

CFW Radio System Update

- I. Parallel Strategies
 - A. Partnerships and Joint Ventures
 - 1. Agencies with common problems for shared solutions
 - 2. Stresses interoperability and shared costs
 - B. CFW Infrastructure Refresh
 - 1. Starts to address immediate issues for CFW and its customers
 - 2. Establishment of infrastructure core to build upon regionally
 - 3. Creation of momentum for regional efforts

- II. CFW- Supported Radio Systems (approximately 10,000 subscriber units)
 - A. System 2 (Public Works)
 - 1. 20-channel, single-site, trunked
 - 2. Used as backup for System 1
 - 3. Non-public safety users
 - 4. One external customer – The T
 - 5. Upgraded within last 10 years
 - B. System 1 (Public Safety)
 - 1. 20-channel, five sites, trunked
 - 2. 23 external customers (14 as primary system)
 - a. Tarrant County
 - b. North Richland Hills
 - c. MedStar
 - d. Haltom City
 - e. Tarrant County College
 - f. Watauga (March 2011)
 - g. Kennedale
 - h. Richland Hills
 - i. Forest Hill
 - j. TCU
 - k. Fort Worth ISD Student Affairs
 - l. UNT-Health Science Center
 - m. CareFlite
 - n. BNSF Security
 - o. Others
 - 3. Installed in 1992
 - 4. Supported in-house

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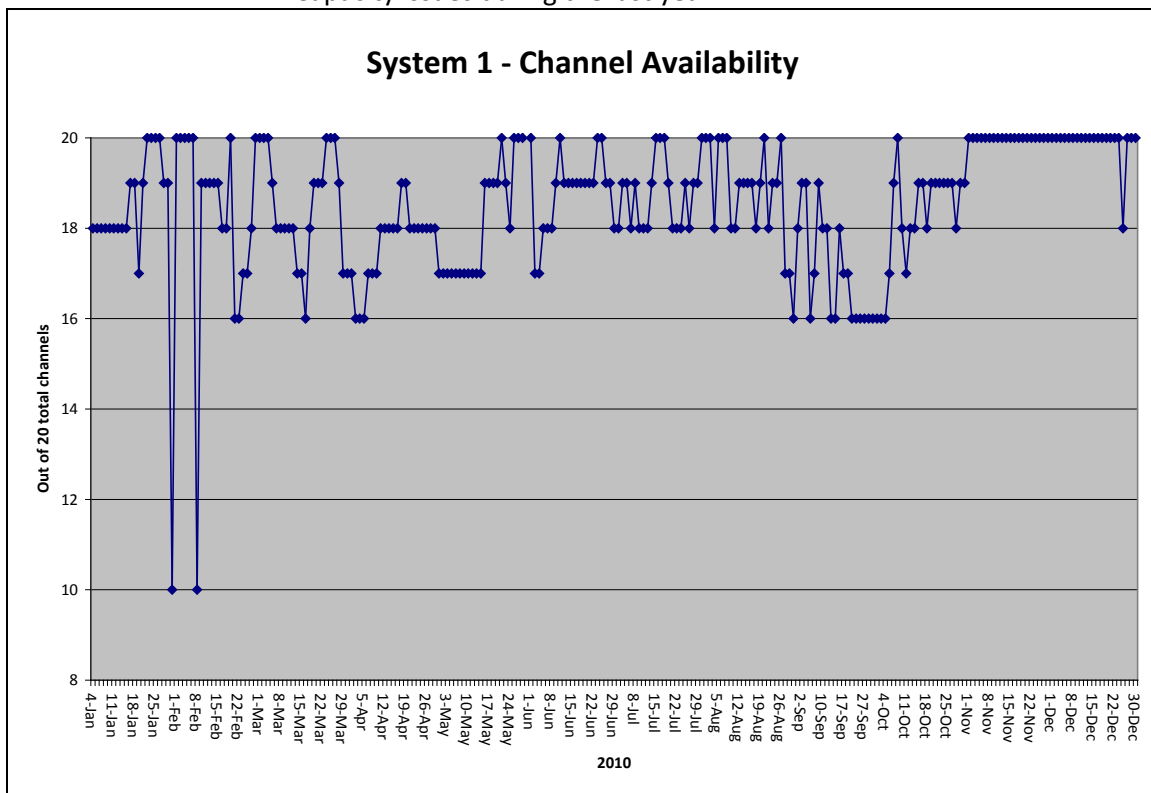
III. System 1 Issues

A. Aging Infrastructure

1. Exceeds "normal" system life by about seven years
2. Existing components physically brittle
3. Key components no longer supported ("best effort" repairs)
4. Scarcity of spares (parts stockpile when able)
5. Increasing durations for repairs

B. Lower Reliability

1. 61 high-priority incidents in 2010
2. Capacity issues during the last year



C. Coverage Issues

1. Weak coverage in some CFW areas
 - a. West (Walsh Ranch)
 - b. Southwest (Camp Bowie)
 - c. Far south (Spinks, Lake Benbrook)
 - d. Far north (TMS)
2. No expansion capabilities of existing system

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IV. CFW Radio System Actions (Active)

A. Subscriber Unit Reflashes (\$495,411)

1. Re-program existing radios to accommodate P25 digital systems
2. 233 – Fire; 96 – ITS Cache; 15 – Police
3. Completed April 2010
4. UASI grants

B. System Planning (\$511,600)

1. Buford Goff & Associates
2. Gather and document CFW requirements
3. Include other major system owners in Tarrant County
 - a. Arlington
 - b. NETCO
 - c. Mansfield
 - d. Grand Prairie
3. Master plans for City and Tarrant County Region
4. Final pricing for Motorola P25 system to replace existing systems
5. Project kickoff – June 2010
6. Project completion – January 2011

C. P25 Radio System – Phase 1 (\$1.7-million)

1. Agreement executed with Motorola in 3Q2010
2. Provides core switch for P25 system and one site (Burnett Plaza)
 - a. Used parallel to existing systems
 - b. Oversized switch to accommodate additional systems in region
3. Ten channels
 - a. Six for CFW
 - b. Four to replace Harris site for NCTCOG Regional Overlay
 - (1) Improves operation of Overlay System
 - (2) Frees Harris equipment for future redeployment
4. ISSI connection to Dallas' P25 master switch
5. Project kickoff – October 2010
6. Project completion – April 2011

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- D. Microwave System (\$1.2-million)
 - 1. Ties system sites to PSAPs
 - 2. Installed in 1997
 - 3. Most components out of support
 - 4. Increasing failure rate affecting dispatch
 - 5. Upgrade project underway
 - a. Funding acquired (2004 Bond Program)
 - b. Estimated completion in June 2011

- E. Towers (appr. \$5.3-million)
 - 1. Replace Rolling Hills (480 ft.) – February 2011 (built in early 1970s)
 - 2. Replace Holly (400 ft.) – 2012 (built in early 1970s)
 - 3. Decommissions (several) – 2011 through 2013

- V. P25 Radio System – Phase 2 (Planned)
 - A. Replacement Radio System (est. \$45-million to \$70-million)
 - 1. Motorola P25 digital system utilizing master switch/site installed in 2011
 - 2. Includes both Public Safety and Public Works w/ability to use either
 - 3. Six sites initially
 - a. Existing (Burnett Plaza, Eagle Mountain, North Beach, Eules, Rolling Hills)
 - b. New (Aledo)
 - 4. Expansion plans through 2019
 - a. South Tarrant Co./North Johnson Co. – two sites
 - b. Far north Tarrant Co. – one site
 - 5. Connects to existing Arlington and NETCO systems
 - 6. Capability to expand to other agencies
 - a. Shared sites – single system
 - b. Separate systems – single master switch as core for all systems
 - c. Backup switch for other systems statewide
 - 7. Requires some radio replacements, but utilizes most existing radios with upgrades
 - 8. Monitored and supported by Motorola
 - 9. Meets interoperability requirements established by state and federal authorities
 - 10. Discounts off HGAC pricing for CFW customers and master switch users through migration
 - a. Infrastructure
 - b. Subscriber units
 - 11. Migration complete by September 2014