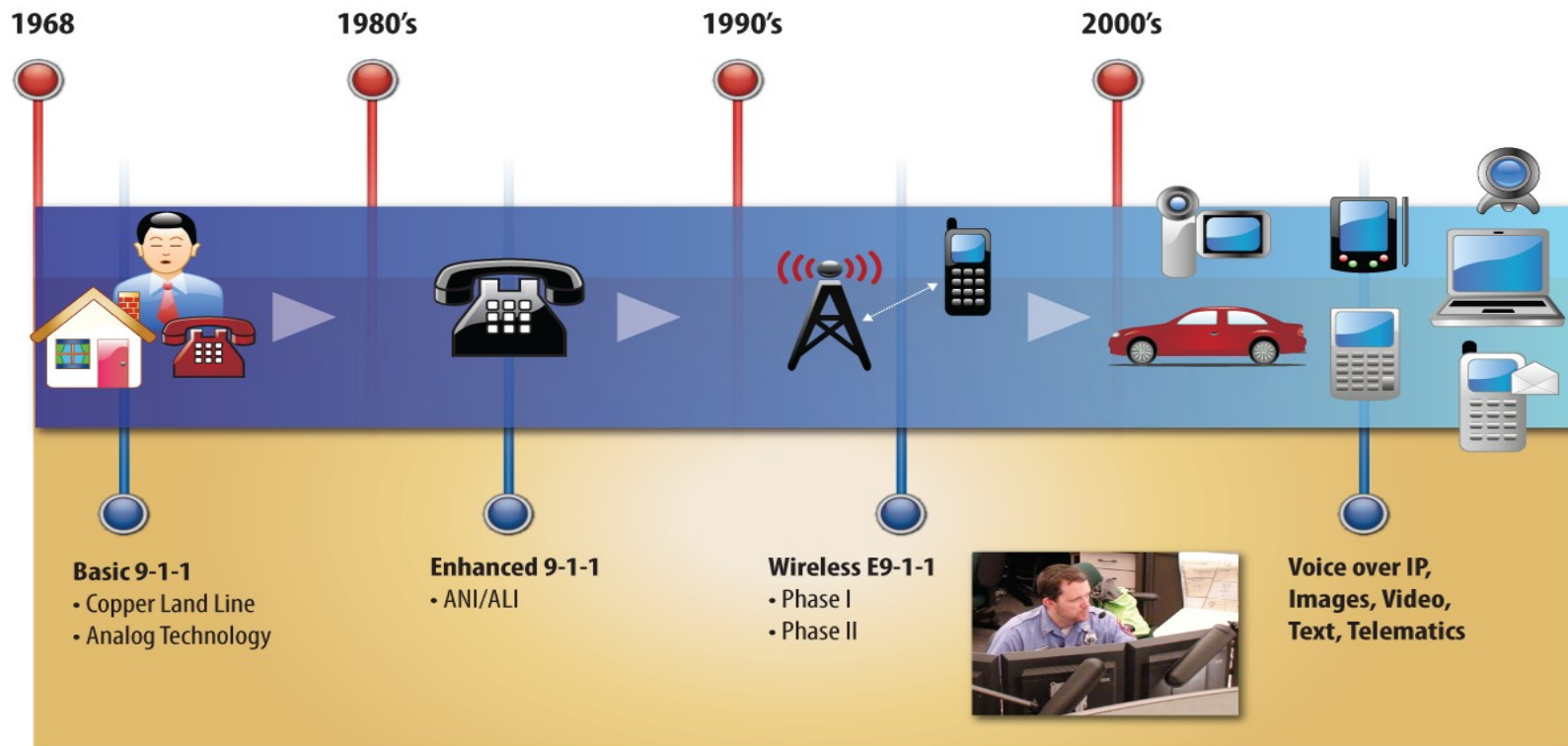


***Building & Funding  
Tomorrow's 9-1-1 System***

NCSL, December 2009  
Laurie Flaherty  
National 9-1-1 Office

# The Current 9-1-1 Network



# *Problem Statement*



# ***Consensus of 9-1-1 Community***

Capitalize on advances in technologies that provide:

- ✓ Quicker and more accurate information
- ✓ Better and more useful forms of information (real-time text, images, video, and other data)
- ✓ More flexible, secure and robust Public Safety Answering Point (PSAP) operations
- ✓ Increased sharing of data, resources, procedures, and standards
- ✓ Promotion of increased coordination and partnerships

# USDOT NG9-1-1 Project



## Background:

*Research and development project, funded by the USDOT's Intelligent Transportation Systems (ITS) Joint Program Office (JPO),  
To define a NG9-1-1 system architecture and develop a transition plan for deploying digital, Internet Protocol (IP)-based 9-1-1 systems.*

## Long Term Goal:

*To enable the general public to make a 9-1-1 "call" (any real-time communication – voice, text, or video) from any wired, wireless, or IP-based device, and  
Allow first responders to take advantage of advanced real-time call delivery and data functions through new internetworking technologies based on open standards.*

# Wireless Connectivity is the Future of the Intelligent Transportation System Program

Research



## Major ITS Initiatives

### Traditional ITS Technologies



Ramp Metering



Transit Information



CV Electronic Credentialing



Transportation Management Centers



ICM



IVSS



IntelliDrive<sup>SM</sup>



MSAA



NG911

### Wireless Connectivity



Drivers



Vehicles



Infrastructure



Wireless Devices



Deployment



Demonstration/Deployment

# Next Generation 9-1-1



Today's 9-1-1	Next Generation 9-1-1
Primarily voice calls via telephones	Voice, text, or video information, from many types of communication devices
Minimal data available	Advanced data sharing is automatically performed
PSAP services – access, transfer, backup – are local only	Enhanced “long distance” capabilities; physical location of PSAP becomes immaterial
Limited capability for emergency notification	Location-specific emergency alerts possible for any networked device

# US DOT NG9-1-1 Initiative



- **Technical**
  - Concept of Operations > Requirements > Architecture
  - Architecture > Proof of Concept demonstration
- **Institutional**
  - Transition Plan
  - Analysis of Cost, Value & Risk



# ***US DOT NG9-1-1 Initiative***



## **Transition Analysis**

Preliminary Analysis of Cost, Value & Risk  
Report on Critical Deployment Issues



Final Transition Plan  
Final Cost, Value and Risk Analysis



# *Transition Plan*

- Deployment Strategies
- Transition Issues
  - Funding
  - Operations
  - Standards and Technology
  - Governance & Policy

<http://www.its.dot.gov/ng911/index.htm>

**Also: Procurement Tool Kit**





# *Analysis of Cost, Value & Risk*

- Assumption: Hybrid Model
- Cost
  - Planning, Upgrading, Maintaining
  - Operating Costs comparable to maintaining present model
  - NG9-1-1 provides greater potential for cost savings
- Value [80% more value than present system]
  - Quicker transmission of useful, actionable information
  - Geographic-independent call access, transfer and backup
  - Increased interoperability and coordination
  - Increased access by public
- Risk
  - 17 Key Risks Identified
  - Risk adjusted lifecycle costs within range of current costs
  - Risks can be further mitigated by cost sharing

# ***A National Plan for Migrating to IP-enabled 9-1-1 Systems***

- NET Improvement Act (2008)
- Benefits, Barriers, Strategies
- Access for Disabled (e.g., hearing impaired)
- Analysis of status of automatic location information (i.e., nomadic devices and high-rise buildings)
- Experiences of early adopters
- **Issues for possible legislative or regulatory action**

<http://www.e-911ico.gov/>

# ***Potential Role for NCSL:***

- NG Transition Plan: Appendix D: State Government
  - Funding, Operations, Standards & Technology, Governance & Policy
- National NG Migration Plan: Executive Summary
  - Changing relationship between PSAP and Networks (Service/Network Providers)
  - Clarifying jurisdictional relationships and responsibilities at each level of government
  - System access and security controls
  - Ensure broad enough authority for 9-1-1 agencies
- Direct Responsibility/Authority AND Indirect Influence, Support & Promotion

# Are Law Enforcement and Fire Services defined as essential services by your state?

- How do people in your state call for help from Law Enforcement and Fire Services?
- Is 9-1-1 defined as an essential service by your state?

# Diversion of 9-1-1 Funds

FCC Report: July 2009

- Illinois
- Maine
- New Jersey
- New York
- Oregon
- Rhode Island
- Utah
- Wisconsin

# Diversion of 9-1-1 Funds

<u>FCC Report</u>	<u>9-1-1 Grant Program</u>
• Illinois	(\$1,343,670.00)
• Maine	(\$500,000.00)
• New Jersey	(\$666,876.00)
• New York	(\$1,603,343.00)
• Oregon	(\$500,000.00)
• Rhode Island	(\$500,000.00)
• Utah	(\$500,000.00)
• Wisconsin	(\$820,409.00)



# Diversion of 9-1-1 Funds

<u>FCC Report</u>	<u>9-1-1 Grant Program</u>	<u>Counties w/o or Basic 9-1-1</u>
• Illinois	(\$1,343,670.00)	13 counties
• Maine	(\$500,000.00)	-
• New Jersey	(\$666,876.00)	-
• New York	(\$1,603,343.00)	1 county
• Oregon	(\$500,000.00)	(phase I)
• Rhode Island	(\$500,000.00)	-
• Utah	(\$500,000.00)	(phase I)
• Wisconsin	(\$820,409.00)	2 counties

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