

# **Consolidated Public Safety Answering Point (PSAP) Feasibility Study: Executive Report**

Prepared for the Richland County Board of Commissioners

Prepared by the Center for Public Management, Maxine  
Goodman Levin College of Urban Affairs, Cleveland State  
University

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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, and Patrick Johnson, Consultant, were contributing authors. Editorial support was provided by Claudette Robey and Kyle Johnson. 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 two public safety answering points in Richland County, Ohio. The report describes the methodology used to assess the feasibility. The findings are that consolidation of dispatch services among the potential participating entities is feasible. Consolidation of services would reduce capital costs expended across the county for public safety emergency dispatching over the long term. 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

# Purpose of the Study

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The purpose of this study is to assess the feasibility of consolidating the Richland County and City of Mansfield's public safety answering points (PSAPs).

## Preface

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Entities look to consolidate services for a number of reasons. While cost savings may be among the most prevalent, in the case of 9-1-1 call centers, safety is perhaps the most compelling. The 9-1-1 communications personnel are a principal point of contact for emergencies. A 9-1-1 supervisor suggested that it is the dispatcher's job to ensure public safety personnel return home every day. In addition, communications personnel are responsible for getting public safety forces to the site of an emergency as quickly as possible.

When law enforcement, fire fighters, emergency medical service (EMS) personnel, or citizens call 9-1-1 dispatchers, lives may be at stake. In reviewing this report, it is important to recognize that it is the responsibility of government to not only consider how this type of service can be provided in a cost effective manner, but also how to maintain a high quality of service and public safety.

# Feasibility Defined

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For the purposes of this study, the study participants defined feasibility as

- Legally implementable,
- Able to provide service that is equal to or better than current levels, including the additional service of emergency medical dispatch and adequate staffing levels,
- Able to organize or enter into a democratic consolidated arrangement that would provide entities a voice and a vote in the decision making and provide accountability to all participants through an independent governing board,
- Able to maintain current level of technology, and
- Financially viable (services could be provided at less than or equal to existing costs or expected future costs).

In addition to these criteria, the Center for Public Management (PM) added another –

- Technologically feasibility (can the participating entities and a consolidated dispatch center communicate with each other?).

# Executive Summary

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Based on the criteria identified for the study, it is feasible to consolidate the Richland County and City of Mansfield PSAPs.

- PSAP consolidation is legally implementable.
- PSAP consolidation would enable service that is equal to or better than current levels.
- A consolidated PSAP could be governed under a structure, such as a council of governments (COG) that has an independent governing board, which could provide accountability to all participants and ensure a democratic process by providing participating entities a voice and a vote in the decision making.
- Through the PSAP consolidation process, participating entities can work together to identify the technology, communications systems and records management systems appropriate for the consolidated center
- PSAP consolidation is financially viable in the long term.

# Executive Summary

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## 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.
- In a cursory review of the labor agreements for the City of Mansfield and Richland County, the management rights clause does not prohibit a consolidation. However, there are issues around which these entities would have to negotiate the impact of closing the PSAPs.

# Executive Summary

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## Equal To or Better Quality of Service

- A consolidated center can provide
  - Improved communication in the event of a large-scale emergency and
  - Greater breadth of experience provides increased learning opportunities.
- Estimates for staffing levels should be adequate to handle existing call levels as well as warrant entry.
- Minimum staffing of 5-6 dispatchers per shift will enable countywide emergency medical dispatch.
- Estimated operating costs for a consolidated center factor in training (both staff time and costs for the training itself) from professional trade groups, which should enhance quality.
- Using standardized professionally-developed training programs and materials should contribute to improved quality of service. A commitment to allocating funds for standardized training (24 hours per dispatcher per year) should ensure consistently high quality.
- Calls coming to the county PSAP will not need to be transferred to other communities' police dispatchers. This should result in faster response times.



# Executive Summary

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## **Equal to or better quality of service**

- Implementation of equipment-related recommendations should result in
  - Greater autonomy of operation and interoperability,
  - Consolidation of radio licenses, which would ensure that licenses do not expire and that there are no interference issues with other agencies in the area,
  - A common signaling protocol for radio identification and emergency alarm activation countywide and coordination of radio IDs, and
  - A backup center within the county that would be housed at the location of the current Richland County PSAP (at least in the short term).

# Executive Summary

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## **Democratic process and organization**

- There are mechanisms (e.g., COG , governing board, or advisory board) that can be put in place to ensure a democratic process and structure for oversight of PSAP operations.

## **Technologically feasible**

- Technology is available to enable participants to communicate with a centralized PSAP.
- Collaboration among participants on equipment can ensure a level of technology that meets or exceeds what is currently in use.

# Executive Summary

## Financially viable (long term)

- Estimated collective cost savings of almost \$121,000, if the Mansfield and Richland County PSAPs consolidated,\*
- Estimated decrease in full-time dispatchers (from 28 to 24), but the addition of 4 part time contributes to reduction in costs,
- Cost savings for bulk purchases, and
- Increased eligibility for federal grants.

### NOTES:

*Cost savings does not take into account Richland County's anticipated costs for a new CAD or digital communications and Internet Protocol dispatch for Next GEN, which are estimated at \$1.3 million nor does it take into account costs related to combining records management systems.*

***\*It is important to note that the Richland County Board of County Commissioners (BOCC) would not experience any savings if it were to cover the entire cost of equipment, staff, and general operations of a consolidated PSAP. In fact, the BOCC's costs would increase by almost \$935,000 because it would absorb the City of Mansfield would not be contributing toward the cost of the PSAP. In this case, the City of Mansfield would experience a reduction in costs of approximately \$1.0 million, the costs to operate its current PSAP.***

# Executive Summary

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## Anticipated challenges

- It will be challenging to fund countywide PSAP without dedicated funding source, such as property or sales tax.
- It will require a willingness of all parties to compromise and come to an agreement on what they can live with rather than what they want.
- Participants in the consolidated PSAP would likely have to negotiate impact on union members if their PSAP were to close.
- Team building exercises among employees would be beneficial prior to merging PSAPs or dispatch centers.

## Other considerations

- The future impact of Next Generation (Next GEN) 9-1-1 on costs of equipment and communications infrastructure is not factored into this study.
- Loss of wireless 9-1-1 revenues is expected to be forthcoming.
- Consolidation of Records Management Systems is not addressed in this study.

# Legal Authority for Consolidated Dispatch Centers in Ohio

Extracted from memo by Eugene L. Kramer, Attorney at Law

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There are no significant impediments to cooperative action by a group of political subdivisions, including in particular the subdivisions that are the subjects of this study.

Detailed analysis (See Appendices) includes:

- Possible Impediments or Prohibitions,
- Review of Charters,
- LEADS Program,
- Intergovernmental Agreements (ORC SECTION 9.482),
- Formation of a Council of Governments,
- Status of Employees of a Council of Governments,
- Procedure for Creation of a Regional Council of Governments,
- Powers of a Council of Governments and Limitations on Those Powers,
- Issuance of Debt Obligations, and
- Revenue Sources.

# Legal Authority for Consolidated Dispatch Centers in Ohio

Extracted from memo by Eugene L. Kramer, Attorney at Law

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## Overview

- 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 for engaging 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 council of governments under which the cooperative action would take place, has the potential for more effective, efficient and economical delivery of this essential service.
- The applicable constitutional and statutory provisions are sufficiently flexible so as to enable willing subdivisions to address their unique situations and needs and to provide for a governance structure that is equitable and for a fair system of cost-sharing.

# Review of Labor Agreements

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The Center for Public Management conducted a **cursory** review of the labor agreements for dispatch employees to assess the likely areas around which the City of Mansfield or Richland County might need to negotiate the impact of dispatch center closure with its bargaining unit and assess the management rights clause of both jurisdictions with regard to their PSAPs and staffing.

## Management Rights

In reviewing the labor agreements, the PM did not find anything in the labor agreements that seemed to prohibit consolidation of centers. In fact, the management rights clause (Article 2) in the City of Mansfield's agreement allows the city:

The sole right to hire, discipline and discharge for just cause, lay-off, and promote; to promulgate and enforce reasonable employment rules and regulations; to reorganize, discontinue, or enlarge any department or division; to transfer employees (including the assignment and allocation of work) within departments or to other departments; to introduce new and/or improved equipment, methods, and/or facilities; to determine work methods; to determine the size and duties of the work force, the number of shifts required, and work schedules;

# Review of Labor Agreements

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to establish, modify, consolidate, or abolish jobs (or classifications); and to determine staffing patterns, including, but not limited to, assignment of employees, numbers employed, duties to be performed, qualifications required, and areas worked;" Further, Mansfield's agreement affords the city the ability "To maintain or increase the efficiency and/or effectiveness of City services; to relieve employees from their duties because of a lack of funds, lack of work, or in order to maintain or increase the efficiency and/or effectiveness of City services; and to schedule overtime"

Article 9 of Richland County's labor agreement addresses management rights. This provides for the county (as the employer) the authority to "Determine the overall methods, process, means or personnel by which governmental operations are to be conducted." It further allows the county to "Suspend, discipline, demote, or discharge for just cause, or lay off, abolish jobs, transfer,...or retain employees."



# Review of Labor Agreements

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## Negotiation of Impact on Bargaining Unit

While management rights may allow for the establishment of a consolidated center, management would be required to negotiate the impact and implementation of the consolidated center on bargaining unit employees. In a scenario in which either Mansfield or Richland County would close its PSAP facility and contract with another party, there are a number of issues around which these entities would need to negotiate impact on the bargaining unit. These are listed below.

- Life insurance
- Call in pay
- Tuition reimbursement
- Sick leave incentive/conversion
- Maternity
- Health care contribution
- Seniority
- Wages

# Review of Labor Agreements

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Potential issues around which Mansfield would likely have to negotiate impact include: most benefits, seniority, and wages.

## Potential Labor-Related Challenge

It is worth noting that there are different bargaining units representing PSAP employees: American Federation of State, County, and Municipal Employees Local No. 3088 and Ohio Council 8, American Federation of State, County, and Municipal Employees, AFL-CIO (Mansfield) and the Fraternal Order of Police Ohio Labor Council (Richland County).

*NOTE:* Legal counsel for each entity should be consulted prior to moving forward with consolidation. See Appendices for a detailed comparison of compensation.

# Communications System/Equipment

by Patrick Johnson, Consultant

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## General Recommendations

- Consolidate radio licenses under the decided-upon government structure.
- Consider an overall maintenance contract for infrastructure, consoles, and user radios.
- Establish control of radio and accessory purchases to maintain interoperability and compatibility among users.
- Develop common naming convention of all radio channels (frequencies) utilized within the county.
- Develop a common signaling protocol for radio identification and emergency alarm activation countywide and coordinate radio IDs.
- If agencies migrate to digital, ensure that the platform utilized is that of an open architecture Project 25 standard and not proprietary in nature.
- Consider changing the current County Fire dispatch frequency to another frequency that is not shared with Crawford County, if one is available.

# Communications System/Equipment

by Patrick Johnson, Consultant

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## Consolidation-Specific Recommendations

- Keep the current Richland County PSAP as a backup (plan for the future upgrade of these consoles when funds become available with a more accurate cost to be determined at time of upgrade).
- The Sheriff and other public safety agencies currently being dispatched by the County PSAP should remain on their existing frequencies. Dispatch is accomplished through the use of licensed control stations and a licensed 4.9 GHz link to Scenic Drive.
- Coordinate the utilization of fire department tactical frequencies with County fire departments while they are responding to an incident to help eliminate radio traffic on the main County fire dispatch frequency.
- The cities of Lexington, Ontario and Shelby police departments should remain on their existing frequencies. Dispatch is accomplished through use of licensed control stations.

*Assumption* - For the purposes of this study, it is assumed that all dispatch operations would be housed at the City of Mansfield's Communications Center at the Municipal Building because it would be more cost effective due to newer equipment and room to accommodate additional staff.

# Communications System/Equipment

by Patrick Johnson, Consultant

Estimated costs associated with the (communications/radio) consolidation analysis are below.

Cost Category	Amount
2 additional console positions	\$33,000
9 additional control stations and antennas	17,000
Furniture	24,000
4.9 GHz link to Scenic Drive	10,000
Training	1,000
Yearly maintenance agreement	20,000
Update logging recorder	25,000
Total	<b>\$130,000</b>

# Assessment of Staffing and Costs

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Staffing levels for a consolidated PSAP were projected using staffing and scheduling models. The outcomes are below.

## Estimated Staffing

A total of 24 full-time and 4 part-time dispatchers (compared to a combined 28 full-time dispatchers at Mansfield and Richland County PSAPs) would be required to staff a consolidated center. The proposed staffing level enables 24 hour per day/7 day per week coverage and includes coverage for vacation.

- 1st & 2nd shift - 6 dispatchers, 7 days per week
- 3rd shift - 5 dispatchers, 7 days per week
- Additional staff includes a center manager, an office manager & a part-time data systems administrator.

Proposed staffing levels results in 7,704 hours of overtime to cover holiday, sick, training, and personal leave, as well as to fill regular 24/7 schedule at an estimated cost of \$154,000 per year.

NOTE: Dispatcher staffing levels assume that the lead/senior dispatchers are dispatching.

# Assessment of Staffing and Costs

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## Process for Estimating Staffing

The estimated countywide call volume based on data provided:

- 1<sup>st</sup> & 2nd Shift - 47 total calls per hour each
- 3<sup>rd</sup> Shift – 25 total calls per hour
- Total estimated annual calls - 344,000

Model-projected staffing levels (*assumes call duration of 95 seconds.*) are:

- 1<sup>st</sup> shift – 5 dispatchers
- 2<sup>nd</sup> shift – 5 dispatchers
- 3<sup>rd</sup> shift – 4 dispatchers

One additional dispatcher was added per shift to accommodate warrant entry. This results in a combined total of 6 dispatchers on 1<sup>st</sup> shift, 6 on 2<sup>nd</sup> shift, and 5 on 3<sup>rd</sup> shift. Based on this staffing, the model calculates average capacity of almost 1,100/day and more than 400,000 calls/year.

# Assessment of Staffing and Costs

Estimated Costs for a Consolidated Center	Estimated Costs Consolidated Center
Operating and maintenance	\$ 85,000
Capital	109,000
Training, memberships, certifications & conferences	15,850
Salary: dispatchers	1,017,792
Salary: supervisor/manager	60,000
Salary: benefits: office manager	30,440
Salary: part-time data systems administrator	31,945
Benefits	456,071
Overtime	153,952
Supplies	2,000
<b>Total Estimated Costs</b>	<b>\$1,962,050</b>

*NOTES:* Operating and maintenance costs include a \$20,000 maintenance agreement for equipment. The average hourly rate of \$16.09 was used for estimated salaries. Benefits estimated at 40% of total salaries.

*Assumption:* General operating costs such as utilities are not factored into calculations; they are assumed to be cost neutral



# Assessment of Staffing and Costs

The overall cost comparison for this study is below.

	<b>Estimated Costs for a Consolidated Center</b>	<b>2011 Combined PSAP (Mansfield &amp; Richland County) Costs</b>
Total	\$1,962,050	\$2,082,810
Difference (2011 vs. estimated)		\$120,760

**NOTES:**

The estimated costs above assumes that all PSAPs and dispatch centers are combined/served by a consolidated center, not just Mansfield and Richland County. These estimates do not take into account Richland County's anticipated costs for a new CAD or digital communications and Internet Protocol dispatch for Next GEN, which are estimated at \$1.3 million nor does it take into account costs related to combining records management systems. In addition, general operating costs such as utilities are not factored into calculations; they are assumed to be cost neutral.

# Appendices

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Methodology and Assumptions

Memorandum Regarding Legal Authority for  
Consolidated Dispatch Centers in Ohio

Review of Labor Agreements

Interoperability and Communications Systems  
Assessment

Current PSAP/Dispatch Center Costs

References

Next Steps

# Methodology and Assumptions

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Data for this project were provided by Richland County and the City of Mansfield. In addition to these data, the Center for Public Management (PM) held several meetings (April 6, 2012, June 7, 2012, and July 16, 2012) and conference calls (June 19, 2012 and September 5, 2012) to discuss the project, reasons for consolidation, decision rules for determining feasibility, characteristics important in a governance structure, allocation of costs, and equipment. In addition, a site visit of the PSAPs was conducted on July 16, 2012 to gather additional information on equipment and facilities.

This section discusses the outcomes of those meetings, as well as the assumptions and methodology for determining staffing and staffing/operating costs.

## **Funding**

The PM held a conference call with the Richland County Board of Commissioners to discuss a funding allocation formula. The Commissioners indicated that, for the purposes of the study, the PM should assume that a consolidated center would be paid for using a county funded source.

## **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:

- Improved quality of service and dispatcher training are important. Team building between the county and city dispatchers would be helpful prior to transitioning to a consolidated center.

# Methodology and Assumptions

- Participants suggested that a consolidated PSAP might reduce the likelihood of understaffing, which is currently an issue.
- A dedicated funding source would be helpful, particularly if wireless 9-1-1 funding is no longer available.
- Sharing costs collectively will better enable the group to address future capital needs, including those required to address Next Generation 9-1-1.
- An independent governing board for a consolidated center was very important to several participants.
- Dealing with two unions as part of the consolidation will be challenging.
- Cost savings is important.

## Staffing Methodology and Assumptions

This section describes the methodology and assumptions used by the PM to determine staffing levels and costs for a consolidated PSAP. ***It is important to acknowledge that the decision on a governance structure, location of a consolidated dispatch center, long-term equipment needs, and even the decision to consolidate have not yet been made.*** However, in order to assess feasibility, an assumption was made with regard to initial governance structure and operating 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 City of Mansfield for service. This is based on the preference (indicated by the group participating in the study-related meetings) for an independent governing board, as well as the assumption that it will be more economical to use the existing infrastructure and staffing at the onset of the consolidation.

# Methodology and Assumptions

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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 in the section *Assessment of Staffing and Costs*.

This study incorporates part-time dispatchers into the staffing mix. The study participants indicated that they were open to using part-time staff as a way to minimize overtime. This analysis assumes that part timers would need to work a minimum of one to two days per week.

# Methodology and Assumptions

This study also assumes that the consolidated dispatch center would handle warrants and validations as well as LEADS data entry.

## 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 vacation accrual rates of dispatchers outlined in the subsection *Overtime, Vacation, and Scheduling of Dispatchers and Shift Supervisors*.

The PM identified busy (peak) hour call levels based on the data provided by Richland County and the City of Mansfield PSAPs. The following methodology was used to calculate busy hour and normal hour call volumes:

1. Hourly call volume was obtained over a 14-day period and provided by the Richland County Emergency Management Agency (EMA). Since the original scope of the proposal included all municipal dispatch centers and PSAPs, the call-occurrence pattern was applied to the total call volume data provided by study participants (Shelby, Ontario, Lexington, Mansfield and Richland County EMA) dispatch centers or PSAPs.

# Methodology and Assumptions

2. 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).
3. 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.
4. 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.

## Staffing Analysis Assumptions

This subsection discusses the assumptions used in developing the staffing estimates.

### *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 five dispatchers first and second shifts, and four 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. 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.

# Methodology and Assumptions

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## *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 during the June meeting with public safety officials and dispatchers, this study assumes that training provided to dispatchers and shift supervisors will exceed Ohio's recommended minimum standards by providing at least 32 hours of training per employee, per year. This would ensure dispatchers maintained certification in at least one of three areas.



# Methodology and Assumptions

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Because a consolidated center would likely hire primarily dispatchers with experience, 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 average hourly rates of \$16.09 for dispatchers. The average was calculated based on data provided from the Mansfield and Richland County EMA PSAPs.

# Methodology and Assumptions

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## *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.

Full-time dispatchers are scheduled 40 hours per week with five days on and two consecutive days off. As a general rule, full-time dispatchers are assigned to work the same days of the week and the same shift from one week to the next.

In the scheduling software, part-time employees were scheduled to work an average of two to four days per week (except the weeks they are scheduled for vacation). Although part-time dispatchers were 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 can be on vacation at the same time. Part-time dispatchers are assumed to have annual vacation accrual rates and usage rates of one to two weeks each.

For this study, vacation usage per year is assumed to be:

- Two (7%) dispatchers at 1 week
- Two (7%) dispatchers at 2 weeks
- Three (11%) dispatchers at 3 weeks
- Twenty-one (75%) dispatchers at 4 weeks

# Memorandum Regarding Legal Authority for Consolidated Dispatch Centers in Ohio

by Eugene L. Kramer

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It is important to note that the original scope of work included an assessment of feasibility for combining PSAPs and dispatch centers located within Richland County, so the following summary addresses all jurisdictions.

# Memorandum Regarding Legal Authority for Consolidated Dispatch Centers in Ohio

by Eugene L. Kramer

SECOND DRAFT 7-20-2012

## MEMORANDUM

To: Daila Shimek  
Center for Public Management  
The Urban Center, Cleveland State University

From: Eugene L. Kramer  
Attorney at Law

Dated: July 20, 2012

Subject: Consolidated Public Safety Dispatch Center Feasibility Study  
For the County of Richland and the cities of Mansfield, Shelby and Ontario

This is in response to your request for legal information and analysis in connection with the study that your office is conducting pursuant to a Letter Agreement to conduct a Consolidated Public Safety Dispatch Center Feasibility Study for the County of Richland and the cities of Mansfield, Ontario and Shelby, all of which are located in Richland County. In particular, this memorandum addresses the following matters listed as the Scope of Work and Services as part of the Consultant Agreement between me and Cleveland State University:

A. Determine and describe impediments or prohibitions (in the charters or Ohio Law) to the cities of Mansfield, Shelby and Ontario, and Richland County with regard to consolidating public safety dispatch services. This should include the implications of OAC 4501:2-10-03 Participation in LEADS and ORC 307.63 establishing countywide public safety communications system. Indicate, where possible, how this group might address these impediments.

B. Describe the general procedures for forming a council of governments. Identify limitations and powers of a council of governments, in particular their ability or inability to issue debt, employees' ability to collectively bargain, and employees' eligibility to be part of the public employees' retirement system.

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# Memorandum Regarding Legal Authority for Consolidated Dispatch Centers in Ohio

by Eugene L. Kramer

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- C. Identify a mechanism or structure (like a taxing district) that would enable them to set up a dedicated revenue source.
- D. Prepare a summary of the above.

## Introduction

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 for engaging 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 council of governments under which the cooperative action would take place, has the potential for more effective, efficient and economical delivery of this essential service. The applicable constitutional and statutory provisions are sufficiently flexible so as to enable willing subdivisions to address their unique situations and needs and to 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 by a group of political subdivisions, including in particular the subdivisions that are the subjects of this study. The impediments to cooperative action in establishing and maintaining an emergency dispatch system or similar joint enterprise 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 and 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 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 sufficiently protective of the interests of the participants that will remain.

A county, like Richland County, that operates under the statutory form of government needs to meet the requirements of the statutes that provide for the cooperative action. Cities and villages have authority under the home-rule

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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 also must have under that charter the authority to participate, or not be prohibited from participating, in the proposed enterprise. A charter can also contain procedural requirements that must be observed in authorizing participation in certain kinds of cooperative agreements. The City of Ontario has not adopted a charter and is authorized by the statutes generally applicable to municipal corporations to enter into various kinds of cooperative agreements.

## **Review of Charters**

The Mansfield and Shelby city charters do not contain provisions that would constitute obstacles to participation by those cities in a cooperative arrangement of the kind under consideration. The Mansfield charter, to the contrary, contains, in Section 2.04, the following comprehensive provision on intergovernmental cooperation that would encompass and authorize any of the types of structure or arrangements that are described and discussed in this report.

### **Language from Section 2.04 A and B of Mansfield's charter are below:**

- (A) In carrying out any lawful function or power of the City the Council may, by a majority vote of its members, authorize the execution of contracts or in any other manner provide for cooperation or joint action, between the City and:
- (1) Political subdivisions, special districts, instrumentalities, or other units of government of the state of Ohio or other states.
  - (2) The State of Ohio, its officers, departments, divisions, instrumentalities or other units or agencies.
  - (3) Other states, their officers, departments, divisions, instrumentalities, or other units or agencies.
  - (4) The federal government, its officers, departments, divisions, instrumentalities or other units or agencies.
  - (5) Councils of governments or other instrumentalities consisting of other political subdivisions, special districts, instrumentalities or other governmental units or agencies allowed under the laws of Ohio, other states or the federal government.
  - (6) Persons, corporations whether for profit or nonprofit, firms and other entities; unless such contracts, cooperation or joint actions are prohibited by the Constitution of the State of Ohio.



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- (B) The powers granted by this section shall be liberally construed to authorize intergovernmental cooperation, but shall not authorize the avoidance of the provisions of this Charter concerning taxation or initiative or referendum.

Any intended participant in a cooperative arrangement for establishing and operating a consolidated public safety dispatch center that is subject to an existing intergovernmental agreement that contains provisions that would be in conflict with obligations that would be undertaken by that subdivision under a proposed new agreement would first need to be relieved of the existing obligations. That should be done in accordance with the provisions, if any, of the existing agreement for amendment, withdrawal or dissolution. No intergovernmental agreement can bind a participant to perpetual participation. In the absence of a provision for dissolution or withdrawal, a court would most likely allow a participant to withdraw upon reasonable notice and upon satisfaction of any then existing obligations. In addition, since the any obligation of a participant to contribute money under the obligation would be subject to the appropriation of money annually by the governing body of a governmental participant, the participant could effectively withdraw by failing to appropriate and contribute money for the conduct of activities under the agreement.

## **LEADS Program**

Since the 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

## **Intergovernmental Agreements (ORC SECTION 9.482)**

The General Assembly recently enacted a new provision, contained in Section 9.482 of the Revised Code, which became effective March 22, 2012 and the text of which is attached, that supplements and expands upon existing authority of political subdivisions to enter into intergovernmental cooperative agreements. Under division (B) of that section, a political subdivision, when authorized by its legislative authority, "may enter into an agreement whereby a contracting political subdivision agrees to exercise any power, perform any function, or render any service for another contracting recipient political subdivision that the contracting recipient political subdivision is otherwise legally authorized to exercise, perform, or render." This provision, like Section 307.15 of the Revised Code, could be employed in a case in which the proposed or desired arrangement would entail having one of the political subdivisions perform a function, or functions, for one or more other subdivisions. That kind of arrangement differs from the case in which, as could occur under a council of governments, a new entity undertakes to perform a function or functions on behalf of the participating subdivisions.

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This new section also clarifies or supplements current law on the questions of employee liability under Chapter 2744 of the Revised Code (sovereign immunity) and pension eligibility under Chapter 4123 of the Revised Code. In both cases, employees of one subdivision, while serving outside the boundaries of the employing subdivision pursuant to an intergovernmental agreement, continue to be afforded immunity from tort liability and receive pension service credit under those statutes.

## **Formation of a Council of Governments**

A council of governments (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.

The principal advantage of creating a regional council of governments 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 because 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 council of governments 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,



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providing for the public employees retirement system. There does not appear to be any prohibition against incorporating in a COG the provisions of Section 9.482 of the Revised Code discussed above relating to employee liability and pension eligibility.

It should be noted also 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 the possibility of creation of 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 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 .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.

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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 council of governments is not a political subdivision or taxing district and has only those powers that are specifically granted by Chapter 167 of the Revised Code (Sections 167.01 through 167.08 of which are attached) and 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

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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 council of governments to levy ad valorem or any other form of tax, and the members may not 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. An agreement entered into under Section 9.482 of the Revised Code, described above, cannot authorize a political subdivision to levy any tax on behalf of a contracting subdivision, but under such an agreement a political subdivision may collect, administer, or enforce any tax on behalf of another political subdivision or subdivisions.

A COG could be authorized by the agreement and bylaws that create it 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 Mansfield, Ontario and Shelby and the County of Richland, or any two or more of them, 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 by entering into one or more intergovernmental agreements, including an agreement pursuant to Section 9.482 of the Revised Code. Any such arrangement would require providing for financial support from the participating subdivisions, since a council of governments can neither issue debt obligations nor levy taxes, and a cooperative agreement under whatever authority entered into would not create any additional taxing authority.

Establishing such a system would require a high degree of cooperation and of 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 generally are the principal constraints on the establishment of effective intergovernmental cooperation arrangements.

If a council of governments were to be created for the proposed purpose, and if the COG would employ staff for carrying out its obligations, provision would have

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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.

## Appendix

### SECTION 9.482 OHIO REVISED CODE

(A) As used in this section, "political subdivision" has the meaning defined in section 2744.01 of the Revised Code.

(B) When authorized by their respective legislative authorities, a political subdivision may enter into an agreement with another political subdivision whereby a contracting political subdivision agrees to exercise any power, perform any function, or render any service for another contracting recipient political subdivision that the contracting recipient political subdivision is otherwise legally authorized to exercise, perform, or render.

In the absence in the agreement of provisions determining by what officer, office, department, agency, or other authority the powers and duties of a contracting political subdivision shall be exercised or performed, the legislative authority of the contracting political subdivision shall determine and assign the powers and duties.

An agreement shall not suspend the possession by a contracting recipient political subdivision of any power or function that is exercised or performed on its behalf by another contracting political subdivision under the agreement. A political subdivision shall not enter into an agreement to levy any tax or to exercise, with regard to public moneys, any investment powers, perform any investment function, or render any investment service on behalf of a contracting subdivision. Nothing in this paragraph prohibits a political subdivision from entering into an agreement to collect, administer, or enforce any tax on behalf of another political subdivision or to limit the authority of political subdivisions to create and operate joint economic development zones or joint economic development districts as provided in sections 715.69 to 715.83 of the Revised Code.

(C) No county elected officer may be required to exercise any power, perform any function, or render any service under an agreement entered into under this section without the written consent of the county elected officer. No county may enter into an agreement under this section for the exercise, performance, or rendering of any statutory powers, functions, or services of any county elected officer without the written consent of the county elected officer.

(D) No power shall be exercised, no function shall be performed, and no service shall be rendered by a contracting political subdivision pursuant to an agreement

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entered into under this section within a political subdivision that is not a party to the agreement, without first obtaining the written consent of the political subdivision that is not a party to the agreement and within which the power is to be exercised, a function is to be performed, or a service is to be rendered.

(E) Chapter 2744 of the Revised Code, insofar as it applies to the operation of a political subdivision, applies to the political subdivisions that are parties to an agreement and to their employees when they are rendering a service outside the boundaries of their employing political subdivision under the agreement. Employees acting outside the boundaries of their employing political subdivision while providing a service under an agreement may participate in any pension or indemnity fund established by the political subdivision to the same extent as while they are acting within the boundaries of the political subdivision, and are entitled to all the rights and benefits of Chapter 4123 of the Revised Code to the same extent as while they are performing a service within the boundaries of the political subdivision.

Amended by 129th General Assembly File No. 64, HB 225, § 1, eff. 3/22/2012.



# Review of Labor Agreements

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The PM conducted a cursory review of the labor agreements for dispatch employees to assess management rights and the likely areas around which the City of Mansfield or Richland County might need to negotiate the impact of dispatch center closure with its bargaining unit. It is worth noting that there are different bargaining units representing dispatch employees: American Federation of State, County, and Municipal Employees Local No. 3088 and Ohio Council 8, American Federation of State, County, and Municipal Employees, AFL-CIO (Mansfield) and the Fraternal Order of Police Ohio Labor Council (Richland County).

## Management Rights

In reviewing the labor agreements, the PM did not find anything in the labor agreements that seemed to prohibit consolidation of centers. In fact, the management rights clause (Article 2) in the City of Mansfield's agreement allows the city

"The sole right to hire, discipline and discharge for just cause, lay-off, and promote; to promulgate and enforce reasonable employment rules and regulations; to reorganize, discontinue, or enlarge any department or division; to transfer employees (including the assignment and allocation of work) within departments or to other departments; to introduce new and/or improved equipment, methods, and/or facilities; to determine work methods; to determine the size and duties of the work force, the number of shifts required, and work schedules; to establish, modify, consolidate, or abolish jobs (or classifications); and to determine staffing patterns, including, but not limited to, assignment of employees, numbers employed, duties to be performed, qualifications required, and areas worked;"

# Review of Labor Agreements

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Further, Mansfield's agreement affords the city the ability "To maintain or increase the efficiency and/or effectiveness of City services; to relieve employees from their duties because of a lack of funds, lack of work, or in order to maintain or increase the efficiency and/or effectiveness of City services; and to schedule overtime;"

Article 9 of Richland County's labor agreement addresses management rights. This provides for the county (as the employer) the authority to "Determine the overall methods, process, means or personnel by which governmental operations are to be conducted." It further allows the county to "Suspend, discipline, demote, or discharge for just cause, or lay off, abolish jobs, transfer,...or retain employees."

## **Negotiation of Impact on Bargaining Unit**

In a scenario where either Mansfield or Richland County would close its dispatch facility and contract with the other party, there are a number of issues around which these entities would need to negotiate impact on the bargaining unit.

Potential issues around which Mansfield would likely have to negotiate impact include:

- most benefits
- seniority
- wages

# Review of Labor Agreements

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Potential issues around which Richland County would likely have to negotiate impact include:

- life insurance
- call in pay
- tuition reimbursement
- sick leave incentive/conversion
- maternity
- health care contribution
- seniority
- wages

It is important to keep in mind this was a cursory review intended to identify key areas, such as wages and benefits, that differed between the two public safety answering points (PSAPs) operating in Richland County. Legal counsel for each entity should be consulted prior to moving forward with consolidation.

- The management rights clause for the City of Mansfield allows the city “To maintain or increase the efficiency and/or effectiveness of City services; to relieve employees from their duties because of a lack of funds, lack of work, or in order to maintain or increase the efficiency and/or effectiveness of City services; and to schedule overtime.”



# Review of Labor Agreements

	Richland County	Mansfield
<b>Union</b>	FOP	AFSCME
<b>Sick leave</b>	(119.6/yr for FT) 4.6 hrs/80 hrs worked	(120 hrs/yr) 0.05769/pay
<b>personal leave (Hrs/year)</b>	NA	24
<b>sick leave incentive/conversion</b>	converts up to 2 days of unused sick leave to personal time on a limited basis	employees w/at least 600 hrs may convert up to 80 hours to comp time which must be used & can't be converted to cash; in addition, employees not using sick leave for 1 yr receives \$500 bonus (use of 1day or less receives 400, use of 2 days or < is 300)
<b>bereavement</b>	1 to 5 days depending on relationship to deceased	1 to 5 days depending on relationship to deceased
<b>maternity</b>	6 days, plus available sick leave	not specifically addressed
<b>uniform allowance</b>	uniforms are provided by employer	none, but if required, city will provide
<b># of paid holidays</b>	11	11
<b>longevity pay</b>	\$500 after 5 yrs, \$100 each add'l year up to 20 yrs	\$100/yr of service
<b>PERS contribution</b>	employee pays employee share	8.5% of employee's share paid by the city
<b>Health care contribution</b>	\$70/mo (single) \$103/mo (family) in 2009	4.5% of total cost
<b>insurance benefits</b>	hospitalization & medical, optional dental	health, dental, vision, Rx
<b>life insurance</b>	\$10,000	not addressed in agreement
<b>call in pay</b>	2 hr minimum at 2x hourly rate	4 hr minimum at 1.5x hourly rate
<b>shift differential</b>	\$0.30 for 2nd; \$0.40 for 3rd	\$.75/hr for 2nd or 3rd shift
<b>tuition reimbursement</b>	requires pre approval; no limitations on reimbursable amount	not specifically addressed
<b>vacation in hours</b>		
<b>&lt; 1yr</b>	0	0
<b>1, but &lt; 8</b>	80	96
<b>8, but &lt; 15</b>	120	144
<b>15, but &lt; 25</b>	160	192
<b>25 or more</b>	200	240

# Interoperability and Communications Systems Assessment

by Patrick Johnson, Consultant

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## Introduction

This report outlines the evaluation of the radio systems currently utilized by each of the public safety agencies involved with the dispatch consolidation feasibility study and makes recommendations on the most cost-effective approach to consolidation at one public safety answering point (PSAP) and dispatch location. All radio communications are conducted on the same portion of the VHF radio spectrum greatly enhancing the prospect of interoperable communications. The exception is that of the City of Mansfield, which also uses a UHF radio system for personnel at Clearfork Reservoir only. However, Mansfield is currently in the process of upgrading this to a VHF system.

## Overview of Communications Systems

### *Richland County*

Richland County manages several analog VHF radio systems for a number of public safety agencies in the county as previously listed in this study and a plan is in place to have radios narrow-band compliant by the end of October, 2012. There are several tower sites located within the county. Each of these sites is utilized in different capacities to give the radio coverage needed throughout the county. Sites that have voted receivers are connected with a combination of UHF and 900 MHz links. Site locations and capabilities are as follows:

- Plymouth (Riggs Street) – This is a voted receiver site for the Sheriff and County Fire dispatch repeater inputs. The Sheriff and County Fire also each have a standalone repeater on their dispatch frequency pair at this site.

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- Shiloh (Mechanics Street) – This is a voted receiver site for the Sheriff and County Fire dispatch repeater inputs. The Sheriff and County Fire also each have a standalone repeater on their dispatch frequency pair at this site.
- Shiloh (Bowman Street) – The TAC 1 West standalone repeater for County Fire is located at this site.
- Shelby (Mickey Road) – County Fire has a standalone repeater on their dispatch frequency pair at this site.
- Crestview (Mansfield-Adario Road and SR 603) – This is a voted receiver site for the Sheriff and County Fire dispatch repeater inputs. The Sheriff and County Fire also each have a standalone repeater on their dispatch frequency pair at this site. The TAC 1 standalone repeater for County Fire is located at this site.
- Mifflin Township (Impala Drive and SR 430) – This is a voted receiver site for the Sheriff and County Fire dispatch repeater inputs. The Sheriff and County Fire also each have a standalone repeater on their dispatch frequency pair at this site.
- Madison Township (water tower) – This is a voted receiver site for the County Fire TAC 2 input.
- Springfield Township (Lexington Springmill Road and CR 309) – County Fire has a standalone repeater on the main dispatch frequency pair at this site. The TAC 2 West standalone repeater for County Fire is also located at this site.
- Straub Road and US 42 (water tower) – This is a voted receiver site for the Sheriff dispatch repeater input and is also the location of the main repeater transmitter and voter. The TAC 2 standalone repeater for County Fire is located at this site.

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The Richland County Fire dispatch frequency is shared with Crawford County and becomes busy at times resulting in wait time to page out agencies and also may result in having to resend pages. Although the Sheriff's dispatch frequency is shared with other law enforcement agencies in the county, its usage largely depends on the number of officers working on a given day and the number and types of event(s) that occur at a given time.

The Richland County PSAP has a four-position Zetron Model 4118 console, which is more than 15 years old. Control stations are used for talking into standalone repeaters and monitoring other agencies. The antennas are located on a 60-foot tower on top of the building. Warning sirens throughout the county are controlled on the County Fire frequency. All channels are recorded and the PSAP center has battery back-up and generator capability. There is not a standardized signaling protocol for radio identification and emergency alarm activation throughout the county.

Richland County has five talkgroups on the Ohio MARCS System that are assigned to them. There are two MARCS control stations in the county's PSAP. In addition, the EMA has one mobile and one portable assigned to its vehicles and all law enforcement agencies throughout the county have at least one MARCS portable for use on the County's assigned talkgroups and for statewide interoperability.

The City of Ontario operates an analog VHF repeater system for its police department and there is a plan in place to have radios narrow-band compliant by October 2012. This frequency is not shared by other

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agencies. There are two voted receiver sites that are linked together by radio and each site has emergency power capabilities. The Ontario Police Department uses MDC (Motorola Data Communications) signaling protocol for its mobiles and portables and they also have DVP-XL encryption capability. In addition, they have four MARCS radios available for use by the police department. The Ontario Fire Department is dispatched by the County PSAP and uses the County Fire frequencies.

The cities of Lexington and Shelby did not supply information for this portion of the study. Consequently, for the purposes of this study, it is assumed that both cities utilize a VHF repeater system for police communications and that their fire departments are dispatched through the County PSAP.

## ***City of Mansfield***

Mansfield operates two separate VHF analog repeaters; one each for the Police Department and Fire Department. A plan is in place to have radios narrow-band compliant by the end of October, 2012. Each repeater transmitter is located at the municipal building on the 10th floor and antennas are mounted onto a 20-foot antenna tower located on the roof. The Police Department has three voted receive sites utilizing wire line control, which are located at the Lex/Springmill water tank, the Straub Road water tank, and the municipal building. The Fire Department has four voted receive sites which use UHF link radios that are located at MedCentral Hospital, the Lex/Springmill water tank, the Straub Road water tank, and at the municipal building. Both departments experience good mobile coverage throughout Richland County; however, portable coverage is sporadic due to demographic

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limitations. Mansfield is currently working with its radio vendor on solutions to increase radio coverage. Neither repeater frequencies are shared by other agencies.

In addition to these VHF analog repeaters, Mansfield also operates a UHF analog repeater at the Clearfork Reservoir because of VHF coverage issues in this area. At this time, Mansfield is in the process of working with its vendor to upgrade this system to VHF for interoperability between city and county agencies.

The Mansfield Police Department and Fire Department operate on their respective dispatch repeater frequencies during an incident and have the ability to go to simplex, if needed. Should a repeater fail, all units will operate off a simplex channel. Signaling protocol includes FleetSync and MDC. Both departments can communicate with all other agencies within Richland County.

In 2008, the City of Mansfield replaced its existing dispatch consoles with a Telex C-Soft VoIP system comprised of four dispatch positions. Control stations are utilized for the operation on various VHF frequencies used within the county and the antennas are mounted on the roof of the municipal building. The communications center also has one MARCS control station for statewide interoperable communications and access to the five talkgroups assigned to Richland County. The police department and fire department both have three MARCS portables each. All of the radio traffic is recorded that is monitored in the communications center and emergency backup is by generator. A Zetron Model 26/6 station alerting system is used to alert each fire station of a call that is linked via UHF control stations.

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## General Recommendations

- Consolidate radio licenses under the decided upon governance structure. This ensures that licenses do not expire and that there are no interference issues with other radio license holders in the area.
- Consider an overall maintenance contract for infrastructure, consoles, and user radios. This would involve a detailed inventory of items to be covered under contract.
- Establish control of radio and accessory purchases to maintain interoperability and compatibility among users. This would also result in cost savings for bulk purchases.
- Develop common naming convention of all radio channels (frequencies) utilized within the county for autonomy of operation and interoperability.
- Develop a common signaling protocol for radio identification and emergency alarm activation countywide and coordinate radio IDs.
- If agencies migrate to digital, ensure that the platform utilized is that of an open architecture Project 25 standard and not proprietary in nature.
- Consider changing the current County Fire dispatch frequency to another frequency that is not shared with Crawford County, if one is available.

# Interoperability and Communications Systems Assessment

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## Recommendations and Assumptions Relative to Consolidation of PSAPs

In order to complete this study, a number of assumptions needed to be made with regard to equipment and location of a consolidated PSAP and dispatch center. The PM made these assumptions by looking for a cost-effective alternative. This study also offers recommendations based on the assumptions. A rationale is provided for both assumptions and recommendations. If the study participants choose to move forward with a consolidation, the group will need to discuss each assumption and come to a consensus on the best alternative for the group.

### ***Assumption***

For the purposes of this study, it is assumed that all dispatch operations would be moved to the City of Mansfield's Communications Center at the Municipal Building.

### ***Recommendations***

- Keep the current Richland County PSAP in place as a backup (plan for the future upgrade of these consoles when funds become available with a more accurate cost to be determined at time of upgrade).
- The Sheriff and other public safety agencies currently being dispatched by the County remain on their existing frequencies. Dispatch is accomplished through the use of licensed control stations and a licensed 4.9 GHz link to Scenic Drive.



# Interoperability and Communications Systems Assessment

by Patrick Johnson, Consultant

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- Coordinate the utilization of fire department tactical frequencies with County fire departments while they are responding to an incident to help eliminate radio traffic on the main County fire dispatch frequency.
- The cities of Lexington, Ontario, and Shelby police departments remain on their existing frequencies. Dispatch is accomplished through use of licensed control stations.

## ***Rationale***

The City of Mansfield has recently updated its dispatch consoles to a Telex C-Soft VoIP system which is an easily expandable system and there is sufficient space available in the communications center for the addition of two more positions and equipment.

There are currently only 12 control stations at Mansfield's communications center and some are frequency-agile radios. Nine control stations will need to be added to accommodate the additional frequencies and a 4.9 GHz link will need to be added for connectivity to the tower site on Scenic Drive.

Training for dispatchers will need to be included for the proper use and functionality of the dispatch consoles. It should be noted that this cost is based on vendor figure and does not include overtime costs.

It is important to have a backup dispatch center. Keeping the current County PSAP in service is a temporary, but viable, solution until further funding is available. It is imperative to plan for the future upgrade of this center.

# Interoperability and Communications Systems Assessment

by Patrick Johnson, Consultant

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The County Fire dispatch frequency is shared with Crawford County and becomes busy at times resulting in wait time to page out agencies and also may result in having to resend pages. By coordinating the utilization of fire department tactical frequencies with the County fire departments, radio traffic on the main fire dispatch frequency can be reduced. This is an interim solution that can be accomplished easily and quickly to help alleviate some radio traffic.

## **Costs**

The estimated costs associated with the above consolidation analysis are as follows.

**Table 1: Equipment and related costs**

<b>Cost category</b>	<b>Amount</b>
2 additional console positions	\$33,000
9 additional control stations and antennas	17,000
Furniture	24,000
4.9 GHz link to Scenic Drive	10,000
Training	1,000
Yearly maintenance agreement	20,000
Update logging recorder	25,000
<b>Total</b>	<b>\$130,000</b>

# Current PSAP/Dispatch Center Costs

	Richland County	Mansfield	Total Mansfield & County
<b>Salaries</b>			
dispatch	\$ 594,000	\$ 439,171	\$ 1,033,171
supervisor	\$ 162,664	\$ 59,558	\$ 222,222
total	\$ 756,664	\$ 498,729	\$ 1,255,393
<b>Overtime</b>			
dispatch	\$ 5,900	\$ 115,820	\$ 121,720
supervisor		\$ 555	\$ 555
total	\$ 5,900	\$ 116,375	\$ 122,275
<b>Separation payouts</b>			
dispatch		\$ 2,008	\$ 2,008
supervisor		\$ 3,808	\$ 3,808
total	\$ -	\$ 5,816	\$ 5,816
<b>Benefits</b>			
health insurance			
longevity		\$ 20,976	\$ 20,976
life insurance		\$ 1,006	\$ 1,006
medicare		\$ 8,340	\$ 8,340
OPERS		\$ 127,239	\$ 127,239
unemployment		\$ 18,534	\$ 18,534
total	\$ 210,900	\$ 176,095	\$ 386,995
<b>Transfers out</b>			
health insurance		\$ 195,500	\$ 195,500
workers compensation		\$ 16,488	\$ 16,488
total		\$ 211,988	\$ 211,988
Telephone/landline		\$ 19,950	\$ 19,950
Contractual services		\$ 9,495	\$ 9,495
Rentals & leases		\$ 596	\$ 596
Repair & maintenance services		\$ 11,099	\$ 11,099
total	\$ 44,712	\$ 41,140	\$ 85,852

# Current PSAP/Dispatch Center Costs

	Richland County	Mansfield	Total Mansfield & County
<b>Training</b>	\$ 900	\$ -	\$ 900
Membership, dues, licenses		\$ 222	\$ 222
Subscriptions & publications		\$ 144	\$ 144
total	\$ 900	\$ 366	\$ 1,266
Supplies	\$ -	\$ 1,606	\$ 1,606
Capital & Equipment			
Computer		\$ 517	\$ 517
Capital	\$ 8,100		\$ 8,100
Equipment <\$5000		\$ 2,663	\$ 2,663
total	\$ 8,100	\$ 3,180	\$ 11,280
	\$ 1,027,176	\$ 1,055,295	\$ 2,082,471

Mansfield overtime includes value of compensatory time

## 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 PSAP/dispatch consolidation being considered by the jurisdictions participating in this study. 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 operational structure that addresses leadership, organizational structure, and financial needs and abilities;
- Identify a structure for financing capital and operational costs. If costs will be shared, determine what types of costs will be shared among participants (and in what proportion), and select a formula for allocation of costs. If costs will be paid solely by the county, determine the funding source for supporting the consolidated center.
- Determine facilities, location, and equipment; and
- Prepare and approve an 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.

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## **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

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various types of structures under which a consolidated dispatch center could operate for these jurisdictions. This summary provides an overview of 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 that will need to be purchased at some point, the consolidated center/ PSAP 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.

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**Table 11: Potential Government Structures**

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



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## **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

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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

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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.

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## Personnel

1. Determine the number of positions and their duties – Staffing may need to be multilevel and include specialists for each type of job function. Examples of positions that exist in PSAPs and dispatch centers are listed below. The working group will need to determine which of the positions – beyond the dispatcher – will be needed at the consolidated center.
  - 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.

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- 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.

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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

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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



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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.



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- 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.

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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 next 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

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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

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- 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

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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

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## 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.

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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.

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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.



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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.).

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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

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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.

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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.

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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

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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.

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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

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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.

5. 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:



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- 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.

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- 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. Pre Arrival Instructions – The communications center should have computerized Emergency Medical Dispatch (EMD) with pre arrival 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.

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

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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.

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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

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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.

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## **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).

## **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.

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## **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).



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