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November 7, 2011

**Consolidated
Dispatch
Center
Feasibility
Study**



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This report was researched and prepared by the staff of the Center for Public Management of the Maxine Goodman Levin College of Urban Affairs at Cleveland State University. Project management and oversight was provided by Daila Shimek. The principal author was Daila Shimek. Eugene Kramer, Attorney at Law; Patrick Johnson; Scott Winograd; Kimberly Renee Vining; Thomas Cozzens and Kevin E. O'Brien were contributing authors. Editorial and methodological support was provided by Claudette Robey. For questions or information concerning this report, please contact Daila Shimek, Project Manager at the Center for Public Management at 216-687-9221.

ABSTRACT: *This report provides an assessment of the feasibility of consolidation of public safety dispatch for three scenarios or combinations of entities in Ashland County, Ohio and Wayne County, Ohio, including the cities of Ashland and Wooster. The report describes the methodology used to assess the feasibility and provides an overview of four case studies of consolidated dispatch centers in Ohio. The findings are that consolidation of dispatch services among the potential participating communities is feasible, with a specific qualification. Feasibility will be, at least, somewhat contingent upon buy-in and payment from communities or entities that (1) have not historically paid for dispatch services, and/or (2) did not actively participate in the study. These entities will be expected to collectively contribute substantial funding relative to the overall cost of a combined dispatch center. If the costs allocated to these entities are distributed only among the three study participants (the cities of Ashland and Wooster, and Wayne County), the change in costs may be significant enough that consolidation is no longer feasible from a financial standpoint. Consolidation of services would reduce capital costs by evenly distributing the cost for large, costly capital items from year-to-year and over a larger base of beneficiaries. Given the proposed investment equipment and staff, the level and quality of service provided by a consolidated dispatch center should exceed those currently being supplied.*

Key Words: *9-1-1, 9-1-1 communications, dispatch, consolidation, emergency dispatch, merger, public safety, public safety answering point, PSAP, regionalization, shared services*

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ACKNOWLEDGMENTS

The Center for Public Management (PM) would like to acknowledge the contribution of the following public safety professionals, who provided information on behalf of his or her respective organization:

James Brosius, Chief, Chagrin Falls Police Department
Robert Buhecker, Assistant Director, Regional Emergency Dispatch Center
Mark Busto, Executive Director, Regional Emergency Dispatch Center
Mory Fuhrmann, Communications Shift Lieutenant, Metropolitan Emergency Communications Consortium
Michael Grossman, Fire Assistant Chief for Mifflin Township and Communications Bureau Director for the Metropolitan Emergency Communications Consortium
Lisa Mariola, Network Administrator, Chagrin Falls Police Department
Nick Pishnery, Supervisor, Westshore Central Dispatch Center

The PM would also like to express its appreciation to the Ashland (city), Wooster and Wayne County (AWWC) dispatch consolidation working group who provided data and guidance throughout the project:

Rick Anderson, Fire Chief, City of Ashland
Robert Breneman, Mayor, City of Wooster
Robert Eyer, Fire Chief, City of Wooster
Matthew Fisher, Police Chief, City of Wooster
Robert Fowler, Director of Administration, City of Wooster
Steven Glick, Retired Chief of Police, City of Wooster
Charles Hardman, Administrative Captain, Wayne County Sheriff's Office
Patrick Herron, Administrator, Wayne County
David Marcelli, Chief of Police, City of Ashland
Glen Stewart, Mayor, City of Ashland
Scott Wiggam, Commissioner, Wayne County
John Wise, Director, Wayne County Emergency Management Agency

The PM would also like to express its appreciation to the Ashland County Sheriff's Office and the city of Orrville and Rittman dispatch centers for providing data that would enable the analysis for various elements of this report.

EXECUTIVE SUMMARY

This study found that it is feasible to consolidated public safety dispatch functions for each of the scenarios requested by the city of Wooster (Ohio), Wayne County (Ohio), and the city of Ashland (Ohio). The study estimates a collective \$331,319 (34%) savings in annual costs to provide dispatch services for the city of Wooster, Wayne County (and the entities for which it dispatches), and the city of Ashland. Further, cost savings increased as the number of participants increased.

For the purposes of this study, the study participants defined feasibility as legally implementable, financially viable (at less than or equal to existing costs), and providing service that is equal to or better than current levels. The group also emphasized the importance of having a democratic consolidated arrangement that would provide all entities a voice and a vote in the decision making. In addition to these criteria, the Center for Public Management (PM) added a fifth criterion, technologically feasible (can the participating entities and a consolidated dispatch center communicate with each other?).

The Ashland (city), Wooster, Wayne County (AWWC) dispatch consolidation working group (working group) requested feasibility be assessed for each of three scenarios, based on the entities that might be included in a consolidated center:

- Scenario 1 includes Ashland (city), Wooster, Wayne County (and the entities for which it dispatches).
- Scenario 2 includes Ashland (city), Wooster, Wayne County (and the entities for which it dispatches), Rittman (and the communities for which it dispatches), and Orrville (and the entities for which it dispatches).
- Scenario 3 includes Ashland (city), Wooster, Wayne County (and the entities for which it dispatches), Rittman (and the communities for which it dispatches), Orrville (and the entities for which it dispatches), and the communities or agencies dispatched by the Ashland County Sheriff's dispatch center

For all three scenarios, based on a review of specific federal laws, state statutes, and municipal ordinances, an assessment of communications and preliminary decisions made by the AWWC working group (see *Assessment of Staffing and Costs*), the following are the outcomes of the study:

- ✓ *Legally feasible* – Current Ohio law authorizes counties, cities, and villages individually to provide for public safety dispatch services and also to provide in a variety of ways to engage in collective action to provide that service for the

- protection of the public safety.
- ✓ *Democratic process and organization* – There are mechanisms that can be put in place to ensure a democratic process and structure for oversight of dispatch center operations.
 - ✓ *Technologically feasible* – Technology is available to enable participants to communicate with a centralized dispatch center.
 - ✓ *Equal to or better quality of service* – Estimated operating costs for a consolidated center factor in training (both staff time and costs for the training itself) from professional trade groups. Using standardized professionally-developed training programs and materials should contribute to improved quality of service.

The financial aspect of feasibility is discussed for each of the scenarios separately. As part of the financial feasibility, it is important to understand that feasibility will be, at least, somewhat contingent upon buy-in and payment from communities or entities that (1) have not historically paid for dispatch services, and/or (2) did not actively participate in the study. These entities will be expected to collectively contribute significant funding relative to the overall cost of a combined dispatch center. If these costs are distributed only among the three study participants, the change in costs may be significant enough to make the consolidated dispatch center not feasible from a financial standpoint. For example, in Scenario 1, these entities¹ will collectively pay an estimated \$190,818 and in Scenario 2, they² will pay an estimated \$539,134. In Scenario 3, nonstudy participants³ will pay an estimated \$724,061. Ashland County differs from the other nonstudy participants in Scenario 3, in that it currently pays a portion of the costs for its dispatch center.

Based on an analysis of current and estimated costs, preliminary decisions (including cost allocation formula) made by the AWWC working group, and the assumption that all entities listed in the various scenarios are willing to participate and pay, the following provides the financial assessment:

¹ Apple Creek Village, Canaan Township Fire 1 and 2, Central Fire Department, Clinton Township Fire, Creston Village, Marshallville Village, Medway, Mount Eaton Village, New Pittsburg Fire, Shreve Village, Smithville Village, South Central Fire, Town & Country Fire, West Salem Village, and Wooster Township Fire have not historically paid for dispatch services and did not actively participate in the study.

² Entities noted in footnote 1, plus Chippewa Township Fire, Dalton Village, Doylestown Village, Kidron Fire, Orrville City, Paint Township Fire, Rittman City, and Sterling Fire, which have not historically paid for dispatch services and did not actively participate in the study.

³ Entities noted in footnote 2 (which have not historically paid for dispatch services and did not actively participate in the study) and Ashland County (did not actively participate in the study).

Scenario 1

- ✓ The city of Ashland would save an estimated \$122,581 in dispatch costs per year – a 29% reduction from 2010 costs.
- ✓ Wayne County would save an estimated \$201,562 in dispatch costs per year – a 36% reduction from 2010 costs.
- ✓ The city of Wooster would save an estimated \$203,662 in dispatch costs per year – a 36% reduction from 2010 costs.

Scenario 2

- ✓ The city of Ashland would save an estimated \$190,872 in dispatch costs per year – a 45% reduction from 2010 costs.
- ✓ Wayne County would save an estimated \$236,999 in dispatch costs per year – a 42% reduction from 2010 costs.
- ✓ The city of Wooster would save an estimated \$283,742 in dispatch costs per year – a 50% reduction from 2010 costs.

Overall costs savings cannot be determined for this scenario, since no cost information was provided for the Orrville and Rittman dispatch centers.

Scenario 3

- ✓ The city of Ashland would save an estimated \$214,566 in dispatch costs per year – a 50% reduction from 2010 costs.
- ✓ Ashland County would save an estimated \$237,689 in dispatch costs per year – a 56% reduction from 2010 costs.
- ✓ Wayne County would save an estimated \$283,216 in dispatch costs per year – a 51% reduction from 2010 costs.
- ✓ The city of Wooster would save an estimated \$313,056 in dispatch costs per year – a 55% reduction from 2010 costs.

Overall costs savings cannot be determined for this scenario, since no cost information was provided for the Orrville and Rittman dispatch centers.

There is another financial consideration that is not captured in the cost estimates and savings indicated above. Ashland and Wayne County have had wireless 9-1-1 revenues available to subsidize dispatch costs. This subsidy results in an understatement of the 2010 actual costs, so savings should actually be greater. If these funds continue to be available, all or a portion of this revenue could be applied toward the overall costs of the

dispatch center, therefore lessening the required contribution of participating communities.

INTRODUCTION

Wayne County and the cities of Ashland and Wooster are located between Cleveland and Columbus, Ohio. The city of Ashland, incorporated in 1916, is the county seat of Ashland County and has a 2010 population of 20,362. The city of Ashland is 10.9 square miles. The city has its own police and fire departments; however, the Ashland County sheriff's communications center dispatches for these departments.

The city of Wooster, with a 2010 population of 26,119, is located in Wayne County. The city is 15.6 square miles. In addition to having its own police department, the city has the only all paid-career fire department in the county. Dispatch services are provided by Wayne County's communications center, located in the city of Wooster.

Wayne County, 555.36 square miles, encompasses the cities of Orrville, Rittman, and Wooster; the villages of Apple Creek, Burbank, Congress, Creston, Dalton, Doylestown, Fredericksburg, Marshallville, Mount Eaton, Shreve, Smithville, and West Salem; and 16 townships: Baughman, Canaan, Chester, Chippewa, Clinton, Congress, East Union, Franklin, Green, Milton, Paint, Plain, Salt Creek, Sugar Creek, Wayne, and Wooster. The county's 2010 population is 114,520 (U.S. Bureau of Census, 2010).

Wayne County's communications center, which functions as one of the three public safety answering points (PSAPs) in the county, dispatches for the county sheriff's office, the city of Wooster's police department, and the village police departments of Apple Creek, Creston, Marshallville, Mount Eaton, Shreve, Smithville, and West Salem. It also dispatches for the following fire and emergency medical services (EMS) departments: the city of Wooster, Paint Township, Apple Creek Village, South Central (Fredericksburg Village), Central (Smithville Village), Wooster Township, Shreve Village, Chester Township (New Pittsburg), Town and Country (West Salem Village), and Canaan Township. The communications center works closely with the Wayne County Emergency Management Agency, which is responsible for responding to disasters including floods, tornadoes, chemical spills, or incidents of terrorism.

There are two other PSAPs in the county. One is the city of Orrville, which provides services to Orrville fire and police departments, Dalton Village police and fire departments, Kidron Fire Department, and Marshallville Fire Department. The other is the city of Rittman, which provides services to the Chippewa Township Fire Department, Doylestown Police Department, Sterling Fire Department, and its own police department, fire department, and EMS.

The city of Wooster, in partnership with Wayne County and the city of Ashland, engaged the PM to assist them in assessing the feasibility of developing a consolidated public safety dispatch center. This report represents the culmination of a feasibility study that includes Ohio case studies, an assessment of legal authority for consolidated dispatch centers in Ohio, an assessment of level of service and cost effectiveness, an overview of labor management relations and human resource issues that may impact a consolidated dispatch center, and an assessment of and recommendations for communications equipment. It can be used as a guide for outlining a process for the evaluation of consolidation of public safety dispatch centers. The report also identifies consolidated centers that may serve as a resource for those looking to consolidate. It is not only useful for those looking to consolidate, but may also serve as a resource for an existing dispatch center in identifying best practices for operations or governance.

CONSIDERATIONS FOR ASSESSING FEASIBILITY

Assessing feasibility is a complex task. Participants must agree to a set of criteria that serve as the basis for feasibility assessment. Since there are a multitude of unknowns at the feasibility assessment phase, the participants must also agree to a set of assumptions. The assumptions in this study are outlined in the appendices of this report.

While this feasibility study attempted to capture the criteria that will be used by these entities in determining if they will move forward with a consolidated dispatch center, ultimately these entities must individually determine whether the expected benefits outweigh the costs or challenges. As these entities weigh their options, they need to think of consolidation as a marathon, rather than a sprint. In the short term, communities will likely spend a year or more establishing a structure and financial arrangement and standard operating procedures (Plante Moran, 2011); however, distributing the expenses of facilities, equipment and upgrades among a larger group can substantially reduce the costs of providing dispatch services in the long run. Further savings, though not as significant, can be achieved through the sharing of staff (Center for Public Management, 2009).

Another consideration in evaluating consolidation is that merged communication centers have been eligible for federal grants. This includes the National Telecommunications and Information Administration's Public Safety Interoperable Communications (PSIC) Grant Program and Office of Emergency Communications (OEC)'s SAFECOM Program. The case studies conducted by the Center for Public Management (2009 and 2011) provide several examples of grant received.

- The Chagrin Falls Ohio center received a \$250,000 technology grant from the federal Community Oriented Policing Services (COPs) program.
- In 2004, the city of Westlake Ohio was awarded a \$566,503 grant from the Department of Homeland Security (DHS) to purchase equipment for the center. In 2010, the consolidated center received an additional \$1 million Assistance to Fire Fighters grant from DHS to purchase radio mobile data terminals, and software upgrades.
- The Department of Homeland Security (DHS) Public Safety Interoperable Communications Program awarded Charleston County South Carolina \$150,000 to perform a study for Next Generation 9-1-1 upgrades. The center has also applied for grants from the Port Security Grant Program, which will (if awarded) help offset the center's technology costs and provide for strategic planning.

- In 2008, the Southeast Georgia Regional Radio Network received a \$7.1 million Public Safety Interoperable Communications Grant that the Liberty County Public Safety Communications used to purchase a new radio communications system to comply with the Federal Communications Commission's (FCC) 2011 narrow-banding mandate deadline.

Consolidation can enable participating entities to think strategically about equipment and other capital needs. Most 9-1-1 communications systems do not have the ability to handle text messaging. According to the FCC (2011), "a number of the public safety answering points (PSAPs) or 911 call centers that handle 911 calls still lack broadband connectivity to a service provider network, which is necessary to support the evolution to NG911. Providing this connectivity on a nationwide scale will require substantial funding." With the collective financial backing, members of a consolidated center can develop a comprehensive communications equipment strategy, rather than taking an approach that patches together old technology (that will require replacement in the short term). This type of long-term approach will enable the group to design a system that is expandable and upgradable, and one that can address issues like narrow banding,⁴ Next Generation 9-1-1,⁵ and general system upgrades – all of which can be cost prohibitive if a community chooses to "go it alone."

In addition to financial considerations, consolidation also has quality implications. It can improve interoperability by having a strategic approach to equipment purchases that emphasizes compatibility. Case study communities indicated that having dispatchers for multiple communities in the same room can result in a more efficient dispatch of public safety forces and equipment within or across community boundaries, especially in larger scale emergencies (Center for Public Management, 2011). If a consolidated center factors in adequate training, the quality of dispatching should increase. Certifications and accreditations may also help reduce risk or liability of the consolidated center because the center and its employees have undergone third party scrutiny or met specific professional standards including implementation of standardized training (Carter, 2011).

Consolidated centers may also reduce the number of times a call is directed or routed. With the advent of cell phones, some households have opted not to use land-based

⁴ "Narrowbanding is an effort to ensure more efficient use of the VHF and UHF spectrum by requiring all VHF and UHF Public Safety and Industrial/Business land mobile radio (LMR) systems to migrate to at least 12.5 kHz efficiency technology by January 1, 2013 (FCC, n.d.)."

⁵ Next Generation 9-1-1 is an initiative aimed at developing a communications infrastructure that supports internet protocol-based communication of emergency-related voice, text, data, photos, and video.

phones. This presents a challenge for dispatch centers. Unlike land lines in most communities, 9-1-1 calls from mobile phones are not linked to a specific address. Cell phone calls are routed to a specific PSAPs, based on the phone's approximate location. Once the caller's specific location is determined, the caller may be transferred to another dispatch center. If the dispatch centers are consolidated, the dispatcher can immediately send the appropriate public safety personnel, thus decreasing response time.

While there are many advantages to consolidating services, it is not without cost or challenge. As centers consolidate, some employees have lost dispatch jobs (Center for Public Management, 2009). Turning over a service may also result in a certain loss of control (in terms of ability to directly communicate with the employees providing the service or the ability to hire and fire employees) and less accountability to the agencies that are served. This can be even more prevalent if there is no mechanism in place for user feedback during and after the consolidation process. Among the challenges experienced by consolidated centers were training employees on new equipment, developing standard operating procedures for all participants, and developing a sense of teamwork among staff from different agencies (Center for Public Management, 2009). Finally, some consolidation opponents feel that as centers get larger, dispatchers are less familiar with the geography of the area. In the absence of a computer aided dispatch system, this can be problematic in that the dispatcher would need to rely on his or her knowledge of the area to determine the closest police officer or fire station to dispatch.

As each entity evaluates the outcomes in this report, it should place great emphasis on the long term costs of capital and the ability of the participating communities to share in this cost. Due to the nature of capital purchases, which vary considerably from one year to the next, this study was limited in its ability to compare existing capital costs to anticipated capital costs for a consolidated center.

If interested jurisdictions move toward a consolidation agreement, there will need to be a consensus on the type of consolidation arrangement they will undertake. Will it be a sharing of communications and computer aided dispatch equipment? Will the groups co-locate? Or, will there be an actual merger? There are a number of benefits to these options. The jurisdictions considering consolidation may also develop a governance structure, such as a council of governments (COG). If a COG is chosen, there are a variety of decisions the group must make including determining how dispatch center costs will be allocated among participants, where the center will be located, what the governing (e.g., representation on the policy board) and organizational structures will look like, what standard operating procedures will be used, and how the transition will affect employees of existing dispatch centers.

OHIO CASE STUDIES

The PM conducted case study research of four consolidated dispatch centers in the state of Ohio. These centers were selected (volunteers) from a group of subscribers to the Association of Public Safety Communications Officials International's (APCO) PSCoconnect's *eGroups* or selected by the dispatch consolidation working group. Participants were asked to share information on the organization's governing and operating structure, funding and fee structure, the organization's consolidation experience, and their perception of the organization's successes, challenges, and lessons learned. Information was obtained via phone interview and through written correspondence. The first part of this section describes the centers' overall characteristics. This is followed by detailed discussions of the centers. Case studies were conducted of the following consolidated dispatch centers (see Figure 1):

- Chagrin Valley Regional Communications Center, Chagrin Falls, Ohio
- Metropolitan Emergency Communications Center, Gahanna, Ohio
- Regional Emergency Dispatch Center, Massillon, Ohio
- Westshore Central Dispatch Center, Westlake, Ohio

The Chagrin Valley Regional Communications Center (CVRCC) and the Regional Emergency Dispatch (RED) Center dispatch for law enforcement, fire, and emergency medical services (EMS). The Metropolitan Emergency Communications Center and Westshore Central Dispatch Center dispatch (Westcom) dispatch for fire and EMS.



Figure 1: Case Study Participants

For details on the case studies, refer to the full report titled, *Consolidated Dispatch Center Feasibility Study: Ohio Case Studies*.

Characteristics of Consolidation

Of the four case studies, all centers consolidated voluntarily, but for a few different reasons. The RED Center, the MEC Center, and Westcom indicated their reasons for consolidating included saving money. The CVRCC is already consolidated but is changing its structure from that of a service contract model to a council of governments (COG) model. The head of the center anticipates a reduction in public safety answering points (PSAPs) at some point and wants to create an organization where participants have a stake, a vote, and a voice in how the organization is run, so participants are more likely to stay. The MEC Center consolidated as a way to improve the quality of service and reduce costs by sharing resources. Its participants anticipate reducing response times by providing the closest source of assistance, regardless of jurisdictional boundaries.

Governance and Operating Structures

Governance structures for these centers were similar. The MEC Center is governed by a consortium board. Three others are governed by a COG. Each of the dispatch centers has a policy board representational of its membership. CVRCC and the MEC Center both have some type of operating committee or operating board that is involved with day-to-day or operational issues. Table 1 provides an overview of the governance and operating structures for the case studies.

Table 1: Governance and Operating Structure

Dispatch/Communications Center	Governance Structure	Policy Board Members	Operating Committee/Board?
Chagrin Valley Regional Communications Center, Chagrin Falls, OH	Operated by the city of Chagrin Falls, but governed by COG	1 per entity. Mayor, Safety Director, Chairman of the Board of Trustees, or other official designated	Yes (called a technical advisory committee)
Metropolitan Emergency Communications Center, Gahanna, OH	Operated by Mifflin Township, but governed by consortium board	1 per entity. Fire chiefs on consortium board, deputy fire chiefs on operations board	Yes. 1 member per entity. Made up of deputy fire chiefs.
Regional Emergency Dispatch Center, Massillon, OH	COG, run by a board	1 per entity; only six of the members have voting privileges	No, COG board handles operational issues
Westshore Central Dispatch Center, Westlake, OH	Operated by the city of Westlake, but governed by a COG	1 per entity. Mayor of each community sits on the COG	No

Staffing

Size and composition of staff among these centers did not vary by much (see Table 2). The Regional Emergency Dispatch (RED) Center has the largest staff with 15 full-time and five part-time dispatchers. The smallest staff is the CVRCC with six full-time and two part-time dispatchers. None of the centers have administrative, information technology, or other nondispatch staff. The only unionized center was the MEC Center.

Table 2: Staffing

Dispatch/Communications Center	Number of Dispatchers
Chagrin Valley Regional Communications Center, Chagrin Falls, OH	6 FT; 2PT
Metropolitan Emergency Communications Center, Gahanna, OH	11 FT; 9 PT
Regional Emergency Dispatch Center, Massillon, OH	15 FT, 5 PT
Westshore Central Dispatch Center, Westlake, OH	6 FT; 9 PT

NOTE: FT means full time, PT means part time

Financial Information

These centers apportioned costs based on these factors: call volume, calls for service, population, or number of participants (see Table 3). All but CVRCC use more than one factor in distributing costs. Three of the centers (MEC Center, RED Center, and Westcom) use population to allocate at least some of the centers' costs. CVRCC, the MEC Center, and the RED Center use call data, in some form, as a basis for dispersing at least some of the costs.

Table 3: Financial Information

Dispatch/Communications Center	Current Funding Sources	Basis for Cost Allocation
Chagrin Valley Regional Communications Center, Chagrin Falls, OH	Grants, receipts from state 9-1-1 fees and member dues	Total emergency calls
Metropolitan Emergency Communications Center, Gahanna, OH	Participant fees	Operating costs allocated based on percent of runs dispatched. Computer aided dispatch (CAD) costs based on population
Regional Emergency Dispatch Center, Massillon, OH	Costs are shared by participants	Law enforcement share based on population. Fire/EMS based on previous year's calls for service.
Westshore Central Dispatch Center, Westlake, OH	Grants and member dues	50% of costs shared equally, the other 50% divided based on population

General and Demographic Information

Given the case study dispatch centers are relatively small, their overall demographics and composition vary (see Table 4). The age of the centers has a range of more than 40 years: CVRCC has been operating since 1963; Westcom since 2006. The RED Center serves the largest population (150,000), followed closely by Westcom at 147,602. CVRCC is significantly smaller at 17,139. Although the MEC Center is the largest in terms of square mileage (187), it serves the second smallest population at 53,124. All centers are described as having a suburban character, but CVRCC and the RED Center also have a rural element.

Table 4: General and Demographic Information

Dispatch/Communications Center	Operating Since	Population Served	Square Mileage	Character of Area	Entities involved
Chagrin Valley Regional Communications Center, Chagrin Falls, OH	1963	17,139	28.42	Suburban and rural	8 communities
Metropolitan Emergency Communications Center, Gahanna, OH	2004	53,124	105	Suburban	6 communities
Regional Emergency Dispatch Center, Massillon, OH	1985	150,000	187	Urban, suburban and rural	21 agencies
Westshore Central Dispatch Center, Westlake, OH	2006	147,602	68	Suburban	6 communities

As shown in

Figure 2, the annual calls for service range from 12,500 (Westcom) to 75,559 (RED Center). The MEC Center and CVRCC had 30,575 and 32,000 calls for service, respectively.

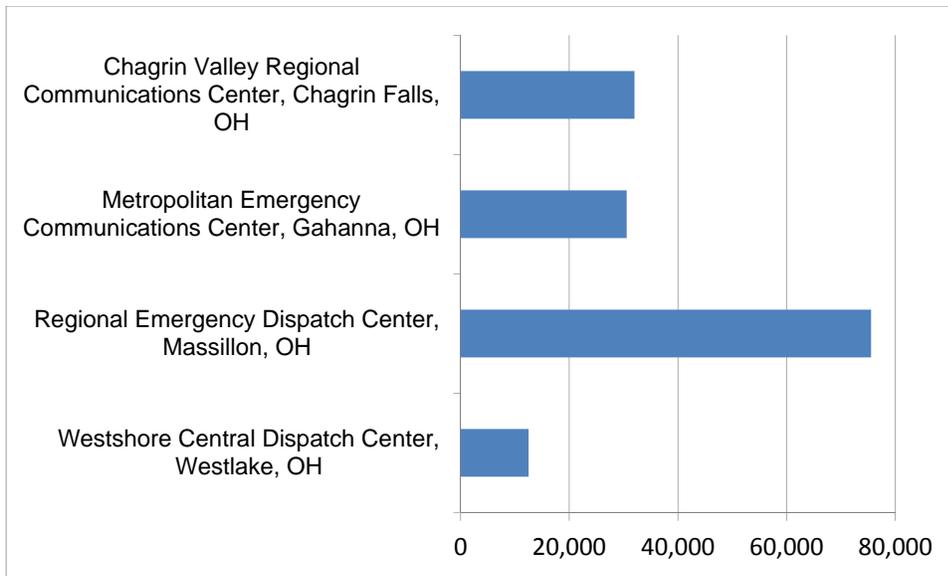


Figure 2: Calls for Service 2009

As a way to ensure taxpayer dollars are being spent as efficiently and effectively as possible, communities across the United States are exploring consolidations of

functions, including public safety dispatch. In doing this, communities seek not only to save money, but also to improve the quality or expand the types of services provided.

There are costs and benefits that need to be assessed in ensuring that consolidation is the appropriate move for communities considering such a move. For example, research conducted by the Center for Public Management (PM) reveals that a significant benefit of consolidated dispatch is improved service. In large-scale emergencies, having dispatchers for multiple communities in the same room can result in a more efficient dispatch of public safety forces and equipment within or across community boundaries. In addition, federal communications equipment requirements and standards can be cost prohibitive if a community chooses to “go it alone.” Sharing the costs of equipment and upgrades can substantially reduce the costs of providing dispatch services. Regional groups may also have greater access to federal and state funding for public safety communications equipment and other start-up costs, largely because equipment purchases will enhance interoperability among jurisdictions. Further savings, though not as significant, can be achieved through the sharing of staff.

While there are many advantages to consolidating services, it is not without cost or challenge. As some centers have consolidated, employees have lost jobs. Turning over a service also results in a certain loss of control, particularly if there is no mechanism in place for user feedback during and after the consolidation process. Many consolidated centers reported some “growing pains” as they worked through the challenges of training employees on new equipment, developing standard operating procedures for all participants, and developing a sense of teamwork among staff from different agencies.

Successes, Challenges, and Lessons Learned

Participants from the case study dispatch centers shared insights on a variety of topics on the planning phase (getting started), governance and structure, operations, and other thoughts. Some of these insights were also raised in a previous study conducted by the Center for Public Management (PM). These are in italics.

Getting Started

- *Search nationally to gain insights from others with experience in consolidation and use ideas from other agencies to improve the new consolidated center’s plan.*
- Focus on building relationships and collaborating. These are keys to success. *It is important to get stakeholders in the same room* and start cultivating relationships.

- Approach collaboration as a regional proposition rather than one that strictly affects an individual political jurisdiction or agency. Be willing to compromise. Consensus will require the group to accept what they can live with, rather than what they want.
- Set expectations of the consolidation process in the beginning so everyone is on the same page.
- *Involve the center director from the very beginning and make sure he or she has dispatch experience.*
- *Include dispatchers in the planning process* so they have a better understanding of the rationale behind decisions and will be more likely to accept the plan for consolidation.

Governance and Structure

- Develop a clear governance structure and chain of command. These are crucial to consolidation and serve to lessen confusion among employees.
- *Give end-users a voice and a vote in the organization's operation and planning.* This will lessen the risk of losing current subscribers to competitor dispatch centers and ensure continued buy-in of participating agencies.
- Develop a chain of command for participants to follow in terms of requests, questions, and concerns. This allows the center to develop standardized responses and protocols, rather than developing a variety of responses “on-the-fly” to similar situations.

Operations

- Have a center director whose focus is running the center.
- *Standardize policies and procedures in advance.* Having different procedures for each agency makes training new employees very difficult, and negatively affected the center's ability to provide dispatch services on their behalf.
- Ensure that an adequate number of dispatchers are in place prior to the opening of the center. It will save money by minimizing overtime.
- Designate a training officer who can focus on training.
- Provide as much *training for the dispatchers* as possible.
- Hire and train intelligent people, rather than focusing on hiring experienced dispatchers.

Other Thoughts

- Consolidate fire, police, and EMS. It is more efficient and cost effective than consolidating fire/EMS alone.
- Join an established multijurisdictional regionalized dispatch center; it is easier than starting from scratch. It is time consuming to research and purchase all new equipment, hire staff, find a location, and fully equip the center.
- Have another (such as a neighboring center) serve as a backup. This is a better alternative than maintaining equipment in another building that lies unused.
- Look for other opportunities to collaborate or share with other dispatch centers outside the consolidated center – a CAD system, for example.

LEGAL AUTHORITY FOR CONSOLIDATED DISPATCH CENTERS IN OHIO

Current Ohio law authorizes counties, cities, and villages individually to provide for public safety dispatch services and also to provide in a variety of ways to engage in collective action to provide that service for the protection of the public safety. Joining together, whether by means of a cooperative agreement between political subdivisions, or by the creation of a regional COG under which the cooperative action would take place, has the potential for more effective, efficient, and economical delivery of this service. The applicable constitutional and statutory provisions are sufficiently flexible so as to enable willing counties, cities, and villages to address their unique situations and needs. Further, the flexibility of these provisions, and provide for a governance structure that is equitable and for a fair system of cost-sharing.

Possible Impediments or Prohibitions

As indicated above, there are no significant impediments to cooperative action under current Ohio law by a group of political subdivisions. The impediments to cooperative action of this kind usually arise from the details of meeting the needs and desires of the individual participants when they differ or conflict with those of other participants. Resolving those possible conflicts and differing interests, providing for a governance structure that is capable of addressing the ongoing operation of the enterprise, and agreeing on funding sources and equitable service delivery can often be the most difficult obstacle to establishing a cooperative enterprise of this kind.

The fact that participating subdivisions must have, and will require, the ability to withdraw from the enterprise (under prescribed conditions and procedures), together with the fact that continuing financial contributions from the participating subdivisions are subject to the annual appropriation of money by the governing bodies of the respective subdivisions, requires that the enterprise be established in a manner that promises to meet the continuing needs of the participants and one that is able to meet changing conditions as they arise. Provisions for withdrawal must not be so onerous that they will be unacceptable to the participants, yet they must be sufficiently protective of the interests of the participants that will remain.

Counties and townships that operate under the statutory forms of government need to meet the requirements of the statutes that provide for the cooperative action. Cities and villages have authority under the home-rule provisions of Article XVIII of the Ohio Constitution, as well as statutory authority, to enter into cooperative agreements. A city or village that has adopted a charter for its governance must also have under that charter the authority to participate or not be prohibited from participating in the proposed enterprise. Charters can also contain procedural requirements that must be observed in authorizing participation in certain kinds of cooperative agreements. The charters of the cities of Wooster and Ashland do not appear to contain any provisions that would constitute obstacles to participation (by these respective cities) in a cooperative arrangement of the kind under consideration (e.g., a COG).

Since the Law Enforcement Automated Data System (LEADS) program that is established by Ohio law is open to participation by the individual subdivisions that would be participants in the proposed consolidated public safety dispatch center, they should, as a cooperating group, also be eligible to take advantage of that system.

Formation of a Council of Governments

A COG is not itself a unit of local government, but an entity (created pursuant to statutory authority) that has as its purpose enabling local units of government to cooperate in the exercise of governmental functions in accordance with a statutory framework. Creation of a COG does not add to, or expand, the governmental powers of the constituent entities, so it is necessary to look to the constitutional and statutory powers and authority of the participants to determine which activities the COG can engage in.

The Ohio Revised Code contains numerous provisions that authorize intergovernmental cooperation and activities between political subdivisions and other governmental entities. In some cases, those statutory provisions offer options for carrying out the same kind of activity. Section 307.15 of the Ohio Revised Code and succeeding sections, for example, provide broad authority for counties and other subdivisions to cooperate in carrying out a wide range of governmental functions, while Section 307.63 provides similar, but more specific, authority for establishing a countywide public safety communications system. Under division (D) of Section 307.63, any participation of a subdivision in a county in a safety communications system established by the county is pursuant to an agreement between the parties. Any such agreement can be terminated in accordance with its terms. In the absence of a provision for such termination, the agreement can be terminated upon reasonable notice to the other party and satisfaction

of current obligations undertaken pursuant to the agreement. No such agreement could bind a subdivision to perpetual participation in such a system.

The principal advantage of creating a regional COG under Chapter 167 of the Ohio Revised Code probably lies in the fact that the basic structure of a COG is determined by the statutes, and that the COG structure is fairly widely used and recognized as a means of intergovernmental cooperation. There is also the possible advantage that Section 167.02 of the Revised Code requires the Ohio Director of Development to "assist the council in securing the cooperation of all appropriate agencies of the state or of the United States to aid in promoting the orderly growth and development of the area, solving the problems of local government, and discharging the responsibilities and duties of local government in the most efficient possible manner."

Status of Employees of a Council of Governments

Though a regional COG is not itself a political subdivision and is not a taxing district, it has some of the characteristics of a political subdivision, since it acts on behalf of the subdivisions and government agencies that create it. The General Assembly has provided that employees of a COG are "public employees" for purposes of Chapter 4117 of the Revised Code, providing for public employees collective bargaining, and Chapter 145 of the Revised Code, providing for the public employees retirement system.

It should be also noted that a COG is subject to other state statutory requirements that are applicable to political subdivisions, including those providing for open meetings and open records.

Procedure for Creation of a Regional Council of Governments

1. Identify the Purpose and the Prospective Participants

Discussions among representatives of the subdivisions that have expressed interest in creating a COG can identify the purpose and some of the important areas of agreement that will have to be reached in order to establish a COG that will be able to achieve the goals of the prospective participants. Unless at least tentative agreement is reached on such matters as the governing structure, representation on the governing board, and financial support to be provided by the participants, it is not likely that the legislative authorities of the proposed

participants will be agreeable to authorize entry into an agreement to create the COG.

2. Draft the Proposed Agreement Creating the Council of Governments

In accordance with those discussions, a draft agreement meeting the requirements of Sections 167.01 and 167.02 of the Revised Code should be drafted and circulated for review and comments and then revised, as necessary.

The agreement needs to provide for representation on the COG governing board from each of the participants and from any subsequently admitted subdivision, and for the procedures for withdrawal from membership. Section 167.02 of the Revised Code requires that no participant be required to retain membership for a period of more than two years. The agreement probably also should provide for the date, time, and location of the initial meeting of the governing board, the procedure for giving notice of that meeting in a manner consistent with the requirements of the state open meetings law, and for the person who is to call the meeting to order and initially preside over the meeting.

3. Adopt the Agreement

Each subdivision's legislative authority would then adopt a similar ordinance or resolution authorizing an appropriate officer or officers to execute the agreement on behalf of the respective subdivision, and for delivery of a copy of the legislation and of the signed agreement to a designated person or office. The legislation should provide for the conditions, such as the number of participants that approve the agreement, for the agreement to become effective.

4. Initial Meeting of the COG Governing Board

The agenda for the initial meeting could be substantially as follows:

- A. Call the meeting to order.
- B. Ratify the giving of the notice of the meeting.
- C. Adopt the bylaws, if they have been previously drafted and tentatively approved by the participating subdivisions. If not, designate a committee to draft the bylaws.
- D. If the bylaws are adopted, elect officers in accordance with the bylaws.
- E. If the bylaws are adopted, adopt a meeting schedule as provided for in the bylaws.

- F. If the bylaws are adopted, establish committees and appoint members as provided in the bylaws.

In the event the bylaws are not adopted at the initial meeting, steps D through F will have to be taken after the bylaws are adopted at a subsequent meeting.

Powers of a Council of Governments and Limitations on Those Powers

A regional COG is not a political subdivision or taxing district and has only those powers that are specifically granted by Chapter 167 of the Revised Code. A COG derives its powers from the agreements entered into by its constituent members to engage in cooperative activities that are within the constitutional and statutory powers of those members. It does, however, have some of the characteristics of a political subdivision. As provided in Section 167.03 of the Revised Code, "The council may, by appropriate action of the governing bodies of the members, perform such other functions and duties as are performed or capable of performance by the members and necessary or desirable for dealing with problems of mutual concern." Under that authority, a COG could undertake, on behalf of its members, the establishment of an emergency dispatch system. In the exercise of those powers, the governing board of the COG, as provided in Section 167.05 of the Revised Code, may employ such staff and contract for the services of such consultants and experts, and lease or otherwise provide for such supplies, materials, equipment, and facilities as the council deems necessary and appropriate in the manner and under procedures established by the bylaws of the COG. The members may also contribute facilities, personnel, supplies, and equipment for carrying out the functions of the COG.

Issuance of Debt Obligations

As the Ohio Attorney General has opined on more than one occasion, a council of governments is not a political subdivision or taxing authority as defined in Chapter 133 of the Revised Code, or elsewhere, that is authorized to issue notes or bonds or other debt obligations, unless it is a COG consisting principally of school districts or that is an "information technology center." Members of a COG may contribute money to the COG that is necessary for the acquisition or improvement of permanent improvements that are necessary for the operation of the COG.

Revenue Sources

Neither Chapter 167 of the Revised Code, nor any other provision of Ohio law, authorizes a COG to levy ad valorem, or any other form of taxes, nor may the members confer that power on the COG. The members may contribute money to the COG in accordance with the agreement establishing the COG or by the bylaws. In the case of a COG that includes in its members one or more counties, the county or counties could provide for a dedicated source of revenue for the COG by a voted property tax under Chapter 5705 of the Revised Code or by sales and use taxes levied pursuant to Chapters 5739 and 5741 of the Revised Code.

A COG could be authorized by the agreement and bylaws to receive and use federal and state grant money that the members individually would be entitled to apply for and receive.

Summary

There do not appear to be any insuperable obstacles to the establishment by the cities of Wooster and Ashland, one or more counties, and other subdivisions in the area, within a reasonable time, of a cooperative arrangement for the provision of a consolidated public safety dispatch center. This could be accomplished through the creation of a council of governments or one or more intergovernmental agreements. Any such arrangement would require providing for financial support from the participating subdivisions, since a COG can neither issue debt obligations nor levy taxes.

Establishing such a system would require a high degree of cooperation and foresight on the part of the participants, including the willingness to surrender some degree of autonomy in the operation of the common enterprise. Political, rather than legal, constraints are generally the principal constraints on the establishment of effective intergovernmental cooperation arrangements.

If a COG were to be created for the proposed purpose, and if it would employ staff for carrying out its obligations, provision would have to be made to recognize the possible ability of the employees to engage in collective bargaining and to participate in the Ohio Public Employees Retirement System.

COMMUNICATIONS EQUIPMENT

The purpose of this section of the report is to evaluate the current radio system(s) utilized by each of the entities involved with the regionalized dispatch study, and to determine the most logical and cost effective approach to consolidation at one dispatch location. Although the physical location of a consolidated center has not yet been determined, this assessment assumes that the physical location of the dispatch center stays at the Wayne County Justice Center building. All operations are conducted on the same portion of the VHF (high-band) radio spectrum greatly enhancing the prospect of interoperable communications. The only exception is that of the city of Ashland Fire Department (FD), which uses the Ohio MARCS System for everyday operations. However, the FD is currently in the process of switching back to VHF because of interoperability issues with surrounding fire departments within the county.

Current Infrastructure

Wayne County

In September 2005, the Wayne County Emergency Management Agency (EMA) hired Public Safety Services, Inc. to conduct an analysis of public safety communications within the county. Recommendations by this study were implemented, and the county's infrastructure was further developed and improved to meet the needs of multiple users throughout the county. It is managed and operated by dedicated, experienced county personnel. The cities of Orville, Rittman, and Wooster, maintain their own radio system infrastructures. Wayne County EMA currently has a plan in place for coordinated narrow-banding of all public safety communications within the county.

Ashland County

Ashland County uses multiple site locations for both the sheriff and fire departments throughout the county. The sheriff's main repeater is located in Ashland at the fairgrounds with voted satellite receiver sites using 900 MHz microwave links located in Loudonville, Mifflin, and Polk. In addition, each of these sites is also a standalone repeater on the same frequency pair as the main repeater activated by switching channels that have a different transmit private line (PL) tone on the input frequency. When users are in a location where they cannot hear the main repeater, they switch channels to the respective standalone repeater located closest to them. The county fire departments use a similar system, however, their repeater channel is not voted. There

are standalone repeaters located at the sheriff sites in Ashland, Loudonville, Mifflin, and Polk. In addition, other sites are located in Ruggles and Jeromesville. Each fire repeater is activated by switching channels that have a different transmit PL tone input on the same repeater frequency pair.

Depending on the location of the FD, the closest standalone repeater site is used. The cities of Ashland and Loudonville maintain their own radio system infrastructures. While Ashland FD currently uses the Ohio Multi-Agency Radio Communications System (MARCS), it has maintained its VHF legacy system and is in the process of switching back to this system. Radio system coverage is adequate for the areas required by each agency. The majority of user radio and base station equipment are newer models capable of being narrow banded. However, there does not seem to be a plan in place to coordinate narrow banding countywide.

The Ashland County dispatch center is located at the Sheriff's office and has a four-position Zetron console that utilizes control stations. There is no antenna tower at this location and all control antennas are mounted on the roof of the Sheriff's office. A 4.9 MHz public safety microwave link to the State Highway Patrol post located within the county is used as a link to a simplex base station for use on Law Enforcement Emergency Radio Network (LEERN) and Intercity. The dispatch center also has an ACU1000 tied into its console for interoperability linking. The city of Ashland FD is dispatched through the use of a Zetron model 26/6 station alerting system.

Recommendations

Below are general equipment recommendations:

- Consolidate radio licenses under the decided-upon government structure. This ensures that licenses do not expire and that there are no interference issues with other agencies in the area.
- Consider overall maintenance contract for all radios. This would involve a detailed inventory of current radios.
- Program radios in-house by agreed upon agency/persons eliminating third-party vendors for a cost savings.
- Establish control of radio and accessory purchases to maintain interoperability and compatibility among users. This also would result in cost savings for bulk purchases.
- Decide upon a common radio ID platform and numbering system to adequately identify user radios.

- Coordinate a narrow-banding plan to decrease the number of times radios are reprogrammed and to ensure that agencies are able to communicate during this process.
- Perform minor repairs on radios and install mobile radios in-house by agreed upon agency/persons for long-term cost savings.
- If agencies migrate to digital, ensure that the platform utilized is that of an open architecture Project 25 standard and not proprietary in nature.

Table 5 provides specific recommendations for a consolidated dispatch center for each of the three scenarios. These recommendations are based on the assumption for this study that the Wayne County Justice Center would be the contracted service provider. It also assumes the 900 MHz point-to-point microwave link to Ashland FD does not have any obstacles in its path and that a radio-frequency identification is available from the state for the dedicated MARCS radio at the Justice Center for the Ashland FD talkgroup.

These hardware cost estimates are provided in terms of total and annual costs. In estimating the overall costs for a consolidated center, it is assumed that participants would use an external approach such as the municipal bond market. In calculating the annual cost of the consolidated dispatch operations across the study partners, the report considers the following assumptions: (1) The analysis utilized assumptions about the purchase of equipment through the use of bonded debt (or similar financing tools), and (2) The analysis assumes the cost to underwrite the purchase of the equipment, which varies depending upon the scenario (\$351,100 to \$716,100). This includes an amortization period of 10 years, thus matching the approximate useful life of the equipment, plus an interest rate estimated at 5.2 percent. This would result in gross annual debt service payments ranging from \$45,912 to \$93,641.

Table 5: Recommendations for Communications Equipment

	Estimated Total Cost	Estimated Annual Debt Service Payment
Scenario 1 – Wayne County and Cities of Wooster and Ashland		
(A) Wayne County entities currently being dispatched from the Justice Center remain on the sheriff and county fire frequencies (as is now the case).	*	*
(B) The city of Wooster fire and police departments remain on their existing frequencies and are dispatched through existing console link at the Justice Center.	*	*

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	Estimated Total Cost	Estimated Annual Debt Service Payment
(C) The city of Ashland fire and police departments remain on their existing frequencies. Install a licensed 900 MHz point-to-point microwave link from the Justice Center to the 100-foot antenna tower at Ashland FD. Install four dedicated licensed VHF control stations at Ashland FD to monitor the police dispatch frequency, police tactical frequency, fire dispatch frequency, and fireground frequency. Use microwave link to connect control stations to the console located at the Justice Center. Install one MARCS radio at the Justice Center dedicated to the Ashland FD talkgroup.	\$60,500	\$7,911
(D) Install a Zetron model 26-station alerting system at the Justice Center for dispatch of the city of Ashland Fire Department and the city of Wooster Fire Department. Use 900 MHz point-to-point microwave link for connectivity to Ashland FD and install a 4.9 MHz public safety microwave link for connectivity to Wooster FD. Install one Zetron model 6-station alerting system at Ashland FD and Wooster FD.	\$31,500	\$4,119
(E) Install nine VHF receivers at the County Home site for monitoring of each county fireground frequency and connect to the console at the Justice Center through newly licensed UHF link frequencies.	\$134,100	\$17,536
(F) Install new logging recorder with enough capacity to record all phone and radio channels in addition to secure password control network access for outside agencies to review radio traffic.	\$125,000	\$16,346
Total	\$351,100	\$45,912

* No additional cost

Scenario 2 – Wayne County, City of Wooster, City of Ashland, City of Orrville, and City of Rittman		
(A) Wayne County entities currently being dispatched from the Justice Center remain on the sheriff and county fire frequencies (as is now the case).	*	*
(B) The city of Wooster fire and police departments remain on their existing frequencies and are dispatched through existing console link at the Justice Center.	*	*
(C) The city of Ashland fire and police departments remain on their existing frequencies. Install a licensed 900 MHz point-to-point microwave link from the Justice Center to the 100-foot antenna tower at Ashland FD. Install four dedicated licensed VHF control stations at Ashland FD to monitor the police dispatch frequency, police tactical frequency, fire dispatch frequency, and fireground frequency. Use microwave link to connect control stations to the console located at the Justice Center. Install one MARCS radio at the Justice Center dedicated to the Ashland FD talkgroup.	\$60,500	\$7,911

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	Estimated Total Cost	Estimated Annual Debt Service Payment
(D) Install a Zetron model 26-station alerting system at the Justice Center for dispatch of the city of Ashland Fire Department and the city of Wooster Fire Department. Use 900 MHz point-to-point microwave link for connectivity to Ashland FD and install a 4.9 MHz public safety microwave link for connectivity to Wooster FD. Install one Zetron model 6-station alerting system at Ashland FD and Wooster FD.	\$31,500	\$4,119
(E) Install nine VHF receivers at the County Home site for monitoring of each county fireground frequency and connect to the console at the Justice Center through newly licensed UHF link frequencies.	\$134,100	\$17,536
(F) Install new logging recorder with enough capacity to record all phone and radio channels in addition to secure password control network access for outside agencies to review radio traffic.	\$125,000	\$16,346
(G) The cities of Orrville and Rittman remain on their existing frequencies and are dispatched through newly licensed control stations installed at the Justice Center.	\$10,000	\$1,308
Total	\$361,100	\$47,220

* No additional cost

Scenario 3 – Wayne County, City of Wooster, City of Ashland, City of Orrville, City of Rittman, and Ashland County		
(A) Wayne County entities currently being dispatched from the Justice Center remain on the sheriff and county fire frequencies (as is now the case).	*	*
(B) The city of Wooster fire and police departments remain on their existing frequencies and are dispatched through existing console link at the Justice Center.	*	*
(C) The city of Ashland fire and police departments remain on their existing frequencies. Install a licensed 900 MHz point-to-point microwave link from the Justice Center to the 100-foot antenna tower at Ashland FD. Install four dedicated licensed VHF control stations at Ashland FD to monitor the police dispatch frequency, police tactical frequency, fire dispatch frequency, and fireground frequency. Use microwave link to connect control stations to the console located at the Justice Center. Install one MARCS radio at the Justice Center dedicated to the Ashland FD talkgroup.	\$60,500	\$7,911
(D) Install a Zetron model 26-station alerting system at the Justice Center for dispatch of the city of Ashland Fire Department and the city of Wooster Fire Department. Use 900 MHz point-to-point microwave link for connectivity to Ashland FD and install a 4.9 MHz public safety microwave link for connectivity to Wooster FD. Install one Zetron model 6-station alerting system at Ashland FD and Wooster FD.	\$31,500	\$4,119
(E) Install nine VHF receivers at the County Home site for monitoring of each county fireground frequency and connect to the console at the Justice Center through newly licensed UHF link frequencies.	\$134,100	\$17,536

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	Estimated Total Cost	Estimated Annual Debt Service Payment
(F) Install new logging recorder with enough capacity to record all phone and radio channels in addition to secure password control network access for outside agencies to review radio traffic.	\$125,000	\$16,346
(G) The cities of Orrville and Rittman remain on their existing frequencies and are dispatched through newly licensed control stations installed at the Justice Center.	\$10,000	\$1,308
(H) Install a licensed 900 MHz point-to-point microwave link from Ashland FD to Ashland County Sheriff Department dispatch center. Install four additional Motorola MCC5500 consoles at the Ashland County Sheriff Department dispatch center and link them back to the Justice Center through the microwave links. Connect new MCC5500 consoles at Ashland County Sheriff Dispatch Center to existing licensed control stations.	\$355,000	\$46,421
Total	\$716,100	\$93,641

* No additional cost

Rationale

Communications equipment

The rationale for communications equipment recommendations (from Table 5) are noted below.

(C) The distance between the Justice Center and the city of Ashland is too great to install a licensed control station and to be able to monitor simplex radio transmissions. By installing a microwave link between these two locations, control stations can be located locally within the area of operation for the city of Ashland.

(D) A 4.9 MHz public safety microwave link is more cost effective for the short distance traveled to the Wooster FD. The Zetron station alerting system can be connected with either dedicated copper phone lines or radio, but not both. Therefore, a microwave link needs to also be established between the Justice Center and the Wooster FD since the link to the city of Ashland FD will be on the 900 MHz microwave link.

(E) The county fire chiefs requested that the dispatch center be able to monitor all fireground frequencies. The current microwave link from this site is at or near capacity; therefore, the most cost-effective solution is to utilize licensed UHF frequencies for these control stations.

(F) Wayne County's current logging recorder is at or near capacity; therefore, a new

logging recorder should be purchased with the capability for outside agencies (e.g., the city of Ashland) to have access.

(G) The most cost effective approach is to add licensed control stations for operation on the cities of Orrville and Rittman radio systems.

(H) The Ashland County Dispatch Center does not have any antenna tower located at its facility; therefore, by installing a 900 MHz link between the city of Ashland FD and this center, a connection can be made back to the Justice Center. It is not recommended to tie dispatch consoles together from different manufacturers. The assumption is to update the Ashland County Dispatch Center with new Motorola MCC5500 consoles for redundancy, autonomy of operation, and reliable connectivity to the Justice Center. Existing control stations at the Ashland County Dispatch Center would be tied into the new consoles.

Financing

Equipment for the consolidated dispatch center can be obtained through internal or external financing strategies. Internal strategies utilizing a “pay out of pocket” financing strategy would make for an efficient and discrete purchase of equipment, but it would initially be accompanied by a high cost to the participating partners to buy into the consolidated dispatch center. External funding approaches include municipal bond market tools such as general obligation bonds and revenue bonds, lease purchasing agreements, and certificates of participation. The use of these financing tools consider three critical factors: (1) The long-useful life of the equipment, (2) the inter-generational nature of the funding base, and (3) the ability to spread the cost of the equipment over the current and future population of consumers (i.e. residents of the area). This approach moderates the annual capital costs for the host and participating partners (if financed over 10 years, the annual cost to subscribers would be one-tenth of the overall cost).

ASSESSMENT OF STAFFING AND COSTS

It is important to acknowledge that the decision on a governance structure, location of a consolidated dispatch center, and even the decision to consolidate have not been made. However, in order to assess feasibility, an assumption was made with regard to type of entity. For the purposes of this study, the assumption is that the group will form a council of governments, which will initially contract with the Wayne County Justice Center (WCJC) for service. This is based on the preference (indicated by the AWWC working group) for a council of governments, as well as the assumption that it will be more economical to use the existing infrastructure and staffing at the onset of the consolidation. The AWWC working group also decided to include one shift supervisor per shift as part of the consolidated center's staffing and that they would be working supervisors who would answer calls while serving a leadership role on the shift. Details regarding decisions made by the working group are discussed in the *Methodology and Assumptions* section of this report.

Over time, the group may wish to hire its own staffing and lease space and equipment from the county or construct its own building, purchase new equipment, and function as a stand-alone entity. If this were to occur, the COG members would likely need to hire a center manager and office manager, in addition to shift supervisors, and dispatchers (both part time and full time). The group would also need to find a mechanism for handling administrative tasks such as legal, accounting, payroll, human resources, and information technology (IT) support. Salary estimates for the additional administrative/support staff members (center manager and office manager) are provided in the *Methodology and Assumptions* section of this report.

This section describes the outcomes of the analysis to estimate staffing and operating costs, as well as the distribution of costs across participating entities. It briefly describes the methodology and assumptions; however, a detailed explanation is available in the *Methodology and Assumptions* section of this report.

Staffing

Projected combined dispatcher and shift supervisor staffing needs per shift for Scenario 1 is shown in Table 6. The staffing figures per shift include one shift supervisor.

Table 6: Scenario 1, Combined Shift Supervisors and Dispatchers per Shift

Shift	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1st	4	4	4	4	4	4	4
2nd	4	4	4	4	4	4	4
3rd	4	4	4	4	4	4	4

Based on the projected staffing needs per shift, overall staffing estimates are 12 full-time dispatchers, five part-time dispatchers, and four full-time shift supervisors for Scenario 1.

Projected dispatcher staffing needs per shift for the second and third scenarios are shown in Table 7.

Table 7: Scenarios 2 and 3, Combined Shift Supervisors and Dispatchers per Shift

Shift	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1st	4	5	5	5	5	5	5
2nd	4	5	5	5	5	5	5
3rd	4	4	4	4	4	4	4

Projected staffing for dispatchers and shift supervisors are 14 full-time dispatchers, five part-time dispatchers, and four full-time supervisors.

To determine staffing levels, the PM identified a staffing model and shift scheduling software. The staffing model, developed by Russ Russell of 9-1-1 SME Consulting, was used to determine the number of staff needed per shift. The model bases the outcomes on a number of factors, including average number of calls during the peak shift and normal shifts. Staffing levels were determined using trial scheduling software from ShiftSchedules.

Cost Estimates

The cost estimates for dispatch were determined based on two sources: (1) current operational costs for WCJC, and (2) estimated staffing costs based on current fringe benefit and salary levels of WCJC dispatchers, which were applied to the estimated number of employees generated during the staffing analysis. Contracts for service costs are based on 2010 actual costs for WCJC. These were adjusted for inflation based on the Consumer Price Index unadjusted 12 months ended July 2011 of 3.6%. Estimated

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capital and operating costs are provided in Table 8. Details on the staffing analysis are provided in the *Methodology and Assumptions* section of this report. The breakdown of capital costs are provided in the section titled, *Communications Equipment*.

Table 8: Estimated Capital and Operating Costs

Estimated Costs	Scenario 1	Scenario 2	Scenario 3
Contracts for services:			
LEADS	\$ 9,001	\$ 9,001	\$ 9,001
Supplies	\$ 2,590	\$ 2,590	\$ 2,590
Network support costs	\$ 777	\$ 777	\$ 777
Software support	\$ 10,671	\$ 10,671	\$ 10,671
Backup software support	\$ 1,518	\$ 1,518	\$ 1,518
Emergitech: CAD support, interfaces for wireline & wireless	\$ 27,661	\$ 27,661	\$ 27,661
Weather monitoring	\$ 1,761	\$ 1,761	\$ 1,761
Backup computer equipment	\$ 2,590	\$ 2,590	\$ 2,590
Radio maintenance on consoles	\$ 4,040	\$ 4,040	\$ 4,040
Subtotal: Contracts for Services	\$ 60,609	\$ 60,609	\$ 60,609
Capital and Operating Costs:			
Capital (debt service)	\$ 45,912	\$ 47,220	\$ 93,641
Training, memberships, certifications & conferences	\$ 4,812	\$ 5,250	\$ 5,250
Salaries & benefits (dispatchers)	\$ 738,865	\$ 847,639	\$ 847,639
Salaries & benefits (shift supervisors)	\$ 211,922	\$ 211,922	\$ 211,922
Salary (part-time data systems administrator)	\$ 35,788	\$ 35,788	\$ 35,788
Overtime (dispatchers)	\$ 108,016	\$ 123,142	\$ 123,142
Overtime (shift supervisors)	\$ 19,450	\$ 19,450	\$ 19,450
Subtotal: Capital and Operating Costs	\$ 1,164,765	\$1,290,411	\$1,336,832
Total Estimated Operating Costs	\$ 1,225,374	\$1,351,020	\$1,397,441

Once total costs were determined, they were allocated among potential participants according to a formula developed by the AWWC working group. The group agreed that the total costs for dispatch services, for the purposes of the study, would be allocated among fire agencies based on each entity's share of *runs* (calls for service). However, the allocation for law enforcement agencies is based on a two-part formula (50% on an entity's share of total population and 50% based on each entity's share of calls for service). There is one exception to this. Medway is a regional drug enforcement agency, but for the purposes of the calculations, it was treated in the same manner as a fire agency (see *Methodology and Assumptions*).

Table 9 shows the estimated annual operating and costs for dispatch and the estimated distribution among participants of the three scenarios.

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Table 9: Estimated Costs, Scenarios 1-3

Jurisdiction/entity	Estimated share of total costs: Scenario 1	Estimated share of total costs: Scenario 2	Estimated share of total costs: Scenario 3	2010 dispatch fees/costs
Apple Creek Village	\$20,593	\$15,732	\$14,235	NC
Ashland (city)	\$304,895	\$236,604	\$212,910	\$427,476
Ashland County			\$189,787	\$427,476
Canaan Township Fire 1&2	\$8,327	\$5,780	\$5,415	NC
Central Fire Department	\$13,458	\$9,342	\$8,751	NC
Chippewa Township Fire		\$12,013	\$11,253	NA
Clinton Township Fire	\$5,466	\$3,794	\$3,554	NC
Creston Village	\$26,464	\$21,031	\$18,770	NC
Dalton Village		\$30,085	\$27,398	NA
Doylestown Village		\$32,482	\$29,120	NA
Kidron Fire		\$3,151	\$2,951	NA
Marshallville Village	\$5,359	\$5,893	\$5,196	NC
Medway	\$908	\$630	\$590	NC
Mount Eaton Village	\$10,256	\$7,415	\$6,842	NC
New Pittsburg Fire	\$5,269	\$3,657	\$3,426	NC
Orrville (city)		\$133,767	\$121,714	NA
Paint Township Fire		\$2,205	\$2,066	NA
Rittman (city)		\$141,502	\$129,771	NA
Shreve Village	\$20,929	\$16,384	\$14,698	NC
Smithville Village	\$29,791	\$22,214	\$20,272	NC
South Central Fire	\$3,966	\$2,753	\$2,579	NC
Sterling Fire		\$2,589	\$2,425	NC
Town & Country Fire	\$9,748	\$6,767	\$6,339	NC
Wayne County Sheriff	\$357,478	\$322,041	\$275,824	\$559,040
West Salem Village	\$20,008	\$15,684	\$14,064	NC
Wooster (city)	\$366,516	\$286,436	\$257,122	\$570,178
Wooster Township Fire	\$15,944	\$11,068	\$10,368	NC
Total	\$1,225,375	\$1,351,019	\$1,397,440	

NOTE: NA means not available. NC means the entity in 2010 the entity was not charged for dispatch services.

Based on an analysis of current and estimated costs (Table 9), preliminary decisions (including cost allocation formula) made by the AWWC working group, and assumption that all entities listed in the various scenarios are willing to participate and pay, the financial assessments are provided in Table 10. The financial assessment is only provided for the communities or entities that have previously paid for dispatch services or that provided costs for dispatch services in 2010. Since no cost information was provided for

the Orrville and Rittman dispatch centers, individual cost savings or increases cannot be determined, nor can the overall costs savings for Scenario 2 or 3.

Table 10: Scenario 1, Estimated Cost Savings

Entity	Estimated Savings/Year	Estimated Savings (%) from 2010
Scenario 1		
Ashland (city)	\$122,581	29%
Wayne County	\$201,562	36%
Wooster (city)	\$203,662	36%
Scenario 2		
Ashland (city)	\$190,872	45%
Wayne County	\$236,999	42%
Wooster (city)	\$283,742	50%
Scenario 3		
Ashland (city)	\$214,566	50%
Ashland County	\$237,689	56%
Wayne County	\$283,216	51%
Wooster (city)	\$313,056	55%

There is another financial consideration that is not captured in the cost estimates and savings indicated above. Ashland and Wayne County have had wireless 9-1-1 revenues available to subsidize dispatch costs. This subsidy results in an understatement of the 2010 actual costs, so savings should actually be greater. If these funds continue to be available, all or a portion of this revenue could be applied toward the overall costs of the dispatch center, therefore lessening the required contribution of participating communities.

HUMAN RESOURCES AND LABOR RELATIONS

The purpose of this section is to identify the labor management relations issues that may impact on the consolidated dispatch center and provide a strategy for addressing various human resources issues. To accomplish this, the PM project team conducted a review of relevant Ohio Civil Service human resource regulations; Ohio Revised Code (ORC) 4117 (Ohio Labor Law); and labor agreements which were submitted by Ashland and Wayne counties. This section addresses the results of the review.

Ohio Civil Service Rules and Regulations and ORC 4117

The relevant sections of the Civil Service Rules and Regulations and ORC 4117 to the proposed consolidation of dispatch services are as follows:

Section 3.01 Classified Service. All compensated positions in the service of the city, except those in the unclassified service which are exempt ... shall be included in the classified service and the provisions of these rules shall be applicable to them and to their incumbents **unless a labor agreement has been signed by the City subject to the procedures set forth in the State of Ohio's Collective Bargaining Law.** (emphasis added)

This section explains that an agreement between a city and an authorized bargaining unit may supersede the provisions of the civil service rules and regulations. Therefore, the parties to the consolidation of dispatch centers could agree with the employee representatives to give priority consideration to the displaced dispatchers without violating the civil service regulations.

Section 3.07 Reclassification of Existing Positions. When a new title and new specification are put into effect by the action of the Civil Service Commission, any employees with permanent status and whose duties do not change from the previous title and specification but conform to the new classification, shall be included in the new classification and shall be entitled to all benefits, if any. Such individuals shall have permanent status under the new classification without examination.

This section provides that dispatchers whose positions are reclassified without substantial change will not lose any benefits and shall have permanent status. Therefore, dispatchers who are displaced by the consolidation and selected for

dispatcher positions in the consolidated center can retain all benefits and not be required to serve a probationary period.

Section 3.08 Establishment of New Positions. Whenever an appointing authority desires to establish any new position in the classified service, he shall present a statement of the proposed duties and responsibilities of such position, the conditions which made its establishment necessary, the qualifications which should be required of the incumbent, and his recommendations respecting the title and rates of compensation.... If the new position is authorized it shall be classified and allocated to the proper class, and the Commission shall give notice to the appointing authority of such action.

This section establishes the process for creating the director position and any new supervisory or support positions required in the consolidated center.

ORC 4117.10 Terms of agreement.

(A) An agreement between a public employer and an exclusive representative entered into pursuant to this chapter governs the wages, hours, and terms and conditions of public employment covered by the agreement. If the agreement provides for a final and binding arbitration of grievances, public employers, employees, and employee organizations are subject solely to that grievance procedure and the state personnel board of review or civil service commissions have no jurisdiction to receive and determine any appeals relating to matters that were the subject of a final and binding grievance procedure. Where no agreement exists or where an agreement makes no specification about a matter, the public employer and public employees are subject to all applicable state or local laws or ordinances pertaining to the wages, hours, and terms and conditions of employment for public employees.... Except for sections 306.08, 306.12, 306.35, and 4981.22, ... this chapter prevails over any and all other conflicting laws, resolutions, provisions, present or future, except as otherwise specified in this chapter or as otherwise specified by the general assembly.

Section 4117.10 states that the Collective Bargaining Law for Public Employees prevails over any and all other conflicting laws and regulations including Civil Service Rules and Regulations. This language, in conjunction with Section 3.01 (above) clarifies the right of the participating communities to provide priority consideration for the displaced dispatchers if the parties agree.

Labor agreements and labor/management Issues

Labor agreements for dispatchers were provided by both Wayne and Ashland⁶ counties. Both agreements are with the Ohio Patrolmen's Benevolent Association. The review and analysis of these agreements reflect management rights language is stated below.

Ashland County's agreement provides for moving forward with the consolidation without waiting for termination of existing labor agreements:

- Ashland County Section 4.01 "... the Employer retains the right to: ... 13) consolidate, merge, or otherwise transfer any or all of its facilities, property, processes or work with or to any other municipality or entity or effect or change in any respect the legal status, management or responsibility of such property, facilities, or work;" (OPBA)

Wayne County is not as straightforward:

- Section 5.1 recognizes "...the Employer has and will retain the full right and responsibility to direct the operations of its departments... and to otherwise exercise the prerogatives of management...including, but not limited to, the following:.."
- Subsection 5.1 B "to manage and determine the location, type and number of physical facilities, type of equipment, programs and the work to be performed;" and
- Subsection 5.1 D "to determine the department goals, objectives, programs, and services, and to utilize personnel in a manner designed to effectively and efficiently meet these purposes;" (OPBA)

While management rights may allow for the establishment of a consolidated dispatch center, management would be required to negotiate the impact and implementation of the consolidated dispatch center on bargaining unit employees. These negotiations would be unique, since they would involve two counties. Federal Mediation Conciliation Service, Labor-Management Cooperation Grant Program, FMCS-2011 provides grants of up to \$60,000 to assist employers and unions to pursue unique approaches to collaborative bargaining on issues that result in improved efficiency and/or cost effectiveness. The group consolidating dispatch may consider seeking a grant to assist them in dealing with potential labor management issues.

⁶ Ashland's agreement expired December 31, 2009.

The following labor management relations (LMR) issues should be considered in the initial staffing of the center. If one of the existing dispatch centers is chosen as the contractor, it could maintain all its current dispatchers and consider displaced dispatchers from the other participating municipalities to fill additional positions needed. The group could establish a new entity for the consolidated dispatch center in which all dispatchers from all participating entities would be considered for employment. This approach “levels the playing field” and provides an equal opportunity for dispatchers in all of the municipalities to be considered. This also provides for the selection of the best of all dispatchers in the participating municipalities.

To minimize the impact of consolidation on the existing dispatch centers, displaced employees of the centers being closed may be given priority consideration in the interview or hiring process. This would require establishing a selection process that would assure the “best of the best” are selected for the consolidated dispatch center. Both the highlighted sections of the Civil Service Rules and Regulations and ORC 4117 (above) provide for this exception to Civil Service Rules and Regulations.

It should be noted that in situations where bargaining unit positions will be eliminated, unions generally pursue seniority as the basis for selection.

Overall, the negative impact on bargaining unit employees in the participating municipalities will be greatest for dispatchers that are not selected for positions in the consolidated center. It is recommended that the participating entities show concern for these “displaced” dispatchers and consider efforts to minimize the impact. Common agreements are for management to make every effort to reassign dispatchers who are not selected for positions in the consolidated center to other comparable positions in the municipality and out-placement assistance when no positions are available.

Different impact issues will affect dispatchers who are selected for the consolidated center and not currently in the selected bargaining unit; sick leave, vacation, holidays, overtime, longevity, insurance, wage rates, and uniform allowances are articles that will most probably require discussion. Management should be willing to make reasonable efforts to minimize any adverse impact on bargaining unit employees during the transition to the consolidated center.

Finally, it is recommended that management groups in the affected communities initiate discussions with their union representatives early in the process.

Hiring procedures and job qualifications

It is recommended that the participating entities concur on the current procedures to be used and/or recommend additional or different tests in view of the technologies that will be employed in the consolidated center. As stated above, it is also recommended that the parties agree on a competitive approach to initial staffing of the center that will assure that only the best qualified are selected.

Salaries and benefits

Communities choosing to close their dispatch centers and contract with another entity for these services may be required to negotiate the impact of closing the dispatch center with the dispatcher's union. This is of particular importance in communities that offer higher compensation (wages and/or benefits) or those in which dispatch employees may not be offered a position with the consolidated dispatch center. While not comprehensive, the analysis below highlights issues over which Ashland County or Wayne County may or may not need to negotiate upon the impact of closing its dispatch center if, or when, consolidation occurs.

- If Wayne County chose to close its center and contract with Ashland County for dispatch services, vacation appeared to be a potential issue around which it might need to negotiate the impact.
 - Ashland County employees must work one year longer to accrue three weeks of vacation than Wayne County dispatchers.
- If Ashland County chose to close its center and contract with Wayne County for dispatch services, Ashland County may need to negotiate the impact of closing the center since its dispatchers had higher average hourly rates than Wayne County.
 - Wayne County dispatchers must work two to three years longer to accrue four or five weeks of vacation.
 - Personal days are different; Ashland County offers three, Wayne County offers one.
 - Ashland County offers a shift differential, uniform allowance, and sick leave bonus; Wayne County does not.
 - Ashland County longevity pay starts at an earlier year of service and pays at a higher rate than Wayne County.
 - Ashland County offers a \$1,000 stipend to employees who maintain emergency medical dispatch (EMD) and Law Enforcement Automated Data System (LEADS) certification; Wayne County does not.

- If consolidation were to occur, neither sick leave nor holiday pay would be a contentious issue; these are treated the same in both counties.

Job descriptions

The AWWC working group indicated that it plans to add shift supervisor positions to its dispatch center organizational structure. Consequently, job descriptions for dispatchers may need to be reviewed and modified to reflect changes in duties, minimum and preferred qualifications, and reporting relationships inherent in the consolidated center. Additionally, a position description will be required for the center director and any supervisory positions created. An organizational chart will be required to facilitate the process of revising existing positions descriptions and developing new position descriptions. Examples of job descriptions, titles, and duties are provided in Appendix B.

Orientation procedures and training requirements

Orientation procedures and training requirements (both on the job and classroom) should be established for all dispatchers. The parties proceeding with consolidation should explore the existing orientation requirements and guidance of professional or trade organizations for public safety communications dispatchers to determine and develop agreeable procedures and requirements. For example, the Association of Public-Safety Communication Officials (APCO), National Emergency Number Association (NENA), and the Commission on Accreditation for Law Enforcement Agencies, Inc. (CALEA) offer extensive information and guidance on training requirements. Professional and trade groups offer standardized training programs that may help dispatchers, supervisors, and managers stay on the cutting edge. Training integral to the provision of dispatch services, in that high quality service cannot be achieved without it. In fact, the Essex Regional Emergency Communications Center in Essex County, Massachusetts places enough of a priority on training, certification, and accreditation that its draft intergovernmental agreement specifies its intent in each of these areas:

- Bring all personnel up to Association of Public Communications Officials (APCO) (or equivalent) certification prior to beginning operation of the RECC. In addition to APCO certifications, the agreement also specifies first aid, cardiopulmonary resuscitation (CPR), automated external defibrillator (AED), and any state-mandated certifications (Essex County, 2009).

- Create all policies and procedures with an eye toward compliance with Commission of Accreditation for Law Enforcement Association (CALEA) standards (Essex County, 2009).
- RECC indicates that training, certification, and accreditation will “allow for a reduction in insurance rates and will lessen the opportunity for frivolous lawsuits to be filed against the center. This recognition will also increase dramatically the stature the center will have among its peers nationwide (Essex County, 2009).”

Performance management and appraisal

A comprehensive plan for effective performance management and appraisal will be critical to the success of a consolidated dispatch center. It is recommended that the participating entities agree on a procedure that can be implemented as an integral element of the consolidated dispatch center. A model for a performance appraisal system is in Appendix C. This was developed by the Unger Center for Local Government Leadership in the Maxine Goodman Levin College of Urban Affairs. It is recommended that implementing any system for performance management and appraisal should include training for supervisors and employees.

NEXT STEPS

The following summary was taken (but reorganized) from the Center for Public Management's report entitled *Feasibility Study: Consolidated Dispatch Center for Police, Fire and EMS Services (2009)* and *Dispatch Magazine Online's* article on communications center plans. While written in a general context, the steps are relevant to the dispatch consolidation being considered by the participating jurisdictions. This section outlines a number of steps that participants should consider as they move toward implementation.

Potential participants in a dispatch consolidation should engage in the following key steps:

- Obtain a commitment from those interested in moving toward consolidation;
- Develop an implementation working group;
- Agree upon a governance, legal and organizational structure that addresses leadership and operations, and financial needs and abilities;
- Identify a structure for financing capital and operational costs, determine what types of costs will be shared among participants (and in what proportion), and select a formula for allocation of costs;
- Determine facilities, location, and equipment; and
- Prepare and approve intergovernmental agreement.

These steps are not all inclusive, nor are they necessarily in sequence; some may even occur simultaneously. Depending upon the selections made during the process, some steps or decisions need not occur.

Commitment to Consolidate

The group should determine which entities are committed to the consolidation process. This commitment can be formal or informal. For example, each of the involved governmental bodies may consider adopting a resolution committing them to the consolidation of dispatch, or they may give a verbal commitment.

Implementation Working Group

Participants planning to move forward should form an implementation working group. This group would meet on a regular basis to ensure the consolidation is moving forward and will make recommendations on how the organization will be equipped, governed, structured, and financed, and where it will be housed. The group should be representative of the participating entities. Depending on the governance structure selected, the working group may have a continuing role in the organization after it is operational. The working group should address or make recommendations in the following areas: financial, legal, human resources and labor relations, organizational/structural, and facilities and equipment. Subgroups may form around each of these topics.

Governance, Legal, and Organizational Structure

Establishing the structure of the communications center is a critical step toward consolidation of dispatch functions. There are several available options for governance and a legal framework. These vary in complexity and strength. The governance decision should incorporate consideration for community representation, the legal strength of the agreement, the required duration of the relationship, the ability to secure financing, and the extent of the body's governing authority. This section will discuss some of the advantages and disadvantages of various types of structures under which a consolidated dispatch center could operate for these jurisdictions. The PM focused on the following models:

- One operated by a council of governments,
- One operated by a jurisdiction that contracts with participating communities, either as a department or a separate enterprise, and
- One operated by a county government that contracts with participating communities, either as a department or a separate enterprise.

In evaluating and selecting a governance structure, the participating communities will need to find a structure that would allow them to perform day-to-day operations including the purchase of capital equipment, staffing, scheduling, dispatching, and managing these activities, as well as long-term planning. Given the cost for major capital equipment, they will likely need to be able to finance these purchases. While the aforementioned structures allow for day-to-day management and governance of a dispatch center, not all have the authority to finance debt. Table 11 highlights characteristics of the governance and legal structures.

Table 11: Potential Government Structures

Governing Structures	Simple	↔	Complex
	Contract with County or Local Jurisdiction		Council of Governments (COG)
Set-up Requirements	<ul style="list-style-type: none"> • Develop contract • Determine what services be provided • Charters must allow outsourcing of services to another entity 		<ul style="list-style-type: none"> • ORC governs establishment of COG
Advantages	<ul style="list-style-type: none"> • Simple, easily understood • Limited expenditures for capital 		<ul style="list-style-type: none"> • Could take on other functions • Flexible structure that could expand over time
Disadvantages	<ul style="list-style-type: none"> • Need someone with the ability to oversee administration of contract • Political concerns • County or local entity would need to finance debt • Subject to members' annual appropriation 		<ul style="list-style-type: none"> • Governed by ORC • Complexities of structure • Unable to finance debt collectively • Subject to members' annual appropriation

Selection of a Governance and Legal Structure

There is some overlap between selection of a governance structure and the legal framework of the agreement. If a group pursues a COG, it may choose to pursue a contractual arrangement for the provision of dispatch services. While a COG itself may offer a democratic structure for decision making, the provider of dispatch services selected by the COG may choose not to offer a democratic mechanism for the group to provide feedback or make decisions with regard to the operations of the dispatch center. The participants, through the COG, may also choose to operate their own center. If this is the case, the group will need to determine a way to secure financing for capital, since COGs (for the purposes of consolidated dispatch) do not currently have the ability to issue debt in the state of Ohio.

Contract with a County or Local Jurisdiction

With this type of arrangement, the county or city maintains the powers provided under the Ohio Constitution, Ohio Revised Code, and its charter, as relevant. This includes the ability of the county or city to finance the capital items more easily because of a broader economic base. However, this type of arrangement would likely result in participating entities having less control over how the center is operated.

Council of Governments

Across the country, COGs are typically multicounty in nature. In Ohio, however, COGs are established between local governments. The Ohio Revised Code (ORC) Chapter 167 explains the process for creating a Regional Council of Governments (COG) and the powers vested in the council. The ORC requires the regional council of governments to adopt bylaws. These must designate the officers of the council and the method of their selection, create a governing board that may act for the council as provided in the by-laws, and provide for the conduct of its business (ORC §167.04).

This type of governing structure has several of the characteristics that would be important for a dispatch center: the ability to purchase or lease or otherwise provide for supplies, materials, equipment, and facilities; the ability to determine how operations would be funded; the ability to receive grants; the ability to enter into contracts with political subdivisions to perform or receive services; and the ability to employ staff (ORC §§167.05, 167.06, 167.08).

Although there are a few limitations in the ORC, a COG has a fair amount of flexibility in its structure. This enables the COG to be democratic in its governance. A democratic process will allow participating communities to have a say in finances, policies and procedures, and other issues. This will be important in enticing participation. A COG agreement should outline membership, funding sources, organizational structure, and withdrawal from the COG. In the absence of these issues being addressed in the COG agreement, the ORC provides for membership of and withdrawal from the COG.

If a COG is chosen, the implementation working group will need to determine the composition of the policy making group or the board of directors. It will also need to determine the powers of the board. These may include having the authority to enter into larger contracts (typically any contract under a certain dollar amount is left to the discretion of the chief administrator); acquiring, holding, and disposing of property; approving the annual budget and expenditures; hiring dispatch center management staff (hiring of dispatch and administrative staff is typically done by the chief administrator); adopting and revising bylaws for its operation, and the operation of user group advisory committees.

Organizational and Human Resources Issues

There are a number of organizational, human resources, and labor relations issues that will need to be addressed. Decisions must be made regarding the management structure of the center itself (defining the center's management responsibilities and the

center's chain of command). Some case study communities suggested hiring a director or manager earlier in the process so he or she can provide input into the organizational structure, union issues, and staffing. The group will need to recruit and hire a center director or manager, initiate union relations, determine the number of and types of positions and their respective duties, and recruit, hire, and train staff.

In addition to the staff dedicated to providing 9-1-1 emergency assistance, the center may also require administrative and technical support. During this phase of the project, it will be necessary to make a determination as to the necessary clerical, administrative, and support staff.

When addressing staffing costs, levels, and duties, union employment contracts must be referenced. This can complicate or slow the consolidation process. Consideration should be given to involving or negotiating with the union early in the consolidation process.

Personnel

1. Determine the number of positions and their duties – Staffing should be multilevel and include specialists for each type of job function, as follows:
 - Public Safety Dispatcher – These personnel handle the basic telephone and radio duties for receiving and dispatching incidents.
 - Supervising Dispatcher - These personnel supervise the basic level dispatchers and make second-level decisions regarding dispatching and staffing.
 - Shift Supervisor or Senior Dispatcher – These personnel provide administration of dispatching personnel, including staffing, training, discipline, and advancement.
 - Technology Systems Specialist – This person has specific talents in working with computer systems, mapping and geographic data files, radio, and telephones, and is responsible for maintaining the center's computer, radio, and telephone systems. This position may not be required unless the dispatch communications center is a stand-alone organization.
 - Office Manager – This person would be responsible for human resources and bookkeeping functions as well as general office management. This position may not be required unless the dispatch communications center is a stand-alone organization.

- Assistant Manager – This person administers the recruiting, selection, hiring, training, evaluations, and promotional processes. This person could also be the liaison to EMS agencies.
 - Center Manager – This person has overall administrative responsibility for the center's operation.
2. Begin recruiting and hiring – There are two options for finding, selecting, and hiring personnel to staff the consolidated center. Some consideration should be given to personnel who might lose their jobs because positions are eliminated from consolidation. Consideration should be given to incorporating devices specifically designed to test dispatchers into the evaluation process.
 - Existing personnel – Establish a process for accepting applications from existing communications centers, then select personnel from that group. Positions not filled from within the current ranks would be advertised outside.
 - New Personnel – Accept applications from any interested person with the required level of experience.
 3. Provide training – Personnel selected for hiring should already have the required skills to perform basic dispatching. This is especially true for management and supervisory personnel who would be involved in the center's start-up. Initial training should include operation of the center's telephone, radio, and computer system. If pre-arrival medical instructions are to be implemented, training classes should be given to all new dispatchers.
 4. Determine compensation – The pay scales for all positions will generally be based on current dispatcher pay rates. That is, supervisory- and management-level position pay rates could be percentage increments over the dispatchers' base pay. Other options could include researching these salary levels of area dispatch centers.

Besides having several pay steps based on length of service, some dispatcher contracts include premium pay for working the evening and night shifts. There may also be premium pay for dispatchers who conduct training, act in a supervisory capacity or perform higher level duties (e.g., senior dispatchers or shift supervisors), and work holidays. Other compensation issues include what would be included in benefit packages.

It is also important to keep in mind that ORC §9.44A addresses prior public service credited in computing vacation leave.

“(A) Except as otherwise provided in this section, a person employed, other than as an elective officer, by the state or any political subdivision of the state, earning vacation credits currently, is entitled to have the employee’s prior service with any of these employers counted as service with the state or any political subdivision of the state, for the purpose of computing the amount of the employee’s vacation leave. The anniversary date of employment for the purpose of computing the amount of the employee’s vacation leave, unless deferred pursuant to the appropriate law, ordinance, or regulation, is the anniversary date of such prior service.”

5. Initiate union relations – Consideration should be given as to how the new employees might be represented. If personnel are hired from existing communications centers, thought should be given as to how current contracts will be transferred or otherwise honored. In particular, issues such as salary, and how seniority and leave might be carried over to the new center will be important. Since the majority of communities participating in this study have unionized dispatchers, this will be an important topic to be addressed. Some of these issues will be affected by the type of organizational/governing structure chosen.

Financial

There are many financial considerations to be addressed by the working group, not the least of which is determining how it will be funded. The group will need to consider funding options such as a fixed source (dedicated property tax levy) or annual appropriations from participating communities.

The implementation working group will need to develop an operating (including staffing) budget based on the data collected from participating entities. It will also need to develop a capital budget based on estimates from communications systems and PSAP equipment suppliers or consultants.

Once the participants are satisfied that the cost estimates accurately reflect the anticipated operating, staffing, and capital costs for the consolidated dispatch center, the implementation working group would need to determine the financial arrangements (e.g. bonds for major capital purchases) and how the various costs will be divided among participants. If payment for capital items would be done through the sale of bonds, identify who has the ability to finance capital improvements through the sale of bonds (e.g., the county, a port authority) and what revenue source would be used to pay off the bonds.

The implementation working group should investigate whether there are any grants available to help pay for equipment or others costs, particularly if they address interoperability issues. If grants are available, the group may consider applying for these grants. While there is no assurance that the grant programs below will continue to be funded, there are sources that were previously available to fund communications-related purchases.

- The Office of Justice Programs has offered the Edward Byrne Memorial Competitive Grant Program Funding to create and retain jobs as well as support law enforcement agencies with civilian crime analysts, dispatchers, and community service officers. These grants help state and local communities improve the capacity of local justice systems and may be used for national efforts such as training and technical assistance. Applicants may be national, regional, state, or local public and private entities, including for-profit (commercial) and nonprofit organizations, faith-based and community organizations, institutions of higher education, tribal jurisdictions, and units of local government that support the functioning of the criminal justice system.
- The U.S. Department of Justice, Office of Justice Programs, National Institute of Justice (NIJ) has a program “Public-Private Partnerships to Evaluate Communications Technology.” Through this program, the participating communities would form a public-private partnership with a private vendor that would allow for the objective evaluation of the implementation, deployment, and functionality of a vendor’s technology solution in an operational environment. These partnerships give public safety agencies access to cutting edge technologies at little to no cost. The NIJ works to broker partnership between the public and private agencies and vendors, conducts operational evaluations of technology and potential technology solutions to determine whether the technology meets the public safety needs and requirements, and provides technology support, advice, assistance, and oversight to public safety agencies involved in the partnership.
- The National Highway Traffic Safety Administration (NHTSA) and the National Telecommunications and Information Administration (NTIA), part of the U.S. Department of Transportation and Department of Commerce, respectively, announced that more than \$40 million in grants were awarded to states and U.S. territories to help call centers improve their 9-1-1 services.

- Other sources include the U.S. Department of Justice's Community Oriented Policing Services (COPS) Program Technology grants, the U.S. Department of Homeland Security (DHS) Public Safety Interoperable Communications Program the Federal Emergency Management Agency's Port Security Grant Program, and the Public Safety Interoperable Communications Grant (available through the Department of Commerce's National Telecommunications and Information Administration (NTIA), in consultation with the DHS).

Facilities, Location, and Equipment

A detailed needs assessment of equipment hardware and software will need to be conducted by the working group or a communications consultant. In addition, the working group will need to evaluate the suitability of various locations available for use for the new consolidated emergency communications center. Once this assessment has been completed, the group with decision-making authority would need to acquire, lease, or construct a facility as appropriate for the group's needs. This group may also need to begin the procurement process for items such as new 9-1-1 CPE, a new CAD system, radio consoles, and specialty furniture. It is important to complete this in a timely manner to allow the installation as soon as the new dispatch facility is substantially completed.

The working group would need to determine specific needs of the communities participating in the dispatch center, as well as the best options in terms of facility location. Given the importance and technical nature of the communications equipment (both telephone and radio), the group may want to select a communications consultant or specialist to handle this task. Another component of the dispatch consolidation process will require that short-term and long-term strategies be developed for addressing interoperability issues among disparate radio systems of participating communities.

This section provides an overview of the decisions that need to be made with regard to site selection and systems, as well as considerations in making these decisions. Consideration should also be given to the guidelines in the *National Fire Protection Association (NFPA) 1221: Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*.

Site Selection

While the participating entities may work with an architect or site selection consultant, consideration should be given to the following regarding the selection of a site for the dispatch center. There are three options for sites:

1. Existing Site and Building - Use an existing site and building and adapt it for use as a consolidated center. It is unlikely that any existing communications center in the study area would have the necessary space, security, and support systems for a consolidated center.
2. Existing Site and New Building - Use an existing site but build a new center. There may be existing sites within the study area that meet the necessary requirements and that are currently owned by a government entity. This alternative would eliminate the cost and administrative process of purchasing land. However, there may be a tendency to compromise on site requirements to save money.
3. New Site and New Building - Acquire a new site and build a new center. This alternative would allow complete flexibility in choosing the most acceptable site.

Location and Access

The communications center site should, to the greatest extent possible, meet the following basic requirements:

1. Appropriate Size - The site should be large enough to accommodate the main communications center building, a separate structure housing an emergency generator, and underground fuel storage. It should also allow an area for parking employee cars, special vehicles (mobile emergency operations centers, if relevant), and other vehicles and temporary structures required during a disaster (tents, shelters, helicopter landing zone, etc.). The property should be large enough to allow a sufficient set-back from structures on adjacent property that might present a collapse, fire, or other hazard.
2. Safety - The site should be free from potential hazards, such as overhead power transmission lines, freeway overpasses, trees, flooding from creeks or streams, earthquake faults, brush fires, vehicle off-road accidents, underground pipelines, etc.

3. Access - The site should be centrally located so it is reasonably accessible to all communities. It should be adjacent to one or more major freeways or state highways. The roads leading to the center should be free of major potential obstructions in time of earthquake or other natural disasters, including over/underpasses, overhead power lines, and street light supports.
4. Communications - The site should have current or easily-installed access to communications links, including the public telephone system, existing county and municipal radio links, microwave towers, etc. The site should not be obscured by hills so that future communications wireless links can be installed. Site consideration should be given to the ease of accessing multiple communication links to ensure redundancy.
5. Future Growth - The site should be sized and arranged to allow future additions to the building for more fire or law enforcement agencies.

Utilities

The center should have easily installed access to the existing public telephone system, water lines, power lines, and a sanitary sewer. The utilities should be arranged to enter the building in a place and method that will not create a hazard during any natural disaster or the failure of any utility supporting structure. Consideration should be given to providing dual (or more) paths for electrical and telephone links to the center, from multiple substations or central offices.

Utilities should enter the building and be otherwise arranged to prevent any water leak or electrical incident from physically affecting the building. That is, a water main break, electrical short, or fire would not impinge upon the building or any of its critical systems.

The building's critical electrical needs should be supplied through an uninterruptible power supply (UPS), which is capable of providing enough power to keep those functions operating for 15 minutes.

The building's critical and necessary electrical needs should be supplemented with a generator powered by an appropriate fuel (propane, natural gas, diesel, etc.), which is capable of providing power for at least eight hours. The fuel tank should be located in an area so as not to endanger the building or dispatch area if a leak or other dangerous situation occurs, and in an area easily accessible by a fuel truck under all weather conditions.

Furnishings and Furniture

The furniture should take into consideration durability, safety, ergonomics, and appearance. The arrangement of the furniture in the office area should emphasize functionality, ease of communications, and mirror the natural contacts that may be necessary between the various job positions. Other considerations include:

1. Necessity to communicate visually and verbally between dispatchers,
2. Isolation of noise between adjacent positions,
3. Adjacency to paper files or other reference sources,
4. Adjacency to dispatching equipment,
5. Glare from window or other openings,
6. Communications center area traffic patterns, and
7. Other building traffic patterns

Security

The following security features should be considered:

1. Site – The site should be fenced to prevent unauthorized persons from approaching the building. The fence should be sufficiently distant from the building that objects cannot be thrown near or onto the building.

The building and landscape design should not create any hiding or blind spots where persons or vehicles are obscured from anyone inside the building, or by the building video surveillance system.

The exterior of the building should be surveilled by one or more video cameras showing at least the fence gate and exterior doors of the building.

There should be no signs visible from the street indicating the building's use as a communications center.

Consideration should be given to constructing an earthen berm between the building and any adjacent public street, to prevent persons from firing any projectile at the building, either from a moving vehicle or from a remote location.

There should be sufficient lighting around the building exterior to allow viewing of unauthorized persons on the site and at the building doors.

There should be sufficient clearance from the building and any adjacent structures capable of radiating or spreading fire, from trees that might fall or spread fire, or any other structure that could cause damage to the center. Any associated antenna towers or structures should be located at a safe distance from the center building, so collapse of any structure would not strike the communications building.

2. Building – Access to the building should be controlled by a computer-controlled, keyless security system. The system should allow immediate, on-site changes to the list of authorized users, including activation, deactivation, and password/number changes. The system should record all access activity, along with the date, time, user, and door ID.

All openings in the exterior wall should not face directly into working areas of the building, unless they are protected from projectile damage or puncture.

Consideration should be given to protecting any exposure (window, door, fan opening, etc.) from fires in adjacent buildings, brush, or trees. Metal fire shutters, sprinklers, or other appropriate protection should be provided if such exposures exist.

The public entryway should be designed to provide physical protection for the receptionist and to prevent visitors from entering or leaving the reception area without authorization.

3. Interior – The interior doors to the communications center area, the computer room, telephone equipment room, and other sensitive areas should be protected by a keyless access system. The security system should allow an alarm to be sounded at a remote location during certain periods, when a specific person enters the room, or when other conditions are met.
4. Computer System – All computer systems used in the building should be housed in secure areas not accessible to the public. All programs running dispatch-related programs shall be protected by a system of user names and passwords. The password system shall allow the system manager to designate how often passwords must be changed by individual users and their format (length, if letters and numbers required, etc.).

The vendors of all computer systems shall document all usernames and passwords either built into the software or added for the access of vendor support personnel. The system and application software that uses passwords

shall allow sufficient access for management to determine what usernames and passwords have been issued for each system and application.

All computer links leading out of the building should terminate at a secure location (firehouse, other communications center, etc.). Consideration should be given to requiring all modem links to the computers system to be activated only upon request (troubleshooting by CAD support, etc.), and then only for the duration of the work performed. At other times, the modem is physically unplugged from the telephone line.

5. Fire/Other – The communications center shall at least meet all applicable fire code requirements for the jurisdiction in which the center is built. Consideration should be given to meeting the requirements of the national Uniform Fire Code. The communications center shall meet all applicable building codes for the city in which the center is built. Consideration should be given to meeting applicable standards for fire alarm centers promulgated by the National Fire Protection Association (NFPA 1221).

Wall coverings, furnishings, and carpet shall be of a type and design to minimize their fire danger and their generation of products of combustion.

The computer areas of the center shall be protected by a fixed Halon sprinkler system.

The electrical system of the center shall be arranged to allow shutting off the power to the smallest possible area of the building. The dispatch area of the building shall be served by at least two circuit breakers to allow selective control of the power in case of emergency or maintenance.

6. Building Layout – The building should be arranged so that the dispatching area is not adjacent to any exterior wall of the building unless the structures (walls, windows, etc.) are sufficiently reinforced to protect against outside threats (rocks, bullets, vehicle entry, etc.).

The building should contain the following areas: reception area for outside visitors, administrative offices, employee locker room, break room, conference/meeting room, training room, dispatch area, storage rooms, computer room, and emergency operations room.

The dispatching area, supervisors' office, and training room should be arranged so they are as close as possible to the computer room, so that cabling runs are minimized.

The bathrooms, break and other areas that have plumbing should be arranged so there is no possibility that spills, leaks, or other water problems could flood or damage the dispatching area or computer room, including floor drains, scuppers, or other features.

The training room should be located so that it may be used for live dispatching or as an EOC during extraordinary incidents.

Consideration should be given to the placement of the dispatch area, computer room, and electrical service to minimize the routing of cables and power lines. Consideration should also be given to how cables and wires should be routed into the dispatch area, via a raised floor, raceways, or overhead.

7. Consoles and Chairs Ergonomics – The consoles, chairs, and other furniture shall be ergonomically designed, to lessen the chance of repetitive stress injuries. This should include chairs that are fully adjustable for height, back angle and height, and armrest height; consoles adjustable for height (from sitting down to standing up); keyboard rests adjustable for height, angle, and distance from the console.

The consoles should be designed to allow easy access to all controls without reaching beyond an average arm's length. Terminals and other video displays should be placed an equal distance from the focal point of the console, and that distance should be according to any national standards or available studies. The video terminals should be arranged to allow their horizontal adjustment closer and further away from the dispatcher.

8. Lighting – Center lighting circuitry should be arranged to prevent a lighting failure to any large area of the building. Lighting in all areas of the building shall conform to any national standard levels for office areas. There should be overall and individual console lighting in the dispatching area. The console lighting should be individually controllable at each console. Overall lighting should be arranged to minimize glare on video display terminals. Consideration should be given to the placement of terminals and windows to reduce the amount of glare on the video terminals or bright window light directly behind the video terminals.

9. Air Conditioning – The building air conditioning system should be arranged to provide a sufficient flow of fresh air (not recirculated) to the dispatch area, to filter the air to remove possible contaminants including pollen, mold, dust and mildew, and to reduce drafts on employees. Temperature control should be available to authorized personnel, but the range should be limited so it always provides sufficient cooling for electronic equipment in the building.

Consideration should be given to installing an electronic filtering system for that portion of the air conditioning system that serves the dispatch area, in order to further filter contaminants from the air. Consideration should be given to a positive pressure air system that keeps outside contaminants out.

10. Sound Control – The dispatch area should have some method of sound control for reducing the volume of noise, echoes and other unwanted artifacts. Methods include acoustic tiles, carpets, wall curtains, or other coverings.

Systems

There are a variety of systems (telephone, computer, and radio) that will need to be a part of the dispatch communications center. This section provides an overview of the systems and considerations related to the systems.

Telephone

The entire building should be served by an independent private branch exchange (PBX) system located in a secure area of the building and powered independently, or by a telephone company-provided switch (Centrex, etc.) located at a central office. If appropriate, the emergency and nonemergency lines terminating in the dispatch area should be routed to an automatic call distributor (ACD) to expedite the routing of incoming calls to the next available call taker or dispatcher. The ACD should provide a user-definable recording to callers explaining: 1) Their call has been answered and is being held in the order received; 2) that if they have an emergency, they should hang up and dial 9-1-1; and 3) alternate contact telephone numbers.

If appropriate, the nonemergency telephone lines terminating in the dispatch area should be routed to an automated attendant that allows the caller to self-route their call based on a series of voice prompts. The system should provide a user-definable recording that allows the agency to select the routing (units, departments, voice mail, etc.) and the option (press 1, press 2, etc.).

The telephone PBX, ACD, and automated attendant systems should provide a selection of printed management reports to allow review of their proper and efficient operation. The ACD system should allow real-time monitoring to insure prompt answering of incoming calls and an interface to display devices that can show the number of calls being held on the various incoming telephone lines.

The PBX system should allow calls to be put on hold, calls to be forwarded to another number, calls to be conferenced between at least the caller and two other telephones, speed dial of at least 50 numbers, voice mail, and voice mail retrieval from outside phones. Optional features include call parking and pick-up, transfer or forward on no-answer, call waiting, and caller ID for interior calls.

1. The 9-1-1 System – The center should be considered the primary public safety answering point (PSAP) for each jurisdiction's 9-1-1 calls. The 9-1-1 equipment at the consolidated dispatch center should be arranged to allow one-button transfer of emergency calls to a backup location. The consolidated dispatch center should also have a list of seven-digit numbers that can be used to reach the backup location if the one-button transfer feature is inoperative.

The 9-1-1 system should allow the addition of Phase I and II wireless E9-1-1 features, including the display of electronic maps. Consideration should also be given to the requirements of NG-9-1-1. The 9-1-1 system should allow a method of transferring incoming calls to a pre designated alternate PSAP. Procedures should also be developed to allow an authorized person to semi permanently transfer 9-1-1 calls to an alternate location in case of communications center evacuation for an extended period.

2. Internal – The consolidated center should have an internal communications system that allows quick and easy access to any dispatching position— telephones, intercom, or public address. This system would be critical to meet one of the center's primary objectives – improved coordination during large incidents. There should be an internal telephone system linking all offices and rooms in the building. The training room should be equipped with extra connections for live dispatching or as an EOC during large emergencies.
3. Public Telephone – The center should be served by the public telephone system. The system should allow direct dialing to specific offices. To minimize the possibility of a disruption, consideration should be given to having dual, independent paths to the center and service from two telephone company central offices. The system should allow on-site changing of numbers and features. It

should also allow no-answer forwarding, user-selectable forwarding, and voice mail.

4. Telephone System – The consolidated center should be added to any county or regional telephone system to allow direct communications with any county public safety agency. Consideration should be given to having dual, independent paths into the system, possibly using two methods (microwave, wired, etc.).
5. Other – The emergency and nonemergency telephone lines terminating in the dispatch area and all appropriate radio channels should be recorded continuously by a logging recorder system that allows archiving of the media (digital tape, CD-ROM, DVD, etc.). The logging recorder system should allow authorized persons to find, play, listen to, and rerecord for any selection of time on another media, console, phone line, or radio channel. The system should allow playback of several channels/lines at once, to allow a compilation of several conversations and transmissions.

Each position used for answering telephone calls for service from the public should be equipped with an instant playback logging recorder device, with at least a 30-minute total call capacity. The device should allow immediate playback of the last call and quick access to previous calls within the 30-minute capacity window, all without the dispatcher leaving the console. This instant playback feature may be provided as part of the 24-hour logging recorder system or as a separate recorder system.

6. Backup – The 9-1-1 and seven-digit public telephone numbers for the communications center should be immediately accessible from a point outside the building, in case the building cannot be occupied (natural gas leak or other contamination). This can be arranged either by terminating the lines at an outside junction box to allow connection of backup phones (stand-alone set-up or mobile communications van), or by terminating lines at a separate building on the site.

The 9-1-1, and optionally the 7-digit public telephone numbers, should have the capability of being rerouted (within no more than 30 minutes) to another location. The location to which calls are rerouted should have sufficient phones to accommodate the dispatch operation (firehouse, precinct station, school, etc.) or it should be another communications center willing to handle the center's calls during the evacuation.

There should be a written evacuation plan that sets out the specific steps for supervisors to take if an evacuation is required. The plan should include (1) a list

of equipment, supplies, maps, lists, and other items to remove from the communications center; (2) how to reroute telephone lines (names and telephone numbers); (3) which methods will be used to transport dispatchers to an alternate site; and (4) the procedures for reoccupying the center.

There should be at least one wireless telephone available to the on-duty supervisor at all times to use in case of any communications emergency at the center.

Computers

1. CAD – The computer-aided dispatch (CAD) system should have all the call entry, dispatching, and status tracking features, plus the following:
 - a. A CAD should have the ability to cross man apparatus. Patrick Johnson, a member of Brook Park Ohio’s Fire Prevention Bureau, provides this example. A fire station with three firefighters may have an engine, a ladder truck, and a squad vehicle. When a call comes in, the three firefighters take whatever piece of apparatus that is needed for the call. When this occurs, the remaining equipment is out of service, since no one is left at the station to staff it. The CAD needs to distinguish that the units left behind are out of service. If this does not occur, then these two pieces of apparatus will show as options for the next run that occurs for that station’s response area.
 - b. Multiple jurisdiction capability – The software must support multiple jurisdictions, both in dispatching and in incident reporting. Each agency must have the ability to establish the agency to handle each type of incident (police, fire, EMS), type of unit to respond for each agency (canine, HAZMAT, single-officer, paramedic, etc.), and how many units to respond.
 - c. Fire move-ups, cover-ins, and mutual aid – The software must allow fire units to move to other fire stations and assume their response district, both within a jurisdiction and across jurisdiction boundaries.
 - d. Fire station printers – The software should support automatic printing of incident information at fire stations.
 - e. Fire station paging – The software should support automatic radio paging of fire stations during incident dispatch, using the codes of the chosen radio paging encoder.
 - f. EMS capability – For any fire departments operating ambulances as fire units.
 - g. Units operating as fire-only or medical-only – Fire units frequently change their status from fire-medical to either fire-only or medical-only, depending upon equipment or personnel changes. CAD must be able to recognize the status changes and recommend units accordingly.

- h. The capability to consolidate street, intersection, and commonplace names from existing CAD geographic data files. Communities in the consolidated dispatch with CAD may have spent considerable time and effort to insure the accuracy of their geographic data files, including freeways, places without street numbers, parks, and commonplace names. These files should be combined to create the base geographic data files for consolidated CAD.
2. CAD Backup – The CAD network should be accessible when needed from an alternate location, preferably the same location where rerouted telephone lines are accessible. The alternate location should not have live CAD access unless the location is secure and the terminals are protected by username/password security.
3. Prearrival Instructions – The communications center should have computerized Emergency Medical Dispatch (EMD) with prearrival instructions (PAI), either within the CAD program itself or on a stand-alone computer accessible at every terminal.
4. Fire and EMS Incident Reporting – Determine how CAD incident data will be used to help generate reports or provide required data.
5. Word Processing – The center should have personal computer word processing software available for all management and supervisory personnel to create memos, letters, reports, and analyses.
6. GIS – The center should have a geographic information system (GIS), either integrated into the CAD software or as a separate program running on a personal computer (PC). The GIS would be used to maintain the CAD geofile and for incident analysis by individual jurisdictions.
7. Other – The critical date/time functions of the dispatch area should be obtained from a master clock system that is synchronized from a universal standard (GPS, WWV,⁷ Internet, etc.). These systems include the logging recorder, CAD, trunked radio, and telephone systems.

Where appropriate, consideration should be given to the installation of a weather radar system or other method of monitoring the weather conditions in real time

⁷ WWV is the call sign of the National Institute of Standards and Technology's (NIST) shortwave radio station located in Fort Collins, Colorado, United States.

(cable TV channel, etc.). Likewise, consideration should be given to installation of a National Oceanic and Atmospheric Administration (NOAA) weather radio.

Radio

1. Transmit – There must be sufficient transmitter sites to cover the entire consolidated area.
2. Receive – There must be sufficient remote receiver sites to allow reception from portable radios throughout the consolidated area, under all circumstances likely to be encountered by field personnel (inside buildings, in underground transit tunnels, etc.).
3. Links – The transmitter and receiver sites should be linked to the communications center by two or more methods that insure that no single interruption of service renders a large geographic area without radio service. For example, key transmitter sites can be linked by microwave and backed up by telephone lines. Key receiver sites might be linked by telephone lines backed up by radio links. Construction and security considerations at the remote radio sites should follow the same guidelines as for the communications center, and the links should allow the transmission of radio, telephone, and mobile data.
4. Consoles – There should be sufficient consoles for each staffed dispatch position. Consider having two consoles available in a separate area for training, as well as two consoles available in the dispatch center for special events and multiagency incidents. The dispatch area should have a supervisory area that has a physical view of the dispatch area, and access to all computer and radio systems, building alarms, and video surveillance systems.

All consoles should be designed and equipped identically to allow control and operation of any radio channel and jurisdiction from any console. Each console should have two headset jacks that allow operation of radio and telephones to provide backup access, dual-dispatcher operation at a console, and side-by-side training or observation by a supervisor.

5. Channel Patches – The radio system should allow patching, or interconnection, to other VHF, UHF, and 800 MHz radio systems used by public safety agencies within the consolidated area. The radio system should allow an authorized person to disable the repeater on any channel.

6. Mobile Data Terminals – The radio system should be capable of supporting a mobile data terminal system. Consideration should be given to existing systems and how they might be expanded to accommodate the consolidated area, rather than building a new system.
7. Mobile Status Terminals – The radio system should be capable of supporting a mobile status terminal system. Consideration should be given to existing systems and how they might be expanded to accommodate the consolidated area, rather than building a new system.
8. Video – The radio receiver sites and site-to-center links should be designed with the capability of transmitting live video for use in handling major incidents.
9. Data – The radio receiver sites and site-to-center links should be designed with the capability of transmitting digital data for use in handling major incidents.
10. Teletype – The facility should be arranged to allow reception of teletype information from state and national sources that transmit weather, natural disaster and national warning information. The link should also handle inquiries and responses from law enforcement databases at the local, county, state, and federal level.
11. Paging
 - a. Fire Stations – The radio system should be capable of supporting a fire station radio alerting system. Consideration should be given to existing alerting systems and how they might be expanded to accommodate the consolidated area. The system should provide sufficient individual codes to allow individually alerting each fire station handled by the communications center, with future expansion. The system should allow sufficient command codes to handle opening gates or doors, turning on lights, sounding an alert device, or activating other equipment individually.
 - b. Personnel – The radio system should be capable of supporting a personnel paging system. Consideration should be given to existing systems and how they might be expanded to accommodate the consolidated area.

If in-house paging does not provide sufficient geographic coverage, then a contract paging service should be employed to provide paging services.

Besides individual pager numbers, the paging system or service should allow group paging by entering a single number or telephone number, whereby several pagers would be activated at once.

12. Phone Patch – Consideration should be given to installing the capability to patch a designated or any radio channel into the PBX telephone system to allow field units to make a telephone call using their radio.

Intergovernmental Agreement

The conclusion of the aforementioned planning activities is some form of a legal agreement. This may take the form of a contract or COG bylaws. The content will vary somewhat, depending on whether it is for a COG or contractual arrangement, but generally it will address a governance and reporting structure, services to be provided (e.g., will the center provide emergency medical dispatch?), powers and duties of leadership, and how financial considerations will be addressed. (See Appendix D for an example of an intergovernmental agreement for dispatch services).

Other Issues

Policies and Procedures

As the working group develops policies and procedures for a new dispatch center, it should not only consider policies and procedures of participating agencies, but it should also consider guidance provided in NENA's "Communications Center/PSAP Daily Personnel Operations Model Recommendation."

Internal Policies and Procedures

The communications center should be governed by rules and regulations, taken from existing department communications centers and revised to handle a consolidated center. The rules and regulations should take into account any existing employee union agreements.

Dispatching Policies and Procedures

The dispatching policies and procedures for the communications center should be drawn from each individual department. They should be simplified and consolidated where possible with the agreement of the participating agencies.

Warrants

The handling of warrants may be an area of concern. The PM recommends further exploration on how this might be addressed. For example, in Scott County, Iowa, the clerk of court agreed to initially accept faxes of the return of service of a warrant. The participants in the consolidated dispatch center agreed that the original warrant would be housed at the combined dispatch center. When a person was arrested on a warrant, a copy of the warrant was faxed to the jail for service on the subject. The original was sent via courier to the courthouse and delivered to the clerk of court. The implementation working group could explore the feasibility of a similar central records management arrangement. While some of this function may be provided by dispatchers, additional clerical staff may be required. Consideration should be given to this in developing job descriptions.

Accreditation

The agency should consider whether or not it will pursue accreditation by the Commission on Accreditation of Law Enforcement Agencies (CALEA).

METHODOLOGY AND ASSUMPTIONS

The PM held a series of meetings with the AWWC working group to discuss reasons for consolidation, decision rules for determining feasibility, characteristics important in a governance structure, and allocation of costs. This section discusses the outcomes of those meetings, as well as the assumptions and methodology for determining staffing and staffing/operating costs.

Funding

There were two facilitated sessions of the AWWC working group regarding a funding allocation formula. The group agreed that it is important to have a funding allocation formula that is equitable; one in which participants' usage of the service is reflected in the amount they pay. While there was a consensus that calls for service might normally be a good measure of the extent to which an entity uses dispatch service, there are currently discrepancies as to how participating law enforcement agencies count calls for service. As a result, the group agreed to a short-term formula (which is used in this study to calculate participants estimated costs for dispatch services) that would be used until calls for service among consolidated dispatch center participants are measured consistently. The group agreed that short-term formula is to be used no more than three years, regardless of whether calls for service are measured consistently. Once consistent and reliable calls-for-service data are available, the group would move to a formula in which all costs would be allocated based on calls for service. The short-term formula is based on runs (calls for service) for fire/EMS. For law enforcement, there will be a two-part formula in which 50% of an entity's cost would be based on its share of the total population; the other 50% would be based on its proportional share of calls for service. There is one exception to this. Medway is a regional drug enforcement agency, but for the purposes of the calculations, it was treated in the same manner as a fire agency. According to the website, the agency handles the Wayne County area, and the cities of Brunswick and Wadsworth in Medina County and Holmes County. This is a combined population of 212,708. Based on the formula chosen for distribution of law enforcement costs, Medway's share based on population would be \$319,592, plus its portion based on number of calls for service. Given the small number of calls for service (46 in 2010), the PM chose to allocate Medway's share based solely on number of calls, not population, since the working group agreed that the overall rationale for the distribution formula is that it be equitable.

What is Important in a Consolidated Entity?

To help frame the study, participants were asked several questions regarding what characteristics are important in a governing structure, under what circumstances they would be willing to participate in a consolidated dispatch center, and expectations of consolidated dispatch. A few themes arose from these questions:

- Participants want to be equal partners with a democratic process in deciding how the consolidated center will be set up and how it will operate.
- A dedicated funding source would be helpful. Participants voiced concerns over having a dispatch center that would be subject to annual appropriation by a multitude of entities. A dedicated funding source is even more important if wireless 9-1-1 funding is no longer available.
- Quality of service and cost savings are important. Sharing costs collectively will better enable the group to address future capital needs, including those required to address Next Generation 9-1-1.
- With regard to organizational structure, some participants expressed the need to have a director or manager that is dedicated to running the center. Others indicated that they would like an organization with a clear reporting structure.
- A council of governments was mentioned by several participants as a possible governance structure.
- The working group agreed that in a consolidated dispatch center, fire/EMS entities' fees would be based on runs. Each law enforcement entity will pay based on the 50/50 formula (half based on population, half based on calls for service) for a maximum of three years from the time the dispatch center opens (receives first 9-1-1 call for the city of Ashland), at which point each entity will pay based on its percentage of calls for service, as defined by standard operating procedures (SOPs). The working group will work toward a standard definition of calls for service. Once data are available based on this common definition, the funding formula will be changed. The working group's plan is that the funding formula be based on calls for service as soon as reliable data are available, but no longer than three years.

Staffing Methodology and Assumptions

This section describes the methodology and assumptions used by the PM to determine staffing levels and costs for a consolidated dispatch center. It is important to acknowledge that the decision on a governance structure, location of a consolidated dispatch center, and even the decision to consolidate have not yet been made. However, in order to assess feasibility, an assumption was made with regard to type of

entity. For the purposes of this study, the assumption is that the group will form a council of governments, which will initially contract with the Wayne County Justice Center (WCJC) for service. This is based on the preference (indicated by the AWWC working group) for a council of governments, as well as the assumption that it will be more economical to use the existing infrastructure and staffing at the onset of the consolidation.

Over time, the group may wish to hire its own staffing and lease space and equipment from the county or construct its own building, purchase new equipment, and function as a stand-alone entity. If this were to occur, the COG members would need to hire a center manager, office manager, and part-time information technology (IT) support analyst, in addition to shift supervisors and dispatchers (both part time and full time). The group would also need to find a mechanism for handling administrative tasks such as legal, accounting, payroll, and human resources functions. Salary estimates for the additional administrative/support staff members are provided at the end of this section.

This study incorporates part-time dispatchers into the staffing mix. The AWWC working group indicated that they were open to using part-time staff as a way to minimize overtime. The group did qualify this by indicating that part timers would need to work a minimum of one day per week.

Methodology

To determine staffing levels, the PM identified a staffing model and shift scheduling software. The staffing model, developed by Russ Russell of 9-1-1 SME Consulting, was used to determine the number of staff needed per shift. The model bases the outcomes on a number of factors, including average number of calls during the *busy hour shift* and *normal hour shifts*. Russell's model was developed in conjunction with a PSAP Staffing Survey and Analysis Study conducted by L. Robert Kimball & Associates, Inc. and 9-1-1 SME Consulting for the National Emergency Number Association (NENA) Special Weapons and Tactics (SWAT) Team Operations Group. The scheduling software from ShiftSchedules was used to calculate the total number of dispatchers and shift supervisors needed to cover each shift, given average vacation accrual rates of dispatchers employed by the WCJC.

The PM identified busy (peak) hour call levels based on the data provided by the WCJC and the Ashland County Sheriff's Office (ACSO) dispatch centers. The following methodology was used to calculate busy hour and normal hour call volumes:

1. Hourly call volume was obtained over a minimum of 14 days during the busiest time of the year for 9-1-1 calls (those coming in over dedicated 9-1-1 circuits) and

- seven-/10-digit emergency number calls (those coming in over the Public Switched Telephone Network to seven-/10-digit emergency numbers or administrative lines that are answered by the call taker).
2. The 9-1-1 and 7-/10-digit calls in each hour were added together to get the total number of calls received during each hour of the selected time period.
 3. The calls number of calls received in the busiest hour of each day were added together and divided by the number of days of the study. This call volume was defined as the average busy hour (ABH).
 4. To determine the busy hour shift, hourly call volumes before and after the ABH were examined to identify the eight-hour period that has the most calls. This eight-hour period is defined as the busy-hour shift.
 5. The normal hour is defined by identifying the highest hourly call volume of the remaining hours of the day (those outside the busy-hour shift). The normal hour serves as the basis for staffing for a normal hour shift.

Call data were provided in incremental terms of calls per hour or calls per four hours. ACSO calls per four hours were assumed to occur evenly across the four-hour time period. Calls for the Rittman and Orrville dispatch centers were assumed to occur in the same pattern as the WCJC. Call data for all entities were added together to establish when the heaviest call loads occurred or might occur, once consolidated. For Scenarios 1 and 2, the average peak number of calls (for service) in 2010 (9.86 and 13.17, respectively) occurred between 4:00 pm and 4:59 pm. For Scenario 3, this occurred between 6:00 pm to 6:59 pm and 8:00 pm to 8:59 pm with 14.75 calls per hour each. The busiest eight-hour time frame across all scenarios was from 3:00 pm to 10:59 pm.

The next step was to determine peak shift staffing for dispatcher and shift supervisor shifts. For seven- and ten-digit emergency calls, the PM used the model's default call duration of 95 seconds. For 9-1-1 calls, data from ACSO's eight 9-1-1 trunk lines were used to calculate an average of 68 seconds per call (2011). Table 11 identifies the upper end of the range in terms of number of calls⁸ that various levels of staffing may be able to handle. In looking at the annual call capacity (total calls, not just dispatched) estimated by the model, it is important not to take the numbers out of context, as the call capacity will vary depending on the data entered.⁹ Call data for all three scenarios, represented in Table 12, Table 14, and Table 15, were entered into Russell's model to generate estimated staffing per shift.

⁸ According to Russell's model and based on the assumptions outlined in this appendix.

⁹ Includes paid holidays off (vacation, personal days, sick), training, conference, estimated number of calls in a given hour, and the estimated length of call.

Table 11: Estimated Staff Capacity

Number of staff taking calls	Total estimated calls per year
4	248,200
5	324,120
6	408,800

At the request of the AWWC dispatch consolidation working group, there is one shift supervisor per shift every day. It is assumed that the shift supervisor is answering calls while serving in this position. *This position is included in staffing figures provided in Table 13 and Table 16.*

Scenario 1

Based on Russell's model, the projected annual call volume would be 224,840 and the estimated staffing level for Scenario 1 is four during the peak hour and the normal shifts. This means four staff members would be answering calls.

Table 12: Scenario 1 Call Data

Call Volume Category	Call Volume		Call Duration in Seconds
	Peak Hour Shift	Normal Shift	
9-1-1 calls	10	6	68
7-/10-digit emergency #	25	15	95

Projected combined dispatcher and shift supervisor staffing needs per shift for the first scenario is shown in Table 13. As noted previously, the staffing figures per shift include one shift supervisor.

Table 13: Scenario 1: Combined Shift Supervisors and Dispatchers per Shift

Shift	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1st	4	4	4	4	4	4	4
2nd	4	4	4	4	4	4	4
3rd	4	4	4	4	4	4	4

Overall staffing estimates are 12 full-time dispatchers, five part-time dispatchers, and four full-time shift supervisors for this scenario.

Scenarios 2 and 3

The model estimates annual call volume for the second scenario to be 245,280 based on the data in Table 14.

Table 14: Scenario 2 Call Data

Call Volume Category	Call Volume		Call Duration in Seconds
	Peak Hour Shift	Normal Shift	
9-1-1 calls	13	8	68
7-/10-digit emergency #	25	15	95

Based on the data in Table 15, the annual estimated call volume for Scenario 3 is 262,800 per year.

Table 15: Scenario 3 Call Data

Call Volume Category	Call Volume		Call Duration in Seconds
	Peak Hour Shift	Normal Shift	
9-1-1 calls	15	10	68
7-/10-digit emergency #	25	15	95

Projected dispatcher staffing needs per shift for the second and third scenarios are shown in Table 16.

Table 16: Scenarios 2 and 3 Combined Shift Supervisors and Dispatchers per Shift

Shift	Sun	Mon	Tue	Wed	Thu	Fri	Sat
1st	4	5	5	5	5	5	5
2nd	4	5	5	5	5	5	5
3rd	4	4	4	4	4	4	4

Projected staffing for dispatchers and shift supervisors are 14 full-time dispatchers, five part-time dispatchers, and four full-time supervisors.

Staffing Analysis Assumptions

This subsection discusses the assumptions used in developing the staffing estimates. While there are some general assumptions that apply to holidays, sick leave, training and certification, and compensation, assumptions relative to overtime, vacation, and scheduling of dispatchers and shift supervisors vary by scenario.

Holidays

Estimated staffing figures assume there are 11 paid holidays that are paid at the full-time employee rate of time-and-a-half for all employees scheduled. Costs for covering holidays are based on staffing levels of four dispatchers first and second shifts, and three for third shift. There would be one shift supervisor per shift.

Sick Leave

It is assumed that each full-time employee uses 15 sick days per year. Part-time employees are assumed to use all sick days that they accumulate over the course of the year, which accrue at 4.6 hours per year. This is consistent with annual median (14 days) sick leave usage of full-time dispatch employees of the WCJC in 2010. Although at least some sick time could be covered by part-time employees, for the purposes of this study, it is assumed that the center will use overtime at a rate of time-and-a-half.

Training and Certifications

In Ohio, there are recommended minimum standards for emergency service telecommunicator certification, which are described in the Ohio Revised Code (ORC) §4742. Certifications standards in this section of the ORC include a minimum of 40 hours of training on the role of a dispatcher; effective communication skills; liability; requirements of the Americans With Disabilities Act as it pertains to dispatchers; handling hysterical and suicidal callers; law enforcement, fire service, and EMS terminology; emergency call processing guides for law enforcement, fire service and EMS; disaster planning; police officer survival and fire or emergency medical service scene safety; and others. To maintain certification, dispatchers must complete at least eight hours of continuing education coursework in emergency service telecommunicator training over a two-year period.

While not the only provider, the National Academy of Emergency Dispatch (NAED) certifies individuals in emergency police dispatch, emergency fire dispatch, and emergency medical dispatch. Certification in all three areas requires a minimum of 48

hours of training over a two-year period; for two areas, 36 hours of training is required, and for one area, 24 hours.

Given the importance of training, as expressed by the AWWC dispatch consolidation working group, this study assumes that training provided to dispatchers and shift supervisors will exceed Ohio's recommended minimum standards by providing at least three days (24 hours) of training per employee, per year. This would ensure dispatchers maintained certification in at least one of three areas.

Because the group would contract with the county, training costs are assumed to be for experienced employees. This is noteworthy because new employee training would be more lengthy and costly than refresher or recertification training. For example, APCO offers a Public Safety Telecommunicator 1 course, which is five days in the classroom or four weeks online, for \$309 to \$359. An online crisis negotiations course is \$199 to \$249 for an eight-hour course (in classroom). Continuing education through the APCO Institute is available for free, in the form of articles and quizzes, and for \$59 to \$79 for web seminars. NAED recertification costs are \$50 for an individual certification, \$85 for two certifications, and \$110 for three. Continuing education may be obtained by reading NAED articles and taking quizzes (free) or by participating in a variety of courses and seminars (at a cost that varies).

In an effort to overestimate rather than underestimate training costs for staff time, dispatchers and shift supervisors are paid overtime for training. Some of the training could be done at a lesser cost by using part-time employees to fill in for those attending training during a scheduled work day.

Compensation

To provide conservative estimates, the PM examined the high and average wage rates for dispatch center staff (see Table 17). High and average hourly rates for the information technology support analyst, dispatchers, and shift supervisors (communications supervisor) are based on Wayne County's 2011 hourly rates for these employees. These figures include a fringe benefit rate of 35%, based on WCJC data.

Table 17: Wage Rates Used in Calculations

Position	High	Average
Part-time dispatchers	\$20.22	\$19.01 *
Full-time dispatchers	\$27.00	\$24.19 *
Shift supervisors		\$28.80 *
IT support analyst		\$34.41 *

NOTE: * denotes the rate used in the final cost calculations.

Overtime, Vacation, and Scheduling of Dispatchers and Shift Supervisors

For all dispatch-related employees, a shift is 8.5 hours long, eight of which are paid. This allows 0.5 hours for lunch and a 15-minute overlap between shifts. Employees are scheduled for no more than five days in a seven-day period without a day off.

Scenario 1

Full-time dispatchers and shift supervisors are scheduled 40 hours per week with five days on and two consecutive days off. The full-time dispatchers are assigned to work the same days of the week and the same shift from one week to the next, with one exception. One dispatcher is scheduled one day per week on first shift and the remaining four on second shift. There is one supervisor assigned to each shift. The fourth full-time supervisor works two consecutive days on first shift followed by three consecutive days on second shift. The open days in the supervisors' schedules are covered by dispatchers, who are assumed to receive a pay adjustment to a supervisor's level for those hours. There are 344 overstaffed shifts totaling 2,752 hours. Some of these hours may be available to cover staffing needs for sick leave or training.

Part-time employees are scheduled to work an average of two to four days per week (except the weeks they are scheduled for vacation). The five part-time dispatchers are scheduled for 848, 1,448, 1,480, 1,624, and 1,704 hours annually. This leaves 2,752 hours open (assuming 2,080 hours maximum per year) in part-time dispatchers' schedules to cover at least some sick and training leave. Although part-time dispatchers are generally scheduled for one shift, there are occasions where they are scheduled across all shifts.

Vacation usage was factored into the calculations for determining staffing needs. A vacation consists of at least five consecutive days off. No more than two dispatchers were on vacation at the same time. Full-time employees are assumed to have the following annual vacation accrual rates: 12 dispatchers with four weeks, three shift

supervisors with five weeks, and one with four weeks. The five part-time dispatchers are assumed to have annual vacation accrual rates and usage rates of one week each.

Proposed staffing levels are adequate for covering most of the hours required for operating a dispatch center. However, there are an estimated 120 hours that the center will need to pay overtime to cover dispatchers' scheduled days off. At time-and-a-half, this equates to 180 hours. There is an assumption that dispatchers filling in for supervisors are paid at the supervisor rate; therefore, no overtime is needed to cover supervisors' time off. Overtime hours to cover training are 459 for dispatchers and 108 for shift supervisors. The combined totals for all overtime are 4,237 hours in overtime for dispatchers and 1,068 for shift supervisors.

Scenarios 2 and 3

Full-time dispatchers and shift supervisors are scheduled 40 hours per week with five days on and two consecutive days off. The full-time dispatchers are assigned work the same days of the week and the same shift from one week to the next, with one exception. One dispatcher is scheduled one day per week on first shift and the remaining four on second shift. There is one supervisor assigned to each shift. The fourth full-time supervisor works two consecutive days on first shift followed by three consecutive days on second shift. The open days in the supervisors' schedule are covered by dispatchers, who are assumed to receive a pay adjustment to a supervisor's level for those hours. There are 196 overstaffed shifts totaling 1,568 hours. Some of these hours may be available to cover staffing needs for sick leave or training.

Three part-time dispatchers are scheduled to work a minimum of two days per week (except the weeks they are scheduled for vacation). Two part-time dispatchers have schedules that change weekly with staff scheduled for three to five days per week. The five part-time dispatchers are scheduled for an average of 24 to 33 hours per week, or 1,240, 1,464, 1,488, 1,632, and 1,708 hours annually. This leaves 2,868 hours open (assuming 2,080 hours maximum per year) in part-time dispatchers' schedules to cover at least some sick and training leave. Although part-time dispatchers are generally scheduled for one shift, there are occasions where they are scheduled across all shifts.

Vacation usage was factored into the calculations for determining staffing needs. A vacation consists of at least five consecutive days off. No more than two dispatchers were on vacation at the same time. Full-time employees are assumed to have the following annual vacation accrual rates: two dispatchers with three weeks, 12 dispatchers with four weeks, three shift supervisors with five weeks, and one with four weeks. The five part-time dispatchers are assumed to have annual vacation accrual rates of one week each.

Proposed staffing levels are adequate for covering most of the hours required for operating a dispatch center. However, there are an estimated 408 hours (at time-and-a-half) that the center will need to pay overtime to cover dispatchers' scheduled days off. There is an assumption that dispatchers filling in for supervisors are paid at the supervisor rate; therefore, no overtime is needed to cover supervisors' time off. Overtime hours to cover training are 684 for dispatchers and 108 for shift supervisors. The combined totals for all overtime are 5,090 hours in overtime for dispatchers and 1,068 for shift supervisors.

Administrative and Support Staff

If the study participants move forward with consolidation and wish to set up a separate entity, below are estimates for those staffing costs. Average and high figures for the center manager and office manager positions are based on data from www.payscale.com for the Cleveland area. The high figure is at the 90 percentile. These figures (see Table 18) include a fringe benefit rate of 35%, which is based on WCJC data. The office manager and dispatch center manager are estimated to work full time (2,080 hours per year). The IT support analyst is assumed to work part time at 1,040 hours per year.

Table 18: Estimated Hourly Rates for Administrative and Support Staff

	High	Average
Dispatch center manager	\$39.10*	\$33.65
Office manager	\$24.00	\$19.63*

NOTE: * denotes the rate used in the final cost calculations.

Based on the above figures, estimated overall staffing costs for administrative and support staff are provided in Table 19.

Table 19: Estimated Annual Administrative and Support Staff Costs

Support staff	Total Annual
Dispatch center manager	\$ 81,325
Office manager	\$ 49,923
Total support staff	\$ 131,248

APPENDICES

Appendix A: References

Appendix B: Sample Job Descriptions

Appendix C: Sample Performance Appraisal Form

Appendix D: Sample Intergovernmental Agreement

Appendix E: Performance Management and Assessment

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Appendix B: Sample Job Descriptions

While these job descriptions do not satisfy all the criteria discussed in Appendix E, they do include elements that may be helpful as Parma crafts a job description for shift supervisors.

Sample Shift Supervisor Job Descriptions

Example # 1

Los Alamos County Job Description and Classification

JOB TITLE: Dispatch Shift Supervisor

JOB CODE: 4203

CLASSIFICATION: Non-Exempt

DEPARTMENT/DIVISION: Police/Dispatch I Supervisor: Consolidated Dispatch Center Supervisor

Position Summary: Under general supervision of the Consolidated Dispatch Center Supervisor, supervises daily activity of shift for the Dispatch Center. Responds to emergency and non-emergency telephone calls for service, identifies and dispatches appropriate emergency units, gathers and relays critical information, documents calls and responses, and complies with department policies and procedures to ensure the safety of personnel and the public. Maintains confidentiality of all privileged information.

The general level and nature of this position are described in the headings below. This is not an all-inclusive list of all responsibilities, duties and skills required of personnel in this classification.

Essential Duties & Responsibilities

- Supervises and coordinates the day-to-day activities of Dispatch Shift Supervisors, to include scheduling, allocation of work assignments, and approval of time records.
- Serves as Terminal Agency coordinator for NMLETS System.
- Assists the Dispatch Supervisors with assigned projects.
- Responsible for NCIC, TAC, MSAG.
- Maintains Protection Order Book.
- Ensures county, department, and staff comply with CDC rules.

- Participates in personnel decisions, such as interviewing applicants, hiring decisions, discipline and corrective action. Prepares performance evaluations. Ensures that dispatchers are trained in the appropriate usage of the state and NCIC computer network.
- Creates and maintains a training manual and performance evaluation checklist for new dispatchers; provides training and ensures that on-the-job training is completed and - documented for new dispatchers.
- Develops recordkeeping procedures and manages appropriate department records in accordance with applicable regulations, policies, and standards.
- Assures that the communications center equipment is fully operational, including radio, telephone, teletype and computer aided dispatch (CAD).
- Checks equipment and makes minor repairs and schedules vendor repairs. Researches and recommends equipment upgrades.
- Receives calls concerning crimes, emergencies, nonemergencies, and other requests for assistance. Prioritizes calls, dispatches police, fire, rescue and/or medical units.
- Maintains contact with personnel responding to calls; relays information and answers questions. Provides timely responses to all requests for information from authorized personnel and other public safety and law enforcement agencies.
- Operates a National Crime Information Center (NCIC) computer, the New Mexico Crime Information Center (NMCIC) and other databases to assist the officers.
- Dispatches through radios, computers and telephones. Operates pagers to call out additional services.
- Broadcasts orders to patrol officers in vicinity to investigate complaint or request when appropriate; relays instructions or questions from remote units.
- Logs calls and data into the Computer Aided Dispatch system (CAD).
- Tracks the locations and activities of on-duty personnel.
- Dispatches calls for a variety of other agencies, including fire, emergency medical services, rescue units, utilities, public works, New Mexico Fish and Game, and others.
- Records calls broadcast and complaints received; performs data entry on computer.
- Performs various clerical duties, including completing the electronic dispatch log and filing reports.
- Answers a variety of questions dealing with public safety and community activities, refers questions and information to appropriate county departments or other agencies, to include road and weather conditions and travel directions.

- Locates and informs appropriate department and county personnel of emergency situations, operations and/or conditions and upon direction of authorized personnel.
- Initiates activation of the county's Emergency Operations Center.
- Ensures strict confidentiality of records.
- Contributes to a team effort and accomplishes related results as required.
- Performs other duties as required.

Minimum Qualifications

- High School Diploma or GED, three years of experience in police or other emergency services dispatch.
- Successful completion and maintenance of the New Mexico Law Enforcement Academy (NMLEA) Public Safety Telecommunicator certification (formerly NMLEA Police Dispatcher Radio) within one year of employment.
- Successfully obtain Emergency Medical Dispatch certification within one year of employment and maintain thereafter.
- Successful completion of computer based skills test prior to commencing work. Successful completion of thorough background investigation, including FBI fingerprint check. Successful completion of the pre-employment physical and psychological exam prior to commencing work.
- Must not have been convicted of a felony or other crime involving moral turpitude.

Preferred Qualifications

- Associate's Degree in Criminal Justice, Criminology, Sociology, Psychology, Social Work, or related field.
- One year police dispatch experience.
- One year lead experience.
- Emergency Medical Dispatch, Health Provider CPR, and NCIC certifications.

Knowledge, Skills, and Abilities

- Knowledge of radio dispatch regulations, procedures, protocols, and/or equipment.
- Knowledge of modern practices and procedures, standard office and accounting equipment. -Knowledge of records management and basic accounting procedures.
- Knowledge of customer service practices and techniques.

- Knowledge of general principles of training and leading employees.
- Knowledge and ability to use NCIC, TAC, MSAG.
- Skill in the use of computers and ability to use NCIC identification and Computer Aided Dispatch software.
- Strong interpersonal and communication skills and the ability to work effectively with a wide range of constituencies in a diverse community.
- Records maintenance skills.
- Skill in making decisions and acting quickly and calmly in emergency situations.
- Skill at analyzing work assignments for completeness, safety concerns and quality assurance.
- Skill in operating radio, telephone and computer equipment.
- Computer data entry skills.
- Clerical, word processing, and/or office skills.
- Ability to interact and communicate with people over the telephone, often in stressful situations. -Ability to effectively operate an ACU 100 interoperable radio console.
- Ability to react calmly and effectively in emergency situations.
- Ability to perform multiple tasks and solve problems in a technical setting.
- Ability to learn the geography of Los Alamos County, the locations of important buildings and the street system.
- Ability to learn county, state, and federal laws and the department policies and procedures as they relate to dispatching police and other emergency services.
- Ability to supervise, motivate, train and lead personnel.
- Ability to read, understand, follow, and enforce safety procedures.
- Ability to understand and follow specific instructions and procedures.
- Ability to communicate effectively, both verbally and in writing.

Physical Demands: While performing the duties of this job, the employee regularly is required to sit; have manual and finger dexterity; stoop, and talk and hear. The employee is occasionally required to crawl, stand, climb heights, walk, reach above shoulder level, crouch, kneel, balance, push/pull, and carry. The employee must occasionally lift and/or move up to 25 pounds.

Work Environment: Work is performed in a police radio communications environment with a moderate noise level. Work may be stressful at times. Irregular hours, night shift, weekend and holiday work is required.

Each and every county position requires the following professional skills and abilities as key and necessary elements of performance. Employees are required to:

- Demonstrate regular and reliable attendance;
- Work well with others and participate fully in a team oriented environment;
- Interface with other employees and customers in a courteous and respectful manner;
- Project positive support of their department and all county organizations at all times; and,
- Maintain and enhance the county's commitment to customer service excellence.

Example # 2:

CITY OF ATLANTA

Department of Human Resources, 68 Mitchell St., SW, Suite 2120, Atlanta, GA 30303

INVITES APPLICATIONS FOR THE POSITION OF:
COMMUNICATIONS DISPATCHER SUPERVISOR, SENIOR
Apply at. www.atlantaga.gov

An Equal Opportunity Employer

SALARY: \$44,318.00 - \$64,703.00 Annually

OPENING DATE: 01/27/11

CLOSING DATE: 02/25/11

Purpose of Position

The purpose of this job is to supervise the entire shift of all call takers, all dispatchers, GCIC, and supervisors while maintain professionalism and rapid response throughout the center. Duties include, but are not limited to: direct oversight of the entire shift from supervising, scheduling and ensuring all requests for services from citizens or emergency units are received and dispatched to the appropriate agency in a timely and accurate manner; and keeping accurate records of all activities. Also included in the duties are handling complaints from citizens, answering the supervisor phones, completing time cards and payroll for employees on your shift. The main source of

responsibility is to ensure that all 911 calls are answered in a timely manner with professionalism and accuracy.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The following duties are required for this job. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

Work Delegation

- Supervises, directs and evaluates assigned staff, handling employee concerns and problems, directing work, counseling, disciplining and completing employee performance appraisals.
- Directs and administers work assignments of shift supervisors and subordinate personnel engaged in dispatching activities; reviews and approves personal leave, sick and vacation.
- Oversees day-to-day operation of E911.

Planning and Organizing

- Plans and maintains schedule for the dispatchers; adjusts schedule, staffing and/or authorizes staff to work overtime when necessary to ensure full staff at all times.
- Organizes, prioritizes and distributes work assignments to supervisors and subordinates; works to meet the goals and objectives of the department.
- Inventories office supplies and equipment; orders and maintains sufficient amount to ensure adequate units are available to perform daily tasks.

Communication

- Must be able to answer and take 911 calls, operate effectively and efficiently in CAD and communicate effectively over law enforcement radio channels initiating and responding to calls; issues case numbers; notifies others, such as wreckers, cabs and utilities, when services are requested/required.
- Provides the general public with directions and referrals, answers to citizen complaints and concerns and any other information requested regarding the community or situation.
- Contacts various utility companies to resolve problems such as gas detection, power failures, etc.; contacts telephone companies for assistance in obtaining address of distressed callers.
- Answers the telephone; provides information, advice and guidance; takes and relays messages and/or direct calls to appropriate personnel; returns calls as necessary.

Employee Development

- Provides on-going, in-service training for all dispatchers; keeps supervisors and dispatchers updated on changes or additions in procedures affecting their job directly or indirectly.
- Guides and trains subordinates on proper procedures and protocol of the department; shows best technique to accomplish tasks and provides technical assistance as needed.
- Reviews documents produced by subordinates to ensure accuracy; discusses errors which may arise and recommends method for corrective action.

Administrative Duties

- Substitutes for other supervisors and/or co-workers in temporary absence of same; performs flexible unit assignments as needed in emergency response; performs other administrative tasks as assigned.
- Attends meetings, seminars and training sessions as required to remain knowledgeable of departmental and city operations, to promote improved job performance and to stay current with changing policies, and command memorandums.

Problem Identification and Solution

- Monitors supervisors and staff members on both radio and telephone traffic to ensure all procedures and policies are followed and all tasks are performed in a professional manner.

Productivity and Accountability

- Performs multiple tasks simultaneously; takes appropriate action when presented with a stressful life/death situation; remains calm under all circumstances.
- Monitors multiple radio frequencies while answering/handling phone calls or other radio frequencies.
- Works assigned shifts.

Equipment Use and Maintenance

- Operates a photocopy machine to copy and a facsimile machine to transmit and receive correspondence, documents and reports; maintains printers changing paper and ribbons as needed.
- Must be able to operate telecommunications device for the deaf.

Record Keeping and Documentation

- Maintains a daily log of all shift personnel, dispatcher work schedule book and leave (absence) time log; prepares time sheets and payroll of unit.
- Prepares statistical information for performance evaluations on employees; prepares disciplinary packages as needed.

Minimum Qualifications

High school diploma or GED required; five years in communications dispatching, or any equivalent combination of education, training, and experience which provides the requisite knowledge, skills, and abilities for this job. Must be certified by the Peace Officer Standard and Training as a Communications Officer or become certified within six months of appointment and must maintain certification of same. Supervisory experience required.

03-29-2011

Example # 3

Position Title: 6329-Supervisor, Police Telecommunications

Department: University Police

Division: Facilities Management

Reports to: Manager, Police Telecommunications

MISSION STATEMENT

The mission of The University of Texas M. D. Anderson Cancer Center is to eliminate cancer in Texas, the nation, and the world through outstanding programs that integrate patient care, research and prevention, and through education for undergraduate and graduate students, trainees, professionals, employees and the public.

SUMMARY

The primary purpose of the Supervisor, Police Telecommunications position is to provide supervision, guidance and training to police telecommunicators. Impacts the effectiveness of public safety through radio communications, telephone communications, teletype and automated data systems and monitoring of security alarm systems and closed circuit television systems within the Police Communications Center (PCC).

CORE VALUES

Caring Behaviors

- **Courtesy:** Is respectful and courteous to each other at all times
- **Friendliness/Teamwork:** Promotes and rewards teamwork and inclusiveness; Is sensitive to the concerns of our patients and our co-workers

Integrity Behaviors

- **Reliability:** Communicates frequently, honestly and openly

- Accountability: Holds self and others accountable for practicing our values
- Safety: Notices a safety concern and brings it to someone's attention; Models safe behaviors (wears badge, washes hands, keeps work area clean and orderly)

Discovery Behaviors

- Responsiveness: By his/her actions, creates an environment of trust; Encourages learning, creativity and new ideas
- Personal Leadership/Self-Initiative: Helps others to identify and solve problems; Seeks personal growth and enables others to do so

KEY FUNCTIONS

1. Supervises, assigns, trains and evaluates employees in the performance of public safety telecommunications and takes quick decisive actions involving escalating situations.
2. Provides guidance in interpreting and enforcing operational policies and procedures and uses appropriate authority regarding actions. Evaluates, writes, and updates emergency and standard operating procedures.
3. Schedules and assigns respective shift personnel; maintains adequate staffing levels.
4. Verifies and executes institutional emergency plan and initiates and follows through with emergency notification system. Participates in the Incident Command System (ICS) in coordination with field operations and the Emergency Operation Centers of the University of Texas.
5. Inspects and monitors the overall performance of radio and telephone communications, closed circuit television, automated data systems, and alarms. Forwards concerns through channels to the appropriate authority. Ensures compliance with CJIS, Clery, CALEA, and other applicable State and Federal regulations.
6. Prepares daily and monthly reports.
7. Performs monthly quality assurance checks.
8. Other duties as assigned.

CORE COMPETENCIES

- IC - Coach & Develop:
 - Assess strengths and development needs of employees;
 - Provide challenging development opportunities; and
 - Provide relevant, timely feedback; mentor others.
- IC - Build Relationships:
 - Initiate, develop, and manage relationships and networks; and
 - Show sincere interest in others and their concerns.
- IC - Provide Direction:

- Provide clear direction and priorities toward a common vision;
 - Clarify roles and responsibilities for employees; and
 - Promote empowerment.
- IC - Oral Communication:
 - Express ideas clearly and concisely in groups and one-to-one conversations; and
 - Create an environment with open channels of communication.
- IC - Written Communication:
 - Convey information clearly and concisely through both formal and informal documents;
 - Adapt writing style to fit the audience.
- IC - Technical/Functional Expertise:
 - Demonstrate technical proficiency required to do the job;
 - Possess up-to-date knowledge in the profession; and
 - Provide technical expertise to others.
- IC - Analytical Thinking:
 - Gather relevant information systematically;
 - Break down problems into simple components; and
 - Make sound decisions.

EDUCATION

Required: Associate's degree from an accredited college or university with major course work in Criminal Justice, Police Science, Public Safety Communications, Business Administration or related field.

Preferred: Bachelor's degree from an accredited college or university with major course work in Criminal Justice, Police Science, Public Safety Communications, Business Administration or related field.

LICENSE/CERTIFICATION

Required: Ability to obtain the NCIC/TCIC Certificate within six months and the TCLEOSE Intermediate Telecommunications Operator Certificate within 24-months.

Preferred: Possess the TCLEOSE Advanced Telecommunications Operator Certificate, the NCIC/TCIC Certificate, and an instructor certification from a licensing agency equal to the TCLEOSE.

EXPERIENCE

Required: Five years of experience in public safety telecommunications. May substitute required education degree with additional years of equivalent experience on a one to one basis.

Preferred: Six years of experience in public safety telecommunications to include two years of supervisory/team lead experience.

SUPERVISION GIVEN

Lead Police Telecommunicators, Senior Police Telecommunicators, and Police Telecommunicators

WORKING CONDITIONS

This position requires:

- | | | |
|---|--|---|
| Working in an enclosed, secured communications environment | <input type="checkbox"/> No | <input checked="" type="checkbox"/> Yes |
| Working in Patient Care Unit (e.g. Nursing unit; outpatient clinic) | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes |
| Exposure to human/animal blood, body fluids, or tissues | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes |
| Exposure to harmful chemicals | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes |
| Exposure to radiation | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes |
| Exposure to animals | <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes |

May be required to work rotating shift assignments on day, evening, and nights with varying days off and on holidays. Subject to emergency recall during man-made or natural disasters and unusual occurrences on campus.

PHYSICAL DEMANDS

	Time Spent			
	Never 0%	Occasionally 1-33%	Frequently 34-66%	Continuously 67-100%
Standing		X		
Walking		X		
Sitting				X
Reaching		X		
Lifting/Carrying				
Up to 10 lbs.			X	
10lbs. to 50 lbs.		X		
More than 50 lbs.	X			
Pushing/Pulling				
Up to 10 lbs.			X	
10 lbs. to 50 lbs.		X		
More than 50 lbs.	X			
Use computer/keyboard				X

**Example # 4
COMMUNICATIONS SUPERVISOR (PUBLIC SAFETY COMMUNICATIONS)**

DEFINITION

Under general supervision of a Division Manager and direction of the Director of Public Safety Communications, performs technical and supervisory work and will plan, coordinate, schedule, assign and evaluate the work of personnel providing or supporting emergency communications for law enforcement, fire and emergency medical services.

EXAMPLES OF DUTIES

Supervise dispatch personnel and direct and monitor dispatch activities to ensure prompt and appropriate responses to requests for emergency assistance in compliance with standard operating procedures; assign and schedule work; train employees on new or changed methods and procedures; directly make or effectively recommend personnel actions, including probationary decisions, discipline, performance evaluations and adjustment of grievances; assist with the development of budgetary recommendations and administration; identify system and equipment operational deficiencies and recommend potential solutions; maintain personnel and computer system records and procedures manuals; manage projects; perform other tasks as assigned.

EMPLOYMENT STANDARDS

Education and Experience: Experience equivalent to high school graduation and work as a Communicator for at least two years with Public Safety Communications. Additional credit will be awarded for previous supervisory or lead work experience (i.e., Acting Communications Supervisor).

Knowledge, Skills and Abilities: Extensive knowledge of police, fire and emergency medical services dispatch procedures; knowledge of Federal Communications Commission rules and regulations; knowledge of Dane County geographic area; knowledge of the communications system, its equipment and proper operation; knowledge of proper arrangement of material for transmission, including priority of messages; possession of effective oral and written communication skills; ability to recognize equipment malfunctions and coordinate service or repair; ability to supervise others including adapting to scheduling problems on short notice and under other stressful conditions; and ability to establish and maintain effective working relationships with subordinates, police, fire and emergency medical personnel and the public.

Special Requirements: Must be available to work evenings, weekends and holidays. Background investigations, including fingerprinting will be part of the final selection process. Must maintain current Wisconsin Transaction Information for Management of Enforcement System Advanced Certification, Emergency Medical Dispatch certification, Emergency Fire Dispatch certification and Emergency Dispatch – Quality certification.

**Example #5
APCO-INTERNATIONAL
Public-Safety Communications Line Supervisor**

Sample Job Titles:

Dispatch Line Supervisor, Dispatch Supervisor, Dispatch Operations Shift Supervisor, Supervising Public Safety Dispatcher, Supervisor, Shift Manager/Supervisor, Communications Supervisor, Communications Shift Supervisor, Communications Center Supervisor, Line Supervisor, Operations Supervisor, Emergency Resource Supervisor, Telecommunications Supervisor, Senior Fire Communications Supervisor

Sample Job Responsibilities

- Plans, organizes, establishes objectives; resolves difficult and complex operational issues; participates in the administration of a Communications Center, and supervises one or more employees.
- Is familiar with all operations and functions expected of subordinates and demonstrates that knowledge on a regular basis.
- Monitors and evaluates staff performance for completeness, accuracy and compliance with established policies and procedures.
- Recognizes performance issues and takes appropriate measures to correct, or praise employees.
- Is able to quickly prioritize and organize operational functions and makes appropriate decisions in stressful situations.
- Recognizes and mitigates potential issues within, or affecting, the Communications Center and is able to diffuse tense situations.
- Maintains a professional attitude at all times and ensures employees maintain the same.

Promotes a positive working relationship with subordinates as well as supervisors, coworkers, and other professional entities.

**NORCOMM, [located in] Bellevue, Washington
Telecommunicator**

Compensation Range: \$45,264 - \$59,916 yearly

NORCOM requires a third-party typing certificate stating the applicant typed 40 net words per minute. The Applicant must take each of the skills tests below and pass them in order before moving on to the next phase:

1. Multiple task/ split ear evaluation, pass at 80%
2. Written examination, pass at 80%
3. Video examination at National Testing Network, pass at 70%

Additional steps in application process

- Interview

- Computerized Voice Stress Analysis
- Psychological Evaluation
- Second Interview
- Background Check
- Those offered a position will be sent for a post offer/pre-employment physical examination and drug test

Job Requirements

- High School Grad/GED
- High school diploma or equivalent.
- Valid WASHINGTON State Driver's License
- If utilizing a personal vehicle in the performance of duties, must possess a valid Washington State Driver's License and the appropriate amount of automobile insurance. Incumbent may be required to respond to the needs of the Communication Center regardless of external weather or other emergency factors and outside of regular work hours
- Ability to Read and Speak the English Language
- Ability to speak English clearly, possess an excellent vocabulary and verbally communicate rapidly. Ability to comprehend English coherently to exchange information in person and on the telephone
- Vision - Adequate hearing and visual acuity to successfully perform the essential job requirements
- Prior Experience - One year experience in the public safety field or successful completion of a vocational dispatch course is beneficial

Essential Functions

- Answers emergency and nonemergency calls for service and simultaneously enters this information into the computer using a Computer Aided Dispatch (CAD) System
- Calms, negotiates, advises and provides instructions to callers to obtain accurate and essential information necessary to establish priority and initiate a timely response to emergency calls
- Dispatch police, fire, and medic units as appropriate via radio transmissions; anticipate problems and respond to units as necessary
- Continually updates information as it is received, enters in to computer and updates units as to new information or instructions including follow up and updated status of calls
- Process more than one call at a time
- Assist co-workers as necessary when available
- Attend shift meetings and /or debriefing before or after work as directed

- Represents the Center while participating in local, regional or state functions related to public safety
 - Must be reliable and dependable, reporting for work on a consistent and punctual basis
 - Performs additional duties as assigned
- Required Knowledge/Skills/Abilities
- Knowledge of NORCOM service area including streets and landmarks
 - Knowledge of map reading techniques, including directions of travel and freeway access
 - Ability to condense and organize large amounts of information into readable, sensibly typed remarks in a timely manner and recall numerous acronyms and type codes essential to efficient and accurate call processing
 - Ability to make timely and appropriate decisions under emergent circumstances based on technical standards, criteria and policies
 - Ability to remember numerous details and quickly re-call essential information
 - Ability to consistently think clearly and respond quickly in a wide variety of emergency situations
 - Ability to speak English clearly, possess an excellent vocabulary and verbally communicate rapidly
 - Ability to deal effectively with people in a multi-cultural society under extremely stressful situations
 - Ability to quickly perform multiple time-sensitive tasks in response to visual and sound stimuli with a high degree of accuracy
 - Ability to type 40 words per minute while conversing with callers
 - Maintain accurate records as required
 - Ability to articulate in a clear, concise manner, disseminating complete and accurate information in a logical and timely basis both orally and in writing
 - Ability to work under stress; be a team player and establish good working relationships; maintain self-control under stressful circumstances
 - Ability to discern several conversations simultaneously, disseminate appropriate information, prioritize actions and respond in an effective manner
 - Ability to be available for shift work encompassing a 24 hour day, seven-day week; inclusive of days, evenings, nights, weekends, and holidays
 - Computer skills sufficient to discern and solve routine problems

**City of Whitehall, Ohio
Communications Operator/ Police Dispatcher**

Salary Information: Starting annual salary \$40,123

The City of Whitehall is currently hiring for Communications Operator/Police Dispatcher. There will be testing available at three testing sites in Ohio through October and November. All testing must be completed by November 23, 2011.

Benefit Information: The City of Whitehall offers a comprehensive benefit package including vacation, holiday, personal and sick leave as well as medical, dental, vision, life insurance and retirement benefits. In addition, the City offers college tuition reimbursement, supplemental life insurance and deferred compensation programs. *Subject to change with collective bargaining agreement and/or administrative code changes.

Candidate Contact Person: 614-338-3101 Human Resource Administrative Assistant

Department Overview: The City of Whitehall is an eastern suburb of the City of Columbus with a residential population of 19,200 and encompasses a little over 5.2 square miles. The Whitehall Division of Police is a full service agency providing 24/7 365 services to the community. The Division of Police had approximately 35,000 calls for service during the 2010 calendar year.

The City of Whitehall is seeking to establish an eligibility list for the position of Communications Operator for future hiring. Seeking motivated, customer service oriented safety professionals to join our team of approximately 70 division staff members in providing excellent service to the community.

The City of Whitehall is an equal opportunity employer.

Job Information: Dispatchers work in a state of the art dispatch center that utilizes Next-Gen 9-1-1. We are the primary public safety answering point for all Police/Fire/EMS needs of the community.

We also offer a comprehensive training program.

Population: Approximately 19,200.

Job Requirements

- Age - 18 years of age
- US Citizen - Must be a US Citizen
- High School Grad/GED - Must be a high school grad/GED
- Valid OHIO State Driver's License - Must have valid state driver's license
- Ability to Read and Speak the English Language - Must be able to read and speak the English Language

- Vision - Must pass a vision exam based on visual acuity, depth perception and color perception; must have normal hearing in both ears; must be free of speech or speaking defects, and have the ability to communicate orally

Specific Disqualifiers/Behaviors

- Felony, Criminal Activity Disqualifiers: Any felony convictions
- Drug Use Disqualifiers: Any illegal use of drugs or a pattern of drug abuse. Any use or abuse of solvent-based chemicals, and non-recovered use or abuse of alcohol
- Employment Disqualifiers: Poor employment history
- Financial Disqualifiers: Poor credit history, a history of financial problems, wage garnishments, bankruptcy, poor payment records, may disqualify a candidate from consideration

Affidavit

I hereby certify that the information provided above is correct. I understand that I am required to inform the City of Whitehall of any change that could impact my hire. I ensure that the aforementioned information is accurate and I acknowledge that the City may investigate my background. I understand as well, that any misrepresentation in the information I have provided above will remove me from consideration and permit the City to seek any applicable legal remedies.

Eligibility List

The Civil Service Commission will post a certified roster of eligible Dispatcher candidates who have successfully passed the written Civil Service examination, listing the highest scoring candidates in sequential order. Once an opening occurs in the Division of Police for a Dispatcher, the Civil Service Commission forwards the top ten names from the eligibility roster to the Division of Police for processing. Candidates may be subject to extensive background screening, physical, psychological and truth verification testing to ensure fitness for duty.

**Pickerington, Ohio
Police Dispatcher**

Salary Information: \$17.47 per hour to \$21.24 per hour, full or part-time

Benefits Information:

Full Time: Paid holidays, Personal days, Sick Leave accrual, Vacation accrual, Shift differential, Overtime eligible, Longevity, Job-related tuition reimbursement, Uniforms, Health and Rx Insurance, Vision, Life, Supplemental, Deferred Compensation.

Part Time: Dispatcher wages and uniforms are the same. Holidays are pro-rated and one 8-hour wellness day per 6 months of employment is provided. Part Time Dispatchers are ineligible for other benefits such as insurance coverage.

Minimum Requirements:

- US Citizen
- High School Grad/GED
- Ability to Read and Speak the English Language

Additional Information: Public Safety Dispatchers hold safety-sensitive positions with a high degree of responsibility. Candidates must pass an extensive background investigation including physical and drug testing to be eligible for hire.

Essential Duties and Responsibilities

- Record and monitor all calls for police in Computer Aided Dispatch (CAD) System and dispatch proper personnel via radio. Interpret and transmit important information from 9-1-1 equipment to emergency personnel or to proper jurisdiction when misrouted. Monitor various radio frequencies for transmissions.
- Give potential life-saving instructions to, sometimes distraught, callers over the telephone.
- Operate/Query state regulated computer terminal (L.E.A.D.S.) for information on vehicles and persons per Officer's request. This also includes making entries i.e., wanted/ missing people, stolen/impounded vehicles; criminal histories and sending messages to other agencies regarding sensitive law enforcement information.
- Respond to Community and Public requests regarding special events and routine questions i.e., driving directions/road conditions, telephone numbers, fingerprint inquiries, etc.
- May represent police department at public speaking engagements and answer questions regarding 911 and other duties of a Public Safety Dispatcher.
- Maintain needed forms and logs for prisoners in county jail on local charges; warrant log; vehicle impounds, adult and juvenile ticket and charge log, traffic cone log, and resident vacation checks.
- Assist Clerk of Court in collecting bond/fines and issue receipts. Gather, copy, stamp and prepare court packets for arrestees. Prepare the weekly tickets for

Court Clerk and prepare affidavits/personal recognizance bonds and notarize documents as needed.

- Assist outside agencies by sending backup emergency personnel when requested; query and relay business/residence information from CAD system.
- Maintain media relations via press releases as directed from the Chief of Police.
- During high risk situations, notify the appropriate supervisor and any special units requested by the on-scene Supervisor, in addition to maintaining regular shift duties.
- Attend meetings, conferences and training seminars as needed and approved.
- May perform additional clerical and/or reception duties, including but not limited to
- notifying officers of changes in the court schedule, recording court dispositions, completing and distributing extra patrol forms, print daily logs, keep policy/procedure and general order books and rolodex updated, make copies and distribute reports as needed, load important address information into the CAD/InterBadge System.

Required Knowledge, Skills and Abilities

- Knowledge of the City of Pickerington and surrounding areas; police department policies/procedures, city organizations and functions; FCC rules and regulations, and police/fire terminology.
- Ability to recognize unusual and/or threatening situations and react accordingly.
- Skill in radio operations and related equipment: Telecommunications Device for the Deaf (TDD); telephone; two way radio; CAD; L.E.A.D.S.; copy machine; fax machine; recorders; VCRs; Cellular phones and radios.

Required Education and Experience

- Any combination of training and/or work experience that establishes the possession of listed skills, knowledge and abilities above. An example of acceptable qualifications for this position are:
- Completion of secondary education or equivalent; ability to appropriately respond to an emergency situations; ability to multi-task and prioritize work; carry-out written, oral or scheduled instruction; define specific problems, collect data, establish facts and draw conclusions from information; communicate effectively in oral and written form, type/keyboard

- 30 words per minute; assist and respond courteously and professionally to the public and coworkers; must demonstrate excellent hearing and diction; ability to multitask with multiple calls and radio traffic, obtain required certifications within established time period.

To Pre-Test and Qualify for this position

- Go to: www.NationalTestingNetwork.com and select "Emergency Communications," then select the department/position. Read the department job requirements and if qualified, choose a testing facility that is close to you.
 - Schedule test date and time(s) on the calendar, fill out the application and history forms. Be at the test location at least 30 minutes prior to test time for check-in and briefing. If you have questions, call 866-563-3882 or 425-423-9922. There is a Google Map on our website under "Testing Locations" at the bottom of the front page.
-

**Kenosha, WI
9-1-1 TELECOMMUNICATOR**

General Statement Of Duties: The 911 telecommunicator provides dispatch and communications operations for law enforcement and emergency service agencies in Kenosha County. The telecommunicator is responsible for dispatching the proper agencies in response to requests for assistance by the public and aids in dispatching and coordinating the agencies in accomplishing their official duties. Employees in this position normally work specific shifts that cover a 24 hour period. Work is performed under the general direction of a communications manager and shift supervisors. This position is subject to mandatory overtime hours.

Essential Duties and Responsibilities: (not limited to) Operates radios, telephones, computers, teletype and other electronic communications equipment; gathers emergency and nonemergency related information; determines actions, assists callers, and dispatches appropriate responses; maintains logs and records; and provides information to service units and agencies.

Physical Requirements: This is sedentary work requiring the exertion of up to 50 pounds of force occasionally, and a negligible amount of force frequently or constantly to move objects; work requires reaching, bending, walking, lifting, fingering, and repetitive motions; vocal communication is required for expressing or exchanging ideas by means of the spoken word; hearing is required to perceive information at normal spoken word levels, and to receive detailed information through oral communications

and/or to make fine distinctions in sound; visual acuity is required for preparing and analyzing written or computer data, operation of machines, detecting color differences, and determining the accuracy and thoroughness of work. The worker is not subject to adverse environmental conditions.

Other Required Duties and Responsibilities: Monitors public safety alarms, weather and emergency situations; activates warning systems, pagers, sirens, and notifies persons or agencies of needs or problems; assists in training and performs any other duties required.

Essential Knowledge, Skills, and Abilities: (not limited to) The ability to read, write, and speak English fluently; speak clearly; hear and understand radio, telephone, and verbal communications; vision capable of reading documents and operating the equipment in the work area; ability to sit for long periods of time and work in an enclosed area; ability to remain in control and work under stressful situations; ability to mentally retain information on a short and long term basis; ability to comprehend and follow oral and written instructions and to think and react quickly in all types of situations; ability to organize and execute assigned tasks; ability to compile, analyze, record and assemble data and information in a meaningful and effective manner and make good decisions and judgments; ability to perform several functions in rapid succession or at the same time; ability to tactfully and courteously communicate with callers in emergency situations and/or altered mental states; ability to learn and operate various types of equipment used in the assigned duties; ability to learn and apply the proper methods, techniques, procedures, rules, regulations, and policies governing call taking for multiple agencies; and the ability to data entry at 6200 keystrokes per hour with an accuracy rate of 95%.

All applicants are required to pass a series of qualifying tests including but not limited to a written examination, data entry test, oral interview, records and background investigation; psychological examination and physical examination inclusive of a drug screening. All qualifying applicants will receive consideration for employment without regard to age, race, creed, color, sex, national origin, handicap, or political affiliation. Residency within a defined perimeter must be established 90 days after successful completion of the probationary period. The residency policy and map may be viewed upon request.

Training and Experience: Must have a high school diploma or G.E.D. and at least one year of responsible work experience. In lieu of one year of responsible work experience, any equivalent combination of training and experience which provides the required knowledge, skills, and abilities will be considered.

Salary and Fringe Benefits: Benefits subject to change. Effective January 1, 2011, the pay range for this position starts at \$17.36 per hour to a maximum of \$21.78 per hour. Shift and other premiums are additional. Health and dental insurance, sick leave, vacations, Social Security benefits, flexible spending accounts, deferred compensation, and an Employee -Assistance Program are provided. Basic group life insurance and retirement benefits are provided for.

**APCO - INTERNATIONAL
Public-Safety Communications Telecommunicator**

Sample Job Titles

Public Safety Dispatcher, Emergency Communications Operator, Dispatcher, Call Taker.

Sample Job Responsibilities

1. Functions as a front line dispatcher or call taker for police, fire, and/or EMS agencies.
 2. Operates telecommunications equipment to receive emergency and nonemergency phone calls.
 3. Determines situations from callers and ascertains all required information for dispatch of a call.
 4. Relays information to a dispatcher (if a separate position) via CAD or manual dispatch cards.
 5. Operates radio equipment to dispatch first responder units to request emergency services, receives radio traffic from first responders, monitors emergency and support radio frequencies.
 6. Maintains unit status and practices both decision-making and multitasking skills.
 7. Operates computer equipment to assist both officers and citizens with the retrieval of information.
 8. Maintains appropriate security and confidentiality of information created or encountered in the performance of assigned duties.
-

**APCO-INTERNATIONAL
Public-Safety Communications Line Supervisor**

Sample Job Titles:

Dispatch Line Supervisor, Dispatch Supervisor, Dispatch Operations Shift Supervisor, Supervising Public Safety Dispatcher, Supervisor, Shift Manager/Supervisor, Communications Supervisor, Communications Shift Supervisor, Communications

Center Supervisor, Line Supervisor, Operations Supervisor, Emergency Resource Supervisor, Telecommunications Supervisor, Senior Fire Communications Supervisor

Sample Job Responsibilities

- Plans, organizes, establishes objectives; resolves difficult and complex operational issues; participates in the administration of a Communications Center, and supervises one or more employees.
 - Is familiar with all operations and functions expected of subordinates and demonstrates that knowledge on a regular basis.
 - Monitors and evaluates staff performance for completeness, accuracy and compliance with established policies and procedures.
 - Recognizes performance issues and takes appropriate measures to correct, or praise employees.
 - Is able to quickly prioritize and organize operational functions and makes appropriate decisions in stressful situations.
 - Recognizes and mitigates potential issues within, or affecting, the Communications Center and is able to diffuse tense situations.
 - Maintains a professional attitude at all times and ensures employees maintain the same.
 - Promotes a positive working relationship with subordinates as well as supervisors, coworkers, and other professional entities.
-

**APCO-INTERNATIONAL
Public-Safety Communications Center Director**

Sample Job Titles

Director, Assistant Director, Executive Director, Deputy Director, PSAP Manager, Communication Center Director, Communications Director/Manager, Communications Administrator, Center Manager, Communications Chief, Public Safety Manager, Communications.

Sample Job Responsibilities

1. Maintains appropriate contacts with the public, users and the media on the proper use of the emergency communications system.
2. Responsible for planning and directing the daily operations of the Communications Center.
3. Responsible for developing and monitoring the policies and procedures of the Communications Center.
4. Serves on advisory boards and other professional organizations and fosters the professionalism of the agency.

5. Maintains active liaisons with all participants, customers, emergency service providers and other departments and local, state and federal agencies relative to the operations of the Communications Center.
 6. Prepares and submits an annual plan, including budget preparation and administration, program goals and Capital Improvement Plan.
 7. Employs, schedules, counsels, disciplines, and evaluates the performance of Communications Center staff.
 8. Performs a variety of functions as directed that could include accounts payable and employee payroll.
-

APCO-INTERNATIONAL

Public-Safety Communications Information Technologist

Sample Job Titles: Systems Administrator, Information Technologist Specialist, Information Technologist, Network Administrator, Systems Engineer, Senior Computer Analyst, CAD/GIS Administrator, Network Services Supervisor, NCIC/CAD System Manager, Technician, 9-1-1 Systems, Information Technology Coordinator, Senior Project Manager, Records Technician (MSAG Coordinator), Mobile/CAD System Administrator, Information Technology Specialist 4, IT Tech and Address/Mapping Coordinator

Sample Job Responsibilities

Analytical/Technical:

- Provides technical support and performs professional work related to the operation and support of computer hardware, peripherals, and software applications.
- Participates in the evaluation and implementation of new computing technologies.
- Performs complex level application support work on the agency's computer applications systems.
- Provides project and program leadership to professional and technical staff.
- Provides project management for large scale support projects.
- Performs routine to complex level application support work on the agency's computer applications systems.
- Performs advanced level telecommunications work related to the purchase, installation, and maintenance of communications equipment.
- Performs technical work gathering, analyzing, and summarizing data.

Database/Network:

- Performs and coordinates the activities necessary to administer and manage the databases and systems used within and across departments throughout the agency.
- Designs and develops GIS applications.
- Provides analytical modeling in support of planning functions.
- Manages and coordinates the design installation, upgrade and maintenance of agency wide network systems.

Appendix C: Sample Performance Evaluation, Livingston Co. MI

It is important to note that while this performance evaluation does not satisfy all the criteria discussed in Appendix E, this evaluation uses performance measures or criteria that are specific to a dispatch position.

Performance Evaluation Ratings and Definitions

Exceptional (5): Consistently performs at the highest level of standards in handling all assignments. Acquires and demonstrates skills, abilities, and knowledge beyond what is expected for the position. Makes unique contributions to the department which provides substantial and significant impact, outcome, and solutions.

Above Average (4): Demonstrates ability to integrate a wide variety of skills to effectively solve problems and carry out duties, responsibilities, and objectives. Makes or recommends ongoing improvements in the performance of regularity of assigned tasks, and in other related areas of the work department.

Satisfactory (3): Performance meets requirements needed to fulfill the principal duties, responsibilities, objectives, and expectations of the position. Has demonstrated the ability to handle wide variety of assignments and is considered fully competent.

Marginal (2): Performance frequently does not meet the satisfactory requirements needed to fulfill the principal duties, responsibilities, objectives, and expectations of the position. Requires above normal amount of guidance, supervision, or follow-up to assure that work assignments are completed adequately.

Unsatisfactory (1): Performance is consistently below the minimum requirements needed to fulfill the principal duties, responsibilities, objectives, and expectations of the position. Requires an extensive amount of supervision. Consistently fails to meet deadlines and standards of accuracy.

Yearly performance evaluation

Review Information

Name: _____ **Classification:** _____
Date: _____ **Review Period:** _____ **to** _____

Guidelines

Review completed, using the following scale:

5 = Exceptional
4 = Above Average
3 = Satisfactory
2 = Marginal
1 = Unsatisfactory
NA = Not Applicable

Not Applicable should be documented in space next to Unsatisfactory. Review to be conducted annually.

Call Intake/ Service Delivery

	(5) = Exceptional	(4) = Above Average	(3) = Satisfactory	(2) = Marginal	(1) = Unsatisfactory
1. Processes received information <i>Enters info in CAD w/o error in appropriate time frame</i>	<input type="checkbox"/>				
2. Listens effectively <i>Obtains necessary info to determine nature and priority of call, utilizes sensory perception while gathering info, attentive to officer safety</i>	<input type="checkbox"/>				
3. Utilizes EMD cards appropriately <i>Follows EMD protocol during applicable calls</i>	<input type="checkbox"/>				
4. Demonstrates a courteous and professional demeanor <i>Consistently tactful, courteous, and fair with all members of public</i>	<input type="checkbox"/>				
5. Ability to multi-task effectively <i>Performs several tasks simultaneously</i>	<input type="checkbox"/>				
6. Quality of work <i>Lack of errors, attention to detail, relevancy</i>	<input type="checkbox"/>				

Total: _____

Comments: _____

Job performance/stress

	(5) = Exceptional	(4) = Above Average	(3) = Satisfactory	(2) = Marginal	(1) = Unsatisfactory
7. Maintains composure	<input type="checkbox"/>				

**Consolidated Dispatch Center
Feasibility Study**

Remains calm, confident, and organized in extreme situations

- | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 8. Leads by example
<i>Consistently displays appropriate professional behavior</i> | <input type="checkbox"/> |
| 9. Strong customer advocate
<i>Seeks and initiates opportunities to assist citizens</i> | <input type="checkbox"/> |

Total: _____

Communication

- | | (5) =
Exceptional | (4) = Above
Average | (3) =
Satisfactory | (2) =
Marginal | (1) =
Unsatisfactory |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 10. Exhibits relaxed/confident demeanor | <input type="checkbox"/> |
| 11. Uses proper voice tone
<i>Voice transitions between delicacy and forcefulness as dictated by situation</i> | <input type="checkbox"/> |
| 12. Responds appropriately to questions
<i>Does not challenge authority</i> | <input type="checkbox"/> |
| 13. Demonstrates good interpersonal skills
<i>Tactful, constructive, positive, respectful</i> | <input type="checkbox"/> |
| 14. Uses appropriate language
<i>No antagonistic or combative language</i> | <input type="checkbox"/> |
| 15. Communicates effectively: | | | | | |
| a. Verbal communications- <i>Speaks in a concise, clear manner and presents organized ideas and appropriate info to assure understanding</i> | <input type="checkbox"/> |
| b. Written /CAD entry- <i>Good writing principles such as clarity, brevity, and appropriate detail. Acceptable grammar/vocabulary</i> | <input type="checkbox"/> |
| c. Reading comprehension- <i>Comprehends written material and complexity common to the position</i> | <input type="checkbox"/> |
| d. Listening- <i>Absorbs info and relates to issues appropriately. Exhibits appropriate non verbal behavior</i> | <input type="checkbox"/> |
| e. Organizational- <i>Disseminates info appropriately throughout the organization. Follows chain of command</i> | <input type="checkbox"/> |

Total: _____

Comments:

Initiative, motivation, and productivity

	(5) = Exceptional	(4) = Above Average	(3) = Satisfactory	(2) = Marginal	(1) = Unsatisfactory
16. Establishes realistic/challenging goals	<input type="checkbox"/>				
17. Completes assigned tasks timely	<input type="checkbox"/>				
18. Manages time effectively <i>Uses free time for constructive self improvement</i>	<input type="checkbox"/>				
19. Organizes tasks	<input type="checkbox"/>				
20. Strives to be self reliant <i>Ability to perform duties independently</i>	<input type="checkbox"/>				
21. Develops working knowledge of available resources	<input type="checkbox"/>				
Total: _____					

Departmental Equipment

	(5) = Exceptional	(4) = Above Average	(3) = Satisfactory	(2) = Marginal	(1) = Unsatisfactory
22. Demonstrates proper use and maintenance of equipment					
<i>a. Radio console- adding/subtracts radio channels</i>	<input type="checkbox"/>				
<i>b. Recording device-can replay radio traffic</i>	<input type="checkbox"/>				
<i>c. 911/telephone display-ANI/ALI</i>	<input type="checkbox"/>				
<i>d. CAD system-functions of CAD</i>	<input type="checkbox"/>				
<i>e. LEIN/NCIC terminal- can determine when there is a problem</i>	<input type="checkbox"/>				
<i>f. Weather computer-can fix errors, bring up weather map</i>	<input type="checkbox"/>				
23. Reports problems/potential problems w/ dispatch and non dispatch equipment appropriately	<input type="checkbox"/>				
24. Records information in an effective and efficient manner	<input type="checkbox"/>				
Total: _____					

Comments:

Police, fire, and EMS safety

	(5) = Exceptional	(4) = Above Average	(3) = Satisfactory	(2) = Marginal	(1) = Unsatisfactory
26. Anticipates needs and requests of units in field <i>May include making calls, sending additional units, reviewing previous calls, flags, etc.</i>	<input type="checkbox"/>				
27. Monitors availability/location of on duty units <i>Consistently aware of unit location and current status</i>	<input type="checkbox"/>				
28. Checks unit status appropriately	<input type="checkbox"/>				
29. Relays pertinent information to responding units <i>Updates units appropriately</i>	<input type="checkbox"/>				
30. Coordinates assistance of additional units when necessary <i>Uses map and common places to see potential hazards/areas of concern</i>	<input type="checkbox"/>				
31. Consistently attentive to radio traffic	<input type="checkbox"/>				
32. Uses necessary resources	<input type="checkbox"/>				
					Total: _____

Relationships

	(5) = Exceptional	(4) = Above Average	(3) = Satisfactory	(2) = Marginal	(1) = Unsatisfactory
33. Strives to get along with co-workers <i>Establishes open and friendly rapport, mutual trust and responsiveness</i>	<input type="checkbox"/>				
34. Contributing member of assigned team <i>Seeks and initiates opportunities to help all team members-helps with productivity of team</i>	<input type="checkbox"/>				
35. Seeks to resolve conflicts appropriately <i>Talks one on one with person to resolve problem. Follows chain of command</i>	<input type="checkbox"/>				
36. Shares experience and knowledge	<input type="checkbox"/>				
37. Demonstrates loyalty towards	<input type="checkbox"/>				

**Consolidated Dispatch Center
Feasibility Study**

department

Speaks highly of department and shows dedication to department

38. Ability to set aside biases

Remains neutral during interpersonal interactions (verbal/non verbal, gestures, actions, behaviors)

Total: _____

Comments:

Department and County policies/procedures

	(5) = Exceptional	(4) = Above Average	(3) = Satisfactory	(2) = Marginal	(1) = Unsatisfactory
39. Attendance/punctuality <i>Present and on time ready to perform all tasks/not tardy and rarely misses work</i>	<input type="checkbox"/>				
40. Professional conduct <i>Promotes positive image of dept. through appearance, demeanor, and treating everyone fair</i>	<input type="checkbox"/>				
41. Awake and alert during shift	<input type="checkbox"/>				
42. Dress code <i>Consistently complies with dress and grooming standards</i>	<input type="checkbox"/>				
43. Weather emergencies <i>Attentive to NOAA notifications</i>	<input type="checkbox"/>				
44. Computer usage <i>Uses computers for work purposes only/doesn't interfere w/work</i>	<input type="checkbox"/>				
45. Reviews current materials <i>On daily basis to stay up to date</i>	<input type="checkbox"/>				
Total: _____					

County geography

	(5) = Exceptional	(4) = Above Average	(3) = Satisfactory	(2) = Marginal	(1) = Unsatisfactory
47. Knowledge of county geography <i>County borders (road names), major roads/freeways, common locations</i>	<input type="checkbox"/>				
48. Knowledge of police/fire/EMS jurisdictions/bases <i>Address/cross roads to bases/PD's/fire halls</i>	<input type="checkbox"/>				
49. Familiar with and uses necessary resources	<input type="checkbox"/>				

**Consolidated Dispatch Center
Feasibility Study**

- | | | | | | |
|---|---|---|---|---|---|
| <p>assignment sheets, attendance reports, and other similar documents</p> <p>59. Verifies the accuracy & completeness of work performed by team members</p> <p>60. On regular basis, performs general dispatch duties as part of an assigned team</p> <p>61. Notifies management of any violations of department or county rules and regulations</p> <p>62. Provides guidance and direction to all employees</p> <p>63. Monitors multiple situations simultaneously</p> <p>64. Determines the need to call-in additional dispatch/management staff during bad weather and/or emergency situations</p> | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> | <p><input type="checkbox"/></p> |
|---|---|---|---|---|---|

Total: _____

Comments:

Overall total: _____ out of _____

Goals: _____

**Consolidated Dispatch Center
Feasibility Study**

**Plan of
action:** _____

Comments:

Supervisor signature: _____ **date:** _____

Shift Leader signature: _____ **date:** _____

Employee signature: _____ **date:** _____

Appendix D: Sample Intergovernmental Agreement

INTERGOVERNMENTAL AGREEMENT
CHARLESTON COUNTY CONSOLIDATED 9-1-1 CENTER
12/31/07

This Agreement, effective as of January 22, 2008, made and first entered into by and among the undersigned governmental jurisdictions to include Charleston County, City of North Charleston, Town of Mt. Pleasant, City of the Isle of Palms, City of Folly Beach, the St. Johns Fire Department, St. Andrews PSD Fire Department, and the James Island PSD Fire Department.

WITNESSETH:

WHEREAS, jurisdictional entities within Charleston County formed the Charleston County Consolidated Dispatch Committee, including multi-jurisdictional representation from law enforcement, fire and EMS entities within Charleston County; as well as a County Administration representative and a federal agency representative; and this committee has been exploring the benefits of consolidating public safety communications within Charleston County; and

WHEREAS, a Countywide Emergency Communications Services Consolidated Feasibility Study was completed in April, 2007, based upon a scope of work developed by the Consolidated Dispatch Committee and paid for by a Homeland Security grant and seven jurisdictions; and

WHEREAS, the Feasibility Study found that the current emergency call processing is inefficient, potentially detrimental, involving 5 Public Safety Answering Points (PSAPs), 1 Secondary PSAP, and 4 Dispatch-only centers, and that 9-1-1 emergency calls frequently have built-in delays involving transfers to other centers; and

WHEREAS, the jurisdictions and residents of Charleston County would benefit in terms of life safety and efficiency of service from a consolidated 9-1-1 Public Safety Answering Point (PSAP) providing services to Charleston County and the municipalities and fire protection departments within Charleston County; and

WHEREAS, the undersigned governmental jurisdictions wish to agree to the establishment and maintenance of a consolidated Public Safety Answering Point (PSAP), to be hereafter known as "Charleston County Consolidated 9-1-1 Center"; and

WHEREAS, the establishment of such PSAP will provide improved police, fire and emergency medical service communications within the boundaries of the participating jurisdictions (the "Consolidated Service Area"), together with such other jurisdictions as may hereafter contract with the undersigned for communications services; and

WHEREAS, the establishment and maintenance of such PSAP will be of substantial benefit to the citizens of the undersigned governmental jurisdictions and the public in general;

NOW THEREFORE, as an exercise of the police power and authority granted by the Constitution and laws of the State of South Carolina, and in consideration of the mutual terms, covenants and conditions set forth herein, it is hereby agreed and covenanted among the undersigned as follows:

1. 0 PURPOSE: This Intergovernmental Agreement to establish the Charleston County Consolidated 9-1-1 Center contains the following organizational objectives:

1. 1 To promote the health, safety and general welfare of the citizens throughout Charleston County. To that end, the parties wish to continually improve procedural efficiency and technical capabilities of emergency call-taking, emergency call processing, and all emergency response communications.

1. 2 To save lives by improved call processing time which reduces response times to emergency incidents.

1. 3. To improve safety to emergency responders.

1. 4 To effectively receive calls for routine and emergency assistance, based on structured call intake protocols, and coordinate response resources to those calls for service based on the needs of the caller and the direction of field response agencies.

1. 5 To provide all participating agencies with a single contact point for the notification of emergencies and receipt of emergency assistance requests, and for the control of coordinated dispatch for law enforcement, fire and EMS.

1. 6 To bring about increased efficiencies and coordination of communications and emergency response services, including the use of the National Incident Management System and the National Response Plan. These communications improvements are intended to impact emergency response for all types of scenarios that are generally broken into three categories:

- A) Emergencies that occur daily in the community: those “typical” crimes, fires, and medical emergencies.
- B) Local, small scale disasters, such as a school bus accident.
- C) Large scale and/or national level disasters, such as terrorist attacks or natural disasters.

1. 7 To provide the public and field response agencies with highly trained, certified and/or credentialed 9-1-1 employees who strive to provide the best service possible to all parties involved.

1. 8. To set the goals of 1) meeting NFPA’s 1221 standards, 2) meeting National Emergency Medical Dispatch (EMD) standards for Accreditation and attaining this accreditation, and 3) meeting CALEA’s Standards for Public Safety Communications Agencies and attaining CALEA accreditation.

1. 9 To provide funding to ensure the appropriate level of service to all parties involved as defined by user agencies by establishing funding mechanisms and defining the budget process for the center.

1. 10 To provide for operational oversight from a “Consolidated Dispatch Board” of emergency response leaders.

1. 11 To ensure accountability to the field response agencies by creating User Groups which provide feedback to the Consolidated Dispatch Board.

1. 12 To provide a mechanism for the addition or withdrawal of parties to the Agreement.

1. 13 To establish an alternate center to serve as a backup, overflow and training site, and as a secondary location where emergency dispatchers will function in the event that they need to evacuate the primary Consolidated 9-1-1 Center.

2. 0 DEFINITIONS: As used in this Agreement the following words and phrases shall have the meanings indicated unless the context clearly requires otherwise:

2. 1 "PSAP" (Public Safety Answering Point) shall mean the facility housing the equipment and personnel that provide 9-1-1 call answering, processing and dispatching services.

2. 2 "9-1-1 Services" shall mean those services and equipment to answer 9-1-1 calls on a 24-hours-per-day basis.

2.3 "Other Services" shall mean services related to emergency service or jurisdictional communications provision, such as administrative call-taking.

2.4 "County" shall mean Charleston County.

2.5 "E9-1-1" (Enhanced 9-1-1) shall mean the emergency communications system which connects the public to emergency response.

2.6 "Participants" shall mean the parties to this Agreement and such other entities as become parties in the future.

2.7 "Charleston County Consolidated 9-1-1 Center" shall mean collectively the parties to this Agreement in their capacity as providers and/or receivers of 9-1-1 services; or, as the context may require, the system of providing such services; or the facility housing the countywide 9-1-1 operations.

2.8 "Consolidated Dispatch Board" shall mean the multi-jurisdictional Board of Law Enforcement, Fire and EMS leaders established to guide the establishment and operations of the Center.

3.0 COUNTY TO ESTABLISH A DEPARTMENT OF PUBLIC SAFETY COMMUNICATIONS: The parties agree that Charleston County, through operational funding as established in Section 9, will establish and maintain a Department of Public Safety Communications which will operate the Charleston County Consolidated 9-1-1 Center. Charleston County will provide the backbone structure to provide important and necessary services such as payroll, employee benefits, facilities maintenance, budget/finance, legal, risk management and procurement. This arrangement provides significant cost efficiencies since the infrastructure and capabilities are in place to provide the administrative and support services to a department serving countywide needs. The Center Director and all employees of the Center will be County employees, subject to all County personnel policies and procedures.

4.0 PROGRAMMING AND CONSTRUCTION OF FACILITY: Charleston County will purchase, lease, or otherwise obtain the use of an existing facility or build a new facility for the purpose of locating and establishing the Consolidated 9-1-1 Center, at the County's expense. Other uses of the land and the building to be used for the Consolidated 9-1-1 Center may also be considered. Construction or renovation of a consolidated dispatch facility and other related capital costs not covered by 9-1-1 fees will be based upon appropriations made at County Council's discretion.

The Consolidated 9-1-1 Center will include at least the following: (1) dispatch area, (2) Director and supervisor administrative offices, technology specialist offices, clerical and reception office space, (3) radio/recording/CAD/9-1-1 technology equipment rooms, (4) storage for inventory, supplies and records, (5) locker room, (6) bathroom/shower facilities, (7) kitchen, (8) lunch/break room, (9) training area, and (10) multi-purpose classroom/conference room.

Charleston County agrees that the existing Joint Communications Center located at the County Public Services Building or other suitable facilities will be available as a backup center in the event that the Consolidated 9-1-1 Center employees must evacuate the primary Consolidated 9-1-1 Center. This will not preclude the County from utilizing this space for other purposes, with the understanding that the space must be secured, maintained, accessible and activated as needed under the primary purpose and use as the Consolidated 9-1-1 Center's alternate/backup/overflow site. This site may also be used for Consolidated Dispatch training purposes.

5.0 TRANSITION ISSUES: The parties agree to cooperate in the many complex aspects of transitioning into the Consolidated 9-1-1 Center. Transition elements include, but are not limited to the following:

5.1 There will be continued involvement of the Consolidated Dispatch Board in all phases of the establishment of the Center.

5.2 All reasonable attempts will be made to hire a Director during the facility programming phase, subject to the funding agreement as indicated in Section 9. The hiring of the Director shall involve the Board, as indicated in Section 6.

5.3 Hiring of employees:

A) EMS and Sheriff's Office dispatch employees who meet qualifications standards, at the time of cutover, will be transferred to the new Consolidated 9-1-1 Center. Supervisory and other specialty positions will be filled by the Center Director.

B) Subject to the conditions below, the Center Director will hire dispatchers that meet the qualifications standards adopted by the Board, from emergency communications centers of the parties to this agreement. A readiness program to assist current dispatchers to meet qualifications standards will be made available during the establishment phase of the facility. (Readiness training and funding responsibilities as referred to in Sections 9.3 and 9.4.)

C) Dispatchers must meet the minimum qualifications established for the position, unless they have been hired less than six months before cutover to the Consolidated 9-1-1 Center, in which case they will have a period of six months from cutover to meet the minimum qualifications. All new hire employees will be subject to the County's standard probationary period and all other Charleston County employment policies and procedures.

D) It is the intent of this Agreement that the hiring of dispatch staff at participating agencies will take place, subject to the pay scales established for the Consolidated 9-1-1 Center, and with existing longevity and position level taken into consideration, among other things. Criteria which may render a participating dispatch center employee ineligible for County employment at the Consolidated 9-1-1 Center include, but are not limited to, the following:

- Convicted felon or other significant information found on a criminal records check
- The employee has been determined "not eligible for re-hire" as a Charleston County employee
- Inability to pass a drug test
- Inability to pass a basic literacy exam
- Education level which is not equivalent to a high school diploma or higher

5. 4 Individual municipal and agency needs and requests regarding other services such as non-public safety administrative call-taking or other nonemergency communications functions will be determined early in the planning stage and will have specific protocols, training and technology needs established and well-defined. Funding for other services will be as indicated in Section 9.

5. 5 Costs for the transition period prior to moving into the Consolidated 9-1-1 Center will be handled as indicated in Section 9.

5. 6 A transition plan will be developed by Charleston County working closely with the Consolidated Dispatch Board. Charleston County will establish a transitional budget and be responsible for managing this budget and paying transitional expenses, including but not limited to staffing of Director and other positions identified as needed prior to cutover, dispatcher training course fees (see 5. 7 below) and consultant planning assistance. Some transitional funding may come from other participating jurisdictions, and 9-1-1 and grant money will be used wherever possible.

5. 7 The staff time (including necessary overtime) involved in the initial Consolidated Dispatch related training of dispatchers hired or anticipated to be hired by the Consolidated 9-1-1 Center Director, will be borne by the participating Centers where

they are working prior to the cutover date. Dispatcher training course fees will be borne by Charleston County during the six months prior to cutover to the consolidated 9-1-1 Center. However, fees for supervisory/QA/trainer courses will be paid by Charleston County only when employees have been selected for supervisory/QA/trainer positions by the Consolidated 9-1-1 Center Director.

6. 0 CONSOLIDATED DISPATCH BOARD: With the execution of this Agreement, the existing "Consolidated Dispatch Committee" will be disbanded and the "Consolidated Dispatch Board" will be established as follows:

6. 1 Membership:

Charleston County: 2 (Sheriff & EMS Director)
North Charleston: 2 (Police Chief & Fire Chief)
Mount Pleasant: 2 (Police Chief & Fire Chief)
Isle of Palms/Sullivans Island/Folly Beach: 1 (Police Chief) One appointee to serve on the Board through cutover to the Consolidated 9-1-1 Center. Following this, these municipalities will appoint a police chief from one of the other two jurisdictions and rotate these appointments every 3 years.

Charleston County Fire Chiefs Association: 2 Representatives selected by the Association. These appointees must not be from one of the jurisdictions listed above. The two fire chiefs appointed by the Chiefs Association, who have served on the Consolidated Dispatch Committee, will serve on the Board through cutover to the Consolidated 9-1-1 Center. Following this, the Chiefs Association will make new fire chief appointments every 3 years.

Non-Voting Member: County Administrator Designee (to serve as Liaison to County Administration and Secretary to the Board).

Non-Voting Member (Advisor): Federal Agency representative selected by majority vote of the Board based upon nomination by the Chair or another Board member.

6. 2 Responsibility and Authority: The Consolidated Dispatch Board shall have the responsibility to:

A) elect a Chairperson from its members by a majority vote of the Board. The Chairperson will serve a two-year term and may be re-elected for subsequent terms. The Chairperson will have the authority and responsibility:

a. to preside at regular and special meetings of the Board;

- b. to appoint a member of the Board to act as Chairperson in his/her absence. This appointment may be made on a case-by-case basis or for a designated period of time, not to exceed three consecutive meetings;
 - c. to call special meetings as appropriate;
 - d. to appoint committees as appropriate;
 - e. to represent the Board or appoint another member or the 9-1-1 Center Director to represent the Board at various jurisdictional meetings where consolidated dispatch is on the agenda;
 - f. to provide the County Administrator with performance reviews of the Center Director and make written recommendations regarding his or her performance, utilizing the County Personnel Policies & Procedures, as may be amended from time to time, and with significant input from Board members.
- B) establish, together with the Director, the mission and goals of the Charleston County Consolidated 9-1-1 Center;
- C) work together with the County Administrator to develop an appropriate Director job description and criteria for employment. The Consolidated Dispatch Board will interview qualified applicants and select a candidate (or candidates) for whom a written recommendation will be provided to the County Administrator;
- D) establish operational protocols, policies and procedures for the Consolidated 9-1-1 Center with the assistance of the Director;
- E) consider and resolve questions, issues and disputes presented to the Board by the User Groups or parties to this Agreement;
- F) work with the Director to submit to the County Administrator a recommended budget for the Consolidated 9-1-1 Center by no later than December 15 of each year for the following fiscal year beginning July 1;
- G) provide advocacy for both capital and operational needs of the Center, and work toward funding efficiencies and grant opportunities;
- H) annually adopt a long-range comprehensive plan as described in Section 8, Item J;
- 6.3 Meetings of the Board:
- A) Any member of the Consolidated Dispatch Board may designate a representative to attend meetings in the member's place. The designee must be from the same

jurisdiction and the member will ensure that the designee is knowledgeable and prepared. While so designated, the representative shall assume all rights and responsibilities of a full member. However, members themselves are expected to attend the majority of meetings. If a member misses 3 out of 12 meetings during a calendar year, a letter of concern will be written to the member, with copies to the Governing Body and Administrative Head of the jurisdiction.

B) Regularly scheduled meetings of the Consolidated Dispatch Board shall be held monthly at such time and place as determined by mutual agreement. Special meetings may be called by the Chairman as appropriate.

C) A quorum shall be necessary to convene a meeting. Five members shall constitute a quorum. All motions presented for approval shall require majority vote in order to move forward. Additional procedural rules for Board meetings will be established by the Board within the first 90 days of the Board's existence.

D) The Consolidated Dispatch Board will be a public body subject to the South Carolina Freedom of Information Act.

7.0 USER GROUPS: Two User Groups will be established for the purpose of providing the opportunity for all user agencies to have input into the operations of the Consolidated 9-1-1 Center. There will be a Law Enforcement User Group and a separate Fire/EMS/Rescue/Emergency Management User Group. Membership in each group will include the Chief (or designee) of each agency which utilizes the Consolidated Center for Emergency Communications. These groups will meet at least quarterly and provide written feedback to the Consolidated Dispatch Board regarding any concerns, problems, or recommendations related to operational protocols or any other aspects of the Center's performance to meet their needs.

User Group recommendations relative to service levels, staffing levels, performance standards, operational procedures and protocols or systems shall be made to the Consolidated 9-1-1 Center Director no later than August 15 of each year in order to be considered for implementation in the next budget year.

8.0 CENTER DIRECTOR: The Charleston County Consolidated 9-1-1 Center will be managed, operated and supervised by a Center Director, who will be a Charleston County employee subject to the County's personnel policies and other employee regulations. The hire/fire/evaluation of the Center Director shall occur as outlined in Section 6.2.

8. 1) Responsibility and Authority of the Center Director:

A) The Center Director shall be the administrative head of the Charleston County Consolidated 9-1-1 Center and will be responsible for handling administration and personnel matters within the framework of Charleston County regulations and personnel policies.

B) The Center Director shall be responsible for following operational policies and protocols established by the Consolidated Dispatch Board as outlined in Section 6. 2, Item D.

C) The Director will prepare a proposed budget for Board approval and will assist the Board in submitting to the County Administrator a recommended budget for the Consolidated 9-1-1 Center by no later than December 15 of each year for the following fiscal year beginning July 1.

D) The Center Director will be responsible for managing the Center within the approved annual budget.

E) The Center Director will work closely with the County 9-1-1 Coordination staff regarding equipment, training, and other issues for which 9-1-1 funds can be utilized to maintain the best available technology and training to best serve citizens.

F) The Center Director will be responsible for all activities of the Consolidated 9-1-1 Center, including but not limited to oversight of call- taking, dispatching, records (custodian), recording, staffing, training, and security.

G) The Center Director shall establish and utilize performance standards for employees. The Director shall actively and continually consider and evaluate all means and opportunities toward the enhancement of operational effectiveness of emergency communications for the benefit of the public and emergency response agencies.

H) The Center Director shall review and evaluate proposals from User Committees for changes to service levels, performance standards, and/or operational procedures. The Director will prepare a written report on such proposals to include, at a minimum, implementation costs, benefits and liabilities, and will provide a recommendation. Such reports and recommendations will be forwarded to the Consolidated Dispatch Board for review. Final decisions will be made by the Board on all changes in service levels, performance standards and operational procedures, contingent upon available funding for implementation. However, in order to meet the need for procedural changes in a

dynamic deployment situation, the Director will be given authority to alter the procedures during critical circumstances.

I) The Center Director will participate in a non-voting capacity in meetings of the Consolidated Dispatch Board and the User Groups. Should it be necessary for the Center Director to miss a meeting, he/she will have a designee present.

J) The Center Director will develop appropriate long-range plans, including strategic capital improvements, staffing, technology, and other matters. A comprehensive long-range plan will be developed and updated yearly. This plan will be presented to the Consolidated Dispatch Board on a yearly basis at a date and time determined by the Board. Each year the Board and Director will reach consensus on the plan, and the Board will take action to adopt the plan.

9.0 FUNDING:

9.1 Capital: Capital costs will include start-up costs associated with building & equipping 9-1-1 center, to include such things as land acquisition, programming, designing and constructing the facility, computer Aided Dispatch (CAD) for multi-jurisdictional use, dispatch Center furnishings & equipment not funded through 9-1-1 surcharge, in-building circuitry, grounding, HVAC (heating ventilation and air conditioning), electrical, cable pathways, cabling for radio, CAD, 9-1-1 equipment (CPE), local area network (LAN) and future networks, systems networking & connection needs (9-1-1 & other phone lines, radio, CAD, NCIC) to the primary PSAP, and the alternate/backup PSAP, with built-in redundancy. (Municipal and/or departmental connections will also be needed in support of email access, department/municipal systems and information access)

Charleston County will provide funding for Capital costs as authorized by Charleston County Council. County Council's Capital Improvement Plan includes \$15 Million for Consolidated Dispatch, subject to final appropriations by County Council.

9.2 Transitional: Transitional costs will involve staffing and consultant costs before Center becomes fully operational, to include initial personnel costs to hire the Director and other staff, training and equipping staff, consultant planning services, and training of dispatchers who will be moving from participating jurisdictions to the Consolidated 9-1-1 Center.

9.3 Transitional costs funded by Charleston County: The County's projected Transitional costs are estimated at approximately \$1.7 million over three fiscal years,

primarily to cover early hiring of high level staff and consultant expenses. These expenses will be borne by Charleston County, subject to budget approval by Charleston County Council. During the six months prior to cutover date, the County will pay dispatcher training/certification fees for those dispatchers at participating centers who are hired or anticipated to be hired by the Consolidated 9-1-1 Center.

9. 4 Transitional costs funded by participating Jurisdictions: Personnel staff time (including necessary overtime) involved in the initial Consolidated 9-1-1 Center related training of dispatchers who are hired or anticipated to be hired by the Consolidated 9-1-1 Center, will be borne by the participating dispatch agencies where they are employed prior to the cutover date. This will facilitate dispatchers at participating agencies being employed by the Consolidated 9-1-1 Center, while allowing them to remain at their current respective agencies until cutover date.

9. 5 Operational: Operational costs involve costs to operate once Center becomes activated, including salaries, benefits, support staff, training and employee specific equipment and supplies (uniforms, headsets, etc.), systems maintenance and support costs, facility maintenance, utilities, other indirect costs (factored in projections at 10%), and capital replacement fund to provide future funding toward capital improvement plans such as lifecycle replacement of systems and equipment, NG9-1-1 upgrades and building renovations.

9. 6 Operational costs, projected at approximately \$10. 5 million in FY12 (first possible year of Consolidated 9-1-1 Center Operations), increasing annually at a rate of 4% per year as shown on Attachment A, are to be handled through Charleston County taking on all operational costs on an incremental basis, as follows:

A. First year of Consolidated Dispatch operations (potentially FY-12): Participating jurisdictions will pay 100% of their “status quo” costs (costs they would otherwise incur for continuing their own dispatch operations). Attachment A includes each jurisdiction’s future projected “status quo” costs. For the first operational year of the Consolidated 9-1-1 Center, each jurisdiction will pay Charleston County an amount equal to their status quo costs as shown on this chart (given by fiscal year). If the first year of consolidated dispatch operations is FY-12, then the jurisdictions will pay the full status quo amount indicated for FY-12.

B. Second year of Consolidated Dispatch operations (potentially FY-13): Participating jurisdictions will pay approximately 50% of their “status quo” costs. Attachment A will be used and each jurisdiction will pay Charleston County an amount equal to 50% of their status quo costs as shown on this chart (given by fiscal year). If the second year of

consolidated dispatch operations is FY-13, the jurisdictions will pay 50% of the full status quo amount indicated for FY-13.

C. Third year and beyond: Charleston County will take on the full costs of Consolidated Dispatch.

9. 7 Operational Funding as it relates to areas outside of Charleston County: Special financial arrangements will be worked out between Charleston County and those entities which have areas outside of Charleston County which are within their jurisdiction, to ensure that these citizens being served by the center are paying a portion of costs.

9. 8 Existing Funding (funding currently used for 9-1-1 service provision and expected to continue): Wireline and wireless 9-1-1 surcharges currently fund countywide 9-1-1 equipment, call counting software, networking/connectivity, logging recorders and mapping for the PSAPs. Uses for 9-1-1 funding may expand in the future, per legislative changes. Charleston County will make use of 9-1-1 funds wherever possible.

9. 9 Radio System funding: The countywide radio system funding structure is not expected to change with the advent of consolidation. The Consolidated Center will be responsible for operational costs associated with connectivity to the County's Radio system and the maintenance costs of radio dispatch consoles.

9. 10 Grant Funding: Applicable grants will be sought in order to assist in funding Charleston County's Consolidated Dispatch Center.

9. 11 Other Services Funding: Funding of desired other services, such as municipal administrative call-taking or other nonemergency functions, will be identified by participating jurisdictions early in the planning stage. The participating agency requesting other services will reach a separate agreement with Charleston County related to the compensation for other services, following review and recommendation by the Consolidated Dispatch Board.

10. 0 EQUIPMENT: Equipment and furnishings for the 9-1-1 Center shall be purchased in the County's name and be the property of Charleston County. The purchase and maintenance of all equipment necessary to receive calls, radio transmissions, and data at the locations (or vehicles) of participating jurisdictions will be the responsibility of the jurisdictions. The parties may engage in cooperative purchasing activities, including but not limited to use of SC State Contracts.

Charleston County and the participating jurisdictions will cooperate together and with local, state and federal agencies in order to maximize interoperability and economies of scale, grant-funding, and other means to reduce costs for equipment and operations. The Center Director, working with the Board, will develop uniform standards for a multi-jurisdictional Computer Aided Dispatch (CAD) system with expandable ports for multiple interfaces such as Records Management System (RMS), Fire Reporting, EMS Reporting and message switching for MDTs or other data-sharing interfaces. Each jurisdiction will be responsible for purchasing and maintaining its own records/data management module and related CAD interface. Access to internal CAD information via the internet may also be an option, and will be funded by each participating jurisdiction. All participating jurisdictions, including those jurisdictions electing not to purchase separate modules and interfaces, will have access to their jurisdiction's call counts and calls for service CAD data upon request to the Center.

11.0 DURATION OF AGREEMENT - WITHDRAWAL: The initial duration of this Agreement shall be for a period of five (5) years from the date hereof, and thereafter shall be automatically extended for consecutive two (2) year periods unless terminated by the parties. In the event that any party desires to withdraw from this Agreement, said party must give 12 months' advance written notice to the other parties, and the withdrawal shall take effect only as of the beginning of the succeeding fiscal year of the County, unless otherwise agreed between the parties. (By way of example and not in limitation, if notice is delivered later than the end of business June 30 of a given year, the Agreement shall continue until the end of the following fiscal year. Notice delivered June 30, 2007, equals withdrawal June 30, 2008. Notice given July 1, 2007, or later, equals withdrawal June 30, 2009.)

12.0 ADMISSION OF NEW JURISDICTIONS: Additional jurisdictions may become participants by written addendum to this Agreement, with the approval of the majority of participating governing bodies, upon recommendation by the Consolidated Dispatch Board, with terms and conditions as agreed upon.

13.0 MEDIATION: Any controversy between the members with regard to the application or interpretation of this Agreement shall be submitted to the Consolidated Dispatch Board for resolution. If the Board's action does not resolve the controversy, it may be submitted for mediation. Upon failure of mediation, each party reserves all rights and remedies otherwise available under South Carolina law.

14.0 RESPONSIBILITY FOR LOSS: Each participating jurisdiction agrees to be responsible and assume the risk of liability for its own wrongful and/or negligent acts or omissions, or those of its officers, agents, or employees to the extent that liability exists.

15. 0 SEVERABILITY: Should any part of the Agreement be determined by a court of competent jurisdiction to be invalid, illegal or against public policy, said offending section shall be void and of no effect, and shall not render any other section herein, nor this Agreement as a whole, invalid. Those rights and obligations under this Agreement, which by their nature should survive, shall remain in effect after termination, suspension or expiration hereof.

16. 0 EXECUTION: This Agreement, or amendments hereto, shall be executed on behalf of each participating jurisdiction by its duly authorized representative and pursuant to an appropriate motion, resolution or ordinance of each participating jurisdiction. This Agreement, or any amendment thereto, shall be deemed adopted upon the date of execution by the last so authorized representative.

17. 0 SIGNATURES: Each party to this Agreement shall sign a signature page to constitute valid execution.

18. 0 ENTIRE AGREEMENT: This document encompasses the entire Agreement of the members. No understanding or amendment, addendum, or addition to this Agreement shall be effective unless made in writing and signed by all members.

**Consolidated Dispatch Center
Feasibility Study**

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals
this _____ day of _____, 200__.

FOR CHARLESTON COUNTY:

WITNESSES

_____+

_____ (Seal)
McRoy Canterbury, Jr. , Administrator

WITNESSES

_____ (Seal)
J. Al Cannon, Jr., Sheriff

(V12/31/07)

Appendix E: Performance Management and Assessment

This appendix was authored in January 2011 by Thomas A. Cozzens, (retired) director of the Unger International Center for Local Government Leadership of the Maxine Goodman Levin College of Urban Affairs at Cleveland State University. The purpose of this appendix is to discuss the current state of performance management and evaluation in the public service and to recommend an approach that facilitates integration of these two processes.

Supervisors have two legitimate expectations of their employees: 1) They will perform their jobs in a satisfactory manner (job performance expectations), and 2) that they will observe and respect the administrative values, policies and procedures of the organization (administrative expectations). Anything more should be appreciated. Anything less should be unacceptable. However, with the right to these expectations comes the responsibility to clearly communicate them at the beginning of the assessment period and through dialogue with employees during the course of the assessment period.

To facilitate managing job performance, managers have two tools: First is the position management system (job descriptions), which tells employees what management expects them to do. The second is the performance management system (performance appraisals), which tells employees how well management expects them to do it. Unfortunately, in many organizations, both of these tools are broken, outdated, ignored, or missing. This is likely a contributing factor to public sector manager's failure to take corrective (a.k.a. disciplinary) action for poor performance.

If employees do not have a clear understanding of their responsibilities, they cannot be expected to perform them acceptably. Consequently, position descriptions should be current, clear, concise, and related to organizational goals. Further, if position descriptions are current, clear, and concise, they should serve as the basis for performance management, not some generic form that often measures traits rather than job performance.

Unfortunately, some evaluation instruments have succumbed to "the bureaucratic tendency to homogenize the process for ease of comparison... and to facilitate analysis of the evaluations. Precise graphs and charts can only be constructed if uniform criteria are used and employees are rated on identical scales of, say, 1 to 5" (Sylvia, et al., 2002).

The tools available to facilitate managing administrative expectations are most often found in the employee handbook or the personnel manual, if the organization has one

or both of these. With or without these tools, it is reasonable for managers to expect employees to work cooperatively with supervisors, co-workers, subordinates and customers, to demonstrate the ability to manage conflict, to respect diversity, and to observe hours of duty. Incorporating these expectations in a performance management instrument and discussing them during an orientation of new employees and at the beginning of an appraisal period for all employees provides the manager with an opportunity to highlight their importance at the outset rather than having to raise the issues when unacceptable deviations occur.

Below is a brief description of the key elements of a performance evaluation form.

Period of assessment

This function is clearly the purview of management. In most cases a one-year period is appropriate, but a shorter period may be selected. For example, it may be advisable to assess a new employee after three or six months. In any case, the employee should be aware of the period chosen for assessment at the time of employment.

Part I. Job performance expectations

Performance issues should be keyed to the essential elements of the employee's job description. A copy of the job description could be attached to the appraisal form and job elements referred to by number. Expectations should be stated briefly, and when possible, in quantitative terms. For example, if the employee is a case manager, the expected average number of closed cases per week or month might be listed. In many instances, particularly in service organizations, expectations will be stated in qualitative terms. The important point is that the expectations generate a constructive dialogue between supervisor and employee about what is expected of the employee during the assessment period.

Part II. Administrative expectations

These expectations should reflect the administrative values of the organization. Discussing these expectations, particularly with new employees as part of the orientation process, provides the supervisor with an opportunity to explain the organization's administrative values and expectations such as hours of duty and interpersonal relations. Additional expectations may be added to accommodate the needs a particular work group.

Part III. Employee development & objective setting

Both the employee and supervisor should look ahead and discuss developmental issues or opportunities. An open discussion of training, increased responsibilities, developmental assignments, and the like, can lead to a greater understanding of the potential for integration of the employee's aspirations with the organization's needs, goals, and capacity to respond. Agreements reached during the discussion of employee development and objective setting can be incorporated into the performance management/appraisal form for the next assessment period.

Rating levels

A good performance instrument provides for three rating levels: Exceeds, Meets, or Below Expectations. Granted, the more popular employee rating systems in the public and nonprofit sectors utilize five levels. Generally these levels, by a variety of different terms or symbols, are Outstanding, Very Good, Good, Fair, or Poor. It is further recognized that rating performance in service organizations, including the public and nonprofit sectors, is highly subjective. Five level systems merely compound the subjectivity of an already subjective process. Further five-level systems, no matter what terms or symbols are used, can be perceived by the supervisor and employee in academic terms (i.e. A, B, C, D, and F). When this perception is present, a rating that equates to an academic "C" is not likely to be accepted as descriptive of successful performance. Consequently, a three-level system minimizes the need for subjective hair splitting and reduces the potential for confusing ratings of performance with academic grades.

Employee ratings

Self-evaluation can be controversial and tradition suggests that performance evaluation is the responsibility of the supervisor. However, current organizational theory fosters the notion of employee involvement. The traditional approach to performance assessment has, in many instances, disenfranchised employees and left many conscientious managers uncomfortable with the process. If one of the primary purposes of performance assessment is to encourage constructive dialogue between supervisor and employee, the supervisor's knowledge of the employee's perceptions of her/his performance should facilitate this dialogue.

The supervisor and employee are encouraged to use the instrument to facilitate performance related meetings during the appraisal period. It becomes an integral part of a two-way, continuous process of observation, conversation, thinking, planning, and coaching that occurs throughout the year. Additionally, each of the items on the

instrument may be elaborated in attachments and/or supported by notes and memoranda developed during the rating period. Consequently, the appraisal is a cover sheet or summary of the natural dynamics of good performance management.