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**Consolidated
Dispatch
Center
Feasibility
Study: Ohio
Case Studies**



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ABSTRACT: *This report describes the outcome of case study research of consolidated dispatch centers in the state of Ohio. Each case study includes descriptions of the governing and operating structure, consolidation process, funding and fee structure, and the successes, challenges, and lessons learned by each entity.*

The results suggest that while the experiences among consolidated dispatch centers varied, the elements that should contribute to a successful transition are building strong relationships, involving a center director and other stakeholders (including affected employees) in the planning process, having a willingness to compromise, providing training for dispatchers developing of standard operating procedures, and establishing expectations of the consolidation process.

Key Words: *9-1-1 communications, 9-1-1 dispatch, case studies, consolidation, emergency dispatch, merger, public safety, shared services*

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EXECUTIVE SUMMARY

As a way to ensure taxpayer dollars are being spent as efficiently and effectively as possible, communities across the United States are exploring consolidation 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 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 multi-jurisdictional 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.

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.

Wayne County and the cities of Ashland and Wooster engaged the Center for Public Management (PM) to assist them in assessing the feasibility of developing a

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consolidated public safety dispatch center. To achieve this, the PM facilitated dialogues with the leadership and public safety leaders and stakeholders of the jurisdictions; conducted research on implementation experiences of other consolidated centers (case studies); designed the protocol to guide all facilitated sessions; developed a financial profile for the group and for each participating community; designed a viable human resources strategy, and identified the labor management relations issues that may impact the consolidated dispatch center.

This report represents the case study component of the study. The remaining elements of the study can be found in the complete report. This report can be used as a guide for outlining a process for consolidating public safety dispatch centers. The report identifies consolidated centers that may serve as a resource for those looking to consolidate. It is not only useful for those looking to consolidated, but may also serve as a resource for an existing dispatch center in identifying “best practices” for operations or governance.

CASE STUDIES

The PM conducted case study research of four consolidated dispatch centers across the United States. These centers were selected (volunteers) from a group of subscribers to the Association of Public Safety Communications Officials International's (APCO) PSConnect'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 in 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) for fire and EMS.



Figure 1: Case study participants

Characteristics of Consolidated Centers

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 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.

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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. 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 non-dispatch 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 center's 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.

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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. 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, respectively.

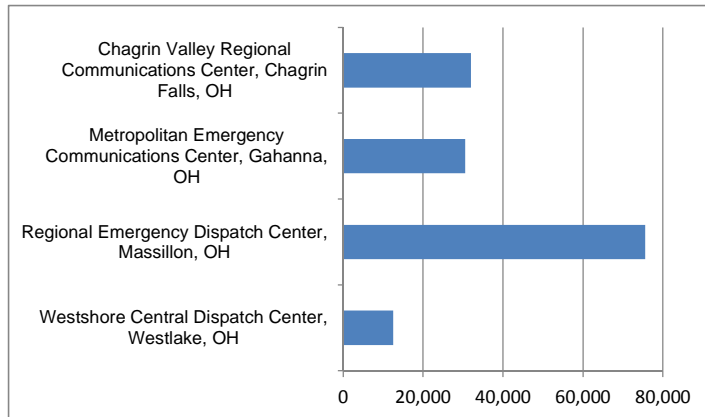


Figure 2: Calls for service 2009

The balance of this report provides specific information on each 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.

Chagrin Valley Regional Communications Center (Chagrin Falls, OH)

Unless otherwise noted, this case study summary is based on information obtained in an interview with Lisa Mariola, Administrative Assistant to the Chagrin Falls Police Department, conducted on January 25, 2011 and James Brosius, Chief of the Chagrin Falls Police Department on, March 4, 2011.

Chagrin Valley Regional Communications Center (CRCC), located in Chagrin Falls, Ohio, has been providing contractual dispatch services to various municipalities since 1963. The center services a population of 17,139 and logged 43,500 calls for service in 2010. Recently, CRCC and its clients decided to change their relationship from that of service provider and end-user to equal-share co-owners. In February 2011, the Chagrin Valley Dispatch Council (CVD) was created and its bylaws were drafted. CRCC will continue to provide dispatch services for eight political subdivisions (eight police and

two fire departments) listed below.

- Chagrin Falls Township police
- Orange Village police
- Village of Bentleyville police
- Village of Chagrin Falls police
- Village of Chagrin Falls fire
- Village of Hunting Valley police
- Village of Moreland Hills police
- Village of South Russell police
- Village of Woodmere police
- Village of Woodmere fire

CRCC officials are engaged in informal discussions with other potential participants, but no formal commitments to join CRCC have been made at this time.

Structure and Operations

In early 2011, Chagrin Falls and its seven dispatch service subscribers created a council of governments (COG), as authorized by Ohio Revised Code 167, to “promote...and coordinate action... in matters relating to the dispatch of public safety services and the operation” of CRCC (CRCC Intergovernmental Agreement, 2011). CRCC’s governance and operating structures are discussed below.

CRCC will be governed by the Chagrin Valley Dispatch Council (CVD) (see Figure 3). The council will be comprised of one voting representative of each member political jurisdiction. The CVD will have the authority to

- enter into contracts,
- create and implement all staffing decisions,
- purchase, lease, or provide all supplies, equipment, materials, and facilities, and
- accept and raise capital for operation, maintenance, and upgrades.

A technical advisory group, made up of COG member chiefs of police and fire, will make recommendations to the CVD on “staffing, equipment, and operational needs” and will assist in budget preparation and implementation (CVD By-laws draft, March 2011).

Chagrin Falls Police Department has been designated as the employing COG member. Chief of Police James Brosius will handle the day-to-day operations under the control and guidance of the CVD (see Figure 3). Chagrin Falls will receive compensation for its services as the employing COG member. The exact amount of such compensation,

however, has yet to be determined (CVD By-laws draft, March 2011). Although the Chagrin Falls police chief technically makes all hiring, firing, and staffing decisions, the city has agreed in all of the foregoing matters to defer to the will of the governing board.

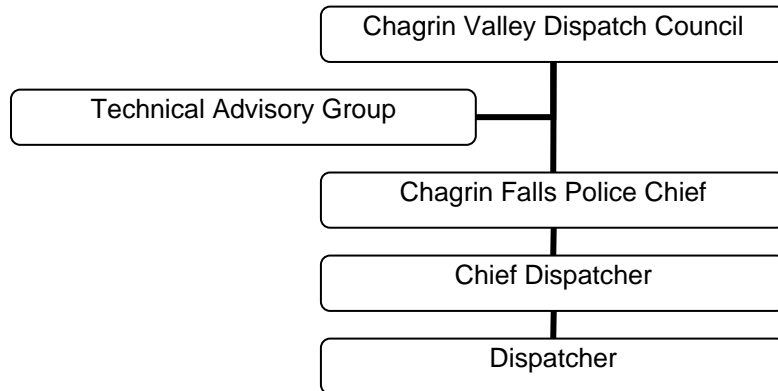


Figure 3: Chagrin Valley Dispatch Governance Structure

Staffing, Human Resources, and Training

To ensure service quality, CRCC utilizes a comprehensive testing, interview, and training process for its dispatchers. To be considered for employment, CRCC applicants must obtain preset performance metrics/scores on the following tests:

- dispatch specific profile,
- psychological,
- intelligence quotient, and
- hearing.

CRCC employs a staff of six full-time dispatchers, three part-time dispatchers, and a chief dispatcher, who, in addition to dispatching, serves as records clerk for the department. Dispatchers report to the chief dispatcher, who reports directly to the chief of police. There are two dispatchers on duty from 08:00 p.m. to midnight and one dispatcher is on duty from midnight until 8:00 a.m. This schedule is the same seven days per week. All dispatchers are trained and certified to perform emergency medical dispatch. Staffing will remain unchanged unless new jurisdictions join the CRCC.

Funding and Fee Structure

As a new stand-alone COG, CRCC will be funded by a combination of grant awards and COG member monthly dues. CRCC recently applied for and received a \$250,000 technology grant from the federal Community Oriented Policing Services (COPs)

program. The grant will be used to upgrade dispatch technology and to construct a new dispatch center building.

The total estimated operating and capital costs for the center will be apportioned among COG based on their percentage of the center's total dispatched calls (calls for service) from the previous year. This apportionment is referred to as monthly dues. Although both nonemergency and emergency police and fire department calls (depending on the contracted service) come through the center, nonemergency calls are not included among the calls billed. Upon adoption of the bylaws, COG members will pay, in advance, three months of dues, which will be "retained and utilized as working capital" (CRCC Intergovernmental Agreement).

Consolidation

Since CRCC is providing contractual dispatch services to the municipalities listed previously, proposed changes focus solely on governance structure. Although CRCC's governing board may implement operational changes or authorize expansion in the future, no such changes are planned at the time of this writing.

Successes, Challenges, and Lessons Learned

CRCC found their existing service provider structure could ultimately lead to a loss of subscribers. Specifically, end-users wanted to have a voice and a vote in CRCC's operation and planning. Chief Brosius, current police chief of Chagrin Falls, posited that because county governments are pushing toward dispatch regionalization, more and more regional dispatch centers will be created in the near future. Thus, this will create a greater risk of losing current subscribers to competitors. Chief Brosius stated that it is best to get ahead of the regionalization trend by creating a co-owner relationship with CRCC's end-users, and that this would help to alleviate competitor risk and ensure continued buy-in of its members.

Metropolitan Emergency Communications Center (Gahanna, OH)

Unless otherwise noted, this case study summary is based on information obtained during interview with Mory Fuhrmann, a communications shift lieutenant with the Metropolitan Emergency Communications Consortium, conducted on January 21, 2011, emails on January 16, 2011 and July 7, 2011, and interviews with Michael Grossman, fire assistant chief for Mifflin Township Fire Department and communications bureau director for the Metropolitan Emergency Communications Consortium, on January 24, 2011, August 12, 2011, and August 17, 2011.

The Metropolitan Emergency Communications (MEC) Center, located east of Columbus in Gahanna, Ohio, is a venture of the Metropolitan Emergency Communications Consortium (the consortium). The consortium consists of representatives or partners from Jefferson Township, Mifflin Township, Plain Township, Truro Township, Violet Township, and the City of Whitehall. The consortium contracts with Mifflin Township to operate the MEC Center, which provides fire and emergency medical dispatch for the consortium's six partners. The service area encompasses approximately 105 square miles and is a largely suburban area with some rural and urban areas. The MEC Center also provides dispatch services for the Division of State Fire Marshal's Fire and Explosion Investigation Bureau (FEIB) and the Ohio Fire Chief's Association (OFCA) during holidays, nights, and weekends. In 2010, the MEC Center handled 30,575 calls for service. Nonemergency calls are not counted by the systems.

Structure and Operations

The consortium has two boards: the consortium board and the operations board. The consortium board is comprised of the fire chief of each of its full partners' (described in *Funding and Fee Structure*) fire departments or agencies. Key responsibilities of this board are approving the MEC Center budget, strategic planning, marketing, and adding new partners and programs to the consortium. The operations board, which consists of the assistant or deputy fire chiefs of each full-partner agency, tries to identify new and more efficient collaborative ways of regionally operating the dispatch center, the emergency medical program, fire operations, radios and communications equipment, information technology (IT), resource assets, and logistics. It also deals with vendors and contractors, and infrastructure development, such as purchasing new equipment. Leadership on both boards rotates annually among the full-partner agencies.

Direct oversight of the center is the responsibility of the communications bureau director (director). This position is currently held by Mifflin Township's assistant fire chief of special operations. The director reports to the consortium operations board. The MEC Center and its employees are part of the Mifflin Township Fire Department. The consortium partners are exploring the possibility of having the consortium become a government agency, such as a council of governments.

The MEC Center has 11 full-time dispatchers and nine part-time dispatchers, which staff four platoons, each working 12-hour shifts. Minimum staffing for each shift is three dispatchers, which normally includes one communications shift lieutenant and two fire/emergency medical service (EMS) dispatchers. Part-time dispatchers are used to staff two additional shifts, which run Monday through Friday from 7:00 a.m. to 11:00 a.m. and 7:00 p.m. to 11:00 p.m. These four-hour shifts enable the MEC Center to maintain preferred staffing levels of four dispatchers during the beginning of each shift.

This provides enough staffing to cover call-offs, and front-loads staffing for anticipated weather-related events, planned fairs or festivals, and trainings. Additional staffing is added during large-scale incidents and multiple incidents that tax normal or average center call volumes and work load.

The management structure consists of four communications shift lieutenants and the communications bureau director, who also holds the rank of assistant chief of special operations for Mifflin Township (see Figure 4).

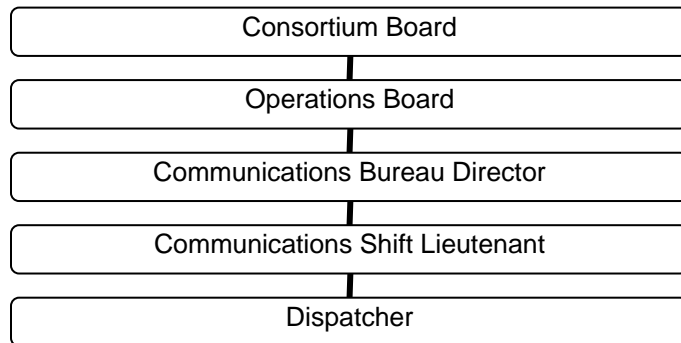


Figure 4: Organizational Structure for Metropolitan Emergency Communications Consortium

The MEC Center’s extensive hiring process for dispatchers utilizes a behavioral personality and traits test. Second, the prospective dispatchers are tested on skills and multitasking abilities. A background check and an interview with standardized questions are conducted.

The dispatchers have emergency medical dispatch (EMD) and fire dispatcher certifications, which require a total of 36 hours of continuing education over two years to maintain. These certifications are provided by a Priority Dispatch in Utah and/or the Association of Public-Safety Communications Officials (APCO) International. The academy that certifies dispatchers provides quizzes that qualify for continuing education credit, while the MEC Center also provides continuing education on the job, such as setting aside time to review standard operating procedures (SOPs).

Funding and Fee Structure

There are two types of memberships or partners in the MEC Center: a full partner and a member. These vary based on the services received and basis for fees. Member organizations have the option to buy individual services, such as call handling; IT support; emergency medical direction, protocols, training, and group purchasing; or dispatching services. Full partners receive dispatching services and IT support and pay equal shares of building costs, IT costs, and capital reserves. Dispatch center operating costs, about \$2.0 million in 2010, are distributed based a two-part formula consisting of population (weighted at 80%) and dispatched incidents (weighted at 100%). The FEIB and OFCA, considered partner organizations, have separate two-year contracts with the MEC Center.

Consolidation

The decision to consolidate was prompted by a desire to share resources and provide the closest source of assistance, regardless of jurisdiction. According to Michael Grossman, the consortium “embodies the philosophy that the sum of our efforts is many times greater than those we may pursue individually.” It was thought that centralizing the fire and EMS communications in the region would reduce response times, give smaller departments a greater regional voice in dispatch-related issues, and provide the opportunity to have a more modern communications infrastructure by pooling financial resources. In addition, Plain and Jefferson Townships’ fire/EMS departments indicated that fire and EMS concerns were not being adequately addressed because a law enforcement agency (New Albany Police Department) provided their dispatch services.

Mory Fuhrmann viewed the consolidation timetable for the MEC Center as extremely ambitious. In November 2003, it was awarded a federal grant of \$700,000 for capital expenses, including new radio infrastructure. Work groups and task forces were formed and tasked with projects related to technology, response assignments (which units respond to which calls), training, personnel, logistics, and facilities. Due to the magnitude of the project, several external vendors were involved in the planning and implementation process. Consistent with the projected timeline, the center opened on June 26, 2004.

When the MEC Center first opened, it served Plain Township, Jefferson Township, and Mifflin Township, and was staffed with former Mifflin Township fire dispatchers. The communities of Violet Township, Truro Township, and the City of Whitehall would join later and in that order. When Truro Township joined, two of its dispatchers were interviewed and offered positions with the MEC Center. Others stayed with Truro and were reassigned to other positions. When the City of Whitehall joined, one dispatcher

interviewed and was offered a position with the MEC center. The others retired or remained with the city in other positions.

Dispatchers from Truro Township and the city of Whitehall were able to carry over their seniority¹ and vacation leave balance to Mifflin Township. Mifflin Township took on liability for the vacation leave brought in by dispatchers from other centers, but was reimbursed through the consortium. In addition, the MEC Center established pay scales that would provide employees with comparable levels of experience at the same pay level.

Successes, Challenges, and Lesson Learned

Successes

Mr. Fuhrmann offered his thoughts on what the MEC Center did well and what he would have changed in the early stages of the consolidation. He said it was helpful that some dispatchers were included in the planning of the new center. He thought that by including dispatchers, they would have a better understanding of the rationale behind decisions and would be more likely to accept the plan for consolidation. He also stated that the consortium has enabled smaller communities to voice their opinions and serves as a mechanism for pooling participants' resources.

Challenges

The MEC Center encountered several challenges in the beginning. When it opened, Mr. Fuhrmann indicated that the MEC Center did not have enough dispatchers to staff the center. There were four full-time dispatchers with two on duty at all times. In order to have enough staff to fill in for dispatchers taking sick and vacation leave, the MEC Center had to use firefighters as backup until more dispatchers were hired. Since firefighter's wages are higher than dispatchers, Mr. Fuhrmann said that hiring an adequate number of dispatchers prior to the opening of the center would have saved the center money.

Initially, the director position for the MEC Center rotated among the chiefs of the member townships. Consequently, the director's duties were in addition to each chief's existing duties. Now, there is a MEC Center director, with an office onsite, who can focus on running the center.

¹ This meant that an employee's years of service would be recognized with regard to bidding on schedules, overtime, and vacation.

Michael Grossman indicated that, in the beginning, the center struggled with the various chiefs making requests directly to MEC Center employees. Now all requests, questions, and concerns go through the director. This gives the MEC Center the opportunity to develop standardized responses and protocols, rather than developing a variety of responses “on-the-fly” to similar situations. For example, if a fire department chief wants to change which units are responding to different areas in his jurisdiction, he would discuss this with the director. If there was an issue with how a dispatcher handled a call, the fire chief will contact the director.

According to Mr. Fuhrmann, a current challenge has been managing 12 capital projects simultaneously. With so many projects underway, the MEC Center was having difficulty bringing any of them to closure. Consequently, the director decided that no new projects would be undertaken until the ongoing ones were completed.

Lessons Learned

Mr. Grossman offered several observations:

- Focus on building relationships and collaborating. These are keys to success. It is important to get everyone in the same room and start cultivating relationships. Participants may fear that consolidation will result in loss of identity or autonomy; however, when done properly, everyone still has a voice.
- Set expectations of the consolidation process in the beginning so everyone is on the same page.
- Have a consistent leader assigned to the center.
- Approach collaboration as a regional proposition rather than one that strictly affects an individual political jurisdiction or agency. Seek to positively affect a larger region.
- Have another center (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.

Regional Emergency Dispatch Center (Massillon, OH)

Unless otherwise noted, this case study is based on information obtained from personal emails with Robert Buhecker, the assistant director of the Regional Emergency Dispatch Center (RED Center), dated April 14, 2011, May 19, 2011, and June 14, 2011.

The RED Center is located in western Stark County, Ohio and dispatches for 21 police, fire, and EMS agencies (Regional Emergency Dispatch Center, 2011). Since the RED Center is a secondary public safety answering point (PSAP), calls are routed from the 9-1-1 call center at the Stark County Sheriff's Office (the primary PSAP) to the RED Center (RED Center, 2011). Its service area covers 187 square miles on rural, urban, and suburban land. This area has approximately 150,000 residents. The assistant director estimates that the center received 75,600 calls for service in 2010, with an average daily call volume of 207.

The RED Center dispatches for the following departments:

- Beach City Police
- Beach City Fire
- Bethlehem Township (Twp.) Fire
- Brewster Police
- Brewster Fire
- Canal Fulton Police
- Dalton Fire
- Hills and Dales Police
- Jackson Twp. Police
- Lawrence Twp. Police
- Lawrence Twp. Fire
- Lexington Twp. Fire
- Marlboro Twp. Police
- Massillon City Police
- Massillon City Fire
- Navarre Police
- Navarre Fire
- Waynesburg Police
- Wilmot Police
- Wilmot Fire

Structure and Operations

Local Organizations of Government in Cooperation (LOGIC) is a COG. The COG "management team" serves as the governing board for the RED Center and comprises officials (police and fire chiefs, elected officials, and a city service director) from its member jurisdictions. Although all COG members may voice their opinions, due to the large number of entities involved, only six members vote on resolutions and make other decisions. The management team elects a team leader every year to organize meetings and serve as the point of contact for the executive director (RED Center Standard Operating Procedures). The management team is responsible for operational matters relating to the RED Center including selecting equipment; developing rules, regulations, and dispatch procedures; conducting research; and budgeting (RED Standard Operating Procedures). The executive director of the RED Center reports to the LOGIC board. There are 15 full-time dispatchers (called communications officers) and five part-time dispatchers who report to the assistant director (director of operations), who in turn reports to the executive director (See Figure 5 **Error! Reference source not found.**). The assistant director handles the day-to-day operations, while the executive director is responsible for the overall leadership and supervision of employees including

purchasing, accounting, training, hiring recommendation, disciplinary actions, policies and produces development and implementation. Staffing per shift is as follows: five employees are scheduled 10:30 a.m. to 10:30 p.m., four from 10:30 pm to 02:30 a.m. and three from 02:30 a.m. to 10:30 a.m.

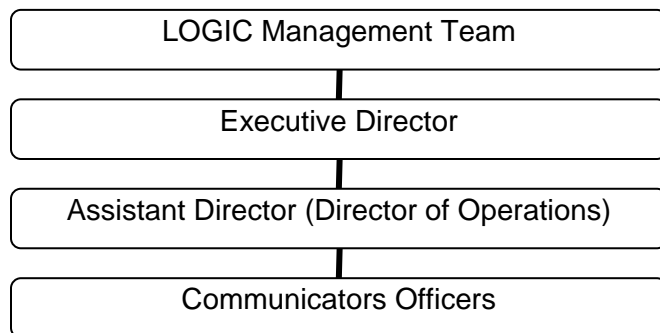


Figure 5: Regional Emergency Dispatch Center Organizational Chart

The executive director and assistant director handle the payroll and verify it before sending the information to an external bookkeeping agency for processing. Most IT problems are handled internally by the assistant director or executive director, but an outside contractor handles issues beyond the technical abilities of internal staff.

The hiring process has changed since the initial consolidation. The current hiring process involves a typing test and a practice exercise. The practical exercise is a basic multitasking test that simulates dispatching public safety, as well as taking and relaying information to responding units. Each dispatch applicant must also type faster than 30 words per minute. Once these thresholds are achieved, the executive director and assistant director conduct interviews and perform background checks.

Historically, the RED Center entered into a three-year contract with each participating entity. The contracts indicate a total amount to be paid, which is based on the funding formula described in the Funding and Fee Structure. Since the jurisdictions in Stark County have been trying to establish a countywide dispatch center, the current (two-year) contract has a provision that indicates that the agreement “terminates if any Stark County Regional Dispatch operation occurs that replaces the dispatching operations described in this agreement” (LOGIC Contract RED Center). The plans for a countywide dispatch center are on hold since one of the anchor dispatch centers has chosen not to participate.

Funding and Fee Structure

The RED Center has different funding formulas for law enforcement agencies and fire departments. Population, as defined by the current Census, is the basis for the law enforcement agency fees. The fire departments pay based on the previous year's calls for service. Since 65% of the total calls for service (in the year the center was established) were for law enforcement and 35% for fire/EMS, law enforcement agencies pay 65% of the dispatch center's total costs; the remaining 35% is allocated among the fire departments. The cost allocation formulas for law enforcement and fire/EMS are below.

- Jurisdiction fee for law enforcement dispatch:
Total dispatch center cost x 65% x jurisdiction's share of combined population of all jurisdictions in the dispatch center
- Jurisdiction fee for fire/EMS dispatch:
Total dispatch center cost x 35% x jurisdiction's share of the dispatch center's total calls for service

The assistant director explained why law enforcement and fire/EMS agencies formulas are different. In developing a cost allocation formula, the concept of charging participants based on the number of calls was introduced. Agreement could not be reached on what constitutes a law enforcement call for service, but an agreement was reached for fire and EMS. To illustrate the difficulty experienced, the assistant director indicated that some law enforcement agencies do not consider a traffic stop, officer-initiated call, vacation check, or similar actions as being calls for service, even though these activities may require action by a dispatcher.

Consolidation

The Jackson Township Police Department, Hills and Dales Police Department, and Massillon Fire Department, the original participants, consolidated in 1986 voluntarily as a way to save money. At the time, most of these agencies used fire fighters or law enforcement officers to dispatch. The consolidation resulted in the hiring of civilian dispatchers, which allowed the first responders to be in the field rather than dispatching at a desk. The Canal Fulton Police Department joined within the first two years of the consolidated center's existence. Canal Fulton's original motivations for consolidation were to combine resources to cut costs, increase communication with neighboring agencies, and increase overall interoperability among safety services. The equipment from the old centers was nearing the end of its useful life, so it remained at the respective agencies in case a backup was needed.

Although the RED Center started with three agencies (two police and one fire and EMS), it has expanded to 21. In 2003, seven police departments (Beach City, Brewster, Lawrence Township, Malboro, Navarre, Waynesburg, and Wilmot) and the Lexington Fire Department switched from their existing dispatch service provider to the RED Center. Most of these agencies determined that a new fee structure established by their service provider would have imposed a higher fee than the RED Center. Switching to the RED Center also enabled these agencies to improve communications with neighboring agencies. Another positive factor for these police departments was that the RED Center was already dispatching most of their corresponding fire departments. This allowed for greater interoperability between the departments. For example, now Navarre's police and fire departments would be dispatched by the same center. This eliminates the need to transfer calls and allows for faster communications.

Successes, Challenges, and Lesson Learned

Robert Buhecker indicated that getting the participating agencies to standardize their policies and procedures continues to be the center's greatest challenge. He thinks that having different procedures for each agency makes training new employees very difficult, and negatively the center's ability to provide dispatch services on their behalf. Mr. Buhecker said the center's greatest success has been surviving; it has endured periods of declining revenues among the participating agencies. The center is also able to pass savings on to its agencies. For example, it is keeping its dispatching rates the same for the next two years, as it had in the previous year.

Mr. Buhecker thinks that the RED Center has accomplished much of its original purpose, which was to reduce costs and increase efficiency. With all dispatchers in one room, dispatchers can more quickly and easily coordinate during emergencies. This is particularly helpful when an emergency is larger in scale or crosses jurisdictional boundaries. This also contributes to improved officer safety, he said, because dispatchers can relay information quickly among several agencies. With public safety officers no longer serving as dispatchers, these officers are available to serve in the field. This provided an economical way to increase safety forces' presence while not increasing the agencies' budgets.

Mr. Buhecker made some recommendations for those considering consolidation:

- Establish standardized policies and procedures in advance.
- 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.

Westshore Central Dispatch Center (Westlake, OH)

Unless otherwise noted, this case study summary is based on information obtained in interviews with Nick Pishnery, Westshore Central Dispatch Center supervisor, conducted on October 26, 2010, April 11, 2011, and July 29, 2011, and in an email on June 14, 2011.

Westshore Central Dispatch Center (Westcom) was created in February, 2005, when four of the six members of the Westshore COG agreed to consolidate dispatch by approving an intergovernmental agreement and bylaws. Currently, Westcom provides fire and EMS dispatch services for the four Westshore COG members (Bay Village, Fairview Park, Rocky River, and Westlake) and the city of North Ridgeville.

Westcom serves a population of 147,602, has a suburban service area of 68 square miles, and fields approximately 12,500 calls for service each year. All participating entities are located in Cuyahoga County, except for North Ridgeville, which is located in Lorain County. As a result, a 9-1-1 call for North Ridgeville (wireline² or wireless) is routed differently than one originating in the other communities. A call for North Ridgeville's fire/EMS is routed to the Lorain County Emergency 9-1-1 Agency whose dispatcher then transfers the call to Westcom (R. Scarborough, personal communication, June 16, 2011). In the other Westcom communities, wireline calls are routed to the primary PSAP (operated by the police departments of the respective cities). Upon determining the need for fire/EMS, the primary PSAP routes the call to Westcom. For example, a call from a resident of Westlake about a house fire would first be answered by the Westlake Police Department and would then be transferred to Westcom. Cuyahoga Emergency Communications System (CECOMMS) operates the cellular/wireless PSAP. This means wireless calls originating in Cuyahoga County are first routed to CECOMMS. Once the nature of the emergency is determined, the caller is forwarded to the appropriate PSAP.

Governing and Operating Structure

Westcom is organized under the Westlake Fire Department, but it ultimately answers to the Westshore COG. Mr. Nick Pishnery, Westcom supervisor, runs the dispatch center's day-to-day operations with the help of an assistant supervisor. There are six full-time dispatchers and nine part-time dispatchers working at Westcom. The reporting structure is shown in Figure 6.

² These are calls initiated from a wired phone (connected to an outlet) rather than wireless.

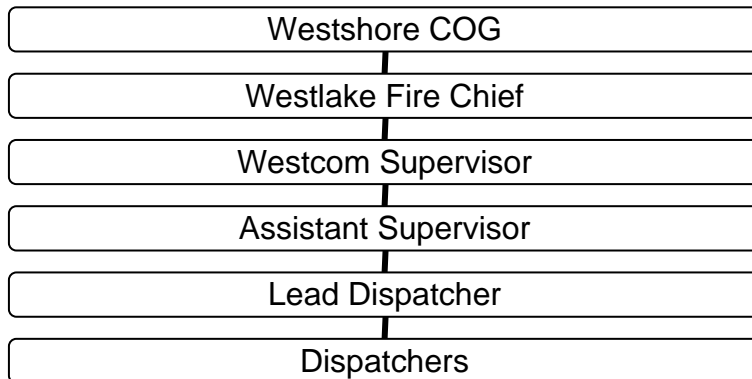


Figure 6: Westshore Central Dispatch Center Organizational Chart.

Westcom staffs each shift with a supervisor (the supervisor, assistant supervisor or lead dispatcher). First and second shifts utilize three dispatchers; third shift utilizes two dispatchers. Start times for each shift are staggered by an hour (e.g., first shift start times are 7:00 a.m., 8:00 a.m., and 9:00 a.m.). This helps provide better continuity of service and smoother shift transitions.

Westcom places a high priority on training. In fact, one of the dispatchers serves as an in-house training officer. All dispatchers are trained in EMD, cardio-pulmonary resuscitation (CPR), crisis communications, pain management, and Incident Command System (ICS)³ as described in the current version of the National Incident Management System (NIMS).⁴ All employees of Westcom are trained at the NIMS 100, 200, 700 levels. All supervisors and lead dispatchers are also trained at the 300, 400, and 800 levels. For much of the training, Westcom uses materials from the APCO International and courses sponsored by the Cuyahoga County EMA. Dispatchers also visit the fire station and do “ride alongs.”

Funding and Fee Structure

Westcom’s budget comprises operating and capital costs. The supervisor develops the budget and presents it to the Westlake fire chief, who then presents it to Westlake City Council, then to Westshore COG for approval. While Westcom has received several grants to cover capital costs, future capital costs will be split evenly among participating entities. In 2004, Westlake was awarded a \$566,503 grant from the Department of Homeland Security (DHS) to purchase equipment for the center. In 2010, Westcom

³ ICS is a “standardized, on-scene, all-hazards incident management approach” (FEMA ICS, 2011).

⁴ NIMS is an “approach to guide departments and agencies at all levels... and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents...in order to reduce the loss of life and property and harm to the environment” (FEMA NIMS, 2011).

received an additional \$1 million Assistance to Fire Fighters grant from DHS to purchase radio mobile data terminals, and software upgrades. Operating costs are shared among participants. Each of the five Westcom members pays 10% of the yearly operating costs (for a total of 50%). Then, the remaining 50% of the operating costs are divided among Westcom members according to their proportional population percentages.

Consolidation

Westshore COG members looked into regionalizing fire dispatch as a way to save money. In February 2005, the cities of Bay Village, Fairview Park, Rocky River, and Westlake agreed to consolidate dispatch services. The center opened in March 2006. North Ridgeville's fire department joined Westcom in December 2007. Prior to consolidation, members of Westcom operated their own (secondary) PSAPs, which were housed in their respective fire departments. Each fire department had a firefighter devoted to dispatch duties, which was not viewed by these departments as an efficient use of a firefighter's time. The Westshore COG thought it would more efficient to allow firefighters to concentrate on other tasks and have professional dispatchers answer calls.

In order to recruit dispatchers for the new center, Westcom placed advertisements in some trade journals and *The Plain Dealer*. Over 200 people were initially interviewed and seven full-time and seven part-time dispatchers from this pool of candidates were hired. None of the dispatchers came from any of the participating cities' fire dispatch centers.

Successes, Challenges, and Lessons Learned

Nick Pishnery shared his insight on successes, challenges, and lessons learned. He said that the fact that Westcom is located in a hospital allows dispatchers to more easily communicate with hospital personnel in an emergency. Being located in a hospital (low rent) has also provided the center with significant cost savings. Mr. Pishnery stated that one of the challenges of Westcom's consolidation was starting with nothing. It was time-consuming to research and purchase all new equipment, hire staff, find a location, and fully equip the center, he said. In Mr. Pishnery's estimation, it is more prudent and economical to join an established multi-jurisdictional regionalized dispatch center.

Mr. Pishnery offered advice to those looking to consolidate:

- Consolidate fire, police, and EMS. It is more efficient and cost effective than consolidating fire/EMS alone.

- Develop a clear governance structure and chain of command. These are crucial to consolidation and serve to lessen confusion among employees.
- Involve the center director from the very beginning and make sure he or she has dispatch experience.
- Provide as much training for the dispatchers as possible. In Westcom's case, dispatchers are trained in EMD, CPR, crisis communications, pain management, and ICS.
- Designate a training officer who can focus on training.
- Hire and train intelligent people, rather than focusing on hiring experienced dispatchers.

APPENDIX A

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