

T-Band: What's Next for Public Safety?

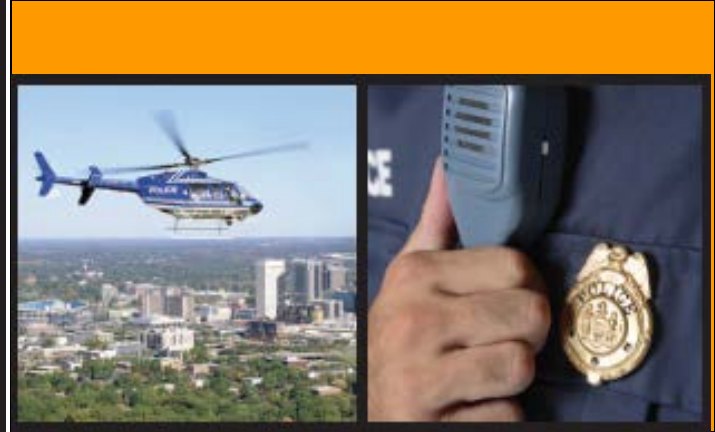
APCO International
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The member organizations of the National Public Safety Telecommunications Council are grateful to the Department of Homeland Security's Science and Technology Directorate, Office for Interoperability and Compatibility (OIC) and the National Protection and Programs Directorate, Office of Emergency Communications (OEC). Points of view or opinions expressed are those of the originators and do not necessarily represent the official position or policies of the U.S. Department of Homeland Security.

Panelists



- Stu Overby, Vice-Chair NPSTC Spectrum Management Committee and Senior Director, Spectrum Strategy, Motorola Solutions
- David Troup, Greater Boston Area Police Council
- Donald Wright, President, Intelligent Communications Solutions Inc.; Member, NPSTC T-Band Working Group and former Executive Director, ICIS Radio System
- Harlin McEwen, Chair, IACP Communications and Technology Committee



T-Band Background and NPSTC Report Summary

Stu Overby

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T-Band (470-512 MHz)

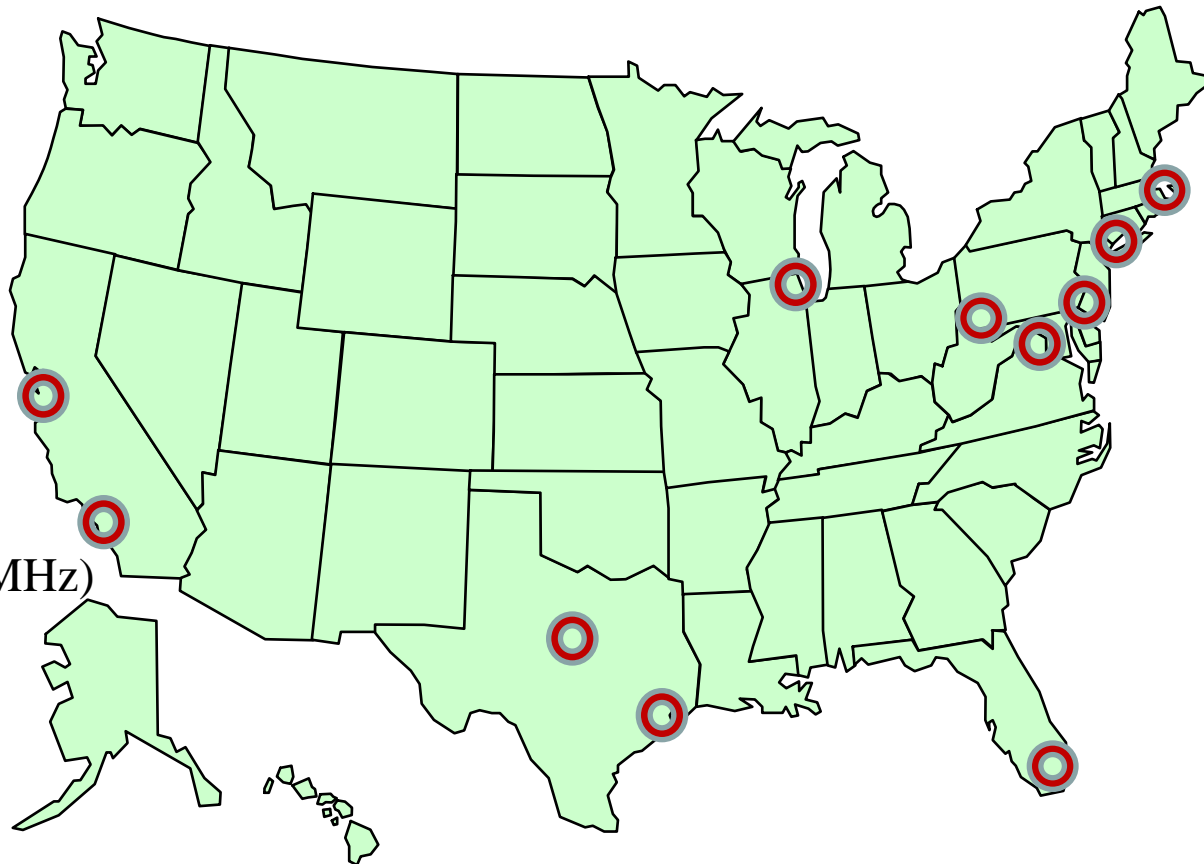


- T-Band is a major spectrum resource for public safety-- available since 1971
- Portion of T-Band Spectrum is used to support systems within a 50 mile radius of 11 top metro areas
- Spectrum used by public safety, public works, transportation, petrochemical industry, others.

Amount of T-Band Spectrum

- Boston (12 MHz)
- Chicago (12 MHz)
- Dallas/Fort Worth (6 MHz)
- Houston (6 MHz)
- Los Angeles (24 MHz)
- Miami (6 MHz)
- New York/NJ (18 MHz)
- Philadelphia (12 MHz)
- Pittsburgh (12 MHz)
- San Francisco (12 MHz)
- Washington DC/MD/VA (12 MHz)

Public Safety portion of this spectrum varies by market.



- Section 6103 of 2012 Spectrum Act requires FCC to auction public safety T-Band spectrum for commercial use and move public safety from band
 - Begin T-Band auction within 9 years (by 2/22/2021)
 - Clear public safety from the band by 2 years of auction close
- T-Band auction proceeds can be used toward relocation costs.

Subsequent Actions



- April 2012: FCC imposed a freeze on new or expanded licenses in T-Band
- June 2012: NPSTC chartered working group to study impact of legislation and FCC freeze on public safety.
- Feb. 2013: FCC issued a Public Notice seeking comments on options at T-Band (PS Docket 13-42)
- March 2013: NPSTC issued its T-Band Report
- May 2013: NPSTC filed its Report with FCC

NPSTC T-Band Report Findings



- 5 of the 11 markets have insufficient spectrum in other bands to accommodate public safety T-Band relocations; 3 additional markets are marginal
- Analysis indicates estimated relocation costs would be \$5.9B for public safety in all 11 metro markets
- T-Band auction proceeds unlikely to cover relocation costs
- Loss of T-Band will impact Interoperability
- Planned expansions are being impacted by FCC freeze
 - Note: FCC will consider requests for waivers of the licensing freeze



NATIONAL PUBLIC SAFETY
TELECOMMUNICATIONS COUNCIL



Boston Area Police Emergency Radio Network (BAPERN)

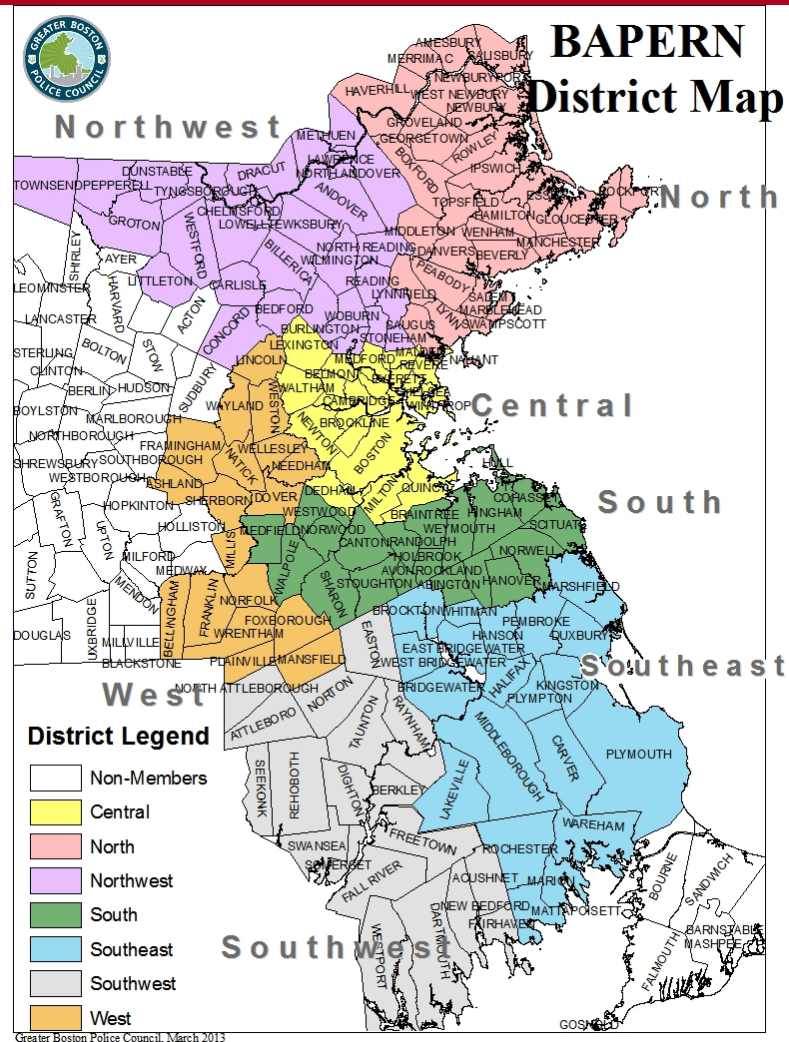
David Troup

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BAPER



Boston Area Police Emergency Radio Network



NPSTC is a federation of organizations whose mission is to improve public safety communications and interoperability through collaborative leadership.

BAPER N Membership



- 166 Members:
 - Local Police (130)
 - Campus Police (17)
 - Federal law enforcement agencies (8)
 - County Sheriff's Departments (5)
 - State Agencies (4)
 - Hospital Police (2)
- System is used every day to communicate essential public safety information.
- Access to the BAPER N System includes certain fire service, public health and public works for command and control in emergency situations

BAPER N System (T Band Channels)



12 Fully Operational Channels are Available:

- 2 Areawide Channels
 - 6 District Channels
 - 4 District Digital Tactical Channels
-
- All member agencies have radios programmed with a standardized BAPER N Channel Plan.

BAPER N Coverage Area



- Over 2,000 sq. mi (25% of Commonwealth)
- Population of over 3.5 Million (1/2 of state population)
- Over 9,700 Law Enforcement Officers

- BAPER N has 22 simulcast sites, 22 receive sites and redundant control equipment.

Fire Service



- 83 have a T-Band Channel as their primary channel
- 4 regional mutual aid/interoperability T-Band systems using 23 T-Band Channels

NPSTC T-Band Report



- \$831 million to transition public safety in the Boston Area.



Contact Information



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NPSTC

**NATIONAL PUBLIC SAFETY
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T-Band in the Greater Los Angeles Area

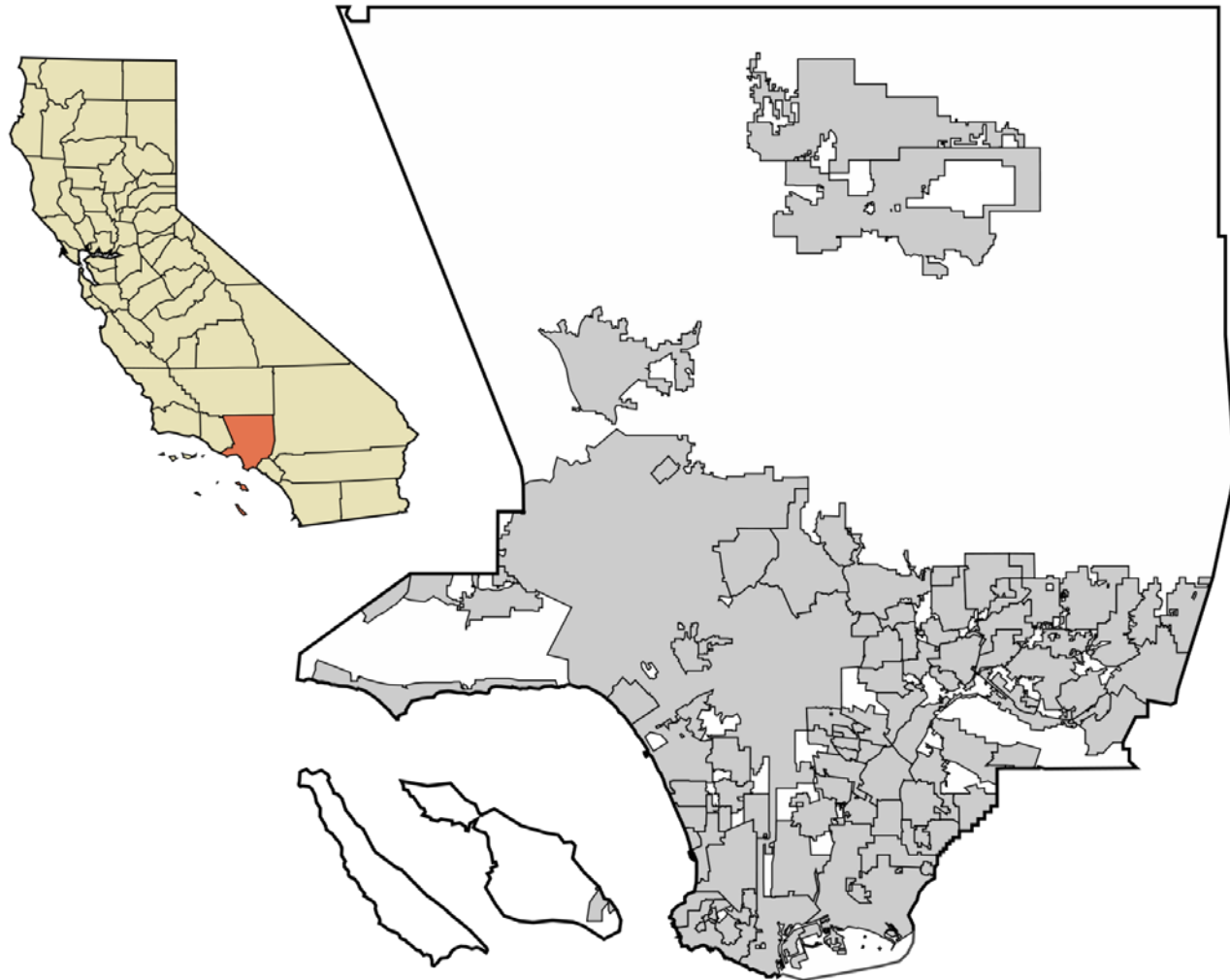
Donald Wright

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Regional Overview



- The County of Los Angeles is approximately 4000 square miles
- There are 88 Cities in the County
- The population of the County is approximately 12 million people
- There are over 600 T-Band channel pairs licensed in the County for municipal operations



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Original Plans

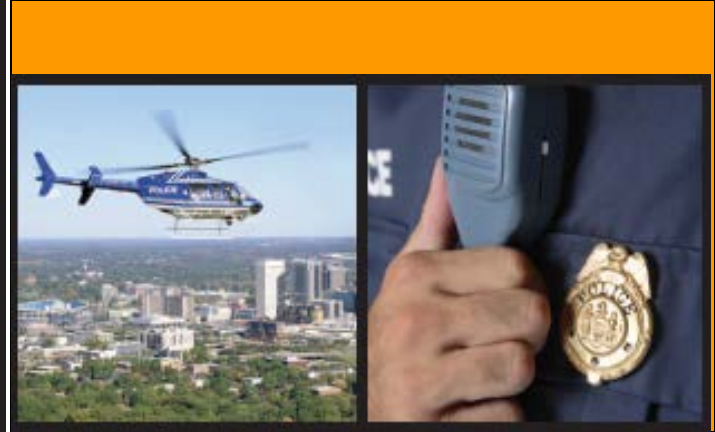


- In 2006 the City of Los Angeles contracted with RCC to evaluate and recommend a regional network solution
 - *Recommendation for UHF trunked system*
- In 2008 the County of Los Angeles was granted TV channel 15 to augment public safety communications in the region
- It remains unclear what other band can provide this much spectrum in this region

Current Environment



- Several agencies with T-Band holdings have placed plans to upgrade on-hold
- New sites planned for and funded have been modified or scrapped due to limitations imposed by the FCC freeze
- Agencies planning to join regional networks in T-Band are now waiting
- Agencies fear a loss of spectrum with no substitute being made available



T-Band- What's Next?

Harlin McEwen

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Thoughts on Next Steps



- T-Band Legislation

- FCC T-Band License Freeze

Note: Pending any change in the freeze, FCC will consider individual requests for a waiver of the freeze

Q and A