

COUNTY OF MILWAUKEE
INTEROFFICE COMMUNICATION

DATE: June 28, 2016

TO: Supervisor Theodore Lipscomb, Sr., Chairman, County Board of Supervisors

FROM: Christine Westrich, Director, Office of Emergency Management (OEM)

SUBJECT: Informational Report on the Key Findings of the Public Policy Forum (PPF) report titled, *Get Connected, An Analysis of Public Safety 9-1-1 Call Taking, Dispatch and Command Center Services in Milwaukee County*

REQUEST

There is no request at this time; this report is for informational purposes only.

BACKGROUND

In January 2015, Milwaukee County merged four of its public safety functions into a new Office of Emergency Management (OEM). The consolidation of those functions – Emergency Management, Emergency Medical Services, 911 Communications, and Public Safety Radio – has created an opportunity to explore how the County and its municipalities might work together to further improve the delivery of emergency response and services to our communities.

The Public Policy Forum was engaged in the summer of 2015 to lead the research into not only efficiencies within the dispatching functions of the County but the possibilities of a collaborative 9-1-1 Public Safety Answering Point (PSAP) effort among the thirteen (13) existing centers.

SUMMARY, Part 1: Consolidating Milwaukee County Dispatch Functions

The first step of the project was to consider the extent to which various Milwaukee County dispatching and emergency communications functions should be consolidated within a new OEM command center facility. This facility would house dispatch and emergency communications services in a secure environment that could provide daily collaboration between public safety functions while also coordinating emergency response during crises, which could include severe winter storms, tracking road conditions and snowplows on county highways.

The OEM's Emergency Medical Services (EMS) Communications Center successfully consolidated with its 9-1-1 dispatch center into the Safety Building on June 1st, 2016, leveraging savings in technology, future cross-training, and the beginnings of a synergistic hub of intelligent data.

Ergo, the PPF turned their attention to the airport, transit, and highway dispatching and communications. In each case, the report found full-scale consolidation is not immediately practical, there are initiatives which can improve coordination and data sharing.

Summary of Internal County Emergency Communications Recommendations:

Function	Recommendation	Estimated Cost
General Mitchell International Airport	Don't physically consolidate, but upgrade Airport Fire Station alerting system and integrate with OEM Communications Center	\$235,000 - \$320,000
Milwaukee County Transit	Don't physically consolidate, but establish back-	\$150,000 - \$210,000

System	up Transit Operations Center at OEM Communications Center	
Milwaukee County DOT, Highway Division	Consider physical co-location of highway dispatching; in the meantime, upgrade GPS capability and share data with OEM Communications Center	\$25,000 for immediate upgrades, ongoing cost of \$1,500/month

SUMMARY, Part 2: Municipal PSAPs, Enhanced Data Sharing and Integration

PSAP consolidation already has occurred in Oak Creek and Bayside, yet there did not appear to be widespread interest among other municipal PSAPs in the County. Despite the lack of interest at this time, the report expresses the imperative need for technological upgrades that could make consolidation more attractive to several municipal PSAPs in the not-too-distant future.

Most importantly, the report did find interest in developing a more integrated approach to sharing data and improving dispatch capabilities among all the PSAP stakeholders. The recommendation is immediate pursuit of several integration initiatives as a possible precursor to eventual larger-scale PSAP consolidation. These initiatives would be in alignment with ongoing public safety initiatives coordinated by the County, including a new emergency communications radio system known as P.25 and/or OASIS.

The recommendations outlined here in Part 2 use relatively simple and reasonably priced strategies to substantially enhance emergency communications and protocols in Milwaukee County. These recommendations are deemed non-controversial and serve as a precursor to larger consolidation of municipal PSAPs, but they certainly do not imply that such consolidation must take place.

Determining how to pay for these recommendations and how to govern their implementation would pose challenges, yet, fortunately, a successful governance and financing model exists today with the countywide P.25 OASIS system. This public safety radio network allows first responders to communicate via hand-held and portable radios. Upgrades to the radio system were financed by the County, while annual usage fees are charged to municipalities to support ongoing operations and maintenance.

Hypothetically, a similar cost-sharing arrangement of the improvements recommended in the report – in which the County would pay most or all of the capital costs while municipalities would help support operations – could be considered. A similar financing paradigm also was used to upgrade municipal elections equipment in 2015.

CAD-to-CAD Integration Recommendation

Implementation of a countywide CAD-to-CAD solution that would allow CAD data from individual dispatch centers throughout the county to be shared. Municipal PSAPs could view public safety response activity in neighboring municipalities, improving mutual aid and reducing response times. In large-scale incidents, this level of integration would provide all agencies a view of the situation and deployed resources, coordinating response and resource allocation to include evacuation as the incident cascades.

Countywide Geographical Information System (GIS) Map for Public Safety

Implementation of a common countywide map that would be available to all public safety agencies and PSAPs to enhance incident location identification. The GIS-based map would be integrated with the CAD-to-CAD solution.

A common map would allow a single connection to external data sources, including ShotSpotter, electronic fire/burglar alarms, panic buttons, car telematics, smartphones, video, social media, etc.; preparing the County for Next Generation 911 (NG911).

Emergency Medical Dispatch (EMD)

The EMS Communications Center recently moved from the Milwaukee Regional Medical Center’s Froedtert Emergency Department to the OEM Communications Center in the downtown Safety Building. This combined communications center partnered with the Medical College of Wisconsin (MCW) in a pre-arrival instruction grant for cardiac arrest victims, implementing life-saving procedures to be initiated by the caller before an ambulance arrives.

However, at this time, only three of thirteen PSAPs in the county use formal EMD instructions. The recommendation is to provide full EMD capability beyond cardiac arrest, thus providing standardized, advanced EMD capabilities throughout Milwaukee County.

Integration Opportunity	Recommendation	Estimated Cost
CAD-to-CAD Integration	Implement a technological solution to allow OEM and each municipal PSAP to have CAD data allowing mutual aid and/or increased situational awareness	Capital: \$990,000 Annual maintenance: \$115,000 - \$130,000
Common GIS Map	Have the Milwaukee County Land Information Office maintain a common GIS map with public safety layers that is integrated into each CAD system	No capital, only personnel hours
Emergency Medical Dispatch	Establish EMD protocol countywide through software installation and enhanced training	Capital: \$300,000 - \$800,000 Annual maintenance: \$16,800 - \$57,000

SUMMARY, Part 3: Wauwatosa PSAP Consolidation Case Study

The final component of the report is a hypothetical scenario under which the City of Wauwatosa would close its PSAP and contract for such services with Milwaukee County. Over the past 10 years, many communities throughout the country have evaluated options for consolidating PSAPs. This trend is likely to accelerate in light of the anticipated implementation of Next Generation 911 technology, which will require PSAPs to upgrade facilities, purchase new hardware and software, and provide enhanced training for dispatchers. The costs associated may be prohibitive for some local governments, and particularly for those who administer small dispatch operations.

The Wauwatosa PSAP receives wireless 911 calls that emanate from Wauwatosa and are transferred from the OEM Communications Center, as well as wireline 911 calls directly from the local telephone company. The PSAP operation dispatches for fire, police and emergency medical services. Annual call volume for Wauwatosa that would be handled by OEM is 24,398. OEM currently handles 184,643.

The report analyzes personnel and technology cost impacts for capital investment, replacement cost, and annual maintenance.

	Wauwatosa Independent PSAP	OEM Contracted for Service YEAR 1	OEM Contracted for Service YEAR 2+
Direct Costs Personnel	\$621,412	\$403,901	\$403,901
Direct Costs Equipment/Tech. Replacement	\$76,500	\$48,567	\$48,567
Direct Costs Equipment/Tech. Maintenance	\$134,700	\$87,267	\$87,267
OEM OVERHEAD	n/a	\$143,000	\$143,000
OEM START-UP COSTS	n/a	\$68,000	\$0
TOTAL COSTS	\$832,612	\$750,735	\$682,735
SAVINGS FOR WAUWATOSA	n/a	\$81,877	\$149,877

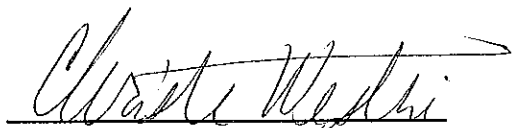
The total Wauwatosa savings is outlined above. PSAP consolidation is a national trend; in fact, some states are imposing mandatory consolidation timelines. While Wisconsin has not opted to require mandatory consolidation, ongoing capital expenditures and rising personnel costs are forcing agencies to look for alternatives.

The Wauwatosa case study provides perspective on the potential cost savings and economies of scale that can be realized through consolidation. Additional operational impacts, aside from the estimated \$150,000 annual savings noted above, include: reduced dispatch processing time, cost effective purchasing and maintenance of IT, and staff hiring, retention and professional development opportunities for staff.

Overall, the study reports that the potential collective savings and operational efficiencies/improvements are significant enough to warrant a more rigorous examination of the possibility of combining Wauwatosa's PSAP operations with the County's OEM. Furthermore, similar consideration should be given for other Milwaukee County municipalities with stand-alone PSAP operations if OEM relocates to a facility designed for enhanced operations.

RECOMMENDATION

There is no recommendation at this time; this report is for informational purposes only.



Christine Westrich
Director, OEM

Attachments: *Get Connected, An Analysis of Public Safety 911 Call Taking, Dispatch, and Command Center Services in Milwaukee County, July 1st, 2016* by Public Policy Forum

Diagram: *Milwaukee County 9-1-1 PSAPs and OASIS Radio Network*

cc: Chris Abele, County Executive
Raisa Koltun, Chief of Staff, Office of the County Executive
Kelly Bablitch, Chief of Staff, County Board of Supervisors
Steve Cady, Research & Policy Director
County Board Standing Committee of reference by the Chairman:
Respective Standing Committee Supervisors
County Clerk, Committee Coordinator
Office of the Comptroller, Research Analyst