Federal Communications Commission
Public Safety and Homeland Security Bureau
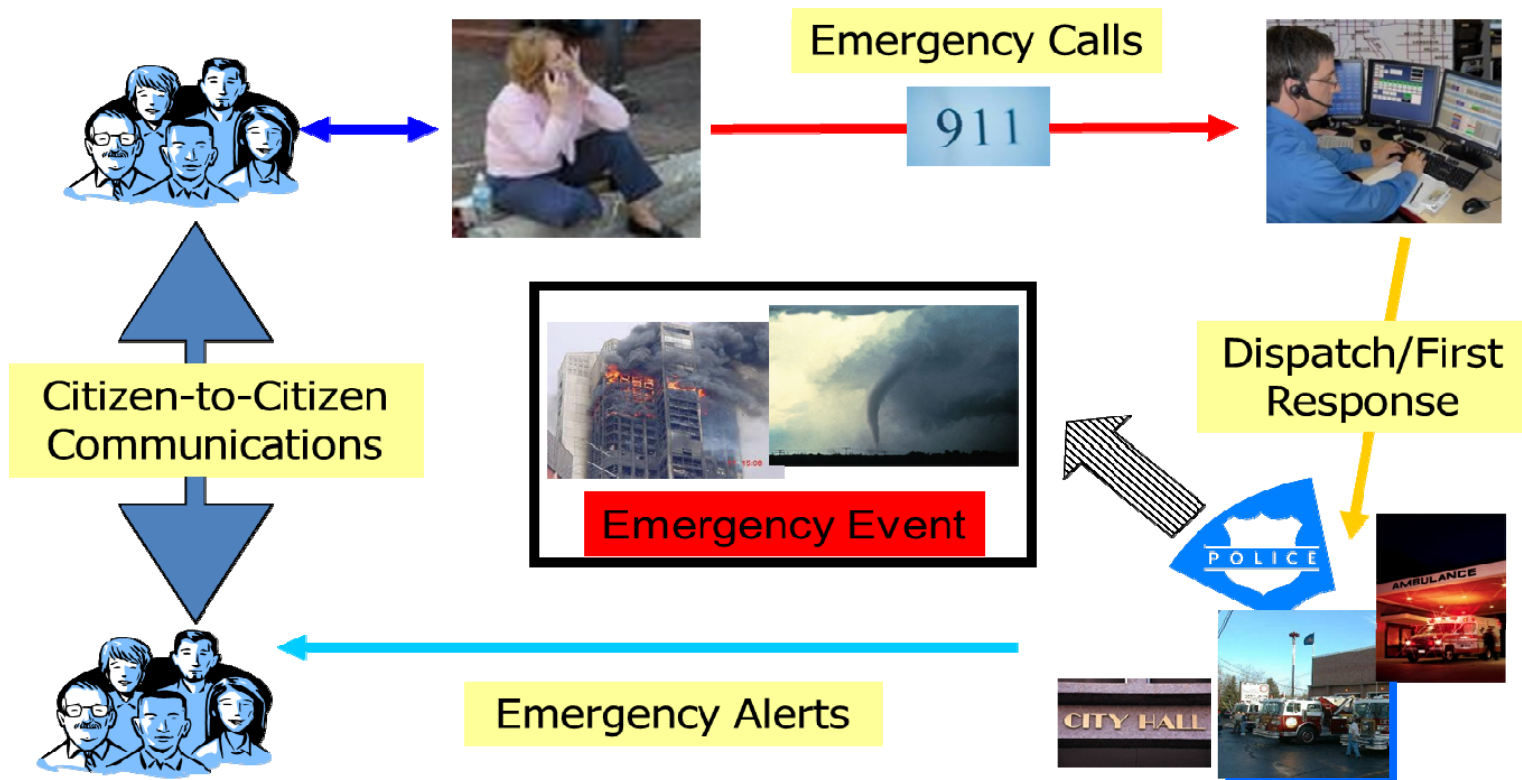
The Road to
Next Generation 911

911 Goes to Washington
March 24, 2014

David L. Furth
Deputy Chief
Public Safety and Homeland Security Bureau

Emergency Communications Ecosystem

Emergency Calls
911

Citizen-to-Citizen Communications

Emergency Event

Dispatch/First Response

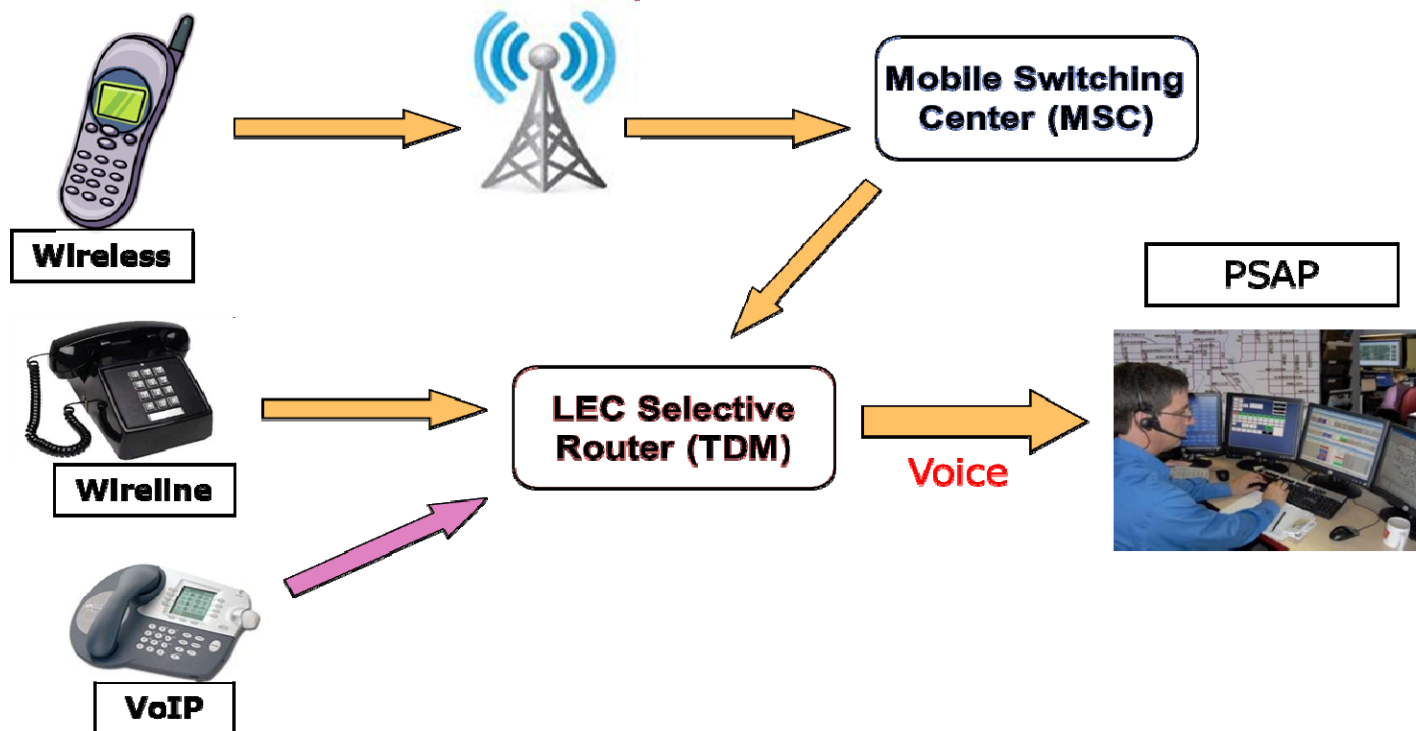POLICE

CITY HALL

Emergency Alerts

2

Next Generation 911

- NG911 will provide existing and new 911 services over IP rather than over the legacy TDM telephone network

- Comparing NG911 to Legacy 911:
  - IP network architecture more flexible and resilient than TDM
  - Improved accessibility, particularly for people with disabilities
  - Enhanced capabilities can enhance speed and effectiveness of emergency response

- Over time, NG911 will fully replace the legacy 911 system, but the transition will take time and will not be uniform
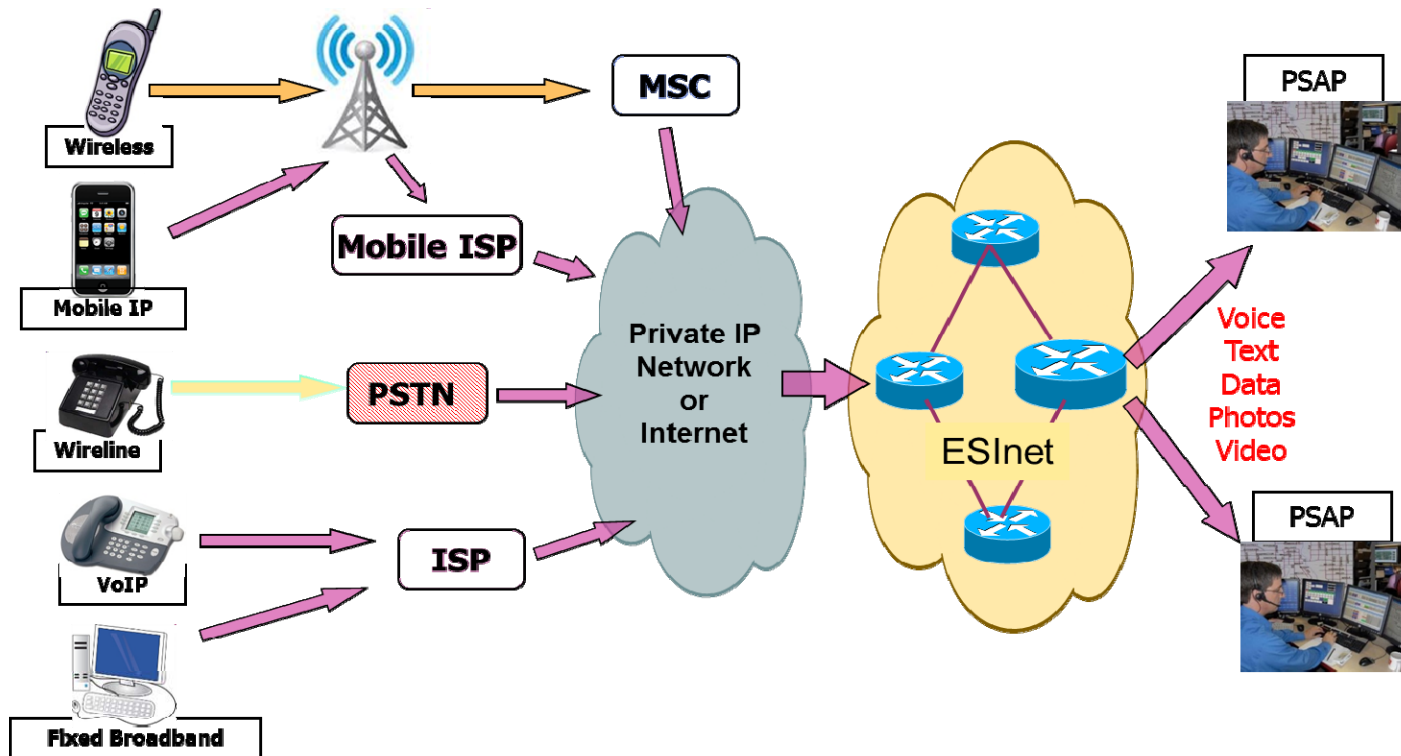
Legacy 911 Architecture

Wireless

Wireline

VoIP

Mobile Switching Center (MSC)

LEC Selective Router (TDM)
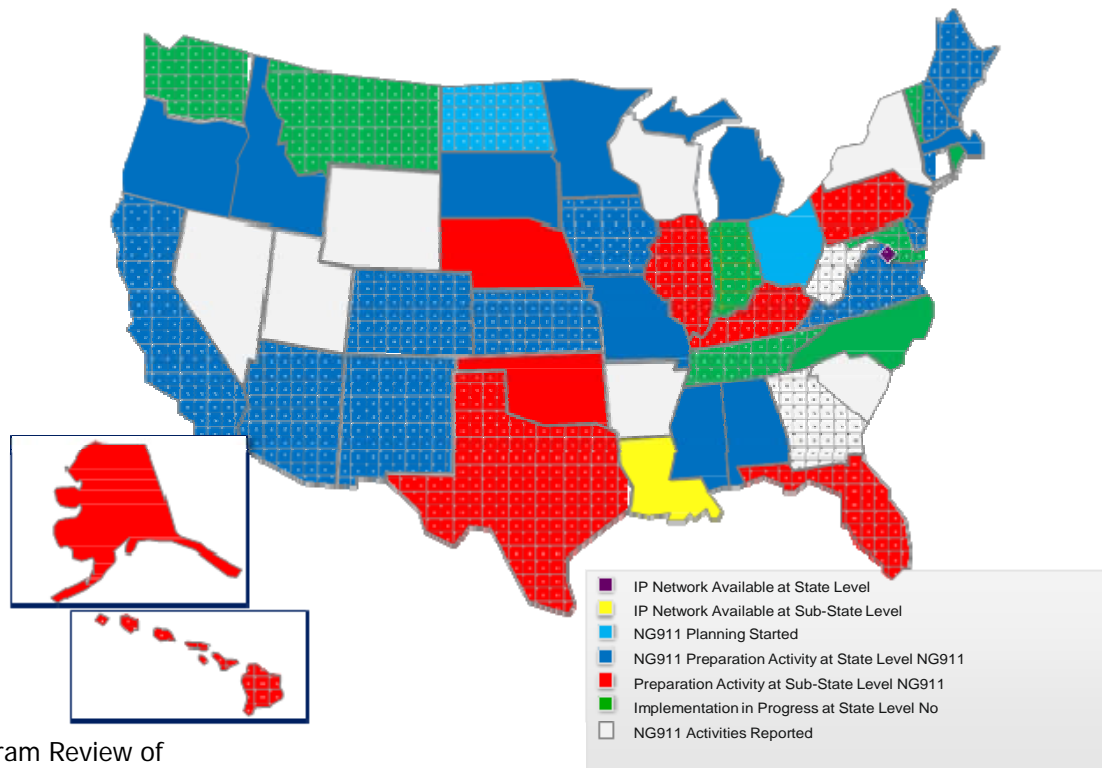
Voice

PSAP

NG911 Architecture

Are We There Yet?

- NG911 evolution is work in progress, with many technical, operational, financial, and governance challenges still to be addressed

- The communications networks that support the public's access to 911 are already transitioning to IP; major communications providers ultimately intend to decommission their legacy TDM networks

- Some state and local 911 authorities have taken initial NG911 transition steps, but most PSAPs remain heavily reliant on legacy network elements

NG911 Status by State

Legend:
- IP Network Available at State Level
- IP Network Available at Sub-State Level
- NG911 Planning Started
- NG911 Preparation Activity at State Level NG911
- Preparation Activity at Sub-State Level NG911
- Implementation in Progress at State Level No
- NG911 Activities Reported

Source: National 911 Program Review of
Nationwide 911 Data Collection, July 2013

What Is Needed to
Complete the NG911 Transition?

- Enhanced consumer and PSAP capabilities to support delivery and use of multimedia information (voice, text, data, photos, and videos)

- Effective location accuracy determination for all NG911 applications

- Comprehensive and consistent technical standards to ensure functionality, interoperability, and security of all system elements

- Adequate and sustainable funding

- Workable framework for NG911 governance

Recent FCC Activity to Further the NG911 Transition

- Enhanced Capabilities: Text-to-911 rulemaking, voluntary deployments, and consumer outreach

- Location Accuracy: E911/NG911 location accuracy rulemaking proposals

- Standards: CSRIC working group activity on emerging technical issues (e.g., indoor location testing, text-to-911 location determination)

- Funding: Annual 911 fee report (new spotlight on NG911 funding)

- Governance: FCC report to Congress on NG911 legal/regulatory framework (2013)

What's Ahead

- **Further action on Text-to-911 and Location Accuracy**
  - Text-to-911 comments due April 4, replies due May 5
  - Major carrier voluntary text-to-911 implementation: May 15
  - Location accuracy comment dates to be announced shortly
- **FCC Technology Transitions proceeding and trials – launched January 2014**
  - Opportunity to test impact of IP transition on 911
  - FCC Technology Transition Workshop on public safety issues: April 17-18
- **Continued FCC engagement with other NG911 stakeholders (federal, state/local/tribal, industry, consumer groups)**

Thank You!

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