection. The funding request was not approved by the State of Ohio because of limited available funds. Subsequently, the GCEP Steering Committee allocated funds to develop a business case for local funding of the feasibility study. This report sets forth the business case considerations for the feasibility study.

## Current Feasibility Study Environment

The feasibility study proposal submitted to the State of Ohio is largely still appropriate today. The study would analyze three models for shared earnings tax administration and collection:

- Contract services from the City of Cincinnati Income Tax Bureau;
- Contract services with an existing state-wide non-profit regional income tax collection agency (RITA); and
- Development of a new, local regional non-profit income tax collection agency.

The objectives of service sharing also remain the same:

- Increase earnings tax collections without increasing tax rates;
- Reduce the cost of collection, freeing up marginal revenue for direct services; and
- Make compliance easier for filers through increased uniformity.

Management Partners prepared a survey instrument designed to provide a more detailed profile of the income tax collection services operated by local governments in the county. Working with the Center for Local Government (CLG), the survey instrument was sent to each of the original jurisdictions that had partnered with Cincinnati in the grant application to the State of Ohio. In addition, the survey was also sent to each member of the CLG. The survey was returned by the following jurisdictions:

- Cincinnati
- Fairfax
- Lockland
- Middletown
- Montgomery
- North College Hill
- Amberley Village

In addition to surveying government jurisdictions, a survey of businesses that collect and remit taxes was conducted under the auspices of the Chamber of Commerce, through the assistance of the Cincinnati Business Committee. The Chamber agreed to include six questions on the earnings tax in its monthly survey of its members. The Chamber's survey was sent to 68 chief executive officers. It included a cross-section of small companies (1 to 49 employees), middle market companies (50 to 499 employees) and some corporate partners (over 500 employees).

Management Partners' project staff also met with an agent of RITA to obtain additional background information about the agency and the services it provides. RITA's mission is to provide income tax administration and collection services to its member agencies. As of June 2009, RITA had 160 members including five Hamilton County jurisdictions: Addyston, Arlington Heights, Lockland, Newtown, Milford and Silverton. Most of RITA's members are of similar size to its current Hamilton County customers. RITA is engaged in an effort to market its services to other Hamilton County jurisdictions including the City of Loveland, which has recently acted to take advantage of RITA's services.

Management Partners also met with Silverton staff to discuss their level of satisfaction with RITA. Silverton staff expressed high satisfaction and has seen its cost of administration and

collection decrease. Since Silverton has been a member for less than a year, the staff could not tell if collections had increased.

Management Partners also met with Cincinnati's Income Tax Commissioner and a representative of the Cincinnati City Solicitor's office. The purpose of that meeting was to learn about Cincinnati's methods and capacity for collecting income tax. The reason the representative of the Solicitor's office attended the meeting is that the City of Dayton, Ohio, has asked Cincinnati about developing a relationship and agreement for partnering with Cincinnati for income tax collection and administration. Cincinnati's City Solicitor is currently conducting a legal review of the forms that such a partnership could take. During the course of the meeting Cincinnati's Income Tax Commissioner stated that the issue of partnering with other governments to collect and administer income taxes had been discussed internally and that the City administration was eager to discuss and develop such partnerships.

### Potential for Reducing the Cost of Collection

Information submitted by the seven jurisdictions responding to the survey indicates that there is significant potential for reducing the cost of collections using the model of contracting for services with Cincinnati or RITA. Cincinnati's nominal cost of collection was reported at 0.83% of tax revenue collected (\$0.83 for every \$100 of tax collected), while RITA's cost of service ranges from a cost of 1.86% of revenue collected in Lockland (in 2006) to about 3.5% quoted for the City of Silverton. Each of the other six jurisdictions responding to the survey reported their cost of collections between 2.57% and 5.52%.

The table below illustrates the potential cost savings if the six jurisdictions in our current review were to contract with the City of Cincinnati to provide income tax administration and collection. The base assumption is that Cincinnati's cost was 1% of collections. The aggregate cost savings for just these six jurisdictions would be over \$800,000 a year.

**TABLE 1: POTENTIAL COST OF COLLECTION DECREASE**

	<b>2008 Collections</b>	<b>2008 Collections Budget</b>	<b>Budget as a Percent of Collections</b>	<b>1% of Collections</b>	<b>Potential Cost Savings</b>
Fairfax	\$2,342,198	\$99,000	4.23%	\$23,421	\$75,579
Lockland	\$2,195,529	\$64,840	2.96%	\$21,955	\$42,885
Middletown	\$20,300,000	\$522,000	2.57%	\$203,000	\$319,000
Montgomery	\$7,485,418	\$221,336	2.96%	\$74,854	\$146,482
North College Hill	\$2,559,466	\$141,250	5.52%	\$25,594	\$115,656
Amberley Village	\$2,366,842	\$156,561	3.66%	\$23,668	\$132,893
<b>Total</b>	<b>\$37,249,453</b>	<b>\$1,205,037</b>	<b>3.24%</b>	<b>\$372,249</b>	<b>\$832,788</b>

In summary, two of the three models we examined would likely lead to a reduction in the cost of collections. Since RITA is currently available to Hamilton County jurisdictions and since our preliminary work with the City of Cincinnati has confirmed its interest in also serving other local governments in the area, the existence of two viable options makes it clear that there is no advantage in developing a new Hamilton County tax administration agency as a third option. Therefore, that alternative was dropped.

## **Potential for Increased Collections**

An important element to consider regarding the potential for increased collections is the availability of what is known as the Internal Revenue Service (IRS) match. This is a service that the IRS makes available to local agencies that serve a population of more than 300,000. Cincinnati is the only jurisdiction locally that meets the threshold requirements for participating in the IRS match program.

The basic methodology of the program is that the local jurisdiction can access IRS data to compare information about who has filed a return with the IRS and what income/profits were reported on the IRS return. This means that Cincinnati can determine if there are persons/businesses that filed a federal return but failed to file a local return. They can also determine if the amounts reported on the local return are different than amounts reported on the federal return. Anecdotal information from jurisdictions that use the IRS match program indicates they experienced a 3% to 5% *increase* in collections after gaining access to the program. For the six jurisdictions that submitted survey returns, the potential increase in collections would range from \$1,117,000 to \$1,862,000.

Cincinnati already has access to the IRS match program. RITA just gained access to the IRS match program in early 2009. None of the other Hamilton County jurisdictions that maintain a separate tax administration function would have access to the IRS match program without partnering with Cincinnati or RITA. Access to the IRS match program is the reason why Dayton approached Cincinnati to explore a partnership arrangement for income tax administration and collection.

## **Potential for Reducing Compliance Effort**

Customer service can be viewed in the context of how the income tax is currently collected and who pays. Local income taxes are paid by individuals and businesses.

Individuals have their income tax directly withheld from their paycheck at the rate the income tax is levied by the jurisdiction where they are employed. Typically, the tax rate is applied to the gross salary of the taxpayer. If the jurisdiction where the taxpayer resides also has an income tax and the tax rate there is higher than the tax rate where s/he works, the taxpayer is obliged to file another return. The taxpayer then pays the difference. (In some rare cases, jurisdictions require residents to pay the entire amount to them with no deduction for the amount paid to the community where the resident works.)

Business income taxes are typically due at the same rate as individual taxpayers and are levied on the net profits of the business. If a business has multiple locations, the business must be able to calculate the amount of tax due to each of the jurisdictions where it has a location.

### **Individual Income Tax Collection**

Collection of income taxes from employees is efficient because due to payroll withholding. Typically, the employee does not have to take any action. With the advent of payroll servicing companies, many businesses have their payroll managed by a servicing agent. Payroll servicing companies have developed an efficient system for determining the jurisdiction to which income tax amounts withheld should be delivered. In many cases, especially if the individual

lives and works in the same jurisdiction, the individual does not have to file a return. As noted above, individuals may have to file a return in the community in which they reside, but since a person can only “reside” in one place, only one return is required.

There is little opportunity to significantly reduce customer effort for individual filers to comply with income tax return requirements: it is already simple due to withholding. None of the alternative models would make it possible to avoid filing a return when the rate where an individual resides is higher than the rate where an individual works.

We note that with the RITA model, mandatory filing is required. That means that even if the local income tax has been withheld from an individual’s paycheck and no additional amount is due to the jurisdiction in which the individual resides, the individual must still file a return with the jurisdiction. Mandatory filing is required even if the individual works and lives in the same jurisdiction. Although the filing process is not complex nor is it extremely time consuming, this practice would impose a requirement that is not currently an element of the local income tax system. We also note that some Hamilton County jurisdictions already have a mandatory filing requirement for their residents, although the practice is not widespread.

In summary, the model of contracting for shared services with Cincinnati would have little impact on the effort required to comply with filing requirements for individuals. The RITA model could require more effort to achieve compliance.

### **Business Income Tax Collections**

Since businesses located in multiple jurisdictions must calculate net profits and file with each of the jurisdictions in which the business is located, there is a significant opportunity for reducing the compliance effort. With 29 jurisdictions in Hamilton County that levy a local income tax, theoretically, some companies could have to file 29 net business profit returns.

In this regard, the results of the local business survey are instructive. One of the 25 companies responding to the Chamber of Commerce survey reported filing returns in between 26 and 29 communities in Hamilton County. Over 31% of companies responding reported needing over 100 labor hours to comply with filing requirements. Nearly 9% indicated needing more than 2,000 labor hours. Ten percent of the companies responding indicated spending between \$10,000 and \$20,000 a year to comply with reporting requirements, while another 10% reported spending more than \$20,000 a year for compliance.

On the positive side, 72% of responding businesses rated compliance with local income tax requirements as easy or very easy. The same number (72%) also rated “making compliance easier” as important or very important. Nearly 78% of companies responding felt that ease of compliance with local income tax filing was the same in Hamilton County as other Ohio counties.

Each of the alternative models for consolidating tax administration offers the potential to reduce the effort required to comply with local income tax requirements. The biggest potential lies in reducing the number of different jurisdictions in which a company must file. There is also an opportunity for greater uniformity in reporting format.

In summary, implementing shared services for local income collection and administration offers an opportunity to reduce compliance efforts for net business profits reporting. Little positive impact on compliance effort would be expected for individual returns.

## **Appetite for Shared Services**

It is interesting to note that of the 29 jurisdictions in Hamilton County that levy an earnings tax, only six responded to the survey distributed by the Center for Local Government about this project. (One of the responders, Middletown, is in Butler County). In addition, when the application for this study was filed with the State of Ohio last year, the income tax shared services study had the fewest number of jurisdictions that expressed an interest in participating. This suggests that there is an aversion by local leaders to relinquishing responsibility for local income tax administration.

Conversely, the preliminary analysis indicates that it does not take a large number of communities participating in such a partnership to realize aggregate monetary benefits to taxpayers in the multi-million dollar range.

As with any initiative to move to a shared or consolidated service model, the burden of proof is on the side of those advocating for change. A key factor is quality of service. If an agency hands off the service to an outside provider, will it be done as well? Better? How do we know, and how can we measure the result? What remedy do we have if we make the change and then find the service isn't measuring up? These, among others, are the questions that must be answered to convince risk-averse, wary local leaders that a change is the right thing to do.

The most potent argument for consolidating tax administration is not widely known by local officials who currently support separate tax administration functions: the potential for increased collections that could result from gaining access to the IRS match program. This access will only become available for most of the smaller governments through a partnership with Cincinnati or by becoming a member of RITA.

## **Summary and Conclusion**

The business case study indicates that the potential to reduce the cost of collection is very great through consolidation of the function with either RITA or the City of Cincinnati. The RITA model has reduced the cost of collection for its current Hamilton County clients, but may not reduce costs for every Hamilton County jurisdiction. Currently, there is no way for a jurisdiction to contract with the City of Cincinnati, so that alternative is not available.

Importantly, the business case study reveals that either of these two alternatives would result in a significant improvement in collection efficiency through access to the IRS match program. This is an important new learning not identified in the Phase 1 GCEP Report of December 2007. It is particularly important because the most common reason cited by local leaders for maintaining separate tax administration staff capacity in their own local governments was that they were able to pay closer attention and know their taxpayers better than an outside agency, thus resulting in more efficient tax administration and therefore in higher revenue collection. A key finding of this analysis is that the increased efficiency available through the IRS match program will more than offset the modest local gains that were historically available.

The importance of this conclusion is that *it is highly likely that many jurisdictions would save money and all would collect more revenue by consolidating tax administration with an integrated*

*service provider*. The challenge now is to communicate this to Hamilton County governments and to analyze the specific outcomes for each individual tax collecting agency.

GCEP can help local governments take advantage of this opportunity in two important ways. The first is to help the City of Cincinnati arrange to provide tax administration services for other jurisdictions in a near-term time frame. Terms and procedures would need to be decided and documented, and processes established to assure that the jurisdiction served would both receive the information it requires and have assurance about the quality of the work performed. No doubt there are legal issues that would need to be identified and addressed for such a program to be established. Secondly, GCEP could assist jurisdictions that want to seriously consider contracting with either the City or RITA by analyzing the costs and benefits of changing to such an arrangement.

GCEP can support both dimensions of implementing this expenditure-saving initiative. Although the City of Cincinnati and each interested jurisdiction could complete this work using in-house staff, if it is to be completed in timely fashion, the external capacity that GCEP could provide is essential since all current staff have full-time work. Using GCEP capacity to support this change would have the value of planning a project with key steps to execute and a project schedule to follow, that would assure that a quality effort will be completed within a defined time frame.