



E-911 Services Board

General Business Meeting

January 14, 2015





Agenda

1. Call to Order
2. Approval of Minutes
3. Finance Committee Report
4. FY 17 PSAP Grants
5. Old Business
6. New Business
7. Public Comment
8. Adjourn



Finance Committee Report





FY2015 - Transferred to VITA

Description	Amount
Transferred from TAX	\$30,987,423.51
Aide to Localities	(\$10,004,836)
CMRS Cost Recovery	(\$ 4,039,969)
Salaries/Benefits	(\$ 1,322,504)
Other Expenses	(\$ 832,894)
VSP Transfer	(\$3,700,000)
Compensation Board Transfer	(\$8,000,000)
VGIN Transfer	(\$1,750,000)
Difference	\$1,337,221
Cash with Treasurer – June 30, 2015	\$13,619,957.02



Wireless E-911 Fund Revenue

Year	Revenue	Change
FY15	\$59,245,942.01	10%
FY14	\$53,670,091.37	-8%
FY13	\$58,469,892.72	6%
FY12	\$55,228,578.90	4%
FY11	\$52,953,817.62	0%
FY10	\$53,015,427.57	3%
FY09	\$51,536,334.92	2%
FY08	\$50,461,828.00	6%
FY07	\$47,593,846.00	11%
FY06	\$42,905,088.00	9%
FY05	\$39,313,650.00	14%
FY04	\$34,381,027.00	14%
FY03	\$30,196,055.00	11%
FY02	\$27,148,179.00	45%
FY01	\$18,737,782.00	7%



Cash Reserve Policy

“It shall be the policy of the Virginia E-911 Services Board to maintain a cash reserve **at least** equal to the average amount of projected expenses for one month of the following fiscal year. As permitted by Section 56-484.17(D) of the Code of Virginia, the Board will, to the maximum extent possible, retain some or all of uncommitted funding at the end of each fiscal year for a reserve balance pursuant to this policy.”

Description	Amount
Average VITA Monthly Aide to Localities	\$2,237,207.76
Average TAX Monthly Payments	\$2,470,850.20
Total Monthly Costs	\$4,708,057.96



Grant Funding

Description	Amount
Cash Balance – June 30, 2014	\$13,619,957.02
Prior Year Grants Carried Over	(\$4,867,927.97)
FY2016 Grants Awarded	(\$7,657,138.45)
Projected FY16 Grant Revenue	\$4,760,790.19
Cash Reserve Policy	(\$4,708,057.96)
Unspent CMRS Funding for FY16	\$2,587,555.28
Projected FY17 Grant Revenue	\$4,816,988.89
Projected FY17 PSAP Grant Funding Available	\$8,552,167.00



FY 17 PSAP Grants





Focus of Grant Presentation

- Review significant changes with the FY 17 PSAP Grant Guidelines
- Request the Board consider the following items related to the FY 17 grants:
 1. Fund grants through Priority 31
 2. Fund Priority 32 grants with revisions to original scope of work and amount requested



Review of FY 17 Grant Guidelines

- New Programs:
 - Shared Services, Individual PSAP, and PSAP Education Program (PEP)
 - Priorities have been streamlined and begin to address NG9-1-1
 - NG9-1-1 GIS Equipment and Services
- New definitions:
 - NG9-1-1 Ready, Recurring Costs, Call Handling Equipment (CHE)
- Funding for Text-to-9-1-1 projects



Summary of FY 17 Grants

- PSAP Grant Committee (PGC) met on December 10, 2015 to review, prioritize, and recommend amounts for the FY 2017 PSAP grants
- 155 grants were received, which totaled \$12,648,749:
 - 83 PEP grants
 - 12 Shared Services grants
 - 60 Individual grants



Summary of FY 17 Grants

- Four applications are not recommended for funding because they did not meet the FY 17 PSAP Grant Guidelines:
 1. Botetourt - Enhancement Project
 2. Hampton - Enhancement Project
 3. Louisa - Enhancement Project
 4. Twin County - Multi-Year Funding



Summary of FY 17 Grants

- Ten GIS data project applications were submitted with varying justifications for Tier Type
- The PGC is recommending the following:
 - Non Vendor Supported
 - Floyd
 - Technically Outdated
 - King & Queen, Roanoke County, Tazewell, Botetourt, Franklin City, Greenville, and Wise
 - Strengthen
 - Amelia and King & Queen



Summary of FY 17 Grants

- Other applications:
 - Fairfax County's ESInet project was ranked as Technically Outdated
 - Precedent setting for ESInet projects
 - Greenville Shared Services project was reviewed to see if it met the shared services definition
 - Augusta, Clarke, Martinsville-Henry Time Sync and UPS projects



Recommendations for FY 17 Grants

- Report from Finance Committee indicates that \$8.5M is available for PSAP grants
- As a result, PGC is recommending that grants through Priority #31 be awarded funding
 - This amount is \$8,066,886
- **Board item #1: Consider funding grants through Priority #31**



Additional Item: Priority #32 Grants

- The PGC recommendation does not include any NG9-1-1 Equipment and Services grants
- The amount of uncommitted funding (about \$550K) is insufficient to fully fund the next group of grants (Priority#32)
- The PGC asked ISP staff to consult with the impacted PSAPs to develop a successful strategy to provide partial funding for projects in this grant category



Priority #32 Grants

- ISP staff worked with localities to revise their applications to include stand-alone phased and related costs
- The goal was to produce tangible and usable products for potential partial grant awards
- The general approach taken by the localities was to focus initially on local data to determine improvements or corrections for a regional model



Priority #32 Grants

- The total for all three revised applications is \$486,650:
 1. King and Queen - \$129,641
 2. Roanoke - \$166,259
 3. Tazewell - \$190,750



Priority #32 Grants

- The criteria developed for evaluating these revised applications is as follows:
 - Does the proposed scope of work support a stand-alone project?
 - Do the participating localities and state derive benefit if the project is completed?
 - Can follow-up issues (e.g. data freshness) be handled locally?
- ISP staff believes that all revised applications satisfy the above criteria



Priority #32 Grants

- Issue of Multi-Year Funding
 - Guidelines do not allow grant funding to sustain multi-year requests for the same project priority or original scope of work
 - Staff does not believe that this is an issue because the original applications have been set aside and the revised applications are different
 - If the localities submit a FY 18 application they will not run afoul of the multi-year prohibition either since the application would contain a different scope of work from FY 17



Priority #32 Grants

- **Board action #2 : Consider approval of staff recommendation**
- **Suggest this language in motion to address multi-year funding:**
 - By approving these grants, the scope of work contained in each of the original grant applications has been set aside and has been replaced with a new scope of work. Any subsequent grant applications for regional enhancements to these projects would be allowable if the scope of work supports the regional project.



Priority #33 Grants

- ISP staff discussed the possibility of funding the Priority 33 grants because NG9-1-1 data preparation is an identified priority
- Currently there is no uncommitted FY 17 grant funding
- ISP staff will explore the possibility of finding funding outside of the PSAP Grant Program to help the localities complete their GIS data projects



Old Business





Old Business Items

- Update on legislation



New Business





New Business Items

- Regional Advisory Council (RAC) Report
- Text-to-9-1-1 Update
- Preliminary Report on Data Analytics Pilot
- CMRS Subcommittee Report



RAC Report

- Chair and vice chair elected
- Charter and meeting schedule approved
- Initial discussion on RAC assignments:
 - Reviewed initiatives included in 9-1-1 Comprehensive Plan to determine which ones needed to be identified as high priorities
 - Next step is to identify tasks to support Plan's goals and objectives
- In-person meeting on Jan 26th

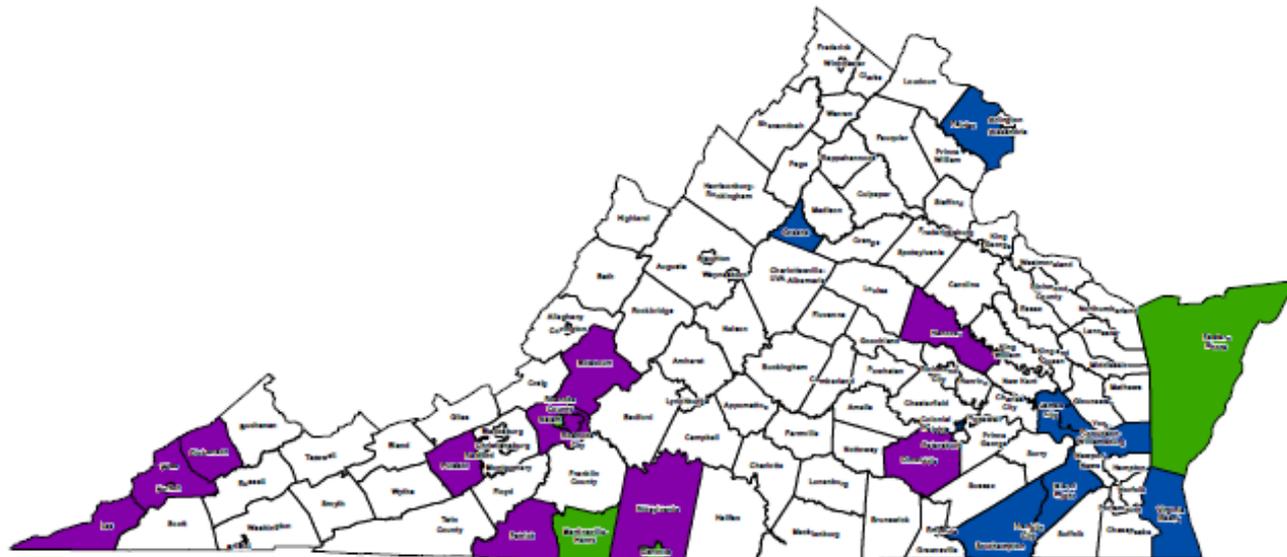


Text-to-9-1-1

- As of December 1st, 24 PSAPs have deployed Text-to-9-1-1 in Virginia
 - 20% of Virginia PSAPs have deployed this technology
 - 31% of all Virginia citizens have this service available to them
 - Pockets of deployment in contiguous localities
- Text-to-9-1-1 Resource Page available:
 - <http://www.vita.virginia.gov/isp/default.aspx?id=6442473870>

Text-to-9-1-1 Deployment Map

Commonwealth of Virginia PSAP Coverage Areas Status of Text-to-9-1-1 Deployment as of December 1, 2015



Virginia Information Technologies Agency



Legend

Deployed

- Deployed - Direct IP (12)
- Deployed - Web Browser (8)
- Deployed - TTY (4)

Ready to Deploy (FCC)

- Ready to Deploy - Direct IP (0)
- Ready to Deploy - Web Browser (0)
- Ready to Deploy - TTY (0)

Number of PSAPs in each category shown in parenthesis (Total = 121)





Problem Statement

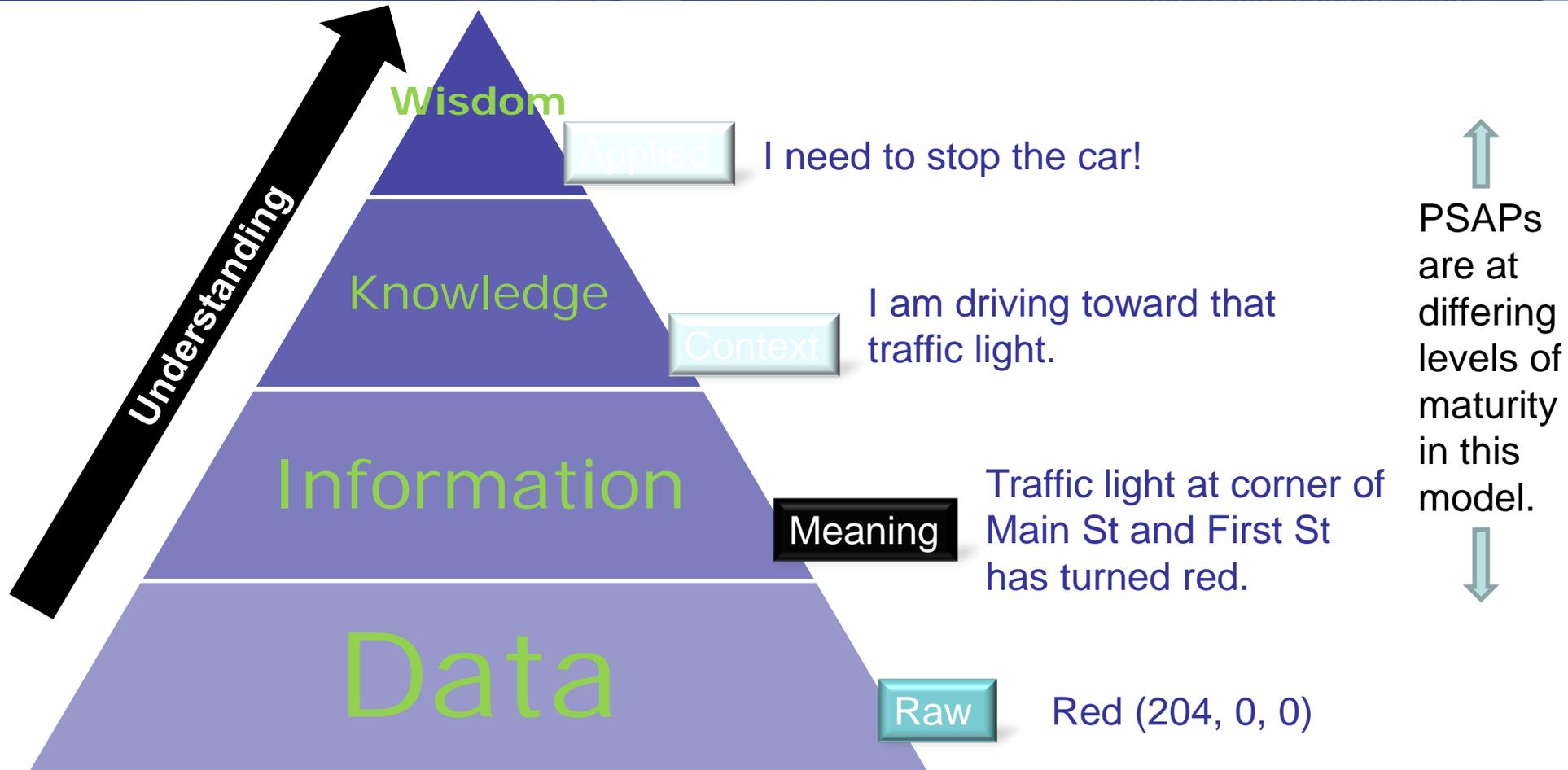
- Minimal data collection currently
- Guiding principle to not degrade service
 - Need to be able to monitor system performance
 - Need a baseline of service before NG9-1-1
- No performance data on existing network
 - Routing of wireless calls
 - Location data provided (WPH1/WPH2)
 - Call set up/delivery times



Data Analytics Pilot

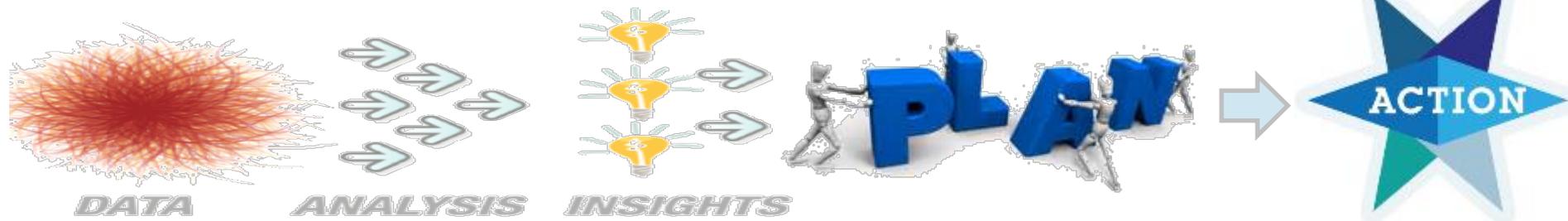
- Market research of potential solutions
- Approached two PSAP Grant recipients (Fluvanna & Waynesboro) and surrounding PSAPs
- Proposed three month pilot to test concept
- PSAPs can continue after pilot
- Determine if meets Commonwealth needs
- ECaTS selected for pilot

Transform Data Into Wisdom (action)



Data Analytics

- A process of inspecting cleaning, transforming and modeling data with **goals of**:
 - Discovering useful information
 - Suggesting conclusions
 - **Supporting decision making**
- Provides **Business Intelligence (BI)**
 - Data analysis that focuses on specific business
 - Allows easy interpretation of large volumes of data
 - Used to identify areas and issues that require **proactive and effective management**





Emergency Call Tracking System (ECaTS)

- Collects analyses, and reports on a PSAP's Call Detail Record (CDR) data.
- Purpose is to deliver accurate call volume and operational statistics for all PSAPs, regardless of the manufacturer of the CPE.
- How it works:
 - A Remote Data Distribution Module (RDDM) is installed at each site
 - It collects and transmits raw call detail record data to the ECaTS data center where it is stored for analysis and reporting
 - Use any device with internet access to log onto the ECaTS portal and run and save reports.

LIVE ECATS DEMO



Commonwealth Wide Reporting

- Critically important that we have a data supported understanding of:
 - Current functional levels of 9-1-1; operationally and systematically,
 - The impact of NG9-1-1 services on those functional levels.
- Standard reporting tool across PSAPs, that provides consistent, comparable data analytics.



Report Examples, Uses & Importance

- Annual true-up reporting
 - Each primary PSAP required to report on (and provide supporting documentation on) total incoming wireline and wireless 9-1-1 calls.
 - Current funding formula uses this data to determine the % of funding each PSAP will receive on a monthly basis.
 - Accuracy and comparability of this data across PSAPs, is essential for assuring equitable distribution of funding.



Calls by Circuit Report Generation

ECaTS smarter 9-1-1 Stefanie McGuffin | Logout

Reports AdHoc Raw

Reporting Groups ECaTS Administration Support Release Notes Download ECaTS Training Manual

Standard Reports

- Call Summary
- Calls Per Hour
- Top Busiest Hours
- Average Call Duration
- Calls By Circuit**
- Circuit Utilization
- PSAP Answer Time
- PSAP Call Taker Ring Time
- Last 12 Months Answer Time
- Last 12 Months Call Taker Ring Time
- Class of Service
- Call Transfer
- Calls by Operator
- Initial Station Total Calls
- Operator Speed of Answer
- Calls per Hour by Day of Week
- Top ESN Report
- Top ANI Report

Management Reports

- Trunk Group Utilization
- Answer Time Exception Report
- Call Taker Ring Time Exception Report

REPORTS
Standard Reports > Calls By Circuit

Select Psaps:

- Augusta County
- Fluvanna County
- Staunton City
- Waynesboro City

OR

Select Group:

VITA

Select Date Range From: 11/01/2015 To: 12/31/2015 **Period Group:** Month

Call Type: 911 Calls **Abandoned Filters:** Include Abandoned

Graph Format: Bar

Agency Affiliation

Emergency Communications
 Fire
 Medical
 Police
 Sheriff
 Training

Filter out Unknown trunks?

Output Format: Web Generate Report



Calls by Circuit Reports (sample)

Calls By Circuit

Augusta County
18 Government Center Lane
Verona, 24482

County: Augusta

Year: 2015

Agency Affiliation: Emergency Communications

Report Date: 01/07/2016 12:02:40

Report Date From: 11/01/2015

Report Date To: 12/31/2015

Period Group: Month

Call Type: 911 Calls

Abandoned Filters: Include Abandoned

Agency Affiliation: All

	911 - Wireless				911 - Wireline				Total
	CELL 1	CELL 2	CELL 3	CELL 4	LAND 1	LAND 2	LAND 3	LAND 4	
November 2015	152	161	813	814	7	8	240	242	2437
December 2015	167	163	865	850	15	13	263	263	2599
Total	319	324	1678	1664	22	21	503	505	5036

Calls By Circuit

Augusta County
18 Government Center Lane
Verona, 24482

County: Augusta

Year: 2015

Agency Affiliation: Emergency Communications

Report Date: 01/07/2016 12:02:40

Report Date From: 11/01/2015

Report Date To: 12/31/2015

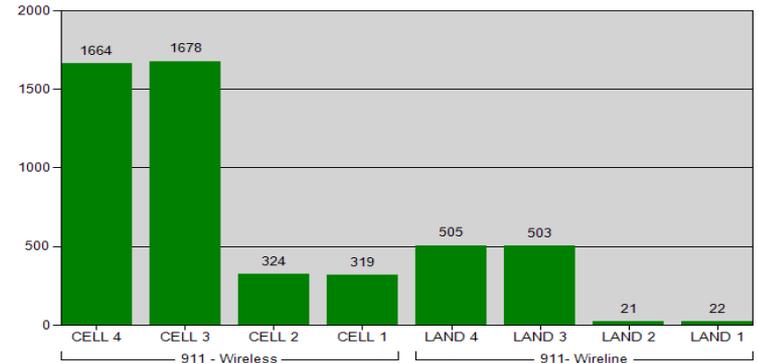
Period Group: Month

Call Type: 911 Calls

Abandoned Filters: Include Abandoned

Agency Affiliation: All

Calls by Circuit



Calls By Circuit

Waynesboro City
250 S Wayne Ave
Waynesboro, 22980

County: Waynesboro City

Year: 2015

Agency Affiliation: Emergency Communications

Report Date: 01/07/2016 12:02:40

Report Date From: 11/01/2015

Report Date To: 12/31/2015

Period Group: Month

Call Type: 911 Calls

Abandoned Filters: Include Abandoned

Agency Affiliation: All

	911 - Wireless				911 - Wireline				Total
	Cell-1	Cell-2	Cell-3	Cell-4	1	2	3	4	
November 2015	202	267	213	256	63	57	63	0	1121
December 2015	219	289	226	294	65	66	64	0	1223
Total	421	556	439	550	128	123	127	0	2344

Calls By Circuit

Waynesboro City
250 S Wayne Ave
Waynesboro, 22980

County: Waynesboro City

Year: 2015

Agency Affiliation: Emergency Communications

Report Date: 01/07/2016 12:02:40

Report Date From: 11/01/2015

Report Date To: 12/31/2015

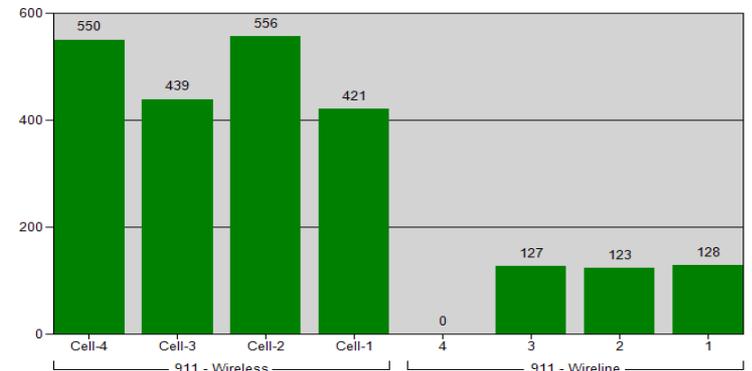
Period Group: Month

Call Type: 911 Calls

Abandoned Filters: Include Abandoned

Agency Affiliation: All

Calls by Circuit





Call Transfers

- According to the Commonwealth's NG 9-1-1 Feasibility Study survey, **about 9% of all 9-1-1 calls get transferred.**
- Call transfers consume time and ultimately delay response.
- In November 2015 there were 406, 9-1-1 call transfers just among pilot participants.
 - Does not include transfers to other PSAPs or agencies



Call Transfer Report

- The Call Transfer Report
 - trace a transferred call from one PSAP to another
 - from the initial time that the call is delivered to the time it is terminated by the caller.
 - This report presents tracking information for transferred calls between PSAPs.



Call Transfer Report Generation

Standard Reports	REPORTS Standard Reports > Call Transfer		
Call Summary	Select Psaps:		
Calls Per Hour	<input checked="" type="checkbox"/> Augusta County <input checked="" type="checkbox"/> Fluvanna County <input checked="" type="checkbox"/> Staunton City <input checked="" type="checkbox"/> Waynesboro City		
Top Busiest Hours	OR		
Average Call Duration	Select Group:		
Calls By Circuit	VITA		
Circuit Utilization	<hr/>		
PSAP Answer Time	Select Date Range	From:	To:
PSAP Call Taker Ring Time	Specify a Date Range <input type="text"/>	11/01/2015	12/31/2015
Last 12 Months Answer Time			Period Group:
Last 12 Months Call Taker Ring Time			Year <input type="text"/>
Class of Service	Call Type:		
Call Transfer	All <input type="text"/>		
Calls by Operator	Agency Affiliation		
Initial Station Total Calls	<input checked="" type="checkbox"/> Emergency Communications <input checked="" type="checkbox"/> Fire <input checked="" type="checkbox"/> Medical <input checked="" type="checkbox"/> Police <input checked="" type="checkbox"/> Sheriff <input checked="" type="checkbox"/> Training		
Operator Speed of Answer	Ani: <input type="text"/>		
Calls per Hour by Day of Week	<hr/>		
Top ESN Report	Output Format: Web <input type="text"/>		
Top ANI Report	<input type="button" value="Generate Report"/>		
Management Reports			
Trunk Group Utilization			
Answer Time Exception Report			
Call Taker Ring Time Exception Report			
Outage			
10-Digit Emergency Call			
Unparsed Data			
Wireless Routing Reports			
Wireless Call Sector			
Wireless Transfer Summary			



Call Transfers in November (sample)

Total Calls Transferred: 201

	ALI Information					Call Record Information				
	ANI	City	Class	ESN	Call Sector	Call Type	PSAP	Seizure Date Time	Talk Secs	Duration Secs
Source	540-671-1551	WAYNESBORO	WPH2	00547	1150 SHENANDOAH VILLAGE DRS SECTOR	911 Calls	Waynesboro City	11/1/2015 4:54:27 AM	38	43
Transfer To	540-671-1551	WAYNESBORO	WPH2	00547	1150 SHENANDOAH VILLAGE DRS SECTOR	911 Calls	Augusta County	11/1/2015 4:54:59 AM	145	150
TOTAL:									183	193
Source	240-832-5521	STAUNTON	WPH2	00888	HUCKLEBERRY HILL TOWER SITEE SECTOR	911 Calls	Augusta County	11/1/2015 10:43:05 PM	144	149
Transfer To	240-832-5521	STAUNTON	WPH2	00888	HUCKLEBERRY HILL TOWER SITEE SECTOR	911 Calls	Staunton City	11/1/2015 10:45:09 PM	105	114
TOTAL:									249	263
Source	540-241-0683	WAYNESBORO	WPH1	00547	1541 S DELPHINE AVESW SECTOR	911 Calls	Waynesboro City	11/2/2015 1:10:16 AM	82	87
Transfer To	540-241-0683	WAYNESBORO	WPH2	00547	1541 S DELPHINE AVESW SECTOR	911 Calls	Augusta County	11/2/2015 1:11:30 AM	9	15
TOTAL:									91	102
Source	540-255-3998	VERONA	WPH1	00539	375 WILLOW SPROUT RD - S Sector	911 Calls	Augusta County	11/2/2015 7:42:13 AM	80	86
Transfer To	540-255-3998	VERONA	WPH1	00539	375 WILLOW SPROUT RD - S Sector	911 Calls	Staunton City	11/2/2015 7:42:52 AM	41	49
TOTAL:									121	135
Source	434-906-9015	VERONA	WPH2	00888	12 MID VALLEY LNW SECTOR	911 Calls	Augusta County	11/2/2015 1:45:55 PM	122	131
Transfer To	434-906-9015	VERONA	WPH2	00888	12 MID VALLEY LNW SECTOR	911 Calls	Staunton City	11/2/2015 1:47:46 PM	353	368
TOTAL:									475	499



Cell Tower Sector Routing

- Determine which cell tower sectors transferred calls originate from.
- Use this information to determine if re-routing cell tower sectors to another PSAP, will reduce the need for call transfers.
 - Streamline call processing
 - Increase response time



Wireless Call Sector Report

- The Wireless Call Sector report
 - provides transfer information based on cell sectors for the specified date range.
 - If a PSAP transfers 50% or more of their calls from a specific cell sector to the same destination PSAP, it will show up on this report.



Wireless Call Sector Report Generation

Standard Reports	REPORTS Wireless Routing Reports > Wireless Call Sector		
Call Summary	Select Psaps:	Select Group:	
Calls Per Hour	<input checked="" type="checkbox"/> Augusta County	VITA	
Top Busiest Hours	<input checked="" type="checkbox"/> Fluvanna County	OR	
Average Call Duration	<input checked="" type="checkbox"/> Staunton City		
Calls By Circuit	<input checked="" type="checkbox"/> Waynesboro City		
Circuit Utilization	<hr/>		
PSAP Answer Time	Select Date Range	From:	To:
PSAP Call Taker Ring Time	Specify a Date Range <input type="text"/>	11/01/2015	12/31/2015
Last 12 Months Answer Time			Period Group:
Last 12 Months Call Taker Ring Time			Month <input type="text"/>
Class of Service	Number of Calls in Sector (>=)	1 <input type="text"/>	
Call Transfer	Percent Transferred (>=)	30 <input type="text"/>	
Calls by Operator	<hr/>		
Initial Station Total Calls	Output Format: Web <input type="text"/>		
Operator Speed of Answer	<input type="button" value="Generate Report"/>		
Calls per Hour by Day of Week			
Top ESN Report			
Top ANI Report			
Management Reports			
Trunk Group Utilization			
Answer Time Exception Report			
Call Taker Ring Time Exception Report			
Outage			
10-Digit Emergency Call			
Unparsed Data			
Wireless Routing Reports			
Wireless Call Sector			
Wireless Transfer Summary			



Wireless Call Sector Report (sample)

Originating PSAP	"Transferred to" PSAP	Cell Sector	Telco	Total 9-1-1 Calls	Total 9-1-1 Calls Transferred	Percentage of Calls Transferred
Augusta County	Staunton City	119 AUGUSTA WOODS DRNW SECTOR	CFWDI	66	34	51.52%
Augusta County	Staunton City	HUCKLEBERRY HILL TOWER SITESW SECTOR	VZW	42	14	33.33%
Augusta County	Staunton City	5322 A LEE HWYNW SECTOR	VZW	34	11	32.35%
Augusta County	Staunton City	199 Equestrian Dr - NE Sector	ATTMO	18	12	66.67%
Augusta County	Waynesboro City	2158 JEFFERSON HWYS SECTOR	CFWDI	18	7	38.89%
Augusta County	Waynesboro City	2761 HERMITAGE RDSE SECTOR	CFWDI	15	10	66.67%
Augusta County	Staunton City	1380 NEW HOPE RDSW SECTOR	CFWDI	8	3	37.50%
Augusta County	Staunton City	199 EQUESTRIAN DRE SECTOR	CFWDI	8	4	50.00%
Augusta County	Staunton City	199 EQUESTRIAN DRN SECTOR	CFWDI	7	6	85.71%
Augusta County	Waynesboro City	51 THREE NOTCHED MOUNTAIN HGWY RT250N SECTOR	VZW	7	4	57.14%
Augusta County	Waynesboro City	51 THREE NOTCHED MOUNTAIN	CFWDI	7	4	57.14%



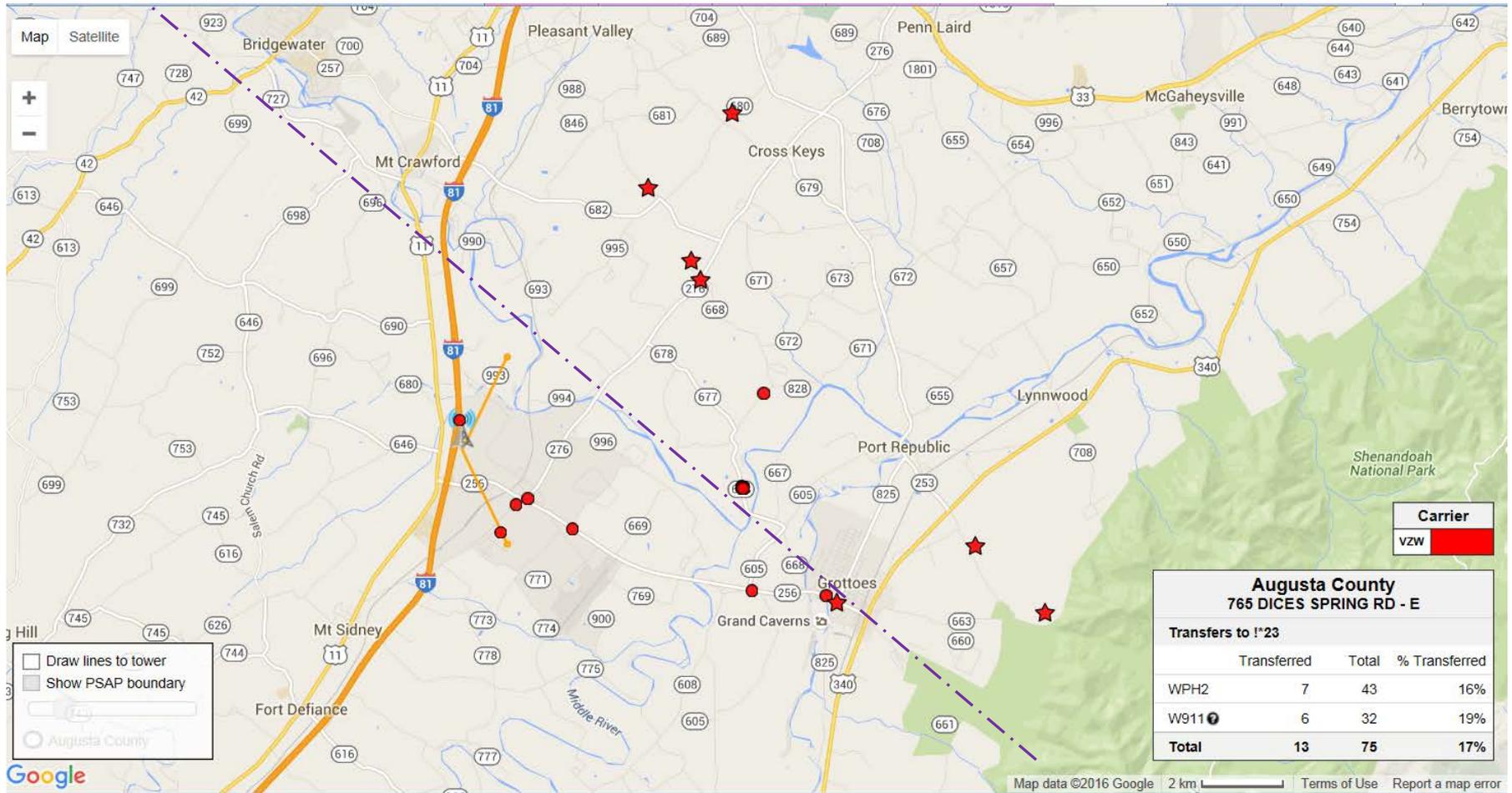
Report & Visualize Wireless Transfers

- Can run reports and also create maps to review the data and results of all transfers.

Originating PSAP	Tower Address	Sector	Carrier	Total 9-1-1 Calls	Transfer Details		Plot Calls
					Transfer PSAP	% Transferred	
Augusta County	166 CRIMORA STATION RD	W	VZW	3	I*20	33.33%	Visualize
Augusta County	2203 LEE JACKSON HWY	S	TMOB	9	I*20	33.33%	Visualize
Augusta County	250 N JEFFERSON ST	NW	VZW	3	I*23	33.33%	Visualize
Augusta County	375 WILLOW SPROUT RD - NE Sector	NE	ATTMO	3	I*20	33.33%	Visualize
Augusta County	375 WILLOW SPROUT RD - S Sector	S	ATTMO	2	I18005722260	50.00%	Visualize
Augusta County	418 BROADHEAD SCHOOL RD	E	VZW	2	I*20	50.00%	Visualize
Augusta County	438 HANKEY MOUNTAIN HWY	SW	CFWDI	5	Staunton City	60.00%	Visualize
Augusta County	559 Spottswood Rd - NE Sector	NE	ATTMO	10	I*20	30.00%	Visualize
Augusta County	59 Construction Ln - NW Sector	NW	ATTMO	1	Staunton City	100.00%	Visualize
Augusta County	760 TROXELL GAP ROAD	E	VZW	22	I*24	40.91%	Visualize
Augusta County	767 DICES SPRING RD - N	N	CFWDI	3	I*20	33.33%	Visualize



Visualization of Call Transfers





Pilot Continuation

- Two months of three month pilot completed
- Continue to analyze available data
- Determine needs met/unmet and quantify benefit
 - Local
 - Commonwealth
- Determine short-term and local term issues to be resolved



Issues Identified

- Records retention
- Hosted data versus local storage
- Freedom of information Act
- Report Access
- Contracting



CMRS Subcommittee Report

- Review Subcommittee's recommendations



And In Conclusion

- Public Comment
- Adjourn
- Next meeting date is March 10, 2016