



Intelligent Transportation Systems
U.S. Department of Transportation



The U.S. Department of Transportation

9-1-1 and the Next Generation

Linda Dodge – ITS Joint Program Office – USDOT

Jenny Hansen – Contractor – NG9-1-1 Project Coordinator

USDOT – NHTSA



Overview

- ✓ **Emergency Medical Services (EMS) and 9-1-1 at DOT**
- ✓ **Secretarial Wireless E9-1-1 Initiative**
- ✓ **Next Generation 9-1-1 Initiative**
- ✓ **National 9-1-1 Office**





9-1-1, EMS and DOT



- **Highway Safety Act of 1966**
- **9-1-1 as part of the Emergency Medical Services (EMS) system**
- **National Highway Traffic Safety Administration (NHTSA)**
 - **Office of EMS: Federal EMS Lead Agency**





Wireless Enhanced 9-1-1 (WE9-1-1) Initiative

Secretary of Transportation Norman Y. Mineta:

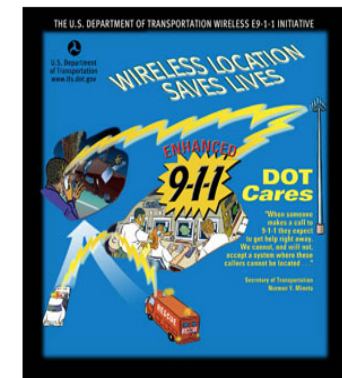
- Convened a Wireless E9-1-1 Stakeholder Summit in April 2002
- Accelerating the deployment of wireless E9-1-1
- National leadership and attention to the WE9-1-1 issue





WE9-1-1 Initiative: Accomplishments

- **Priority Action Plan**
 - Product of Steering Council and Expert Working Group
- **Technical Assistance Products for PSAPs**
 - Clearinghouse; videos; PSAP survey and database
 - Produced under contract with NENA
- **Technology Innovation Roundtable**
 - Reexamination of WE9-1-1 technological approaches
 - Led to Next Generation 9-1-1 Initiative

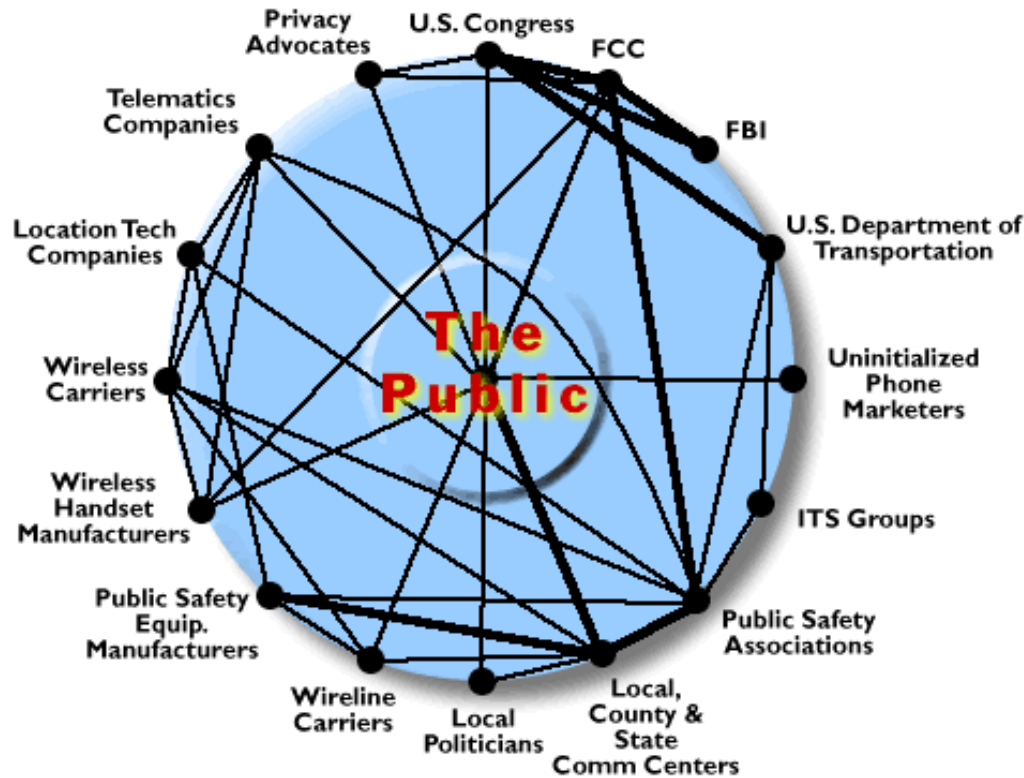




NG9-1-1 Project: An Impact Statement



The Web of Wireless 911 & Location Technology



DISPATCH Monthly graphic



NG9-1-1 Project: Today and Tomorrow



Today's 9-1-1	Future 9-1-1
Primarily voice calls via telephones.	Voice, text, or video from many types of communication devices
Minimal data	Advanced data capabilities
Local access, transfer, and backup	“Long distance” access, transfer, and backup
Limited capability for emergency notification	Location-specific emergency alerts possible for any networked device

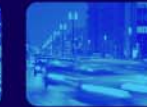


Consensus within the 9-1-1 Community



Capitalize on advances in technologies that provide:

- ✓ Quicker and more accurate information to responders
- ✓ Better and more useful forms of information
- ✓ More flexible, secure and robust PSAP operations
- ✓ Lower capital and operating costs



NG9-1-1 Project: The Goal



Long Term Goal:

To design a system that enables the transmission of voice, data or video from different types of communication devices to the Public Safety Answering Points (PSAPs) and onto emergency responder networks.

Major Milestones:

- National architecture and high-level design for NG9-1-1 System
- Proof of Concept
- Transition plan for NG9-1-1 implementation



NG9-1-1 Project: Program Plan



- **Engage stakeholders**

- Public and Private Agencies
- Create Partnerships
- Connecting the Dots



- **Establish the vision**

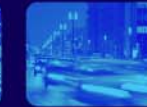
- National Architecture (*Internetwork*)



- **Define the future**

- Collaboration
- Shared Systems
 - Full Autonomy at the Local Level
 - Robust Network
 - Continuity of Operations

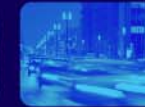




NG9-1-1 Initiative: Design Assumptions



- Access to emergency services will occur within a broader array of interconnected emergency networks
- The system must support the transmission of voice, text, images and other data from all types of communication devices
- Will build on existing IP-based functionality already inherent in the Internet and similar packet-based infrastructure
- Will require new emergency response network architecture to be designed, along with new and modified standards



NG9-1-1 Initiative: IACP Considerations



- The ability to generate and communicate new data and information about an event
- More effective incident management
- Safer First Responders
- Fault tolerant, flexible infrastructure in place to support flow of multi-media forms of data and information from and to all types of devices



NG9-1-1 Project: Current Activity



- RFP closed: July 6, 2006 (4:15 p.m.)
 - <http://www.fbo.gov/spg/DOT/FHWA/OAM/DTFH61%2D06%2DR%2D00030/SynopsisP.html>
- Evaluating the proposals
- Continue engaging the stakeholders (public and private)
- Conduct meeting of Federal agencies
- Continue monitoring standards development activities
 - Provide the bridge between this initiative and on-going IP-telephony standards development and related activities



National 9-1-1 Office



ENHANCE 911 Act of 2004 (PL 108-494)

- Federal 9-1-1 responsibilities:
 - Formal program and policy coordination across federal agencies.
 - Federal funding support to PSAPs and related state and local agencies for E9-1-1 deployment and operations.



ENHANCE 911 Act (PL 108-494)



- Requires NHTSA and NTIA to coordinate on 9-1-1 (FCC and DHS)
 - Create an E9-1-1 Implementation Coordination Office (ICO)
 - Establish a joint program to facilitate coordination and communication
- DOT is authorized up to \$250 million per year for five years for the grant program (*no funds appropriated*)



ENHANCE 911 Act (PL 108-494)



- Assist state level E9-1-1 coordination.
- Collect information on E9-1-1 practices, procedures and technologies.
- Provide technical assistance to state-level E9-1-1 entities
- Administer a grant program for “Phase II E9-1-1 Implementation”



Current Related Legislation



- **H.R. 5252**

- NATIONAL REPORT- 18 months after the enactment, the National 911 Implementation and Coordination Office shall develop a report to Congress on migrating to a national IP-enabled emergency network capable of receiving and responding to **all** citizen activated emergency communications.



NG9-1-1: It's Not Just Telephones Anymore



Would You Like to be Added to the Project Email Distribution List?

Do You Have Any Questions?

Do You Have *Best Practices* to Share?



Linda Dodge

Linda.Dodge@dot.gov

Jenny Hansen

Jenny.Hansen@dot.gov

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

