

ENROLLED ORDINANCE 174-029

MODIFY SCOPE OF CAPITAL PROJECT 200815 DIGITAL RADIO SYSTEM
UPGRADE TO ALLOCATE FUNDS FOR DIGITAL PAGING SYSTEM UPGRADE

WHEREAS, the Waukesha County Department of Emergency Preparedness currently uses an analog paging system to send emergency notifications to fire and EMS first responders throughout the county; and

WHEREAS, the migration from analog to digital technology is required because the vendor will no longer support analog systems, the current analog system has reached the end of its normal life cycle, and replacement parts will be more difficult to obtain; and

WHEREAS, the paging system was originally planned for replacement in the Emergency Preparedness operating budget, but the new requirement to migrate from analog to digital technology and the recent addition of two new radio tower sites increased the total number of sites to upgrade such that the operating budget would not be sufficient; and

WHEREAS, including the paging system upgrade in the Digital Radio System Upgrade capital project would be appropriate because the paging equipment will be installed at all of the county's radio tower sites, will be managed by Emergency Preparedness Radio Services staff, and will provide emergency notifications countywide through a digital signal; and

WHEREAS, the Digital Radio System Upgrade project is expected to have sufficient existing budget authority to fund this paging system upgrade.

THE COUNTY BOARD OF SUPERVISORS OF THE COUNTY OF WAUKESHA ORDAINS that the scope of Capital Project 200815 Digital Radio System Upgrade be modified to allow for replacement and upgrade of the radio system's paging system.

FISCAL NOTE

MODIFY SCOPE OF CAPITAL PROJECT 200815 DIGITAL RADIO SYSTEM UPGRADE
TO ALLOCATE FUNDS FOR DIGITAL PAGING SYSTEM UPGRADE

This ordinance modifies the scope of capital project 200815 Digital Radio System Upgrade to include an upgrade of the existing analog paging system to a digital system. The current capital project is expected to have sufficient budget authority to fund this paging system upgrade estimated to cost \$240,000 without having to appropriate additional funding. The paging system will essentially be part of the digital radio system because it is integrated with radio tower site infrastructure, will be managed by Radio Services staff, and will operate through a countywide digital signal.


The maintenance cost of the upgraded system will be adjusted from the existing budgeted base in future operating budgets, when the system is implemented.

Linda Witkowski

Linda Witkowski
Budget Manager
5/6/2019
BPD

MODIFY SCOPE OF CAPITAL PROJECT 200815 DIGITAL RADIO SYSTEM
UPGRADE TO ALLOCATE FUNDS FOR DIGITAL PAGING SYSTEM UPGRADE

Presented by:
Executive Committee



Paul L. Decker, Chair

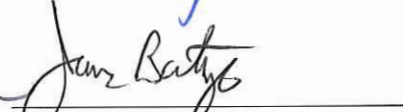
Approved by:
Judiciary and Law Enforcement
Committee


Peter M. Wolff, Chair

Approved by:
Finance Committee

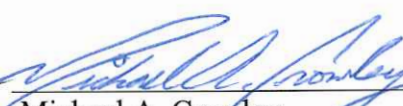
Absent
James A. Heinrich, Chair


James A. Heinrich


Jim Batzko


Timothy Dondlinger



Christine M. Howard



Michael A. Crowley


Tyler J. Foti

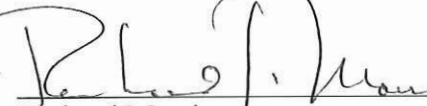

Larry Nelson

absent
Timothy Dondlinger


Thomas A. Michalski


David W. Swan

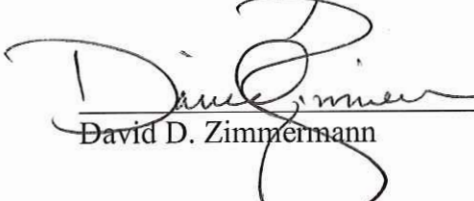

Tyler J. Foti

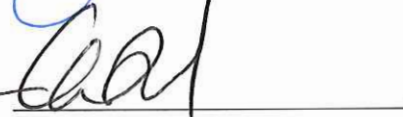

Richard Morris

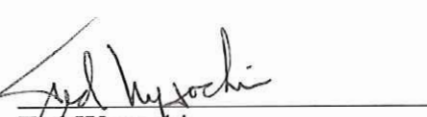

Peter M. Wolff


Jennifer Grant



Duane E. Paulson


David D. Zimmermann


Chuck Wood


Ted Wysocki

The foregoing legislation adopted by the County Board of Supervisors of Waukesha County, Wisconsin, was presented to the County Executive on:

Date: 5/30/19, 
Margaret Wartman, County Clerk

The foregoing legislation adopted by the County Board of Supervisors of Waukesha County, Wisconsin, is hereby:

Approved: X
Vetoed: _____

Date: 5/30/19, 
Paul Farrow, County Executive

Project Title:	Digital Radio System Upgrade	Project #:	200815
Department:	Emergency Preparedness	Project Type:	Information Technology
Phase:	Implementation	Sponsor:	Radio Services
Budget Action:	C - Scope	Manager:	Gary Bell, Director of Emergency Preparedness
Date:	May 7, 2019		

Year	2011	2012	2013	2014	Total
	Budget & Concept	Design & Engineering	Engineering Implement	Implement	Project
Expenditure Budget	\$7,000	\$70,000	\$775,000	\$8,663,000	\$9,515,000
Revenue Budget	<u>\$7,000</u>	<u>\$70,000</u>	<u>\$387,500</u>	<u>\$4,331,500</u>	<u>\$4,796,000</u>
Net County Cost	\$0	\$0	\$387,500	\$4,331,500	\$4,719,000
COST DOCUMENTATION		REVENUE			
Design	\$57,000	Radio Services Fund Balance			\$77,000
Engineering	\$73,000	Municipal Sinking fund			\$1,600,000
Construction	\$8,701,000	County Loans to Municipal partners*			\$3,119,000
Digital Paging System Upgrade	\$240,000	General Fund Balance of \$625,000 set aside per year beginning in 2010			
Contingency	<u>\$444,000</u>	County Share (Not included in total revenue)			\$4,796,000
Total Project Cost	\$9,515,000				
EXPENDITURE BUDGET	\$9,515,000	REVENUE BUDGET			\$4,796,000

*Loans to be paid back over eight years. Loans are expected to be about \$1.5 million less than budget, reflecting lower project costs and reduced charges to municipalities.

Project Scope & Description

The migration from analog to digital technology is required because the vendor will no longer support analog systems, and the current analog system will have reached the end of its normal life cycle. All new trunked radio systems will be required to meet the new FCC standards or upgrade their current radios to the new platform. This project does not include costs of agency radios.

The project scope is modified to include an upgrade of the paging system from an analog system to a new VHF (very high frequency) digital system. The paging system sends emergency notifications to fire and EMS first responders throughout the county. The migration from analog to digital is necessary because the vendor will no longer support analog systems, the current system has reached the end of its normal life cycle, and replacement parts will be more difficult to obtain.

The paging system was originally planned for replacement in the Emergency Preparedness operating budget, but the switch to digital and the addition of two new radio tower sites meant the operating budget would not be sufficient for this upgrade, estimated to cost \$240,000. Including the paging system upgrade in the Digital Radio System Upgrade capital project would be appropriate because the paging equipment will be installed at the County's radio tower sites, will be managed by Emergency Preparedness Radio Services staff, and will provide emergency notifications countywide through a digital signal. There is not expected to be a significant cost impact to municipal first responders as a result of this upgrade.

Location: Equipment is located throughout the county, but the "intelligence" of the system is located at 2120 Davidson Road. The County has added two additional transmitting sites (in the towns of Lisbon and Vernon) for a total of nine sites. Paging upgrades are expected to improve the coverage area for fire and EMS departments in areas that have been deemed deficient by public safety field partners based on their end user experience.

Analysis of Need

When the current system was purchased and installed in 2000 digital systems were relatively new and it was determined that the digital technology was not stable enough for the County's application. Digital offers better reception in the fringe areas compared to analog thereby increasing coverage. The transition to digital for the paging system is due to the end of life cycle support of the analog solution currently installed and active.

Alternatives: There are no alternatives to replacing the system if the County wants to continue to use this as a public safety system. As these systems age, reliability can be negatively affected. In the near future the vendor will no longer support this system and replacement parts will be more difficult to obtain. It would be inappropriate to rely on a public safety system that is in danger of failure or hampered by an inability to be repaired effectively.

Ongoing Operating Costs: The County expects increased equipment and maintenance costs to be partially offset by system users' annual operating cost reimbursements for County radio services operations. Ongoing costs are estimated at approximately \$200,000 for the digital radio system. The vendor has not supplied estimated ongoing costs for the digital paging system, but typically this is estimated at 10% of project costs, or \$24,000.

Previous Action: 2008: new project. 2010-2014 capital plan: approved as planned. An amendment to the original intergovernmental agreement was signed by all 37 communities. 2012-2016 capital plan: approved as planned. 2013-2017 capital plan: approved with change in scope. 2014-2018 capital plan: approved as planned.



Voting Results for Ordinance 174-O-028

Modify Scope Of Capital Project 200815 Digital Radio System Upgrade To Allocate Funds For Digital Paging System Upgrade

Passed With 17 Yes Votes Needed

AYE: 25 **NAY: 0**

ABSENT: 0

D1 - Foti	AYE
D2 - Zimmermann	AYE
D3 - Morris	AYE
D4 - Batzko	AYE
D5 - Dondlinger	AYE
D6 - Walz	AYE
D7 - Grant	AYE
D8 - Michalski	AYE
D9 - Heinrich	Motion AYE
D10 - Swan	AYE
D11 - Howard	Second AYE
D12 - Wolff	AYE
D13 - Decker	AYE

D14 - Wood	AYE
D15 - Mitchell	AYE
D16 - Crowley	AYE
D17 - Paulson	AYE
D18 - Nelson	AYE
D19 - Cummings	AYE
D20 - Schellinger	AYE
D21 - Gaughan	AYE
D22 - Wysocki	AYE
D23 - Hammitt	AYE
D24 - Whittow	AYE
D25 - Johnson	AYE