

Houston IT Services (HITS)



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



Consolidated System



- » 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

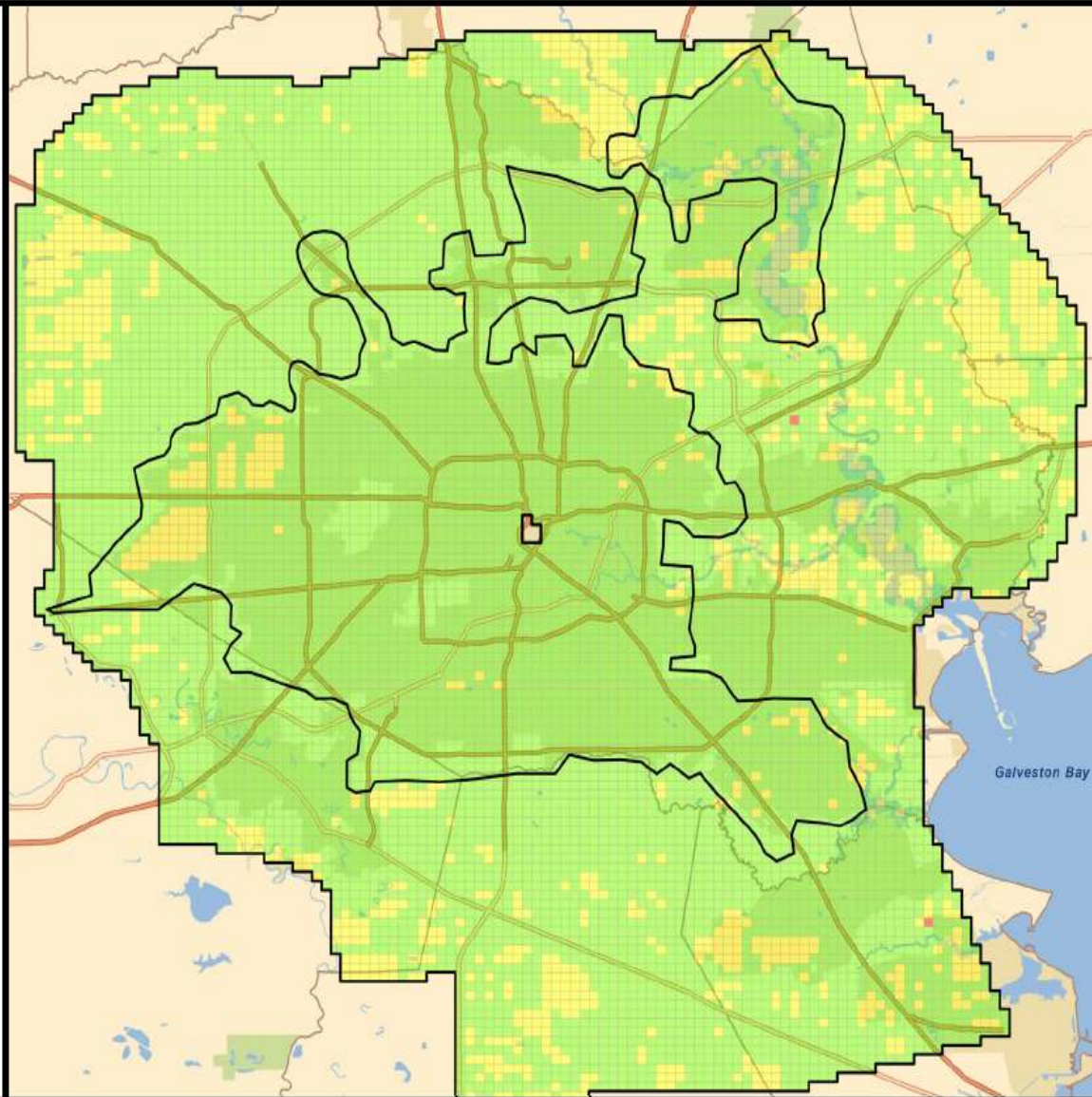
Portable On-Street

- Passed
- Failed
- Inaccessible

Grids Tested : 8,623

Grids Failed : 2

Tested & Passed : 99.98%



Coverage Testing

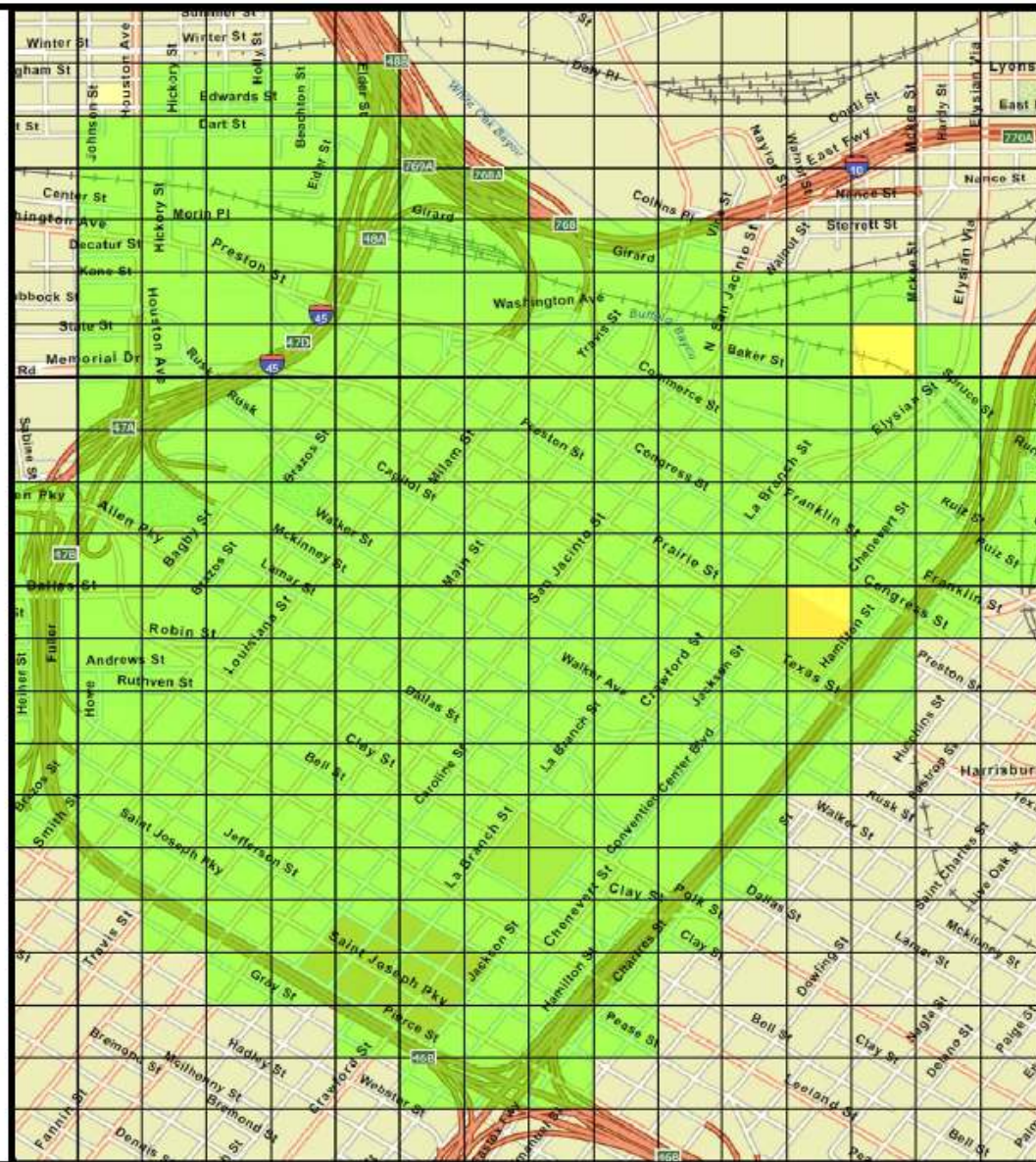


Public Safety M3 Coverage Test

Portable On-Street Downtown



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



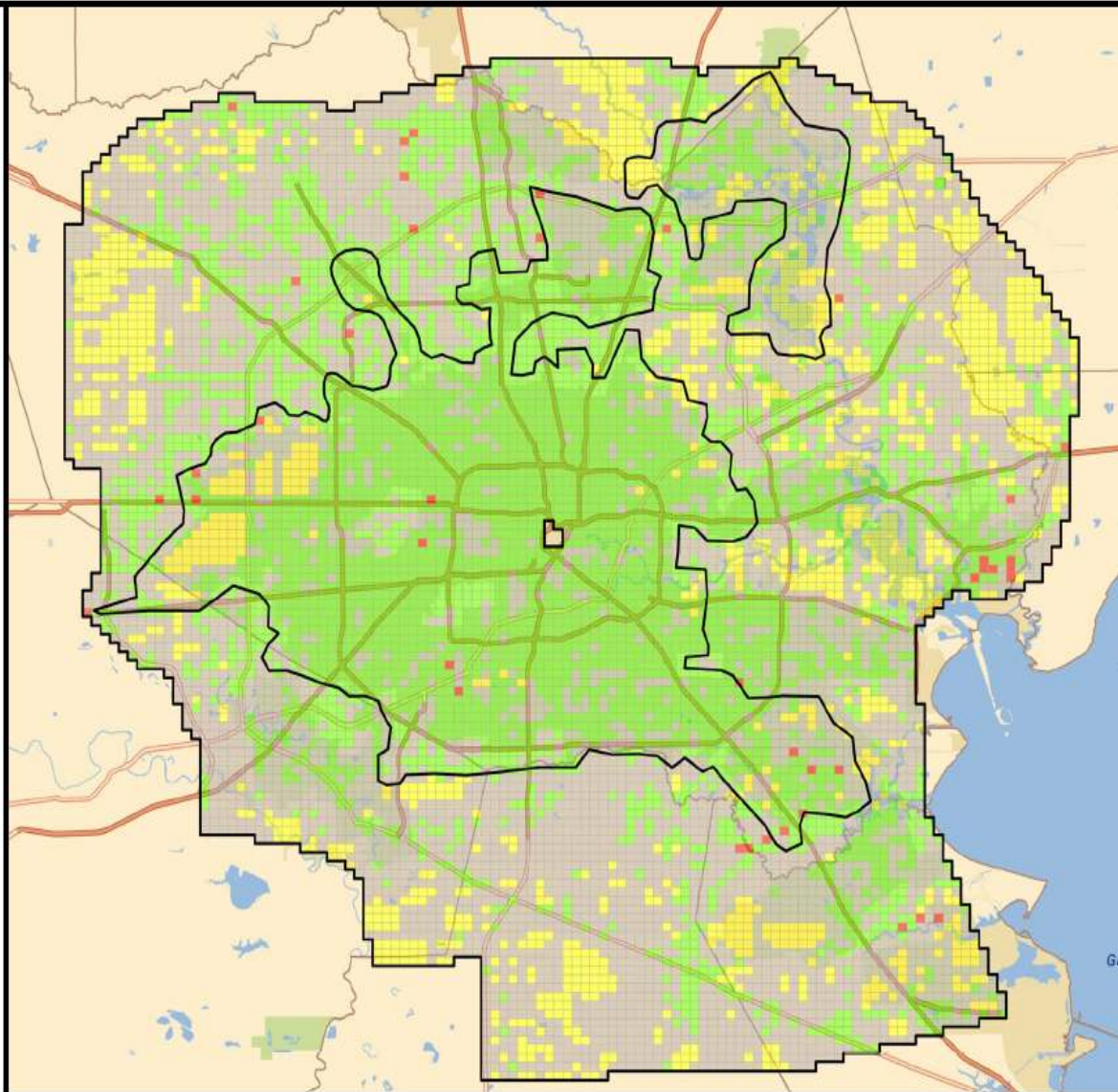
Coverage Testing



Public Safety M3 Coverage Test Random Buildings

- Passed
- Failed
- Inaccessible
- No Building

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

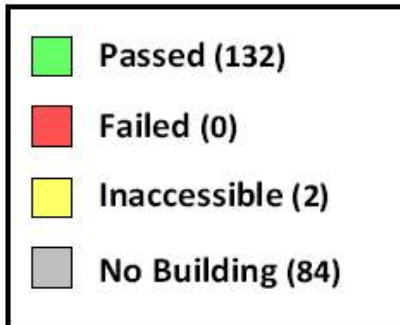


Coverage Testing



Public Safety M3 Coverage Test

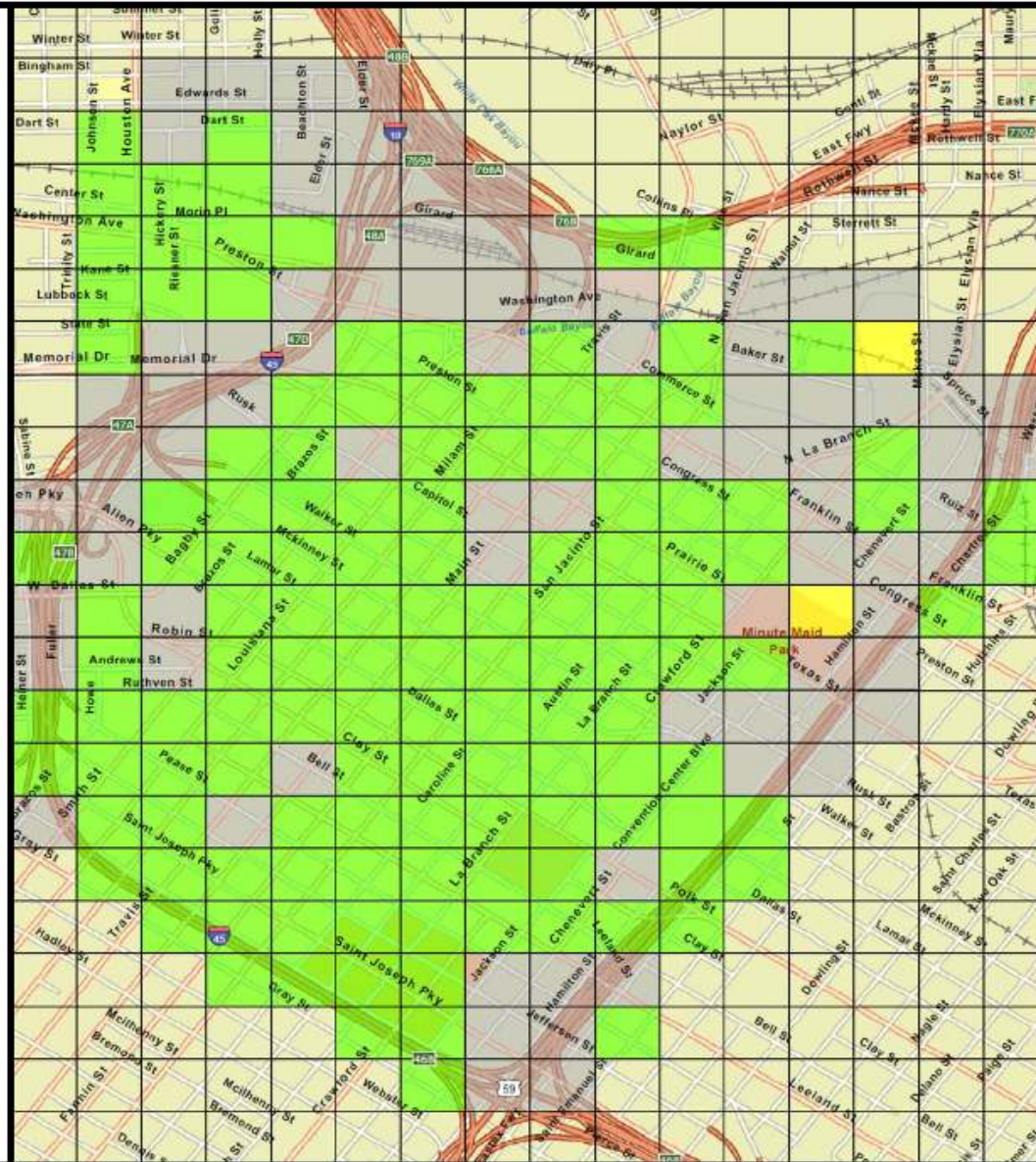
Random Buildings Downtown



Grids Tested : 132

Grids Failed : 0

Tested & Passed : 100%



Required Buildings



- » 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



Downtown Tunnels



- » 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