



9-1-1 Services Board

General Business Meeting

May 31, 2017





Agenda

1. Call to Order
2. Approval of Minutes
3. FY 19 PSAP Grant Guidelines
4. Status of Activities Related to 9-1-1 Comprehensive Plan and NG9-1-1 Feasibility Study
5. Old Business
6. New Business
7. Public Comment
8. Adjourn



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FY 19 PSAP Grant Guidelines





Grant Program Recommendations

- PSAP Grant Program would be used almost exclusively to support one-time NG9-1-1 transition costs
 - one-time ESInet set-up
 - GIS data preparation
 - SR transition project to NGCS ESInet
- The exception would be the PSAP Education Program (PEP)
 - Dedicated funding of \$500,000



Grant Program Recommendations

- In FY19, funding would be limited to the following priorities:
 - CHE
 - NG9-1-1 GIS
 - Integrated CAD/Mapping
 - Physical Consolidation
- No funding for other items included in Guidelines from previous years



FY19 is a Bridge Year

- The FY19 grant application cycle opens on July 1, 2017, before any statewide ESInet procurement decisions are made
- The Board will be making FY19 grant awards in January 2018, before the outcome of their 2018 legislative agenda is known
- FY19 grant priorities should not be dependent on ESInet award or legislation



NG9-1-1 Grant Program

- Support funding requests for one-time NG9-1-1 transition costs
- Replaces Shared Services and Individual Grant Programs
- Increase funding level for NVS shared services CHE and NG9-1-1 GIS projects
- Provides funding for physical consolidations and integrated CAD/mapping solutions



NG9-1-1 Grant Program

- Several priorities that were previously funded by the PSAP Grant Program have been eliminated
- The concept of Tiers from previous grant years has been removed
- The replacement of NVS equipment is eligible for funding, but other Tiers have been removed from the Guidelines
- PSAP NG9-1-1 deployment assessments to determine GIS data readiness



Funding for NG9-1-1 Priorities

- \$200,000 per PSAP participating in a shared services CHE project
- \$150,000 for an individual PSAP CHE project
- Full funding for allowable NG9-1-1 GIS data cleanup projects based on criteria and metrics established by the Board



Funding for NG9-1-1 Priorities

- \$75,000 per PSAP for a CAD project
- \$25,000 per PSAP for a mapping system project
- \$500,000 per initial physical consolidation project



PSAP Education Program (PEP)

- PEP provides funding for 9-1-1/GIS specific group education/training opportunities
 - \$2,000 for Individual PSAP award
 - \$3,000 for multi-jurisdictional award
- A PSAP may receive an award for an individual PEP grant and participate in a multi-jurisdictional PEP grant in the same grant cycle



NG9-1-1 GIS

- ISP to provide localities with an NG9-1-1 Deployment Assessment (**Report Card**) to determine GIS data readiness
- Purpose of funding is to enable PSAPs to undertake allowable NG9-1-1 GIS data cleanup projects (**criteria**)
- Goal is to achieve a baseline level of readiness prior to the selection of an NG9-1-1 service provider (**metrics**)



Report Card

- GIS is critical to NG9-1-1 call delivery
- VITA-ISP has provided MSAG/ALI/GIS analysis results back to each PSAP
- Data quality checks:
 - 2016Q3 - included MSAG, ALI and GIS layers for road centerlines and address points
 - 2017Q1 - showed the level of improvement since the initial check



Criteria and Metrics

- 11 Focus Areas identified for NG9-1-1 GIS data cleanup projects based on these datasets:
 - Address Points (APs)
 - Road Center Line (RCL)
 - Address Overlap
 - Address Duplicates
- Discrepancies with match rates will determine whether or not projects receive funding



Specific Criteria and Metrics

Focus Area	ALI to GIS QA/QC Checks Source: 2016Q3 Analysis	Eligible for work in NG9- 1-1 GIS grant if discrepancy rate is greater than
1	ALI to AP match	2% (Goal: >98% Match Rate)
2	ALI to RCL match	2% (Goal: >98% Match Rate)
3	ALI to AP match with spelling incorrect	2% (Goal: >98% Match Rate)
4	ALI to RCL match with spelling incorrect	2% (Goal: >98% Match Rate)



Specific Criteria and Metrics

Focus Area	GIS Analysis Checks: Road Centerline Source: 2017Q1 Analysis	Eligible for work in NG9-1-1 GIS grant if discrepancy rate is greater than
5	RCL Check #2 - RCL with duplicate address ranges	1% (Goal: >99% Match Rate)
6	RCL Check #6 – RCL with left side overlapping address range	1% (Goal: >99% Match Rate)
7	RCL Check #7 - RCL with right side overlapping address range	1% (Goal: >99% Match Rate)
8	RCL Check #10 - RCL with non-standard street name attributes	1% (Goal: >99% Match Rate)



Specific Criteria and Metrics

Focus Area	GIS Analysis Checks - Address Point Source: 2017Q1 Analysis	Eligible for work in NG9- 1-1 GIS grant if discrepancy rate is greater than
9	AP Check #18 - AP is duplicate, no street name or street number	1% (Goal: >99% Match Rate)
10	AP Check #19 - AP does not geocode to RCL	2% (Goal: >98% Match Rate)
11	AP Check #20 - AP / RCL Street Name Mismatch	1% (Goal: >99% Match Rate)



Grant Extension Requests

- Colonial Heights – AVL
- Dickenson/Lee - CPE
- Fairfax – NOVA SIF
- Tazewell/Russell - CAD
- Wise/Norton - CPE



Status of Activities Related to 9-1-1 Comprehensive Plan and NG9-1-1 Feasibility Study



1. Baseline Services & Capabilities

Initiative A

- Identify, specify, and adopt a standard or set of standards for a baseline level of 9-1-1 service and capability

- **Task 1:**

- **Create baseline level of service and capabilities document**

- **Task 2:**

- Develop PSAP baseline capabilities implementation plans

2. Standardized Data Sharing

Initiative A

- Implement statewide standards and best practices that enhance incident information sharing
- **Task 1:**
 - **Create a 9-1-1 Clearinghouse**
- **Task 2:**
 - Create and adopt data sharing standards and best practices



2. Standardized Data Sharing

Initiative B

- Identify and adopt a planning methodology that enhances technology implementation coordination throughout a project lifecycle and improves change management
- **Task 1:**
 - Create an incident information sharing planning policy that provides a strategic framework for data sharing initiatives

2. Standardized Data Sharing

Initiative C

- Employ technology that allows for seamless automatic bi-directional communication of incident management between PSAPs
- **Task 1:**
 - Monitor industry and assess emerging technologies that promote data sharing and interoperability
- **Task 2:**
 - Champion emergency technology projects

3. Sustainability

Initiative A

- Allocate funding for future state and regional PSAP initiatives to maintain and improve service

- **Task 1:**

- **Develop PSAP baseline level of service and capabilities budgets**

- **Task 2:**

- Create a holistic statewide 9-1-1 funding strategy

3. Sustainability

Initiative B

- Establish a strategy for funding the statewide deployment of NG9-1-1
- **Task 1:**
 - **Create NG9-1-1 deployment and sustainment funding strategy**



3. Sustainability

Initiative C

- Adopt Statewide procurement guidelines
- **Task 1:**
 - Create and maintain statewide procurement and vendor qualification guidelines



4. Professional Development

Initiative A

- Identify and adopt minimum a PSAP technical staffing needs
- **Task 1:**
 - **Conduct staffing analysis**



4. Professional Development

Initiative B

- Identify and adopt minimum criteria for training, certification and retention programs to support 9-1-1 professional and technical support personnel
- **Task 1:**
 - Adopt and create baseline 9-1-1 professional and technical support staff development criteria



5. 9-1-1 System Reliability & Security

Initiative A

- Identify PSAP assets and communication infrastructure attributes
- **Task 1:**
 - Gather and assemble attributes for existing PSAP assets and infrastructure

5. 9-1-1 System Reliability & Security

Initiative B

- Support 9-1-1 center staff in formalizing COOPs for their respective PSAP
- **Task 1:**
 - Develop COOP template for Virginia PSAPs
- **Task 2:**
 - Confirm that each PSAP has a formalized COOP



5. 9-1-1 System Reliability & Security

Initiative C

- Adopt a QA/QI and monitoring program to document and report the effectiveness of baseline level service and capabilities criteria
- **Task 1:**
 - Create QA/QI guidelines



6. Stakeholder Communications

Initiative A

- Develop a communications plan for internal and external 9-1-1 stakeholders
- **Task 1:**
 - **Create a 9-1-1 stakeholder communications plan**



6. Stakeholder Communications

Initiative B

- Develop guidelines for an effective stakeholder education and outreach program, to include legislators
- **Task 1:**
 - Develop 9-1-1 public education guidelines



7. Synergies of 9-1-1 and GIS

Initiative A

- Support coordination and collaboration of 9-1-1 between PSC Coordinator and VGIN
- **Task 1:**
 - Identify ways to improve 9-1-1 and GIS coordination and collaboration within and between levels of government

7. Synergies of 9-1-1 and GIS

Initiative B

- Validate and improve GIS data quality and integration for public safety purposes
- **Task 1:**
 - Develop contractual provisions for outsourcing
- **Task 2:**
 - Conduct GIS database review
- **Task 3:**
 - Develop user requirements for using GIS data in public safety software solutions



Governance/Legislation

Planning Accomplishments

- Outreach and education
- Foundational legislation
- Standards
- Regional Advisory Council

Implementation Needs

- Composition and duties of the Board
- ESInet participation and funding
- Additional resources
- Role of PSC Coordinator and staff support



Financing

Planning Accomplishments

- Sustainability
- Collection Methodology
- Fund Transfers
- Formulas

Implementation Needs

- NG9-1-1 Deployment Cost Model
- PSAP operational funding
- NG9-1-1 recurring costs



Geospatial Foundation

Planning Accomplishments

- Completed statewide MSAG/ALI/GIS analyses to determine accuracy of local data Sustainability
- Standards

Implementation Needs

- Migration strategy for Emergency Call Routing Function/Location Validation Function ECRF/LVF
- Data Maintenance



PSAP Grant Program

Planning Accomplishments

- Financial incentives for multi-jurisdictional projects
- Focus on NG9-1-1 ready equipment
- Call Handling Equipment (CHE) on statewide contract

Implementation Needs

- Leverage Program almost exclusively for NG9-1-1



Best Practices/Standards

Planning Accomplishments

- Process in place for development and maintenance of best practices
- RAC acts as Steering Committee for Best Practices

Implementation Needs

- Have best practices identified as high-priorities in place prior to need
- Standards to support statewide ESInet



ESInet Design/Pricing

Planning Accomplishments

- Requirements definition through constituent outreach
- Understanding of marketplace and available options

Implementation Needs

- Procurement decision and implementation plan
- Trusted partner



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Old Business





Results of PSAP Budget Survey Analysis



Approach to Data Analysis

- Statewide:
 - Answer the question: What is the cost of 9-1-1 in Virginia?
 - Can the data collected through the survey be used to identify any potential financial gaps that would impede the deployment of NG9-1-1 in Virginia?



Approach to Data Analysis

- Regional:
 - Held conference calls with RAC PSAP representatives
 - Reviewed data and also asked about next steps

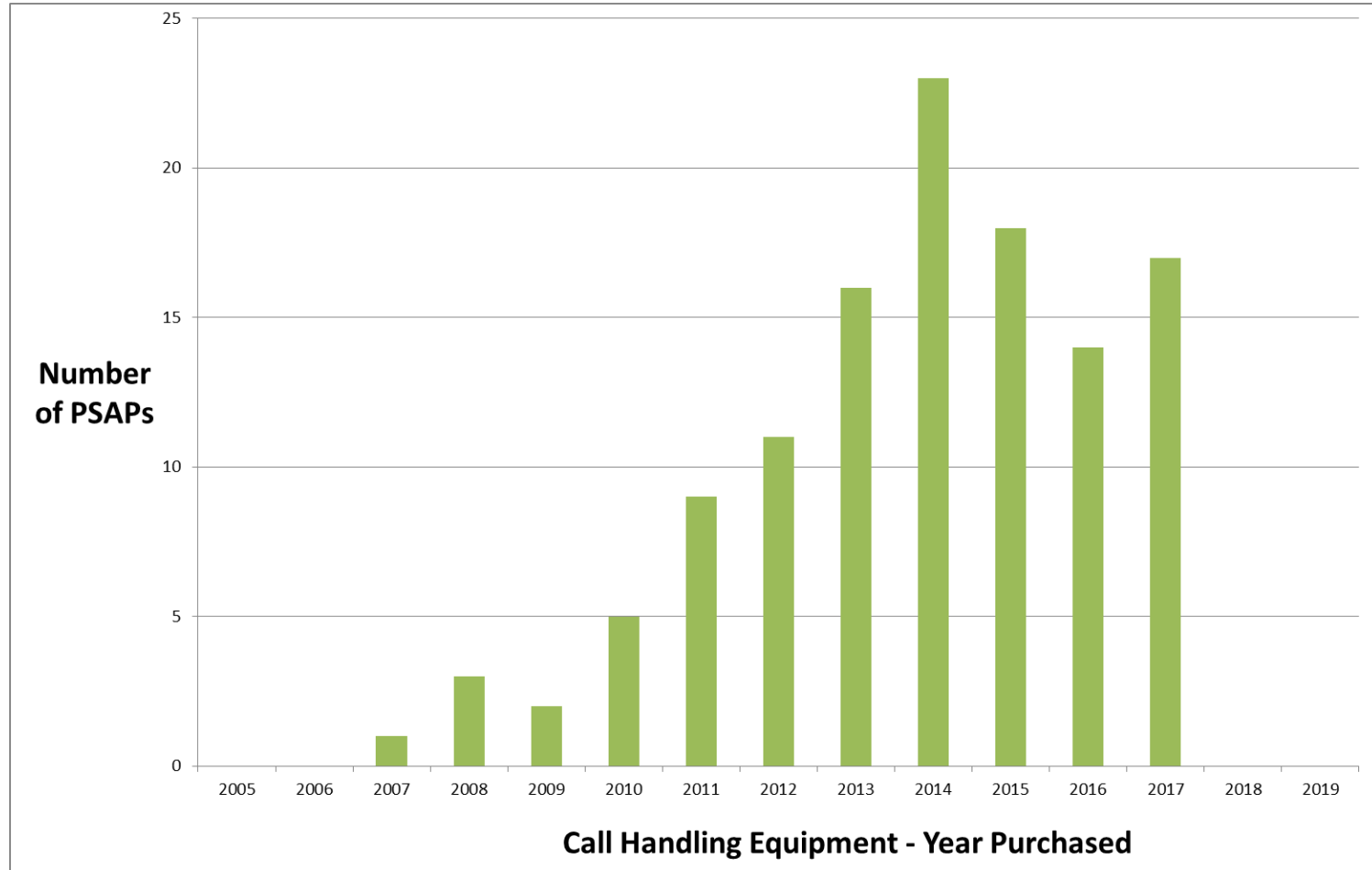


CHE Results

- Cost per position is \$47,000
 - Remove PSAPS that included maintenance in their total cost
 - Fairfax not counted b/c their CHE cost includes other towns & back-ups
- 81 (68%) pay annual maintenance
- 18 (15%) paid 5-year maintenance



CHE Graph - Age



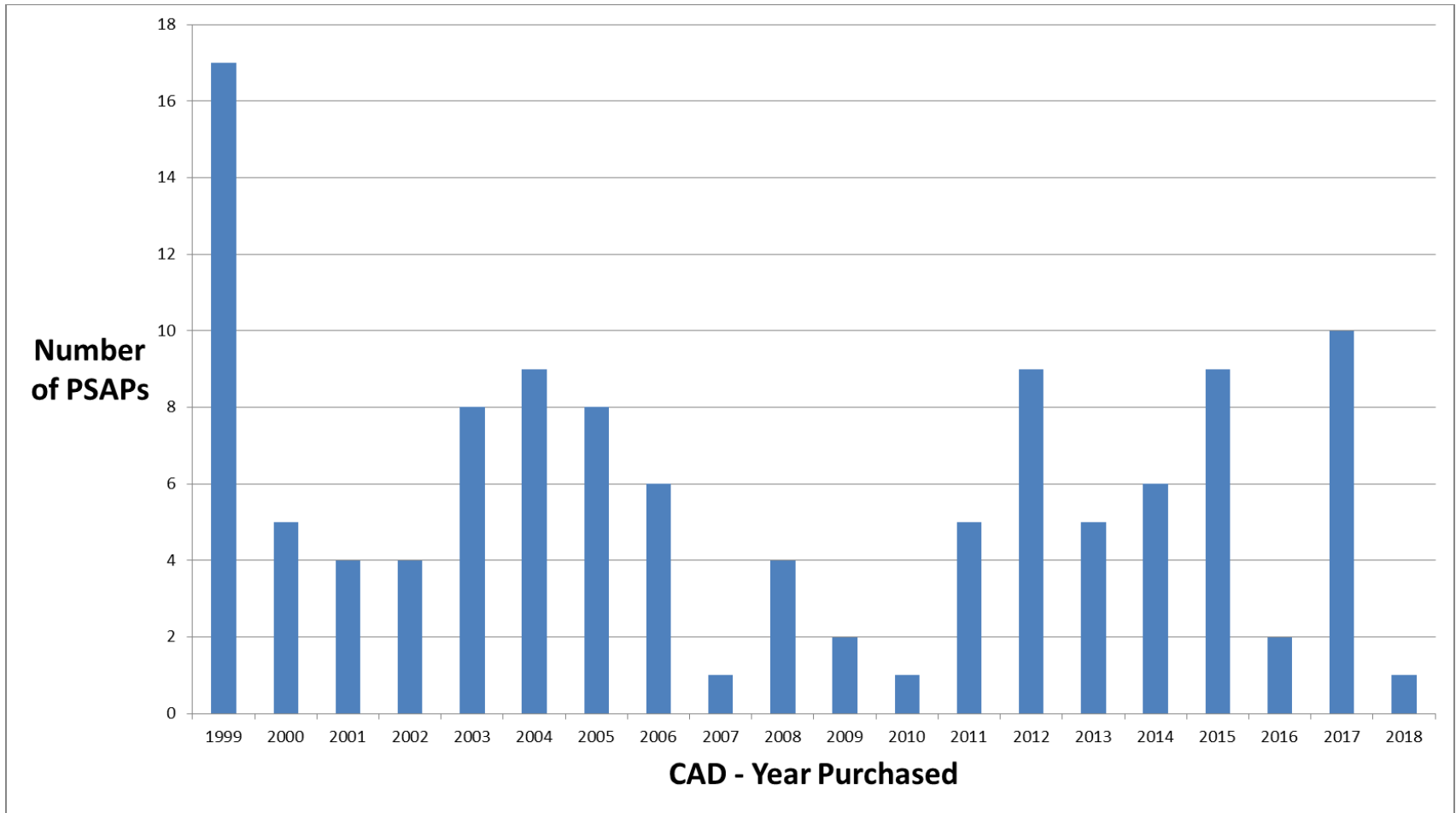


CAD Results

- Do not have a per position cost for CAD since often purchased with something else
 - Instead of using survey data will use information contained in PSAP Grant Program CAD applications (software licenses)
- 88 pay annual maintenance
- 10 paid 5-year maintenance



CAD Graph - Age

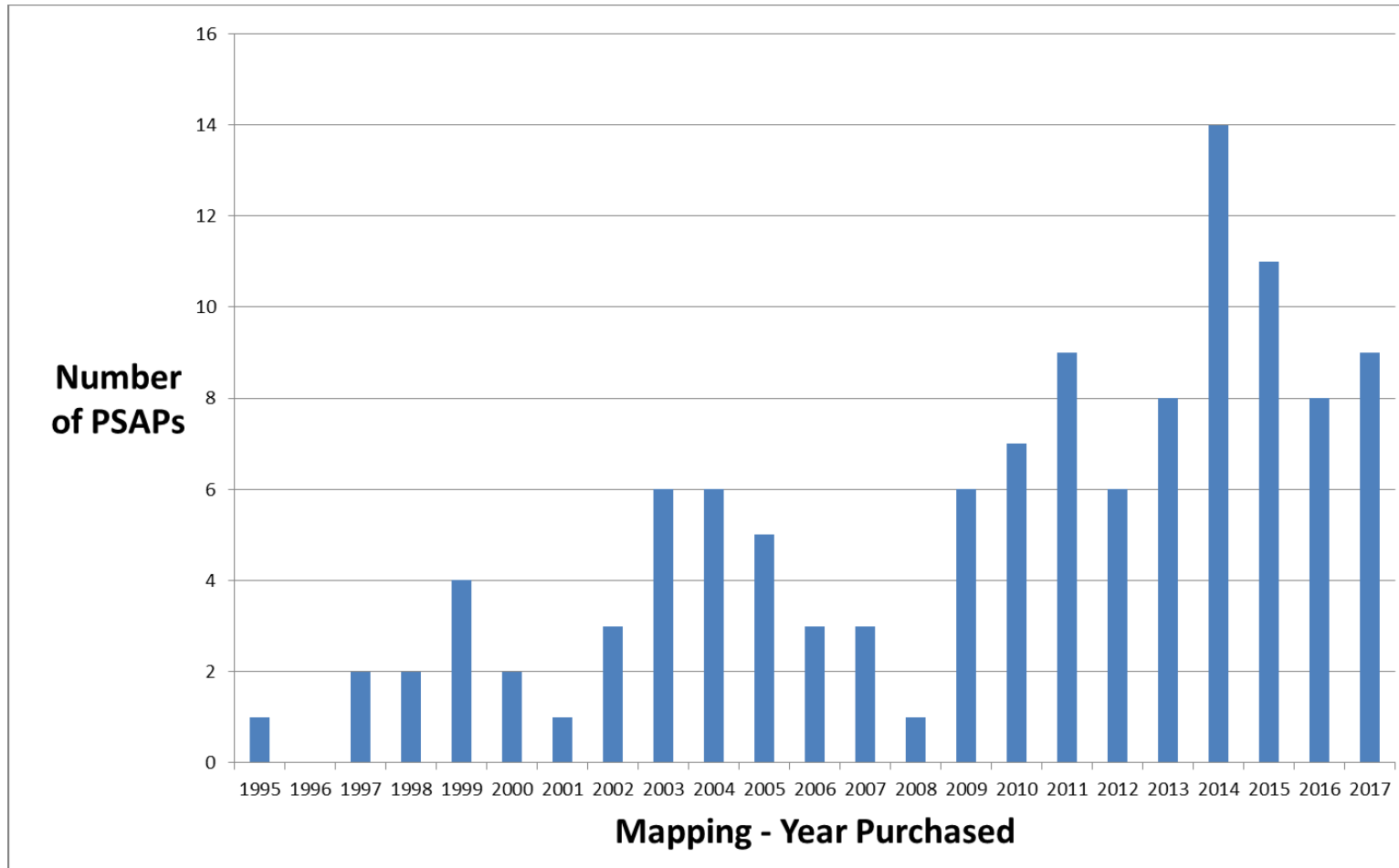




Mapping Results

- Do not have a per position cost for Mapping since often purchased with something else
 - Instead of using survey data will use information contained in PSAP Grant Program mapping applications (software licenses)
- 70 pay for annual maintenance
- 12 paid 5-year maintenance

Map Graph - Age

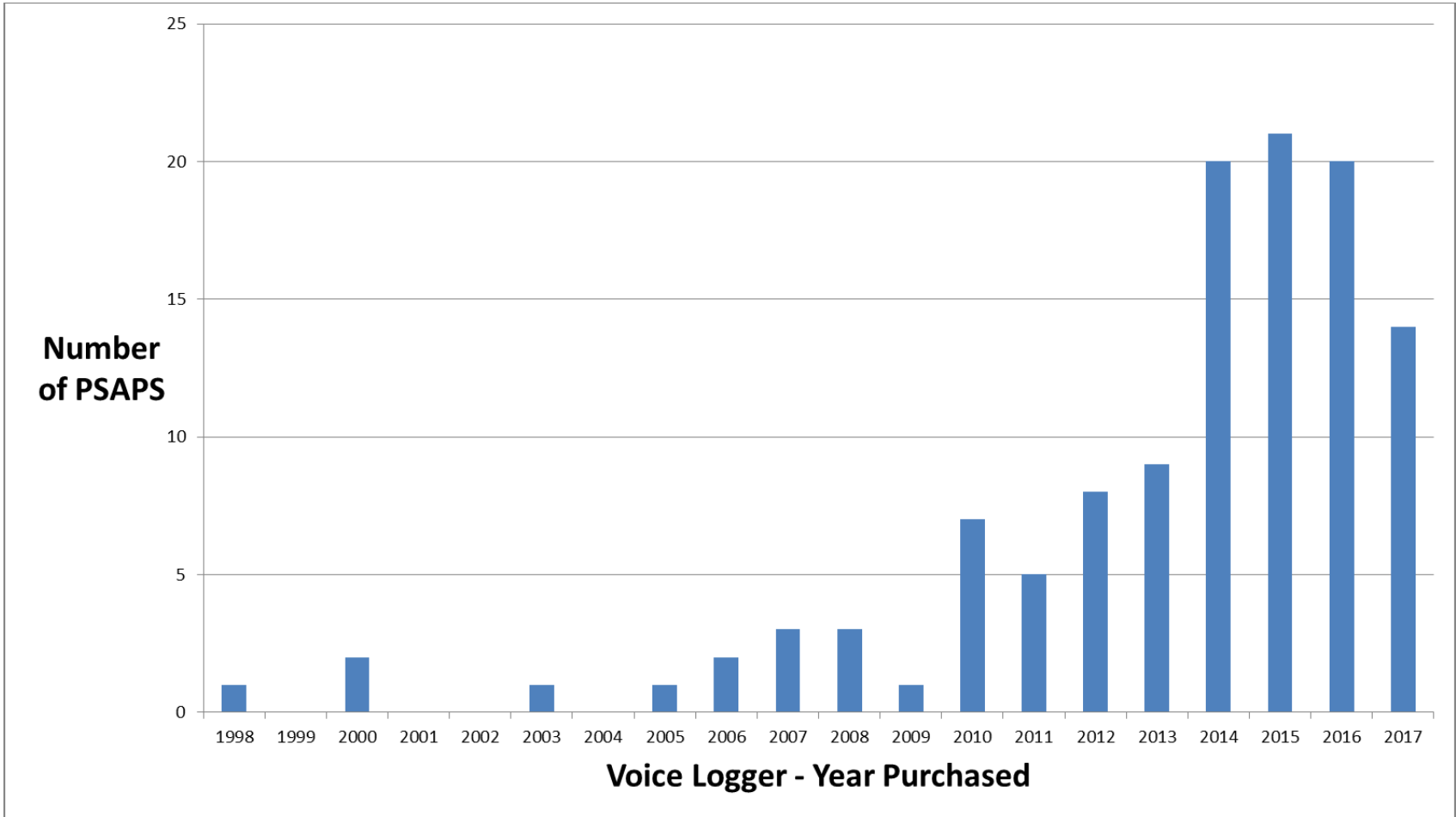




Logger Results

- 112 PSAPs listed prices ranging from \$5,000 to \$650,000
 - Average price paid was \$81,000
 - The median price paid was \$36,000
- 79 pay for maintenance annually 12 pay for maintenance over 5 years

Logger Graph - Age





Critical Infrastructure Analysis

By Region - Not by SR Pair	Est. Legacy Selective Router/ALI charges per Feasibility Study Data	Critical Infrastructure by Region
Region 1	\$1,503,025.00	\$ 1,286,292.86
Region 2	\$742,228.00	\$ 678,285.53
Region 3	\$725,214.00	\$ 968,962.52
Region 4	\$569,190.00	\$ 482,378.00
Region 5	\$1,319,214.00	\$ 1,558,327.69
Region 6	\$900,480.00	\$ 809,866.25
Region 7	\$2,607,332.00	\$ 3,050,033.73
	\$8,366,683.00	\$ 8,834,146.58



Validating LEC Costs

- Estimate of Legacy SR costs turndown included in the NG9-1-1 deployment cost model was accurate
- Comparing results of recurring costs of early adopters to determine if a gap will exist for localities to address NG9-1-1 recurring costs



Feedback on Personnel Data

- Caution urged when using this data for additional purposes
- Look for patterns in result related to small, medium and large PSAPs
- Compare results to population density and call volume
- Analyze in terms of billets, position and minimum staffing requirements



2018 Legislative Update



Proposed 2018 Agenda

- Elimination of wireless cost recovery for wireless service providers (Sprint, AT&T, etc.)
- All communications service providers (Verizon, CenturyLink, etc.) required to provide access to 9-1-1 at no cost to Commonwealth or PSAP
- Establish Board to define points of interconnection (POI) for network
- Establish priority for grants focused on NG9-1-1



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New Business





Regional Advisory Council Report

- Re-chartering of RAC
- Standard 9-1-1 Capabilities and Services Document



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Best Practices





Best Practice Initiative

- Identified as a need in planning documents including
 - NG9-1-1 Feasibility Study
 - 9-1-1 Comprehensive Plan
 - Virginia GIS Strategic Plan
- Best Practices developed to support:
 - Current needs and operations in 9-1-1 and GIS
 - Transition to NG9-1-1



Best Practices

- A generally accepted method that when followed gives good results
- Benchmark by which to maintain quality
- Not a standard or a requirement
- Guidance for local governments that can be used and applied as they deem appropriate



Best Practice Approach

- Facilitated by ISP staff
- RAC serves as BP Steering Committee
- Compiled a relevant BP list
 - RAC prioritized
- Workgroups will be formed to develop and/or review BP document(s)
- RAC and Board will accept BPs
- ISP will publish and notify/educate stakeholders about BPs



Best Practice Documents

- Two documents accepted by RAC and ready for release to stakeholders
 - 9-1-1 Addressing: Operational & Administrative
 - Public Safety Call Processing
- Wireless 9-1-1 Call Routing Optimization best practice doc developed
 - Reviewed by RAC
 - Ready for stakeholder review



9-1-1 Data Analytics





9-1-1 Data Analytics

- ECaTS deployed at primary PSAPs
 - Installation costs and service and support through FY2017 budget
- Service and support for ECaTS in FY18
 - Is \$313.12/PSAP/Month = \$435,863.04
- Seeking an allocation of appropriate portion of existing network improvement funds to continue support of ECaTS statewide



Funding Committee Report



PEP Travel Assistance

- Travel Assistance amount for 2017 VA NENA/APCO Conference is \$109.75



City of Manassas Grant Request

- City of Manassas has submitted a FY 18 grant request in the amount of \$150,000 to replace CHE
- PSAP does not meet the definition of a primary PSAP and is ineligible to participate in the PSAP Grant Program



And In Conclusion

- Public Comment
- Adjourn
- Next meeting date is July 13, 2017