

## PSAP Grant Program Grant Ranker

# View Application--45--Telco Diversity Development

**Grant Period:** 2010

**Tier:** Replacement of out of service wireless E-911 equipment to enable primary PSAP to maintain current service levels to the general public (**OUT OF SERVICE**)

**Grant Program:** Continuity and Consolidation **Grant Type:** Regional Initiative

**Priority:** CPE (CPE)

**Primary PSAP Applicants:** Bath County

**Jurisdictions Served:** Alleghany, County of  
Bath, County of  
Highland, County of

### **Project Director:**

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### **Project Description:**

**Total Project Cost** \$406,250.00

**Amount Requested:** \$406,250.00

### **Statement of Need:**

Evidence of Financial Need Each of the participating PSAPs has established their respective enhanced 9-1-1 services over the past 5 years. To get the systems operational in a reasonable timeframe, they implemented their PSAP services using the existing and available resources from the telecommunication providers. The long term plan is to improve the reliability of E 9-1-1 services to the region by establishing call route diversity. In addition, the PSAPs are interested in improving their ability to handle the next generation 9-1-1 service requests by implementing the infrastructure to reliability handle the diverse service request traffic. This includes the ability to utilize the emerging capabilities of the statewide network infrastructure. The participating PSAPs in individually and collectively do not have the financial resources to perform the work contemplated in this grant. However, successful accomplishment of this work is a key milestone achievement in the long term plan to improve E 9-1-1 services within our respective localities. We respectfully request the funding described above to enable us to complete this work. Without this grant award, this project will not be done. Relationship to the Current Funding Priorities This grant request relates to the Continuity priority #1 CPE. This grant will provide the necessary funding to develop a plan to diversify the wireless and wireline call routing to the CPE at the PSAP. Impact on Operational Services Successful accomplishment of this project will guide the procurement and implementation of the infrastructure necessary to provide call routing diversity. Provision of call routing diversity will improve the E 9-1-1 services in respective PSAP areas. Consequences of not receiving funding This project is reliant upon

the award of the grant funding described in the budget section below. Should grant funding not be awarded or significantly reduced from the requested amount, this project will not be undertaken. Inclusion of Project in PSAP Planning This project is an integral part of the long term planning to establish and maintain the highest possible quality of E 9-1-1 services within the participating localities. As stated in the Statement of Need, each of the participating PSAPs have established their respective enhanced 9-1-1 services over the past 5 years. The long term plan is to improve the reliability of E 9-1-1 services to the region by establishing call route diversity.

### **Comprehensive Project Description:**

**Telco Diversity – Project Description** The current infrastructure provides sufficient call pathway diversity from the wireline and wireless providers to the Verizon tandems located in Staunton and Salem. The current infrastructure does not provide call pathway (routing) diversity from the Verizon tandems to the participating PSAPs. Due to their physical locations and the existing telecommunications infrastructure serving these PSAPs emergency calls from wireline and wireless providers travel over a single route from the tandems to the PSAPs. If this route becomes inoperable, the PSAPs lose their ability to receive 9-1-1 calls. This project will work with the PSAPs and telecommunications providers serving the areas covered by the PSAPs to define a plan to establish reliable alternative pathways for call routing. The plan will also consider the next generation 9-1-1 requirements and implications to insure the planned infrastructure can reliably support them. The state is establishing a new statewide networking infrastructure to support secured governmental communications, including PSAPs. This plan will make maximal use of this new infrastructure where possible.

**Goals and Objectives**

**Goal** The goal of this project is to produce a plan that will guide the implementation of infrastructure, dataflows, and work processes to establish and sustain route diversity for emergency services calls. The objectives to achieve this goal include:

1. Identification and participation of all wireless and wireline Telecoms that provide services to the participating localities.
2. Assessment of the PSAPs current CPE and GIS systems and infrastructure
3. Development of infrastructure requirements based on PSAP needs and need of next gen E 9-1-1
4. Identification and assessment of existing telecommunications infrastructure
5. Development, evaluation, and recommendation of the route pathway options
6. Development of implementation plan
7. Assessment and acceptance of implementation plan

**Implementation Strategy and Work plan** The plan will include an assessment of the existing infrastructure, development and assessment of route diversity options, recommendations and specifications for the preferred routing options, and development of an implementation strategy. The implementation strategy will include infrastructure requirements, budget costs, identification of potential funding sources, and a proposed implementation schedule. We anticipate this project will include:

1. Identification of all wireline and wireless service providers serving the participating PSAPs
2. Development of a framework for performing the assessment and developing pathway options
3. Assessment of the current PSAP and GIS systems and requirements to enable reliable call processing
4. Assessment of the current telco systems infrastructure with respect to location, capability, composition, usage, etc..
5. Development of metrics to assess the pathway options based on existing PSAP needs and next gen E 9-1-1 requirements
6. Development of options for establishing new pathways for call routing
7. Evaluation of the pathway options
8. Selection of recommended option
9. Development of and implementation strategy framework, requirements, costs, schedule
10. Development of implementation plan
11. Assessment and acceptance of implementation plan

**Project Timeline (completion time from grant award)**

- 15 days - Identification of all wireline and wireless service providers serving the participating PSAPs
- 1 month - Development of a framework for performing the assessment and developing pathway options
- 45 days - Assessment of the current PSAP and GIS systems and requirements to enable reliable call processing
- 3 months - Assessment of the current telco systems infrastructure with respect location, capability, composition, usage, etc..
- 3 months - Development of metrics to assess the pathway options
- 6 months - Development of options for establishing a new pathway for call routing
- 9 months - Evaluation of the pathway options
- 9 months - Selection of recommended option
- 10 months - Development of and implementation strategy framework, requirements, costs, schedule
- 14 months - Development of implementation plan
- 15 months Assessment and acceptance of implementation plan

**Project Sustainability** This project provides the research, analysis, and planning necessary to develop diversified call routes. It is next step in the longer term plan for providing E 9-1-1 services to the region. It is anticipated that this project will lead to a project for implementing the planned system.

### **How will the equipment purchased will support future technologies for PSAP readiness?:**

n/a

## **Budget and Budget Narrative:**

submitted as an attachment

## **Evaluation:**

Evaluation data will be collected throughout the project as specific milestones are achieved. The data sources will include regular project status reports, milestone testing and acceptance documents, and final project acceptance documents. Project milestones and status reports will follow our specific project objectives: 1. Identification of all wireline and wireless service providers serving the participating PSAPs 2. Development of a framework for performing the assessment and developing pathway options 3. Assessment of the current PSAP and GIS systems and requirements to enable reliable call processing 4. Assessment of the current telco systems infrastructure with respect to location, capability, composition, usage, etc.. 5. Development of metrics to assess the pathway options based on existing PSAP needs and next gen E 9-1-1 requirements 6. Development of options for establishing new pathways for call routing 7. Evaluation of the pathway options 8. Selection of recommended option 9. Development of and implementation strategy framework, requirements, costs, schedule 10. Development of implementation plan 11. Assessment and acceptance of implementation plan

## **Attachments**

<a href="#">Telco Diversity Budget Narrative.pdf</a>
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## Budget and Budget Narrative Section

### *Budget and Budget Narrative - Purpose*

<b>Budget</b>	<b>Task</b>
\$ 6,250	Identification of all wireline and wireless service providers serving the participating PSAPs
\$ 18,750	Development of a framework for performing the assessment and developing pathway options
\$ 50,000	Assessment of the current PSAP and GIS systems and requirements to enable reliable call processing
\$ 81,250	Assessment of the current Telco systems infrastructure with respect location, capability, composition, usage, etc..
\$ 25,000	Development of metrics to assess the pathway options
\$ 93,750	Development of options for establishing a new pathway for call routing
\$ 43,750	Evaluation of the pathway options
\$ 8,750	Selection of recommended option
\$ 6,250	Development of and implementation strategy framework, requirements, costs, schedule
\$ 66,250	Development of implementation plan
\$ 6,250	Assessment and acceptance of implementation plan
<b>\$ 406,250</b>	<b>Total Budget Estimate</b>