Public Safety Radio In-Building Coverage Update

Public Safety Committee
May 15, 2014
Presentation Topics

» Scope and History

» Required Building Progress to Date

» Downtown Tunnel System Update

» Fire Code Changes
Existing Systems

» Antiquated
» Low Capacity
» Low Reliability
» Poor Coverage
» Poorly Maintained
Consolidated System

» Modern
» Ultra High Capacity
  > Room to Share
» Incredibly Reliable
» Dramatically Improved Coverage
» Enhanced Security with Voice Encryption
» Well Maintained
RCA Approved – October 2008

- $132.3 million contract value

- Increased Coverage (16 to 48 sites)
- Increased Capacity (5X)
- Increased Reliability through redundancy
- Increased Interoperability

Safety of First Responders and the Public They Serve
Coverage Testing
Coverage Testing

Public Safety

M3 Coverage Test

Portable On-Street

- Passed
- Failed
- Inaccessible

Grids Tested: 8,623
Grids Failed: 2
Tested & Passed: 99.98%
Coverage Testing

Public Safety
M3 Coverage Test
Portable On-Street
Downtown

- Passed
- Failed
- Inaccessible

Grids Tested: 217
Grids Failed: 0
Tested & Passed: 100%
Coverage Testing

Public Safety
M3 Coverage Test
Random Buildings

- Passed
- Failed
- Inaccessible
- No Building

Grids Tested: 4,003
Grids Failed: 41
Tested & Passed: 99.0%
Coverage Testing

Public Safety
M3 Coverage Test

Random Buildings
Downtown

- Passed (132)
- Failed (0)
- Inaccessible (2)
- No Building (84)

Grids Tested : 132
Grids Failed : 0
Tested & Passed : 100%
HFD & HPD identified 147 buildings that had to have coverage no matter what

147 buildings = more than 550 structures

10 structures failed to meet the 95% coverage requirement

City-wide 43 structures tested required some type of remediation

Average cost per square foot of $0.61/Sq’

1 Building refused to allow the remediation work

Last building (3 structures at U of H) began this week and should be completed by June 15th
Agreement with Cellular consortia in August 2012

Individual Agreements with each Building Owner

> 5 out of 43 still unsigned
  + Negotiation complete waiting for owner to execute
    – Pensoil Place & Chronicle
  + At an impasse regarding insurance
    – Reliant Energy Plaza
  + No response to repeated requests
    – Wells Fargo Plaza & JP Morgan

Design completed including contingency for 5 unsigned buildings

Projected Completion - December 2014
Fire Code Changes

» Working for several years on Houston specific changes to the Fire Code

» Vetted with Industry also for several years

» Intended to enact local amendments this month

» Recently published edition of National Fire Code includes most items

» Anticipated local adoption process completion in September/October timeframe
New Code Highlights

» Provides for 95% coverage throughout buildings

» Requires FCC compliant equipment with 24-hour battery backup in a water proof cabinet

» Must be installed by FCC general class technician certified by the manufacturer

» Requires test plan, maintenance schedule, and proof of compliance subject to annual review by Fire Code Official
Local Amendments

» 99% Coverage in Fire Control Room

» Establish a time frame for buildings to comply with this section of the new Fire Code

» Establish a time frame for completion of building remediation once a location is found to be non-compliant

» Require Professional Engineer review of compliance plans
Summary

» Current State of In-building Coverage is Excellent

» Required Buildings will be completed by June 15th

» Tunnel System still some building hold outs but scheduled for completion by end of 2014

» Continue to ensure In-building coverage by adopting newest version of National Fire Code with a couple of local amendments

Continue to provide the best service possible to protect our first responders and the public they serve