

Next Generation 9-1-1 & FirstNet Improving Emergency Communications



Homeland Security

NCC

National Coordinating Center
for Communications

Next Generation 9-1-1 & FirstNet

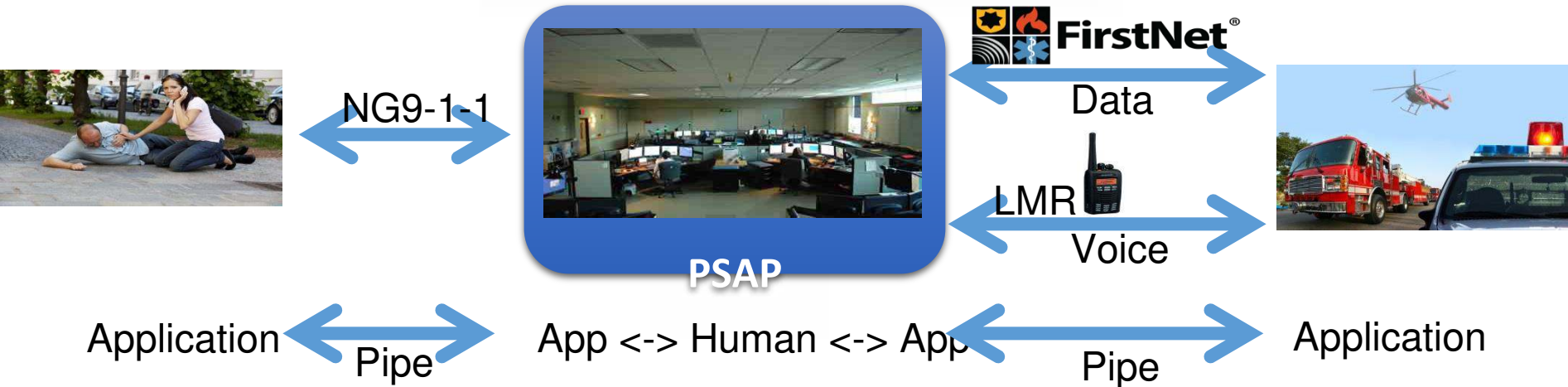
Improving Emergency Communications

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- **Integration between FirstNet and NG9-1-1 is a critical in order to achieve success for public safety.**
- **NG9-1-1 and FirstNet represent the two halves of public safety request and response. The PSAP is the nerve center in the middle.**
- **PSAPs will be more than simply call taking or dispatching centers.**
- **The use of standards based, non-proprietary approach is important.**

Basic Architecture

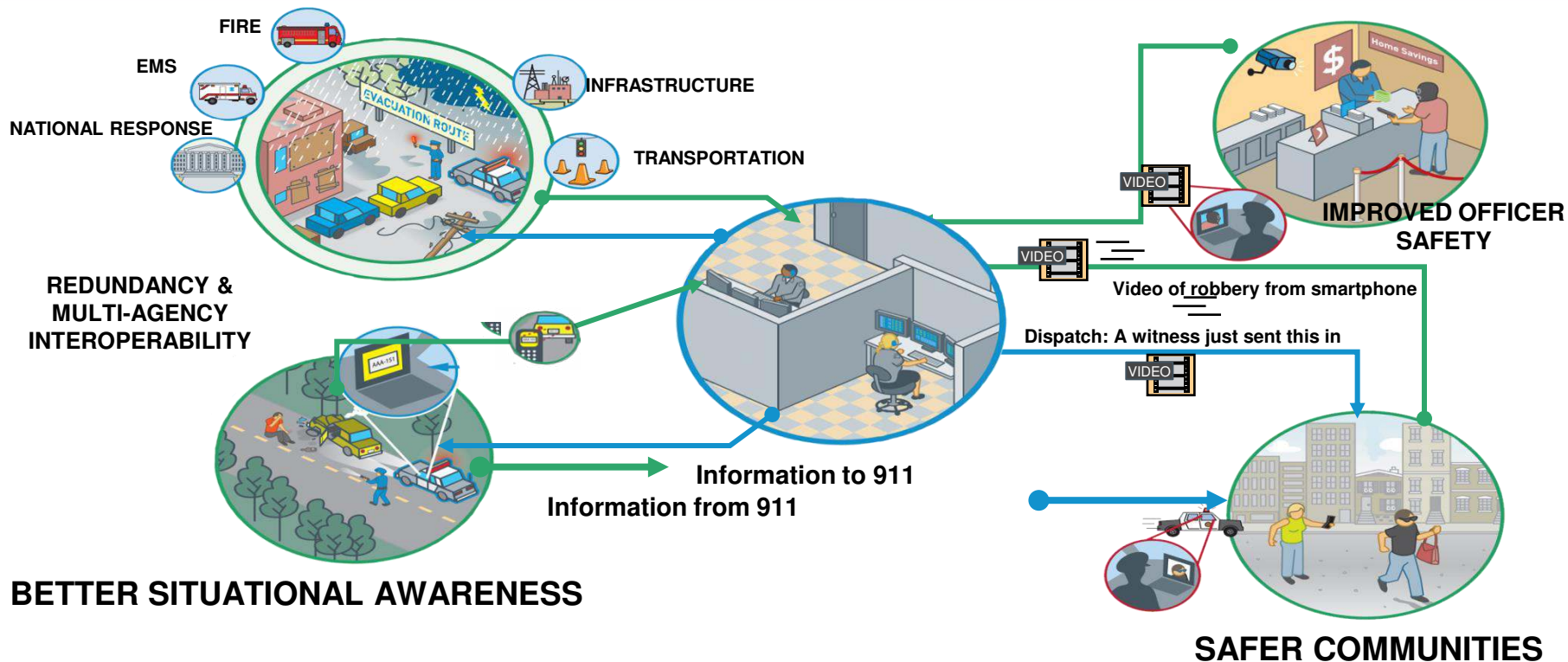


The **PSAP** Integrates **NG911** and **FirstNet**

FirstNet Shared Goals With NG9-1-1

- Technology Modernization: Both represent efforts to update voice centric legacy systems to IP based architecture to allow telecommunicators and first responders to leverage information in multiple media formats
- National Focus: Both aim for broadband connectivity in urban, rural, remote communities
- Improved Emergency Response: Both seek to enhance communications and coordination of responses to requests for public safety assistance
- Planning & Governance: Both require planning and governance to ensure successful deployments

Scenarios and Goals for the Continuum of PS Response



Questions for the Future

- Data Interoperability, Standardization and Interchange
 - NG911 -> PSAP -> Responder
 - NG911 -> PSAP -> ESINET -> PSAP -> Mutual Aid Responder
 - Responder -> PSAP -> ESINET -> PSAP -> Mutual Aid Responder
 - VHS or Beta
- What technology is needed in a PSAP to open a photo or video, make a decision on its value and potentially send it to a responder or save it to an archive as evidence?
- What Standard Operating Procedures, Multi-Disciplinary Planning and training is required to enable the “Telecommunicator of the Future”

How Do We Get There

- Define the Data Interchange that must exist within a PSAP to ensure that a call for service artifact can be received from NG911, processed by the PSAP and sent to a First Responder.
- Prepare the PSAP to make this exchange with technology and standard operating procedure
- Integrate NG911 to the PSAP
- Integrate FirstNet to the PSAP
- Train and Equip the Telecommunicators
- Launch the service

NG9-1-1 Security

- With advancement of technology comes an increased threat of infiltration and exploitation of the system
- NG9-1-1 systems and ESINets will be vulnerable to the same threats as existing IP networks and systems
- Must consider shared architectures and approach
- Training and awareness are important considerations
- Our people, not just the equipment, are key
- There are resources “out there”
 - TFOPA work underway
 - NIST, US-CERT, DHS all have products available

What is the Common Denominator During an Emergency?

ALL Emergencies are **LOCAL**.

***Interoperability of both voice
and data services is critical as
incidents unfold and expand.***

***Next Generation services can
provide that interoperability***



NG9-1-1 Transition

Evolution not Revolution





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QUESTIONS?

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