



*Virginia Information Technologies Agency*

# Next Generation 9-1-1

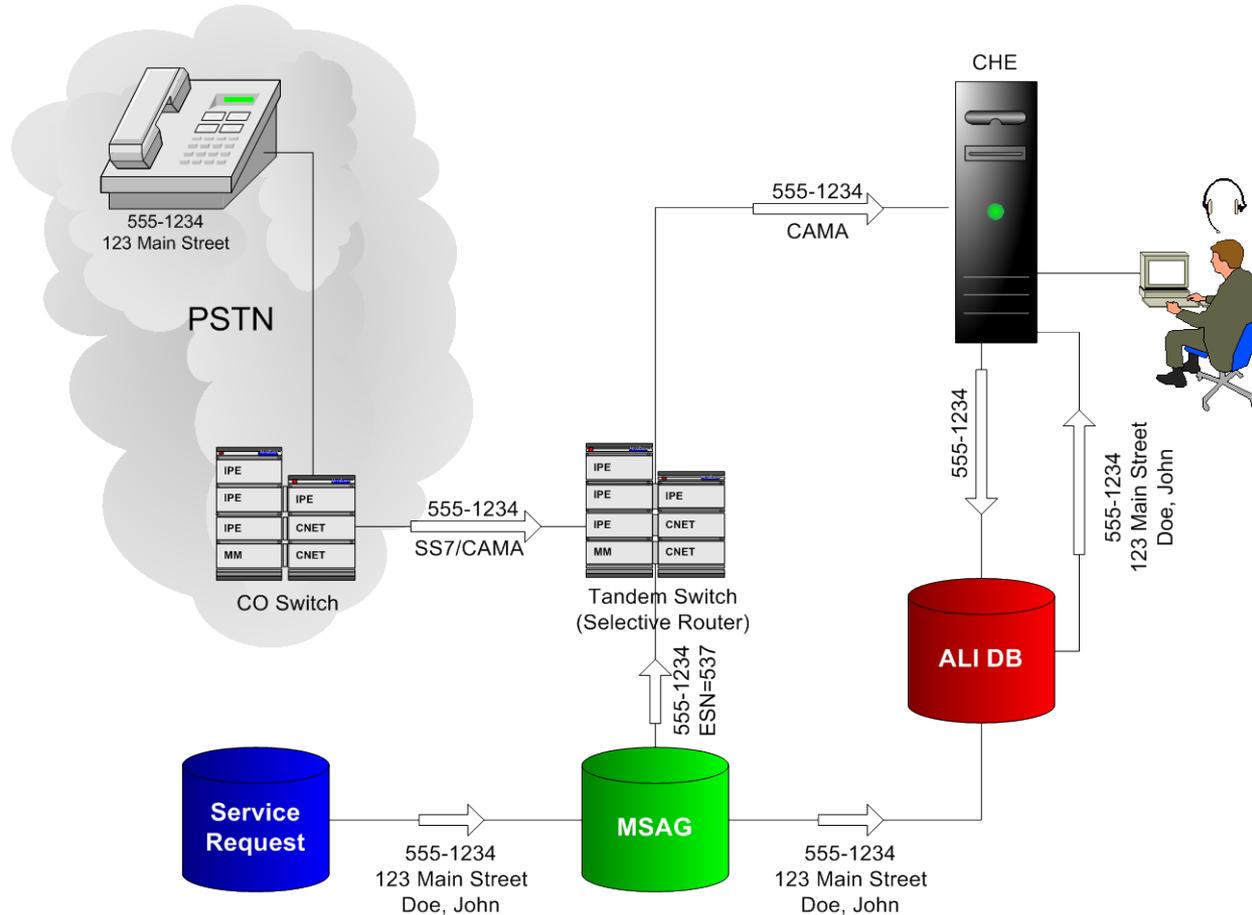
Decision Maker Webinar

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October 7, 2015



# Existing 9-1-1 System





# Challenges to Existing 9-1-1 System

- Telecommunications Services
  - Multiple service providers/technologies
  - New technologies/applications continually developed
  - National and global instead of local
  - Increased flexibility/mobility of citizens
- 9-1-1 system
  - Nine, independent networks
  - Extremely limited ability to process data
  - CORE ANALOG TECHNOLOGY IS GOING AWAY



## What is Next Generation 9-1-1?

- NG9-1-1 is the solution to existing challenges
  - Migration from circuit (analog) to packet switched (IP) technology
  - A complete upgrade of the E9-1-1 network to a shared IP network
  - A system of systems serving local, state and national needs
  - Required to meet the demands of new telecommunications technologies



## Benefits of Next Generation 9-1-1

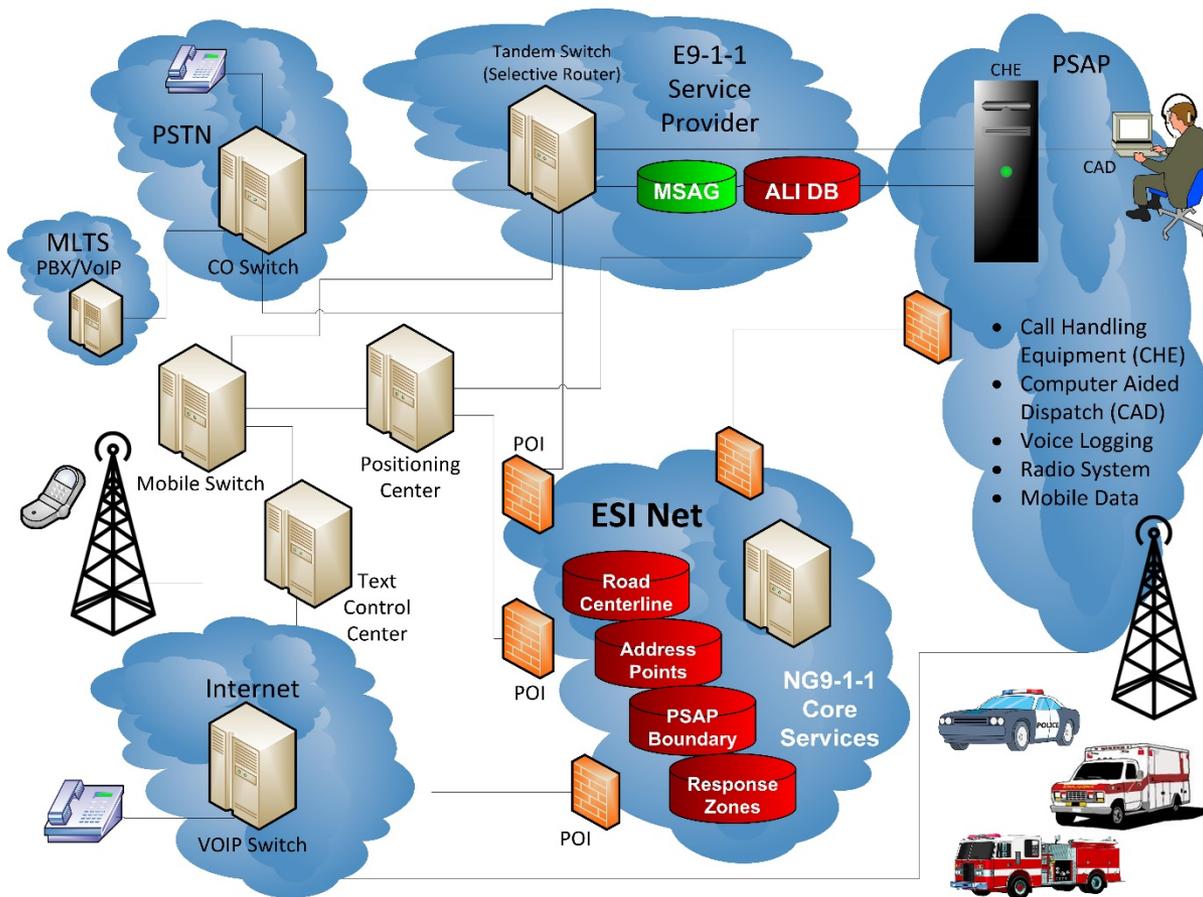
- Flexibility within the PSAP
- Integration of voice and data
- Increased data available to the PSAP
  - About the caller
  - About the incident
  - About sharing data with other PSAPs and first responders



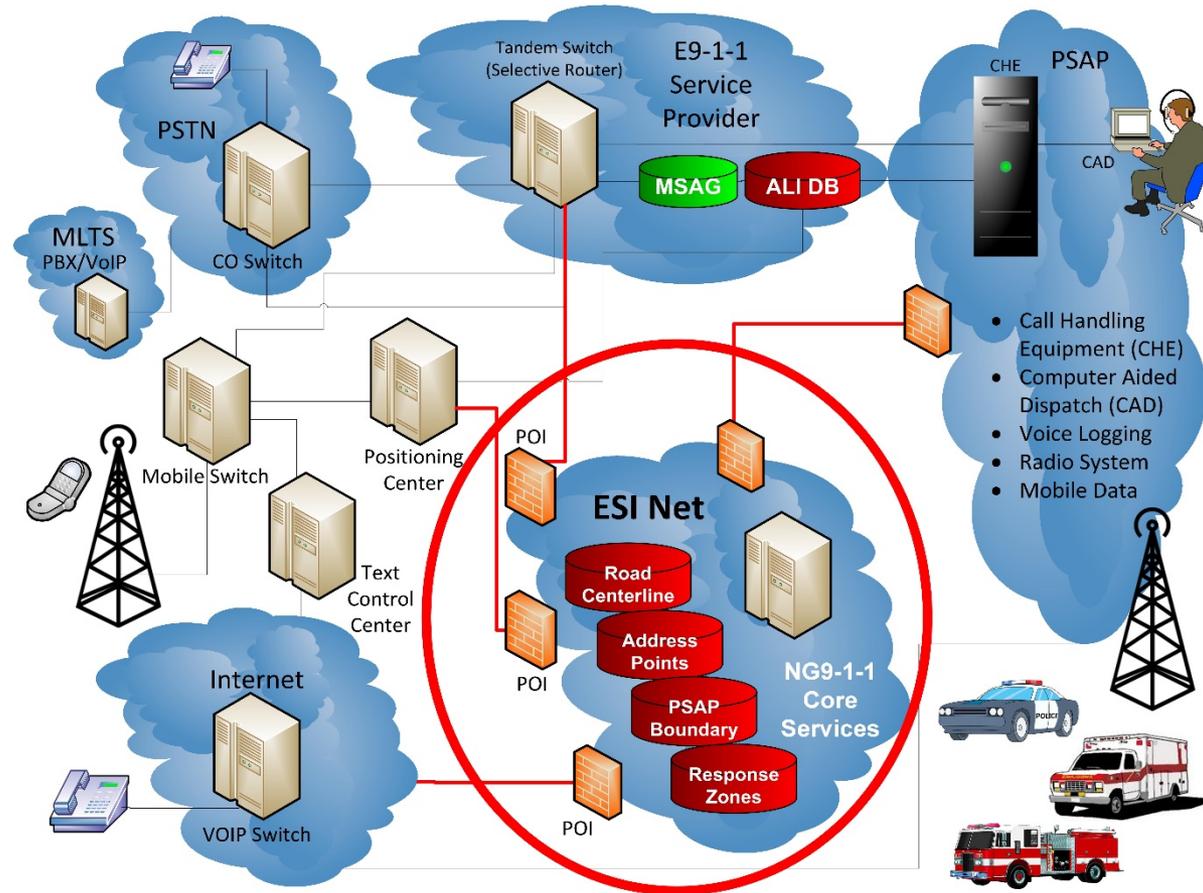
## Guiding Principles

- 9-1-1 is an essential, local/regional, public safety service
- Need to address ALL of 9-1-1 not just NG
- Full stakeholder engagement is needed
- Services must be not be degraded
- Economies need to be leveraged
- Doing nothing is NOT an option

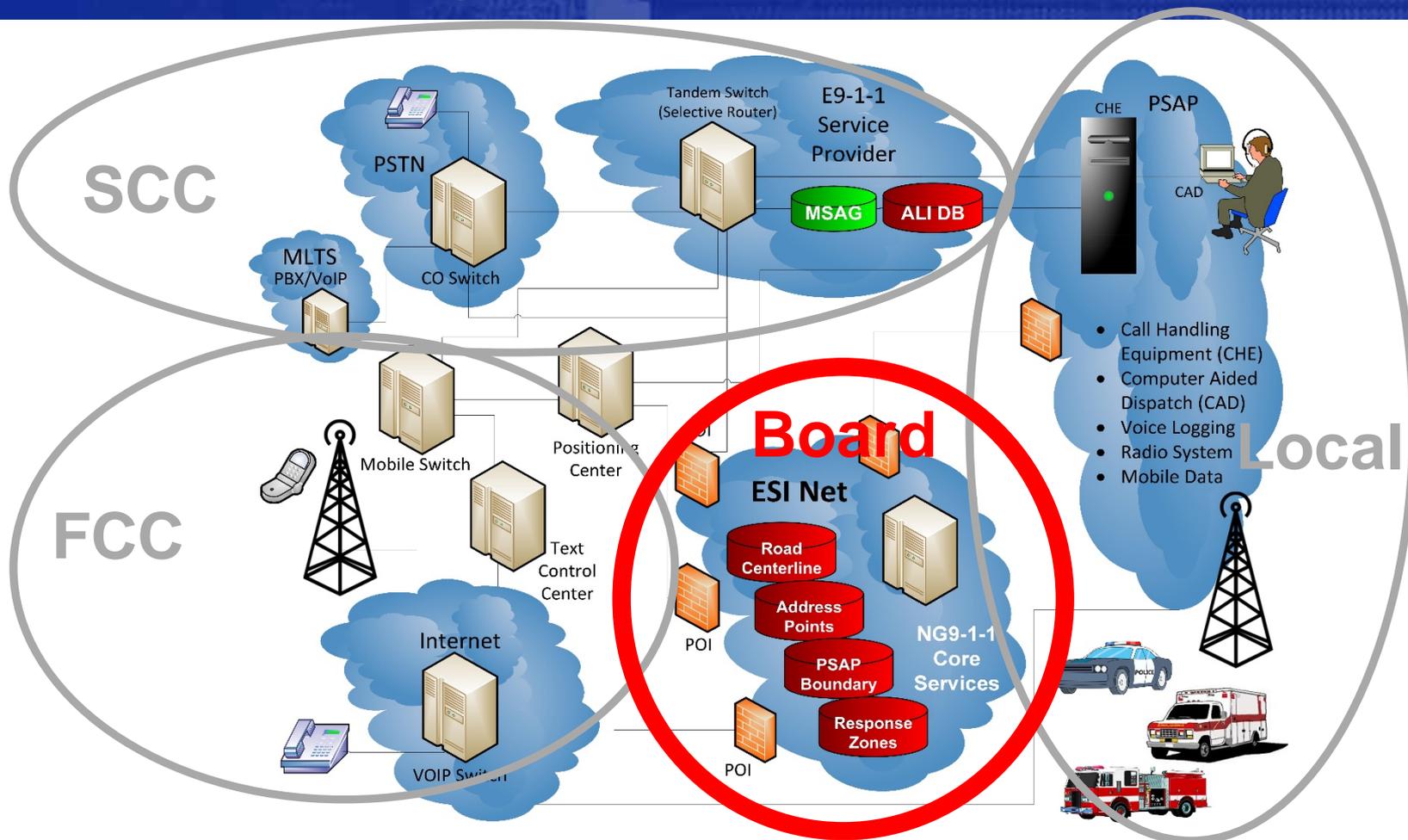
# 9-1-1 Ecosystem



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# 9-1-1 Ecosystem





## Role of the E-911 Services Board

- Define Standards for:
  - NG9-1-1 Core Services
  - ESIInet
  - PSAP Function
  - Processing of information through the ESIInet
  - Ensuring the Commonwealth can operate as a single network and interoperate with other states
- Assist localities with best practices for those things in Local control



## Role of GIS in NG9-1-1

- One of the most time consuming efforts of moving to an NG9-1-1 system will be the preparation of GIS data
  - Used to provide location validation and routing of 9-1-1 calls to the appropriate PSAP
- Analysis of current GIS data
- Synchronization of the MSAG/ALI with the GIS road centerline and address point data



## E-911 Service Board Path Forward

- Encourage legislation in 2016 to redefine role of the Board
  - Assist localities with the provision of 9-1-1 through best practices and funding
  - Plan, promote and assist with deployment of the ESI-net for future 9-1-1
  - Publish standards for ESI-net and core NG9-1-1 services



## E-911 Service Board Path Forward

- Develop statewide requirements for the ESI-net and develop solicitation for such service defining costs
- Encourage compliance with standards through available grant funding
- Develop GIS data standards to support NG9-1-1
- Explore funding models for sustainment of 9-1-1 with interested stakeholders