## WCSD: GATRRS Capital Equipment Replacement

**Executive Summary** 

Dept: CTM - WCSD eTRACS #: Critical Replacement

Sponsor: Chuck Brotherton, Wireless Communication Services Manager

**Problem:** Greater Austin-Travis County Regional Radio System (GATRRS) infrastructure equipment – microwave radios and antennas, voice radio repeaters, dispatch consoles – purchased early in the last decade has now passed the ten-year mark of its service life. All of these items are approaching obsolescence, with dates announced for end-of-manufacture and end-of-support. Between 2012 and 2019, these three major component groups will have to be replaced if the GATRRS system is to stay functional and reliable.

date: 1/12/2012

**Solution:** Over six budget cycles, via a phased, carefully-managed, cost-effective approach, replace and upgrade the following elements of the "live" GATRRS: Microwave network, radio repeaters, dispatch consoles, system software/firmware, and radio shop management software application. Share the cost among the four GATRRS Coalition partners – City of Austin, Travis County, Austin Independent School District, and University of Texas – per existing interlocal agreement.

**Results:** The GATRRS will be updated and positioned to take advantage of new technologies such as 4G/LTE and MPLS for public safety voice, data, and video, as well as improved system redundancy capabilities. (NOTE: These advances require additional equipment and funding not requested here.)

- Redesign of the simulcast system will improve capacity and coverage throughout Travis County, not
  just in the urban core.
- City Radio Shop's work-order / billing / inventory management software application will be replaced
  with one that's fully integrated with the radio system and common to other full-service shops we work
  with, such as Williamson County, Harris County, and others, thereby improving efficiency and
  customer service.

### Legal/Regulatory Requirement: ☑ No ☐ Yes, please specify:

### Support for "Best Managed":

- ☑ Maintains and upgrades critical systems and technology that support City operations.
- ☑ Supports proactive planning for emergency communications' evolving technology.

Benefit	Measurement	Level of confidence
Service increase: Improves coverage and capabilities of our regional public safety radio system.	<ul><li>☑ Transformative.</li><li>☑ Grows existing services.</li><li>☑ Supports existing service.</li></ul>	<b>100%</b> 90% 60% 30%
<u>Direct citizen impact:</u> Improves ability of COA first responders to perform their duties.	☑ 100% of citizens affected.	<b>100%</b> 90% 60% 30%
Supports sustainability: Improves first-responder safety, improves City's ability to leverage new technologies for improved public safety voice and data communications.	☑ Reduces energy demands. ☑ Reduces waste stream. ☑ Increases worker safety.	<b>100%</b> 90% 60% 30%

### Financial Information:

#### Benefits:

☑ Preferred cost option is a phased, integrated, coordinated approach, contracted with Motorola over 6 years at \$5,333,333 per year. This option represents a \$6.5 million savings over the "a la carte" approach whereby components are replaced as needed, without integration. Savings = \$6.5 million; Confidence: 90%.

#### Costs:

☑ \$5,333,333 per year over 6 years, all costs to be shared by the GATTRS Coalition partners on a percentage basis defined by 2004 interlocal agreement:

Annual contracted amount to Motorola (estimated):	\$5,333,333
WCSD resource costs included in GATRRS annual O&M budget	\$376,000
Total Annual Startup	\$5.709.333

☑ Expected life in years: 10 to 15

# **TOTAL COST OF OWNERSHIP, FY13 – FY18**

	Share	Capital	Operating	Total FY13-18
City of Austin	60.85%	\$19,472,000	\$14,126,605	\$33,598,605
Travis County	26.37%	\$ 8,438,400	\$ 6,121,916	\$14,560,316
AISD	09.36%	\$ 2,995,200	\$ 2,172,967	\$ 5,168,167
University of Texas	03.42%	\$ 1,094,400	\$ 793,969	\$ 1,888,369
Total	100.00%	\$32,000,000	\$23,215,457	\$55,215,457

## Funding:

## **Requesting funding in Technology CIP:**

TOTAL	\$32 million
FY 2018:	\$5,333,333
FY 2017:	<b>\$5,333,333</b>
FY 2016:	\$5,333,333
FY 2015:	\$5,333,333
FY 2014:	<b>\$5,333,333</b>
FY 2013:	\$5,333,333

WCSD resource costs are included in the annual \$3.5 million GATRRS Operation and Maintenance Budget, which is presented annually for approval by all coalition partners.