

*Assessment of and Recommendation for*

# The Consolidation of the Winnebago County 9-1-1 System with the City of Rockford 9-1-1 System

*submitted to*

## Winnebago County Emergency Telephone System Board

Rockford, Illinois

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## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>1. PROJECT OVERVIEW .....</b>	<b>2</b>
1.1 SCOPE OF WORK .....	2
1.2 METHODOLOGY .....	2
1.2.1 Data Collection .....	2
1.2.2 Assumptions .....	2
1.3 KEY DEFINITIONS .....	3
<b>2. CURRENT CONDITIONS .....</b>	<b>4</b>
2.1 CITY OF ROCKFORD PUBLIC SAFETY ANSWERING POINT .....	4
2.1.1 Operations .....	4
2.1.2 Technology .....	4
2.1.3 Facilities .....	5
2.1.4 Assessment .....	6
2.2 WINNEBAGO COUNTY PUBLIC SAFETY ANSWERING POINT .....	6
2.2.1 Operations .....	6
2.2.2 Technology .....	7
2.2.3 Facilities .....	8
2.2.4 Assessment .....	8
<b>3. INDUSTRY STANDARDS .....</b>	<b>9</b>
3.1 CONSOLIDATION MODELS .....	9
3.1.1 Full Consolidation .....	10
3.1.2 Part of a Participating Entity .....	10
<b>4. RECOMMENDATIONS .....</b>	<b>11</b>
4.1 CONSOLIDATION OF THE EXISTING PUBLIC SAFETY ANSWERING POINTS .....	11
4.1.1 Option 1 .....	11
4.1.2 Option 2 .....	11
4.2 GOVERNANCE .....	11
Existing Agency .....	12
4.2.1 Labor Agreements .....	13
4.2.2 Existing General Contracts for Services .....	13
4.3 OPERATIONS .....	14
4.3.1 Staffing .....	14
4.3.2 Dispatching .....	17
4.3.3 Personnel Estimates .....	19
4.3.4 Salary Ranges .....	23
4.3.5 Job Titles .....	24
4.3.6 Shift Supervision .....	25
4.4 FACILITIES .....	26
4.4.1 Back-Up Facility .....	26



4.5	COST ESTIMATES.....	28
5.	SUMMARY AND TIMELINE .....	29
5.1	CONSOLIDATION ESTIMATED TIMELINE .....	29

## TABLE OF TABLES

Table 1—Rockford 9-1-1 Call Volume Summary .....	4
Table 2—Rockford 9-1-1 Technology .....	5
Table 3—Winnebago County 9-1-1 Call Volume Summary .....	7
Table 4—Winnebago County 9-1-1 Technology .....	7
Table 5—Estimated Total Call Volume .....	14
Table 6—Hourly Call Volume Distribution and Workstation Count .....	16
Table 7—CAD Events .....	17
Table 8—Workstation Distribution .....	18
Table 9—Current Minimum Staffing .....	19
Table 10—Current Optimal Staffing .....	20
Table 11—Consolidated PSAP Staffing .....	20
Table 12—Consolidated PSAP Staffing by Hour .....	22
Table 13—Current Employees .....	23
Table 14—Current Salary Ranges .....	24

## EXECUTIVE SUMMARY

L.R. Kimball (Kimball) contracted with the Winnebago County Emergency Telephone System Board (ETSB) to examine the communications technology, systems, processes, human resource (HR) issues and related costs of the participating agencies in order to provide an assessment of and recommendation for the consolidation of the Winnebago County 9-1-1 public safety answering point (PSAP) with the City of Rockford 9-1-1 PSAP.

Winnebago County is located in northern Illinois and is part of a ten-county regional initiative called the Northern Illinois Next Generation 9-1-1 Alliance (NINGA). The ten county ETSBs have joined together in a unified planning effort to migrate enhanced 9-1-1 (E9-1-1) capability to Next Generation 9-1-1 (NG9-1-1). Currently, Winnebago County is involved in a NINGA project to procure a systems integrator for a NG9-1-1 host/remote system. This system integrator will bring together service providers and vendors to provide component subsystems into a complete functional NG9-1-1 system and assure that all subsystems function together. This consolidation study was completed with the assumption that Winnebago County will be moving forward with consolidation independent of this NINGA project.

In examining operations within the County, Kimball collected data through a comprehensive survey, meetings with key stakeholders in the County, and observing PSAP operations at the City of Rockford PSAP and the Winnebago County PSAP. Detailed in this report is Kimball's findings based on the data collection. An assessment of the current PSAP conditions was performed to determine how each of the PSAPs operate and how leadership works with staff and how staff works with each other, as well as what kind of facilities and technologies exist at each PSAP.

Based on the data collected and Kimball's analysis of that data, Kimball recommends a single countywide PSAP under the control and authority of the City of Rockford providing services for the City of Rockford and Winnebago County out of the following options. These recommended options are detailed in this report, but are outlined below:

- Option One: Fully consolidate under the City of Rockford with the Winnebago County 9-1-1 facility as back-up
- Option Two: Fully Consolidate under the City of Rockford including all 9-1-1 calls, and police dispatch would be handled at the Winnebago County facility, all fire calls for service for fire dispatch would continue at the Rockford 9-1-1 PSAP and using Rockford 9-1-1 as back-up.

Along with these recommendations, this report details governance and operational factors that Winnebago County should consider when determining a consolidation strategy. Kimball recommends that a consolidated PSAP should continue to be governed by the current board that is in place rather than by one of the agencies served by the PSAP if all participants can reach consensus. The participating PSAPs are under three different contractual arrangements with the respective unions. As a part of this project, union labor agreements were examined and Kimball provides recommendations regarding these labor agreements for the consolidation options.

## **1. PROJECT OVERVIEW**

### **1.1 Scope of Work**

The Winnebago County ETSB contracted with Kimball to provide an emergency dispatch services consolidation report. The report examines the communications technology, systems, processes, HR issues and related costs of the participating agencies in order to provide an assessment of and recommendation for the consolidation of the Winnebago County 9-1-1 PSAP with the City of Rockford 9-1-1 PSAP.

### **1.2 Methodology**

#### **1.2.1 Data Collection**

Kimball performed a comprehensive review of the existing conditions and a thorough analysis using our industry experience and expertise, similar project experience in other regions and accepted best practices across the industry. Kimball utilized additional data that was collected during the 9-1-1 NINGA project in addition to PSAP visits to Rockford 9-1-1 and Winnebago County, PSAP observations, employee and key stakeholder interviews and an additional survey which included the following subject areas:

- Current organizational structure and governance
- Staffing numbers and classifications
- Employee Schedules
- Call processing and dispatch methodology
- Call volumes (9-1-1 and administrative calls)
- Call process statistics
- Event volumes (calls for service and officer self-initiated)
- Ancillary duties
- Training/quality assurance standards and requirements
- Pay ranges
- Budget
- Computer aided dispatch (CAD), records management system (RMS), geographic information system/automatic vehicle location (GIS/AVL), mobile data, radio consoles, customer premise equipment (CPE), logging recorders and PSAP technology

#### **1.2.2 Assumptions**

In performing this consolidation study, Kimball assumes that all information provided by the participating PSAPs and utilized in this report is correct and current.

Kimball also assumes that Winnebago County ETSB wants to move forward with consolidation on an independent timeline to the NINGA NG9-1-1 project that is currently underway in the ten-county region.



### 1.3 Key Definitions

**Public Safety Answering Point (PSAP)** – Public Safety Answering Point (PSAP): An entity responsible for receiving 9-1-1 calls and processing those calls according to a specific operational policy.

**9-1-1 Call Answering Equipment** – Communications or terminal equipment located in the customer's facilities – Terminal equipment at a PSAP.

**Shared Technology** – Two or more PSAPs share key PSAP systems such as CAD, radio, 9-1-1 call answering equipment or logging recorders. Although technology is shared, each PSAP retains its existing organizational structure and remains in its own facility. This form of consolidation increases interoperability and allows for cost efficiencies through group purchases.

**Telecommunicator** – Refers to a PSAP employee who performs call taking and dispatch job functions. For purposes of this document, all PSAP staff are assumed to be telecommunicators, exclusive of supervision.

**Call taker** – Refers to a PSAP job function which includes the processing of incoming 9-1-1 and administrative calls. Call taker may also be a job title in PSAPs where an employee performs only call taking functions. However, this document assumes all PSAP staff will perform both call taking and dispatch functions and will hold a telecommunicator job title.

**Dispatcher** – Refers to a PSAP job function which includes the dispatching of field personnel via radio to calls for service. Dispatcher may also be a job title in PSAPs where an employee performs only dispatch functions.

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## 2. CURRENT CONDITIONS

### 2.1 City of Rockford Public Safety Answering Point

The City of Rockford is the county seat for Winnebago County with an estimated population of 150,250 and covers approximately 61 square miles.

#### 2.1.1 Operations

Rockford 9-1-1 is located on the first floor of the City of Rockford Fire Department. The 9-1-1 system serves the City of Rockford Police and Fire and two additional law enforcement agencies. Part of the dispatch coverage area includes five additional fire agencies. The PSAP is manned by a staff of 40 telecommunicators that work from ten call taking and dispatching capable positions and six call taker only positions. There are three positions included in that count that are utilized by Winnebago County 9-1-1 should they need to relocate. In 2014, the staff processed approximately 115,770 9-1-1 calls for service with 82 percent of those calls coming from wireless devices.

##### 2.1.1.1 Total Call Volume

The call volume handled by the Rockford 9-1-1 PSAP including 9-1-1 and administrative and/or non-emergency calls is summarized in the following table.

Rockford 9-1-1 Call Volume Summary				
Call Type	2012	2013	2014	Average
Wireline	22,292	24,248	21,107	22,549
Wireless	109,517	93,230	94,666	99,138
Administrative/Non-Emergency	106,712	101,968	102,393	103,691
<b>Total Combined Call Volume</b>	<b>238,521</b>	<b>219,446</b>	<b>218,166</b>	<b>225,378</b>

**Table 1—Rockford 9-1-1 Call Volume Summary**

#### 2.1.2 Technology

All 9-1-1 calls are delivered to the PSAP via the AT&T Geneva router. AT&T is the primary telephone provider for the PSAP. The 9-1-1 call handling system is a Positron Lifeline system that was installed in 2006. The system is connected to the AT&T selective router via 13 trunks. Eight of those trunks are dedicated to wireline calls and the remaining five are dedicated to wireless calls.

Five new radio consoles are being purchased and installed at the communications center; however, prior to purchase it was confirmed with Motorola that they may need to relocate them to an alternative location should the merger occur.



The following table outlines the technology currently utilized in the Rockford 9-1-1 PSAP.

Rockford 9-1-1	
Technology	
CPE	Positron Lifeline 100 Installed 2006
Administrative Phone System	Nortel option 61 installed 2006
Logging Recorder	Nice Log Installed 2006
Master Clock	Spectracom Installed 2006
ALI Provider	Intrado
CAD	Motorola Premier CAD 7.0 Installed 2005
Mobile Data	Motorola PMDC Installed 2009
Mapping/GIS	Motorola ATM ESRI Format Installed 2006

**Table 2—Rockford 9-1-1 Technology**

### 2.1.3 Facilities



The PSAP is located within the Fire Department Administrative building and has undergone an extensive remodel. There is ample room for technology upgrade or expansion. The dispatch center is located on the first level of the facility shared with staff and officers from the City of Rockford Fire Department Administrative offices. The equipment room located adjacent to the dispatch floor is climate controlled and has restricted access through secure card reader access.

The building is serviced by a Cummins diesel generator and an Emerson full system UPS.

## 2.1.4 Assessment

The City of Rockford 9-1-1 has recently upgraded their facility. An information technology (IT) staff person maintains the older systems in the best possible operating condition.

The Positron Lifeline 100 CPE system was installed in 2006 and is at the end of life. There is a need to replace the CPE with the latest technology.

The workstations, installed in 2006 are designed to provide a full functional range of usage.

The NICE logging recorder was installed in 2006 and does not have the capability to be upgraded to an Internet protocol (IP) based environment. The logger is an analog based system and there is a need to replace that with a newer technology that provides for an IP based environment.

The Motorola Premier CAD 7.0 system is antiquated as well that was originally installed in 2005.

Rockford 9-1-1 operates on the Statewide STARCOM21 radio system for law enforcement and an independent very high frequency (VHF) system for fire and EMS. STARCOM21 is a Project 25 (P25) compliant 700/800 MHz IP based radio system. The Starcomm system is connected to the Rockford 9-1-1 Center via T1 lines connected to Downers Grove. The PSAP radio equipment includes the following:

- MACom VHF 100 watt base stations (Fire 1,2,3 & 4) circa 1998 (back-up transmitters) and 14 Motorola Desktrac consolettes, 40 watt (VHF, 800) at the dispatch facility
- MAComm VHF 100 watt base stations (Fire 1,2,3 & 4) circa 2006 (main transmitters) at remote facilities



## 2.2 Winnebago County Public Safety Answering Point

### 2.2.1 Operations

Emergency communications in Winnebago County is provided by Winnebago County 9-1-1 that serves an estimated population of 141,220 and covers approximately 513 square miles. Winnebago County Sheriff's Office provides 9-1-1 service for the county along with 10 additional law enforcement communities. The PSAP is manned by a staff of 18 telecommunicators that can work from ten positions which have call taking and dispatching ability and four that are call taking only. The staff processed approximately 53,500 9-1-1 calls for service with 80 percent of those calls coming from wireless devices.

#### 2.2.1.1 Total Call Volume

The call volume handled by the Winnebago County 9-1-1 PSAP including 9-1-1 and administrative and/or non-emergency calls is summarized in the following table.

Winnebago County 9-1-1 Call Volume Summary				
Call Type	2012	2013	2014	Average
Wireline	11,086	10,146	9,502	10,245
Wireless	46,226	41,326	42,405	43,319
Administrative/Non-Emergency	55,988	51,755	48,771	52,171
<b>Total Combined Call Volume</b>	<b>113,300</b>	<b>103,227</b>	<b>100,678</b>	<b>105,735</b>

**Table 3—Winnebago County 9-1-1 Call Volume Summary**

### 2.2.2 Technology

All 9-1-1 calls are delivered to the PSAP via the AT&T Geneva router. AT&T is the primary telephone provider for the PSAP. The 9-1-1 system is a Positron Lifeline system installed in 2006. The system is connected to the AT&T selective router via 11 trunk lines. Eight of those trunks are dedicated to wireline calls and the remaining three are dedicated to wireless calls.

The following table outlines the technology currently utilized in the Winnebago County 9-1-1 PSAP.

Winnebago County 9-1-1	
Technology	
CPE	Positron Lifeline 100 Installed 2006
Administrative Phone System	Nortel Option 61 Installed 2006
Logging Recorder	NICE Nicelog Installed 2006
Master Clock	Spectracom Installed 2006
ALI Provider	Intrado
CAD	Motorola Premier CAD 7.0 Installed 2005
Mobile Data	Panasonic
Mapping/GIS	Motorola ATM ESRI Format Installed 2006

**Table 4—Winnebago County 9-1-1 Technology**

### 2.2.3 Facilities



Winnebago County 9-1-1 Board is to be commended for their facility. The PSAP is located in a standalone facility that has ample room for technology upgrades or expansion. The facility is low profile and is only identifiable by the antenna structure located next to the facility. The building is supplied with emergency power via a Caterpillar diesel generator and a Liebert system Uninterruptible Power Supply (UPS).

### 2.2.4 Assessment

The Positron Lifeline 100 CPE system installed in 2006 is at the end of life. There is a need to replace the CPE with the latest technology.

The workstations, installed in 2006 are designed to provide a full functional range of usage.

The NICE logging recorder was installed in 2006 and does not have the capability to be upgraded to an IP environment. The logger is an analog based system and there is a need to replace that with a newer technology that provides for an IP based environment.



The Motorola Premier CAD 7.0 system is antiquated and was originally installed in 2005.

Winnebago County 9-1-1 operates on a VHF system for police dispatch. The Winnebago County 9-1-1 system is connected to the radio network via a tower located at the dispatch facility. In addition, they utilize several towers throughout the county and utilize AT&T and Frontier phone lines for additional connectivity to the radio system.



### 3. INDUSTRY STANDARDS

Key public safety industry organizations recognize that the on-going evolution of 9-1-1 requires establishing minimum standards for PSAP employee training, operations, technology and facilities. These organizations include:

- International City/County Management Association (ICMA)
- National Emergency Number Association (NENA)
- Association of Public-Safety Communications Officials – International (APCO)
- International Association of Fire Chiefs (IAFC)
- Commission on Accreditation for Law Enforcement Agencies (CALEA)
- National Fire Protection Association (NFPA)
- Illinois Department of Health (IDPH)

The industry standards that are cited within this report specifically are derived from the following entities:

- NFPA Section 1221 Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems
- CALEA Standards for Public Safety Communications Agencies
- NENA
- APCO
- International Academies of Emergency Dispatch (IAED)

#### 3.1 Consolidation Models

The evolution of 9-1-1 and the associated technology coupled with difficult economic times have encouraged state and local governments and public safety agencies to investigate the concept of shared services or consolidation. The simplest definition of consolidation is the combining of two or more PSAPs into a single facility and/or organization with a single set of critical PSAP technology and protocols. Different consolidation models exist and are customized to meet unique regional and stakeholder needs. The consolidation process is complex and can yield substantial improvements in service levels, responder safety, employee retention, technology efficiencies and potential cost savings if implemented correctly.

The timing of a consolidation will impact the consolidation configuration and should be the first consideration. There are several options available based on this timing and are as follows:

- **Consolidating with existing PSAPS** If the two entities consolidate it is anticipated that AT&T will combine each PSAP's access line count and determine the number of trunks needed to provide a .01 Grade of Service.
- **Consolidating with new equipment only** If the consolidation would occur after the cutover to Hosted NG9-1-1 equipment as planned for in the 9-1-1 NINGA project, but before core services, the centralized automatic message accounting (CAMA) trunks from the tandem will have already been terminated to the hosts. Therefore, the host provider can reroute anything to the consolidated PSAP in a much shorter time frame. In this case, the host provider should be notified so the proper bandwidth can be provided prior to the consolidation.

- **Consolidating with new equipment and core services.** If the consolidation occurs after core services have been provisioned as planned for in the 9-1-1 NINGA project, there would be hardly any delay as it would be a Host provider's responsibility to route the calls.

### 3.1.1 Full Consolidation

It is clear that consolidating City of Rockford 9-1-1 and Winnebago County 9-1-1 is a logical progression given the history and size of the two Winnebago County PSAPs. A single countywide PSAP under the control and authority of the City of Rockford is the recommended option for the City of Rockford and Winnebago County. :

A full consolidation of the two PSAPs will provide the most efficient and effective service levels for the specific geography and population density found in Winnebago County. This PSAP would receive all 9-1-1 traffic within the county, as well as any 7/10 digit calls for emergency services. Citizens and visitors to Winnebago County would be assured of a consistent level of service and 9-1-1 telephony capabilities. One CAD would be used to record all events within the county. Combining personnel who dispatch for all police entities within Winnebago County has multiple benefits for the emergency responders and provides better situational awareness and command and control within the center.

### 3.1.2 Part of a Participating Entity

In this model, the consolidated PSAP is part of the organizational structure of one of the participating entities such as the City of Rockford. The 9-1-1 director is a division head reporting to the same position within the fire department organizational structure as other division heads.

Primary positive attributes of this structure include the following:

- There is an established reporting structure for not only the PSAP director, but for the participating agencies as well. Since the director reports to a senior management position within the parent organizational structure, there is a single point of contact for disputes that cannot be resolved otherwise. This model provides protection for the PSAP from politics that can affect the PSAP under other organizational structures. This model provides the PSAP protection from changes in direction that result from personnel changes in decision-making positions, thus creating a more stable environment for the PSAP long-term.
- A more developed career path for PSAP staff is created by utilizing civilian staff rather than sworn personnel.
- As part of a municipal structure, the PSAP has access to administrative support such as human resources, building facilities, and computer and network support.

Primary negative attributes of this structure is there will be adjustment to the loss of direct control of PSAP staff by the newly consolidated department agency personnel.



## **4. RECOMMENDATIONS**

### **4.1 Consolidation of the Existing Public Safety Answering Points**

There are two options available for the existing PSAPs.

#### **4.1.1 Option 1**

Fully consolidate into the City of Rockford 9-1-1 with the Winnebago County facility serving as a live back-up. Depending on the final configuration of the consolidated PSAP, some of the existing staff would continue to function in the facility located at the Rockford Fire Administrative Services facility and some staff would migrate staff to Winnebago County 9-1-1 facility and merge them into the new operations environment. This would allow for the Winnebago County 9-1-1 facility to be kept as a live backup operation. Under this option, the City of Rockford union contracts would remain as the currently exist. Governance would be under the control of the City of Rockford.

#### **4.1.2 Option 2**

Consolidate the City of Rockford 9-1-1 and Winnebago County 9-1-1 into the Winnebago County 9-1-1 facility. This option would keep the existing fire dispatch staff at the Rockford Fire Administrative facility and move the police dispatch to the Winnebago County facility. This would allow for the City of Rockford facility to be kept as a live backup operation. Under this option, the City of Rockford union contracts would remain as the currently exist. Governance would be under the control of the City of Rockford.

### **4.2 Governance**

In an era of advancing technology and cutting-edge capabilities, one element continues to be the nucleus of effective emergency communications and emergency response—the human element. In Kimball's experience working within 9-1-1 centers throughout the United States, the factor consistently found to be the root of exceptional 9-1-1 services are the human factors of trust and cooperation. The relationship between telecommunicator and emergency responder is built on trust and cooperation. Often, for an emergency responder, the dispatcher they communicate with is their lifeline for aid and assistance. When a breakdown in this fundamental bond occurs, it typically creates discord between an agency and the 9-1-1 center that dispatches them. This same principle holds true with governance and management of a consolidated emergency operation.

A well-crafted governance agreement is critical to the success of any consolidation. The agreement allows a director or manager to manage operations effectively. Regardless of the governance model chosen, incorporating the following key points into the agreement are essential. Not all bullets will necessarily apply.

- Roles and responsibilities of parties
- Reporting structure for director
- Span of authority and control for the ETSB
- Capital and operating budget development process, as well as establishment of a reserve account to pay for critical systems replacements

- Budget approval or input process for items that will change the financial contribution of participating agencies
- Agreed upon training programs for police, fire and EMS call taking and dispatch functions to ensure all disciplines receive the same level of service
- Funding mechanism and a method for updating it or changing it as needed
- Length of the agreement
- De-consolidation process—What happens if a participating agency leaves before the end of the agreement without cause? For example, does the departing agency lose any capital contribution? What happens if the agency leaves with cause? What is the definition of cause?
- Ownership of technology purchased jointly
- Process for participating agency complaint resolution, input and appeal
- Span of authority for the director
- Standard operating procedures (SOPs) approval process
- Agreed upon service levels to be provided

Although various governance structures can be employed to provide administration over a consolidated PSAP, the key to any structure is representation and cooperation. An agency that financially contributes to the budget of a consolidated operation wants to have their voice heard and should. Kimball can cite many instances in which agencies have withdrawn from one center and moved to another for this very reason, lack of representation. Improvement and optimal performance levels in any joint enterprise are based on good policies and procedures and the equitable application of same.

These fundamental principles are offered at the forefront of our recommendations regarding governance as they are foundational and serve as the keystone of a successful relationship, whether one-on-one or organizational. A governance structure and accompanying agreement or charter between member agencies, especially in a consolidated PSAP environment, fosters stability and professionalism. Governance sends a clear message that the professionals that serve the communities and their emergency responders are interested in continued improvement and feedback from those same communities and emergency responders. Transparency is the key to any exceptional service oriented organization. It demonstrates to all participants that there is pride in the services it provides, that the organization stands by its policies and procedures and, if mistakes are made, is quick to take ownership and make improvements for the benefit of all involved.

A consolidated PSAP's role is to provide equitable and high level service to all police, fire and EMS user agencies based on the dispatch plans for each participating agency. To do this, the PSAP must be insulated from the impact of political changes to the highest degree possible. Further, funding for the PSAP should be designed to provide a known and reliable budget from year to year. A well-crafted governance agreement will ensure that these goals are realized.

### **Existing Agency**

In a governance model where the consolidated PSAP is part of one of the existing agencies, such as Winnebago County 9-1-1, sworn personnel often manage the PSAP and fall under the authority of the hosting agency head such as the sheriff, police or fire chief.

Primary Positive Attributes



- It's possible to avoid the costs of hiring a civilian director and the parent agency's budget can absorb management costs.
- As part of an existing county or municipal structure, the PSAP has access to administrative support such as human resources, building facilities and computer and network support.
- There is a clean reporting structure for not only the PSAP manager or director, but for the participating agencies as well.

#### Primary Negative Attributes

- There will be adjustment to the loss of direct control of PSAP staff by participating agency's personnel.
- Participating agencies often perceive that distribution of PSAP resources is not equitable. Generally, the perception is that the host agency receives a higher level of service.
- Detailed governance agreement is necessary to prevent political changes and in-fighting from impacting the PSAPs ability to provide consistent and high quality service over time.

### **4.2.1 Labor Agreements**

The participating PSAPs are under three different contractual arrangements with the respective unions. The IAFF Local 413 firefighters union represents the 12 fire dispatch staff within Rockford 9-1-1 and the remainder of the Rockford 9-1-1 staff is represented by the American Federation of State, County and Municipal Employees (AFSCME) Council 31, Local 1058 police telecommunicators. Winnebago County 9-1-1 employees are represented by AFSCME Council 31, Local 473.

If the decision is to migrate into the Rockford 9-1-1 operations, the employees of Winnebago County 9-1-1 could assimilate into the remaining Rockford 9-1-1's Local 1058 and would follow that contract. Seniority is the biggest issue that would be faced in this option. While the incoming Winnebago staff would become city employees, it would be advisable for those staff to be provided with the same seniority as the hire date with the county. They would migrate into the appropriate seniority structure that currently is in place with the city. It would not be Kimball's recommendation for the incoming staff to be classified as a new hire and start at the bottom of the seniority structure. Credit should be given for the experience and hire date from the assimilated agency.

The members of IAFF Local 413 would remain unaffected by the merger.

### **4.2.2 Existing General Contracts for Services**

Currently there are several contracts for general dispatch with entities within Winnebago County. Those existing contracts would need to be reviewed by the City of Rockford to understand the terms and conditions that have been agreed too. The City of Rockford would need to continue with the existing dispatch contractual arrangements and provide those participating agencies with the same service levels that currently exist. The City of Rockford would need to accept the existing dispatch contracts as a transfer or due to the change in governing authority, re-negotiate the existing contracts for acceptable terms and conditions.

## 4.3 Operations

### 4.3.1 Staffing

To provide efficient service to the public and local emergency services, PSAPs must assure that an adequate number of qualified staff is on duty at all times. When this does not occur, service quality can diminish and the short and long-term effects on employees often lead to staffing issues, overworked personnel and attrition increases.

Determining appropriate staffing levels for a PSAP is a complex process that involves a combination of mathematical calculations based on a quantifiable work load, such as 9-1-1 and administrative call volume, incidents and number of required dispatch positions.

Call volume is the prime factor in determining the number of trunks and workstations needed to handle a PSAP's projected call taking workload. The NENA standard is to answer 90 percent of 9-1-1 calls within 10 seconds. The NFPA standard, used by the Insurance Services Office (ISO), is to answer 95 percent of calls on emergency lines within 15 seconds.

Based on Kimball's experience with call statistics, managing consolidated centers and consolidation planning projects, it is not uncommon for the non-emergency/administrative incoming and outgoing call volumes to decline once full consolidation is realized. This is due in part to the participating departments having to retain agency specific non-emergency and administrative functions at their respective offices and to automation of some services or shifting of responsibilities to more appropriate staff outside the emergency dispatch operation.

The first step in estimating staffing levels is to estimate the total call volume the PSAP will handle, including both 9-1-1 and ten digit emergency and non-emergency phone calls. To determine these statistics, 2014 call volumes submitted by the two PSAPs were used.

The combined 9-1-1 call volume for the two PSAPs in 2014 was 306,765 and the combined ten-digit emergency and non-emergency call volume was 151,164. The total call volume for the two PSAPs in 2014 was 318,844. This total call volume figure is used as a baseline estimate in the table below.

PSAP	Total Phone Calls				
	2011	2012	2013	2014	Average
Rockford	232,334	238,521	219,446	218,166	227,117
Winnebago County	113,755	113,300	103,227	100,678	107,740
<b>Total</b>	<b>346,089</b>	<b>351,821</b>	<b>322,673</b>	<b>318,844</b>	<b>334,857</b>

**Table 5—Estimated Total Call Volume**

The next step is to calculate the number of call taker positions needed to manage the call volume. Table 6 on the following page reflects the monthly and per-hour estimated call volume determined from the annual statistics supplied to Kimball. Both PSAPs provided hourly call volumes for their busiest months and those were those were used to determine the combined busy hour estimates.

The slowest and busiest hours in the hourly table (Table 6) are highlighted. The number of call taker positions listed in the hourly table was arrived at by using an Erlang C calculator methodology with the following best practice call performance standards:

- Service level objective of 90 percent calls within 10 seconds or less
- Average talk time of 90 seconds
- Average after-call wrap up time of 30 seconds

The Erlang C calculator Kimball uses allows the call taking performance standards desired to be entered in order to arrive at the correct number of workstations. Due to the calculator not allowing two separate service level objectives for emergency and non-emergency calls, the NENA standard of 90 percent within 10 seconds or less was used for both as part of the combined call load.

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Rockford Fire and Winnebago County			
Hour	Hourly %	Calls Per Hour	Call Takers Needed
0:00	3.20%	31.4	3
1:00	2.69%	26.4	3
2:00	2.17%	21.3	3
3:00	1.55%	15.2	2
4:00	1.20%	11.7	2
5:00	1.12%	11.0	2
6:00	1.52%	14.9	2
7:00	2.04%	20.0	3
8:00	3.20%	31.4	3
9:00	4.22%	41.4	4
10:00	4.68%	45.9	4
11:00	5.15%	50.5	4
12:00	5.25%	51.5	4
13:00	5.56%	54.5	5
14:00	5.87%	57.5	5
15:00	5.99%	58.7	5
16:00	6.01%	58.9	5
17:00	5.92%	58.1	5
18:00	6.19%	60.7	5
19:00	5.29%	51.9	5
20:00	5.54%	54.4	5
21:00	6.10%	59.8	5
22:00	5.13%	50.3	4
23:00	4.38%	43.0	4
<b>Average</b>	<b>100.00%</b>	<b>40.86</b>	<b>3.83</b>

**Table 6—Hourly Call Volume Distribution and Workstation Count**

The table indicates the slowest hour of the day is estimated to be 05:00 hours (5:00 a.m.) and 18:00 hours (6:00 p.m.) is the busiest hour of the day. This table provides upper and lower call volume from which staffing projections can be estimated. When looking at scheduling at a more granular level, determining the busiest and slowest days of the week and hour of those days allows the PSAP manager to staff shifts more efficiently based on actual workload.



However, for the purposes of this preliminary staffing estimate, the average number of workstations that need to be covered is used. In this case, the average number of call taker positions needed to manage the incoming call volume is 3.83 call takers. Since call volume is not evenly distributed around the 24-hour clock, some hours of the day will require no more than two call taking positions and others will require five positions.

#### 4.3.2 Dispatching

The next step in estimating staffing is based on the number of dispatch workstations that will be needed. Currently, there is not a nationally recognized calculation/formula to more accurately determine the number of dispatchers needed based on workload. However, radio traffic/usage studies can be conducted to determine the level of use or available airtime of a talkgroup or channel. This type of study can assist a PSAP in determining the number of channels needed to support operations, but does not directly provide the number of dispatchers needed to staff the required talkgroups or channels.

As mentioned above, there is currently no scientific formula that calculates the number of needed dispatch positions based on the number of incidents or CAD events. However, this information is collected and reviewed along with the other types of criteria listed below when estimating dispatch workstation numbers.

PSAP	Total CAD Events				
	2011	2012	2013	2014	Average
Rockford	202,245	197,845	186,633	184,699	192,856
Winnebago County	179,970	173,448	173,248	171,278	174,486
<b>Total</b>	<b>382,215</b>	<b>371,293</b>	<b>359,881</b>	<b>355,977</b>	<b>367,342</b>

**Table 7—CAD Events**

To maximize the efficiencies gained by consolidation, each existing dispatch position must be reviewed to see if combining the consolidated agencies on to the same primary dispatch talk group makes sense. If a single primary dispatch talkgroup is not feasible, then reducing the number of primary dispatch talkgroups to the lowest number possible is ultimately the best scenario.

It is not a recommended best practice to assign additional tasks to primary dispatchers other than dispatching events. This assures they are available as soon as a new event arrives and are ready for dispatch or when a field unit has a radio message for the dispatcher. This is completed by thoroughly reviewing and taking into consideration the following:

- Current radio platforms in use by each user agency. Clearly, agencies that use different radio platforms cannot share talkgroups or channels without one agency moving to a new platform and incurring the cost of doing so.
- Geography – when considering combining agencies onto the same primary dispatch talk group thought must be given to whether the combination makes sense from a geographical and radio coverage perspective. Agencies that share geographical borders often already assist each other on a routine basis. Therefore, combining talk groups would be beneficial and potentially more efficient.

- Number of field personnel or agencies tracked by each dispatcher. If a fire or EMS dispatcher is responsible for only a small number of field units, then combining talkgroups may offer the opportunity to reduce the number of personnel, create a more efficient call flow process in the PSAP and improve field communications by having those agencies that commonly work together on the same talkgroup.
- The use of current technology, such as mobile data and AVL, should be used to the fullest extent possible to help reduce radio traffic.
- The use of tactical or operational talkgroups and channels is common in fire and EMS communications to properly manage event communications, operations and incident management. A dispatcher should be assigned to monitor and support field personnel during active incidents.

The following table illustrates the number and type of physical workstations and operational assignments needed for the consolidated center and backup site is a minimum of 14 positions.

Minimum Recommended Positions	
#	Position Type
1	Supervisor
2	Dispatcher 1
3	Dispatcher 2
4	Dispatcher 3
5	Dispatcher 4
6	Dispatcher 5
7	Dispatcher 6
8	Dispatcher 7
9	Dispatcher 8
10	Call Taker 1
11	Call Taker 2
12	Call Taker 3
13	Call Taker 4
14	Call Taker 5

**Table 8—Workstation Distribution**

It is important to understand that the above workstation distribution table is conceptual. Multiple options exist for the actual configuration or operational and work distribution for the consolidated communications center. Those options are examined during the implementation planning process and a final workflow and operational model are put in place. However, in order to estimate staffing needs and personnel costs, the Kimball team developed the above model based on our knowledge and experience with consolidated center operations.

The rationale behind the above workstation configuration is as follows:

- It is Kimball's recommendation that all positions should be equipped with the same critical technology such as CAD, 9-1-1 answering equipment and radio dispatch consoles if economically feasible. This would allow any communications center function, call taking or dispatching, to be conducted at any position in the center. This allows decision makers to easily change operational assignments as needed (e.g. the 5 call taker and 8 dispatcher positions recommendation could easily be changed to 6 call takers and 7 dispatchers if needed).
- The above table shows five call taker workstations during the busiest time of the day. Based on Kimball's experience during significant events, incoming call volumes spike so any dispatchers assigned to operations/tactical positions who are not currently operating an incident can be used as back-up call takers and assist in answering calls. When absolutely necessary, but as the last resort, the same can be done at the supervisor's position.

All staff would be cross-trained for all job functions. While daily job function assignments would change, any employee could be utilized at any position. This methodology ensures a higher level of efficiency and, hopefully, lower overtime costs. The ability to cross train all staff is a benefit of a PSAP of this size. As PSAPs grow and become more complex there is a need to split job functions by specialty; dispatcher and call taker. While this structure works well, it does add a layer of complexity to scheduling and training.

### 4.3.3 Personnel Estimates

The staffing needs of a 24/7 public safety operation require constant monitoring of the work load and staffing assignments to maximize coverage across all shifts. It is rare that a set number of staff is on duty at any given time. The work hours and assigned positions per shift are based on need, skill sets, experience and call volume. The center management and supervisory staff are responsible for monitoring these factors and assigning staff as such.

The following tables depict current minimum and optimal staffing levels in the two PSAPs:

City of Rockford - Minimum Staffing				
Days	Shifts	Call Taker	Dispatcher	Total
All Days	06:00 to 18:00	3	5	8
All Days	18:00 to 06:00	3	5	8
Winnebago County - Minimum Staffing				
Days	Shifts	Call Taker	Dispatcher	Total
All Days	06:00 to 18:00	1	3	4
All Days	18:00 to 06:00	1	3	4

**Table 9—Current Minimum Staffing**

City of Rockford- Optimal Staffing				
Days	Shifts	Call Taker	Dispatcher	Total
All Days	06:00 to 12:00	3	5	8
All Days	12:00 to 18:00	4	5	9
All Days	18:00 to 24:00	4	5	9
All Days	24:00 to 06:00	3	5	8
Winnebago County - Optimal Staffing				
Days	Shifts	Call Taker	Dispatcher	Total
All Days	06:00 to 18:00	2	3	5
All Days	18:00 to 06:00	2	3	5

**Table 10—Current Optimal Staffing**

Based on the estimates and assumptions included in the prior sections, the estimated personnel count for the new consolidated communications center is as follows:

Consolidated Center Staffing	
Position Title	Total Number of Employees
Shift Supervisors	4
Telecommunicators	69
<b>Total PSAP Staff Needed</b>	<b>73</b>

**Table 11—Consolidated PSAP Staffing**

Once the number of needed workstations is determined, Kimball uses APCO Project Responsive Efforts to Address Integral Staffing Needs (RETAINS) to determine the number of employees needed to staff the workstations. RETAINS takes the annual number of work hours per employee (2,080) and subtracts standard leave such as vacation, training, sick etc. to arrive at the total available work hours per employee.

The total number of annual work hours in this study for Rockford 9-1-1 is 1491.7 hours per employee and is based on the following criteria:

- Vacation and holiday time – 293.49 hours
- Sick – 62.16 hours
- Training – 51.64 hours
- Personal leave – 70.49 hours
- Military/FMLA leave – 78.49 hours
- Lunch and breaks – 136 hours

The parameters used for this study were based on personnel statistics that were provided by the City of Rockford, which of the two PSAPs analyzed had the lowest net available work hours per employee. The actual parameters put



in place in a newly formed center will depend on a variety of decisions made in the planning and implementation stages. The final parameters may or may not match what is in place currently at any of the existing centers.

The final number of employees needed to cover call taking functions is added to the number needed for dispatch functions to arrive at the total number of telecommunicator staff.

Based on Erlang C calculations and the RETAINS formula, the minimum projected communications staff needed in the consolidated PSAP is 73. This minimum projection was derived using the reported 9-1-1 and administrative/non-emergency call volume for the calculations. It is important to remember these positions are listed here more as functions and not necessarily as employee trained skills. Cross training in both call taking and dispatching is the ultimate goal for all employees.

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Recommended Hourly Staffing Model for the Consolidated Center					
Hour	Hourly %	Calls Per Hour	Call Takers Needed	Dispatchers Needed	Total Positions
0:00	3.20%	31.4	3	8	11
1:00	2.69%	26.4	3	8	11
2:00	2.17%	21.3	3	8	11
3:00	1.55%	15.2	2	8	10
4:00	1.20%	11.7	2	8	10
5:00	1.12%	11.0	2	8	10
6:00	1.52%	14.9	2	8	10
7:00	2.04%	20.0	3	8	11
8:00	3.20%	31.4	3	8	11
9:00	4.22%	41.4	4	8	12
10:00	4.68%	45.9	4	8	12
11:00	5.15%	50.5	4	8	12
12:00	5.25%	51.5	4	8	12
13:00	5.56%	54.5	5	8	13
14:00	5.87%	57.5	5	8	13
15:00	5.99%	58.7	5	8	13
16:00	6.01%	58.9	5	8	13
17:00	5.92%	58.1	5	8	13
18:00	6.19%	60.7	5	8	13
19:00	5.29%	51.9	5	8	13
20:00	5.54%	54.4	5	8	13
21:00	6.10%	59.8	5	8	13
22:00	5.13%	50.3	4	8	12
23:00	4.38%	43.0	4	8	12
<b>Average</b>	<b>100.00%</b>	<b>40.86</b>	<b>3.83</b>	<b>8.00</b>	<b>11.83</b>

**Table 12—Consolidated PSAP Staffing by Hour**

Note that these projections do not include administrative and support positions. While completely cross-trained staff is desired, projected minimum certified staff is provided as guidance toward meeting call volume and dispatching needs.



The staffing projections represent the number of full time employees (FTE) employees needed to staff, at a minimum, two call taking positions, eight dispatch positions and one supervisor position during the slower periods of the day. Additional FTE staff is projected for the other positions needed during the higher call volume periods of the day; during the busier times of the day five call taking positions, eight dispatch positions and one supervisor position will need to be staffed.

Based on projected staffing needs, some of the existing staff can be expected to transition to the consolidated PSAP. Through attrition and qualification procedures, the possibility exists that several existing staff members will not transition to the new consolidated PSAP. If this occurs, a hiring process will be necessary to fill additional staff positions.

A re-evaluation of available statistical call volume and data should be performed every three to six months during the planning and implementation phases of consolidation to ensure accuracy in staffing projections.

#### 4.3.4 Salary Ranges

It is a common industry best practice when addressing personnel issues, specifically salary and benefits that during the planning stages of the consolidation every effort is made to avoid doing any harm to existing employees who may be transitioning to the new entity or the hosting entity. These types of personnel issues will need to be addressed specifically to a new consolidated center.

The decision makers from the affected agencies or municipalities joining the new center will ultimately have to make the final decision on the benefits that will be offered to the employees. This can be accomplished through a new negotiated collective bargaining agreement (CBA), or if all agree, or by the joining members coming under the jurisdiction of the current relevant CBA.

The following table depicts the number of authorized and actual employees for the two PSAPs:

Current Employees				
PSAP	Authorized Employees Full Time	Authorized Employees Part Time	Actual Employees Full Time	Actual Employees Part Time
City of Rockford	43	0	40	0
Winnebago County	24	0	18	0
<b>Total</b>	<b>67</b>	<b>0</b>	<b>58</b>	<b>0</b>

**Table 13—Current Employees**

The following table depicts the current salary ranges for the employees for the two PSAPs:

Current Salary Ranges			
PSAP	Low - Hourly	High - Hourly	Average
City of Rockford	\$20.00	\$31.00	\$25.50
Winnebago County	\$17.00	\$19.00	\$18.00
<b>Difference</b>	<b>\$3.00</b>	<b>\$12.00</b>	<b>\$7.50</b>

**Table 14—Current Salary Ranges**

#### 4.3.5 Job Titles

Below are some sample definitions for positions typically found in a consolidated operation comprised of a fully civilian staff. Although the functions of each of the positions will be needed, it may not be necessary that a dedicated person will be needed for each position that is listed. This all depends on workload, so for example, the training and QA positions may be combined; QA may be completed by the supervisors with training conducted by the deputy director, etc.

##### **Director or Manager**

This position has overall responsibility for providing leadership and has ultimate responsibility for all PSAP operational, technological, budgetary and administrative tasks. The director is charged with setting the direction for the PSAP, planning for future operational and technological changes and ensuring that the PSAP is meeting the mission set by the PSAP's oversight body. The reporting relationship for this position is determined by the type of governance chosen.

##### **Deputy Director/Manager - Operations**

This position reports to the Director/Manager. This Deputy Director/Manager oversees the shift supervisors, may function as the shift supervisor during the day shift or as needed. This position is responsible for assisting the Director/Manager in budget preparation, making staffing decisions, performing complaint investigations, working with agencies served by the PSAP and other operational support.

##### **Technology Manager**

This position reports to the Director/Manager and oversees all technical and equipment issues concerning the PSAP's technology. This position oversees IT and geographic information support (GIS) support staff, works with vendors on maintenance and repair issues, plans for upgrades and supports the technology needs of the PSAP.

##### **GIS and Technology Support**

This position(s) reports to the Technology Manager and is responsible for providing GIS and/or IT support for various technology found in the PSAP. This support could be dedicated to IT, CAD, radio, telephone, logging recorder or a combination of PSAP technology.

**Training**

The Training staff is responsible for the coordination and training of all PSAP operational personnel, and for developing and interacting with Chief Technology Officers (CTOs). In addition to new-hire training, 40-hours continuing education per year per telecommunicator is typically recommended and/or required to maintain and update skills. Specialized certifications may require a minimum number of continuing education hours per year. The Training staff is responsible for certification maintenance programs and for tracking and monitoring on-the-job training.

**Quality Assurance**

The QA staff reviews calls, provides feedback on performance and ensures compliance with best practices and policies. This process provides evidence needed to establish and ensure that services provided by the PSAP are of high quality and performed effectively. This position helps identify organizational and individual training deficiencies and provides plans to rectify them. The QA function is required of any agency administering pre-arrival instructions and/or pursuing accreditation through NAED or CALEA. This position is typically responsible for the creation of recordings for investigations, use in court or other official proceedings.

**Shift Supervision**

To properly manage a consolidated PSAP, a strong supervisory structure is recommended for two primary reasons; public safety best practices and operational efficiency. Although in smaller PSAPs shift supervisors are not always present for financial reasons or because sworn personnel function in this role, the PSAP in these models will be too large to operate efficiently without the presence of 24/7 supervision. In Kimball's view, it is essential that shift supervision not be assigned to a primary call taker or dispatch position and are present on a 24/7/365 basis.

**Telecommunicators**

This position reports to the shift supervisor and is responsible for call taking and dispatch functions.

**Administrative Support**

This position reports to the Director/Manager and is responsible for providing administrative support and managing office responsibilities.

Functions such as HR, payroll and facility maintenance are not covered within this structure. These functions can be provided by adding in-house staff, contracting with one of the participating municipalities or with a third party vendor. Therefore, the final organizational structure may change during the implementation planning process based on decisions made by stake holders and the governing group.

**4.3.6 Shift Supervision**

Public safety best practices require 24/7 supervision. NFPA has developed codes, standards and recommended practices through a process approved by the American National Standards Institute (ANSI). To cover this, six Supervisors will be needed to ensure one supervisor on duty on a 24/7 basis. This group can be supplemented by senior telecommunicators functioning in an acting supervisory capacity.

The Department of Homeland Security, coordinating with federal, state and local governments established the National Incident Management System (NIMS). Incident Command System (ICS) falls under the Command and

Management element of NIMS. The ICS represents best practices and is the standard for emergency management across the country and requires a supervisor when there are between five and ten persons performing similar functions. A manageable span of control allows supervisors to supervise and control their subordinates, while allowing for efficient communications between all parties.

While NFPA standards and ICS require dedicated supervisory personnel, there are in-house considerations as well. A consolidated PSAP will have greater geographic boundaries and agency responsibilities and a dedicated supervisor assigned to each shift:

- Provides coordination and direction during major emergency incidents, such as severe weather or high profile incidents
- Is available for problem solving
- Is a single point of contact for stake holder agencies
- Is readily able to identify areas for growth among subordinate employees
- Allows for formalized development of career paths
- Has the ability to document employee performance for annual/periodic reviews
- Provides a more narrow scope of supervision when implementing new policies and procedures
- Provides more supervision for diversified, complex tasks
- Is able to stay current with technological changes/advancements
- Provides guidance to new employees who have less training and experience
- Provides greater knowledge of laws, procedures, and administrative processes
- Is able to focus on the operations of the PSAP as a whole and not have split responsibilities with a call taker or dispatch position
- Is able to focus on customer service to public, stakeholder agencies
- Allows for improved communications with management, subordinates, and stakeholder agencies
- Spends more time with subordinates individually, on a daily basis
- Allows for operational efficiency
- Is able to identify areas for remedial training, counseling or discipline, when appropriate
- Is able to address issues upon occurrence, not after the fact
- Is able to set priorities
- Allows for delegation of tasks/responsibilities

## **4.4 Facilities**

### **4.4.1 Back-Up Facility**

In the State of Illinois, PSAPs that serve the size of population that Rockford and Winnebago County do, it is required they have a designated live backup facility. If the PSAPs require a new facility or decide to renovate an existing facility to accommodate a consolidated communications center, there will be a need to identify, plan for and equip a long-term back-up facility. In the event the consolidated communications center had to be evacuated or was rendered uninhabitable, there will be a need to maintain operations and relocate to a back-up center at another location.

A back-up PSAP is essential to maintaining an acceptable level of 9-1-1 call processing and emergency services dispatching. Without a back-up center, call processing and dispatching would be severely compromised if operations

at the consolidated communications center ceased for whatever reason. Evacuation and relocation of staff from the consolidated communications center may be caused by environmental and/or technical infrastructure failure. Failures of the 9-1-1 internal or external telecommunications, radio dispatch equipment or electrical service equipment are situations when evacuation to a back-up PSAP could be warranted.

A back-up facility should be reviewed for specific requirements by the consolidating PSAPs. It will require robust and diverse systems that share operational and functional redundancy and physical capabilities with the primary facility. The selected back-up facility can serve as a cost-effective location for off-site installation of back-up servers or database maintenance for any or all critical systems in use at the primary facility. The primary and back-up facility can provide systems redundancy for each other. It is best if the facility has sufficient hardening and redundant power/telecommunications connectivity to function in this capacity.

Kimball recommends a back-up center sized to accommodate the minimum of 75 percent capacity of a consolidated communications center. Full capacity is the ultimate configuration but often cannot be achieved due to fiscal or space requirements.

The facility should have the ability to support a temporary short- and long-term loss of the primary facility. Short-term would be designated as two to five days and long-term would be considered a longer period (e.g., days, weeks, months).

The consolidated center has the option to consider using the Winnebago County 9-1-1 and Rockford 9-1-1 facilities as a back-up solution since both are already primary PSAPs and already receiving and processing the incoming 9-1-1 calls. Any selected back-up PSAP must have the necessary resources and capability to handle the capacity of a consolidated communications center. It has been Kimball's experience that many times adjacent existing centers often don't have the resources, space or the equipment to be a back-up for a large consolidated center but this is not the case for both PSAPs in Winnebago County.

Kimball does not recommend a mobile command post solution as the only means for back-up communications. Mobile command posts typically work as a temporary solution until a more robust, reliable and well-equipped back-up center can be staffed and begin operations.

With the proper connectivity between the primary and back-up, the back-up facility can augment operations at the primary facility during times of disaster or high call volume when additional call taking and/or dispatching resources are needed.

The back-up facility should be geographically diverse for weather-related or other localized disasters and emergencies. If at all possible, the back-up facility should be served by alternate utilities (telephone, power grid, etc.).

Costs related to supporting a back-up facility can range from minimal to expensive depending on the size, furnishings and the amount and type of technology desired. Commonly, a back-up facility does not mirror the primary PSAP in terms of space, technology and furnishings due to the cost involved as compared to the actual usage of a back-up facility. While it is critical that a back-up facility exist, it can function with less technology (use of manual or paper tracking systems) and often uses furniture and chairs that are second-hand from the primary PSAP. In other words,



when the primary PSAP installs new dispatch furniture, the old furniture is moved to the back-up facility. Under these circumstances, costs to support the back-up facility are minimal. If a mirror of the primary PSAP is desired, then technology-related costs can be substantially higher and, at times, cost prohibitive.

## 4.5 Cost Estimates

Cost estimates for the options identified above are difficult to determine specifically. There are still circuit costs, technology costs and operations cost. While there would be a reduction in administrative costs, all other line items may still be applicable. A complete review of the two budgets would determine individual line items that may not be applicable in a combined facility.

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## 5. SUMMARY AND TIMELINE

Winnebago County has viable options for consolidation of its two PSAPs. Although the current two-PSAP arrangement has satisfactorily met the needs of the citizens and visitors of Winnebago County for many years, there are many advantages to consolidation that the County can realize through consolidation.

Apart from the many technological advances and efficiencies that can now be gained through consolidation, there are a myriad of personnel and facility costs that are currently being absorbed both by the taxpayers and the 9-1-1 surcharge budget in order to keep the two PSAPs operations functioning at the current performance levels. Consolidating the two centers will allow for all of these efficiencies, as well as viable and capable back-up center options.

One of the major roadblocks Kimball sees across the country when it comes to consolidation is politics—unwillingness of officials to relinquish control. In various parts of the country, local officials have made conscious choices to maintain a lower quality of service rather than merge with a more advanced neighboring PSAP. Often, these decisions to maintain one's turf, to the detriment of citizens and emergency responders, are unknown to the general public. In Winnebago County; however, the political climate is one of working together to determine what is best for the County 9-1-1 operations and what will yield the highest level of services for the citizens. This makes for a much more functional and successful consolidation effort.

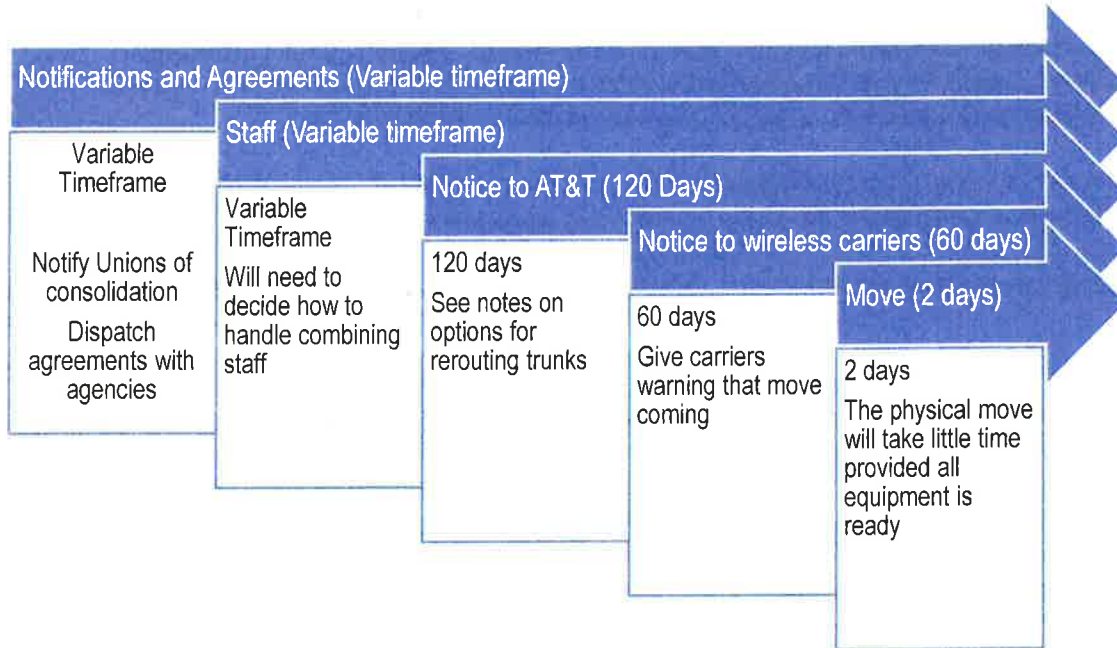
Based on all the data collected and meetings with many stakeholders within the County, Kimball has detailed two recommended options for consolidation in Winnebago County:

- **Option One:** Fully consolidate under the City of Rockford at Rockford 9-1-1 facility with the Winnebago County facility as back-up.
- **Option Two:** Fully Consolidate under the City of Rockford using the Winnebago County 9-1-1 facility as the primary PSAP keeping the existing fire dispatch staff at the Rockford Fire Administrative facility and moving the police dispatch to the Winnebago County 9-1-1 facility. Rockford 9-1-1 could then serve as back-up.

The City and County should commit to advancing to the next phase of the consolidation process which is development of a governance agreement and a cost distribution model. Until participants can reach consensus on these issues it is difficult for the municipalities to reach an informed decision on whether to commit to the consolidation process or can an accurate timeline be projected.

### 5.1 Consolidation Estimated Timeline

Depending on which option Winnebago County chooses to pursue, the timeline to accomplish consolidation will vary slightly. However, for each of the three options detailed in this report, the high-level timeline below is a big-picture idea of the main steps to consolidation and about how long they will take.



**Figure 1—Estimated Consolidation Timeline**

If Winnebago County participates in the NINGA NG9-1-1 project prior to consolidation, the County will not have to move the AT&T trunks. At some point, Kimball recommends that the County have AT&T perform a line study to determine how many lines will actually be needed. Kimball recommends giving AT&T and wireless carriers a heads-up that they are talking about consolidation.