



Enhanced 911 Advisory Committee

Annual Legislative Update – 2019

COVER LETTER

DATE: January, 2020

TO: The Senate Energy, Environment & Telecommunications Committee

The House Public Safety Committee

Cc: Washington State Senators and Representatives

FROM: The Enhanced 911 Advisory Committee (AC)

Joann Boggs, AC Chair, Deputy Director, Pend Oreille County Emergency Management

Richard Kirton, AC Vice Chair, Executive Director, Kitsap 911

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SUBJECT: 2019 REPORT TO THE LEGISLATURE, E911 ADVISORY COMMITTEE

RCW 38.52.532 requires, “On an annual basis, the enhanced 911 advisory committee must provide an update on the status of enhanced 911 service in the state to the appropriate committees in the legislature. The update must include progress by counties towards creating greater efficiencies in enhanced 911 operations including, but not limited to, regionalization of facilities, centralization of equipment, and statewide purchasing.” This is the annual E911 Advisory Committee Legislative Report to the House Public Safety and Senate Energy, Environment & Telecommunications Committees.

We are pleased to present this annual report and highlight the significant progress toward meeting key emergency services goals. As outlined below, the state has made measurable headway in the deployment of Next Generation 911 (NG911) services. So much so, Washington State is being looked to as a model by other states and the National Association of State 911 Administrators (NASNA).

The 911 network and systems are in transformation across the nation and all states are addressing costs and consumer expectations. The goal is to build a secure system with leadership that is deeply focused on the safety of our state citizens while remaining fiscally responsible.

Thank you for your interest in and support of this vital work.

Attachment

cc: The Honorable Governor Jay Inslee

To accommodate persons with disabilities, this document is available in alternate formats by calling the Washington Military Department at 253-512-8000
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INTRODUCTION

This 2019 summary report to the Legislature is submitted by the Enhanced 911(E911) Advisory Committee pursuant to RCW 38.52.532. The Washington State E911 Advisory Committee was created to advise and assist the State Enhanced 911 Coordinator¹ in coordinating and facilitating the implementation and operation of Enhanced 9-1-1 throughout the State.

STATUS OF NEXT GENERATION 911 SERVICE

911 is a critical infrastructure through which the public can access public safety resources during emergencies. The 911 public safety telecommunicators and dispatchers who answer and react to those calls are the first link in the chain of public safety response. The United States Congress, the Washington State Legislature and other federal agencies including the Federal Communications Commission recognize the importance of 911 systems. The transition to Internet Protocol (IP) based technology for delivery of 911 is imperative and inevitable. Next Generation 911 (NG911) will address network interoperability, system resilience, security and reliability, as well as improved interconnections between Public Safety Answering Points (PSAPs) or 911 call centers. The system supports not only 911 voice but data as well. These capabilities enhance accessibility of emergency services to the public and provide PSAPs with information submitted by a variety of communication technologies which emergency responders can assess and use to respond to emergencies. The State E911 Coordination Office (SECO) with advice and assistance from the E911 Advisory Committee began the transition to Next Generation 911 (NG911) to address the gap in services and technology that existed in the analog system.

NG911 systems require an Emergency Services Internet Protocol Network (ESInet) as the core infrastructure to transport 911 calls within the state. NG911 systems also require Next Generation Core Services (NGCS), which operates on the ESInet, and provides for 911 call routing, interoperability, security and related services. On July 19, 2016, the SECO completed the procurement process and signed a contract for an ESInet/NGCS vendor. In March 2019, the last of 66 PSAPs were transitioned and are now connected to the new ESInet. The transition is now in the final phase of the project which requires the migration of nearly 90 Originating Service Providers (OSPs) or carriers to the ESInet. Carriers began transitioning in September and were expected to be completed by December 31st 2019. Delays in circuit ordering and testing with some of the carriers has pushed the end of the transition project into 2020. It is now projected that, with the exception of one carrier, all OSPs will be migrated to the ESInet by January 31, 2020. The remaining carrier, CenturyLink, cited resource concerns as the reason for their transition delay which they project as mid-2020. The SECO continues to encourage CenturyLink to commit more resources and complete the migration as soon as possible.

Revenues & Expenditures

History

State and county E911 excise tax revenues are remitted to the Washington State Department of Revenue (DOR), which distributes funds in accordance with RCW Chapter 82.14B. The E911 excise taxes are applied

¹ SECO is the state **911 Authority**: The Washington Military Department (WMD) is the governmental entity responsible for 911 service operations in Washington State for funding, planning, management, and/or operations of certain service components.

to each switched access line, wireless subscribers and voice over internet protocol (VoIP) service line which were set at the maximum rates by the Legislature in 2011. On January 1, 2014, prepaid wireless retailers were also required to remit E911 excise taxes on each retail transaction at the point of sale. The SECO, under the Washington State Military Department, is the designated 911 network administrator.

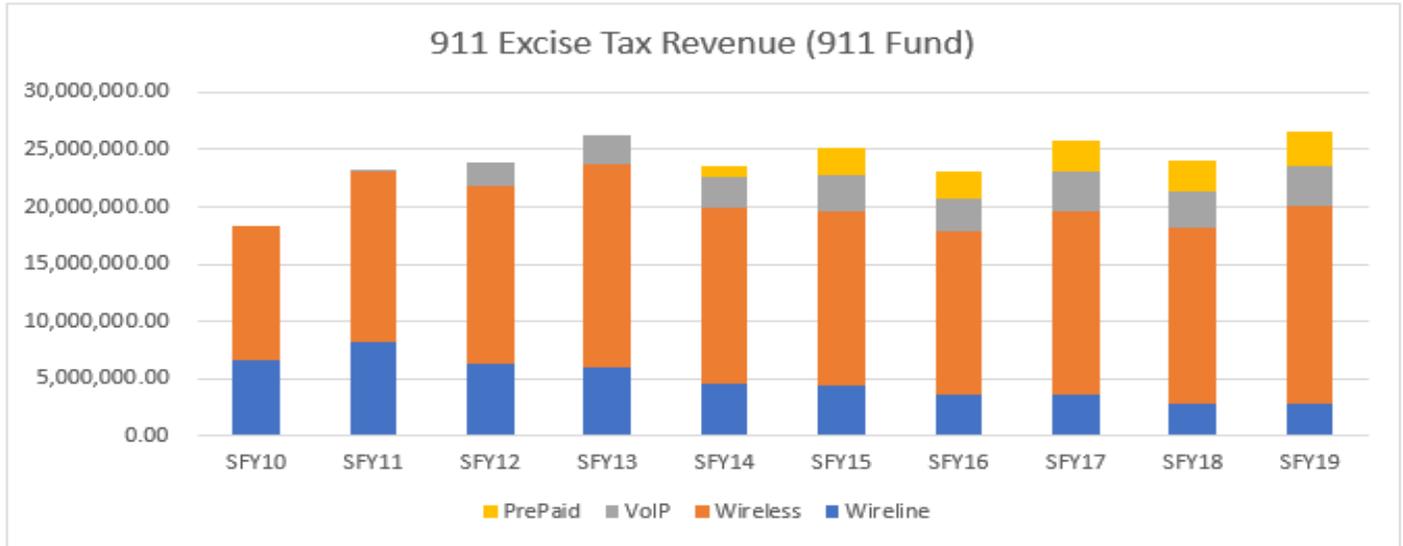


Figure 1

Figure 1 shows that State excise tax collections of wireless revenues have been pretty consistent over the last 10 years. During that same period however there has been a significant shift away from landline (Wireline) remissions to PrePaid and VoIP users. There were one-time revenue corrections in years 2013 and 2017 which account for a spike in revenue. Over the past six years, adjusting for the one-time events, the excise tax has remained steady around \$25M per year or \$50M per biennium.

Current Status of the State E911 Fund

The 2017-2019 biennium ended with a balance of \$600K in the State E911 account. For biennium 2019-2021, the Department of Revenue forecasted \$53.3M in state enhanced 911 telephone tax receipts, which results in a projected total of \$54M tax revenue into the account during the current biennium. For the current biennium, the Legislature appropriated \$43.7M to the State 911 account and an additional \$9.97M in Gated Funding which is held by OCIO and released once deliverables are met for the ESInet transition project.

Fund Diversion

Implementation of the statewide NG911 system requires a funding model that assures 911 excise tax revenues collected from Washington state residents be fully appropriated for this purpose and only for this purpose. The excise taxes are intended for system development, maintenance, current operating requirements, modernization of the 911 network and PSAP customer premise equipment (CPE). These funds are allocated to ensure the state 911 emergency public safety communication system is capable of processing data and voice technology statewide. RCW 38.52.540 was a mandate by the Legislature that assured all monies from 911 excise taxes be used only to support the 911 system. The Legislature took special effort to ensure no appropriations for purposes other than 911 were included in this biennial budget. This policy aligns with Congressional and Federal Communications Commission directives that 911 fees and charges should be used only for purposes

related to the 911 system. States with a recent history of “diverting” 911 funds are not eligible to apply for federal grants.

PROGRESS TOWARD GREATER EFFICIENCIES

Statewide initiatives

Text-to-911 – Interim Text-to-911 progress includes final statewide policy recommendations development, security requirements, training curriculum development and public education program development. To date, there are 27 PSAPs in 15 Counties receiving Text-to-911.

Once fully implemented the new ESInet will support “Integrated Text-to-911” which offers additional features not available with the current text-to-911 delivery method.

Training Program—State Office

On July 1, 2019, the State Enhanced 911 Coordination Office in collaboration with the Washington Emergency Management Division Training Unit, took over responsibility for the statewide telecommunicator training program. Two training experts were hired to work closely with the 911 Advisory Committee Training Subcommittee in the development of curriculum, processes and procedures for the delivery of critical classes. The classes include; Telecommunicator 1, Telecommunicator 2, Communications Training Officer (CTO), Public Safety Communication Supervisor (PSCS), Telecommunicator Emergency Response Taskforce (TERT) Member and TERT Leader.

Strategic Plan

The 911 Advisory Committee published its 2019 – 2025 Strategic Plan that sets forth the vision for 911 in the State of Washington. The plan identifies fourteen objectives in four areas; Personnel, Finance, Outreach, and Systems, Policies & Procedures.

Regional Efforts

Regionalization/Consolidation of Facilities

Regionalization of facilities involves seeking efficiencies through consolidating services for multiple authorities and PSAPs into a single administrative facility/organizational structure, with the goal of reducing overhead costs and improving service delivery. Specifically, a Consolidated PSAP is one where multiple public safety agencies choose to operate as a single 911 entity within a county. A Regional PSAP is one that serves jurisdictions within multiple counties and also operates as a single 911 entity. This topic continues to be a focus amongst counties and for the E911 Advisory Committee in general.

Jefferson & Clallam Counties

In SFY2015, Clallam and Jefferson counties completed a SECO funded regionalization study seeking greater efficiencies for both counties. In January 2016, both counties entered into a regionalization agreement with the intent to continue efforts in combining the two currently independent PSAPs into a single regionalized PSAP. At the same time, both Counties appointed Karl Hatton, the director of JEFFCOM911, to be the director of both PENCOM (Clallam) and JEFFCOM 911, and to begin the process of combining both operations. To date, there continues to be progress made on implementing the recommendations from this study, but progress is slower than initially anticipated.

Snohomish County -- SNOCOM & SNOPAC (SNO911)

Snohomish County has consolidated all public safety communications into a single, countywide agency – Snohomish County 911. This includes the integration with Snohomish County Emergency Radio Systems (SERS), who completed their consolidation effective January 1, 2019. These consolidation efforts have increased efficiencies in both operations and budget. In 2019, Snohomish County 911 reduced assessments to member agencies by more than \$600,000 (approximate 4% reduction) while at the same time made significant improvements to the public. These reductions were possible due to staffing and technical efficiencies as no new revenue sources, such as an additional sales tax, were adopted.

The agency continues to maintain two physical buildings, one as the primary PSAP and the second as a warm standby site. Technical systems have been configured to allow dispatchers to seamlessly work as a single operation from both sites simultaneously. The warm standby site has also been offered as a regional backup facility for neighboring PSAPs.

Pierce County – South Sound 911

In September South Sound 911 broke ground on the agency’s new facility at 3580 Pacific Avenue in Tacoma. The estimated \$59M cost will result in the final consolidation of operations for both the 35th Street Branch and Fire Comm. The new facility is expected to be operational late in the first quarter of 2021. Included in the cost of the new facility will be an all-new 911 call handling system that can be configured to operate in a host/remote environment for other PSAPs within the County and throughout the region. All parties are coordinating to ensure redundant and diverse connectivity to the new facility to support the regionalization of facilities.

Spokane Integration

Spokane County 911, Spokane Sheriff’s Dispatch, and Spokane County Fire Dispatch have integrated and reorganized as a single agency, known as Spokane Regional Emergency Communications (SREC), as of July 1, 2019. SREC was formed as a Public Development Authority and will also include the employees who maintain the county-wide radio system.

Centralization of Equipment

Centralization of equipment allows one set of devices to provide services to more than one PSAP. Recent technological advances have made it more cost-effective to centralize equipment and services. With the expansion of fiber optic and high-speed networks, that include redundant and resilient paths, these technologies are now a viable solution for more of the PSAPs serving the State of Washington. Efforts and pilot programs are underway across the state for the centralization of equipment.

CRESA-TComm911 Pilot Project:

In 2015, Thurston (TComm911) and Clark (CRESA) counties initiated a geographically diverse, dual-hosted remote prototype pilot program. This program allowed counties the choice to be either a “host” or a “remote” PSAP in the system, reducing on-site equipment and overall costs while increasing redundancy. Wahkiakum County joined the pilot program and formed a Consortium in 2017 and all three counties continue to operate on this centralized equipment dual-hosted remote model successfully.

In 2019, with the help of funding from the Federal NG911 grant, the Consortium began working to refresh and expand this program to include additional PSAPs. To that end, the Consortium issued an RFP in November of 2019 to interested vendors to provide pricing for replacing the current geo-diverse dual host with a system

that is i3 compliant (a recognized national standard for NG911) and can handle and process all NG911 elements. In addition, the vendors were asked to provide pricing for the addition of more PSAPs to the system as either a host site or a remote site to the system. This provides an opportunity for options and potential future cost savings as local PSAPs look to refresh and replace their current 911 phone system.

The Consortium is scheduled to replace its current system by May of 2020. RiverCom has expressed interest in becoming another host site on the system and a member of the consortium if they are able to secure funding by the end of 2020 or the first quarter of 2021.

Columbia County 911 and Walla Walla Emergency Services Communications:

Columbia and Walla Walla Counties completed the purchase and installation of a shared Computer Aided Dispatch (CAD) system with Walla Walla housing and maintaining the shared “back end” of the system. The shared platform also includes Milton-Freewater in Oregon. The common dispatching platform has allowed each of the participating agencies to improve situational awareness, monitor calls for service and serves as redundant/fail-over centers for each other. Participating agencies report significant cost savings while simultaneously providing an opportunity for greater collaboration and coordination between neighboring agencies.

Cowlitz and Clark County (CRESA) CAD Management

In 2019 Cowlitz County contracted with CRESA for CAD management services. Since Cowlitz and CRESA both use a Hexagon CAD system and CRESA has an in-house CAD management team, Cowlitz has found it to be more cost-effective for them to have a service contract with CRESA to meet their CAD Management and software update needs. This has been a success for both agencies and laid the groundwork for Cowlitz joining CRESA’s CAD.

In 2019 Cowlitz received a Federal NG911 grant for funding that will allow them to migrate onto CRESA’s CAD and eliminate the need for them to own and maintain their own CAD system. Much like Columbia and Walla Walla described above, moving to a system that has only one “backroom” to support is cost-effective for the region, and provides improved situational awareness for the shared boundaries and resources. Cowlitz’s migration to the CRESA CAD should be completed by end-of-year 2020 corresponding with a version upgrade of the CRESA CAD.

South Sound 911 and Joint Base Lewis McCord (JBLM)

South Sound 911 and JBLM share common borders and interact with one another on a daily basis. In an effort to enhance communications and share information, JBLM is migrating onto South Sound’s CAD system in 2020. As with the other two CAD sharing projects mentioned above, this will provide both cost savings as well as more efficient daily operations and communications between the two centers.

King County 911 Program Office:

In January of 2018 King County adopted a regional E911 strategic plan to provide:

- A system to integrate with the State’s E911 system and local jurisdictions;
- A 10-year technology investment strategy;
- A 10-year sustainable funding plan; and
- An ongoing decision-making and governance structure.

The current regional E911 system uses a decentralized architecture with equipment located at each of the 12 primary PSAPs that directly interconnects them to the statewide ESInet. To achieve full NG911 capability and functionality King County plans to migrate to a single platform system architecture. This platform approach builds a multi-node host platform that will receive calls from the state of Washington ESInet and then deliver them to the PSAPs networked on the system. Such a configuration will create greater efficiencies as well as allowing one of the host nodes to be in a geographically remote location to increase system resiliency during catastrophic events. 2019 brought consultants onboard to manage, develop requirements, and draft the request for proposal for the project. The County expects project completion by 2022.

Ongoing Challenges

Cybersecurity Protection:

Because all networks are vulnerable to security attacks and compromises, conversion of the 911 systems to IP technologies increases not only the capabilities but also the vulnerabilities to the entire 911 system. Several counties are, or have begun, addressing 911 security at the PSAP level and the new ESInet includes an extensive set of security sub-systems and protocols imbedded within the core services of the network. All these activities and systems will help mitigate – but not eliminate – the threats posed by the use of these new technologies. Training and awareness of cybersecurity attack vectors and vulnerabilities is an ongoing issue of concern for the E911 Advisory Committee and the SECO.

Next steps

Federal Grant

This year the SECO, on behalf of the counties, applied for the NG911 Federal Grant and was awarded \$2.6M to assist counties and the State in moving toward Next Generation 911. Six projects were approved to receive part of the award which includes: Host remote CPE, Joint CAD, Radio Over IP network, ESInet Transition, RAADAR Situational Awareness Tool, and GIS upgrades.

2019-2020 Statewide E911 Operational Cost Study

During the 2019-2020 Washington State legislative session, the legislature approved and the governor signed Engrossed Substitute House Bill 1109 (ESHB 1109) - Operating Budget. Section 145-6 For the Military Department requires a report on the 911 system is provided to the appropriate legislative committees by Oct. 1, 2020 to include:

A) The actual cost per fiscal year for the state, including all political subdivisions, to operate and maintain the 911 system including, but not limited to:

- The ESInet;
- Call handling equipment;
- Personnel costs;
- Facility costs;

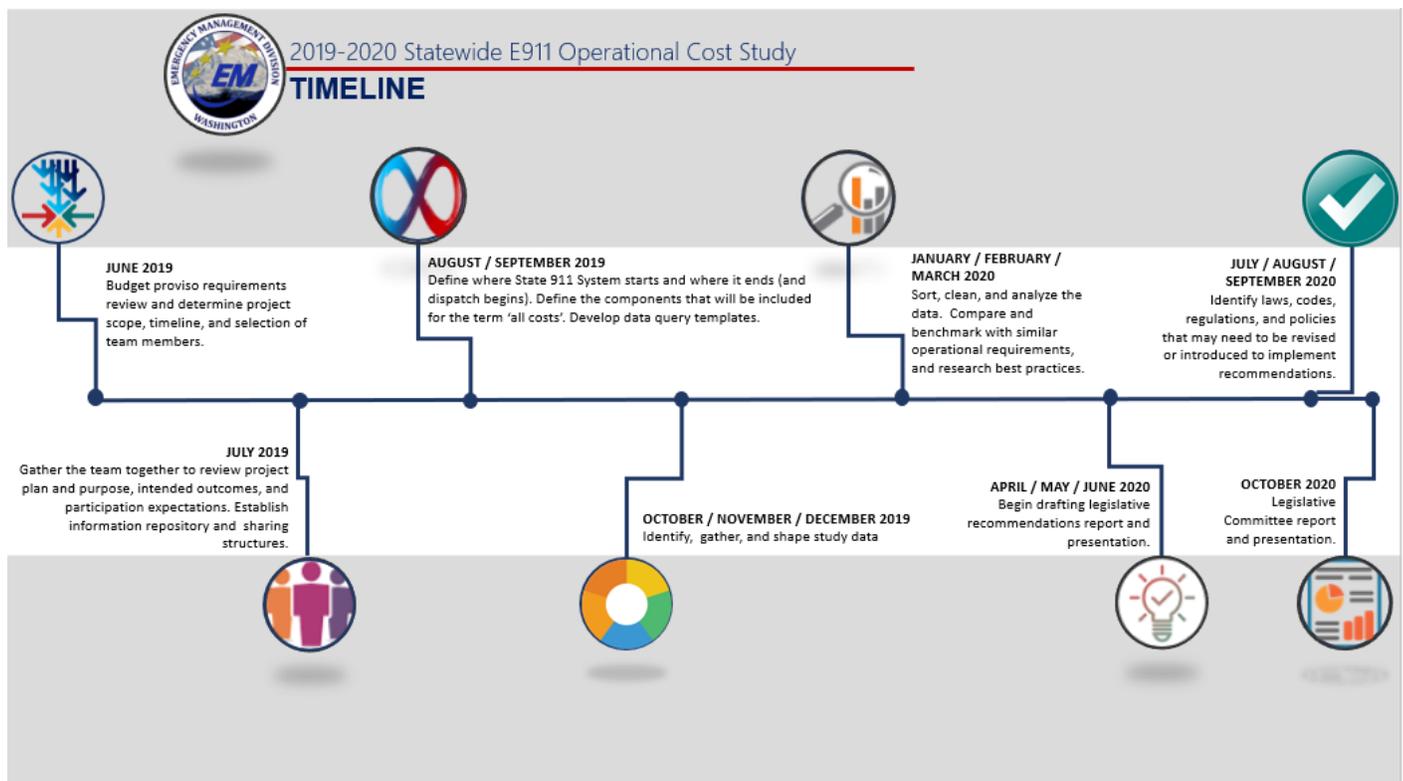
- Contractual costs;
- Administrative costs; and
- Legal fees.

B) The difference between the actual state and local costs and current state and local 911 funding.

C) Potential cost-savings and efficiencies through the:

- Consolidation of equipment;
- Regionalization of services or merging of facilities;
- Positive and negative impacts on the public;
- Legal or contractual restrictions; and
- Appropriate actions to alleviate these constraints.

The goal of the study is to provide the Washington State Legislature with a deeper and more complete understanding of the current operating environments and the total costs associated with providing 911 and associated life-safety services.



CONCLUSION

The Committee respectfully offers this report to the Legislature. The report addresses issues that relate to policies and funding common to state and local jurisdictions in the provision of 911 services. Ensuring accuracy of information submitted to the Legislature and to the Federal Communications Commission in compliance of reporting requirements are focus points of this report from the E911 Advisory Committee. The common goal is to ensure a reliable emergency communications system that continues to serve the residents and visitors to Washington State every day.