# Part III: EMS Funding and Financial Plan

**Introduction:** This section of the EMS 2004 Annual Report focuses on EMS revenues and expenditures for 2003, and projections for 2004. Some historical and forecast information is incorporated for context, including information on the current EMS funding mechanism and the projected status of the EMS Financial Plan through the current levy period. Components include the following:

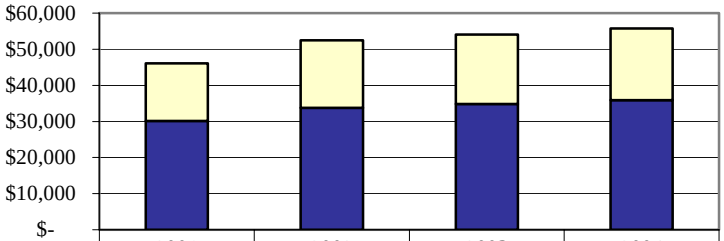
- Current EMS Revenues
- Current EMS Expenditures
- King County Medic One Donations
- EMS Expenditure and Revenue Trends
- The 2004 Financial Plan
- Recommendations for Fund Balance and levy rate

Please note that under terms of an inter-local agreement between King County and the City of Seattle, EMS levy funds collected within Seattle go directly to the City. These discussions focus on the EMS fund within the remainder of King County, excluding the City of Seattle.

## A. EMS Revenues

**EMS Levy:** The EMS levy is a regular property tax levy subject to the limitations contained in Chapter 84.55.010 RCW. EMS levy funds are restricted by RCW and can only be spent on EMS-related activities. In November 2001, King County voters approved an EMS levy to provide funding for the 2002-2007 period. Also passed in November 2001, Initiative 747 limits total levy funds to a 1% increase for existing properties, except for new construction. The EMS levy rate began at $.25 per $1,000 assessed value in 2002. The 2003 effective levy rate was $0.24134 per $1,000 assessed value with a total assessment of $54,087,223. The 2004 effective levy rate is $.23706 per $1,000 assessed value with a total assessment of $55,703,623.

**AMOUNT ASSESSED FOR CURRENT LEVY**
**ACTUAL 2001, 2002, 2003, 2004**
*(All numbers in thousands -- 000 omitted)*




| | 2001 | 2002 | 2003 | 2004 |
|---|---|---|---|---|
| City of Seattle | $16,034 | $18,763 | $19,239 | $19,837 |
| Balance of King County | $30,089 | $33,734 | $34,848 | $35,866 |

In addition to real and personal property taxes, other revenues include miscellaneous taxes, interest earnings, and fees for reimbursable services. King County contributes $375,000 annually in Current Expense Fund monies to King County Medic One. Total revenues in 2003 for the balance of King County were $35.5 million. The regional levy and associated taxes generated 98% of the total revenues, with current expense and other income combining to generate the remaining 2%.

The 2003 beginning fund balance was $5.9 million; the year-end fund balance was $7.8 million. Funds in excess of the required ending fund balance of $2.7 million were placed in a reserve to pay for planned services in 2006 and 2007 when expenses are forecast to exceed revenues.

**2003 EMS Revenue (balance of King County)**

| Revenue Source | 2003 | % |
|---|---|---|
| Property Taxes Current | $33,838,109 | 95.4% |
| Delinquent Taxes | $695,378 | 2.0% |
| Other Taxes | $112,764 | .3% |
| Other Revenues | $165,286 | .5% |
| Interest Income | $291,664 | .8% |
| CX Contribution | $375,000 | 1.1% |
| **Total** | **$35,478,201** | 100% |

Revenues for 2004 are estimated at $36.8 million. The regional levy and associated taxes represent 98% of total estimated revenue. Projected end fund balance for 2004 is $9.97 million. Funds in excess of the required fund balance are needed to cover expenditures above revenue in years 2005 through 2007.

| Revenue Source | 2004 | % |
|---|---|---|
| Property Taxes Current | $35,059,476 | 95.3% |
| Delinquent Taxes | $909,514 | 2.4% |
| Other Taxes | $83,902 | .22% |
| Other Revenues | $66,000 | .17% |
| Interest Income | $291,664 | .79% |
| CX Contribution | $375,000 | 1.0% |
| **Total** | **$36,785,556** | 100% |

Total revenue grew 2% from 2002 to 2003 and is projected to grow 3.7% in 2004. The increase is primarily due to property taxes on new construction. While assessed valuation increased 6.8% from 2002 to 2003 and 4.8% to 2004, property taxes revenues increased 3% a year from 2002 to 2004. Additional information on projected revenues through the end of the current 2002-2007 levy period is included in Section C. *EMS Revenue and Expenditure Trends* (page 60).

## B. EMS Expenditures

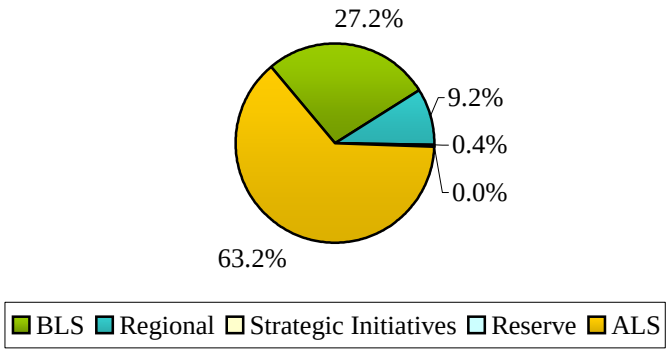
EMS revenues support four major EMS activities related to direct service delivery or support programs. These programs are:

- Advanced Life Support (ALS) Services
- Basic Life Support (BLS) Services
- Regional Support Programs
- Strategic Initiatives

The *2002 EMS Strategic Plan Update of the 1998-2003 Emergency Medical Services Strategic Plan* limits expenditure increases for all ALS, BLS and Regional Service areas to the local area Consumer Price Index (CPI). Increases for ALS services can be raised above CPI if there is 'sufficient funding available to alleviate any dramatic increase in provider contribution' (*EMS Strategic Plan* - page 49).

Advanced Life Support (ALS) Services funding is based on a standard allocation per unit; BLS funding is based on an allocation formula per agency; Regional Support Programs are based on cost of services limited to increases based on forecast CPI; and Strategic Initiatives are based on approved budgets and estimated cash flow. Yearly reserves to provide for unanticipated expenses are also budgeted. The primary use of the contingency fund in 2003 was for costs related to the transition of Evergreen Medic One to Redmond Fire Department.

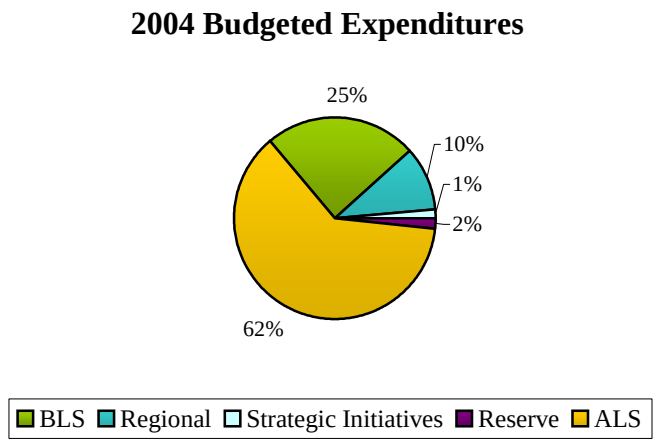
**2003 Actual Expenditures**




| Sub-Fund Expenditures | | 2003 Actual |
|---|---|---|
| ALS | $ | 20,442,385 |
| BLS | $ | 8,801,719 |
| Regional Services | $ | 2,973,104 |
| Strategic Initiatives | $ | 125,094 |
| Contingency Reserve | $ | 0 |
| **Total** | **$** | **32,342,302** |

Expenditures for 2003 were budgeted using a forecast CPI increase of 2.5%. In 2003, 83% of the total budget amount of $3.575 million was spent. Some ALS providers and Regional Services placed unexpended budget in designated reserves for future years where expenses are projected to exceed designated budgets.

Budgeted expenditures for 2004 are based on a CPI forecasted increase of 2.1%. Cash flows for Strategic Initiatives increased over 2003 based on individual project plans.




| Sub-Fund | 2004 Budget |
|---|---|
| ALS | $ 22,624,121 |
| BLS | $ 8,923,020 |
| Regional Services | $ 3,700,562 |
| Strategic Initiatives | $ 503,714 |
| Contingency Reserve | $ 602,501 |
| **Total** | **$ 36,353,919** |

**Advanced Life Support (ALS) Services:** Since the first EMS levy in 1979, regional paramedic services have been largely supported by the EMS levy. The EMS Division manages contracts that provide funds directly to five paramedic provider agencies in King County: Bellevue Fire Department (Bellevue Medic One), Public Health - Seattle & King County (King County Medic One), Redmond Fire Department (Redmond Medic One), Shoreline Fire Department (Shoreline Medic One), and Vashon Island Fire & Rescue.

The EMS levy funds ALS services using a standard unit cost methodology based on the full costs of operating one paramedic unit staffed with two Harborview-trained paramedics, 24 hours a day, 365 days a year. These expenditures include personnel, medical equipment and supplies, support costs for dispatch, paramedic supervision, medical direction, continuing medical education, and other EMS-related expenses.

In 2003, the standard unit cost allocation was $1.3 million per paramedic unit. This allocation reflects an 8% increase over the 2002 allocation of $1.2 million per unit (or a 5.5% increase over forecast CPI-U of 2.5%).

The EMS Strategic Plan calls for an annual review of ALS costs to minimize cost shifting of ALS expenses to provider agencies. An ALS task force comprised of representatives of the different ALS providers meets each year to review costs and provide recommendations to the EMS Advisory Committee. This group recommended a one-time increase of 5.5% above the CPI rate of 2.5% (for a total of 8%) for 2003. The recommendation for the 2004 allocation was based on forecast CPI. Significant cost drivers that contributed to the need for an increase in 2003 included rising labor costs associated with recently settled union contracts and increased costs of medical supplies.

Medic Unit Allocation: The total annual EMS levy allocation for each paramedic provider is determined by the number of units staffed with two paramedics, the number of EMT/P units, the number of 12-hour 2-paramedic units, and the number of vehicles due for replacement that year. Start-up costs for any new paramedic units are added separately (including personnel, medical equipment and supplies, vehicles, radios, and other items).

Two types of paramedic units qualify for half of the standard unit cost funding. Emergency Medical Technician/Paramedic (EMT/P) units are staffed 24-hours per day with one EMT trained in defibrillation and one paramedic. Part-time (or 12-hour) paramedic units are staffed with two paramedics for twelve hours during peak workload periods. Each EMT/P and 12-hour unit received $651,971 in 2003, although EMT/P units are additionally supported with local fire department funds. Vashon Medic One is funded at a 0.5 unit allocation.

Paramedic vehicle replacement is funded separately from the standard unit cost allocation and follows a paramedic vehicle replacement plan. Medic units are currently replaced every three years and then placed in a backup vehicle status for three additional years. The allocation for vehicle replacement costs in 2003 was $120,421 per vehicle. Four vehicles were funded in 2003; five vehicles were funded in 2002.

Unit Additions: One 0.5 unit expansion was added to the system in 2003. Medic 14 in Issaquah was expanded from a 12-hour half-time 2-paramedic unit to a full 24-hour 2-paramedic unit. In addition to the 0.5 unit allocation increase, $70,000 was provided for start-up costs. An additional .5 unit expansion was added to the system in 2004. Medic 12 in Enumclaw was expanded from a 12-hour 2-paramedic half-time unit to a full 24-hour 2-paramedic unit. These increases were anticipated in the EMS Strategic Plan and implemented after a review that looked at workloads, response times, and percent back-up provided by other medic units.

Another significant increase in ALS service was the transition of Medic 3, the EMT/Paramedic unit located in North Bend. This change was requested by the Medical Program Directors who identified clear advantages in having a full 2-paramedic unit responding in the area. Their concerns were related to the high level of serious trauma patients paramedics treated, the long response times from other back-up units responding along the I-90 corridor, the poor winter conditions, and geographic-related communication problems.

Although the Medical Program Directors recommended the change, it was not apparent where the funding for the ALS unit increases would be obtained. A substantial amount of the existing fund balance had already been targeted for existing and planned service increases, including one-time increases to the ALS allocation. A partnership was developed with Eastside Fire & Rescue, Bellevue Fire Department and the EMS Division to transition Medic 3 to a full 2-paramedic unit. Eastside Fire & Rescue contributes $100,000 per year and the levy fund provides funding from the reserve that is equivalent to a .25 unit or ½ the funding needed for a medic unit. All contributions are to increase by CPI-U each year. It is anticipated that this unit will be provided full funding during the next levy.

Due to limited available funding to support both EMT/P unit upgrades, the EMS Advisory Committee recommended that Medic 35 , an EMT/P unit located in Woodinville, be converted to a 2-paramedic unit when feasible. Based on a financial analysis, the committee recommended funding the equivalent to Medic 3 beginning in 2006.

A significant change for ALS services in 2003 was the smooth transition of paramedic service to Shoreline and Redmond fire departments, provided previously for 28 years by Evergreen Hospital. Redmond Fire took over operation of 2.5 units and Shoreline Fire added one unit to the 1.5 existing units.

The **total number of ALS units in 2004** is shown in the following chart:

| | Full Units (2 paramedic / 24 hour)[1] | Half Units (EMT-P or 12 hour)[2] | Total Funding Units |
|---|---|---|---|
| Redmond | 2 | 1 | 2.5 |
| King Co. | 7 | | 7.0 |
| Bellevue[4] | 3 | 1 | 3.5 |
| Shoreline | 2 | 1 | 2.5 |
| Vashon[3] | | 1 | .5 |
| **Total** | **12** | **6** | **16.0** |

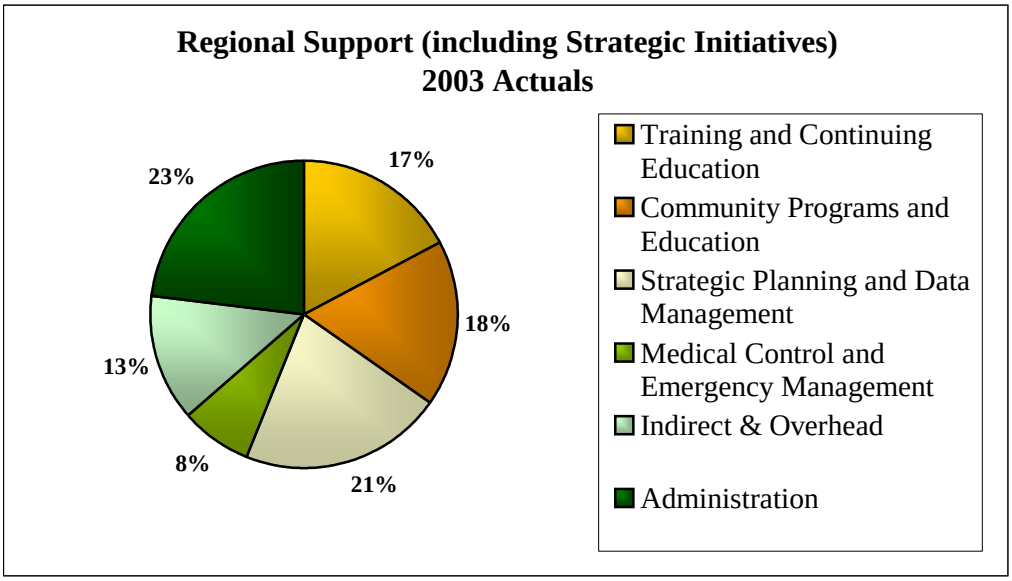
[1] Full Units are funded at 100% of the Standard Unit Cost of $1,303,942.
[2] Half Units are funded at 50% of the Standard Unit Cost of $651,971.
[3] Vashon funding is currently set at .5 of 24-hour unit.
[4] Does not include additional funding .25 unit funding for Medic 3.

**Basic Life Support (BLS) Services:** The levy provides partial funding to BLS providers to help ensure uniform and standardized patient care and to enhance BLS services. Basic Life Support services are provided, outside the City of Seattle, by thirty-three local fire departments and fire districts. Beginning in 2002, the total amount of BLS funding was increased by the local area CPI (CPI-U) each year as noted in the *2002 Strategic Plan Update of the 1998-2003 EMS Strategic Plan*. The total annual BLS dollar allocation for 2003 was $8.75 million; the total for 2004 is $8.9 million.

The task force that completed the Strategic Plan Update also recommended a thorough review of the BLS funding formula and in early 2002 a BLS Funding Formula Review Committee convened to discuss the critical issues. The group was able to attain consensus on the new criteria for allocating BLS funds and the revised formula was used to calculate the 2003 BLS allocations. The new formula was again reviewed in May 2003 and May of 2004 to monitor the impacts and validate the assumptions. The intended effects were evident and the review committee recommended continued use of the new formula. Minor improvements were recommended and implemented.

**Regional Services:** The primary purpose for regional EMS programs and services is to provide support to critical functions essential to providing the highest quality out-of-hospital emergency care available. This includes uniform training of EMTs and dispatchers, regional medical control, regional data collection and analysis, quality improvement activities, and financial and administrative management (including management of ALS and BLS contracts). Regional coordination of these various activities is important in supporting a standard delivery of pre-hospital patient care, developing regional policies and practices that reflect the diversity of needs within King County, and maintaining the balance of local area service delivery with centralized interests.

The *2002-2007 EMS Strategic Plan Update* limits increases in funding for Regional Services to the local CPI (CPI-U). Expenditures, particularly labor expenditures related to resolution of labor agreements, have increased higher than the CPI-U. The 2003 budget for Regional Support was $3.6 million. Approximately $3 million (or 83% of the budget) was expended in 2003. Approximately $650,000 was placed in reserves to cover future costs, particularly labor and indirect and overhead costs that are projected to increase higher than CPI.




The 2004 budget for Regional Services was increased by the forecast CPI of 2.1%. In addition and as planned, $50,000 budgeted for maintenance related to the Regional Data Collection Project (RDC) was transferred from the Strategic Initiative budget to Regional Services.

**Strategic Initiatives:** The term 'Strategic Initiative' is used to describe a handful of new and innovative programs that are thought to have significant impact on the success of the Strategic Directions (see Part II - Status of EMS Division Programs and Activities for details - page 18). The 2003 budget for Strategic Initiatives was $439,000. Strategic Initiatives approved in 2004 are shown in the following chart:

## EMS Strategic Initiatives

| 2003 Supplement Budget/Cashflow | 2003 | 2004 | 2005 | 2006 | 2007 | Total |
|---|---|---|---|---|---|---|
| **Dispatch Initiaitves** | | | | | | - |
| CBD ALS Triage Criteria | 58,000 | | | 20,000 | | 78,000 |
| EMD QI | 24,000 | 31,000 | 32,000 | 33,000 | 34,000 | 154,000 |
| Enhanced CBD | 90,000 | 92,000 | 95,500 | 98,400 | 101,400 | 477,300 |
| **Technology Initiatives** | | | | | | |
| Web-based Training for Dispatch | 15,000 | 20,000 | 20,000 | 25,000 | 25,000 | 105,000 |
| Web-based Training for EMS | 25,000 | 50,000 | 20,000 | 20,000 | 20,000 | 135,000 |
| Regional Electronic Data Collection Project | 172,000 | | | | | 172,000 |
| **EMS System Efficiencies** | | | | | | - |
| Procedure & Patient Treatment Evals | 10,000 | 20,000 | 21,000 | 22,000 | 23,000 | 96,000 |
| Enhanced Care for EMS Patients | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 50,000 |
| Injury Prevention Programs | 35,000 | 36,000 | 37,000 | 38,000 | 39,000 | 185,000 |
| **Levy Planning** | | | | 50,000 | 50,000 | 100,000 |
| **TOTAL** | **$ 439,000** | **$ 259,000** | **$ 235,500** | **$ 316,400** | **$ 302,400** | **$ 1,552,300** |

## C. EMS Revenue and Expenditure Trends

**Revenue Trends:** The primary revenue source for the EMS system in King County is the 2002-2007 EMS property tax levy. Levy revenue growth is limited by a voter-approved tax initiative (Initiative 747). This initiative limits revenue growth from existing properties to 1% per year plus new construction. The 2002 Update to the EMS Financial Plan assumed modest growth in property values, continued low inflation, a one-percent limit on fund growth from existing properties, growth in expenditures related to anticipated regional demand for Advanced Life Support Services (ALS), and stable growth in other services at the level of local consumer price index (CPI-U).

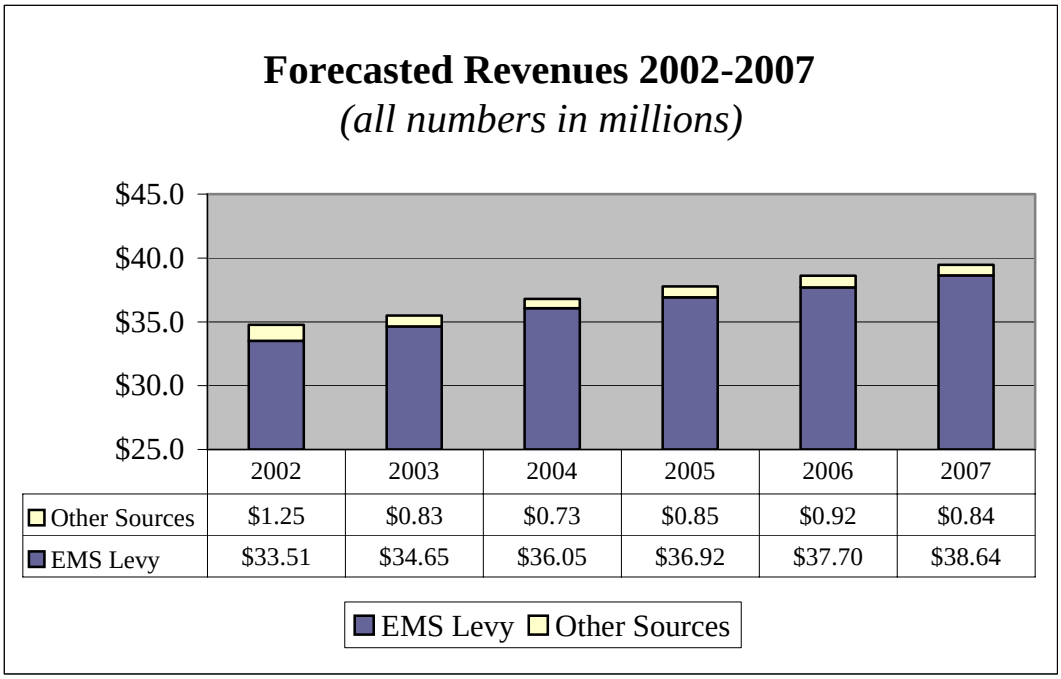
Forecasted total levy assessment including both the City of Seattle and the remainder of King County is projected to increase from $52.5 million in 2002 to $59.8 million in 2007. This is a total increase of 14% or an average of 2.8% per year. Growth over 1% is primarily due to property taxes on new construction. The following chart shows forecast levy assessments for both Seattle and the remainder of King County:

## Forecast Levy Assessment

*(amount billed in millions)*

Total EMS Division tax revenues, including real estate and personal taxes, leasehold taxes and timber taxes are projected to increase 14% from 2002 to 2007 (or an average of 2.7% per year). Total revenues are projected to increase from $35 million in 2002 to $39.5 million in 2007.

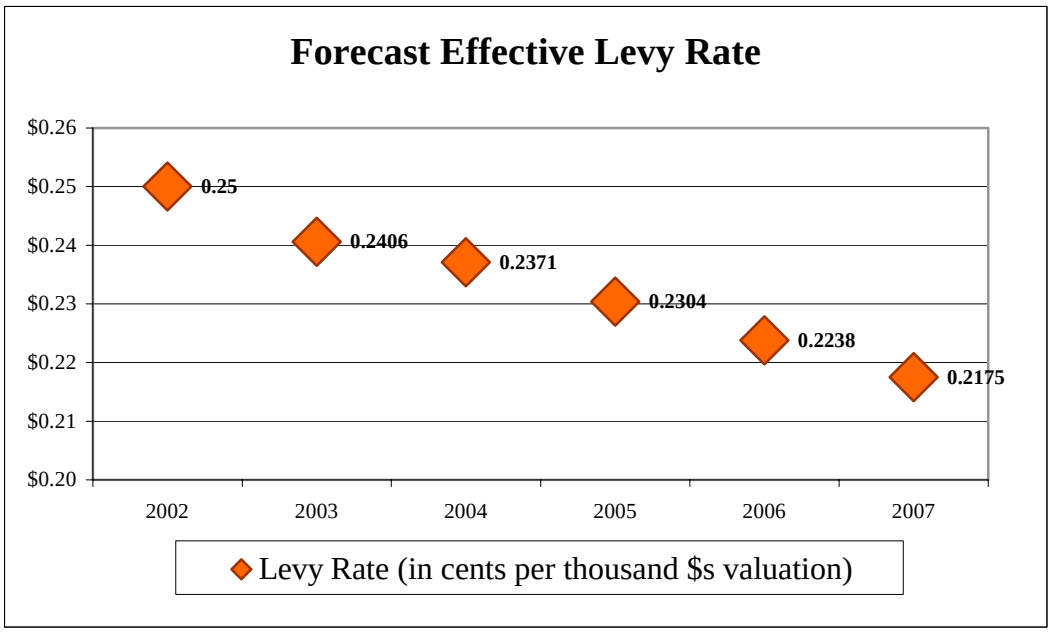
Most other revenues are projected to remain stable, including current expense contributions of $375,000 per year. The following chart shows actual and projected revenues for King County EMS Fund (excluding Seattle) through 2007:



While revenues are projected to increase, the effective levy rate will decrease. Initiative 747's limit to 1% total yearly levy increase is less than average increases in individual property's assessed value. Since assessed values on existing properties are increasing at a rate higher than the increase in the total EMS assessment, the effective levy rate is projected to decrease from $0.25 per thousand dollars of valuation in 2002 to $0.2175 in 2007.

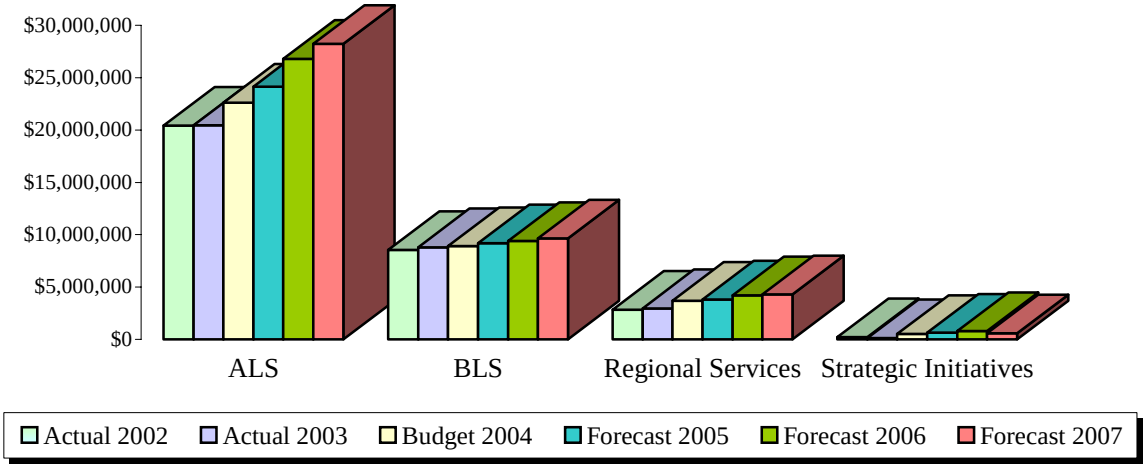
In 2004, based on recommendations from the King County Economist, both forecasted new construction growth and forecasted CPIs were increased for the remainder of the levy. The increased revenues cover the increase in projected expenses. Forecast revenues are sufficient to cover forecast expenditures through the end of the levy period. It appears there is a sufficient fund balance to accommodate one or two future one-time increases in the ALS allocation if it is needed to minimize cost shifting to ALS providers or other unanticipated but necessary strategic initiative program support.

Discussion at the EMS Advisory Committee meeting in June 2004 was to plan for two smaller increases of 2.1% in both 2005 and 2006 rather than waiting for one larger increase in 2006. It was felt that this better met the ALS provider's projected expenditures. Funds for addressing needs not included in the EMS Strategic Plan, such as desired service increases to outlying areas, are limited.



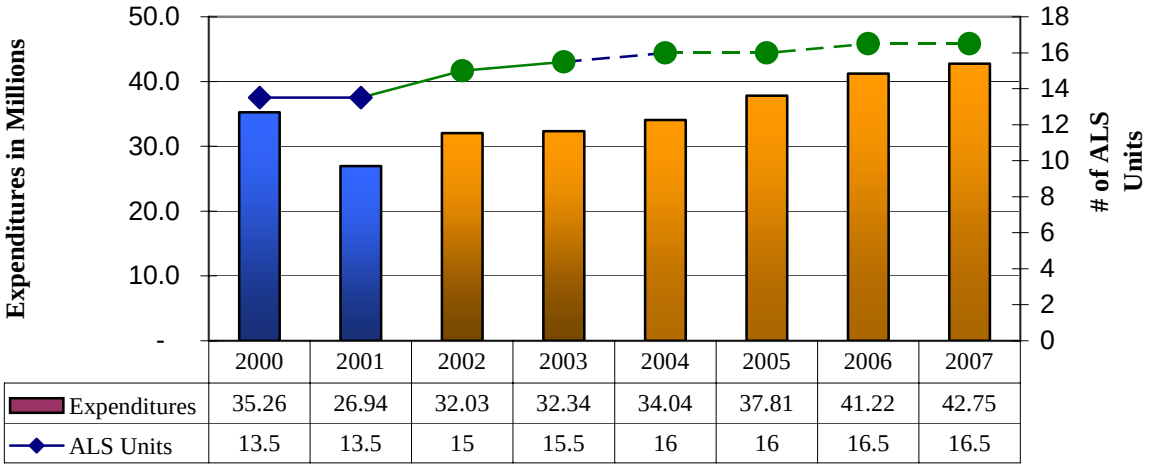

**Expenditure Trends:** There are two main factors affecting expenditure trends, increased costs and the addition of new ALS service. Expenditures are projected to increase from $32 million in 2002 to $42.8 million in 2007. This is a 33% increase or an average increase of 6.7% per year. Since ALS is the largest recipient of EMS levy funds, increases in ALS due to new units and allocations increases above forecast CPI have a large affect on expenditures. The following chart shows projected expenditures by sub-fund for the current levy period.

**EMERGENCY MEDICAL SERVICES**
**Actuals, Budgets & Projections 2002 - 2007**




Since expenditure increases in each area are tied to the forecast local CPI-U, long term changes in the CPI-U rate can have a significant effect. The forecast CPI was increased to 2.9% for 2005 and 2.5% for 2006 and 2007. This change increased forecast expenditures by approximately $3 million and is offset by projected increases in property taxes due to new construction. One new 0.5 medic unit equivalent is projected to be added for the remainder of the levy period. The EMS Strategic Plan anticipated the potential need for additional ALS services in South County in 2006. A review of the need for this increase will occur in 2005. Other anticipated needs include the recommended addition of 0.25 unit funding towards increasing Medic 35 in Woodinville from an EMT/P to a full two paramedic unit in 2006. The following chart shows how expenditure growth correlates to the number of ALS units in service:

**Total Cashflow Related to Number of ALS Units**




| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|---|---|---|---|
| Expenditures | 35.26 | 26.94 | 32.03 | 32.34 | 34.04 | 37.81 | 41.22 | 42.75 |
| ALS Units | 13.5 | 13.5 | 15 | 15.5 | 16 | 16 | 16.5 | 16.5 |

**2000 payment of approximately $8.1 million of Tax Anticipation Notes not shown*

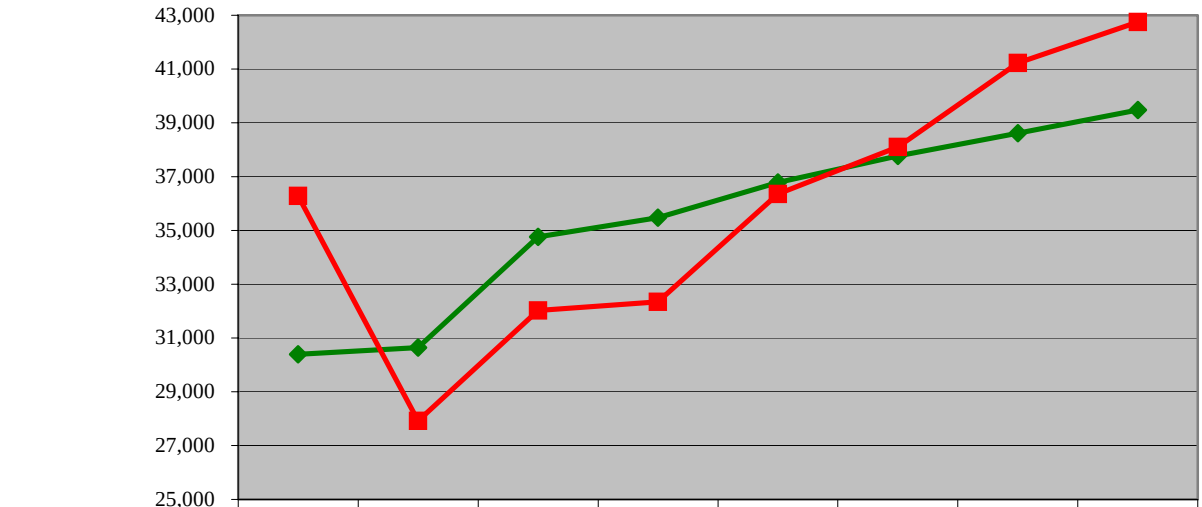
BLS and Regional Support funding is projected to remain steady and not exceed CPI. BLS funding is projected to increase from $8.53 million in 2002 to $9.6 million in 2007. Regional Support funding is projected to increase from $3.55 in 2002 to $3.96 in 2007. Expenses for Regional Services, particularly personnel and indirect and overhead charges are increasing higher than CPI. To accommodate these increase, Regional Services is planning on using under-expenditures from 2003 (placed in a designated reserve). It is anticipated that there will be continued limited use of contingency reserve each year.

Significant revenue trends to monitor include growth of new construction, interest rates related to income, and delinquent taxes. Current forecast and past economic trends appear to indicate that new construction growth may increase in the remaining years of the levy. Interest rates also appear to be rising. Expenditure trends to monitor include changes (particularly increases) in the local CPI, and labor and medical supply costs for paramedic services. Currently, it is anticipated that if funds are available from fund balance that they will be used to move towards converting Medic 35, the EMT/P unit in Woodinville, to a full 2-paramedic unit. Significant unanticipated costs in other areas will decrease funds available to supplement this service.

The following chart shows actual and projected revenues and expenses from 2000 to 2007. Revenues are projected to exceed expenditures through 2004. Expenditures are projected to exceed revenues by a small amount in 2004 (less than $350,000). It is currently projected that revenues placed in the fund balance between 2002 and 2004 will be sufficient to fund expenses in 2005, 2006 and 2007.

## EMS FUND – EXPENDITURES VS. REVENUES

*All numbers in thousands (000 omitted)*




| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|---|---|---|---|
| REVENUE | 30,398 | 30,637 | 34,760 | 35,478 | 36,786 | 37,773 | 38,620 | 39,476 |
| EXPENDITURES | 36,285 | 27,916 | 32,025 | 32,342 | 36,354 | 38,112 | 41,223 | 42,753 |

The 2003-2005 EMS Financial Plan summarizes actual and projected revenues and expenditures for core EMS Division programs and services, major strategic initiative directions, and other additions. The EMS Financial Plan shows the current status of the undesignated fund balance in relationship to a target fund balance. The target fund balance is the equivalent of one month's operating costs for EMS activities. Please refer to Appendix F: *EMS Division Revenue/ Expenditure Summary* on page 77 for details.

The EMS Financial Plan currently projects a fund balance in 2007 that exceeds the EMS Fund required end fund balance (EFB) by only $187,000. Due to the ALS challenges mentioned in the EMS System Review section, ALS costs that are projected to exceed CPI, and a desire to minimize cost shifting to ALS providers, it is recommended that the EMS levy rate be set at the maximum allowable rate of the levy. In addition, EMS is in the third year of a six-year levy. It is prudent to set rates to maximize revenues to support needed ALS/paramedic services. If additional funds are collected, they will be used to address the unfunded needs highlighted in this report, specifically provision of ALS service in outlying areas.