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WestCORE Project

***Testimony to Pennsylvania Senate Veterans Affairs and Emergency Preparedness
Subcommittee***

Brian R. Melcer, Director of Public Safety, Lawrence County

Frank Jannetti, Director of Public Safety, Mercer County

October 16, 2012

Good Morning. My name is Brian Melcer and I am the Director of Public Safety for Lawrence County. With me is my colleague, Frank Jannetti, and he is Director of Public Safety for Mercer County. We are here to represent the counties that comprise the Western Pennsylvania County Regional Emergency Services IP Network project, which we refer to as "WestCORE". I would like to first thank Senator Baker, Senator Solobay and the distinguished members of the this committee for holding this hearing regarding critical 9-1-1 capabilities and funding in the Commonwealth.

First lets discuss the history and background of WestCORE:

In late 2009 three counties--Butler, Mercer and Lawrence--met to discuss eventual replacement of our individual 9-1-1 Telephone systems. We each had purchased our "standalone" systems at substantial cost to our individual counties, using wireline and wireless 9-1-1 funds. In 2010 we were notified by our 9-1-1 telephony manufacturer that the system was at "end of sale" and nearing "end of support". A replacement 9-1-1 switch would cost \$250,000 but could support more than 200 9-1-1 workstations. For comparison, there are only 74 positions in the entire WestCORE

footprint. At that time the three counties started exploring sharing a single switch and saving the \$500,000 needed to buy the other two. We quickly recognized the need for a network that would allow us to share one switch.

Meanwhile, several of our colleagues in seven other counties were notified by the same manufacturer that their 9-1-1 telephony was also nearing end of life. Working in a collaborative fashion, the following counties came together to seek a common solution that provided redundant 9-1-1 capabilities, without unnecessary duplication. The participating counties include Armstrong, Butler, Cambria, Fayette, Greene, Indiana, Lawrence, Mercer, Somerset, and Westmoreland. And we are pleased to announce that just two weeks ago Allegheny County notified us that they would be joining the WestCORE initiative. Throughout the initial planning, our counties recognized that while there was a desire to work together and share 9-1-1 infrastructure, we had no way to tie the PSAP's together which is a critical piece to make the technology work. Without a way to tie our PSAP's together we would each have to spend the additional money and have standalone systems.

We then prepared a whitepaper that was submitted to PEMA. In the whitepaper we suggested the reprogramming of a ENHANCE 9-1-1 Grant to achieve a real solution to the 9-1-1 problem we were facing. The WestCORE project was more aligned with the original intent of the ENHANCE 9-1-1 grant program for ESINet deployment. In return WestCORE counties would provide the 50% match to the grant

and free up the previously committed Commonwealth match for other purposes. In addition WestCORE could serve as a model for sharing 9-1-1 systems in an effort to reduce the overburdened 9-1-1 funding model in the Commonwealth. (We have attached the whitepaper submitted to PEMA in mid-2011)

Here is what WestCORE hopes to accomplish as a group:

By collaborating, the WestCORE counties are able to accomplish our public safety objectives with a more efficient model. We anticipate the following benefits by working together.

- ***WestCORE means cost savings*** - we anticipate a cost per 9-1-1 position to fall from more than \$50,000 to around \$35,000 by joining together. The savings to the 9-1-1 fund and county government will exceed \$2 million on the purchase of 9-1-1 telephony alone. Additional cost savings will be recognized for support and service of the system.
- ***WestCORE will establish more effective disaster recovery between member counties.*** The counties intend to provide backup emergency call taking and processing capabilities for one another instead of each county having their own. This can eliminate up to eleven backup systems while improving sustainable emergency call processing. We all recognize that 9-1-1 in Pennsylvania is a cooperative effort between counties, local municipalities, the Commonwealth and private technology vendors. However, when a call is misrouted, or there is a delay between passing calls

between centers, or if an entire PSAP goes offline due to manmade or natural disaster—generally, it is accepted that the general public just knows that “9-1-1 failed”. And usually, the ultimate responsible party whose name is on the front page of the paper is the County. The current system does not give the counties sufficient control over how such disaster scenarios are handled. In a shared model such as WestCORE, with a reliable network, not only do we see the benefit of public safety grade reliability to prevent these scenarios, but also the ability to respond quicker and have another county immediately back us up without convoluted means of rerouting calls.

- ***WestCORE will enhance special needs access to emergency services through a next generation ready solution***
- ***WestCORE will provide scalability that will allow other PSAPs to come on board when they are ready to replace existing systems.*** We fully expect this system to be available to counties beyond our current members.
- ***WestCORE counties are also looking to share other public safety systems and applications in lieu of purchasing single county solutions.*** These systems include voice loggers, multi-county radio, EOC telephones, computer aided dispatch, emergency notification systems and a shared video conference platform that improves planning and coordination for response.

WestCORE was initially established to solve specific 9-1-1 problems and procure a common 9-1-1 platform. Meanwhile, our Southwest Pennsylvania Emergency Response Group, (commonly referred to as Region 13) recognized that by investing in an ESInet for all of our member counties we could be more effective in reducing costs, improving interoperability, situational awareness and disaster recovery capabilities by linking all of our EOCs and PSAPs together on the ESInet. Region 13 is recognized under State Law Act 227 as one of 9 in the Commonwealth. Region 13 covers a population of 3 million over a 9,550 square mile area. There are 706 local Municipalities, 713 Fire Departments, 392 Police Departments and 203 EMS Agencies. Region 13 is proud of our strong relationship between local, county, state, and federal organizations. This unprecedented cooperative relationship led the Region 13 executive board to make the ESInet a strategic priority item for ensuring a high degree of mutual aid and collaboration in delivery of Emergency management, Homeland security and 9-1-1 call taking and dispatch services. Region 13 committed more than \$6 million in homeland security funding for public safety applications that are shared by thirteen counties and the City of Pittsburgh. This ESInet build out complements the more than \$2 million investment by the WestCORE Counties and the \$2.5 million Enhance 9-1-1 Grant.

In each and every case the investments being made into this program are intended to complement the investments by other stakeholders rather than compete with them.

Here is our vision of the future:

As part of the eventual solution we believe that the WestCORE initiative is the beginning of what the public safety communications future will look like. It has been identified as a model project by the National Association of Counties (NACO) and Emergency Management Technology News has also written an article for our colleagues across the nation. Our members realize that while quality of service must remain high we are competing for scarce resources. By leveraging existing assets and working across traditional government boundaries and jurisdictions we can achieve more with less. The intention is to collaborate not only among the WestCORE members but to continue to work with the PEMA , our first responder stakeholders and our colleagues across the Commonwealth to deliver the best public safety service possible.

In the future, we anticipate and welcome the opportunity to tie in with the Northern Tier counties once the Broadband Middle Mile project is complete. We also look forward to linking in directly with the Northwest Tier Regional CPE project. We believe that the citizens of our Commonwealth deserve a uniform level of public safety service that enhances quality of life and protection of property. We recognize

this cannot be accomplished with sixty-seven distinctively unique counties, each having varying resources allocated to public safety. Rather, by establishing a Commonwealth wide network that allows shared technology and telecommunications capabilities we can still carry out the delivery of superior public safety service.

In conclusion, the WestCORE counties recognize the importance and crucial job that our telecommunicators and emergency service providers deliver to the citizens of the Commonwealth every day. We also recognize the changing economic climate, and the need for shared, common sense solutions, instead of operations that are stove piped either by geography or public safety discipline. However, the mother who is holding her non breathing baby, or the person who is trapped in a burning building, or the police officer who is under duress on a dark highway at night, expects only one thing. A timely response to their time of need. The WestCORE initiative will help us to deliver that timely response as well to help us to face our funding challenges by creating a reliable network of shared resources. We thank the committee for their commitment to public safety through studying these issues and hope to answer any questions that the members may have. Thank you.

We have attached the following items as appendices:

Whitepaper from WestCORE to PEMA

NACO article from 12/5/2011

Emergency Management Technology News article from 12/14/2011

Western Pa. counties share new 911 equipment, technology

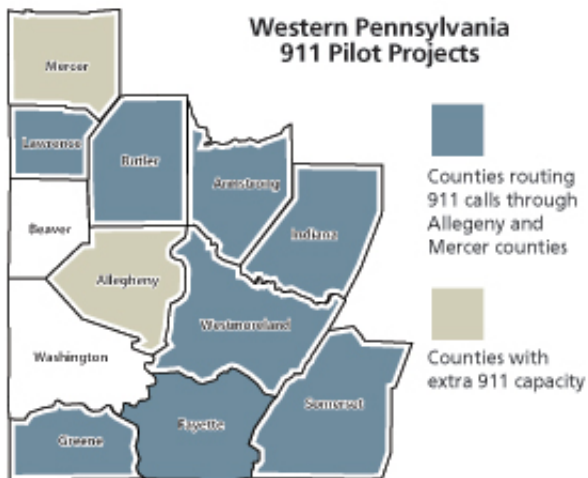
By Charlie Ban
STAFF WRITER

Emergency management departments in western Pennsylvania will transform with new capabilities over the next year when 10 counties complete a major 911 upgrade.

The regional upgrade was made possible thanks to Allegheny and Mercer counties' using their new Internet-based communications systems' extra capacity to manage 911 calls for the eight others. Once new equipment is in place, the counties' emergency communications centers (ECC) will be able to receive the text and email equivalent of 911 calls.

"Right now our 911 department is a call center; it's all analog," said Gary Thomas, Allegheny County emergency services' assistant chief and 911 coordinator. "When we're finished, it will be a data center with more than just phone calls coming in. We'll face a bit of a learning curve when we're inundated with new media, but we'll adapt."

As 911 systems reached the end of their maintenance life in Allegheny County (along with the city of Pittsburgh) and Mercer County, their ECCs replaced the systems with models that could not only receive data, but also had much higher capacities. Lawrence, Butler, Armstrong, Westmoreland, Indiana, Somerset, Fayette and Greene counties, which are all reaching the same point where they have to replace obsolete equipment, will have to pay for a slight upgrade, but at a much lower cost than purchasing a fully fledged system like Allegheny and Mercer did. Allegheny County's full-system upgrade cost approximately \$10 million.



"What's even more noteworthy than the technology is the way these counties are sharing it," said Tim Loewenstein, NACo's representative on the Department of Homeland Security's SAFECOM Executive Committee. SAFECOM addresses the need for emergency response interoperability among governments.

"These jurisdictions are seeing the big picture and helping their neighbors," he said. "For a lot of counties, this kind of technology is unreachable, but now their services will improve, and the bottom line is the taxpayers win."

Greg Leathers, Greene County's Emergency Services acting director, said the proactive approach has helped the counties win support.

"Everyone has to cut costs somehow and consolidate, but if you go to the state to talk about it before they tell you it's time to do it, you're going

to be looked at a lot more favorably," he said.

The new system's obvious beneficiaries are younger people who habitually use text messaging, but it will also give a new freedom to hearing- and speech-impaired people who could previously only reach 911 using TTY systems in their homes.

"They'll no longer be tethered to their home phones," Thomas said. "And kids, well, both my kids have cell phones and they barely talk on them, they're almost always texting."

It will also be a huge benefit for people who are unable to speak to 911 dispatchers, for fear of giving away their location.

"The (2007) Virginia Tech shootings is a great example of a situation where texting to 911 would have been the best option," Thomas said.

The 911 systems will also be able to receive information from cars equipped with sophisticated communications systems that transmit in event of a crash. The car's location, condition and information as to the number of passengers and whether airbags have been deployed can be sent to local dispatchers even if the drivers and passengers are unconscious.

The new technology will also allow emergency managers to log into their systems remotely, which Thomas said would be

useful if an emergency management facility is unreachable.

Brian Burke, the former Washington County Emergency Management director who is now a senior vice president at public safety communications consultant Mission Critical Partners, said the participating counties will see additional savings because they won't have to pay multiple licenses and site licenses for software.

A federal grant to the Pennsylvania Emergency Management Agency (PEMA) has provided \$2.4 million that the agency will use help those eight counties buy equipment. The money must be spent by Sept. 30, 2012, so that will serve as a deadline for buying equipment and the effective target date for having equipment in place.

PEMA and the eight counties are doing an assessment to determine what new equipment will be needed and how much it will cost.

Jon Hansen, the director PEMA's 911 Bureau, said although the funding plan and scope of the pilot program have not been finalized, the bulk of the grant will go toward building infrastructure.

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Pennsylvania Counties Hatch 911 Tech Sharing Plan

BY: Brian Heaton | December 14, 2011

Emergency management agencies are taking a regional approach to public safety in western Pennsylvania, as 10 counties plan to use a shared next-generation 911 system by early 2013.

Allegheny, Armstrong, Butler, Fayette, Greene, Indiana, Lawrence, Mercer, Somerset and Westmoreland counties will be linked on a network with access to the same 911 technology, giving each of the counties in the conglomerate the ability to accept emergency text and video messages.

Frank Matis, director of Butler County Emergency Services, said the idea was sprung when Allegheny and Mercer did their own 911 system upgrades. Various counties in the region then reached out to one another and the state — which oversees the 911 program of each county — about a way to share the technology throughout the western part of Pennsylvania.

Mission Critical Partners, a public safety communications consultant, is doing an assessment on the technology and policy needs of each county to create a governance model on how to implement the partnership. The evaluation will identify how costs would be distributed among the counties, including whether the best model is based on population, call volume or other factors.

Matis said it isn't clear yet whether the region would be using the call capacity and newer 911 switches — which route emergency calls to the appropriate operator — owned by Allegheny and Butler counties, or if additional equipment would be purchased to serve the group's needs. But the partnership will have access to the latest technology at a fraction of the cost it would be to purchase individually.

Through the state, the counties are getting some help from Uncle Sam to make the plan a reality. A \$2.5 million federal grant was awarded to the Pennsylvania Emergency Management Agency, which will be used to help purchase whatever equipment is needed to establish the regional network.

Brian Bark, senior vice president of Mission Critical Partners, said 911 switch redundancy is a paramount factor to make the network viable. The consultancy will be designing a system that has two or three centralized 911 switches so that if one fails, another is ready to pick up the slack for all counties on the system.

But exactly how many switches will be used and where they'll be located is still up in the air.

"Today [the counties] own their own 911 switches and each one of them cost \$250,000," Bark said. "The new switches have capacity to support 150 911 workstations. So if you have a network in place, one switch could potentially support 10 to 15 counties."

The financial savings are an obvious advantage in a time where local government budgets are continually shrinking. But there will be other positives. Matis said the ability to immediately restore service in the event of a catastrophe is one critical benefit the shared use of emergency technology will have for Butler County.

"We obviously have a restoration plan, but it would take several days to get it all operational," Matis admitted. "When we're sharing this 911 equipment, it would be extremely easy to have our calls transferred and answered in another county. It would be almost instantaneous."

More Applications Planned

Ultimately while 911 systems were the kick-start for the equipment-sharing idea, Bark said it's likely only the first application that will result.

As the network's infrastructure is built, in addition to the 911 technology, Bark and Matis said other applications such as GIS, an emergency notification system, voice loggers and computer-aided dispatch systems and their data can eventually be tied into the network.

Bark explained that while creating a network for shared services isn't a novel idea, he felt most municipalities that do it only put one application on it. But what the western Pennsylvania counties are trying to do is establish an all-encompassing public safety network.

"It's complex, it's not easy, but just the fact these folks are stepping up to work together and to see the coordination and the foresight and vision they have and to be part of it is pretty rewarding for us," Bark said.

This article was printed from: <http://www.emergencymgmt.com/safety/Pennsylvania-Counties-911-Tech-Sharing-Plan.html>

Western Pennsylvania County Regional ESInet (West-CORE)

Pilot NG-9-1-1 Whitepaper

Introduction –

Currently several counties in western Pennsylvania own or lease separate 9-1-1 CPE systems, with several having Cassidian ECS1000 ANI/ALI Controllers. These ECS 1000's are at end of Sales and require replacement. The new ANI/ALI controllers are a significant capital investment in an effort to comply with future requirements for NG 9-1-1. In today's austere environment it is the intent of the stakeholder counties to share infrastructure and resources where possible. With limited exceptions these systems are not currently interoperable, however at least two of the Region 13 member counties are using NG 9-1-1 capable CPE (PlantCML Patriot) with the potential to share NG 9-1-1 CPE on a Region-wide Emergency Services IP Network (ESInet).

This whitepaper is submitted with the intent to align the West-CORE project with the Commonwealth of Pennsylvania, to serve as the NG 9-1-1 proof of concept via the Enhance 9-1-1 Act grant program. The West-CORE participants would like to create a program whereby each of our stakeholder PSAPs offer matching funds to the grant and work with the 9-1-1 Program Office to create a sustainable inter-county ESInet that promotes a combined public safety communication program.

Opportunity -

The Armstrong, Butler, Fayette, Greene, Indiana, Lawrence, Somerset, and Westmoreland PSAPs are in need of replacement of owned or leased ECS-1000 ANI/ALI Controllers. While existing 9-1-1 funding promotes each county securing its own replacement the Counties would like to share infrastructure to develop a solutions that promotes:

- Special needs access to emergency services
- Disaster Recovery
- Sharing of public safety applications, i.e. CAD, Logging recorders, ENS, etc.
- Interoperability and Situational Awareness
- Sustainable long term system performance
- Scalability
- Reduced cost of individual PSAP 9-1-1 programs via shared services
- Aligning with the intent of the Enhance 9-1-1 grant program for ESInet deployment

The PSAPs are prepared to initiate contracts for defining local requirements and as noted below are committing that investment as a match to the 2009 Enhance 9-1-1 grant.

Funding –

In addition to the funds available to PEMA under the ENHANCED 911 Act grant the counties could apply for funds for CPE upgrades under the PA Wireless and Wireline acts. The following PSAPs are willing to provide hard match contributions.

	Professional Services	CPE	Subtotal
Armstrong	\$78,790	\$313,257	\$ 402,047
Butler	\$71,790	\$306,943	\$ 378,733
Lawrence	\$71,790	\$255,625	\$ 327,415
Fayette	\$71,790	\$363,407	\$ 435,197
Indiana	\$71,790	\$306,000	\$ 306,000
Mercer (In kind via Host)	\$51,870		
Somerset	\$71,790	\$236,098	\$ 308,888
Westmoreland	\$121,790	\$1,700,000	\$1,821,790
TOTAL County Match			\$4,031,9400

Conclusion –

In summary PEMA is presented with an opportunity to develop and test a regional Next Generation 9-1-1 IP network that will make best use of available funds and once deployed could be expanded throughout the Commonwealth. The West-CORE PSAPs request to serve as the foundation for not only NG 9-1-1 but many other emergency services applications that comply with the 2009 Enhance 9-1-1- grant award and could be integrated into the state-wide PA STARNET network for interoperability.