UT- 061398(P)

MILITARY DEPARTMENT
EMERGENCY MANAGEMENT DIVISION

MS: TA-20 Building 20
Camp Murray, Washington 98430-5122
Phone: (253) 512-7000 • FAX: (253) 512-7200

August 30, 2006

Ms. Carole Washburn, Secretary
Washington State Utilities and Transportation Commission
Chandler Plaza Building
Post Office Box 47250
Olympia, Washington 98504-7250

Dear Ms. Washburn:

The Enhanced 911 (E911) Program Office recommends the state E911 wireline excise tax continue at the current rate of 20 cents in 2007. State wireline E911 excise tax revenue collected in fiscal year (FY) 2006 was $0.3 million less than collected in FY 2005 as projected. It is anticipated this trend will continue, with another $0.3 million decrease in wireline E911 revenues anticipated for FY 2007, as wireless and Voice over Internet Protocol (VoIP) phones continue to displace traditional wireline services.

The state E911 excise tax was extended to wireless subscribers beginning January 1, 2003, at a fixed rate of 20 cents per month per subscriber. State wireless E911 excise tax revenues increased by $0.9 million in FY 2006 and are projected to increase by $0.3 million in FY 2007. This additional tax resource is being used to assist counties with related Public Safety Answering Point (PSAP) operations and equipment upgrades. The total tax collections for both the wireline and wireless services are anticipated to be approximately $17.8 million, with the wireline revenue anticipated to be $7.9 million of that total revenue. A continued requirement for FY 2007 is the separation of support into wireline and wireless components for tracking purposes.

Enclosed is a chart depicting the distribution of expenses for fiscal year 2007. The anticipated expenditures for FY 2007 equal the wireline and wireless revenue projections. The expenditures chart for FY 2007 includes both wireline and wireless expenditures. Also enclosed is a draft copy of the 2006 now required annual report to the Legislature.

Many of the items that support E911 can be attributed to activities that support both wireline and wireless 911 calls. After the distinct wireline and wireless items are calculated, the remaining shared activities are split between the two funding sources based on the number of subscribers for each type of service. That split for FY 2007 is 50% wireline and 50 % wireless.

For FY 2007 the Program Office continues to use a priority system for county assistance based on rules in the Washington Administrative Code. Customer groups have taken a very active role in a thorough review of the policies that support the provisions of that code with clear direction

to assure sustainability and equality of support to counties. This, and other, subcommittees of the Enhanced 911 Advisory Committee exemplify the best in user-based involvement with a singular objective of assuring that residents of Washington State have the best available E911 service.

County requests for assistance for both wireline and wireless components of the E911 system are well supported for some items associated with caller location capabilities, computer-aided dispatch, and system additions necessary to accommodate technological changes.
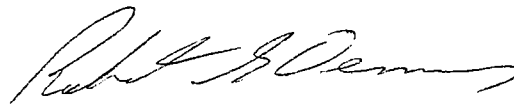
Current projects of significance include;

1. Ordering Telecommunications Service Priority for a select group of circuits.
2. Installation of a real-time 9-1-1 traffic monitoring system.
3. Upgrading the database from sequential data files to extensible markup language (XML) files.
4. Upgrading the network to an internet protocol (IP) based platform (Next Generation 911 (NG911)).
5. Pandemic Contingency Planning.

The E911 Office continues to be actively involved in establishing technical standards for the operation of 911 networks including both wireline and wireless systems. Formats for sending information to the 911 centers have been standardized to the maximum degree possible with this new data format also being used for wireline. VoIP connection to Enhanced 911 systems now has protocols in place that permit VoIP customers to receive benefits of 911 similar to those of wireline customers. Protocols are being forwarded that will permit Enhanced 911 systems to utilize VoIP technologies for call processing. These efforts are captured under the heading Next Generation 911 (NG911) which will ultimately be a complete revision to 911 call processing to utilize Internet Protocols for all message management, voice and data. The state E911 Program is leading these efforts both in planned early adoption and in providing leadership to the standards efforts. The Program has also taken a leadership role in developing best practices for the 911 industry similar to those developed for the telecommunications industry under the Federal Communications Commission's National Reliability and Interoperability Council.

Thank you for the continuing support that the WUTC provides to the State E911 Program. If you have any questions, please do not hesitate to contact this office at (253) 512-7011.
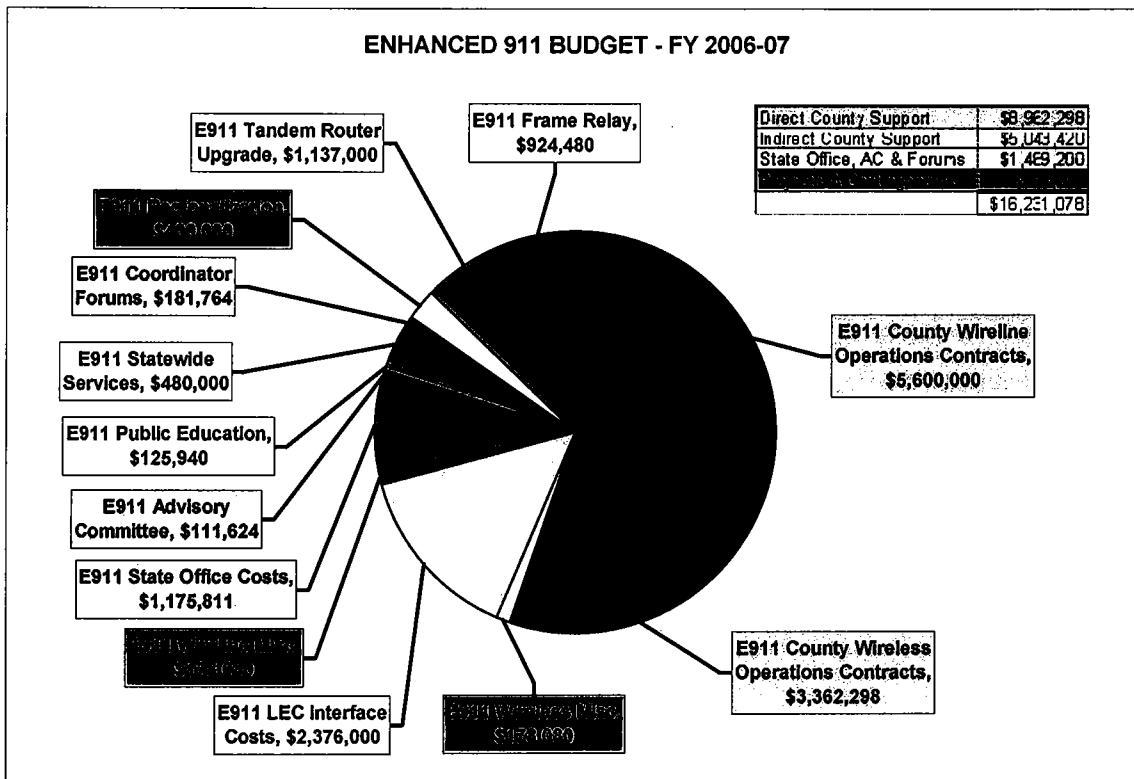
Sincerely,

Robert G. Oenning
Washington State E911 Administrator

RGO:pjc

Enclosure: Fiscal Charts
Draft Report to the Legislature
cc: Rebecca Beaton, Washington Utilities and Transportation Commission
Bob Williamson, Washington Utilities and Transportation Commission

Enclosure – Fiscal Chart & Notes

ENHANCED 911 BUDGET - FY 2006-07

Direct County Support	$8,962,298
Indirect County Support	$5,043,420
State Office, AC & Forums	$1,469,200
	$16,231,078

E911 Tandem Router Upgrade, $1,137,000

E911 Frame Relay, $924,480

E911 Coordinator Forums, $181,764

E911 Statewide Services, $480,000

E911 Public Education, $125,940

E911 Advisory Committee, $111,624

E911 State Office Costs, $1,175,811

E911 LEC Interface Costs, $2,376,000

E911 County Wireline Operations Contracts, $5,600,000

E911 County Wireless Operations Contracts, $3,362,298

Direct County Support
County Wireline Operations Contracts
County Wireless Operations Contracts
> Reimbursement contracts with counties that support an extensive list of Enhanced 911 cost elements. The primary contract requirement is that the locally collected E911 excise tax be expended on these eligible items before a county is eligible for State support. The support includes both technical equipment and personnel support for specific activities necessary for the 911 call answering function.

Indirect County Support
Tandem Router Upgrade
> The Enhanced 911 switching equipment that routes 911 dialed calls from to the responsible Public Safety Answering Point (PSAP). The network provides paired dual routers with diverse facilities and associated call management capability such as on-network call transfer between all Washington and Oregon PSAPs, default routing, and alternate routing for backup or disaster situations.

E911 Frame Relay
> The data network provides for delivery of address information for both wireline and wireless calls.

Statewide Services
> Training for 911 call answers offered statewide under contract with the Criminal Justice Training Commission, a specialized training program on answering calls from the deaf community, over the phone interpreter service for about 100 languages available 24x7, and similar services that are available to all counties

Public Education
>   Primarily responsible for material publication and distribution for public education materials developed by a sub-committee to the E911 Advisory Committee. The materials are focused on assuring that people appropriately call 911 often with emphasis on particular situations such as backwoods recreation or boating incidents.

LEC interface costs
>   The port costs for carriers to connect to the E911 selective routers. This is the demarcation point as defined by the FCC for wireless carriers.

State Office, AC & Forums

State Office Costs
>   Costs of operations for the State E911 Program Office.

Advisory Committee
>   Costs to support the E911 Advisory committee including room rent and travel reimbursement for the 10 meetings per year.

Coordinator Forums
>   The State program offers three training forums each year for County 911 Coordinators and other specialized county 911 personnel such as those who manage the databases or mapping components. The forums are two days each commonly with an attendance of near 100 persons.

Projects and Contingencies

Regionalization
>   The Program has a policy of supporting multi-county PSAP regionalization to the degree that the regionalization generates savings to the program during the first three years of the consolidate operation. This is a contingency in recognition of some county discussions.

Wireless Miscellaneous
Wireline Miscellaneous
>   Special needs that are separated to provide county support in unusual circumstances that are not included in the generalized operations contracts.

FY 2006 Report to the Legislature
Enhanced 911 (E911) Program
Washington Military Department
Emergency Management Division
September 1, 2006

FY 2006 Report to the Legislature
Enhanced 911 (E911) Program
Washington Military Department
Emergency Management Division
Table of Contents

FY 2006 Report to the Legislature
Enhanced 911 (E911) Program

Overview

In 1991 State Legislature enacted Engrossed Substitute House Bill (ESHB) 1938. It found that a statewide emergency communications network of Enhanced 911 (E911) telephone service, which allows an immediate display of a caller's identification and location, would serve to further the safety, health, and welfare of the state's citizens and would save lives.

ESHB 1938 was passed by the Legislature and signed by the Governor, placing the issue of funding enhanced 911 statewide on the Fall 1991 ballot. Referendum 42 is codified as RCW 82.14B.

RCW 82.14B authorizes the collection of a 20 cent per access line per month excise tax by the State to assist counties in implementing 911 systems. By December 31, 1998, each county, singly or in combination with adjacent counties, is required by law to implement district-wide, county-wide or multi-county-wide E911 emergency communications systems, making E911 available throughout the state. By law, the county provides funding for the Enhanced 911 communication system in the county or district in an amount equal to the amount the maximum local tax of 50 cents would generate in the county or district or the amount necessary to provide full funding of the system in the county or district, whichever is less.

The E911 program is supported by a tax on all telephone access lines in the state. There are three E911 taxes: a state tax on wireline telecommunications of 20 cents per month, and a 50 cents per month county tax on wireline (except for King County which imposes a 35 cents per month tax) and a 25 cents per month county tax wireless telecommunications. The taxes are collected and remitted by telecommunications companies.

The State Enhanced 911 (E911) Program assists and coordinates the counties' operations and continued advancement of E911 systems which provide expedient, reliable public access to emergency services statewide.

The Vision of the State E911 Advisory Committee gives a clear direction to the State E911 Program: **To provide the most responsive 911 access to emergency services in the world.**

Ten goals as outlined in the Program's Strategic Plan have been identified as vital to the functionality of E911 in Washington State:
1. Sustain an E911 network that is efficient, economic, and flexible in addressing the current and future demands of E911.
2. Encourage legislation supporting current/future program needs.

3. Support of program in establishing policies and procedures which are consistently applied, statewide.
4. Promote 911 as a recognized emergency services discipline.
5. Create strategy for addressing telecommunications technologies that access 911.
6. Maintain a well-educated base group of 911 professionals on all aspects of the E911 Program.
7. Develop best practices for the provision of E911 service.
8. Educate the public on the appropriate use of 911.
9. Establish and maintain relationships with other emergency services agencies, providers and industries to benefit the E911 program.
10. Develop and promote a plan to explain current and future revenue sources.

The goals are assigned to work groups chaired by a member of the E911 Advisory Committee and are operational guides for the Enhanced 911 Program Office activities. In 2006, seven E911 Advisory Committee sub-committees addressed the Pandemic Flu, Wireless/VoIP, Public Education, Telecommunicator Training, 211, Strategic Planning, and Policy Review. These committees are formed on an as-needed basis and may be ongoing or of limited duration.

FY 2006 Projects
E911 Advisory Committee Work Groups

- **Policy Subcommittee** -- A customer group, comprised of a representative of the E911 Advisory Committee, the counties, special interest groups, and State E911 staff, has taken an active role in policy review, supporting the provisions of those annually updated policies with clear direction to assure sustainability and equality of support to counties. This group and other subcommittees of the Enhanced 911 Advisory Committee exemplified the best in user-based involvement with a singular objective of assuring that residents of Washington State have the best available E911 service. The policy review focuses balancing on fiscal responsibility with county support needs aimed at long-term program and fund stability.

The Policy Review Committee reviewed and completed the following policies:
- FY07 Operations Contract
- Below the Line Funding Policy
- E911 Coordinator Forum Attendance
- E911 Advisory Committee Meeting Attendance
- E911 Telephone System Support
- Logging/Voice Recorder Support
- E911 Call Detail Recorder Support
- E911 Auxiliary Generator Support

- E911 Uninterruptible Power Supple Support
- E911 Wireless Phase II Definition
- Training Policy

- **Strategic Planning Subcommittee** -- Reviewed and revised the statewide Enhanced 911 Strategic Plan through FY2009.

- **Pandemic Flu Subcommittee** -- Currently developing guidelines for continuity of business of Public Safety Answering Points (PSAP) in the event of a Pandemic Flu Epidemic. Their work is being circulated nationally as a model, even as it is being finalized.

- **Wireless Work Group** – This long-standing subcommittee has established itself as a unique meeting place for the public-safety community and wireless carriers to discuss concerns and to develop resolutions to issues surrounding wireless communications interfaces to E911 systems. Their work has resulted in standards that generate uniform operational protocols for use in Washington State that are frequently requested by other authorities, nationwide. They have discussed Voice over Internet Protocol (VoIP) issues and have been successful in resolving issues for this service.

Hardware/Software/Technical Support
- The Qwest **Frame Relay Upgrade Project** replaced outdated equipment (1200 BAUD or BPS, bits per second) and single path data circuits with state-of-the-art technology allowing for faster delivery of automatic location identification of a 911 caller.

  The antiquated equipment was replaced with a T1 (1.544 megabits per second) with two PVCs (permanent virtual circuits) providing a committed information rate (CIR) of 16 kilobits per second. The upgrade permits the transmission of longitude and latitude information for cell phone calls without delays due to congestion.

  The upgrade, completed June 30, 2005 at a cost to the State E911 Program of $1.6 million accommodates data transfer capabilities for the next generation 911 (NG911) services that will be phased in over the next few years. It affects all Washington counties with Qwest services, with the exclusion of King County where the data network had already been upgraded.

  The final phase of the dual tandem network with mirrored trunking and software, providing two distinct locations for route diversity statewide has been implemented through the enhanced 911 system.

- Qwest completed the installation of the **Dual Tandem Project** to the 911 system, providing redundancy and diversity to the 911.

This major enhancement affects every county in Washington with Qwest service (with the exception of King County which already had dual tandem capability). The final phase of the dual tandem network with mirrored trunking and software was the upgrade of the Verizon system to a system similar to Qwest's system.

Previous to the Dual Tandem implementation, only a single selective router was available to the Public Safety Answering Point (PSAP) for processing receipt of a 911 call. If for some reason the Selective Router failed, the 911 call will not be received at the PSAP. This project allowed for an additional Selective Router to each PSAP. This second Selective Router is positioned in a separate location at a different switching office with approximately one-half of the 911 calls from any one location going through each router serving that area. The probability of a 911 call not reaching the PSAP has been greatly reduced. This enhancement affects all Qwest and Verizon phone subscribers.

Because of the magnitude of this project statewide, cutover to the Selective Routers were staggered over a three-month period. The Qwest **Dual Tandem Project** was completed at the cost of $1.8 mil to the State E911 Program. The affected counties incurred no additional cost and, even though all 911 network components were changed and upgraded, there were no service disruptions to the public.

- Assured the physical diversity of 911 network trunking by ordering Telecommunications Service Priority (TSP).

    TSP is a service which sets by priority, with the 911 system given highest priority, restoration of services should a trunk become disabled due to a man-made or natural disaster. The cost associated with providing this service, formerly paid by each individual county, has now been assumed by the State E911 Program. The network components serving any one location are installed on separate facilities to the degree possible to assure 911 call capability even when there are cable disruptions.

- Provided a leadership role in the Federal Communication Commission's (FCC) National Reliability and Interconnectivity Council (NRIC) VII. This working committee reviewed 911 outages nationwide to determine how they might be prevented by implementing Best Practices. In reviewing existing best practices, the NRIC group identified which practices addressed both telecommunications and public safety.

- Active participation on the Institute of Electrical and Electronic Engineers (IEEE) Committee to develop best practices for Public Safety Answering Points (PSAPs) that aligns with NRIC Best Practices.

- Provided a leadership role on the Washington State Interoperability Executive Committee (SIEC) as chair of the SIEC Advisory Funding Enterprise (SAFE), a group delegated the responsibility for developing funding recommendations for statewide interoperability radio systems.

- Supported active participation at the national level of the Association of Public-Safety Communications Officials' (APCO) Telecommunicator Emergency Response Taskforce (**TERT**).

- Provided a leadership role on the national level to the National Emergency Number Association's (NENA) Automatic Collision Notification/Vehicle Telematics committee, creating technical information documents that delineate the industry implementation process.

- Provided leadership and direct involvement with national standards bodies under the Alliance for Telecommunications Industry Solutions (ATIS) committee of the Emergency Services Interconnection Forum (ESIF). ESIF is the primary venue for the telecommunications industry, public safety and other stakeholders to generate and refine both technical and operational interconnection issues to ensure that life-saving E911 services are available for everyone in all situations.
ESIF enables many different telecommunications' entities to fully cooperate and interconnect with each other to determine the best practices and solutions necessary to effectively and promptly deploy E911 services nationwide. ESIF is one of the leaders in establishing Next Generation 911 (NG 911) documentation and standards for emergency services network and systems.

- Actively provide support for and participate in other organizations including the National Association of State Nine-one-one Administrators (NASNA) to facilitate information sharing between states and local government. NASNA's focus is on finding common and less-costly solutions for 911 issues as well as to gain support for the needs of the industry.

Public Education and Training
- Developed collaborative working partnerships with state, federal, and private vendors:
  - The Office of the School of Public Instruction in targeting risk managers in public schools about private branch exchange (PBX) phone systems and 911 call delivery and provisions contained in state law.

  - The Washington Military Department's Emergency Management Division in two month-long campaigns: the September Terrorism Month campaign and the April Disaster Preparedness Month campaign in distribution of informational publications to targeted audiences.

- Boating and maritime industries, businesses and enforcement agencies to distribute brochures statewide targeting the boating public who use cell phones to call 911 for help while on the water.

- Conducted a customer satisfaction survey of Washington's 911 county coordinators to determine customer service levels. The information guides future actions of the State E911 Office in its product and service delivery.

- Coordinated three, one and one-half day training forums statewide for county E911 personnel to assist in their performance as a 911 professional.

- Developed, produced and disseminated four (4) educational publications targeting specific audiences: PBX/School Risk Managers; Cell Phone User Misdials to 911 (English and Hispanic versions); Voice over Internet Protocol (VoIP) Users explaining limitations in placing 911 calls over the Internet.

- Supplied counties with a variety of other public education materials previously developed on an as-requested basis for use at public gatherings, such as county fairs, with a focus on assuring that there is an understanding of how to utilize the statewide 911 dialing capability effectively.

Financial/Budget
- A total of $4.8 million was distributed to 33 counties during fiscal year 2006. The funding was for reimbursement of eligible operational costs incurred by the counties which exceeded their local E911 tax revenues.

- Continued to prioritize county assistance based on rules in the Washington Administrative Code.

- Automated the county grant application process to enable electronic submission, speeding up contract reimbursements to the counties.

- Continued support of county requests for technical, financial, and public education assistance in accordance with state law and administrative code.

- Implemented a staggered funding mechanism to upgrade 911 equipment at Washington State Patrol Public Safety Answering Points (PSAPs), with funding being provided for one PSAP.

- Provided an annual report out to the Washington Utilities and Transportation Commission (WUTC) in support of continuance of the 911 tax at a fixed rate of 20 cents per month per subscriber for wireline services.

Challenges
Network Diversity
Although the dual tandem project moved the network into a diverse configuration, there are many links where diversity is not assured due to single cable paths or dominant carrier facilities. Those links are being identified by Qwest and, where possible, diverse facilities are being placed into service. Where Qwest cannot provide diversity, the State will be working with Qwest to implement diverse connectivity. That effort will require innovation and cooperation with others, possibly including private communications suppliers.

PSAP Hardware Upgrades
The hardware at Public Safety Answering Points is virtually all computer based, often with multiple PCs at each work station and multiple controllers. This equipment supports the software-based communications tools including 911 telephone systems, computer-aided dispatch systems and computer-controlled radio consoles. Both the hardware and software in these systems have limited life spans and are plagued by the computer industry trends where frequent capability upgrades create obsolesce factors that end up forcing major upgrades every four to five years.[1] In the PSAP environment, there is considerable interaction between positions and systems which must be equally supported by all hardware. About 30 PSAPs are supported by the State E911 Program with telephone system costs averaging around $250,000 per system. However in the past two years, few systems have been replaced creating a backlog.

Database Upgrades
The E911 databases are being managed today using techniques that were common 30 years ago. These databases are restricted in accepting and displaying data. While the databases are reliable, they cannot be manipulated to accommodate emerging needs. These systems require major changes to current practice technology resulting with assurance of system reliability and no downtime. The frame relay project upgraded the network capacity to handle the new data techniques, with a pragmatic upgrade of the data handling techniques to follow.

Voice over Internet Protocol (VoIP)
This is a relatively new technology to deliver telephone service. To a substantial degree it has already been integrated into the E911 systems in Washington State, although full integration cannot be accomplished until substantial upgrades are made to the technology used for managing the 911 calls. One issue with VoIP is that it is not included in the taxing authority as is the case for traditional wireline or wireless telephone services. Major sales efforts are currently

---

[1] Operating system upgrades are introduced about every four years, and support for the older software is discontinued about one year before the next major release. Hardware vendors begin building to the new software specifications before formal introduction of the next upgrade generally terminating the capability to support older protocols. The result is that PSAP equipment, where equal capabilities to access all operating elements are a requirement, has a maximum life cycle of about seven to eight years.

underway in the promotion of VoIP services, and it is anticipated that the technology will be widely utilized in the near future. If a taxing structure is not modified to accommodate this change in technology, the E911 Program viability would be threatened.

Regionalization

Two regional Public Safety Answering Points (PSAPs) serving multiple counties are operating successfully. In the urban counties multi-jurisdictional PSAPs operating as independent agencies offer service under contract have also met with success. The E911 Program was established to assist counties in providing statewide E911 service and included regional operations as a suggested solution. Concern continues to be raised that the perception of smaller PSAPs serving a county with low population is not an efficient use of 911 tax dollars while additional support for the larger PSAPs and network is needed. The State currently has a policy on supporting regional PSAP implementation based on self-nomination. A review of the policy with a forward focus of industry trends along with possible adoption of rules is required that will give counties improved stability in considering a regional effort.

Next Generation 911 (NG911)

Next Generation 911 is a set of standards being developed to permit the migration of the 911 network to an Internet Protocol (IP)-based platform. NG911 is equivalent to today's switched based operations in reliability. NG911 is flexible in accommodating not only new technologies but new ways to manage the data associated with providing effective emergency services. The new systems must accommodate inputs from telematics providers as well as text messaging necessary for effective services to the deaf community. NG911 must be capable of processing pictures as well as feeding information to other systems, such as field medical devices and automated dispatch services. This network upgrade is comparable to the change in the retail industry as they moved from store sales and manual inventory to internet sales of products distributed directly from suppliers. Moving to this technology will entail an unprecedented effort for the E911 Program.

Call Accounting and Reporting System (CARSNet)

The State E911 Program has contracted for the installation of a Call Accounting and Reporting System (CARSNet) to be installed in all PSAPs in the state. CARSNet is an Internet-based information system designed specifically for the management and administration of 911 Call Centers. In addition to automating the reporting of 911 call activity, CARSNet provides for automation of a number of other activity reports decreasing county effort while providing improved information. The system is also real-time reporting for call volumes and can provide early detection for network problems. The movement to this system for statistical collection will coincide with the development of the State E911 Program annual operations' contract with the county. The annual operations' contract will need to have provisions for accommodating the new data collection capabilities.

Pandemic Contingency Planning
The one public safety service that must operate at a near normal or an even higher level of operation in a pandemic health-related event is 911. Planning is underway for PSAP preparedness which will be a local decision for implementation. Pandemic planning for network contingencies that will permit load sharing between PSAPs statewide is scheduled to begin in September 2006.

Funding
History
The wireline excise tax continued at the current rate of 20 cents. Although the revenue from the State wireline E911 excise taxes increased in 2005, some Washington counties continued to project lower wireline E911 revenues for fiscal year (FY) 2005-06, as wireless and Voice over Internet Protocol (VoIP) phones displaced traditional wireline services.

The state E911 excise tax was extended to wireless subscribers beginning January 1, 2003, at a fixed rate of 20 cents per month per subscriber. This additional tax resource is being used to assist counties with related Public Safety Answering Point (PSAP) operations and equipment upgrades.

The total FY2006 tax collections for both the wireline and wireless services were approximately $17.5 million, with wireline revenue contributing $8.2 million.

A continued requirement for FY 2006 is the separation of support into wireline and wireless components for tracking purposes.

Call Volumes
In calendar year 2005, over 6.1 million 911 calls were answered at 67 Public Safety Answering Points (PSAPs) accounted for by those counties with state operations' contracts. Of those calls, 2.6 million were reported to have been made from wireless phones.

FY 2006 Allocation and Expenditure
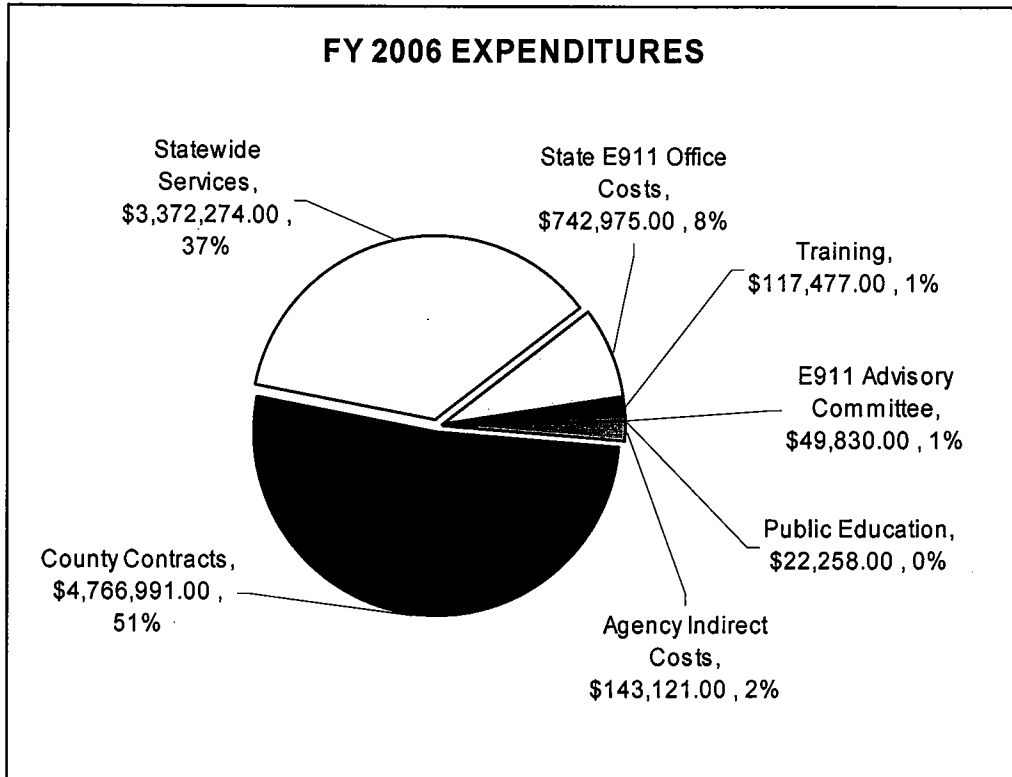**Statewide Services Provided**
- Selective Routing
- LEC Interface costs for Qwest counties
- Tandem Router Upgrades
- Frame Relay
- Production, warehousing and dissemination of 911 Public Education brochures and promotional items statewide
- Facilitation of three, annual E911 County Coordinator Forums (funding up to three PSAP personnel from each county per forum)

- Contract with the Washington Criminal Justice Training Commission to conduct statewide telecommunicator training for PSAP personnel and for county in-house trainers of telecommunicators
- Contract with the Seattle-based Hearing, Speech and Deafness Center to provide statewide TTY training for telecommunicators
- TeleAtlas (mapping software)
- Language Line

County Services Provided
- Switching Office Enabling
- Automatic Number Identification (ANI)
- ANI/ALI Controllers And Maintenance
- Phase II CAD system upgrade
- Telephone System and Maintenance
- ANI/ALI Display equipment
- PSAP Mapping Maintenance
- ALI/DMS Service (Database)
- County Enhanced 911 Coordinator duties
- MSAG / Mapping Administration
- E 911 Mapping Administration Hardware/Software
- TDD/TTY and Maintenance
- Traffic Studies between the Switching Office and the Selective Router
- Traffic Studies between the Switching Office and the Selective Router
- Traffic Studies between the Selective Router and the PSAP
- 911 Call Receiver salaries and benefits
- Uninterruptible Power Supply (UPS) and Maintenance
- Night Service
- Route diversity between Selective Router and PSAP
- Call Receiver Training
- Language line charges
- Instant Call Check Equipment and maintenance.
- Mapping Display
- 911 Management Information Systems (MIS)
- Call Detail Recorder and/or printer and maintenance
- Headsets for 911 Call Takers
- Costs associated with destruction of E911 records
- 911 Coordinator electronic mail (e-mail)
- Logging Recorder & Maintenance
- Computer aided dispatch (CAD) & Maintenance
- Auxiliary generator & Maintenance
- Clock Synchronizer & Maintenance

The Fiscal Year 2006 Expenditures as shown below demonstrate the commitment to county assistance either through direct reimbursement or by acquisition of services that directly support E911 availability.

FY 2006 EXPENDITURES

Statewide Services, $3,372,274.00, 37%

State E911 Office Costs, $742,975.00, 8%

Training, $117,477.00, 1%

E911 Advisory Committee, $49,830.00, 1%

Public Education, $22,258.00, 0%

County Contracts, $4,766,991.00, 51%

Agency Indirect Costs, $143,121.00, 2%

# HISTORY OF ANNUAL 911 EXCISE TAX COLLECTED

Historically the E911 excise tax revenues have continued to grow but would have declined if the Legislature had not extended the tax to wireless in 2003.

FY 1999	$ 3.4 mil
FY 2000	$ 9.6 mil
FY 2001	$11.7 mil
FY 2002	$ 6.3 mil
FY 2003	$10.2 mil
FY 2004	$15.6 mil
FY 2005	$16.7 mil
FY 2006	$17.5 mil

WIRELINE VS. WIRELESS REVENUES

|	Wireline Revenues Collected	Wireless Revenues Collected
FY03	$7.9 mil	$2.2 mil
FY04	$8.7 mil	$6.9 mil
FY05	$8.5 mil	$8.2 mil
FY06	$8.2 mil	$9.3 mil

E911 REVENUE BY SOURCE
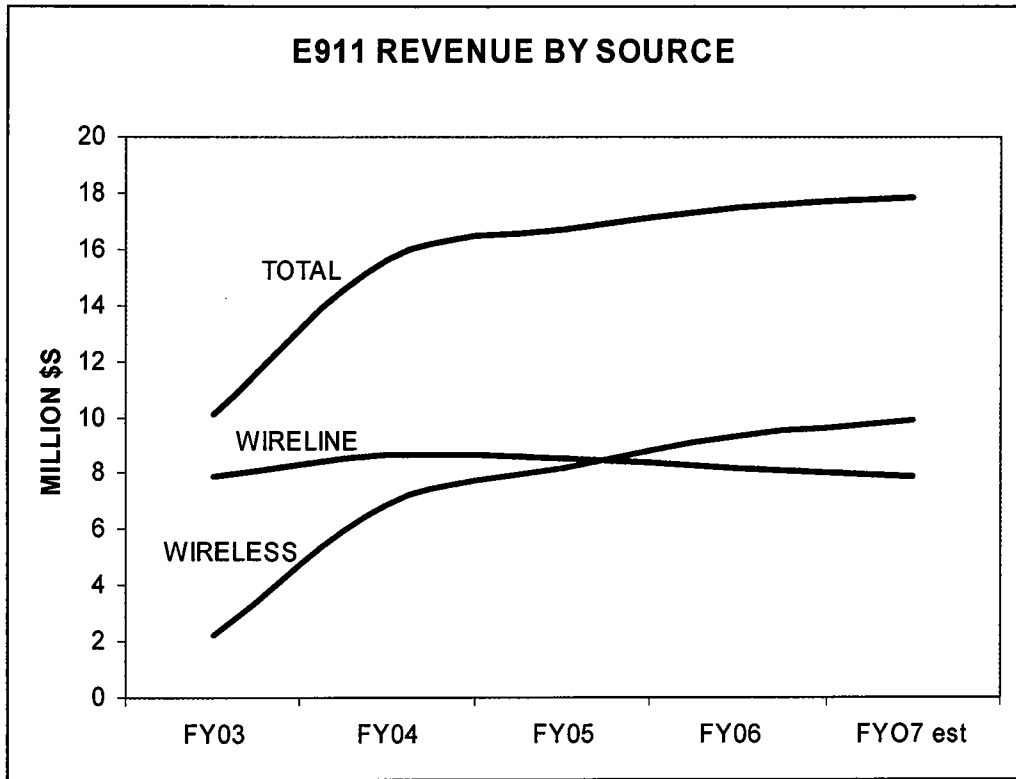
REPORTED 911 CALL VOLUMES

Calls to 911 continue to increase somewhat proportionally to the number of telephone units in service.

	911 Wireline Calls	**911 Wireless Calls**
CY 2003	3,049,563	1,978,172
CY 2004	3,923,837	2,123,241
CY 2005	3,522,655	2,605,295

CALLS TO 911 BY SERVICE TYPE

DRAFT
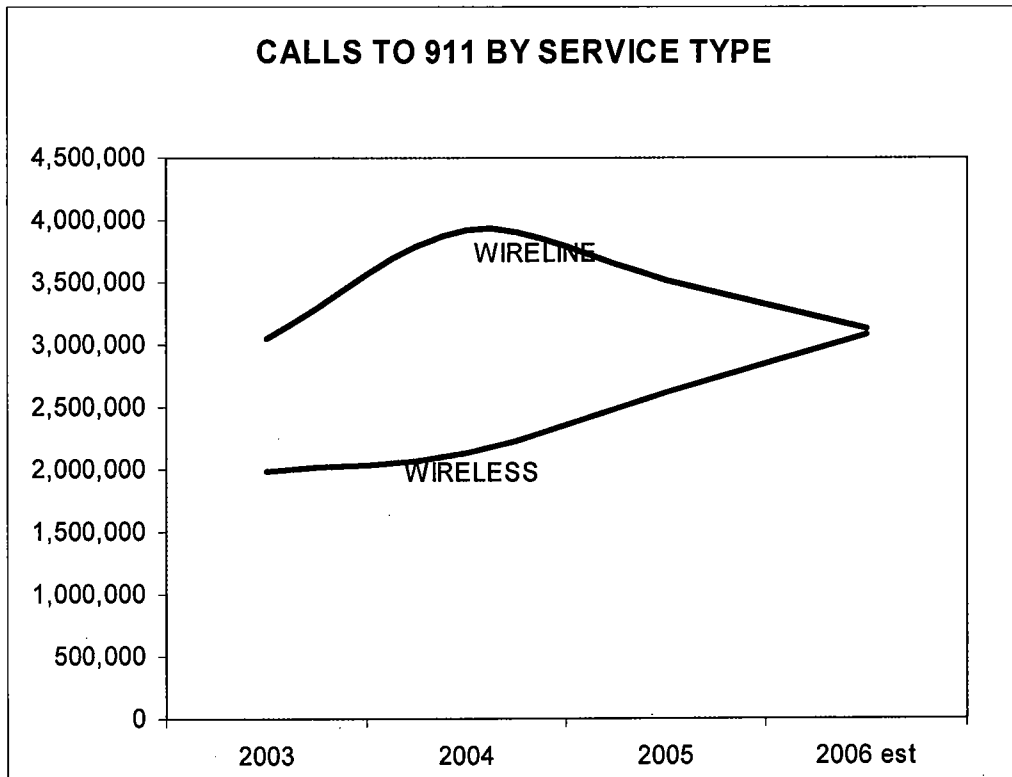
Challenges to the E911 Program – Estimated Costs

Estimates have been made of the cost of addressing the challenges to the E911 Program. In some cases these costs will displace existing costs; but, even in those instances because of the need to assure ongoing operational capability for a period of time, it will be necessary to operate dual system elements.

ESTIMATE OF NEW PROJECT COSTS	Fiscal Year				4-year total
	2006-07	2007-08	2008-09	2009-10	
Network Diversity	$480,800	$28,280	$28,280	$28,280	$565,640
Database Upgrades	$1,300,000	$650,000	$550,000	$300,000	$2,800,000
Voice over Internet Protocol (VoIP)	$138,000	$15,000	$15,000	$0	$168,000
Regionalization	$500,000	$500,000	$500,000	$500,000	$2,000,000
Next Generation 911 (NG911)	$713,150	$4,310,900	$4,525,750	$2,269,940	$11,819,740
Call Accounting & Reporting System	$360,000	$70,000	$70,000	$70,000	$570,000
Pandemic Contingency Planning	$1,849,525	$24,865	$24,865	$24,865	$1,924,120
Equipment Replacement	$1,193,000	$2,133,500	$2,375,000	$2,630,500	$8,332,000
Total	$6,534,475	$7,732,545	$8,088,895	$5,823,585	$28,179,500

STATE E911 OFFICE STAFF

State E911 Administrator
Bob Oenning, b.oenning@emd.wa.gov; 253-512-7011

Public Education Program Coordinator/Public Information Officer
Penelope Cassidy, p.cassidy@emd.wa.gov; 253-512-7016

Administrative Secretary
vacant position

Technical, Data and Network Support Staff
Network and Database Administrator
Dave Irwin, d.irwin@emd.wa.gov; 253-512-7017

Technical Manager
William Boyd, w.boyd@emd.wa.gov; 253-512-7015

Customer Service Support Staff
Customer Service Support Supervisor
Bruce Baardson, b.baardson@emd.wa.gov; 253-512-7018

Senior Financial Program Coordinator
Lorri Gifford, l.gifford@emd.wa.gov; 253-512-7013

Financial Program Coordinator
Blessing Guillermo, b.guillermo@emd.wa.gov; 253-512-7481

Program Assistant
Carol Losey, c.losey@emd.wa.gov; 253-512-7482

E911 website: http://emd.wa.gov