King County Auditor's Office

Cheryle A. Broom, King County Auditor



Financial Review & Compliance Audit of the 2011 Emergency Medical Services Levy

Susan Baugh Laina Poon Ron Perry

September 19, 2012 Report No. 2012-04

Executive Summary

The Emergency Medical Services (EMS) Division's implementation of the 2011 EMS Levy and financial plan was in compliance with the Council-adopted policies. The EMS Division managed the levy resources effectively to provide full funding for advanced life support (ALS) services and continued funding of all four EMS programs for the duration of the current levy. In addition, the EMS Division and regional partners have managed their respective EMS programs efficiently to carry forward significant savings for the 2014 to 2019 EMS Levy cycle while maintaining excellence in the quality of EMS services.

The overall amount of the basic life support (BLS) allocation was reasonable, but the method for distributing the BLS funds to fire agencies could be improved to provide greater equity and transparency. We recommend that the EMS Division consider distributing the majority of BLS funds by assessed value and call volume, and adding a new category to distribute three percent of the total allocation to provide additional support to fire agencies with very low assessed values and high response times.

The County Executive concurred with the audit findings and recommendation.



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MEMORANDUM

DATE: September 19, 2012

TO: Metropolitan King County Councilmembers

FROM: Cheryle A. Broom, County Auditor

SUBJECT: Financial Review and Compliance Audit of the 2012 Emergency Medical

Services Levy

Attached for your review is the Financial Review and Compliance Audit of the 2012 Emergency Medical Services (EMS) Levy. The primary objective of the audit was to determine whether the EMS Division's financial practices complied with the Council-adopted 2011 EMS Levy policies and financial plan. In addition, the audit assesses the overall EMS Levy allocation for BLS services and the reasonableness of the distribution of the annual allocation among the regional fire agencies that provide basic life support (BLS) services. Finally, the audit includes a midterm review of the EMS Division's implementation of the levy.

The general audit conclusion was that the EMS Division managed the levy resources effectively to provide full funding for advanced life support (ALS) services and continued funding of each of the major EMS programs for the duration of the current levy. The audit also confirms that adequate funds will be available for the duration of the current levy, and identifies potential savings that can be carried forward to decrease the amount needed for the 2014 to 2019 EMS Levy cycle. In addition, the audit concludes that the overall amount of EMS Levy funding for BLS services was reasonable, although the method for distributing levy funds to BLS fire agencies could be improved to provide greater equity. We recommend that the EMS Division develop options for distributing the total BLS allocation. Specifically, the EMS Division should consider distributing the majority of the funds based on assessed value and call volume, and adding a new category to distribute three percent of the total allocation to support to fire agencies with very low assessed values and high response times.

The County Executive concurred with the audit findings and recommendation.

The Auditor's Office sincerely appreciates the cooperation received from the EMS Division management and staff, regional partners, and the expertise provided by Miller and Miller, P.S.

CB:SB:lo

King County Auditor's Office

Cheryle A. Broom, King County Auditor



Financial Review & Compliance Audit of the 2011 Emergency Medical Services Levy

Report Highlights

September 19, 2012 Report No. 2012-04

Purpose

King Council Ordinance 15862 requires the King County Auditor's Office to conduct annual audits of the 2008 to 2013 EMS Levy. The primary purpose of this audit is to review the EMS Division's financial practices and compliance with the Council-adopted 2011 EMS Levy policies and financial plan. In addition, at the request of the Division, the audit assesses the overall EMS Levy allocation for Basic Life Support (BLS) services and the reasonableness of the distribution of the annual allocation among the regional fire agencies that provide BLS services. Finally, the audit includes a mid-term review of the EMS Division's implementation of the levy. It confirms that adequate funds will be available not only for the duration of the current levy, but also identifies the potential savings that can be carried forward to decrease the amount of funds needed for the 2014 to 2019 EMS Levy.

Key Audit Findings

During 2011, the use of EMS levy funding conformed to the 2011 adopted EMS financial plan and policies and year-end undesignated fund balance was well above the six percent requirement. The annual BLS allocation was also reasonable given the overall amount of the EMS Levy and the longstanding policy to give priority to full funding of advanced life support (ALS) services. The current methodology for allocating BLS funds among the fire agencies, however, results in unequal levels of support for BLS agencies.

During the first half of the current EMS Levy cycle, the EMS Division and regional partners managed their respective programs and levy allocations efficiently and made substantial progress in implementing recommendations developed in the 2008 to 2010 auditor's office financial reviews and audits. Major accomplishments included fully defining funding of ALS services; ensuring sufficient funding of all four EMS programs for the duration of the current levy; and accruing significant savings from the current EMS Levy to reduce for the 2014 to 2019 EMS Levy cycle.

What We Recommend

The audit recommends that by the third year of the next levy period, the EMS Division develop options for distributing the total BLS allocation. It should consider distributing the majority of funds by assessed value and volume, and adding a new category to distribute three percent of the total allocation to provide additional support to fire agencies with very low assessed values and high response times.

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Introduction

Council Mandate to Conduct Annual Audits King County Council Ordinance 15862, which adopted the Emergency Medical Services (EMS) Levy financial policies in 2007, requires the King County Auditor's Office to conduct an annual audit of the 2008 to 2013 EMS Levy. Council Motion 13654 adopting the 2012 Auditor's Office Work Program also mandates the 2011 EMS Levy Audit.

The primary purpose of this audit is to review the EMS Division's financial practices and compliance with the Council-adopted 2011 EMS Levy policies and financial plan. In addition, the audit assesses the overall EMS Levy allocation for Basic Life Support (BLS) services and the reasonableness of the distribution of the annual allocation among the regional fire agencies that provide BLS services. Finally, the audit includes a mid-term review of the EMS Division's implementation of the levy. It confirms that adequate funds will be available not only for the duration of the current levy, but also identifies the potential savings that can be carried forward to decrease the amount needed for the 2014 to 2019 EMS Levy cycle.

Financing the Regional EMS System

King County's Medic One/Emergency Medical Services (EMS) system provides internationally recognized out-of-hospital patient care, including lifesaving medical assistance, to the 1.9 million residents throughout the county. The EMS system is funded principally by a voter-approved, six-year EMS Levy. The 2008 to 2013 EMS Levy provides an average of approximately \$63.5 million annually for Advanced Life Support (ALS), Basic Life Support (BLS), Regional Services, and Strategic Initiatives.

In 1979, the Washington State Legislature authorized the use of a regional EMS Levy to fund emergency medical services. Pursuant to the Revised Code of Washington (RCW) 84.52.069, King County passed six countywide levies from 1979 to 2007. The most recent six-year levy funds Medic One/EMS services from 2008 to 2013. Appendix 1 contains the original EMS Levy Financial Plan attached to Ordinance 15861 and Appendix 2 contains the Council-adopted 2011 EMS Levy Financial Plan.

This Emergency Medical Services Financial and Compliance Audit focuses on fiscal year 2011, the fourth year of the EMS Division's implementation of the 2008 to 2013 EMS Levy. Appendix 3 contains additional information about the 2008 to 2013 EMS Levy and Financial Plan as well as background information on the four major EMS Programs supported by the levy.

Introduction

Audit Scope and Methodology

This financial review and audit of the EMS Levy financial plan and operations was conducted by the Auditor's Office in conjunction with the Miller and Miller, P.S. The primary purpose of this audit is to review the EMS Division's financial practices and compliance with the Council-adopted 2011 EMS Levy policies and financial plan. The audit assesses the overall EMS Levy allocation for BLS services and the reasonableness of the distribution of the annual allocation among the regional fire agencies that provide BLS services. In addition, the audit includes a mid-term review of the EMS Division's implementation of the levy that confirms that adequate funds will be available not only for the duration of the current levy, but also identifies the potential savings that can be carried forward to decrease the amount needed for the 2014 to 2019 EMS Levy cycle. The Miller and Miller and County Auditor's Office scopes and methodologies are presented in Appendix 4.

General Conclusions

EMS Levy Managed in Compliance with Financial Plan and Policies Based on the 2011 review, we concluded that the EMS Division managed the EMS Levy resources and financial activities in accordance with the Counciladopted 2011 EMS Levy financial plan and policies. The EMS Division managed the levy resources effectively to provide full funding for ALS services and continued funding of all four EMS programs for the duration of the current levy. We also determined that the overall amount of the BLS allocation was reasonable, but the method for distributing the BLS funds to fire agencies could be improved to provide greater equity and transparency. In addition, we found that EMS Division and regional partners have managed their respective EMS programs efficiently to carry forward significant savings for the 2014 to 2019 EMS Levy cycle while monitoring the quality of EMS services.

Significant 2011 EMS Levy Findings and Recommendation

Use of EMS Levy Funding Conformed to the 2011 Adopted EMS Financial Plan and Policies and Year-End Undesignated Fund Balance Was Well Above the Six Percent Requirement. EMS managed its financial operations in accordance with the Council-adopted 2011 EMS Levy financial plan and policies. Actual revenues exceeded the adopted budget by \$1.3 million and expenditures were less than the budget by \$5.0 million

Introduction

resulting in a \$6.4 million positive operating variance. EMS did not use a substantial amount of the \$3.4 million budgeted contingencies. The millage reduction reserve was increased by \$1.0 million in accordance with the reserves established in the Council-adopted budget. The EMS Levy ending undesignated fund balance was \$15.6 million, which was \$7.0 million more than the adopted 2011 budget and well above the six percent minimum ending fund balance required by the EMS Levy financial plan. This funding level allows EMS to manage the impact of projected property tax reductions during the remaining two years of the levy.

The current methodology for distributing levy funds to BLS agencies resulted in inequities due to policy applied in previous levies intended to support small rural agencies. Although increased demand for BLS services in the last two decades outpaced growth in both local and levy funding for EMS services, we determined that the annual BLS allocation is reasonable. This conclusion is largely based on the overall amount of the EMS Levy, the substantial increase in the annual BLS allocation approved for the 2008 to 2013 levy, and the longstanding policy to give priority to full funding of ALS services. The current methodology for allocating BLS funds among the fire agencies, however, results in unequal levels of support for BLS agencies, benefitting some agencies with areas that have transitioned from rural to suburban and disadvantaging other agencies that have experienced recent, rapid growth.

The audit recommends that the EMS Division develop options for distributing the total BLS allocation in the third year of the 2014 to 2019 levy period. Specifically, it should consider distributing the majority of funds based on assessed values and call volumes within the fire jurisdictions, and adding a new category to distribute three percent of the total allocation by response times to provide additional support to fire agencies with very low assessed values and high response times.

The EMS Division and regional partners managed their respective EMS programs and levy allocations efficiently and made substantial progress in implementing the recommendations developed in the 2008 to 2010 Auditor's Office financial reviews and audits. The EMS Division and regional partners have managed their respective EMS programs and allocated levy resources efficiently (e.g., underspent appropriated funds and established additional reserves in the EMS Levy Financial Plan) to provide full funding for ALS services, and continue funding of all four EMS programs for the duration of the current levy while maintaining excellence in the quality of EMS services. In addition, due to careful planning and use of the funds, the EMS Division and regional stakeholders plan to carry forward significant savings from the current EMS Levy to decrease the amount needed for the 2014 to 2019 EMS Levy cycle.

Section Summary

EMS managed its financial activities in accordance with the EMS Levy financial plan and policies. Actual revenues exceeded the adopted budget by \$1.3 million and expenditures were less than the budget by \$5.0 million resulting in an approximately \$6.4 million positive operating variance. The EMS Levy ending undesignated fund balance was \$15.6 million, which was \$7.0 million more than the adopted 2011 budget and well above the six percent minimum ending fund balance required by the EMS Levy financial plan. This funding level allows EMS to manage forecast reductions in property tax revenues in the last two years (2012-2013) of the current levy.

2011 EMS Funding and Financial Plan

King County's regional EMS system is funded by a six-year levy. In 2011, the budgeted revenues were \$61,914,065 and budgeted expenditures were \$63,893,587, not including contingencies or reserves. The reserves include a millage reduction reserve used to track the unused ALS salary and wage contingency and other positive fund balances so that the County Council may consider a potential millage reduction in the later years of the levy or to offset the rate needed for the next levy. A minimum EMS Levy ending fund balance of six percent of annual revenues is required. (Appendix 2 contains a copy of the adopted 2011 EMS Levy financial plan.)

This section focuses on the fourth year of the EMS Division's implementation of the 2008 to 2013 EMS Levy financial plan. As mandated by County Ordinance 15862, the primary objective of the audit is to review the 2011 EMS Levy financial activities and compare the annual revenues, expenditures, and reserve and contingency balances to the amounts identified in the annual financial plan adopted by the King County Council. The financial analysis included testing a limited sample of transactions to verify that all funds were used for the purposes intended.

Finding I: Use of EMS Levy Funding Conformed to 2011 Adopted EMS Policies and Financial Plan

EMS Levy funding complied with the 2011 adopted EMS policies and financial plan based on a comparison of the financial plan contained in Ordinance 15861, the 2011 annual adopted budget, actual results from the King County ARMS financial system, and schedules prepared by EMS management to calculate reserves and designations. Exhibit A below presents a summary comparing the 2011 EMS Levy operations to the 2011 adopted budget and financial plan.

EXHIBIT A: Financial Comparison of 2011 EMS Operations to Budget and Financial Plan

	2011 Proposed (15861)	Difference	2011 Supplemental Budget*	Difference	2011 Actual
BEGINNING FUND BALANCE	\$ 12,298,857	\$ 21,991,319	\$ 34,290,176	\$ 4,337,218	\$ 38,627,394
EMS REVENUES					
Taxes	67,630,570	(6,400,355)	61,230,215	1,234,416	62,464,631
All Other Revenues	1,009,068	(325,218)	683,850	113,152	797,002
EMS REVENUE TOTAL	68,639,638	(6,725,573)	61,914,065	1,347,568	63,261,633
EXPENDITURES					
Advanced Life Support Services	(40,021,655)	4,810	(40,016,845)	3,263,212	(36,753,633)
Basic Life Support Services	(15,738,118)	583,955	(15,154,163)	-	(15,154,163)
Regional Support Services	(7,197,262)	88,885	(7,108,377)	1,038,038	(6,070,339)
Strategic Initiatives	(1,239,355)	(374,847)	(1,614,202)	717,178	(897,024)
EXPENDITURES TOTAL	(64,196,390)	302,803	(63,893,587)	5,018,428	(58,875,159)
Total Excess of Revenues Over Expenditures	4,443,248	(6,422,770)	(1,979,522)	6,365,996	4,386,474
Other Items Affecting Fund Balance	(2,765,904)	(643,111)	(3,409,015)	3,446,796	37,781
ENDING FUND BALANCE	13,976,201	14,925,438	28,901,639	14,150,010	43,051,649
TOTAL RESERVES AND DESIGNATIONS	(9,807,262)	(10,403,222)	(20,210,484)	(7,232,631)	(27,443,115)
ENDING UNDESIGNATED FUND BALANCE	\$ 4,168,939	\$ 4,522,216	\$ 8,691,155	\$ 6,917,379	\$ 15,608,534

Source: EMS Levy 2011 adopted budget and financial plan and EMS Division financial documents.

*Adopted budget did not conform to the EMS financial plan; County Council adopted the supplemental budget in compliance with the EMS financial plan.

EMS 2011 Excess
Revenues Over
Expenditures
Were \$6 Million
Higher than
Planned

Actual 2011 EMS Levy revenues were higher than the 2011 adopted budget by \$1.3 million, and actual expenditures were less than the budget by \$5.0 million. Actual excess revenues over expenditures equaled \$4.4 million during 2011 compared to the budget of a negative \$2.0 million (the financial plan assumed that expenditures would exceed revenues). Factors contributing to the \$6.4 million positive budget variance included approximately \$1.2 million in taxes above the projected amount and approximately \$5.0 million in under spending in three of the four major program areas.

Exhibit A above shows that the "Other Items Affecting Fund Balances" were substantially unused. This category is largely comprised of EMS contingencies, including the Disaster Response Contingency (\$3.4 million) and the planned use of program balances and reserves (\$1.4 million), which were budgeted but not needed during 2011. The category also includes funding for the annual audit.

EMS partially reduced the combination of the \$6.4 million positive operating variance, the \$4.3 million positive variance in beginning fund balance, and the \$3.4 million in unused contingencies by transferring \$7.1 million over

the amount planned in the adopted budget to reserves and designations. The remaining positive variances increased the ending undesignated fund balance. The changes in reserves and designations from 2010 to 2011 included:

- 1. \$0.5 million added to designations for King County Medic One (KCM1) equipment replacement bringing the total to \$2.5 million;
- 2. \$1.3 million added to designations for ALS providers bringing the total to \$4.7 million;
- 3. \$0.5 million added to the Regional Support program balances bringing the total to \$2.8 million;
- 4. \$2.8 million added to three new reserves established by the adopted budget for salaries, facilities and dispatch;
- 5. \$1.6 million added to the risk abatement reserve bringing the total to \$2.2 million;
- 6. \$1.7 million added to the reserve for outstanding ALS retirement liability bringing the total to \$3.9 million in conformity with the adopted budget; and
- 7. The reserve for millage reduction was increased by \$1.0 million in conformity with the adopted budget bringing the total to \$6.0 million.

Total designations and reserves were \$10 million more than 2010.

These changes (and other reserves in the budget offset by additions to provider loan balances), when combined with the prior year balances, allocate approximately \$27 million of the ending fund balance (\$43 million) resulting in an ending undesignated fund balance of \$15.6 million.

EMS Levy Ending
Fund Balance
Well Above Six
Percent
Threshold
Required by
Adopted EMS
Financial Policies

The ending undesignated fund balance of \$15.6 million was approximately \$7 million more than the adopted 2011 budget and \$11.5 million more than the original proposed 2011 budget in County Ordinance 15861. The actual ending undesignated fund balance as a percent of annual revenue was 25 percent, which was well above the six-percent threshold established by the EMS Levy financial plan. This level provides funds to offset reduced property taxes in the remainder of the levy.

A more detailed comparison schedule related to the year end balances for the reserves and designations was developed based on EMS Division worksheets and is provided in Exhibit B.

EXHIBIT B: Comparison of Year-End Fund Balance for Reserves and Designations to Budget and Fiscal Plan

	2011 Proposed (15861)	Difference	Supplemental Budget*	Difference	2011 Actual
RESERVES AND DESIGNATIONS					
Encumbrances	\$ (977,521	\$ 458,511	\$ (519,010)	\$ 519,010	\$ -
Reappropriation	(25,000	25,000	-	-	-
Designations					
Prepayment	-	-	-	-	-
Provider/Program Balances	(1,022,900	(1,338,919)	(2,361,819)	(5,185,639)	(7,547,458)
ALS Provider Loans	-	469,586	469,586	-	469,586
KCM1 Equipment Replacement	-	(371,306)	(371,306)	(2,141,138)	(2,512,444)
Designations from 2002-2007 Levy	-	(240,841)	(240,841)	9,999	(230,842)
Reserves for Unanticipated Inflation ¹					
Diesel Cost Stabilization	(2,897,541	2,807,541	(90,000)	-	(90,000)
Pharmaceuticals/Medical Equipment	(1,097,000	-	(1,097,000)	-	(1,097,000)
Call Volume/Utilization Reserve	(1,159,800	216,979	(942,821)	-	(942,821)
Reserves					
Medic Unit/Chassis Obsolescence1	(562,500	11,881	(550,619)	-	(550,619)
Salary Reserves		(1,095,000)	(1,095,000)	-	(1,095,000)
Operations/Dispatch Reserves		(620,000)	(620,000)	(34,863)	(654,863)
Facilities1		(650,000)	(650,000)	(400,000)	(1,050,000)
Risk Abatement	(565,000	(1,635,000)	(2,200,000)	-	(2,200,000)
Outstanding ALS Retirement Liability			(3,900,000)	-	(3,900,000)
Millage Reduction	(1,500,000	(4,541,654)	(6,041,654)	-	(6,041,654)
TOTAL RESERVES AND DESIGNATIONS	\$ (9,807,262	\$ (10,403,222)	\$ (20,210,484)	\$ (7,232,631)	\$ (27,443,115)

Source: EMS Levy 2011 adopted budget and financial plan and EMS Division financial documents.

EMS Managed Reserves and Designations to Adopted Financial Plan The comparison shown in Exhibit B indicates that EMS managed the reserves and designations as required by the adopted 2011 policies and financial plan. This includes the ending fund balance which was \$15.6 million, or 25 percent above the six percent minimum ending fund balance. This funding level provides funds to offset the property tax reductions in effect for the remainder of the 2008 to 2013 levy period.

¹ 2010 adopted budget combined the reserves for unanticipated inflation in one line item; this presentation shows them broken out. The medic unit obsolescence and facilities were similarly combined into one line item.

^{*}Adopted budget did not conform to the EMS financial plan; County Council adopted the supplemental budget in compliance with the EMS financial plan.

Section Summary

Demand for

BLS Services

Up About 70

Fire Agencies'

Call Volume

Now Makes

Percent of

Securing sufficient BLS funding is challenging for fire agencies, but the levy cannot contribute a greater proportion of funds to BLS services at this time. However, the model for allocating BLS levy funds among the agencies could be changed to improve equity and transparency.

Historically, Basic Life Support (BLS) services have been primarily funded by local fire agencies, with some funding from the EMS Levy. However, increasing costs of providing BLS services have outpaced support from the EMS Levy, which primarily funds Advanced Life Support (ALS) services. The current methodology for allocating BLS levy funds provides unequal support for BLS agencies, benefitting some agencies with areas that have transitioned from rural to suburban and disadvantaging other agencies that have experienced recent, rapid growth. We recommend using the 2014 to 2019 levy period to develop options for a new methodology by which to distribute BLS levy funds in the 2020 to 2025 levy period or sooner.

Background

BLS services, which comprise approximately 70 percent of the current EMS annual call volume, are provided by local fire agencies in King County. BLS units are usually the "first responders" to medical emergencies, providing immediate basic life support that includes administering advanced first aid and CPR/AED to stabilize patients.

BLS services are critical to efficiency and success of ALS operations by sustaining patients until an ALS unit arrives and reducing ALS call volume

by responding to patients with less acute conditions. Since the first EMS Levy, BLS call volume has steadily increased during the past 30 years such that BLS calls now comprise approximately 70 percent of the fire agencies call volume.

BLS services are embedded in local fire



Figure 1: Fire District #45 - Duvall tending to a patient

department and district operations, which include fire suppression, emergency medical services, and community education. The BLS levy allocation recognizes the fire agencies' vital role as first responders in the integrated, tiered regional network of basic and advanced life support

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¹ Fire agencies provide BLS first responses for ALS emergencies because they have many more units capable of providing emergency medical response. The national response time benchmark from time of dispatch to time of arrival is five minutes for BLS and nine minutes for ALS.

services provided by King County, municipal fire departments, fire districts and regional fire authorities.

Finding 2: Increased Demand for BLS Services Has Outpaced the Growth in both Local and Levy Funding for These Services

In 2010, the County received approximately \$65 million, or 64 percent of the total EMS levy revenues. For BLS services, fire agencies received approximately \$15 million, or 26 percent of the County's share of the levy fund. This represents approximately eight percent of the overall King County BLS system costs in 2010, which we estimated at \$179 million. The remaining 92 percent of BLS costs are covered by other local fire agencies' revenues. Because BLS services are provided by fire agencies and use the same personnel, equipment, and administrative systems, it is difficult to separate the cost of providing BLS services from the cost of providing fire suppression and other services. Most fire agencies do not separate BLS costs from costs related to fire and other activities, so we developed a simple method to estimate their BLS costs using information provided by the agencies. Please see Appendix 4 – Scopes and Methodologies for details.

Fire Districts
Particularly
Impacted by
Declining
Property
Values and
Limits on
Property
Taxes

Although local tax collections predominantly support BLS services, fire districts and other taxing entities began to experience decreasing revenues

when voters passed Initiative 747 in 2001, limiting property tax growth to 1 percent per year. As costs increased due to inflation (averaging 3.6 percent annually between 1980 and 2011), local property tax revenues did not keep pace. Many fire agencies struggled to maintain adequate levels of service. In addition,



maintain adequate levels of Figure 2: SeaTac Fire Department en route to an incident

assessed values have fallen in many areas, compounding the loss of revenues. The limit on property tax growth affects all fire agencies, but fire districts are particularly impacted because they have fewer revenue sources

² The City of Seattle keeps the EMS levy revenues collected from properties within the City and uses them to fund the Seattle Fire Department's ALS and BLS services.

³ \$179 million does not include BLS costs for the City of Seattle. Fire agencies do not generally separate BLS and fire control costs, since the functions are performed by the same personnel. We developed and implemented a simple methodology to compare agencies' BLS costs as consistently as possible.

⁴ I-747 was replaced by legislation revising the RCW to reflect the 1% cap in January 2008. Jurisdictions can ask voters to pass a temporary or permanent levy lid lift to relieve the 1% cap as provided in RCW 84.55.050.

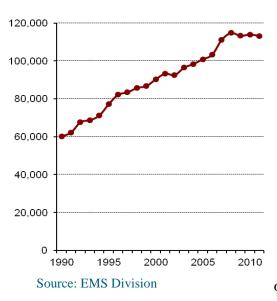
than municipal fire departments. (See Appendix 5 – Local Funding Options for information on revenue sources available to fire agencies.)

Originally, the EMS Levy was designed to contribute a small amount to the overall BLS costs when EMS calls comprised a relatively small proportion of fire agencies' workload. However, as the percentage of EMS calls increased, the BLS levy allocation increased at a fraction of the rate, placing financial strain on BLS providers.

From the first EMS Levy in 1979 to the end of the 2002 to 2007 EMS Levy, increases to the BLS allocation were limited to growth in the total levy amount, remained static, or were limited to changes in the Consumer Price Index (CPI). EMS determined that the BLS levy allocation covered approximately 14 percent of the fire agencies' operating costs for BLS services using 2004 expenses. The BLS Subcommittee of the EMS Strategic Planning Task Force felt that this situation had become untenable for BLS providers since their local funding sources were primarily intended to pay for fire control services rather than EMS.

Over the course of strategic planning for the 2008 to 2013 EMS Levy, the BLS Subcommittee sought to significantly raise the total BLS allocation in order to compensate agencies for increased EMS call volume over the last 20 years. Exhibit C shows the increase in call volumes since 1990.

EXHIBIT C: King County BLS Call Volume 1990-2011



The Subcommittee also recommended linking the BLS allocation to the number of calls requiring ALS transport since BLS provides critical medical services for these calls by being first on the scene and stabilizing the patient. This increased funding for BLS services by \$4.7 million (or 49 percent) in the 2008 to 2013 EMS Levy.

We surveyed BLS providers to gather information about the costs of providing BLS service and their opinions about levy funding allocations. Even after the funding

increases in the current levy, 90 percent of the BLS providers who responded to our survey indicated that the levy funds do not provide sufficient support to offset the cost to provide BLS services. Specifically, the percentage of

⁵ 20 of the 23 BLS agencies that returned our survey responded to the question, "Do you feel that the EMS Levy funds you receive provide sufficient support of your BLS costs?"

The BLS
Subcommittee
Recommended
Maintaining the
Status Quo
Funding Level for
2014 to 2019 Levy

BLS costs covered by the levy decreased from an estimated 14 percent in 2004 to an estimated 8 percent in 2010. Nonetheless, the majority of providers believe that the allocation of levy funds between ALS, BLS and other programs is fair.

During the planning for the 2014 to 2019 EMS Levy, there was a BLS Subcommittee of providers who focused largely on funding issues. Subcommittee members indicated that additional funding would help maintain adequate BLS response times. However, they acknowledged that this was not feasible due to the slow pace of economic recovery and because of the levy's primary objective is to provide full funding for ALS. The Subcommittee ultimately recommended maintaining the percentage of BLS funding at the same level as in the 2008 to 2013 EMS Levy.

The Subcommittee recommendation has merit because the EMS Levy does not have the capacity to fully fund BLS service. Historically, local fire agencies have controlled the organization and provision of fire and EMS services. That approach continues in the context of a robust regional system where agencies support each other through the levy and



Figure 3: Eastside Fire & Rescue providing medical assistance

many mutual aid agreements. Despite the challenges of declining revenues, increased demand for BLS services, and the vital support BLS provides to ALS services in King County, the levy cannot afford to offer a "safety net" for fire agencies. Even if the levy rate was raised to its legal maximum of 50 cents per thousand dollars of assessed value and the entire increase was allotted to BLS services, the resulting sum would not cover even one third of the total cost of providing BLS services.

In partnership with BLS agencies, the EMS Division is also focusing on reducing the growth in BLS call volume through strategic initiatives and regional services, such as the Telephone Referral Program/Nurseline and the new Community Medical Technician (CMT) pilot program. The CMT program is expected to provide a low cost alternative response to patients

⁶ Different methodologies were used for the 2004 and 2010 estimates, which could account for some of the variance.

who may need the services of an Emergency Medical Technician (EMT), but do not require acute emergency care or transport for follow-up treatment. The Division hopes that CMTs will reduce the burden on BLS units, increasing their availability to respond to serious emergency calls. In addition, the CMT program will provide vehicle cost savings. Many fire agencies are also proactively taking steps to reduce their call volumes. Efforts to reduce EMS call volumes include promoting public education on injury prevention and working with frequent 911 callers to address their needs outside the emergency medical system.

Levy Cannot Support Increased BLS Funding

Despite declining local fire agency and EMS levy revenues since 2008, the EMS Division successfully modified its financial plans to maintain support for BLS services at the levels planned before the economic downturn. The Division also attempted to further offset BLS costs through the Regional Services and Strategic Initiatives intended to create efficiencies in the regional system. Given the current economic conditions and the primary purpose of the levy in supporting ALS services, it would seem prudent to maintain the overall amount of the BLS levy allocation at this time.

Finding 3: The Current Levy Allocation Methodology Resulted In Inequities Due To a Policy From Previous Levies Intended to Support Small Rural Agencies

The BLS funding allocation formula has been in effect since the first EMS levy, albeit in various forms. It uses a complex methodology for distributing a fixed dollar amount to fire agencies in King County (with the exception of the Seattle Fire Department) based on system demand (call volumes—CV), jurisdictional contribution to the levy (assessed value—AV), and the longstanding policy of supporting small rural agencies to effectively maintain a high quality regional EMS system.

Supporting small, rural agencies with proportionately larger levy allocations was a policy decision the EMS Division and regional partners made in previous levies to support comparable levels of service across the regional EMS system. Previous allocation methodologies included components such as population and type of community (rural, urban, or transitional area) with the intent of supporting agencies whose assessed value was not high enough to fund BLS services at a comparable level to other agencies in King County. These components were removed from the allocation formula by the end of the 2002 to 2007 levy, when it became clear that most of the small, rural agencies had significant suburbanized areas where assessed value had grown tremendously. In addition, the population component was

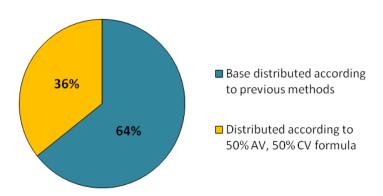
⁷ The Division has not established a standard level of BLS service provision, but the national benchmark for first tier (two EMTs) response time (dispatch to arrival) is five minutes. Average BLS response time for first response by King County fire agencies is approximately five minutes, which the Division considers an acceptable level of service.

difficult to estimate between census years, potentially introducing inaccuracies in the allocation model.

Even though the BLS funding allocation methodology was changed in 2008 to use only assessed value and call volume, the effect of the previous methodologies persists because the new formula was only applied to the marginal increase in funds added to the overall BLS allocation in 2008 and in subsequent years. Consequently, the base funding level that has been carried forward accounted for 64 percent of each agency's 2010 BLS allocation and only 36 percent was distributed according to the new formula.

Exhibit D below shows that almost two-thirds of the levy funds earmarked for BLS agencies are distributed according to previous methodologies. Because each new method for distributing BLS funds was only applied to marginal increases in funds over the prior year, the "base" allocation remained in place. The primary difference between the historical methods used to distribute BLS funds reflected in the base is the inclusion of policies intended to provide extra support for small rural agencies and agencies with areas transitioning from rural to suburban.⁸

EXHIBIT D: EMS
Levy Funds Primarily
Distributed Using
Previous Methods



Source: KCAO Analysis of EMS Data

Current BLS
Allocation
Methodology Has
Inequities

Over time, the former methodology began to distort the BLS funding allocation in two major ways. First, it benefitted some agencies that no longer required substantially more support than other jurisdictions due to growth in assessed values. As discussed above, the levy allocation for BLS services currently covers approximately eight percent of the fire agencies' overall operating costs.

Exhibit E shows that some agencies still receive a disproportionate share of the levy funds compared to the simple half assessed value, half call volume allocation. In addition, a few of them receive a much greater percentage of their estimated BLS costs from the levy than the current county average of eight percent.

⁸ The Division does not have accessible historical records prior to 1996.

EXHIBIT E: Agencies Covered by Previous Policies Now Receive Disproportionate Share of Levy Funds

Agency	2010 EMS Levy BLS Allocation	Percent of Estimated BLS Costs Covered by 2010 Levy Allocation	Simple AV-CV Allocation Using 2010 Data	Percent of Estimated BLS Costs Covered by Simple AV- CV Allocation	Assessed Value (billions)
Fire District #44 – Mountain View/Black Diamond	\$345,236	21.7%	\$187,062	11.8%	\$3.4
Enumclaw Fire Department	\$289,834	18.6%	\$170,276	10.9%	\$2.3
Fire District #43 - Maple Valley	\$415,454	8.41%	\$287,982	5.8%	\$5.5
Fire District #45 - Duvall	\$152,081	9.18%	\$110,360	6.7%	\$2.1
Eastside Fire & Rescue	\$1,364,430	14.4%	\$1,191,278	12.6%	\$25.5

Source: KCAO Analysis

Three small rural agencies, whose assessed value is less than \$250 million, continue to struggle to provide BLS response times that are consistent with the rest of the BLS providers. Specifically, Fire District #47–Palmer Selleck and Fire District #50–Skykomish have average response times of over ten minutes; Fire District #51–Snoqualmie Pass has an average response time of 7.6 minutes. Response times for these agencies are likely to increase further if the additional levy support is withdrawn. These agencies will continue to require additional support beyond the standard allocation from the levy because their assessed property values are not high enough to generate sufficient local funding for the expected level of BLS services.

The second way the current allocation methodology results in the unequal distribution of funding is that it depresses levy funding for those agencies experiencing rapid growth in assessed value and/or call volume. For example, as shown in Exhibit F, Snoqualmie Fire and Rescue's assessed value grew from approximately \$425 million in 2001 to approximately \$2.1 billion in 2010, representing a 494-percent increase. Its call volume grew 74 percent over a similar timeframe. However, because the majority of its levy allocation is an accumulated sum based on historically lower assessed value and call volume data, and includes other variables such as population; the current allocation does not fully reflect rapid growth experienced in the last ten years. Kent Regional Fire Authority is another agency affected by rapid growth that is not reflected by the current BLS allocation.

[^]

⁹ Although the BLS response time standard recommended by the National Fire Protection Association is five minutes (one minute turnout time and four minutes travel time), other industry leaders such as the Commission on Fire Accreditation International (CFAI) recognize the challenge of meeting these response times in rural and wilderness areas, as well as the fact that the 5-minute standard is based on clinical guidelines for sudden cardiac arrest incidents, which represented 1 percent of BLS calls in 2010. CFAI quotes a California EMS response time standard of under 15 minutes for 90 percent of suburban and rural responses, and "as soon as possible" for wilderness responses. Data at the 90-percent frequency level are not available for the three agencies mentioned above.

EXHIBIT F: Agencies that Have Experienced Recent Rapid Growth Are Currently Not Receiving as Much Levy Support as Other Agencies

Agency	2010 EMS Levy BLS Allocation	Percent of Estimated BLS Costs Covered by 2010 Levy Allocation	Simple AV-CV Allocation Using 2010 Data	Percent of Estimated BLS Costs Covered by Simple AV- CV Allocation	2001 Assessed Value (billions)	2010 Assessed Value (billions)	Change in AV
Snoqualmie Fire	\$89,144	7.1%	\$118,531	8.6%	\$0.4	\$2.1	494%
& Rescue							
Kent Regional	\$1,201,648	7.4%	\$1,399,059	9.4%	\$9.7	\$18.3	189%
Fire Authority							

Source: KCAO Analysis

Alternative
Allocation
Methods Can
Make Funding
More
Proportionate

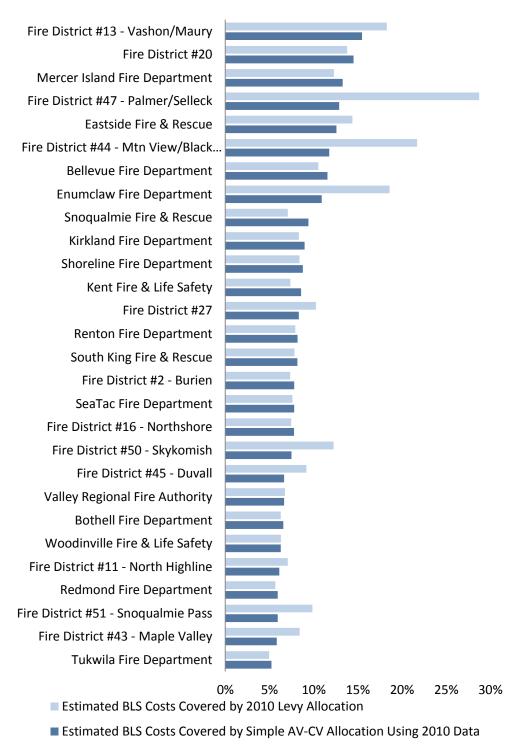
We assessed possible methodologies that would eliminate inequities from previous allocation methodologies and provide more proportionate support to the agencies. To determine the best alternative allocation method, we applied the criteria expressed by the EMS regional partners:

- Incorporates jurisdictional contributions to the levy (AV)
- Incorporates the amount of BLS service provided (CV)
- Supports the smallest rural agencies
- Uses reliable, comparable, objective data
- Stable: does not fluctuate by large amounts
- Transparent: funding clearly tied to specific criteria
- Equitable: provides a similar percentage of each agency's BLS costs

We determined that eliminating the base allocation levels and distributing the entire BLS fund half by assessed value and half by call volume meets all the criteria except supporting the smallest rural agencies. We developed a way to meet this criterion as well, which is discussed below. To assess alternative allocation methodologies, we tested models using combinations of variables such as population, acreage, out of service time, number of fire stations, assessed values and call volumes (see Appendix 4 – Audit Scopes and Methodologies). Applying a formula based half on assessed value and half on call volume generated the most consistent results, providing levy support at an average of nine percent of agencies' respective BLS costs.

Exhibit G below displays the effect of applying this approach. The new methodology (dark blue lines) reduces the range in percent of BLS costs covered by the levy. The current methodology creates outliers: a few agencies receive much more funding proportionate to their costs (long light blue lines) than others.

EXHIBIT G: Eliminating Base Allocation Level BLS Formula Would Increase Equity of Funding



Source: KCAO Analysis

Further
Adjustments
Needed to
Support the
Smallest
Agencies

Applying the proposed formula would eliminate extra support for the few small rural agencies that still need it due to their low assessed values. This can be remedied by creating a new category that distributes three percent of the total allocation in the manner described below. For example, we suggest distributing three percent of the BLS levy fund (\$450,000 in 2010) among all 28 agencies based on ability to respond in a timely manner. This "ability allotment" would be distributed among all agencies according to their average response time. As a result, the three agencies with the lowest assessed values would receive the largest allotment. In dollars, each agency's allotment is not a large sum (\$10,000-20,000 for most agencies), but it represents proportionately significant support for the smallest agencies.

Without this support, the smallest agencies would lose a large portion of their levy funding under the proposed formula, which is based only on assessed value and call volume and does not include the complicated methodologies previously used to support small rural agencies.

The ability allotment is transparent and easy to administer, because it uses only one data element (average response time) and uses the

methodology



same Figure 4: Fire District 47 responding to an incident

as is currently used to allocate levy funds by assessed value and call volume, i.e., each agency's percent of the total. ¹⁰ The amounts are small enough so as not to create incentive for agencies to respond more slowly in an attempt to increase their allotment. The smallest agencies that the allotment is intended to support are likely to continue having higher response times than agencies with more dense populations because of their rural nature.

Exhibit H below shows the dollar amounts of the ability allotment for each agency using 2010 figures. Agencies are sorted by AV from smallest to largest. The group of three agencies at the top of the table would receive the greatest increase from the ability allotment as a percentage of their estimated BLS costs.

¹⁰Response time data from Valley Communications Center (Valley COM), which serves many of the fire agencies operating in south King County, are known to be slightly inaccurate because of outdated transmission equipment. Valley COM and its contracting agencies are updating the dispatch system and transmission equipment, and expect to be able to provide enhanced data reliability when the new system goes online in fall 2013 or later. North East King County Regional Public Safety Communications Agency (NORCOM) is also in the midst of upgrading its system.

EXHIBIT H: Ability Allotment Gives Additional Funding to All Agencies, but Small Rural Agencies Benefit the Most

Agency	AV Category (billions)	2010 Assessed Valuation (\$)	Average Response Time (minutes)	3% Ability Allotment by Average Response Time (\$)	Ability Allotment as a Percentage of Estimated BLS Costs
Fire District #51 - Snoqualmie Pass	Under \$.25	90,256,923	7.61	19,823	7.65%
Fire District #50 - Skykomish	Under \$.25	177,286,118	14.44	37,614	10.55%
Fire District #47 - Palmer/Selleck	Under \$.25	244,369,192	10.18	26,517	32.59%
Fire District #27	\$1 - \$5	1,335,829,462	6.63	17,270	1.84%
Fire District #20	\$1 - \$5	1,682,003,319	5.33	13,884	1.10%
Fire District #45 - Duvall	\$1 - \$5	2,070,850,181	7.63	19,875	1.20%
Snoqualmie Fire & Rescue	\$1 - \$5	2,097,243,745	5.87	15,290	1.21%
Enumclaw Fire Department	\$1 - \$5	2,343,332,607	5.43	14,144	0.91%
Fire District #13 - Vashon/Maury	\$1 - \$5	2,806,791,475	7.53	19,615	1.93%
Fire District #11 - North Highline	\$1 - \$5	2,978,128,233	5.65	14,717	0.25%
Fire District #44 - Mtn View/Blk Dmnd	\$1 - \$5	3,374,319,765	7.02	18,286	1.15%
Bothell Fire Department	\$1 - \$5	3,532,933,963	5.15	13,415	0.25%
SeaTac Fire Department	\$1 - \$5	4,920,815,252	5.22	13,597	0.29%
Tukwila Fire Department	\$5 - \$10	5,188,404,039	5.33	13,884	0.18%
Fire District #43 - Maple Valley	\$5 - \$10	5,448,465,938	5.64	14,691	0.30%
Fire District #2 - Burien	\$5 - \$10	5,757,344,252	4.32	11,253	0.21%
Fire District #16 - Northshore	\$5 - \$10	6,040,053,063	5.02	13,076	0.29%
Valley Regional Fire Authority	\$5 - \$10	7,076,444,341	5.67	14,769	0.14%
Shoreline Fire Department	\$5 - \$10	8,023,455,840	5.07	13,207	0.18%
Woodinville Fire & Life Safety	\$5 - \$10	9,904,327,947	5.72	14,900	0.19%
Mercer Island Fire Department	\$10+	10,332,031,615	4.8	12,503	0.39%
Renton Fire Department	\$10+	16,955,941,478	4.98	12,972	0.09%
South King Fire & Rescue	\$10+	17,406,718,688	5.65	14,717	0.09%
Kirkland Fire Department	\$10+	17,599,015,756	4.64	12,087	0.12%
Kent Fire & Life Safety	\$10+	18,315,861,671	5.33	13,884	0.09%
Redmond Fire Department	\$10+	19,965,796,729	5.62	14,639	0.09%
Eastside Fire & Rescue	\$10+	25,476,658,239	6.44	16,775	0.18%
Bellevue Fire Department	\$10+	47,370,871,016	4.92	12,816	0.07%
TOTAL (using 2010 figures)				\$450,222	

Source: KCAO Analysis

Recommended Allocation Methodology

We propose distributing BLS levy funds 97 percent by assessed value and call volume and three percent by ability (average response time). This formula is a transparent and equitable methodology and best reflects the priorities of the regional partners.

Exhibit I below shows the impact of applying the proposed formula using 2010 data for illustrative purposes. These figures will change based on the current conditions at the time of implementation.

EXHIBIT I: Proposed New Allocation Formula Increases Transparency and Equity

Change as a Percentage of Total Revenues
0.4%
0.2%
-0.9%
-3.3%
1.3%
-1.0%
-0.3%
0.2%
-0.2%
-1.5%
-3.3%
-0.8%
5.8%
5.3%
0.6%
0.3%
0.6%
0.1%
0.2%
0.2%
0.2%
0.8%
0.1%
0.2%
-0.1%
0.0%

Source: KCAO Analysis

This formula would provide increased transparency and equity in the distribution of BLS funds. Agencies that experienced recent, rapid growth that was not reflected in their levy allocation would receive higher levy allocations. Agencies that were receiving a disproportionate share of BLS funds because of previous policies intended to protect small rural agencies would receive lower allocations under the new formula.

To mitigate major changes in funding levels resulting from distributing the entire BLS levy fund according to the proposed formula, the EMS Division could take several steps.

First, we suggest planning for the implementation of funding changes over time. For example, the 2014 to 2019 levy period could be used as a transition period to

- Freeze the allocations of agencies slated to have reduced allocations under the new methodology and thereby decrease the difference between their current allocations and their new allocations.
- Review any changes in agencies or other aspects of the regional system such as consolidations or changes in assessed values.
- Develop options by the third year of the 2014-2019 levy period for implementing a new allocation methodology.

EMS Division
Could Limit
Reductions to -10
Percent to Ease
Transition to
New Formula

Second, when a new methodology is implemented in the 2020-2025 levy period or sooner, EMS could limit the maximum percentage decreases in funding, or "collar" funding changes at 10 percent or less. This would entail a simple redistribution that would take a portion of the gains from increased allocations and use it to cap reductions at -10 percent for those allocations slated to decrease substantially.

Using a collar would protect agencies from abrupt changes in funding. As assessed values rise over time and provide more money to the levy, the allocations could continue migrating toward the new allocation levels while minimizing funding changes to the agencies supported by the collar. (See Appendix 6 – Collar Method for Reducing Immediate Impact of Proposed Allocation Formula.)

Recommendation I

We recommend that by the third year of the 2014 to 2019 levy period, the EMS Division develop options for a new methodology for distributing BLS levy funds in the 2020 to 2025 levy period or sooner. The EMS Division should consider the methodology presented in this report as a starting point in that process.

Section Summary

EMS Division's effective financial management of the 2008 to 2013 EMS Levy ensured that three important policy objectives were achieved despite a significant loss of revenues due to the 2008 economic recession.

These objectives included full funding of ALS services, improving the transparency in the use of the levy funds for all four major EMS programs, and generating sufficient millage reduction reserve funds through savings in the current levy period to reduce the funding needed for the 2014 to 2019 EMS Levy. Currently, the EMS Division projected that approximately \$21 million in program savings and unused program contingencies and reserves will be available to decrease the amount of funds needed for the next levy. In addition, EMS Division management's progress in implementing the 2008 to 2010 EMS Levy audit recommendations also led to more accountable and transparent financial policies and practices.

Background

Historically, the Emergency Medical Services (EMS) Levy has been the primary source of revenue for regional King County emergency medical services, and currently provides 99 percent of the funds needed for life-saving medical assistance to 1.9 million county residents. The first EMS Levy was passed by the county voters in 1979 at the rate of \$0.21 of \$1,000 assessed value, and ranged from \$0.25 to \$0.29 through 2007. The current levy is at \$0.30/\$1,000 assessed value, which represents a significant increase in revenues from the prior levy period.

Exhibit J below displays the 2008 EMS Levy funding for the major programs supported by the levy. Also displayed is the percent increase in funding from the last year of the prior levy to 2008.

EXHIBIT J: 2007 to 2008 EMS Levy Budget and Percent Change by Program

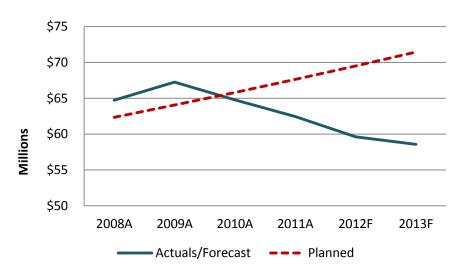
EMS Program	2007	2008	Difference	Percent Change
Advanced Life Support (ALS)	\$27,446,411	\$34,334,975	\$6,868,564	25%
Basic Life Support (BLS)	\$9,674,868	\$14,390,254	\$4,715,386	49%
Regional Support Services and Strategic Initiatives	\$5,990,957	\$7,701,181	\$1,710,224	29%

Source: EMS Division, 2012

In 2008, the total EMS Levy budget significantly increased from approximately \$44 million to \$62 million. Exhibit J shows ALS funding increased by 25 percent from the prior levy period and funding for Regional Support Services and Strategic Initiatives increased by 29 percent from 2007 to 2008. Funding for BLS services increased by 49 percent in 2008.

Although revenues were higher than planned during the first two years of the levy cycle due to higher than expected property tax collections, revenues declined and were lower than planned in 2010 and 2011 due to unanticipated deflation. Revenues and expenditures are forecasted to remain lower than planned through the remaining levy period, with an overall \$23 million decrease in collections over the levy cycle. Exhibit K below shows a financial comparison of the planned annual expenditures versus the actual and revised projected annual expenditures for the six-year levy period.

EXHIBIT K: Comparison of Planned vs. Actual Annual EMS Levy Property Tax Revenues



Source: EMS Strategic Planning Task Force, Meeting Handout, June 2012

As shown the in exhibit, EMS Levy property tax revenues were higher than expected in 2008 and 2009, but declined in 2010 and will remain lower than expected for the remaining levy period.

Finding 4: Despite a \$23-million Revenue Reduction, the EMS Division's Planning and the Careful Use of 2008 to 2013 EMS Levy Contingencies and Designated Reserves Allowed for Full Funding of ALS Services and Better Accountability and Transparency. Reduced Expenditures Will Decrease the Amount of Funds Needed for the 2014 to 2019 EMS Levy.

To avoid a potential revenue shortfall at the end of the 2008 to 2013 levy cycle, the EMS Division set aside \$20.1 million in contingencies and designated reserves to help ensure that all EMS costs were covered. Originally, the EMS Levy contingencies were adopted as a percentage of planned expenditures to cover ALS wages and disaster relief, and reserves were established to cover unanticipated and higher than expected inflation for vehicle costs/chassis obsolescence, risk abatement and other designated program expenses.

During its review of the 2008 to 2013 EMS Levy and Financial Plan, the King County Council established a new millage reduction reserve to help lower the potential property tax collection at the end of the current levy cycle or help reduce tax rate increases in the next levy cycle. The County Council required the EMS Division to transfer excess EMS Levy revenues into the millage reduction reserve unless the excess funds were needed for other operating reserves or expenses.

2009 EMS Levy Financial Review Identified Additional Unfunded ALS Expenses Based on interviews with the ALS providers and a review of the EMS Levy reserves in 2009, the King County Auditor's Office identified several unfunded ALS expenses. The audit recommended a modification of the reserves to better accommodate unique and one-time expenses. In response to the audit recommendation to ensure full funding of ALS services, the EMS Division and ALS providers held a series of meetings in 2010 to identify unique and additional ALS provider costs such as the conversion of EMS personnel from the Washington State PERS to the more expensive LEOFF retirement system. These unanticipated expenses were either not addressed by the existing reserves or significantly higher than the standard ALS unit cost allocation model.

The EMS Division, EMS Advisory Committee and ALS Work Group jointly determined which costs would be eligible for reimbursement by the levy, and developed the criteria to determine the level of funding not only for the new reserves but also for the existing reserves. They also developed "triggers" or thresholds (e.g., actual cost at least 10 percent above equipment allocation) that would allow the ALS providers to access each reserve but discourage unnecessary use of the reserve funds. A formal process was instituted to apply for reserve funding, which required the recommendation of the EMS Advisory Committee (EMSAC), and its Financial Subcommittee as well as appropriation authority from the King County Council to access the reserves.

Exhibit L below provides a description of the seven new reserves along with their purpose, conditions and thresholds established for ALS providers to access the reserves.

EXHIBIT L: New EMS Reserves Established in 2010 and Council Adopted 2011 Financial Plan

Description of Reserve	Use Triggers	Agency Responsibility to Access Funds	How Trigger Determined
Facilities—Tenant improvements for housing medic units	Cost exceeds \$100,00 and approved by EMSAC Financial Committee	Include renovations in existing allocations and use ALS providers balance	EMSAC Financial Committee
Excess Backfill for Paid Time Off—Higher use of benefits related to aging workforce	Costs exceed more than 10 percent of amount included in ALS unit allocation	Cover up to 10 percent above the five-year average cost	Five-year average plus deviation of 95% confidence level more than 10 percent
Dispatch and Communications—Cost increases due to CAD and organizational changes	ALS dispatch costs exceed current unit allocation	None	Actual costs exceed allocation
Salary and Wage—Cover difference between two percent COLA and CPI if ALS allocation exceeded	CPI used in ALS allocation less than 2% (for 2011 only)	Cover costs within unit allocation	Amount exceeds allocation by at least \$5,000.
Outstanding ALS Retirement Liabilities— Conversion of paramedics to LEOFF from PERS and medical costs	Costs/Liabilities not included in allocation	Up to \$2,500 per Agency	Expense outside the ALS unit allocation
Paramedic Student Training—Cover additional cost for students above average of one per year	Exceeds assumptions in ALS unit cost allocation by 1 student	Cover cost of 1 student over above number in allocation	Exceed cumulative number of students in allocation
ALS Risk Abatement— Cover liabilities due to incidents or accidents	Significant unplanned event and uninsured or underinsured motorists; not included in risk pools	Cover costs up to 2 percent of ALS allocation; proposed plan to avoid in future	Expense outside the unit allocation and not refunded by outside parties

Source: EMS Division Strategic Planning Handouts, 2012

Although some reserves were drawn down between 2008 and 2010 for approved, unanticipated expenses, the additional reserves increased the overall amount of EMS Levy funding potentially available for full funding of the ALS provider services. In addition, the reserves improved the transparency of the ALS program costs and accountability in ensuring that the EMS Levy funds were used for authorized services.

Given the significant reduction in EMS revenues from 2010 to 2013 and the decision to establish the new reserves, the EMS Division and regional partners also collaborated on expenditure reduction efforts for the four major EMS programs. Examples of these efforts included deferring the planned expansion of two 12-hour medic units in 2012 by relocating the existing units to maintain EMS response times and not filling vacancies in the EMS Division's Administration Section.

Exhibit M below provides the financial comparison of the planned expenditures versus the actual and revised projected expenditures during the six-year levy period. As shown in the Table, the EMS Division projected that expenditures could be reduced by approximately \$38 million by the end the current levy period. Based on current EMS Division projections, an estimated \$14 million in program savings along with \$7 million in unused contingency and reserve balances will be available to decrease the amount of funds needed for the 2014 to 2019 EMS Levy.

EXHIBIT M: Total Six-Year Planned Versus Total Actual and Revised Projected Expenditures

	2008 Planned	2008-2013	
	(Ordinance 15861)	Actual/Projected	Difference
REVENUES			
Property Taxes	\$400,828,425	\$377,432,623	(\$23,395,803)
All Other Revenues	<u>5,643,415</u>	<u>5,006,150</u>	<u>(637,265)</u>
REVENUE TOTAL	\$406,471,840	\$382,438,773	(\$24,033,067)
EXPENDITURES			
Advanced Life Support Services	(\$236,232,893)	(\$219,403,011)	16,829,882
Basic Life Support Services	(93,110,906)	(91,027,940)	2,082,966
Regional Support Services	(42,139,881)	(38,338,595)	3,801,286
Strategic Initiatives	(7,540,784)	(5,450,147)	2,090,638
Contingencies (Wage and Disaster)	(20,149,750)	0	20,149,750
Use of Program Balances & Reserves	0	(6,891,180)	(6,891,180)
Other/Audit	<u>(421,651)</u>	<u>(414,278)</u>	<u>7,373</u>
EXPENDITURES TOTAL	(\$399,595,865)	(\$361,525,151)	\$38,070,714
TOTAL EXCESS OF REVENUES OVER			
EXPENDITURES	\$6,875,975	\$20,913,622	\$14,037,647

Source: EMS Advisory Committee Meeting Handout, June 2012

The EMS Division was well on its way toward reaching the \$21 million in levy savings by the end of 2010. As reported by the Auditor Office in its 2010 EMS Levy Financial Review, the EMS Division increased its total Reserves and Designations to \$17.3 million, which was \$9.2 million more than planned in the original Council-adopted EMS Levy Financial Plan for the same period and \$3.1 million more than planned for 2010.

During the first half of the 2008 to 2013 levy period, the EMS Division was also able to enhance EMS Levy allocations for ALS and BLS providers through EMS Regional Support and Strategic Initiatives. The average annual expenditures for Regional Support and Strategic Initiatives that impacted fire agencies were approximately \$1.9 million in 2011, and more than \$11.6 million over the six-year levy period. These additional funds were available to help offset the loss of local fire agency operating revenues due to lower property tax collections.

EMS Levy Regional Services and Strategic Initiatives Provided Additional Funds for the ALS and BLS Program Services by Local Fire Agencies

Funding for Regional Support Services and Strategic Initiatives directly and indirectly support ALS and BLS providers. The average annual expenditures in these categories were \$6.6 million for the first four years of the current levy for a total of \$26.4 million.



Figure 5: CMTs providing cost-effective EMS response

ALS and BLS providers were the primary recipients of Regional Support Services and Strategic Initiatives Program funds in the following categories: Training and certification recordkeeping; small grants to BLS agencies; BLS quality improvement; patient care protocols; and the Community Medical Technician, Taxi Transport Voucher and Communities of Care programs. Anticipated expenditures on these programs average \$1.9 million per year for the entire levy period. These services directly help fire departments mitigate demand on their operating budgets.

In other cases, the Regional Support and Strategic Initiatives helped the fire agencies avoid costs by providing services such as EMT training that fire agencies in other jurisdictions pay out-of-pocket to colleges and other fire agencies to train their personnel. In addition, the initiatives also funded ongoing program and service efficiencies, such as the Telephone Referral Service/Nurseline, Taxi Voucher and Regional Purchasing Programs, which ultimately help the fire agencies maximize the use of their local tax resources.

It is also noteworthy that the funding level for the Strategic Initiatives was substantially increased from the 2002 to 2007 EMS Levy to the 2008 to 2013 EMS Levy. The EMS Division has continued to carry the unexpended amount of these funds forward in the Strategic Initiatives Program fund balance for the remaining years of the levy. Lifetime project budgets have also been decreased so that an uncommitted Strategic Initiative Program fund balance will be available to decrease the amount needed for the 2014 to 2019 EMS Levy.

In summary, careful management of the EMS Levy funds allowed the EMS Division to maximize EMS savings (e.g., unexpended or excess funds) during the first three years of the levy cycle. These savings, along with unused contingency and reserve balances, will be used to reduce the amount of funds needed for the 2014 to 2019 levy period.

Finding 5: EMS Division Management Made Substantial Progress in Implementing the 2008 and 2009 EMS Levy Audit Recommendations.

During the first half of the EMS Levy cycle, the EMS Division made substantial progress in implementing the recommendations contained in two of the three financial reviews and performance audits. Some of the Division's earlier implementation efforts were presented in prior Auditor's Office EMS Levy follow-up reports and are highlighted in the first finding of this report. Since the EMS Division's efforts are ongoing, the presentation below provides an updated summary on their current status of implementing the recommendations by year (see Appendix 7 for complete text of the audit recommendations and the EMS Division's implementation efforts).

2008 EMS Levy Audit Recommendations

The primary focus of the 2008 EMS Levy audit recommendations was on the implementation of the EMS Levy and Financial Plan. They emphasized compliance with the King County Council's and voter's intent for full funding of ALS services as well as the need for accountability and transparency in the use of levy resources.

In response to the 2008 audit recommendations, the EMS Division:

- Established an ALS Working Group of the EMS Advisory Committee Financial Subcommittee, the EMS Levy Manager and finance staff in 2010. The work group identified unusual and infrequent operating costs that were not covered by the ALS unit allocation or existing reserves, proposed new reserves, and assessed the adequacy of the proposed and existing reserves along with funding levels to ensure full funding of all ALS services. The proposed reserves and funding levels for all reserves were reviewed and approved by the EMS Advisory Financial Subcommittee and the EMS Advisory Committee. The King County Council also approved the reserves during the adoption of the 2010 and 2011 EMS Levy Financial Plans.
- Developed financial policies that provided further guidance concerning what ALS costs should be funded by the EMS levy, including unusual or infrequent allowable costs. The financial policies were reviewed and endorsed by the EMS providers and EMS Advisory Committee in 2010, and the finalized policy guidelines were implemented by the EMS Division in 2011.
- Clarified financial policies and communicated allowable costs for ALS providers in 2009. Modified the ALS provider contracts and year-end reporting requirements to include more items (consistent with the intent of the EMS Levy and financial policies) and allowed the ALS providers more opportunity to document costs beyond those already invoiced for reimbursement by the levy. Reviews of the financial policies and implementation of contract and reporting modifications consistent with the new financial policies were completed in 2010 and 2011.

2009 EMS Levy Audit Recommendations

The primary focus of the 2009 EMS Levy audit recommendations was to promote greater EMS transparency and accountability in developing, implementing and reporting annually on Strategic Initiatives. The recommendations included the development of performance measures and targets along with better financial analysis to ensure the cost effectiveness in designing and implementing the initiatives. In addition, recommendations were made to ensure the inflators for ALS medic units were consistent with actual costs and that replacement policies and practices optimized the use of the medic units.

In response to the 2009 recommendations, the EMS Division:

 Collaborated with PSB, formerly Office of Management and Budget, and the Office of Finance and Business Operations Division to use the King

County financial systems to track all reserves and designations whether included in the adopted budget or not. ¹¹ Entries to the related accounts are based on actual budget and expenditure data, supported by underlying accounting records, and subject to standard journal entry process controls. EMS will continue this practice with the new ABT system.

- Although the current ALS medic unit inflator is already included in the EMS Levy ordinance, the EMS Division is currently using both the Consumer Price Index (CPI) and the audit-recommended alternative index. This allows the Division to more closely track inflation for truck equipment such as fire trucks and ambulances to forecast future vehicle costs, to develop use of the EMS vehicle reserves. The Division also worked in partnership with the ALS providers to increase the average vehicle lifespan from six years to a minimum of eight years and committed to assessing the option to extend the lifespan to ten years in the 2014 to 2019 EMS Levy cycle. The extended timeframe will provide the basis for determining the funding level for the ALS Vehicle Reserve Fund.
- The EMS Division conducted a benchmarking review and finalized the findings in 2011 and reported on the assessed potential efficiencies of the Strategic Initiatives in the 2011 Annual Report. Although no new Regional Support and Strategic Initiatives were proposed for immediate implementation at the end of the mid-levy review period, the EMS Division assessed and amended the current Strategic Initiatives to include additional performance measures and targets, where possible, and reported changes in the 2011 Annual Report. One example in the 2011 Annual Report is the operational and cost analyses for its Community Medical Technician pilot project which is likely to be expanded in the 2014 to 2019 EMS Levy cycle. The EMS Division also committed to more rigorous analysis of new initiatives that are likely to be introduced and implemented in the next EMS Levy period.
- EMS management, along with the EMS regional partners, also plans to develop a performance measurement initiative for the 2014 and 2019 EMS Levy cycle. Data from both ALS and BLS providers will be used to better evaluate system-wide performance. In conjunction with the King County Executive's efficiency initiative, the EMS Division will be using the new data system to collect, analyze, document and report on anticipated improvements and cost reductions in a series of program areas, including the Community Medical Technician and Vehicle Replacement programs. These efforts should improve accountability and transparency in reporting on the EMS Levy's performance.

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¹¹ OMB is now the Office of Performance, Strategy, and Budget.

Appendix I 2008-2013 Emergency Medical Services Levy Financial Plan (From Levy Ordinance 15861)

The EMS Levy financial plan identifies the estimated annual revenues generated from the levy, and allocates a large percentage of funds to the four EMS programs. The remaining levy revenues are distributed to a series of contingencies, reserves, and designations. The financial plan also requires an undesignated fund balance equivalent to six percent of the annual revenues.

	2006 Actuals	2007 Estimated	2008 Proposed	2009 Proposed	2010 Proposed	2011 Proposed	2012 Proposed	2013 Proposed
BEGINNING FUND BALANCE	10,733,241	9,296,940	6,070,111	7,478,574	9,530,365	12,298,857	13,976,201	14,467,53
REVENUES								
	00.440.004	00 001 510						
Property Taxes State Grants	38,112,894 1,463	39,324,543 0	62,349,590 0	64,065,620 0	65,813,748 0	67,630,570 0	69,508,371 0	71,460,52
Intergovernmental Payment	278	0	0	0	0	0	0	
Charges for Services	80,571	82,950	52,000	54,340	56,785	59,341	62,011	64,80
Interest Earnings/Miscellaneous Revenue	1,352,798	483,574	306,541	366,450	457,458	571,897	649,893	672,74
Other Financing Sources	9,059	5,040	4,503	3,567	3,179	2,831	2,621	2,45
Transfer from Current Expense Subfund	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,00
EMS REVENUE TOTAL	39,932,064	40,271,107	63,087,633	64,864,978	66,706,170	68,639,638	70,597,895	72,575,52
XPENDITURES								
Advanced Life Support Services	(27,445,965)	(27,945,082)	(34,558,361)	(36,100,374)	(37,869,114)	(40,021,655)	(42,274,793)	(45,408,59
Bellevue Fire Department King County Medic One	(5,719,090)	(6,210,085)	(7,368,004)	(7,602,457)	(7,870,564)	(8,237,859)	(8,631,040)	(9,048,3
Redmond Fire Department	(12,456,489) (4,233,568)	(11,783,566)	(14,080,283)	(14,795,608)	(15,189,092)	(15,880,326)	(16,620,212)	(17,405,38
Shoreline Fire Department	(3,659,425)	(4,780,238) (3,758,230)	(5,345,018) (4,840,864)	(5,776,283) (4,689,502)	(5,902,923) (4,919,102)	(6,178,394) (5,148,662)	(6,473,280) (5,394,400)	(6,786,23 (5,655,19
Skykomish/King County Fire District 50	(60,000)	(60,000)	(170,058)	(178,911)	(4,919,102)	(196,243)	(205,509)	(215,3
Vashon Fire Department	(1,317,393)	(1,352,963)	(1,603,505)	(1,688,221)	(1,770,877)	(1,853,518)	(1,941,984)	(2,035,87
New Units/Unallocated	N/A	N/A	(907,463)	(937,900)	(1,579,607)	(2,059,465)	(2,522,081)	(3,755,6
Outlying Area Service Levels	N/A	N/A	(243,167)	(431,491)	(449,356)	(467,189)	(486,285)	(506,5
Basic Life Support Services	(9,420,513)	(9,674,868)	(14,390,254)	(14,886,717)	(15,333,319)	(15,738,118)	(16,163,048)	(16,599,4
Auburn Fire Department	(360,914)	(371,121)	(574,225)	(594,040)	(611,863)	(628,018)	(644,976)	(662,3
Bellevue Fire Department	(1,164,786)	(1,208,884)	(1,862,757)	(1,927,035)	(1,984,852)	(2,037,257)	(2,092,268)	(2,148,76
Black Diamond Fire Department	(48,770)	(50,087)	(63,976)	(66,184)	(68,170)	(69,970)	(71,859)	(73,79
Bothell Fire Department Duvall Fire Department	(190,302) (110,372)	(201,298) (110,372)	(316,243) (145,444)	(327,156) (150,463)	(336,972) (154,977)	(345,869) (159,069)	(355,208) (163,364)	(364,80 (167,7)
Eastside Fire and Rescue	(949,850)	(949,850)	(1,328,850)	(1,374,704)	(1,415,950)	(1,453,334)	(1,492,578)	(1,532,8
Enumclaw Fire Department	(230,549)	(230,549)	(285,744)	(295,604)	(304,473)	(312,512)	(320,951)	(329,6
Kent Fire and Life Safety	(759,340)	(775,056)	(1,190,773)	(1,231,863)	(1,268,823)	(1,302,323)	(1,337,489)	(1,373,6
King County Fire District 2	(227,173)	(239,292)	(374,201)	(387,114)	(398,729)	(409,256)	(420,307)	(431,6
King County Fire District 20	(106,458)	(112,317)	(164,387)	(170,059)	(175,161)	(179,786)	(184,641)	(189,6
King County Fire District 27	(67,418)	(69,238)	(92,176)	(95,357)	(98,218)	(100,811)	(103,533)	(106,3
King County Fire District 40	(210,667)	(210,667)	(299,191)	(309,515)	(318,801)	(327,218)	(336,054)	(345,12
King County Fire District 44	(252,271)	(252,271)	(324,765)	(335,972)	(346,052)	(355,189)	(364,780)	(374,63
King County Fire District 47 King County Fire District 49 (51)	(18,705) (18,354)	(19,210) (18,850)	(23,051) (22,909)	(23,846) (23,700)	(24,561) (24,411)	(25,209) (25,056)	(25,890)	(26,58 (26,42
King County Fire District 49 (51) King County Fire District 50	(32,348)	(33,221)	(40,921)	(42,333)	(43,603)	(25,056)	(25,733) (45,962)	(47,20
Kirkland Fire Department	(495,286)	(512,252)	(789,132)	(816,362)	(840,855)	(863,056)	(886,361)	(910,29
Maple Valley Fire and Life Safety	(304,293)	(304,293)	(409,441)	(423,570)	(436,278)	(447,797)	(459,889)	(472,30
Mercer Island Fire Department	(235,416)	(244,629)	(376,189)	(389,170)	(400,846)	(411,429)	(422,539)	(433,94
Milton Fire Department	(14,104)	(14,889)	(20,320)	(21,021)	(21,652)	(22,224)	(22,824)	(23,4
North Highline Fire Department	(271,067)	(280,748)	(404,954)	(418,928)	(431,497)	(442,890)	(454,849)	(467,13
Northshore Fire Department	(203,896)	(211,146)	(326,232)	(337,489)	(347,615)	(356,793)	(366,427)	(376,32
Pacific Fire Department	(36,000)	(36,972)	(51,115)	(52,879)	(54,466)	(55,904)	(57,414)	(58,96
Pierce County Fire District 27	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,500)	(1,50
Redmond Fire Department Renton Fire Department	(539,880) (492,082)	(574,375) (514,465)	(863,640) (801,932)	(893,442) (829,604)	(920,248)	(944,545)	(970,050)	(996,24 (925,06
Sea Tac Fire Department	(492,082)	(221,407)	(343,637)	(829,604)	(854,495) (366,161)	(877,056) (375,829)	(900,739) (385,977)	(396,39
Shoreline Fire Department	(376,181)	(380,055)	(580,829)	(600,872)	(618,900)	(635,240)	(652,393)	(670,00
Snoqualmie Fire Department	(52,033)	(53,702)	(82,646)	(85,498)	(88,063)	(90,388)	(92,829)	(95,33
South King Fire and Rescue	(772,172)	(787,067)	(1,210,071)	(1,251,827)	(1,289,386)	(1,323,429)	(1,359,165)	(1,395,86
Tukwila Fire Department	(224,182)	(231,283)	(357,958)	(370,310)	(381,420)	(391,490)	(402,061)	(412,9
Vashon Fire Department	(129,619)	(129,619)	(180,435)	(186,661)	(192,261)	(197,337)	(202,666)	(208,13
Woodinville Fire and Life Safety District	(311,139)	(324,180)	(480,561)	(497,144)	(512,060)	(525,580)	(539,772)	(554,34
Regional Services	(3,826,680)	(4,798,846)	(6,102,144)	(6,478,134)	(6,838,366)	(7,197,262)	(7,578,964)	(7,945,01
Strategic Initiatives	(674,484)	(867,040)	(1,246,580)	(1,491,275)	(1,253,878)	(1,239,355)	(1,195,153)	(1,114,54
Encumbrance Carryover	0	0	0	0		0	0	
ALS Salary and Wage Contingency	0	0	(2,104,452)	(2,199,152)	(2,298,114)	(2,401,529)	(2,509,598)	(2,622,53
EMS 2002-2007 Reserves	(723)	(212,100)	0	0	0 (F.005.000)	0	0	(0.044.07
Disaster Response Contingency	. 0	0	(3,216,379)	(4,809,156)	(5,085,682)	(5,378,109)	(5,687,350)	(6,014,37
Prior Disaster Response Underexpenditure King County Auditor's Office	0	0	0 (61,000)	3,216,379 (64,759)	4,809,156 (68,360)	5,085,682	5,378,109 (75,763)	5,687,35
Thing County Addition 5 Office			(01,000)	(04,709)	(00,300)	(71,947)	(75,763)	(79,82

Appendix I (Continued)

EMERGENCY MEDICAL SERVICES LEVY FINANCIAL PLAN

-	2006 Actuals	2007 Estimated	2008 Proposed	2009 Proposed	2010 Proposed	2011 Proposed	2012 Proposed	2013 Proposed
ENDING FUND BALANCE	9,296,940	6,070,111	7,478,574	9,530,365	12,298,857	13,976,201	14,467,537	12,946,087
RESERVES AND DESIGNATIONS								
Encumbrances	(977,521)	(977.521)	(977,521)	(977,521)	(977,521)	(977,521)	(977,521)	(977,521)
Reappropriation	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)	(25,000)
Designations								
Prepayment	0	0	0	0	0	0	0	0
ALS Provider Balances	0	(1,022,900)	(1,022,900)	(1,022,900)	(1,022,900)	(1,022,900)	(1,022,900)	(1,022,900)
ALS Provider Loans	0	0	0	0	0	0	0	0
Reserves for Unanticipated Inflation								
Diesel Cost Stabilization	0	0	(756,000)	(1,512,000)	(2,457,000)	(2,897,541)	(2,933,280)	(1,613,304)
Pharmaceuticals/Medical Equipment	0	0	(230,000)	(506,000)	(828,000)	(1,097,000)	(877,600)	(447,576)
Call Volume/Utilization Reserve	0	0	(244,000)	(488,000)	(732,000)	(1,159,800)	(1,220,000)	(832,000)
Reserves								
Chassis Obsolescence	0	0	(375,000)	(375,000)	(562,500)	(562,500)	(562,500)	(562,500)
Risk Abatement	0	0	0	(565,000)	(565,000)	(565,000)	(565,000)	(565,000)
Millage Reduction	0	0	0	0	(1,000,000)	(1,500,000)	(2,000,000)	(2,500,000)
TOTAL RESERVES AND DESIGNATIONS	(1,002,521)	(2,025,421)	(3,630,421)	(5,471,421)	(8,169,921)	(9,807,262)	(10,183,801)	(8,545,801)
ENDING UNDESIGNATED FUND BALANCE	8,294,419	4,044,690	3,848,153	4,058,944	4,128,936	4,168,939	4,283,736	4,400,286
				, ,	, ,		, ,	
Fund Balance as % of Revenue	N/A	N/A	6.10%	6.26%	6.19%	6.07%	6.07%	6.06%
EXCESS OVER/UNDER 6% MINIMUM	N/A	N/A	62,895	167,045	126,566	50,561	47,862	45,754

FOOTNOTES TO EMERGENCY MEDICAL SERVICES LEVY FINANCIAL PLAN

(a) For 2008-2013, ALS provider allocation estimates are shown based on the 2007 distribution of units

(b) Funding assumes the schedule for new King County units in the strategic plan (cumulative):

0.5 units 0.5 units 1.0 units 1.0 units 2009 1.5 units

New units and/or fractional units will be allocated based on a thorough regional analysis using the established criteria for paramedic units. The major unit indicators include the following:

- Unit response time:
- Offit response time, Availability in primary service area and dependence on backup; Frequency and service impact of multiple alarms; and Paramedic exposure to critical skill sets.

Consistent with this criteria, new unit allocations will be recommended by the EMS Advisory Committee and appropriated by the King County Council.

- (c) Funding is included to address paramedic service level disparities in Vashon and Skykomish (including potential elimination of paramedic transport fees). Expenditure of these funds requires approval by the EMS Advisory Committee in addition to appropriation by the King County Council.
- (d) For 2008-2013, BLS provider allocation estimates are shown for illustration purposes only. Provider allocation levels were adjusted based on 2005 call volumes and 2007 assessed valuation; actual 20 allocations will be based on data that is not yet available in accordance with the BLS allocation formula
- (e) ALS Salary and Wage contingency is considered a reserve under the restrictions of sections 10 and 11 of had salary and weight contingency is considered a least evaluate the resultance of the Medic One emergency medical services levy ordinance. This annual contingency is equal to a one percent increase over assumed parametic COLA levels. Pursuant to the ordinance, expenditure of this reserve is linked to the consumer price index, subject further to appropriation by the King County Council. These funds can also be used to replenish other reserves for unanticipated inflation (also subject to the provisions of sections 10 and 11 of the Medic One emergency medical services levy ordinance), or can be
- (f) Reserves for the 2002-2007 levy, in particular for Regional Services in 2007, are listed here as an expenditure in anticipation of a supplemental appropriation over the course of 2007
- (g) Disaster Response Contingency is phased in between 2008 and 2009. Funding is equal to the cost of full mobilization of the Medic One paramedic system for a period of three weeks. This contingency is subject to the restrictions in section 9 of the Medic One emergency medical services levy ordinance.
- (h) Although appropriated, Disaster Response Contingency funds are not assumed to be expended, reflected as a credit in the following year. In the event of a disaster that depletes these funds, the County Executive, EMS Advisory Committee, and County Council will work collaboratively to rebalance the financial plan for the remainder of the levy period.

- (i) ALS Provider Balances are funds that have been allocated to specific providers, but not yet appropriated. These funds are banked for future capital costs, or to cover future collective bargaining obligatio
- (j) The EMS Levy Financial Plan assumes diesel price of \$2.38 per gallon. As of May 1, 2007, the average diesel fuel price in the Seattle metropolitan area is \$3.04 per gallon. This reserve is adequate to fund ALS operations at up to \$3.38 per gallon for a period of 18 months; for 2013, coverage is reduced to 9 months. This reserve is subject to the restrictions under sections 10 and 11 of the Medic One emergency medical services levy ordinance. Pursuant to the ordinance, expenditure of this reserve is linked to the average price of diesel fuel, as reported by the US Department of Energy. These funds can also be used to replenish other reserves for unanticipated inflation (also subject to the provisions of sections 10 and 11 of the Medic One emergency medical services levy ordinance).
- (k) The pharmaceutical/medical equipment reserve mitigates unanticipated medical cost inflation. A buffer of 2.5 percent is achieved through 2010, staged to 1.0 percent by 2013. This reserve is subject to the restrictions under sections 10 and 11 of the Medic One emergency medical services levy ordinance These funds can also be used to replenish other reserves for unanticipated inflation (also subject to the provisions of sections 10 and 11 of the Medic One emergency medical services levy ordinance).
- (I) The call volume/utilization reserve provides limited funding to address unanticipated demands on the Medic One emergency medical services system. These funds are intended to augment service levels or otherwise mitigate the demand for emergency medical services. This reserve is subject to the restrictions under sections 10 and 11 of the Medic One emergency medical services levy ordinance. Pursuant to the ordinance, expenditure of this reserve is linked to call volumes and other criteria listed in footnote b, as reviewed by the EMS advisory committee. These funds can also be used to replenish other reserves for unanticipated inflation (also subject to the provisions of sections 10 and 11 of the Medic One emergency medical services levy ordinance
- (m) Disruption to the six-year vehicle replacement cycle may occur with discontinuation of chassis models that facilitate reuse of vehicle components and equipment. The chassis obsolescence reserve designates funds to partially offset potentially higher vehicle replacement costs.
- (n) The Medic One program faces substantial operational risks. A risk management reserve is established to ensure the continuity of smaller providers in the event of significant loss. Any assistance provided from this reserve will be limited, and will require consideration by the EMS Advisory Committee
- (o) Beginning in 2010, provision is made to potentially reduce the effective levy rate. While the primary purpose of this reserve is to receive unexpended contingency funds for outyear levy reduction, these funds are also available to replenish other reserves.

Appendix 2 2011 Emergency Medical Services Levy Financial Plan

Emergency Medical Services/Public Health 1190						
	2009		2010	2011	2012	2013
SEPT OEFA (10/1/10)	Actual ¹	2010 Adopted	Estimated	Proposed ²	Projected ²	Projected ²
Beginning Fund Balance	19,690,000	25,929,424	29,988,811	34,290,176	28,901,639	21,322,139
Revenues						
Property Taxes	67,256,696	62,985,901	64,831,299	61,230,215	58,858,879	61,254,732
Grants	4,986	-	1,650	1,650	1,650	1,650
Charges for Services	181,397	196,690	195,040	190,000	190,000	190,000
Interest Earnings/Miscellaneous Revenue	723,852	413,200	413,200	438,200	532,200	606,200
Other Financing Sources	35,654	3,210	3,210	54,000	54,000	54,000
Transfer from Current Expense Subfund		-	-	-	-	-
Total Revenues	68,202,585	63,599,001	65,444,399	61,914,065	59,636,729	62,106,582
Expenditures	, ,	, ,	, ,	, ,	, ,	, ,
Advanced Life Support Services	(35,656,800)	(35,925,256)	(36,004,916)	(40,016,845)	(42,024,495)	(41,133,019)
Basic Life Support Services	(15,281,662)	(15,033,805)	(15,033,805)	(15,154,163)	(15,451,524)	(15,780,641)
Regional Services	(6,149,464)	(6,854,788)	(6,604,788)	(7,108,377)	(7,251,067)	(7,479,908)
Strategic Initiatives	(629,468)	(1,456,856)	(1,184,656)	(1,614,202)	(1,673,380)	(1,566,139)
Use of Program Balances & Reserves	,	(746,509)	(746,509)	(1,397,068)	(600,000)	(600,000)
Restricted Contingencies ³		(6,500,000)	(1,500,000)	(3,420,000)	(3,540,000)	(3,700,000)
King County Auditor's Office	(60,000)	(68,360)	(68,360)	(91,947)	(95,763)	(99,822)
Total Expenditures	(57,777,394)	(66,585,574)	(61,143,034)	(68,802,602)	(70,636,229)	(70,359,529)
Estimated Underexpenditures	(01,111,001,	-	-	-	-	-
Other Fund Transactions						
GAAP Adjustment & Journal Entry Error	(122,391)					
Reconcile to CAFR	(3,989)					
Assume Disaster Response not used	(0,000)			1,500,000	3,420,000	3,540,000
Total Other Fund Transactions	(126,380)			1,500,000	3,420,000	3,540,000
Ending Fund Balance	29,988,811	22,942,851	34,290,176	28,901,639	21,322,139	16,609,192
Reserves & Designations		,_,_,_,_	0.,200,110			10,000,100
Encumbrances	(519,010)	(2,138,516)	(519,010)	(519,010)	(519,010)	(519,010)
Provider/Program Balances	(4,084,252)	(936,623)	(2,894,605)	(2,361,819)	(1,581,167)	(824,447)
ALS Provider Loans	939,172	328,439	704,379	469,586	234,793	-
KCM1 Equipment Replacement	(1,811,306)	(769,910)	(1,811,306)	(371,306)	(371,306)	(371,306)
Designations from 2002-2007 Levy	(689,773)	(289,773)	(240,841)	(240,841)	(240,841)	(240,841)
Reserves for Unanticipated Inflation a) b)	(2,506,000)	(2,310,000)	(2,310,000)	(2,129,821)	(1,944,755)	(1,047,642)
Salary Reserves c)	,	,	,	(1,095,000)	(1,415,000)	(1,440,000)
Operations/Dispatch d)				(620,000)	(620,000)	(620,000)
Equipment/Capital e)	(173,249)	(360,749)	(360,749)	(1,200,619)	(1,200,619)	(1,200,619)
Risk Abatement f)	(565,000)	(565,000)	(565,000)	(2,200,000)	(2,200,000)	(2,200,000)
Outstanding ALS Retirement Liability g)	, , -,	(2,185,000)	(2,185,000)	(3,900,000)	(894,923)	(330,687)
Estimated Underspending of Reserves		, , , ,	, , , ,	-	-	3,000,000
Millage Reduction	(9,614,449)	(5,041,654)	(5,041,654)	(6,041,654)	(6,741,654)	(6,941,654)
Total Reserves & Designations	(19,023,867)	(14,268,786)	(15,223,786)	(20,210,484)	(17,494,482)	(12,736,206)
Ending Undesignated Fund Balance	\$ 10,964,944	\$ 8,674,065	19,066,390	\$ 8,691,155	\$ 3,827,657	\$ 3,872,986
Target Fund Balance ⁴	4,092,155	3,815,940	3,926,664	3,714,844	3,578,204	3,726,395

Financial Plan Notes:							
¹ 2009 Actuals are from the 2009 CAFR or 14t	h Month ARMS/IB	S. 3 20	011 - 2013 D	isaster Relief (Contingency only		
2 2011-2013 are based on September OEFA F	orecast	⁴ Ta	arget fund ba	lance is based	on 6% of curren	t revenue	
All use of footnoted designations and reserves authority.	require review and	approval of EMS	SAC Financia	l Subcommitte	ee & EMSAC and	l appropriation	on
a) Includes reserves for diesel cost stabilizatio	n, pharmaceuticals	/medical equipme	ent, and call	volume/utilizat	ion.		
b) Pharmaceutical/medical equipment reserve whether cost can be accommodated in equipm			-	•	-		
c) Salary reserves can be used to cover 2% m per unit; or paramedic students more than one			•	ess backfill for	PTO above the 2	164 hours pe	er year
d) Available to ALS providers to cover actual di	spatch costs abov	e allocation.					
e) Vehicle/Chassis designation can be assess assessed for significant improvements costing Advisory Committee.				•		•	
f) Risk Abatement designation can be assessed motorists; cost sharing includes agencies cowe than motorists claims, use limited to loss relate requesting use must prepare and present plan use of program balances prior to requesting fur	ering costs up to 2 sed to court order, s to EMSAC Financ	% of their ALS allosettlement related ial Subcommittee	ocation or up to arbitration to avoid sim	to \$25,000 fo n or lawsuit, st nilar cost/risk i	r under/uninsured ate and federal r n future; agencie	d motorists; (egulations; a s should con	Other agencies nsider

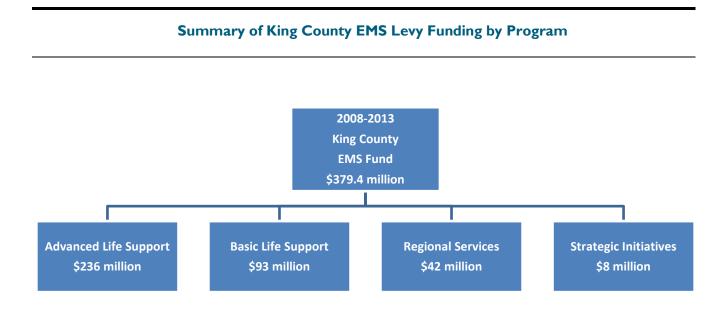
g) Covers expenses related to PERS to LEOFF conversion, excess payments to DRS and LEOFF 1 medical for retired employees.

Appendix 3 Additional Background Information on the 2008 to 2013 Emergency Medical Services Levy

Background

The Medic One EMS Levy is a countywide, voter-approved levy at a rate of \$0.30 per \$1,000 of assessed property value. The EMS Levy was based on planned expenditures of approximately \$622.2 million during the six-year period. Approximately \$207.6 million was allocated directly to the City of Seattle to finance Seattle Medic One, and \$379.4 million was allocated to King County to finance four major Medic One/EMS programs shown below. The remaining \$35.2 million was designated in the King County EMS Levy Fund as reserves for Seattle (\$15.1 million) and King County (\$20.1 million).

A summary of the portion of the EMS Levy Fund that supports the regional county EMS system and programs, exclusive of the City of Seattle system is provided below. Due to the economic downturn, both revenues and expenditures are forecast at \$21 million less than the original plan.



SOURCE: 2009 Update of the 2008-2013 Emergency Medical Services Strategic Plan.

The EMS Levy adopted by the King County Council and approved by the voters provided an average of approximately \$63 million annually for advanced life support, basic life support, regional services, and strategic initiatives. This is currently forecasted at \$59 million a year. The four programs are described in the EMS Strategic Plan as follows:

Four Major EMS Programs

Advanced Life Support (ALS) Services: Funding ALS services is the priority of the Medic One/EMS Levy. ALS service is provided by six major paramedic providers who offer out-of-hospital emergency medical care for critical or life-threatening injuries and illnesses. ALS Providers respond to approximately 30 percent of all EMS requests for services. The EMS Levy fully funds ALS services, including full funding of ALS dispatch services, through the ALS unit allocation model.

Basic Life Support (BLS) Services: BLS services are only partially funded by the EMS Levy, and are provided by more than 4,000 Emergency Medical Technicians (EMTs) employed by 30 different fire agencies located throughout King County to help ensure standardized patient care and enhanced BLS services. Based on the volume of calls for BLS services and assessed property values, the EMS Levy provides an annual allocation to county fire agencies to help offset the costs of providing BLS services, including dispatch services.

<u>Regional Support Services</u>: Core regional Medic One/EMS programs and services support critical functions essential to providing out-of-hospital emergency care. These include uniform training of EMTs and EMS dispatchers, regional medical control, regional data collection and analysis, quality improvement activities, and regional finance and administrative management by the King County EMS Division.

<u>Strategic Initiatives</u>: Strategic initiatives are new programs designed to improve the quality of Medic One/EMS services and manage the growth and costs of the system. Successful strategic initiatives are generally incorporated into Regional Support Services as ongoing core programs.

In the original levy plan, approximately \$20.1 million of the EMS Levy revenues were allocated to contingencies and an additional \$8.5 million to reserves and designations managed by the EMS Division. Currently, there are \$3.75 million in contingencies and \$27.4 million in reserves and designations, included \$6 million in millage reduction. Ordinance 15740 states that designated reserves program balances were added to "encourage cost efficiencies and allow for variances in expenditure patterns." Appendix 2 contains a copy of the Council-adopted 2011 EMS financial plan identifying the designated reserves, including the newly established designated reserve for EMS dispatch and communication services.

Appendix 4 Miller and Miller, P.S. and King County Auditor's Office Scopes and Methodologies

Audit Purpose

The primary purpose of this audit is to review the EMS Division's financial practices and compliance with the Council-adopted 2011 EMS Levy policies and financial plan. In addition, the audit assesses the overall EMS Levy allocation for BLS services and the reasonableness of the distribution of the annual allocation among the regional fire agencies that provide BLS services. The audit also includes a mid-term review of the EMS Division's implementation of the levy that not only confirms that adequate funds will be available for the duration of the current levy, but also identifies the potential savings that can be carried forward into the 2014 to 2019 EMS Levy cycle to reduce the tax rate increase for King County tax payers.

Methodology

The financial review, conducted by Miller & Miller, P.S., included a comparison of the financial plan to actual results for the year ending December 31, 2011. It included a comparison of revenues, expenditures, and budget for all four EMS programs. A sample of 2011 transactions was drawn from the ALS Providers, BLS Providers, and the EMS Division. In addition, the budget, expenditures, fund balances, and cost escalation factors used to project costs and reserve requirements were reviewed in relation to the mandates contained in attachments to Ordinance 15861 that adopted the EMS 2008-2013 EMS Levy. Financial information was also obtained from county financial system and material prepared by the EMS Division.

In analyzing the BLS cost allocation, audit staff obtained financial and operations information from the EMS Division and the 28 fire agencies that provided BLS services in 2011. To collect data necessary to assess equity of BLS funding, we emailed a survey to the 28 BLS providers as they existed in 2010. We received responses from 23 providers, or 82%. The five agencies that did not complete the survey were South King Fire & Rescue and Fire Districts 2, 11, 20, and 51.

2010 BLS Providers

Bellevue Fire Department
Bothell Fire Department
Enumclaw Fire Department
Kent Fire & Life Safety
Kirkland Fire Department
Mercer Island Fire Department
Redmond Fire Department
Renton Fire Department
SeaTac Fire Department
Snoqualmie Fire & Rescue
Tukwila Fire Department
Eastside Fire & Rescue
Shoreline Fire Department

South King Fire & Rescue

Woodinville Fire & Life Safety

Fire District #2 - Burien

Fire District #11 - North Highline

Fire District #13 - Vashon/Maury

Fire District #16 - Northshore

Fire District #20

Fire District #27

Fire District #43 - Maple Valley

Fire District #44 - Mountain View/Black Diamond

Fire District #45 - Duvall

Fire District #47 - Palmer/Selleck

Fire District #50 - Skykomish

Fire District #51 - Snoqualmie Pass

Valley Regional Fire Authority

The data we collected allowed us to estimate the costs of providing BLS service for each provider according to the following multi-step formula.

Formula for Estimating BLS Costs

<u>Step 1</u>: Apply the percentage of non-emergency, non-ALS staff to the agency's Total Actual Expenditures. This is the estimate of "Other Costs."

<u>Step 2</u>: Subtract the Other Costs and any ALS costs from the Total Actual Expenditures. The remainder is a combined total of Fire and BLS costs.

<u>Step 3</u>: Apply the percentage of BLS calls (of the combined total of BLS and other non-ALS calls) to the combined total of Fire and BLS costs to get the Estimate of BLS Costs.

<u>Step 4</u>: Apply the percentage of other non-ALS calls (should be primarily Fire control calls) to the combined total of Fire and BLS costs to get the estimate of Fire Control costs.

For the five agencies that did not complete the survey, we applied the following methodologies to estimate their BLS costs:

<u>South King Fire & Rescue</u>—We found 2010 total expenditure data and 2011 call volumes (which they indicated were very similar to their 2010 call volumes) in reports posted on the agency's website. We were then able to execute the same formula as for the other agencies.

<u>Fire Districts 2, 11, 20, and 51</u>—First we identified peer agencies for these four fire districts by comparing population, assessed value, and call volume. Second, we averaged the percent of BLS costs covered by the levy allocations of their peer agencies and multiplied that average percentage by the levy allocations for the four fire districts to get their Estimated BLS Costs.

<u>Valley Regional Fire Authority</u>—This agency filled out the survey but did not provide Total Actual Expenditure data for 2010. Instead, we used the Total Public Safety Expenditures the agency reported to the Washington State Auditor's Office for 2010.

Criteria for Measuring Equity

Of the many ways to assess equity, we chose two criteria and compared possible alternative funding formulas against each criterion. First, we defined equity as every agency receiving a similar percentage of its costs of providing BLS service. This measure accounts for the differences in structure, size, demand, etc. However, it may fall short as a measure of equity for agencies that rely heavily on volunteer personnel because the majority of BLS costs are related to staffing. Fire District 47 - Palmer/Selleck is all-volunteer, so its levy allocation covers a comparatively high percentage of its costs. In addition, the equal percentage of costs criterion does not address the differences in options for additional funding between municipal fire departments that could potentially receive additional funds from the city budget, and fire districts or regional fire authorities, which depend on local property taxes, service benefit charges, and any revenues they can generate themselves.

To balance the percentage of costs criterion, we also assessed possible funding allocation formulas by comparing them to the formula chosen by the BLS providers for the current levy—half AV, half CV—applied to the entire BLS levy fund, instead of just to the levy monies added after 2007 (the way the levy allocations are currently calculated). This criterion balances the contribution the citizens of each jurisdiction make to the total levy fund (since the levy funds are collected from property taxes on the assessed value of the properties in each jurisdiction) and the BLS services that each jurisdiction provides. Since the BLS agencies endorsed the theory behind this formula, we applied it to the entire levy fund to get a clear picture of the chosen theory put into practice. ¹²

We did not try to measure equity by conducting a cost/benefit analysis for each agency because the King County emergency medical services are provided on a regional basis. The regional system includes more than just the BLS services each agency provides. It includes regional medical direction and protocols developed by the County as well as dispatch and Emergency Medical Technician (EMT) training, among other things. The regional system is further underscored by mutual aid agreements between agencies to ensure a high level of emergency medical service for all King County residents.

Sources of Data and Development of Alternative Funding Methods

We used the call volume and assessed value data that EMS used to calculate the 2010 levy allocations. The EMS Division provided data on population, acreage, number of fire stations, average response time, and average out of service time. Population data are based on 2010 census block data, which is a very fine level of geographic detail that matches up well to the boundaries of each jurisdiction. Acreage data are from the King County Assessor's Office. Response time is measured from the time of dispatch to the unit's arrival on the scene of an incident. Out of service time is measured from the time a unit is dispatched to the time it is available to answer the next call.

To identify alternative funding formulas, we used various combinations of data to calculate possible BLS allocations including but not limited to the following:

- Equal weights call volume, assessed value, population, acres, and hours deployed (average out of service time multiplied by call volume)
- Equal weights call volume and BLS costs

¹² We used the call volume data provided by EMS because it was the most consistent measure of call volume available even though EMS adds an additional call record for incidents where one BLS unit treats multiple patients to facilitate patient-based data analysis.

- Equal weights call volume and assessed value
- Equal weights call volume and out of service time
- Only call volume
- 1/3 assessed value, 2/3 call volume

We applied the alternative formulas to the entire BLS levy fund on the principle that the greatest equity would be achieved by resetting the entire sum and thereby eliminating the base allocations that have been carried forward from previous levies. We also analyzed fire districts and municipal fire departments separately, but found that both the effects of our various formulas and estimated BLS costs were more similar between agencies with similar population, call volume, and assessed value than between fire districts or between municipal fire departments.

Calculation of "Collar" to Transition to New Funding Formula

Recognizing that changing to a new funding formula would create major disruption to BLS providers who will be receiving a much lower funding level than in previous years, we applied a "collar" to limit losses to 10 percent. Here is the methodology we applied to calculate the collar:

Step 1: Cap the reductions for the six agencies whose allocation would diminish by more than ten percent under the new funding formula at exactly ten percent. Calculate the additional funds needed to fill in the reductions up to the ten-percent level by subtracting the sum of the adjusted and non-adjusted new allocations from the total levy funds (\$15,007,406 in 2010). In the example calculation we did, an additional \$349,415 would be needed to support a -10 percent collar using the allocation formula of 97 percent by equal weights AV and CV and three percent ability allotment by response time.

<u>Step 2</u>: Apply the percentage of the total gained by each of the agencies whose allocations would increase to the amount needed to fill in the reductions. That is the amount to subtract from each of the agencies whose allocations are slated to increase. The sum of the amounts subtracted from the increased allocations is the amount needed to fill in the reduced allocations to apply a collar at -10 percent.

We tried applying a larger collar capping reductions at -5 percent but there is not enough money to redistribute without causing quite a few agencies that are supposed to gain a modest amount of funding under the new formula to actually lose funding because of the collar redistribution.

Appendix 5 Local Funding Options

Three types of BLS agencies provide EMS services within King County: municipal fire departments, fire districts, and regional fire authorities. Each type of fire agency operates within different funding environments.

Types of Fire Agencies

- Municipal Fire Departments receive their budgets from their city's operating funds, which
 come from a variety of sources including property taxes, sales taxes, service fees and usage
 charges.
- **Fire Protection Districts** (fire districts) are local improvement districts that provide fire and EMS services outside of incorporated cities and towns except where such cities and towns have been annexed into the district. Fire districts depend primarily on property taxes for funding.
- Regional Fire Authorities (RFAs) are municipal corporations with independent taxing
 authority comprised of adjacent fire departments or districts for the purpose of providing fire
 and emergency services. They can provide operational and funding efficiencies to
 neighboring agencies by minimizing redundant services and streamlining economies of
 scale. RFAs are created by a vote of the people specifically to implement a regional fire
 protection service authority plan; they can collect property taxes and benefit charges from
 property owners within their jurisdictions.

Revenue Sources

The Revised Code of Washington (RCW) provides fire districts a minimum of \$0.50 per thousand of assessed value from property taxes collected in their jurisdiction. Up to a \$1.00 per thousand of assessed value can occur in volunteer fire districts with voter approval. Up to \$1.50 per thousand of assessed value can occur in fire districts with at least one paid staff member. In addition to these regular property taxes, fire districts and RFAs can pursue the following revenue sources:

- Excess Levy Agencies can submit propositions for additional property tax levies to a vote of the people. The state constitution requires a voter turnout equal to 40 % of those who voted in the previous general election and a 60-percent favorable majority vote. In most cases, the excess levy is authorized for one year and requires an annual vote to maintain the levy.
- EMS Levy Although the county has first right to the EMS Levy, if there is capacity remaining under the 50-cent EMS Levy limit, individual agencies could submit local EMS Levy proposals to their voters. These levies are approved for 6 years, 10 years, or permanently.
- **Fire Benefit Charges** Benefit charges are charges based on personal property and improvements to property determined by the county assessor. State law requires that the total amount that can be raised by a benefit charge cannot exceed 60 percent of a district's operating budget. If a fire district enacts a benefit charge, it must reduce its maximum property tax levy from \$1.50 to \$1.00 per thousand dollars of assessed value.

- **Bonds** Voter-approved bonds can be used for capital purchases but not for operating expenses such as personnel.
- EMS Transport Fees As of 2011, ten agencies charged patients for transportation.

Levy Limits

\$10 per thousand constitutional limits: The primary limitation on property taxes was established by the 17th amendment to the Washington State Constitution in 1972. Article 7, Section 2 of the Constitution and RCW 84.52.050 limit the total regular property tax levy on an individual property to a maximum of \$10 per \$1,000 of the assessed value of the property. Excluded from this \$10 limit are levies for ports, public utility districts and any excess levies.

Statutory maximum rates for districts: RCW 84.52.043 establishes maximum levy rates for the various types of taxing districts. For fire districts and RFAs, the maximum is \$1.50 per thousand. The EMS levy cap is \$0.50 per thousand. This statute establishes a maximum total rate of \$5.90 per \$1,000 of assessed value for counties, cities, fire districts, library districts and certain other junior taxing districts. That means that fire districts and RFAs must consider taxes levied for other purposes, such as parks, libraries, and roads. The state levy is not subject to the \$5.90 limit, although it is subject to the constitutional \$10 limit.

Levy increase limit: In November 2001, voters approved Initiative 747 which limited tax growth to 1%. In June 2006, the King County Superior Court invalidated I-747 on a technicality, but the State Legislature reenacted the 1% limit in January 2008.

Appendix 6

Collar Method for Reducing Immediate Impact of Proposed Allocation Formula

Agency	2010 EMS Levy BLS Allocation (\$)	Proposed Allocation: 97% AV - CV 3% Ability Allotment (\$)	% Change from 2010 Allocation to Proposed Allocation	\$ Change from 2010 Allocation to Proposed Allocation	Collar Redistribution (\$)	Proposed Allocation with Collar Limiting Reductions to -10% (\$)	% Change from 2010 Allocation Using Collar	\$ Change from 2010 Allocation Using Collar	2010 Total Revenues (\$)	Change from 2010 Allocation to Proposed Allocation with Collar as a Percentage of Total Revenues
Bellevue Fire Department	1,970,875	2,112,723	7.2%	141,848	-58,272	2,054,452	4.2%	83,577	33,971,736	0.2%
Bothell Fire Department	335,240	353,272	5.4%	18,032	-9,744	343,528	2.5%	8,288	9,929,971	0.1%
Eastside Fire & Rescue	1,364,430	1,172,315	-14.1%	-192,115	55,672	1,227,987	-10.0%	-136,443	21,979,362	-0.6%
Enumclaw Fire Department	289,834	179,312	-38.1%	-110,522	81,539	260,850	-10.0%	-28,983	3,327,787	-0.9%
Fire District #2 - Burien	390,017	413,568	6.0%	23,551	-11,407	402,161	3.1%	12,144	\$1,858,936	0.7%
Fire District #11 - North Highline	419,943	366,544	-12.7%	-53,399	11,405	377,949	-10.0%	-41,994	\$5,521,454	-0.8%
Fire District #13 - Vashon/Maury	185,462	171,974	-7.3%	-13,488	-4,743	167,231	-9.8%	-18,231	4,361,927	-0.4%
Fire District #16 - Northshore	336,930	354,634	5.3%	17,703	-9,781	344,852	2.4%	7,922	8,265,370	0.1%
Fire District #20	174,359	191,838	10.0%	17,480	-5,291	186,547	7.0%	12,189		
Fire District #27	96,548	93,276	-3.4%	-3,272	-2,573	90,703	-6.1%	-5,845	1,490,799	-0.4%
Fire District #43 - Maple Valley	415,454	294,034	-29.2%	-121,420	79,875	373,909	-10.0%	-41,545	8,003,206	-0.5%
Fire District #44 - Mtn View/Blk Dmnd	345,236	199,737	-42.1%	-145,500	110,976	310,712	-10.0%	-34,524	4,371,595	-0.8%
Fire District #45 - Duvall	152,081	126,924	-16.5%	-25,157	9,949	136,873	-10.0%	-15,208	3,314,464	-0.5%
Fire District #47 - Palmer/Selleck	23,374	36,693	57.0%	13,319	-1,012	35,681	52.7%	12,307	230,702	5.3%
Fire District #50 - Skykomish	43,709	63,544	45.4%	19,835	-1,753	61,791	41.4%	18,082	372,643	4.9%
Fire District #51 - Snoqualmie Pass	25,554	34,738	35.9%	9,184	-958	33,780	32.2%	8,226		
Kent Fire & Life Safety	1,201,648	1,370,971	14.1%	169,323	-37,813	1,333,158	10.9%	131,509	\$28,938,530	0.5%
Kirkland Fire Department	831,434	881,778	6.1%	50,344	-24,321	857,457	3.1%	26,024	15,455,549	0.2%
Mercer Island Fire Department	394,091	425,558	8.0%	31,468	-11,737	413,821	5.0%	19,730	4,891,062	0.4%
Redmond Fire Department	902,842	933,174	3.4%	30,332	-25,738	907,436	0.5%	4,594	22,629,951	0.0%
Renton Fire Department	1,161,113	1,175,878	1.3%	14,765	-32,432	1,143,446	-1.5%	-17,667	6,643,786	-0.3%
SeaTac Fire Department	354,935	366,606	3.3%	11,671	-10,111	356,494	0.4%	1,559	\$6,652,346	0.0%
Shoreline Fire Department	613,189	634,734	3.5%	21,546	-17,507	617,227	0.7%	4,039	11,223,170	0.0%
Snoqualmie Fire & Rescue	89,144	130,266	46.1%	41,122	-3,593	126,673	42.1%	37,529	4,937,058	0.8%
South King Fire & Rescue	1,287,578	1,315,974	2.2%	28,396	-36,296	1,279,678	-0.6%	-7,901	22,369,694	0.0%
Tukwila Fire Department	375,143	397,173	5.9%	22,030	-10,955	386,219	3.0%	11,075	10,470,238	0.1%
Valley Regional Fire Authority	728,832	712,315	-2.3%	-16,517	-19,647	692,668	-5.0%	-36,164	18,687,434	-0.2%
Woodinville Fire & Life Safety	498,412	497,854	-0.1%	-558	-13,731	484,122	-2.9%	-14,289	15,449,224	-0.1%
TOTAL:	\$15,007,406	\$15,007,406			\$0	\$15,007,406				
Note: all figures based on 2010 data for	illustrative purpo	ses; revenue dat	ta were not a	available for s	some agencies.				Sourc	e: KCAO Analysis

Appendix 7 EMS Division Audit Recommendations Implementation Status

2008 Audit Recommendations	Agency Position	Schedule for Implementation	EMS Comments
1. Develop financial policies that provide further guidance concerning what ALS costs should be funded by the EMS levy. Such policies should explicitly state the County Council's intention regarding whether all ALS costs should be fully funded, and if so, define what 'full funding' means. The definition of full funding should also be subjected to a legal review of EMS costs allowable under state law, specifically RCSW 84.52.069(5).	Partially Concur	Develop guidelines with EMS providers. Obtain EMSAC review and endorsement by December 2010. Consult with attorneys as necessary. In addition to EMSAC, policies will be communicated to regional EMS providers through the EMS Executive Policy document, expected in late December 2010.	Completed Tasks: Developed policy guidelines with EMS providers. Received regional approval for guidelines by EMSAC. Finalized policy guidelines and incorporated into EMS Executive Policy document.
2. Obtain additional data on all actual service costs that ALS providers incurred but deducted from billing data due to lack of budget, and costs incurred by ALS providers that are not yet recognized in the budget in defining full funding. The definition should provide sufficient detail to determine whether or not general government overhead and costs of support activities provided by other government departments are allowable, as well as the allowable activities under the Regional Support Services and Strategic Initiative categories. Costs deemed to be allowable to support normal, ongoing operations that are not addressed in the current levy period should be considered in developing the financial plan and standard unit cost model for the next levy period.	Concur	 Collect data with annual report to EMS Advisory Committee (coordinated with year-end accounting) Progress report to EMSAC to inform next levy period. Eligible costs will be communicated to regional EMS providers through the EMS Executive Policy document, expected in late December 2010. Reflected in the 2012 and subsequent budgets. 	Completed Tasks: Reviewed all ALS costs within the unit allocation and defined eligible costs and new cost categories. Identified eligible costs outside unit allocation. Reported to EMSAC as scheduled. Completed 2009 costs using new categories in October 2010. Completed review of overhead/indirect costs in June 2011. Results will be reflected in the 2013 budget process and subsequent budgets.

2008 Audit Recommendations	Agency Position	Schedule for Implementation	EMS Comments
3. Identify and account for unusual or infrequent allowable costs. Costs of substantial value should be accumulated and covered by reserves established for their payment. Requests to access the reserves should be included in the next supplemental or annual budget submitted for Council approval and would be controlled similarly to the existing reserves for unanticipated inflation to ensure continued accountability in spending the levy funds.	Concur	Incorporate into 2011 Budget Process. Finalization of reserve categories, funding levels and use triggers moved from May 2010 to September 2010. Finalization of policies for reserve application and review process moved from May 2010 to December 2010. New policies will be included in the EMS Executive Policy document, expected in late December 2010.	Completed Tasks: Identified potential expenses that fell outside unit allocation. Developed mechanisms to cover one time and unique costs/costs increasing above allocation inflation. Refined current and developed new reserves. Developed criteria to determine appropriate funding levels for each reserve. Finalized reserve categories, funding levels and use triggers and was reflected in the 2011 and subsequent budgets. Finalized process for reserve application and peer review. Results of this were reflected in the 2012 and subsequent budgets. These policies were included in the EMS Executive Policy document.
4. Enhance the clarity and consistency of levy financial policies and their relationship with supporting attachments to address current practices, omissions or apparent inconsistencies to ensure the EMS levy funds are managed in accordance with the intent of the County Council. Such revised policies should focus on identifying alternate uses of the existing restricted reserve and fund balances to address the unanticipated economic conditions and long-term impacts of projected or actual deflation during the six-year levy.	Concur	Finalization of policies moved from May 2010 to December 2010. New policies will be included in the EMS Executive Policy document, expected in late December 2010. New policies will be reflected in the 2012 and subsequent budgets.	Completed Tasks: Identified where clarification is required in various EMS documents. Refined current and developed new reserves to address unanticipated/ unique or one-time costs. Developed EMS policies to address inconsistencies between levy documents, as identified in audit recommendation, and received approval in 2012.

2008 Audit Recommendations	Agency Position	Schedule for Implementation	EMS Comments
5. Actual ALS services costs should be communicated to EMS Division management to determine whether the cost model is functioning appropriately. Maintenance of the standard unit cost methodology for allocating levy funds to ALS providers should be continued, but based on improved definitions of 'normal' costs. Such information would include known costs, actual service costs deducted from the billing data by ALS providers due to lack of budget, and costs incurred by ALS providers that are not yet recognized in the budget. Using the policy definitions from implementing the first two EMS financial plan recommendations above, these costs should be screened as to their allowability. Unanticipated costs should be provided for in reserves and designation of fund balance.	Concur	Begin Fall 2009, and screen for eligibility after guidelines are developed (in #1 above); Unanticipated costs addressed in #3 above. Finalization and implementation of policies moved from May 2010 to September 2010. New policies will be included in the EMS Executive Policy document, expected in late December 2010.	 Reviewed all ALS costs within the unit allocation. Defined eligible costs and new cost categories. Identified eligible costs outside unit allocation. Developed mechanisms to cover one time and unique costs/costs increasing above allocation inflation. Refined current and developed new reserves to address unanticipated/ unique or one-time costs. Developed criteria to determine appropriate funding levels for each reserve. Modified the year-end report to include more items and provide ALS providers the opportunity to document costs above those invoiced to the EMS levy. Obtained agency reporting of 2009 costs using new categories in October 2010; incorporate into the 2012 budget and subsequent budgets. Implemented modifications to the year-end report through 2011 contracts.

2008 Audit Recommendations	Agency Position	Schedule for Implementation	EMS Comments
6. The EMS Division and ALS providers should improve financial oversight of the EMS levy program through better clarity of contract requirements, and the development of procedures and definitions related to accounting period cutoff control, allocations and overhead charges, and selected changes to individual ALS provider accounting and internal control processes.	Concur	Implement in prioritized steps. Finalization of amendments moved from May 2010 to October 2010. New policies will be included in the EMS Executive Policy document, expected in late December 2010.	Completed Tasks: Identified contract enhancements with ALS Working Group. Added enhancements to contract template. Conferred with Public Health - Seattle & King County contract specialists to discuss revisions. Obtained approval from PAO through Public Health - Seattle & King County contract specialists for contract revisions. Continued contract review with providers to identify opportunities to provide better transparency of EMS system costs.
7. The EMS Division should explore the feasibility of implementing the recommendations contained in Appendix E with each of the appropriate ALS providers to strengthen internal controls, ensure full reporting of all costs, and promote transparency and accountability in the use of EMS levy funding.	Concur	Some already implemented; remained to be implemented in prioritized steps. Implementation of recommendations moved from April 2010 to December 2010.	Completed Tasks: Reviewed proposals with each agency. Established a December 2010 deadline for agencies to implement the Auditor's findings/ implement the intent of findings. Monitored individual ALS providers; oversaw implementation of Auditor's findings/implementation of intent of findings Continued contract review with providers to identify opportunities to provide better transparency of EMS system costs.

2009 Audit Recommendations	Agency Position	Schedule for Implementation	EMS Comments
Recommendation 1: EMS management, in collaboration with OMB, should use the King County financial systems to track all reserves and designations whether included in the adopted budget or not. Entries to the related accounts should be based on actual budget and expenditure data, supported by underlying accounting records and subject to standard journal entry process controls.	Partially Concur	April 2011	The EMS Division tracked reserves and designations in the King County accounting system. Throughout the year, actual amounts were posted to these accounts, and for the year-end close, estimates of actual activity (accrued expenditures) were made and recorded.
Recommendation 2: We recommend that EMS use the Excel applications as account level subsidiary ledgers that would agree to, or reconcile with, the general ledger accounts established to track fund balances reserves and designations if EMS management continues to use Excel applications for tracking reserves and designations.	Concur	April 2011	EMS Division worked with Finance Management Services to establish the accounts. EMS matched numbers in the Excel spreadsheets to numbers posted in the accounting system. General ledger account balances were reconciled to the Excel spreadsheets.
Recommendation 3: EMS Management should use a Producer Price Index, such as the WPU 1413029, that tracks truck equipment such as fire trucks and ambulances to forecast future vehicle costs, and appears to most closely approximate actual costs that the U.S. department of Labor, Bureau of Labor Statistics, Vehicle Costs Factor currently used in the EMS Levy Financial Plan.	Partially Concur	Propose during 2011 Budget Process (October 2010)	The EMS Division implemented the intent of this recommendation by using the PPI as a means of accessing vehicle reserve funds to supplement the amount in the equipment allocation (reserve). However, since the index chosen to inflate vehicles was established in an ordinance associated with the vote, the index used in the equipment cannot be changed (outside of an election). PPI has been incorporated into the 2014-2019 levy period financial plan.

2009 Audit Recommendations	Agency Position	Schedule for Implementation	EMS Comments
Recommendation 4: EMS Division should consider the results of benchmarking and give strong consideration to operations and practices than can increase EMS system efficiency as well as improve the visibility and transparency of EMS service in identifying potential topics for new individual strategic initiatives.	Concur	Assess potential efficiencies in 2011; report in annual report to Council by September 2011, and incorporate into the Medic One/EMS draft 2014 to 2019 Strategic Plan due to the Council in January 2013.	EMS agreed to apply benchmarking to any new Strategic Initiatives developed in 2011 to 2013 and review operations and practices in 2011 (and continuously through 2013) for potential system efficiencies and visibility or transparency improvements. This practice continued as part of the 2014-2019 levy planning.
Recommendation 5: EMS management should institute performance measures and targets to help promote greater EMS transparency and accountability in developing, implementing and reporting annually on strategic initiatives. Project milestones for completion of projects or project stages should be developed for initiatives with outcomes that cannot be quantified or otherwise measured. EMS should also conduct cost analysis for new initiatives with economic impacts.	Concur	Assess current strategic initiatives efficiencies in 2011; report in annual report to Council by September 2011, and incorporate into the Med One/EMS draft 2014 to 2019 Strategic Plan due to the Council in January 2013.	EMS agreed to institute additional performance measures where appropriate and possible, develop project milestones, and conduct cost analysis for current strategic initiatives.
Recommendations 6: the EMS Division should review its vehicle replacement policy and follow King County Fleet Administration guidelines in conducting a life cycle cost analysis to determine optimum vehicle use as part of a strategic initiative on managing vehicle costs more efficiently. It should also require ALS providers to track and maintain adequate records on mileage, engine hours, vehicle usage at specified intervals, and other data necessary to conduct a life cycle cost analysis.	Concur	Develop plan and proposal for this new Strategic Initiative and conduct analysis in 2011 with intent to incorporate into the Medic One/EMS 2014-2019 Strategic Plan due to the Council in January 2013. Analysis will include development of performance measures that EMS would require providers to track.	The EMS Division worked in partnership with ALS agencies to increase vehicle funding in the 2014-2019 levy period to reflect an average lifespan of eight (8) years. ALS agencies also committed to assessing options that would increase the lifespan to ten (10) years.

2009 Audit Recommendations	Agency Position	Schedule for Implementation	EMS Comments
Recommendation 7: The EMS Division should establish a policy requiring the remounting ambulance modules at specified intervals instead of purchasing new ALS vehicles as part of a strategic initiative on vehicle replacement. The remounting intervals should be specified in conjunction with the result of life cycle cost analysis.	Concur	Include as part of the new Strategic Initiative in Recommendation #6 project plan with intent to incorporate recommendations into the Medical One/EMS 2014 to 2019 Strategic Plan due to the Council in January 2013.	None. See Recommendation #6 above.

Executive Response



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KING COUNTY AUDITOR

SEP 18 2012 RECEIVED

September 14, 2012

Cheryle A. Broom, County Auditor Room 1033 COURTHOUSE

Dear Ms. Broom:

Thank you for your August 31st letter and the opportunity to review and comment on the proposed final report of the Financial Review and Compliance Audit of the 2011 Emergency Medical Service (EMS) Levy. This is the fourth of a series of EMS financial reviews to be conducted, as authorized by King County Council Ordinance 15862, on the Medic One/EMS 2008-2013 levy.

The audit assessed the EMS Division's financial practices and compliance with Council-adopted levy policies and financial plan. It also assessed the overall EMS levy allocation for Basic Life Support (BLS) services and the reasonableness of the distribution of the annual allocation among the regional fire agencies that provide BLS services. Finally, the audit included a mid-term review of the EMS Division's overall financial management and the implementation status of past audit recommendations.

I am pleased to note that the findings of the audit are, again, favorable and supportive. The review demonstrates that the financial operations continue to be managed in accordance with the EMS levy financial plan and policies; the overall amount of EMS levy funding for BLS services was reasonable, although the method for distributing levy funds to BLS fire agencies could be improved to provide greater equity; and the mid-levy review confirms that adequate funds will be available for the duration of the current levy; and the EMS Division has made substantial progress in implementing the 2008 and 2009 EMS levy audit recommendations.

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Executive Response (Continued)

Cheryle A. Broom September 14, 2012 Page 2

We concur with the recommendation from the 2011 EMS levy financial review and compliance audit to improve the distribution of BLS levy funds and will work with BLS agencies to examine BLS distribution methodologies for the 2020-2025 levy period, including consideration of the methodology highlighted in the Auditor's report. I'm happy to see that the recommendation took into consideration and acknowledged the extensive work the EMS Advisory Task Force recently completed in developing programmatic and financial recommendations for the next Medic One/EMS levy period, including the BLS allocation, allowing adequate time for affected parties to meet and discuss future options.

Attachment A identifies the implementation schedule for our response to the recommendation. We will convene our EMS Stakeholders and develop options for the 2020-2025 levy period, or sooner, no later than November 2016.

I appreciate the great level of cooperation and support that occurred between the King County Auditor's Office, Public Health – Seattle & King County and EMS Division management and staff, and the BLS agencies. If you have any questions regarding this response, please contact Jim Fogarty, Division Director, Emergency Medical Services, at 206-263-8579.

Sincerely,

Dow Constantine King County Executive

Enclosure

cc: Fred Jarrett, Deputy County Executive, King County Executive Office (KCEO)

Rhonda Berry, Assistant Deputy County Executive, KCEO

Dwight Dively, Director, Office of Performance, Strategy and Budget (PSB)
David Fleming, M.D., Director and Health Officer, Public Health-Seattle & King
County (PHSKC)

Cindy West, Chief Financial Officer, PHSKC

Jim Fogarty, Director, Emergency Medical Services (EMS) Division, PHSKC

Michele Plorde, Deputy Director, EMS Division, PHSKC

Helen Chatalas, Program Manager, EMS Division, PHSKC

Cynthia Bradshaw, Finance Officer, EMS Division, PHSKC

Eben Sutton, Controller, PHSKC

Tyler Running Deer, Budget Supervisor, PSB

Katherine Cortes, Budget Analyst, PSB

Caroline McShane, Deputy Director, Finance and Business Operations Division, Department of Executive Services

Executive Response (Continued)

Attachment A

Documendation	Agonari	Cohodule for Implementation	7.00
Necommendation	Position	Schedule 101 Implementation	
1. We recommend that by the third year of the Concur	Concur	In 2016, develop options for	The EMS Division will work with BLS
Medical Services (FMS) Division develon		distributing BLS levy funds for	distributing BLS levy funds for agencies to discuss and develop options the 2020-2025 levy meriod or for a methodology for distributing BTS
options for a new methodology for		sooner.	levy funds for the 2020-2025 levy
distributing basic life services (BLS) levy			period, or sooner, and consider the
funds in the 2020 to 2025 levy period or			methodology included in the report.
sooner. The EMS Division should consider			
the methodology presented in this report as			
a starting point in that process.			

Page 1 of

Statement of Compliance

Statement of Compliance with Government Auditing Standards

We conducted this financial and compliance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Scope of Work on Internal Controls

We assessed internal controls relevant to the audit objectives. We satisfied these objectives by performing comparative analysis, testing selected transactions, and obtaining support for revenue, expenditure, and reserve balance calculations. We also reviewed relevant ordinances, financial policies, plans and procedures related to and controlling the use of the EMS Levy.

Recommendation & Implementation Schedule

Recommendation 1: By the third year of the 2014 to 2019 levy period, the EMS Division should develop options for a new methodology for distributing BLS levy funds in the 2020 to 2025 levy period or sooner. The EMS Division should consider the methodology presented in this report as a starting point in that process.

Implementation Date: November 2016

Estimate of Impact: Distributing the total BLS levy allocation by a single methodology will increase transparency of agencies' BLS funding levels. Implementing an allocation methodology such as the one described in the report will increase the equity of BLS funding while continuing to support the smallest rural agencies.