



State of Virginia E-911 Services Board Policy Committee

Internet Protocol (IP)-Based
9-1-1 Network Feasibility Study

December 18, 2014



Project Drivers

- Existing legacy technologies impact 9-1-1 service
 - Public Safety Answering Points (PSAPs) are hampered by outdated and/or proprietary systems
 - Carriers have announced plans to discontinue support for some 9-1-1 systems in the next 2-3 years
- Significant limitations exist, including:
 - Length of analog 9-1-1 call setup time
 - Limited ability to transfer 9-1-1 calls between PSAPs
- Carriers transitioning from circuit-switched to IP
- Consumer expectations / changes in behaviors
- Advances in technologies



Feasibility Study Goals

- Provides multiple solutions for the design of a single, statewide IP-based 9-1-1 network
- Addresses system design, procurement, implementation, operation, and governance issues
- Develops a multi-phase effort to address generational technology issues
- Supports a long-term strategic approach to improve 9-1-1 service delivery



Statewide ESInet Benefits

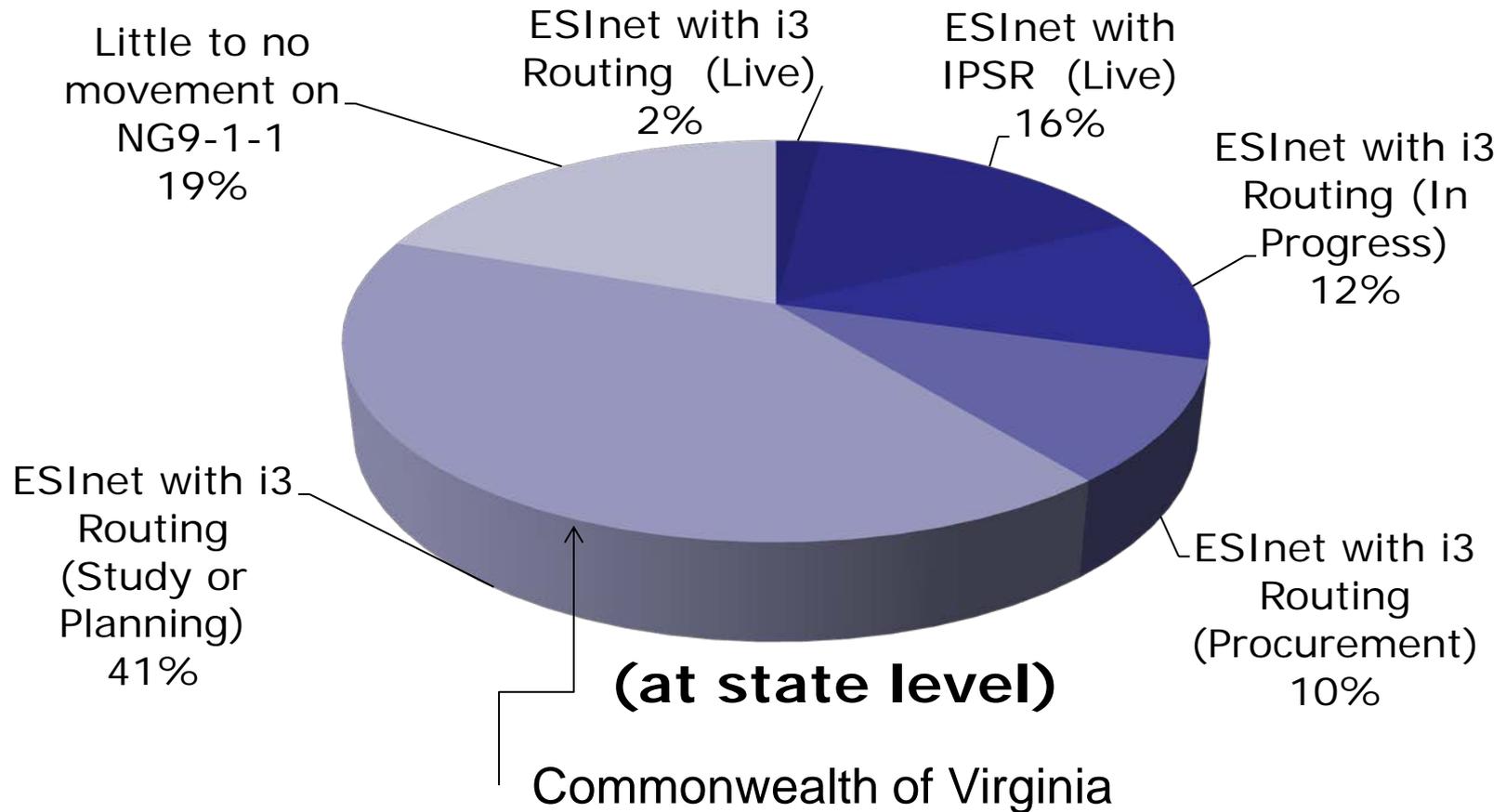
- Speeds access to Text-to-911
- Enables enhanced redundancy / backup PSAP flexibility
- Improves interoperability / data sharing among PSAPs, especially for PSAP-to-PSAP call transfer
- Allows for efficiencies through centralized solutions and retiring of expensive, legacy technologies



Policy and Political Considerations

- National legislative landscape and trends
- Review based on guidelines for State NG9-1-1 legislative language
- Review of Virginia's statutory structure, to include the State of Virginia E-911 Services Board, 9-1-1 funding, and liability protections
- Comparison of current 9-1-1 statute with other states
- Assessment of the current policy and regulatory environment

State of NG9-1-1 in U.S.





National Legislative Landscape

- Evolution of 9-1-1 has mostly been on a community-by-community basis – NG9-1-1 transition must be more statewide in nature
- States that have implemented NG9-1-1 have typically needed to enact statutory and funding modifications necessary to eliminate impediments to implementation of new technologies
- 9-1-1 experts agree that NG9-1-1 will be achieved more quickly and cost-effectively where decision-making and coordination oversight authority are focused at the **state level**



Guidelines for State NG9-1-1 Legislative Language

- Guiding Policy Principles include:
 - 9-1-1 is an **essential governmental service**
 - Comprehensive statewide coordination of 9-1-1 services is important
 - Coordination of a statewide 9-1-1 network rests with the State of Virginia E-911 Services Board
 - Quality assurance is important to the overall health of 9-1-1 in Virginia
 - Equality of service across all methods of access is important
 - Development of technical and operational standards will be an important element of a successful NG911 system
 - Dedicated and sustainable funding for NG911 is essential
 - Roles and responsibilities for 9-1-1 operation should be clearly defined
 - Local governing bodies should retain responsibility for PSAP operations
 - Public education to assist citizens in the effective and efficient use of 9-1-1 is important



Comparison of National Guidelines to Current Statute

- Virginia excels at:
 - Statewide coordination efforts
 - Advisory board responsibility for planning, evaluating and coordinating 9-1-1 services
 - Having a comprehensive MLTS statute
- Additional focus could benefit:
 - Dedicated and sustainable 9-1-1 funding
 - Quality assurance and a minimum level of service delivery statewide
 - Adoption of technical and operational standards for the statewide system



Virginia's Statutory Structure

- State of Virginia E-911 Services Board
 - Expand PSAP representation by creating a Regional Advisory Council
 - Provides the Statewide 911 Coordinator and the Regional Coordinators a vehicle to vet ideas, concepts or plans for 9-1-1 services
 - Council can express the collective viewpoint of the PSAP community and advocate for local concerns
 - Expand to incorporate two State legislators, an IT representative, and representatives from the public and special needs communities
 - Transition technical representatives to advisers



Funding Policy Considerations

- Current 9-1-1 statute provides for dedicated funding only for wireless and future technology collections, relying on a fixed rate per access line/subscriber
- With changes in technology and consumer behaviors, sustainability of the current funding methodology is at risk
- Distributions to the Virginia State Police and the Compensation Board significantly reduce monies available for the PSAP Grant Program and potentially risk access to federal grants



Rulemaking and Regulatory Environment

- Opportunity to advance 9-1-1 through rulemaking in the following areas
 - Realign rulemaking authority from the SCC to the State of Virginia E-911 Services Board
 - Establish authority to create minimum standards
 - Provide for a comprehensive quality assurance program
 - Establish minimum performance metrics
- A Regional Advisory Council could be directed to establish consensus recommendations to the Board for these, and other, areas of rulemaking



Governance Implementation Strategy

- Multi-phased approach to support change
 - Legislative Change Process (1-24 months)
 - Rule making authority change
 - Establish Regional Advisory Council
 - Board structure revised
 - Regulatory Change Process (12-24 months)
 - Minimum standards for system elements
 - Minimum standards for call-taking
 - Policy, Administrative and Implementation Change Process (1-36 months)
 - Comprehensive Plan Revision
 - Standards and Rule Development
 - 9-1-1 Program Development
 - Master Plan Development