Curtis Brown Chairman VDEM

Hon Kevin W. Hall Sheriff Vice Chairman City of Covington

David A. Von Moll Treasurer Comptroller



Dorothy Spears-Dean, Ph.D. Deputy State Coordinator VDEM (804) 840-7260

Terry D. Mayo Board Administrative Assistant VDEM (804) 718-9026

COMMONWEALTH of VIRGINIA

Virginia 9-1-1 Services Board

Meeting Agenda November 18, 2021 10:00 am Four Points by Sheraton Richmond, 9901 Midlothian Turnpike, Richmond, VA 23235

Mary M. Blowe Chief Financial Officer City of Winchester

Thomas A. Bradshaw Captain Virginia State Police

Gary Critzer Emergency Mgmt/ EMS Dir City of Waynesboro

> Terry Ellis Comcast

R. Scott Garber Fire Chief City of Staunton

> Pete Hatcher AT&T

Michelle Painter Lama T Mobile

Jeffrey T. Merriman Verizon Communications

Nelson P. Moe CIO VITA

> Tamara Perez Frederick County

Eddie Reyes Prince William County

Kelvin Wright Chief of Police City of Chesapeake

> Jolena Young Twin County

Gabe Elias SWIC Advisor

1.	Call Meeting of the Board to Order								
2.	Appointment								
3.	Approval of Minutes from September 9, 2021								
4.	NGS Bureau UpdateDeputy State Coordinator								
5.	9-1-1 SummitDeputy State Coordinator								
6.	KPMG Assessment								
7.	NG9-1-1 Deployment UpdateInterim Regional Outreach Division Director								
8.	NG9-1-1 Funding and Amendment RequestsPGC Committee Chair								
9.	Old Business:								
	• 9-1-1 Cost StudyDeputy State Coordinator								
	PSAP Data and Downstream SystemsDeputy State Coordinator								
10.	New Business:								
	PSAP Grant Committee ReportCommittee Chair								
	Regional Advisory Council (RAC) ReportCommittee Chair								
	• Finance Committee ReportCommittee Chair								
	Legislative Committee								
	Upcoming MeetingsDeputy State Coordinator								
11.	Public Comment								
12.	Adjourn Meeting of the Board								

Next Meeting – January 13, 2022



9-1-1 Services Board Meeting

Date: November 18, 2021



Agenda

- Welcome and Remarks from Chairman
- Approval of Minutes
- Bureau Update
- 9-1-1 Summit
- KPMG Assessment
- NG9-1-1 Deployment Update
- NG9-1-1 Funding and Amendment Requests
- Old/New Business
- Public comment
- Adjourn meeting





Bureau Update



9-1-1 Summit



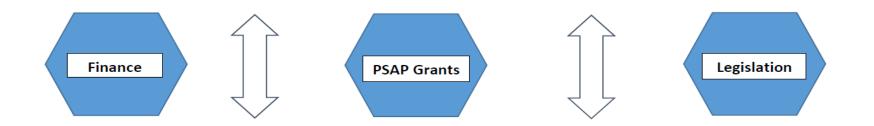




Virginia's 9-1-1 Governance Structure

9-1-1 Services Board

9-1-1 and Geospatial Services (NGS) Bureau Milestones



9-1-1 and Geospatial Services (NGS) Bureau Milestones

Regional Advisory Committee



The Why, How and What

It all starts with a 9-1-1 call

 Establish vision of the enhanced NG9-1-1 ecosystem and related priorities for how the ESInet will be utilized

Operationalize plan for FY 24 and beyond





Summary

- Successful event occurred on November 8th
- Action Items

9-1-1 training status report NG9-1-1 deployment pilot

Community Needs

Location accuracy
Capabilities and services

Next summit scheduled for May 11, 2022





KPMG Assessment

Update

- Management report
 - **Current State Assessment**
 - **Business Improvement Report**
 - Actionable Roadmap
- Assessment team members attends 9-1-1 summit

Expect final management report to be completed in about two weeks





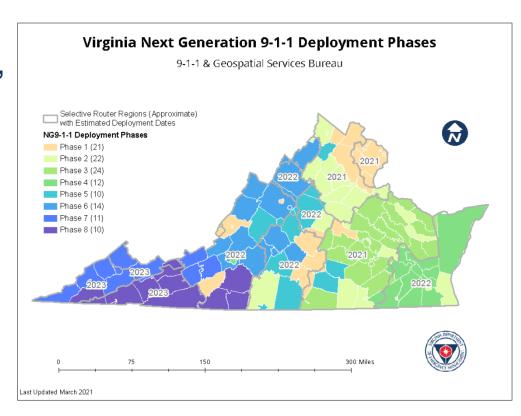
NG9-1-1 Deployment Update





NG9-1-1 Deployment Phased Deployments - Where / When

- 2021 NoVA, Culpeper, Richmond regions
- 2022 Tidewater, Lynchburg, Roanoke regions
- 2023 Southwest Virginia





Additional NG9-1-1 Deployment Metrics

Total # of Projects: 124 – As of 11/18/2021 (% change last 2 months) (100% = 124; 75% = 93; 50% = 62; 25% = 31; 20% = 25; 10% = 12)

- 100% PSAP Contract with AT&T Countersigned (+2%)
- 81% Special Construction Started (0%)
- 61% Special Construction Completed (0%)
- 70% PSAP Call Delivery Circuits (AVPN) Ordered (+1%)
- 55% PSAP Call Delivery Circuits (AVPN) Complete (+5%)
- 50% AT&T/Intrado Project Manager Assigned (+12%)
- 39% SS7 (Legacy Interoperability) Trunks Ordered (+8%)
- 34% SS7 (Legacy Interoperability) Trunks Complete (+9%)
- 33% GIS Data Provisioned to ECRF (+6%)
- 25% ORT & Cutover Dates Identified (+5%)
- 14% PSAPs Deployed (+7%)



Tracking NG9-1-1 Deployment

- Special Construction is nearing completion (bottom slide)
- The time from special construction to cutover varies but is a helpful metric for each deployment.
- Shows the importance of stakeholder engagement and effective communication

AT&T

PSAPs

CHE Providers

Fiber Providers

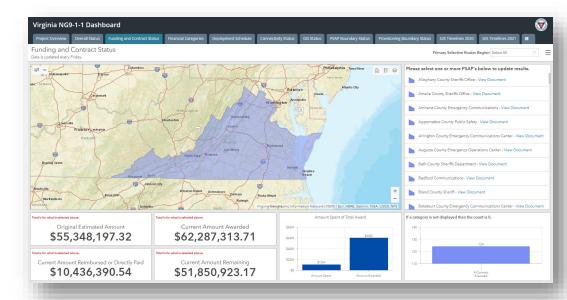
NGS RCs & VGIN Staff

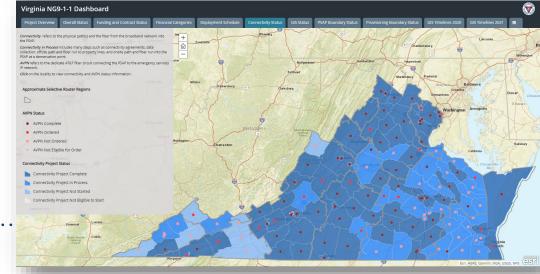
Intrado GIS

Local GIS Staff

Local IT Staff

Current 9-1-1 Service Providers





How do we complete this project by July 1, 2023?

- Complete required work on time and work parallel paths where possible
 - Sequential Steps Connectivity for Fiber / CHE (typically 7-10 months)
 - Non-sequential steps (Tasks to complete as early as possible typically 6-12 months)
- Total Project Time:
 - Parallel Paths (7-12 months)
 - Working sequentially (13-22 months or longer)
- Learn from PSAPs that have had success with shorter timelines. Henrico (7), Farmville (10), RAA (11), Louisa (12) completed these steps in less than 12 months.



What can PSAPs do today?

- Review and sign the <u>Special Construction contract</u>.
- Complete the <u>AT&T data collection workbooks</u>.
- Once special construction is completed, expect <u>site visits by the NG9-1-1</u> <u>fiber provider</u>. Work with the NG9-1-1 project manager to coordinate schedules
- Ask for help if/when needed. Your AT&T Project Manager, Intrado GIS coach, and NGS team members are resources to help you navigate the project.
- Ask "what can I do next, or what else can I do at the same time?"
- Work with your CHE provider to <u>upgrade your CHE if you have</u> <u>a scheduled upgrade</u> that is already funded and needed before deployment. Provide the quote to your NGS RC for review.



What can PSAPs do today?

- Work with your CHE provider to get a <u>quote for the i3 configuration work</u>, and any work needed for the required firewalls for the CHE. Provide the quote to your NGS RC for review
- Work with your local IT staff to determine if you have <u>diverse conduit to</u>
 <u>your PSAP</u>. If not, get a quote, and work with your NGS RC for the
 amendment process.
- Work with the techs from the fiber provider and AT&T who will <u>identify other</u> <u>on-site work that is required</u> in order to activate the fiber circuit at the PSAP. This varies by PSAP. If additional work is needed, get a quote and provide it to your NGS RC for review.
- Work with your GIS staff and/or contractors to <u>load, update, and have your</u>
 <u>GIS data provisioned to the ECRF</u>. All Virginia PSAPs can work on this
 today. Completing this early provides an additional opportunity to update
 GIS data before cutover.

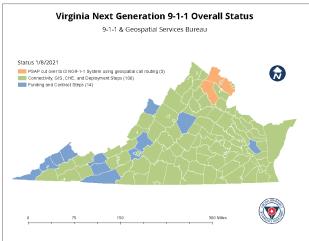


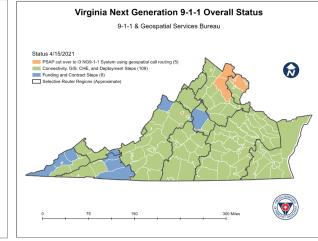
Lessons Learned from Customers Live on AT&T ESINET

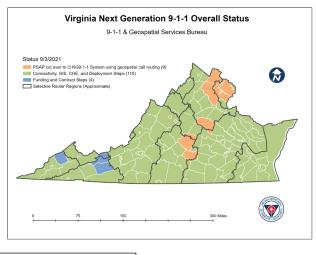
- Fairfax 6/3/20 (28 months)
- Loudoun 8/25/20 (15 months)
- Fauquier 9/17/20 (20 months)
- Staunton 3/24/21 (16 months)
- Franklin City 4/1/21 (15 months)
- Buckingham 5/18/21 (18 months)
- *Louisa 5/20/21 (12 months)
- Prince William 6/17/21 (27 months)
- *Farmville 7/14/21 (10 months)
- Goochland 9/14/21 (17 months)
- *RAA 9/29/21 (11 months)
- Manassas Park 10/5/21 (29 months)
- Manassas 10/12/21 (29 months)
- Prince George 10/27/21 (19 months)
- Richmond City 10/20/21 (21 months)
- *Henrico 11/4/21 (7 months)
- Clarke 11/16/21 (25 months)

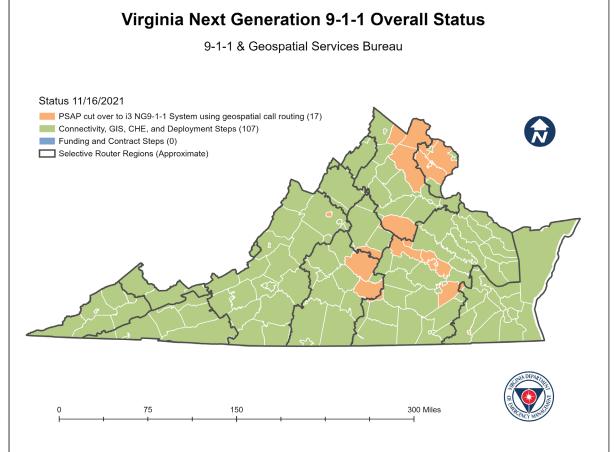
- Deployment Date (Months from special construction contract to deployment)
- Yellow = Intrado PSAPs (avg 14 months)
- Others are Motorola / Channel PSAPs (avg 22 months)
- Deployed PSAPs (count)
 - * <= 12 months (4)
 - 13-16 months (3)
 - 17-20 months (4)
 - 21-25 months (2)
 - 26+ months (4)
- Since these PSAPs began, these lessons have been applied and incorporated into later deployments. Stakeholders have stepped up to the table to keep their respective parts moving forward.
- Regular monthly and bi-monthly coordination calls and project status sharing are ongoing with the respective stakeholders.













Virginia NG9-1-1 Deployment Steps

Funding and Contract

Migration Proposal

Outlines GIS, CHE, diversity, and other PSAP and GIS specific requirements

Funding Request

Submitted by PSAP

Funding Request Recommended by 9-1-1 Services Board Funding Committee

Funding Approved by 9-1-1 Services Board

Contract Executed by: PSAP NG9-1-1 Service Provider

i3 Preconditions

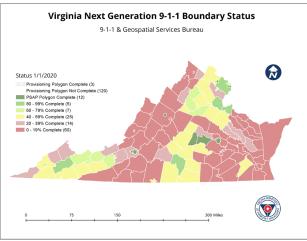
Construction Contract with PSAP Diverse LEC Survey & Work List Connectivity PSAP Contracts with Project Vendor for Needed Work Diversity Constructed Provisioning and PSAP Boundaries Developed GIS Kickoff Meeting i3 Coach Assignment Onboarding EGDMS Critical Errors Resolved **Project** ALI to RCL Issues Resolved Mutual Decision that GIS Supports Geospatial Call Routing Call Handling CHE Supports i3 (PSAP Responsibility) Equipment

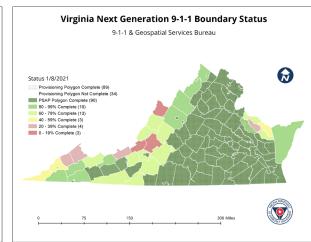
i3 Deployment with Geospatial Routing

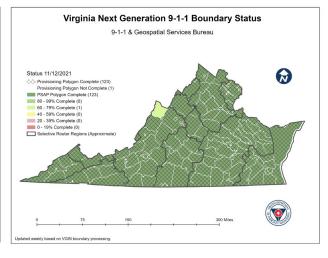
	PSAP Site Remediation				
Architecture Phase	CPE Network Design				
	Architecture Review				
Integration Phase	Order AVPN Circuits for Integration Phase				
	POI to Aggregation Site Network for Region				
	PSAP Equipment Installation				
	Circuits and Network Testing & Turn Up				
	GIS Data Provisioning				
Denloyment	Pre-Cutover Planning and Testing				
Deployment Phase	Planned PSAP Cut-Over Date:				
	PSAP Cut-Over				

Notes:

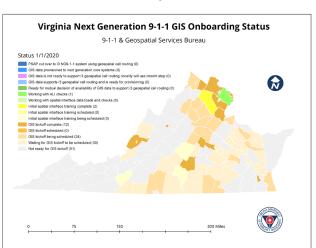
- Blue and orange steps must be completed in order from top to bottom.
- All green boxes must be completed before proceeding with orange Deployment Phase for i3 deployment. They may be completed in any order and can be done simultaneously.
- Green "Mutual Decision" box should be complete about 90 days before the planned cut-over date.
- o If not all green solid boxes are met, steps in orange may be altered to deploy PSAP on the ESInet without complete i3 functionality. PSAP would move to i3 functionality as green preconditions are met.



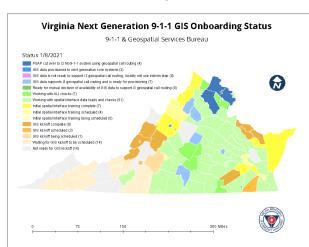




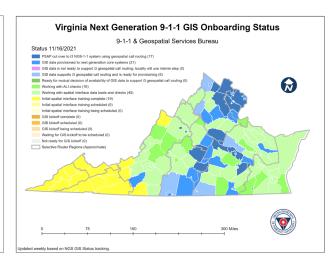
January 2020



January 2021



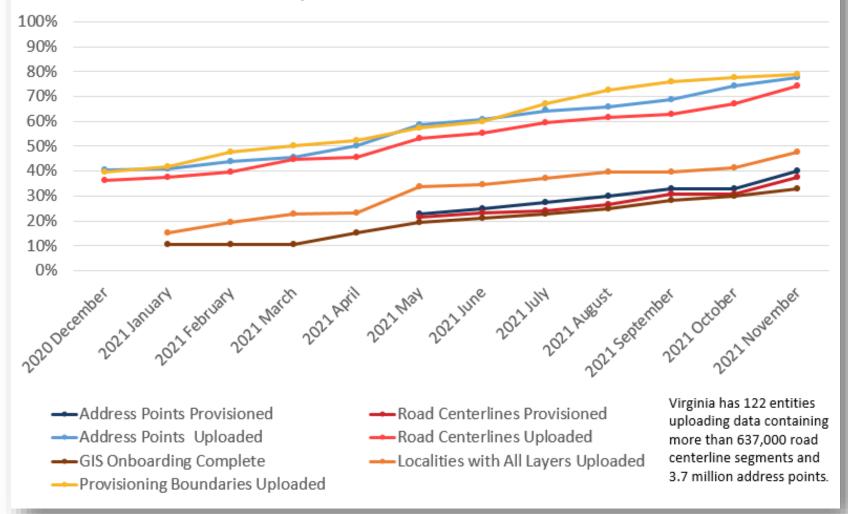
November 2021







Virginia Locality GIS Onboarding Status and GIS Features Uploaded and Provisioned for NG9-1-1





NG9-1-1 GIS Metrics by Locality

Total Number of Projects: 124 – Current as of 11/5/2021

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(100\% = 124; 75\% = 93; 50\% = 62; 25\% = 31; 20\% = 25; 10\% = 12)
```

- 99% NG9-1-1 Provisioning Boundary Complete (+3%)
- 99% NG9-1-1 PSAP Boundary Complete (+1%)
- 100% Eligible to Start GIS Onboarding (+1%)
- 100% GIS Kickoff Meeting Complete (+1%)
- 100% EGDMS Training Complete (+2%)
- 99% Eligible to Upload (+1%)
- 79% Provisioning Boundary Uploaded (+2%)
- 48% All Seven Required GIS Data Layers Uploaded (+3%)
- 47% ALI to Road Centerline Analysis Started (+2%)
- 33% ALI to Road Centerline Analysis Complete (no change)
- 33% GIS Data Provisioned to ECRF (+3%)
- 58% GIS Address Points and Road Centerlines updated in last 90 days (+1%)





NG9-1-1 Funding And Amendment Requests







Amendments Since 09/01/21

PSAP	Cost Category	Amount of Request	Original Project Cost	New Project Cost	Total Funding Provided	Total Funding Post Amendment Approval	% Increase (Category)	% Increase (Project)	Category Closeout
Amherst	CHE i3 Services	\$1,072.00	\$30,000.00	\$31,072.00	\$333,372.21	\$334,444.21	3%	0%	
Clarke	CHE i3 Services	\$4,080.00	\$61,776.00	\$65,856.00	\$224,585.08	\$228,665.08	6%	2%	
Farmville	Monthly Delta	\$6,477.12	\$51,426.96	\$57,904.08	\$367,860.76	\$374,337.88	11%	2%	
Fauquier	Correction	-\$18.00	N/A	N/A	\$375,910.00	\$375,892.00	N/A	0%	
Halifax	CHE i3 Services	\$3,919.66	\$30,000.00	\$33,919.66	\$293,778.26	\$297,697.92	12%	1%	
King George	Diversity	\$10.00	\$613,163.00	\$613,173.00	\$781,179.74	\$781,189.74	0%	0%	
Loudoun	Monthly Delta	\$0.06	\$811,916.82	\$811,916.88	\$977,617.30	\$977,617.36		0%	
Louisa	Monthly Delta	\$10,950.00	\$104,720.64	\$115,670.64	\$390,987.40	\$401,937.40	9%	3%	
Lynchburg	CHE i3 Services	\$2,270.29	\$30,000.00	\$32,270.29	\$631,920.79	\$634,191.08	7%	0%	
Madison	Diversity	-\$0.50	\$74,459.50	\$74,459.00	\$391,335.64	\$391,335.14	0%	0%	Х
New Kent	Diversity	\$90.00	\$57,231.00	\$57,321.00	\$397,902.60	\$397,992.60	0%	0%	
Newport News	CHE i3 Services	\$672.41	\$75,498.51	\$76,170.92	\$466,313.67	\$466,986.08	1%	0%	
Nottoway	Text to 9-1-1	\$12,196.59	\$30,000.00	\$42,196.59	\$468,081.18	\$480,277.77	29%	3%	
Roanoke City	Correction	-\$415.12	N/A	N/A	\$213,720.12	\$213,305.00	N/A	N/A	
Spotsylvania	CHE i3 Services	\$753.58	\$69,533.52	\$70,287.10	\$510,197.40	\$510,950.98	1%	0%	
Winchester	CHE i3 Services	\$21,949.67	\$33,044.44	\$54,994.11	\$604,861.77	\$626,811.44	40%	4%	
Winchester	CHE i3 Services	\$850.00	\$54,994.11	\$55,844.11	\$626,811.44	\$627,661.44	2%	0%	



16 Grants - \$64,858.26 (\$4,053.64 per grant)

1 Diversity Category Closeout (\$0.50)

Importance of NG9-1-1 Awards and Amendments

- In response to a request from the Board, PGC and Finance Committee for more detailed data on the award amendments, staff provided an in-depth review of the award amendments, including breakdowns by category (next two slides).
- Transparency and visibility regarding the usage of the 9-1-1 fund is essential for the community, the Board and all committees as we collectively assess where we are today and how the fund is being used to support 9-1-1 in Virginia as we plan for future years as well.
- Staff will continue to detailed award and amendment data throughout the lifecycle of the project.
- Staff is reaching back to identify a PGC member representative to also participate in the administrative review process.

Result of Consolidated Amendment Tracking

Category	Count	Amount	Average		
CHE i3 Services	73	\$1,284,102.19	\$17,590.44		
CHE Replacement	3	\$550,000.00	\$183,333.33		
Text to 9-1-1	14	\$281,518.11	\$20,108.44		
Voice Logging	1	\$6,534.44	\$6,534.44		
Rack	1	\$685.21	\$685.21		
Diversity	35	\$3,341,028.13	\$95,457.95		
GIS Data	4	\$33,856.27	\$8,464.07		
Legacy 9-1-1	7	\$587,116.20	\$83,873.74		
Monthly Delta	7	\$991,502.80	\$141,643.26		
Correction	13	\$486,998.18	\$37,461.40		
Initial Award	123	\$54,748,326.44	\$445,108.35		
Total Amendments	158	\$7,563,341.53	\$47,869.25		
Amendment Sheet Total	281	\$62,311,667.97			
Pending / Open	0	\$-			
Withdrawn	3	\$27,057.28			
Awarded Total		\$62,284,610.69			
Budget Workbook Total		\$62,284,610.69			
Difference		\$-			
	• • • • • •	· · · · Reconciled · · · ·	• • • • • • • • • •		



Board (B) & Administrative (A) Amendment Review

Category	Α	A - Amount	A - Average	В	B - Amount	B - Average
CHE i3 Services	55	\$895,423.25	\$16,280.42	9	\$151,019.56	\$16,779.95
CHE Replacement	0	\$-	\$-	3	\$550,000.00	\$183,333.33
Text to 9-1-1	3	\$22,917.33	\$7,639.11	3	\$47,871.40	\$15,957.13
Voice Logging	0	\$-	\$-	0	\$-	\$-
Rack	1	\$685.21	\$685.21	0	\$-	\$-
Diversity	14	\$731,428.62	\$52,244.90	19	\$2,626,233.86	\$138,222.83
GIS Data	3	\$29,356.27	\$9,785.42	0	\$-	\$-
Legacy 9-1-1	0	\$-	\$-	0	\$-	\$-
Monthly Delta	4	\$23,103.90	\$5,775.98	3	\$968,398.90	\$322,799.63
Correction	2	\$(433.12)	\$(216.56)	11	\$487,431.30	\$44,311.94
Initial Award	13	\$5,153,350.51	\$396,411.58	110	\$49,594,975.93	\$450,863.42
Total Amendments	82	\$1,702,481.46	\$20,761.97	48	\$4,830,955.02	\$100,644.90
Amendment Sheet Total	95	\$6,855,831.97	\$72,166.65	158	\$54,425,930.95	\$344,467.92





Old Business

Old Business Items

• 9-1-1 Cost Study

PSAP Data and Downstream Systems





New Business





PSAP Grant Committee (PGC)

NG9-1-1 Funding Award Extensions

FY23 PEP Grant Application Cycle

Funding CHE Replacement



NG911 Funding Award Extensions

- Extend the grant expiration date for NG911 funding awards until July 1, 2023 (legislative deadline for NG911 deployment).
- Due to the impact of the pandemic and the implementation of a phased approach since the funding initiated in November 2018, an extension will provide the needed time in the deployment window to meet the legislative deadline.
- Impact: Extends expiration dates for 112 awards.
- PGC Recommendation to the Board: Extend NG9-1-1 grant expiration dates for awards expiring prior to July 1, 2023 to have a new expiration date of July 1, 2023.

FY23 PEP Grant Application Cycle

- 101 Applications received
 - 92 individual requests
 - 9 multi-jurisdictional requests
- Total amount requested \$474,856.00
- PGC Recommended Action: Recommend that grant applications be accepted and approved.



Funding CHE Replacement: Background

- VESTA systems are refreshed every 5 years
- VIPER systems are refreshed every 7 years
- CHE Refresh has been included in NG migration funding during the NG9-1-1 deployment window (2018-present)
- Future funding (outside of NG migration funding) is expected to be needed in the near future as we come up on the 5 year mark for NG funding.
- PGC Recommended Action: RAC to provide input so PGC can make a recommendation in January.

Regional Advisory Committee (RAC) Update

- First meeting was held September 16th
- Over half the members represent the 9-1-1 community
- There are 4 positions on the committee that are still in the appointment process (EM – East, VEMA, NENA, DBHDS)
- Next meeting this afternoon at 1:30pm after the Board meeting
- Will be discussing the previous slide providing input on the CHE refresh process



Finance Committee Update

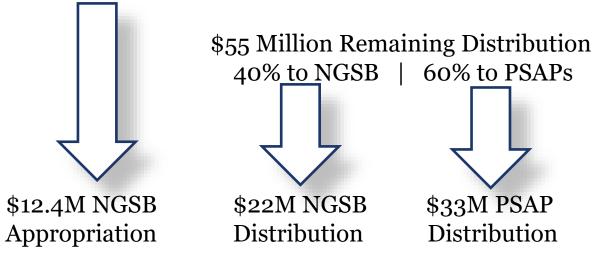
- Last Finance Committee Meeting (informational) was held on October 21st
- FY21 actual revenue was \$67,098,001
- Staff has a meeting December 5th with VDEM Budget/Finance to go over the budget/actual/cash reports from the Wireless Fund.
- After this meeting we will begin presenting regular financial reports to the Board/Committees



9-1-1 Fund Waterfall Example

\$67.4 Million in Revenues for FY21

\$12.4 Million Appropriation Items



\$34.4M total to NGSB



Appropriation - \$12,401,609

- •\$1,750,000 Virginia Geographic Information Network (VGIN)
- •\$3,700,000 Virginia State Police (VSP) dispatch center costs
- •\$6,951,609 Emergency Communication System Development services
 - \$1,000,000 System Development
 - \$4,000,000 Wireless E9-1-1 Service Costs
 - \$1,951,609 Remaining PSC Budget

*** Additional appropriation of \$8,000,000 for Sheriff's Dispatchers, but it does not come "off the top". It is paid out of our 40% (VDEM) distribution as an inter-agency transfer.



Revenues

- Prepaid and postpaid rates increased ~10% as of July 1st, 2021
- Increase from \$.75 to \$.82 for postpaid surcharges
- Increase from \$.50 to \$.55 for prepaid surcharges
- The new revenues have started to show up as of the September distributions
- Expecting the fund to be ~\$72M for FY22 and ~\$75M for FY23.



Legislative Committee Update

- Next meeting is scheduled for December 2nd
- Discuss recommendations from 9-1-1 Summit

- Focus on developing charter document
- Discuss plans to monitor and review 9-1-1 legislation for upcoming GA session



Upcoming Meetings / Dates

11/18/21 Regional Advisory Committee (130pm)

11/30/21 Deadline to submit VA APCO reimbursement requests

12/02/21 Legislative Committee (1pm)

01/06/22 PSAP Grant Committee Meeting (1pm)

01/13/22 9-1-1 Services Board Meeting (1 pm)





Public Comment

Adjourn

Motion to adjourn meeting

Next meeting is scheduled for Jan 13th (2022)

