Winnebago County
All Departments
Subscriber Unit
Radio Replacement

2023 CIP - ARPA

Public Safety Communications System

- In simplest terms, this is the radio system used by all public safety entities in Winnebago County – all police and fire agencies, and then some
- Ensures mission critical communications & interoperability occurs
 - WC Sheriff (all Divisions), WC Highway, WC Facilities, WC Public Health, WC Emergency Management, DA's Office all use the system.
- Approx. 400 subscribers belong to County Departments today
 - Approx. 1,550 total subscribers belong to public safety radios in Winnebago County
 - Many local police and fire have begun to replace theirs already
- Average 1.7 million radio transmissions annually

Communications System History

- Major county-wide project began in 2010
 - Stakeholders involved, feasibility study, RFP's
 - A Motorola radio system was selected
- Federally mandated narrow banding of all radio systems was required by 2013.
- From 2011-2012, Winnebago County:
 - Invested \$5 million for radio infrastructure (800 MHz and P25 complaint Motorola Astro 25)
 - Invested an additional \$5.5 million on 1,500 subscriber unit radios for ALL public safety entities in the county. Those subscriber units are nearing end of life now.







Communications System History

- Components have a shelf life
 - ■The first focus was on the infrastructure upgrades

- 2021 CIP Project replaced 4 microwave links \$330,000
 - Other legacy components have been gradually replaced





Communications System History

- Narrow banding mandate entered into a joint cost savings measure with Outagamie County the radio and recording system infrastructure is jointly owned and shared with Outagamie County signed agreement through December 31, 2031
- 2023 is Year 4 of a 10-year maintenance agreement for the Motorola Astro 25 (with 11-year-old equipment)
 - \$5.1 million in maintenance over 10 years
 - Able to replace/repair/upgrade/update as needed
 - Major software upgrade occurred over one month in September/ October 2022 as part of this maintenance agreement

Today – End of Life (7-10 years =2022)

- Subscriber Units are at end of life Winnebago County Departments must replace:
 - 80 Mobiles (radios permanently mounted in vehicles)
 - 325 Portables (hand-held radios)
 - 12 Consolettes (back up systems and DVRS boosters)







	COUNTY DEPT	TYPE	QUANTITY		UNIT COST	TOTAL COST
	DIST ATTORNEY	APX4000	3		\$3,696.00	\$11,088.00
NOW - MUST PURCHASE	EMER MGMT	APX8000	6		\$7,572.00	\$45,432.00
	EMER MGMT	APX6500	1		\$5,061.00	\$5,061.00
	EMER MGMT	APX8500	2		\$10,000.00	\$10,000.00
	FACILITIES	APX4000	40		\$3,696.00	\$147,840.00
	HIGHWAY	APX4000	28	Portables	\$3,696.00	\$103,488.00
	HIGHWAY	APX4500	69	Mobile/Vehicles	\$3,647.00	\$251,643.00
	PUBLIC HEALTH	APX4000	10		\$3,696.00	\$36,960.00
	MED EXAMINER	APX4000	4		\$3,696.00	\$14,784.00
	SHERIFF	APX4000	32	Clerk/Res/HS	\$3,696.00	\$118,272.00
	SHERIFF	APX6000	75	Corrections	\$5,414.00	\$406,050.00
	SHERIFF	APX6500	39	Squads	\$5,061.00	\$197,379.00
	SHERIFF	APX8000	98	Admin/Pat/Det	\$8,219.00	\$805,462.00
	SHERIFF	APX8500	2	Bearcat/DVRS	\$13,375.00	\$26,750.00
	SHERIFF	APX6500	1	DVRS	\$13,375.00	\$13,375.00
	SHERIFF	APX800 Con	12	BUCS / Jail Cns	\$11,533.00	\$138,396.00

***All Items NASPO Contract Pricing (as of April 2022)

\$2,339,980.00

Additional Costs

- Programming approx. \$85.00/unit (Vendor direct quote)
 - Total \$35,870
- Installing Mobiles approx. \$500.00/vehicle (Vendor direct quote – flat rate vs hourly – saves us money)
 - **■** Total \$56,000
- Accessories Earpieces \$50 each
 - **\$14,880**
- Bank chargers 8 @ \$1,050 each = \$8,400
- Reporting software \$22,000
- Other current accessories will still fit (leather or nylon holders; extra batteries)
 - This plan does NOT involve replacing radio holders. The 10-year-old ones can easily be replaced piecemeal by the departments.

Plan

- Purchase the (approx.) 422 radios for ALL county Departments
- Current CIP books 2021-2025 and 2022-2026 both list \$700,000 for each year 2023-2024-2025 to spread out bonding
 - ■\$2.1 million --- Based upon 2020/2021 pricing
 - Now \$2.47+ million based on 2022 pricing plus 10% contingency
- "Trade in" old ones erase/wipe them and pay us for the parts ~~ approx. \$65,000

Grand Total ***If purchased as one in 2023

\$2,477,050.00

** Materials total has increased \$350,000+ since Fall 2021CIP planning

Alternatives Considered

- Motorola selected as the vendor in 2011
- Significant infrastructure investments into Astro P25 System; the features are crucial, and known to us
 - Construction and Durability
 - Battery Life
 - Range, Frequency, and Audio Quality
 - Mobile Installation and Wiring
 - Vendor relationship
 - Maintenance Contracts congruence

Alternatives Considered

- Replace radios with Motorola's new APX NEXT Smart Radio
 - Base price is higher (approx. \$1,000 each)
 - Must include monthly service fee (\$75 a month), per device, for the life of the device (10 years) ~ \$9,000
- Use non-Motorola products
 - Separate vendors, different radio programming procedures, and additional ongoing maintenance agreements
 - Would need to replace ALL accessories
 - Limited and unsuccessful track records
 - Loss of proprietary features

CIP Plan --- or ARPA??

- → Alternative plan split amongst 2 years (2023 2024)
 - 2023 Sheriff's Office only (262 radios ~ \$1.8 million)
 - 2024 All other County Departments (159 radios = \$690,000 + 13%? Increase again ??? ~ \$780,000)
- Would need 2 separate maintenance agreements to account for 2 sets of radios (separate pricing?)
- Would need a second schedule of mobile installs by the vendor (price increase?)

Questions??

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