Public Health
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City of Seattle King County

Medic One/Emergency Medical Services

2008-2013 Strategic Plan

January 2007

ACKNOWLEDGEMENTS

Developing a strong regional consensus about Medic One/Emergency Medical Services (EMS) priorities was critical to drafting the *Medic One/EMS 2008-2013 Strategic Plan.* Throughout this tiered process, Stakeholder Committees reviewed and approved the plan in each phase of its development. The King County EMS Division would like to thank the numerous members of these Committees who so willingly gave their time, access and expertise to assist in the planning of the *Medic One/EMS 2008-2013 Strategic Plan.*

Steering Committee Members:

Allen Church	Chief, South King Fire & Rescue
Gregory Dean	Chief, Seattle Fire Department
Mickey Eisenberg, MD	Regional Medical Director, King County EMS
Tom Hearne	Director, EMS Division, Public Health - Seattle & KC
Marcus Kragness	Chief, Shoreline Fire Department
Mario Trevino	Chief, Bellevue Fire Department

Technical Stakeholders consisting of representatives from the following areas:

- Medical Program Directors
- Paramedic Providers
- Fire Departments and Districts
- Dispatch Agencies
- Private Ambulance Companies
- Labor

Bob Berschauer	Director of Operations, American Medical Response
Jeff Blake	Chief, Kirkland Fire Department
Allen Church	Chief, South King Fire & Rescue
Michael Copass, MD	Medical Director, Seattle Medic One Program
David Daniels	Chief, Renton Fire Department
Gregory Dean	Chief, Seattle Fire Department
Mickey Eisenberg, MD	Regional Medical Director, King County EMS
Chris Fischer	Director, Valley Communications Center
Tim Fuller	Chief, Redmond Fire Department
Tom Hearne	Director, EMS Division, Public Health - Seattle & KC
Greg Kipp	Chief Administrative Officer, Public Health - Seattle & KC
Marcus Kragness	Chief, Shoreline Fire Department
John Rickert	Commissioner, South King Fire & Rescue
Jim Schneider	Chief, Kent Fire & Life Safety
Mario Trevino	Chief, Bellevue Fire Department
Mike Wilson	District #8 Representative, WA State Council of Fire Fighters
Keith Yamane	Acting Chief, Vashon Island Fire & Rescue

Finance Representatives from:

Auburn Finance Department
City of Bellevue Finance Department
Bellevue Fire Department
Federal Way Finance Division
King County Office of Management & Budget
Kirkland Department of Finance & Administration
Redmond Finance & Business Solutions Department
Renton Finance Department
Seattle Finance Department
Seattle Fire Department
Shoreline Finance Department
Vashon Island Fire & Rescue

Elected Official Committee Members:

Ron Sims, Chair	King County Executive, King County*
Terry Anderson, Vice Chair	Councilmember, City of SeaTac*

Cities with 50,000 + in population:

City of Bellevue:

Grant Degginger	Mayor, City of Bellevue*
John Chelminiak	Councilmember, City of Bellevue**

City of Federal Way:

Mike Park	Mayor, City of Federal Way*
Linda Kochmar	Councilmember, City of Federal Way**

City of Kent:

Tim Clark	Councilmember, City of Kent*
Jim Schneider	Chief, Kent Fire Life & Safety**

City of Renton:

David Daniels	Chief, Renton Fire Department*
Larry Rude	Deputy Chief, Renton Fire Department**

City of Seattle:

Gregory Nickels	Mayor, City of Seattle*
Gregory Dean	Chief, City of Seattle Fire Department**

City of Shoreline:

Bob Ransom	Mayor, City of Shoreline*

Suburban Cities Association:

Ron Hansen	President, Suburban Cities Association* Councilmember, City of Shoreline

* Denotes Representative
** Denotes Alternate Representative

King County Council:

Polly St. John	Senior Legislative Analyst* King County Council Budget Committee

King County Fire Commissioners Association:

Roger Hershey	President, King County Fire Commissioners Association* Commissioner, South King Fire and Rescue
Jim Farrell	Boardmember, King County Fire Commissioners Association* Commissioner, King County Fire Protection District 44 Mountain View Fire and Rescue

Labor:

Greg Markley	WA State Council of Fire Fighters*

Medical Directors:

Michael Copass, MD	Medical Director, Seattle Medic One Program*
Mickey Eisenberg, MD	Regional Medical Director, King County EMS*

Paramedic providers not represented by cities with 50,000+ in population:

Gayle Sommers	Commissioner, Vashon Island Fire and Rescue*
Rosemarie Ives	Mayor, City of Redmond*
Jane Christenson	Assistant to the Mayor, City of Redmond**

* Denotes Representative
** Denotes Alternate Representative

The willingness of King County EMS Division staff to facilitate and lead meetings, prepare briefings, and provide substantial financial research and costing support was greatly appreciated.

Emergency Medical Services (EMS) Division Staff

Tom Hearne	Division Director
Helen Chatalas	Levy Planning Manager
Cynthia Bradshaw	Finance Officer
Linda Culley	Community Programs Section Manager
Mike Helbock	Training Section Manager
Michele Plorde	Planning Section Manager

Participation in the development of the recommendations was certainly not limited to those identified on the committees above; interested parties convened to monitor the process, resulting in the development of subcommittees and technical work groups that grew substantially over the span of this levy planning process. The King County EMS Division would like to recognize and thank these individuals who spent an inordinate amount of time sharing their ideas and insight. They went above and beyond our expectations for participation in this process.

The broad-based membership of these committees, coupled with an open process that sought input from numerous interested constituencies, assures that the *Medic One/EMS 2008-2013 Strategic Plan* clearly reflects the collective thoughts and perspectives of the communities served by the Medic One/EMS system.

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Commonly Used Acronyms:

Emergency Medical Services (EMS)
Advanced Life Support (ALS)
Basic Life Support (BLS)
Regional Services/Strategic Initiatives (RS/SI)
Emergency Medical Dispatch (EMD)
Emergency Medical Technician (EMT)
Assessed Value (AV)

EXECUTIVE SUMMARY

STRATEGIC PLAN OVERVIEW

The Medic One/Emergency Medical Services (EMS) system provides life-saving medical assistance to all residents of King County. It is recognized as one of the best emergency medical services programs in the country, and its response model has garnered an international reputation for innovation and excellence in out-of-hospital emergency care. It serves over 1.8 million people throughout King County and, on average, responds to a medical emergency in the region every three minutes. In 2005, Medic One/EMS responded to over 162,000 calls for assistance.

The highly praised patient and program services of the Medic One/EMS system are funded by a Medic One/EMS levy that expires December 31, 2007. To continue providing this vital service in 2008 and beyond, a new strategic plan, defining the roles, responsibilities and programs for the system, and a levy rate to fund these approved functions, needed to be crafted.

In early October 2005, the King County EMS Division initiated a region-wide effort to review the issues and options facing our system, and develop recommendations for the next strategic plan. This process brought together Stakeholders that represented the full range of Medic One/EMS providers - urban and rural fire departments and districts, paramedic providers, emergency physicians and medical directors, labor representatives, finance specialists, dispatch agencies and private ambulance companies. Elected officials and appointees from large cities, suburban cities, and fire districts joined the discussions later in the process to advise the group about potential political concerns with the recommended levy proposal.

In total, these Stakeholders spent one year reviewing the needs of the Medic One/EMS system, the financial and programmatic policies necessary to meet these needs, and the impacts that a specific levy type, length and rate might have on the regional system and taxpayers. In addition, issues regarding the state requirements for validation and the timing of when to ask voters to support such a levy had to be considered.

In October 2006, regional representatives developed consensus around the future funding and operational plans for a 2008-2013 Medic One/EMS levy, unanimously endorsing a levy proposal that they deemed appropriate and prudent.

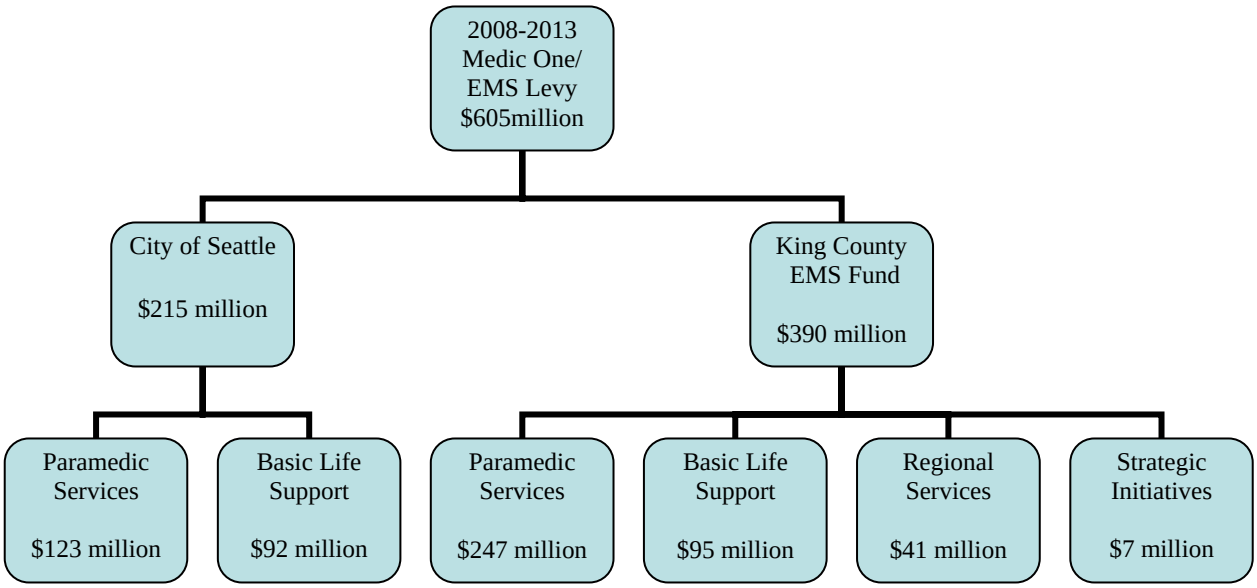
This document summarizes the results of these discussions, and includes the Stakeholders' approved proposals:

- A six-year Medic One/EMS levy at $.30 per $1,000 Assessed Value (AV);
- A financial plan that provides full funding for Advanced Life Support (ALS)/ paramedic service and identifies ALS as a funding priority;
- The funding of an anticipated 3.0 new paramedic units over the span of the six-year levy period to maintain existing levels of services in anticipation of moderate growth in call volumes and anticipated increases in the age of the population in the region;
- Provision of paramedic service to outlying areas;
- A funding increase for Basic Life Support (BLS) services, tying BLS financial support to incidents where BLS most closely supports paramedic services;

- Sustained and enhanced funding in anticipation of expected demands for the Core Regional Services/Programs that support the Medic One/EMS system;
- Continued emphasis on Medic One/EMS Strategic Initiatives designed to improve patient care, manage growth in paramedic services, and develop system efficiencies and cost savings;
- Development of a reserve fund to address unanticipated service or demand needs, potential emergencies, and/or significant changes in strategic and financial plan assumptions; and
- Placement of this proposal on the November 2007 General Election ballot.

The overall levy is structured into four main funded programs: Advanced Life Support Services (ALS), Basic Life Support Services (BLS), Regional Services, and Strategic Initiatives. ALS services are provided by six primary agencies, BLS services are provided by 32 fire departments and districts, and Regional Services and Strategic Initiatives are provided by the King County EMS Division. The following table shows estimated expenditures by program:

2008-2013 Projected Expenditures by Fund and Program



The theme during this planning process was 'transparency, input, and collaboration'. These three values were critical in ensuring that a strong regional consensus was obtained regarding Medic One/EMS service priorities among the full range of Medic One/EMS providers throughout King County. As such, this is the first Medic One/EMS strategic plan where the programmatic and financial sections include combined City of Seattle and King County EMS Fund levy information at a detailed level.

INTRODUCTION AND BACKGROUND: THE MEDIC ONE/EMS SYSTEM

PURPOSE OF THE MEDIC ONE/EMS STRATEGIC PLAN

The *Medic One/EMS 2008-2013 Strategic Plan* is the primary policy and financial document that will direct the Medic One/EMS system into the future. It details the system's current accomplishments, and recommends the necessary steps to ensure the system can meet tomorrow's commitments. The plan provides a description of the programmatic Medic One/EMS services to be supported throughout the levy, and a financing plan to implement these recommendations.

The recommendations put forth in the *Medic One/EMS 2008-2013 Strategic Plan* were developed and approved by both public and private regional partners, local Advanced Life Support (ALS) and Basic Life Support (BLS) providers, regional elected officials, the King County Executive's Office, and the King County EMS Division.

Objectives of the Medic One/EMS System

Global objectives for the Medic One/EMS system to ensure it remains a regional, cohesive, medically-based, tiered response system are:

1. Maintain the Medic One/EMS system as an integrated regional network of basic and advanced life support services provided by King County, local cities, and fire districts.

    - Emergency Medical Dispatchers receive 9-1-1 calls from citizens and rapidly triage the call to send the appropriate level of medical aid to the patient while providing pre-arrival instructions to the caller.
    - Fire fighters, trained as Emergency Medical Technicians, provide rapid, first-on-scene response to emergency medical service calls and deliver immediate basic life support services.
    - Paramedics, trained through the Paramedic Training program at the University of Washington/Harborview Medical Center, provide out-of-hospital emergency medical care for serious or life-threatening injuries and illness. As has been adopted in prior Medic One/EMS strategic and master plans, Advanced Life Support will be most cost effective by delivering services on a sub-regional basis with a limited number of providers.
    - Regional programs emphasize uniformity of medical care across jurisdictions, consistency and excellence in training, and medical quality assurance.

2. Make regional delivery and funding decisions cooperatively, and balance the needs of Advanced Life Support (ALS), Basic Life Support (BLS), and regional programs from a system-wide perspective.

3. Develop and implement strategic initiatives to provide greater efficiencies within the system that:

    - Maintain or improve current standards of patient care;
    - Improve the operational efficiencies of the system to help contain costs; and
    - Manage the rate of growth in the demand for Medic One/EMS services.

THE MEDIC ONE/ EMS SYSTEM DESIGN AND OPERATION

Anytime you call 9-1-1 for a medical emergency, you are using the **Medic One/EMS system**. In the late 1970's, Leonard A. Cobb, M.D. and Chief Gordon Vickery, Seattle Fire Department, pioneered this system to deliver pre-hospital emergency care in King County. The program was novel in that it placed a team of highly specialized paramedics in the field, responding only to the most critical calls for medical assistance, especially cases of cardiac arrest. Recognized by the American Heart Association in 1991 as the 'Chain of Survival', the system identifies the interdependence of essential links that are directly tied to cardiac patient survival and health status.

The **five major components** in the regional tiered Medic One/EMS system are:

Universal Access: A patient or bystander accesses the Medic One/EMS system by calling 9-1-1 for medical assistance. Citizens' rapid responses to an accident can greatly impact the chances of patient survival.

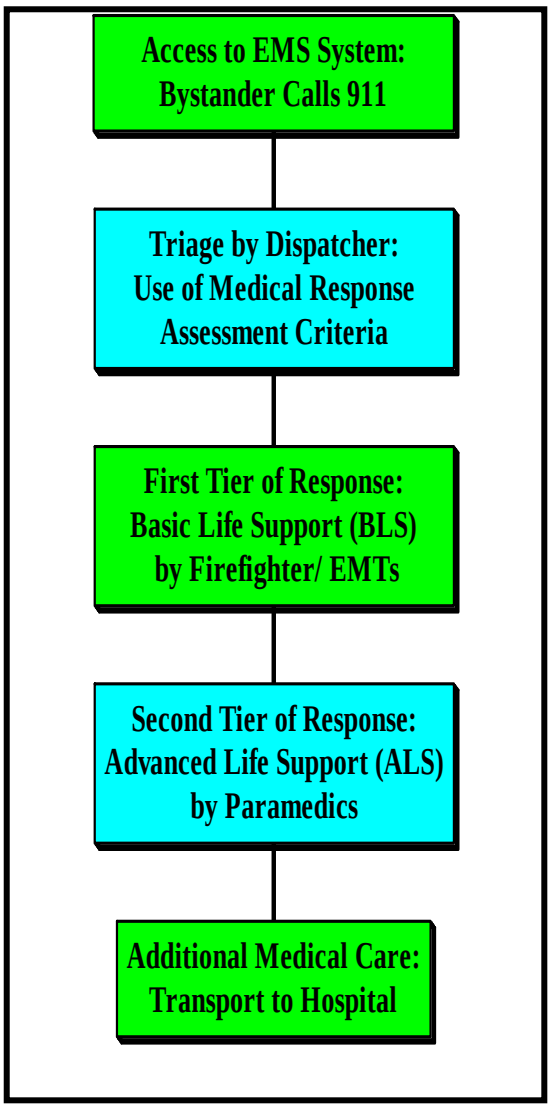
Dispatcher Triage: Calls to 9-1-1 are received and triaged by professional dispatchers who determine the most appropriate level of care needed. Dispatchers are trained to provide pre-arrival instructions for most medical emergencies, and guide the caller through life-saving steps, including CPR and AED instructions, until the Medic One/EMS provider arrives.

Basic Life Support (BLS) services: BLS personnel are the "first responders" to an incident, providing immediate basic life support medical care that includes advanced first aid and CPR/AED to stabilize the patient. Staffed by firefighters trained as Emergency Medical Technicians (EMTs), BLS units arrive at the scene on average under five minutes.

Advanced Life Support (ALS) services: Paramedics provide ALS out-of-hospital emergency medical care for critical or life-threatening injuries and illness. Paramedics respond on average to about 30% of all Medic One/EMS responses.

Transport to Hospitals: Once a patient is stabilized, it is determined whether transport to a hospital or clinic for further medical attention is needed. Transport is provided either by an ALS agency, BLS agency, or private ambulance.

Tiered Medic One/EMS Response System



Today, the regional Medic One/EMS system provides an internationally renowned regional service to the residents of King County, responding in an area of 2,134 square miles and serving a population over 1.8 million. It operates in coordinated partnerships based on the acknowledgement by the BLS

agencies and ALS providers that the benefits of regionalization, collaboration, and cross-jurisdictional coordination far exceed the individual benefits associated with other Medic One/EMS service delivery and funding mechanisms. The success of the system is testimony to the commitment of all its participants to providing high quality services to the residents of King County.

Monitoring the uniformity and consistency of the system is the EMS Advisory Committee. Developed in late 1997, this Committee provides key counsel to the King County EMS Division regarding regional Medic One/EMS policies and practices in King County. Members convene on a quarterly basis to review the implementation of strategic plans as well as other proposals put forward, including Strategic Initiatives and medic unit recommendations. The Committee also reviews major governance and consolidation issues, such as the South King County feasibility study and the successful transition of Evergreen Medic One to the Redmond Medic One consortium.

EMS LEVY STATUTE

The ability to provide emergency medical services using a regional EMS property tax levy was passed by the Washington State legislature in 1979. The Revised Code of Washington (RCW) 84.52.069 allows jurisdictions to levy a property tax for the purpose of providing emergency medical services. This levy is subject to the growth limitations contained in RCW 84.52.050 of 1% per year plus the assessment on new construction, even if assessed values increase at a higher rate. Specifically, RCW 84.52.069:

- Allows a jurisdiction to impose an additional regular property tax up to $0.50 per $1,000 Assessed Value (AV);
- Allows for either a six-year, ten-year, or permanent levy period;
- Requires for passage an approval rate of 60% or greater at an election for which the voter turnout must exceed 40% of the prior general election; and
- Mandates that King County and cities with populations in excess of 50,000 approve the levy proposal prior to placement on the ballot. The Medic One/EMS levy is a countywide levy and requires voter approval every levy period. In addition to the King County Council, cities required to approve the ballot proposal prior to placement on the ballot are Bellevue, Federal Way, Kent, Redmond[1], Renton, Seattle and Shoreline.

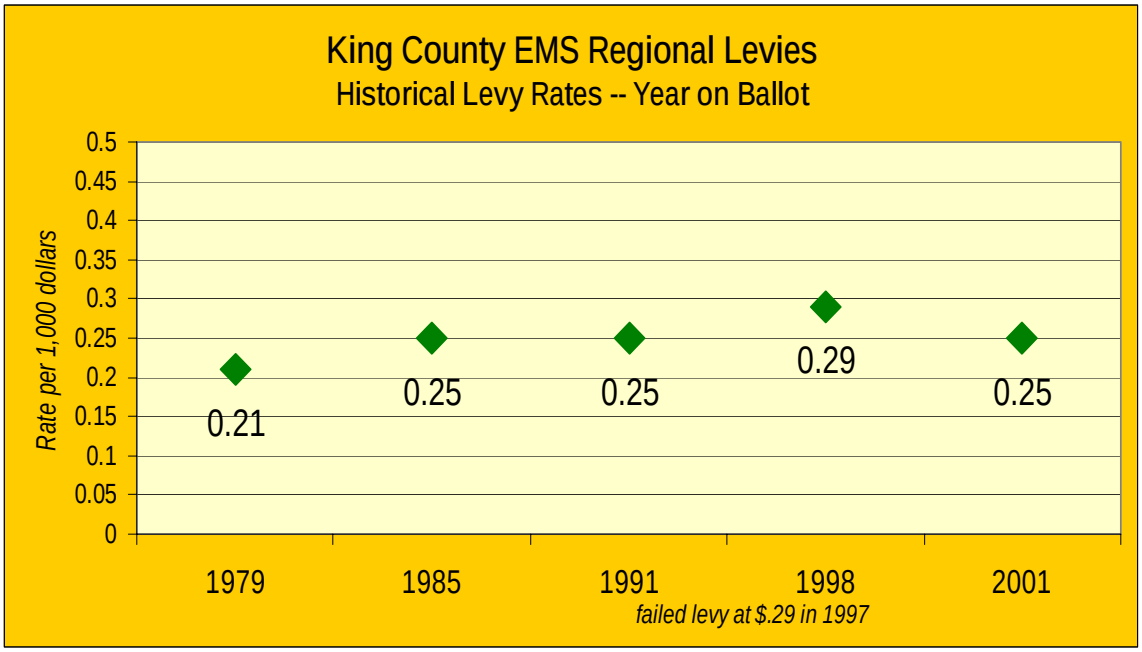
The primary purpose of the 1979 Medic One/EMS levy was to fund Advanced Life Support/ paramedic services (ALS) on a countywide basis. This levy also included funding for Regional Services and partial funding for Basic Life Support (EMT/Firefighters). Funding for Strategic Initiatives was added in 1998. While Medic One/EMS levies have contributed funding to fire agencies for providing BLS services, local jurisdictions have covered the majority of the cost.

Most other jurisdictions in Washington State have Medic One/EMS levies at $0.50 per $1,000 AV. King County has been able to fund the system at a lower rate due to the cost efficiency of the regional system, the high assessed values in the county, and the fact that the majority of BLS costs are paid by local jurisdictions.

Regional property tax levies to support a regional Medic One/EMS levy in King County have been passed in 1979, 1985, 1991, 1998 and 2001. The levies have typically been approved for six-year

[1] The King County Demographer estimates that the City of Redmond will have more than 50,000 residents by the end of 2006.

periods with rates in recent years ranging from $.25 per $1,000 AV to $.29 per $1,000 AV. Although state law now permits Medic One/EMS levies to be approved for six years, ten years, or on a permanent basis, and for an amount up to $.50 per $1,000 AV, Medic One/EMS levies in King County have never been authorized for more than six years nor exceeded $.29 per $1,000 AV.



In 1997, the levy fell short of acquiring the supermajority approval vote necessary for its passage. The County responded by creating a Financial Planning Task Force to research alternative funding options for the Medic One/EMS system, and by placing a three-year, 29-cent levy on the February 1998 ballot.

The Task Force's emphasis was to conduct analysis of long term funding possibilities that would 'allow the County to reduce its reliance on property tax levies to support EMS'. Agreeing that ongoing stable funding would be required to ensure a consistent emergency medical delivery system, this Task Force examined an extensive range of funding sources, including a dedicated sales tax, E-911 telephone excise tax, liquor tax, insurance premium tax, business & occupation tax, utility taxes, payroll taxes, and variations of a regional property tax. Other possibilities included funding from the King County general fund, charging fees for ALS transports, subscription service fees, or DUI/moving violations fees, and the use of tobacco settlement money.

The major obstacle concerning most of these funding sources was the need to seek new or different taxing authority from the State Legislature. It was deemed unlikely at the time that the Legislature would support changing the Medic One/EMS funding legislation, which is the funding option used by most jurisdictions throughout the state, solely for the sake of King County. The Task Force methodically eliminated the options that were neither reliable nor stable long-term funding sources, and ultimately recommended that the region continue with a six-year Medic One/EMS property tax levy.

The Task Force also specifically required that an evaluation of the legal, financial, administrative and operational issues of ALS transport fees as a potential revenue source be performed during the 2002-2007 levy period. The assessment, conducted in August 2005, concluded that a fee for transport

could deter patients from calling for assistance thus jeopardizing their health, generate a small level of funding compared to the great infrastructure and personnel investments needed to develop, implement, and manage such a process, and contradict the Medic One/EMS mission of funding 100% of ALS via the Medic One/EMS levy.

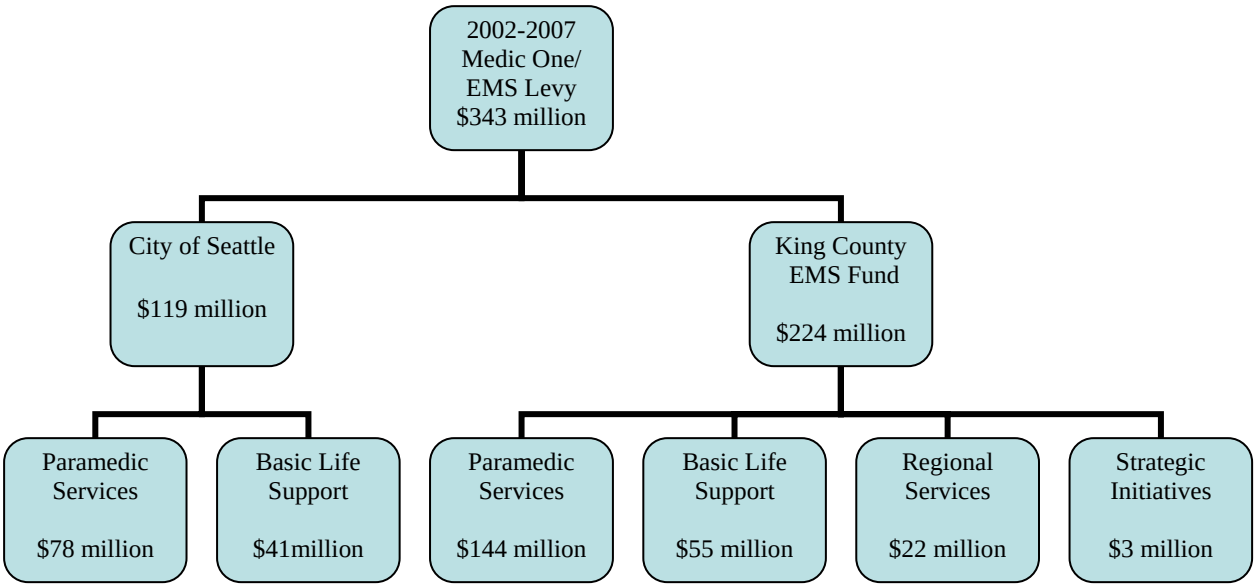
As a result of these findings, a dedicated property tax levy was the preferred funding option to support the Medic One/EMS system from 2008 to 2013.

THE 2002-2007 MEDIC ONE/EMS LEVY

The 2002-2007 Medic One/EMS levy was approved for a period of six years at a levy rate of $.25 per $1,000 AV. Over the span of the entire 2002-2007 levy, it is expected to have raised $343.4 million, with approximately $59 million raised countywide in 2006.

Per an agreement with King County, Seattle receives all Medic One/EMS levy funds raised within the city limits. County funds are placed into the KC EMS Fund and managed regionally by the King County EMS Division, based on policy guidelines within the *Medic One/EMS 2002-2007 Strategic Plan* and recommendations from the EMS Advisory Committee.

2002-2007 Expected Expenditures by Fund and Program



The programs supported by the Medic One/EMS levy are:

- First response Basic Life Support (BLS) services;
- Paramedic services, or Advanced Life Support (ALS) services;
- Regional Support Services; and
- Strategic Initiative coordination and implementation.

ALS services are provided by six primary agencies, BLS services are provided by 32 fire departments and districts, and Regional Services and Strategic Initiatives are provided by the King County EMS Division. Expenditures are tracked, reviewed and reported at a programmatic level.

2002-2007 Estimated Expenditures by Program

Medic One/EMS Levy		
Estimated 2002-2007 Expenditures by Program		
In Millions		
Program	**2002-2007**	
ALS	$	222.2
BLS	$	95.9
Regional Services	$	22.2
Strategic Initiatives	$	2.8
Total Combined	**$**	**343.1**

Advanced Life Support (ALS) Services: ALS funding has been, and continues to be, the priority of the Medic One/EMS levy. Paramedic service in the City of Seattle is provided by the Seattle Fire Department with Medic One/EMS levy funds provided directly to the City. Paramedic Service in the balance of King County is provided by five major paramedic provider agencies: Bellevue Fire Department (Bellevue Medic One), King County (King County Medic One), Redmond Fire Department (Redmond Medic One), Shoreline Fire Department (Shoreline Medic One), and Vashon Island Fire & Rescue. In addition, there is currently a contract with Snohomish County Fire District #26 to provide services to the Fire District #50/Skykomish/ Stevens Pass area.

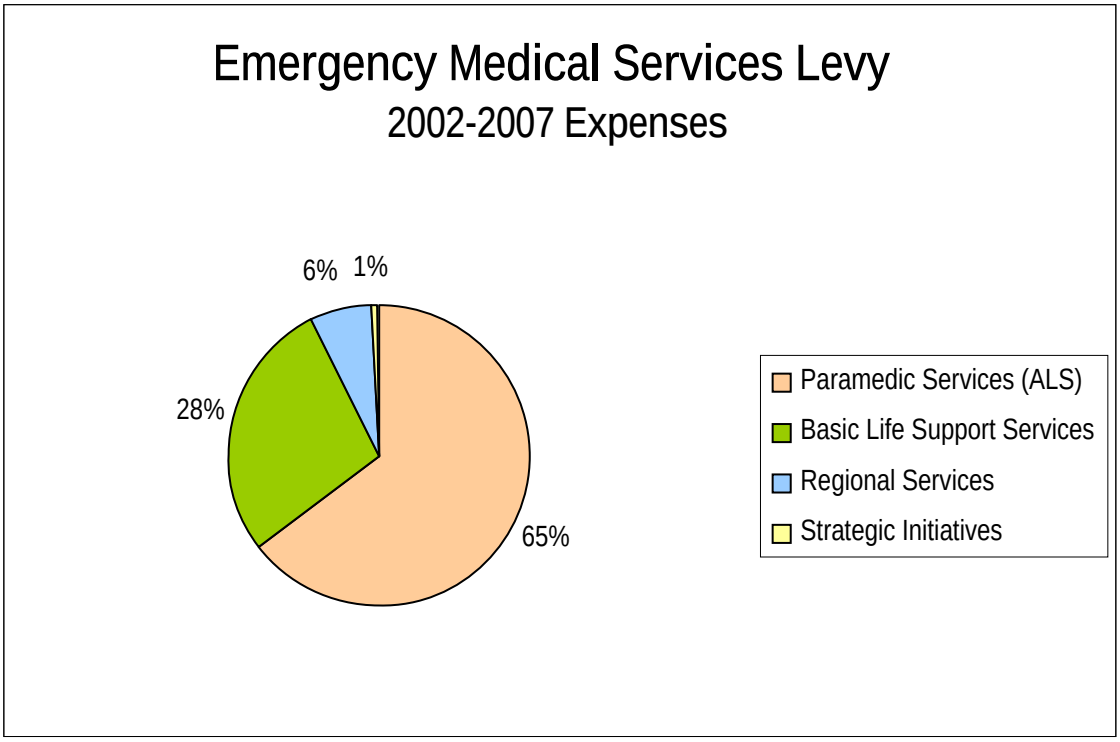
The Medic One/EMS levy supports ALS services using a *standard unit cost* methodology determined by staffing paramedic units with two Harborview-trained paramedics, 24-hours a day, 365 days a year. Contracts with the major paramedic providers from the KC EMS Fund are based on the per unit cost basis.

Basic Life Support (BLS) Services: The levy provides partial funding to BLS providers to help ensure uniform and standardized patient care throughout the system, and enhance BLS services. BLS services are provided, outside the City of Seattle, by 31 local fire departments and fire districts. Beginning in 2002, the total amount of BLS funding was increased by the local area Consumer Price Index (CPI) each year as noted in the *Medic One/EMS 2002-2007 Strategic Plan*.

Regional Services**:** Core regional Medic One/EMS programs and services support 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 programs is imperative in supporting a standard delivery of pre-hospital patient care, developing regional policies and practices that reflect the diversity of needs, and maintaining the balance of local area service delivery with centralized interests.

Strategic Initiatives**:** The term 'Strategic Initiative' is used to describe new programs that lead to successfully implementing the strategic directions of improving the quality of Medic One/EMS services, and managing the growth and costs of the system. Strategic Initiatives are funded with

lifetime budgets. Inflationary assumptions, similar to those used by Regional Services, are included in these lifetime budgets. However, the overall lifetime budgets are not adjusted to reflect small changes in CPI.



MEDIC ONE/EMS 2008-2013 LEVY PLANNING PROCESS

With the 2002-2007 levy ending December 31, 2007, a new strategic plan, indicating the roles, responsibilities and programs for the system, and a levy rate to fund these approved functions, needed to be developed. This would entail not just a detailed review of the concepts and operations of the Medic One/EMS system, but also an all-inclusive planning process to secure consensus for the plan among Medic One/EMS providers in the region.

ISSUES FOR CONSIDERATION

Two assumptions from the *Medic One/EMS 2002-2007 Financial Plan* contributed to the success of the 2002-2007 levy: a levy structure that collected funds in the early years to cover increased costs during the later years of the levy, and conservative forecasts for growth of new construction. However, two significant assumptions created financial difficulties from 2002-2007. First, expense escalators that underestimated the actual costs of providing services were used. Secondly, there was no contingency reserve to cover unanticipated needs.

Cost Inflator: For the *Medic One/EMS 2002-2007 Financial Plan*, CPI was selected as the annual inflator for expenditures. However, many of the costs for ALS services traditionally inflate at rates higher than CPI. These include salaries, benefits, medical supplies and pharmaceuticals.

Unanticipated Needs: Several unanticipated needs developed soon after the passage of the Medic One/EMS levy in November 2001. These included a request from the medical directors to change the composition of the two EMT/P units, staffed by one EMT and one paramedic, to full two-paramedic units. Since the *2002-2007 Financial Plan* did not have a contingency reserve, there were no funds available or specified within the financial plan to accommodate the request.

Structuring the levy so that funds could be raised and placed in a fund balance during the early years of the levy to pay for expenses in the later years allowed the system to grow, as planned, in response to increased service demands. Growth in new construction that was above what was projected in the financial plan helped the Medic One/EMS system address some of the unplanned needs.

In addition to these issues, challenges remained concerning how to address the disparity between how much it costs BLS agencies to provide Medic One/EMS services and how much the BLS agencies receive through the Medic One/EMS levy. BLS agencies were looking for strategies both within a regional levy and outside the levy to help cover their costs.

Preserving the assets of the levy structure, resolving the inherent problems discovered during the current levy, and identifying other potential financial issues played a large role throughout the 2008-2013 levy planning process.

THREE-PHASE PLANNING PROCESS

The *Medic One/EMS 2008-2013 Strategic Plan* is the direct result of 12 months of planning meetings, during which major Stakeholders, representing the full range of Medic One/EMS providers, convened to develop the future direction and basis for the next Medic One/EMS levy. The recommendations in this document build upon the system's current successful medical model and regional approach, establish new policy directions, and present a financial plan to support the Medic One/EMS system through the span of the next levy.

These recommendations reflect collaborative efforts from regional partners both public and private, local ALS and BLS providers, labor and elected officials. This collaboration by these area Medic One/EMS stakeholders was crucial to ensure continued regional support of critical emergency medical services currently funded by the Medic One/EMS levy.

The region-wide planning process was aimed at addressing several important regional goals:

- Maintain the strong and successful medical model that has served the residents of the region so well;
- Develop a clear and comprehensive Medic One/EMS Strategic Plan, one that builds on the directives laid out in the *Medic One/EMS 2002-2007 Strategic Plan*; and
- Support regional participation, complete discussion and review of the issues, and obtain strong regional consensus.

To achieve these goals, a three-phase regional planning process was established and driven by the Stakeholders.

Phase I - The Technical Advisory Stage

A Technical Advisory Group convened in October 2005 to review the Medic One/EMS system as a whole, discuss issues and options facing the system, set clear funding priorities, and draft recommendations for the next Medic One/EMS levy.

For eight months, this Stakeholder Group, consisting of emergency physicians, paramedic providers, fire departments and districts, dispatch centers, hospitals, private ambulance companies, labor and finance officers, evaluated the financial and policy needs of the Medic One/EMS system. Several subcommittees were organized around the primary service areas and played a significant role in preparing a draft proposal that addressed those identified needs within the Medic One/EMS programs.

The overall guiding principles of the Stakeholders were to develop methods to improve the system with programs and services that met projected growth for Medic One/EMS services, and improved current standards of out-of-hospital patient care and patient outcomes. Obtaining these goals was carefully balanced with using existing resources efficiently and ensuring patient care was not compromised in any way.

The Technical Stakeholders were unanimous in their desire to keep the current Medic One/EMS system, with its successful medical model and integrated regional network of basic and advanced life support services, in place. Key issues considered in meeting the objective of maintaining the system in its current form included:

- Ensure continued paramedic service across the county and plan for future paramedic service in order to maintain current service levels;
- Provide full funding for paramedic service as a priority in the proposed 2008-2013 levy and utilize appropriate and adequate annual increases to ensure full funding is maintained;
- Continue to manage the rate of growth of paramedic services through effective and safe use of dispatch guidelines;
- Secure additional financial support for BLS to fire departments and fire districts across the county to help offset the rising cost of service provision;
- Use existing resources more efficiently;
- Develop program recommendations for Regional Support services; and
- Identify new and innovative Strategic Initiatives.

In June 2006, the group completed its task and forwarded its preferred recommendations to the Elected Officials Committee for its review and approval, thus beginning Phase II.

Phase II - The Elected Official Stage

In July 2006, the King County Executive brought together a group of elected officials to analyze and adopt the Medic One/EMS program recommendations that would become the regional *Medic One/EMS 2008-2013 Strategic Plan*. On the agenda were the following items:

- Approval of the Programmatic Recommendations developed by the Technical Stakeholders during Phase I;
- Levy Type;
- Levy Length;
- Levy Rate; and
- Levy Ballot Timing.

Type of Levy: While the Medic One/EMS system has historically been funded through a Medic One/EMS levy, other potential options exist to support the system, such as general fund levy lid lifts. These alternatives are not subject to the validation requirements that a Medic One/ EMS levy is required to meet, such as securing a 40% voter turnout for the election or obtaining a super-majority approval vote for passage. As a regular property tax, the Medic One/EMS levy is subject to the 1% growth limitation ratified by Initiative 747. A general fund levy lid lift is also subject to the limitation of Initiative 747, although an option for a general fund multi-year lid lift is not.

Length of Levy: State law offers three levy length options for a Medic One/EMS levy: six years, ten years, or permanent. Historically in King County, the Medic One/EMS levy has been approved for six-year periods, with the exception of a three-year levy following the levy failure in November 1997. Attractive to Medic One/EMS providers and elected officials alike was securing a permanent levy to ensure a more stable funding source for the Medic One/EMS service, instead of being subject to voter approval every six or ten years. However, providing the additional oversight necessary for longer levy periods has been a deterrent.

Levy Rate: RCW 84.52.069 authorizes a Medic One/EMS levy rate up to $0.50 per $1,000 AV. The first $0.30 of this amount is held exclusively for Medic One/EMS. The additional $0.20 is secondary to other levies and could roll back any Medic One/EMS levy authorization above $0.30. Under state

law, local jurisdictions could seek local voter approval for any additional levy capacity not included in the regional Medic One/EMS levy, but not in the same year the regional Medic One/EMS levy is on the ballot.

King County has not authorized a levy above 29 cents, and no jurisdiction has ever sought the additional levy capacity. The Medic One/EMS levy rate selected for 2008 - 2013 will be driven by regional recommendations concerning the number and level of support for paramedic services, the addition of new services, the amount allocated for BLS, and the amounts allocated to core regional support services and new strategic initiatives.

Levy Ballot Timing: A Medic One/EMS levy can be run at any election, and choosing when to put the levy before the voters is a crucial decision. Competing ballot measures, the consequences of launching an all-mail-ballot election process, a revised primary election date, and modified processing regulations were all factors considered by the Elected Officials Committee.

After four months, the group completed its work in October 2006, and endorsed sending **a six-year, 30-cent Medic One/EMS levy to the voters at the 2007 General Election.** The proposal then proceeded to Phase III of the levy planning process, which is to gain the approval of the elected bodies of cities greater than 50,000 in population in King County and the King County Council.

Phase III - The Councils' Approval Stage

In order for the Medic One/EMS levy to be placed on the ballot countywide, state law requires that the program and financial recommendations, along with the levy rate to implement these recommendations, be approved by the councils of those cities over 50,000 in population (Bellevue, Federal Way, Kent, Redmond[2], Renton, Seattle, and Shoreline), and the King County Council. After approval is obtained, the measure can be placed on the ballot.

[2] The King County Demographer estimates that the City of Redmond will have more than 50,000 residents by the end of 2006.

MEDIC ONE /EMS LEVY RATE OPTIONS

OVERVIEW

The theme of a widening variance between Medic One/EMS costs and Medic One/EMS levy revenues has continued from previous levy planning periods. Due to the challenges and objectives already mentioned, continuing the Medic One/EMS levy at 25-cents per $1,000 AV would not fund the projected increased cost and demand for Medic One/EMS services expected in the 2008-2013 levy period. As a result, various levy rate options for funding the system during the 2008-2013 levy period were developed.

These options ranged from a 27-cents per $1,000 AV possibility that would fund the costs of continuing current services but not fund any new services aside from a contingency fund, to the Original Technical Stakeholder Draft Proposal of 38-cents per $1,000 AV that would more adequately fund the costs of all services provided by the Medic One/EMS system.

After reviewing the 27-cent No New Service Option and the 38-cent Original Technical Stakeholder Draft Proposed Recommendation, Stakeholders directed each subcommittee to review its recommendations and develop cost-savings that would result in a lower levy rate. The ALS Subcommittee was able to reduce the estimate for new units from 3.5 to 3.0 over the duration of the levy period, and adjusted the implementation dates of the new units to reduce costs. The BLS Subcommittee was able to devise an option that tied funding to the number of critical ALS calls that were supported by BLS, later defined as the number of calls that required ALS transport. Regional Services/Strategic Initiatives managers were able to reduce funding, share resources and adjust cash flow without compromising programs. **These changes resulted in a 30-cent levy rate.**

The 30-cent levy rate option continues funding services and programs from the 2002-2007 levy period, meets anticipated future demand in services, addresses deficiencies identified in the 2002-2007 levy period, and does not compete for funding authority with other levies.

The Technical Stakeholders Committee endorsed the 30-cent levy rate as its **Preferred Funding Option**, yet recommended that a levy package with the 27-cent No New Service Option, the 30-cent rate Preferred Option, and the 38-cent rate Original Technical Stakeholder Draft Proposed Recommendation, be forwarded to elected officials for discussion and review. The recommendation also supported jurisdictions using the remaining Medic One/EMS levy authority to seek increased funding for BLS services. The 30-cent levy Preferred Funding Option, including the ability to seek BLS funding via existing levy authority, was unanimously endorsed by elected officials.

There are several reasons why all of the levy rate options are higher than the current 25-cents per $1,000 AV levy.

- Costs of providing ALS services have increased;
- Costs of continuing those services added during the 2002-2007 levy, including new ALS units, must be incorporated into this funding level;
- Contribution toward the costs of Fire Districts and Departments providing BLS services has increased;

- Support of Regional Services and Strategic Initiatives as a crucial component of the Medic One/EMS system must be continued;
- Cost escalator assumptions have been improved so that the financial plan estimates the actual cost of providing services; and
- Contingency Reserve funds to address unanticipated service or demand needs, potential emergencies, and/or significant changes in strategic and financial plan assumptions have been included.

Preferred Funding Option - 30-cents per $1,000 AV
Recommended

The **Preferred Funding Option of 30-cents per $1,000 AV** is projected to provide:

Continued services from the 2002-2007 levy:

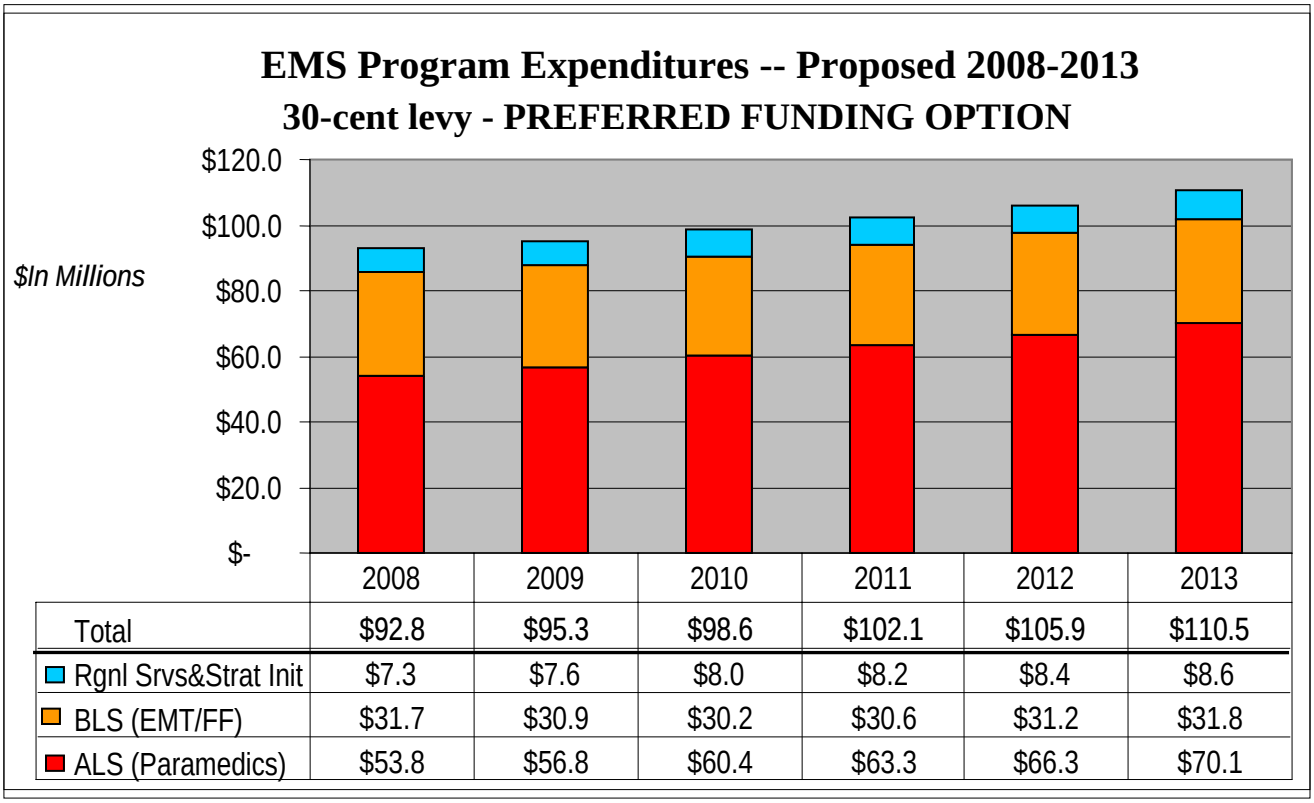
- Funding existing (25 medic units) paramedic services at 100% to prevent cost shifting to providers;
- Maintaining the upgrades of paramedic units for Woodinville, North Bend, Vashon and Skykomish;
- Continued partial funding for BLS services (Fire Fighters/EMTs);
- Maintaining the Core Regional Services/Programs that support the Medic One/EMS system; and
- Continuing the Strategic Initiatives enacted from 2002-2007 shown to improve quality of service and manage growth and costs, in accordance with the *Medic One/EMS 2008-2013 Strategic Plan.*

New services to meet expected demands:

- Funding for 3.0 additional medic units (projected: 1.0 in Seattle and 2.0 in King County);
- Additional BLS funding (BLS funding will still be a portion of overall BLS costs);
- Enhanced Dispatch programs to better manage Medic One/EMS service growth;
- Enhanced EMT education and training;
- Comprehensive Medical Quality Improvement program to strengthen medical oversight;
- Enhanced Injury Prevention program;
- Partial support for all-hazards management preparation and mitigation for Medic One/EMS providers;
- Enhanced data collection to track Medic One/EMS system demand and performance; and
- A contingency (6.9% of expenditures) provided for paramedic service, BLS service and Regional Services to ensure financial stability in the event of changing economic forecast and unanticipated service needs.

Total Expenditures for the 30-cent Option by Program Area

Program	**2008-2013**	**% of Total**
Advanced Life Support (ALS) Services	$371 million	61%
Basic Life Support (BLS) Services	$186 million	31%
Regional Services/Strategic Initiatives	$48 million	8%
TOTAL	**$605 million**	



	2008	2009	2010	2011	2012	2013	TOTAL
Total	$92.8	$95.3	$98.6	$102.1	$105.9	$110.5	$605.2
Rgnl Srvs&Strat Init	$7.3	$7.6	$8.0	$8.2	$8.4	$8.6	
BLS (EMT/FF)	$31.7	$30.9	$30.2	$30.6	$31.2	$31.8	
ALS (Paramedics)	$53.8	$56.8	$60.4	$63.3	$66.3	$70.1	

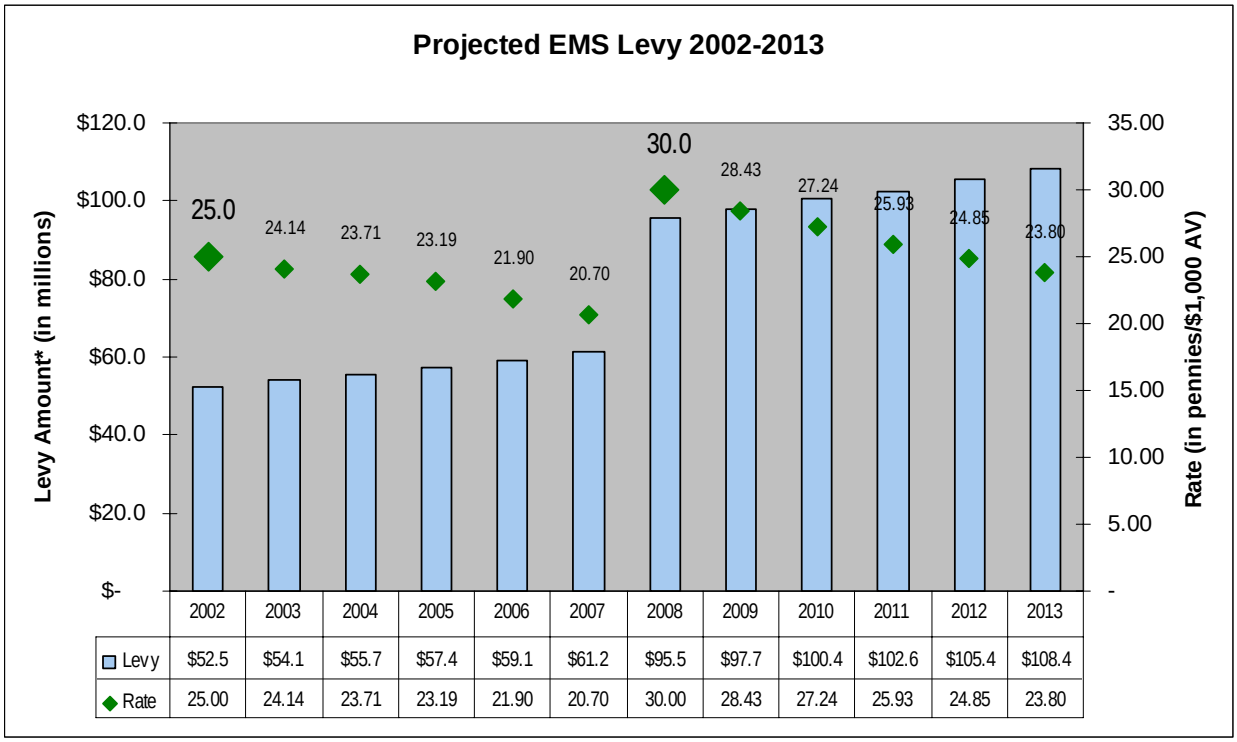
The following chart compares the key differences between the 2002-2007 levy and the 30-cent levy option.

Significant Differences Between Levy Rates

Option	Funding Level *	# of New ALS units	Pennies supporting BLS*	Regional Services	Strategic Initiatives	Contingency Reserve
2002-2007 Levy	*$.25*	*3.5*	*6*	*Existing*	*Existing*	*None*
Preferred Option	$.30	3.0	7	Existing, New Enhanced	Existing and New	Included

**Funding level in pennies per $1,000 assessed value*

The 30-cent Preferred Funding Option includes 0.5 fewer new ALS units that then 2002-2007 plan. BLS funding is slightly increased and tied to BLS support of the most critical calls (those requiring ALS transport), Regional Services is slightly enhanced, and existing Strategic Initiatives are incorporated into the core Regional Services program. The creation of a contingency reserve is a significant addition.



Levy shows full levy assessment (financial plan assumes 1% delinquency rate)
Rate is in cents per $1,000/AV

OTHER OPTIONS CONSIDERED BUT NOT RECOMMENDED

The following two funding options were developed and considered by the Technical Stakeholders, but not recommended.

No New Service Option - 27-cents per $1,000 AV
Not recommended

This option limited costs to only the provision of existing services and programs and did not include the addition of any new paramedic services to meet increased demand, or include any new Strategic Initiatives. It was projected that the increased demand for paramedic services during the 2008-2013 levy period would be derived not only from an increased population, but also from the changing demographics of the county, specifically the aging population. A contingency reserve is part of this option.

The No New Service Funding Option of 27-cents per $1,000 AV was projected to provide:
Continued services from the 2002-2007 levy:

- Funding the existing (25 medic units) paramedic services at 100% to prevent cost shifting to providers;
- Maintaining the upgrades of paramedic units for Woodinville, North Bend, Vashon and Skykomish;
- Continued partial funding for BLS services (Fire Fighters/EMTs);
- Maintaining the Core Regional Services/Programs that support the Medic One/EMS system;
- Continuing the existing 2002-2007 Strategic Initiatives shown to improve quality of service and/or manage growth and costs; and
- Inclusion of a contingency reserve.

New services to meet expected demands:

- None.

Substantial challenges with this option were the inability to address the total increased costs of providing services and the costs of continuing services begun in the 2002-2007 levy period, including 3.5 ALS units, converting EMT/P units to full two-paramedic units, and transferring successful Strategic Initiatives into the ongoing Regional Services program.

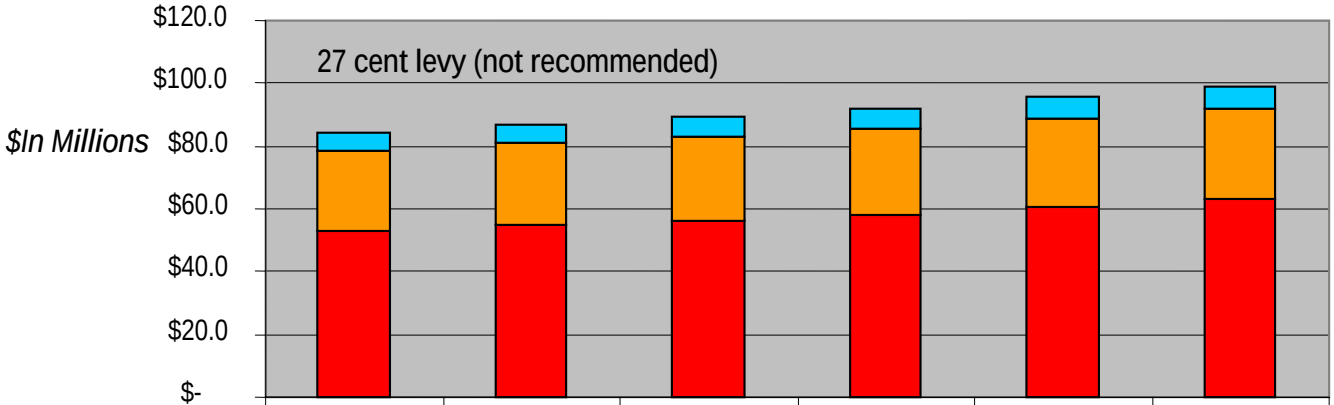
Specifics related to the decision not to recommend this option include:

- No funding for new paramedic units to meet the 9% projected increase in paramedic demand from 2008-2013. This demand reflected the projected growth and aging patterns in the region and population increases;
- No ability to increase BLS funding;
- No ability to enhance the current Core Regional Services/Programs that support the Medic One/EMS system; and
- No ability to create new Strategic Initiatives to continue improvements in quality of service and manage growth and costs, in accordance with the *Medic One/EMS 2008-2013 Strategic Plan*.

Total Expenditures for the 27-cent Option by Program Area

Program	2008-2013	% of Total
Advanced Life Support (ALS) Services	$346 million	63%
Basic Life Support (BLS) Services	$163 million	30%
Regional Services/Strategic Initiatives	$38 million	7%
TOTAL	**$547 million**	

EMS Program Expenditures Proposed 2008-2013
27-cent levy - No New Services
Not recommended



	2008	2009	2010	2011	2012	2013	TOTAL
TOTAL	$84.5	$87.0	$89.2	$92.2	$95.5	$98.8	$547.2
Rgnl Srvs&Strat Init	$5.9	$6.0	$6.2	$6.4	$6.6	$6.9	
BLS (EMT/FF)	$25.8	$26.4	$26.9	$27.4	$28.0	$28.5	
ALS (Paramedics)	$52.8	$54.6	$56.1	$58.4	$60.9	$63.4	

The Technical Stakeholders did not recommend this option as it does not include providing for anticipated demand for services.

Significant Differences Between Levy Rates

Option	Funding Level *	# of New ALS units	Pennies supporting BLS*	Regional Services	Strategic Initiatives	Contingency Reserve
2002-2007 Levy	*$.25*	*3.5*	*6*	*Existing*	*Existing*	*None*
Preferred Option	$.30	3.0	7	Existing, New Enhanced	Existing and New	Included
Continued Service	$.27	0	6	Existing only	Existing only	Included

**Funding level in pennies per $1,000 assessed value*

Original Technical Stakeholder Draft Proposed Recommendation
38-cents per $1,000 AV - Not recommended

The Original Technical Stakeholders Draft Proposal compiled the three financial recommendations from each of the three subcommittees (ALS, BLS, and Regional Services/Strategic Initiatives). The ALS Subcommittee originally proposed the addition of 3.5 new medic units (0.5 units higher than 30-cent option); the BLS subcommittee submitted a request for increased BLS funding equivalent to approximately 15-cents per $1,000 AV; and the Regional Services/Strategic Initiatives Subcommittee maintained the reductions it had made for the preferred 30-cent option.

There was significant apprehension about possible resistance to raising the Medic One/EMS levy rate from 25 cents to 38 cents. In addition, there was concern that the higher levy rate could potentially take taxing authority away from junior taxing districts. Based on these issues, the Technical Stakeholders did not recommend pursuing this option. However, they acknowledged the funding needs of BLS agencies, and developed a statement supporting the ability of individual agencies to place a levy on the ballot using levy capacity not used by the regional levy.

Total Expenditures for the 38-cent Option by Program Area

Program	**2008-2013**	**% of Total**
Advanced Life Support (ALS) Services	$378 million	53%
Basic Life Support (BLS) Services	$281 million	40%
Regional Services/Strategic Initiatives	$48 million	7%
TOTAL	**$707 million**	

Significant Differences Between Levy Rates

Option	**Funding Level ***	**# of New ALS units**	**Pennies supporting BLS***	**Regional Services**	**Strategic Initiatives**	**Contingency Reserve**
2002-2007 Levy	*$.25*	*3.5*	*6*	*Existing*	*Existing*	*None*
Continued Service	$.27	0	6	Existing only	Existing only	Included
DRAFT Recommendation	$.38	3.5	15	Existing, New Enhanced	Existing and New	Included
Preferred Option	$.30	3.0	7	Existing, New Enhanced	Existing and New	Included

**Funding level in pennies per $1,000 assessed value*

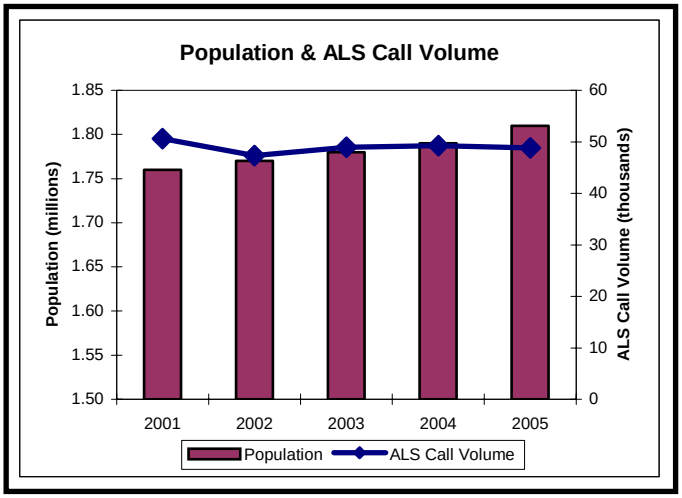
30-CENT PREFERRED OPTION SUMMARY	
Advanced Life Support (ALS) Services	
Continue services from 2002-2007 levy:	▪ Existing paramedic services should be funded at 100% to prevent cost shifting to providers; ▪ The 3.5 ALS units that we added from 2002-2007 should remain in service so that we maintain our total of 25 units in service; and ▪ The upgrades of paramedic units for Woodinville, North Bend, Vashon and Skykomish should be maintained
Provide to address expected demands:	▪ 3.0 new medic units should be added over the span of a 6-year levy. o 1.0 medic unit will be placed in Seattle, and 2.0 medic units will be placed in King County. o The placement of these medic units will be addressed on a regional basis using established criteria. ▪ A composite inflator to project annual increases. ▪ Case by base analysis for providing paramedic services to outlying areas (as defined by the adopted Draft Guidelines developed by the Technical Stakeholders).
Basic Life Support (BLS) Services	
Continue services from 2002-2007 levy:	▪ Partial funding for BLS services (Fire Fighters/EMTs);
Provide to address expected demands:	▪ Increased funding levels to BLS agencies to better target the ALS calls that BLS supports. o Funding should be approximate to the estimated cost of those BLS calls that support ALS calls that result in ALS transport to the hospital. This is estimated to be 18,300 in 2008. ▪ A new method of allocating funding should replace the current funding formula. ▪ Two Strategic Initiatives should be created to address the disparity between the cost of providing BLS services and the funding that BLS agencies receive through the Medic One/EMS levy. ▪ CPI to project annual increases.
Regional Services	
Continue services from 2002-2007 levy:	▪ Core Regional Services/Programs that support the Medic One/EMS system.
Provide to address expected demands:	▪ Funding to create new Regional Services programs and slightly enhance current programs. ▪ CPI + 1% to project annual increases.
Strategic Initiatives	
Continue services from 2002-2007 levy:	▪ Conversion of the current Strategic Initiatives, proven to improve quality of service and manage growth and costs, into Regional Services programs to become core programs.
Provide to address expected demands:	▪ Creation of new Strategic Initiatives. ▪ CPI to project annual increases.

MEDIC ONE/EMS 2008-2013 LEVY PROGRAMMATIC RECOMMENDATIONS

This section highlights **the 30-cent Preferred Option** programmatic and funding recommendations that were developed within the Technical Stakeholder subcommittees, and adopted by the Technical Stakeholders and Elected Officials Committees. Projected expenditures are based on these following recommendations, and more financial information can be found in the Finance section.

Advanced Life Support (ALS) Program

Paramedics provide out-of-hospital emergency care for serious or life-threatening injuries and illness. As the second on scene for critically ill patients, paramedics administering Advanced Life Support (ALS) service provide airway control, heart pacing, the dispensing of medicine, and other life saving out-of-hospital procedures as expected under the medical supervision of the Medical Director. Through the Paramedic Training Program at the University of Washington/ Harborview Medical Center, paramedics receive nearly 3,000 hours of highly specific emergency medical training.



A paramedic unit is typically staffed by two paramedics and requires the equivalent of approximately nine paramedic full-time staff to provide service 24-hours per day, 365 days per year. The Medic One/EMS system also employs the use of 12-hour ALS units during peak workload periods in areas of emerging growth and extended response times. This approach allows for the addition of needed paramedic service without having to meet the demands of a full 24-hour medic unit. The Medic One/EMS system in King County has historically emphasized adding ALS services in order to maintain adequate paramedic service levels in the face of both an overall population increase and an aging population.

As of 2006, there are 25.0 ALS units throughout King County. These units are managed by six primary ALS providers: Bellevue Medic One, King County Medic One, Redmond Medic One, Seattle Medic One, Shoreline Medic One, and Vashon Medic One. Additional paramedic service in the Skykomish area is provided by contract with Snohomish Fire District #26.

Units

Paramedic Agency	Number of Units*
Bellevue Medic One	4.0 units
King County Medic One	7.5 units
Redmond Medic One	3.0 units
Seattle Medic One	7.0 units
Shoreline Medic One	2.5 units
Vashon Medic One	1.0 units
Total Number of Units	**25.0 units**

***** at the end of 2002-2007 levy

These units are identified in *Figure 1* below by provider and location. Paramedic service into the portion of City of Bothell in Snohomish County is provided by Shoreline Medic One. Shoreline Fire Department is reimbursed by the City of Bothell for these services.

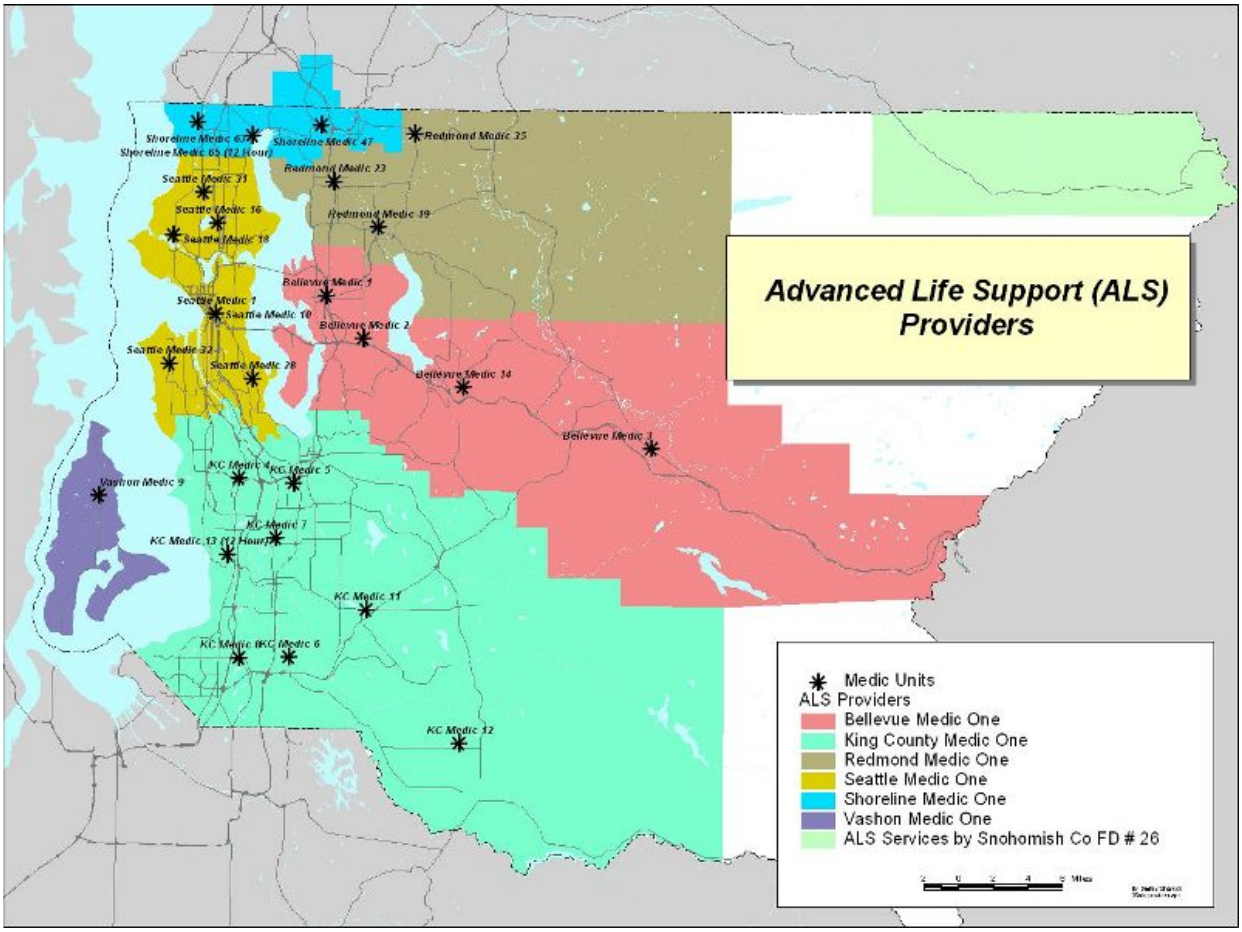
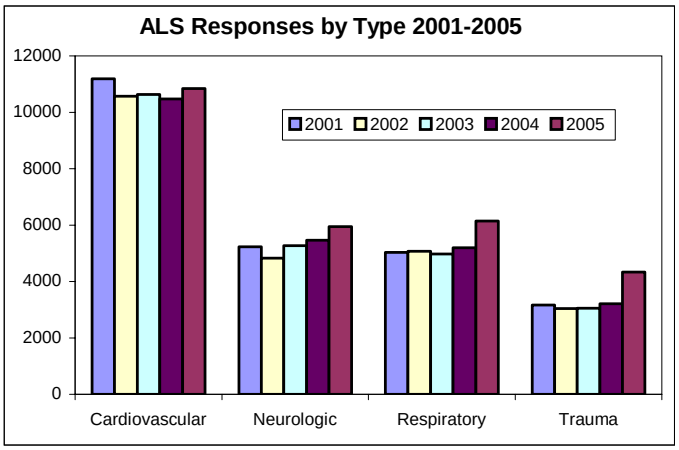


Figure 1: Advanced Life Support Providers in King County



In 2005, paramedics responded to over 48,000 calls for emergency medical care in King County. This represented 30% of the total number of Medic One/EMS calls in the region. The population and ALS call volume figure to the left reflects a trend of relatively limited growth in ALS calls over the past five years, mostly due to the successful implementation of changes to the ALS dispatch criteria.

The average response time of medic units in the county is 7.4 minutes, and units respond to over 95% of the calls in less than 14.0 minutes. Paramedics are more likely to attend to older patients (65+ yo - 40.9%) for cardiac conditions (26.0%) and transport 41.2% of the time.

ALS SUBCOMMITTEE:

A number of themes emerged as Stakeholders identified objectives for providing Advanced Life Support services in the next levy period. First and foremost, ALS needed to remain the primary recipient of the Medic One/EMS levy and the first commitment for funding within the Medic One/EMS system. In addition, ALS providers should not assume the burden of cost shifting during the next levy period. Although measures were taken to ensure this did not occur, annual review of ALS costs should assist in the prevention of cost-shifting to providers.

Finally, a policy needed to be developed for the provision of ALS services in outlying areas because the current options being used for managing an expensive service in those areas that did not meet the criteria for the standard two-paramedic, 24-hour unit were either unclear or no longer advisable (EMT/P unit). Within this context, the ALS work plan remained consistent with the overall *Medic One/EMS 2008-2013 Strategic Plan* directives to help reduce the growth in Medic One/EMS calls, use existing resources more efficiently, and enhance existing programs or add new programs to meet emerging needs.

The ALS Subcommittee work plan objectives were as follows:

1 Establish the cost per medic unit or 'standard unit cost allocation';
2 Identify the number of new ALS units;
3 Identify an appropriate cost inflator;
4 Establish a policy for the provision of ALS service in outlying areas; and
5 Identify any service enhancements and/or efficiencies.

The final recommendations from the ALS Subcommittee regarding these objectives are as follows:

RECOMMENDATION #1: FUND ALS STARTING AT $1.75 MILLION PER UNIT

The Subcommittee determined that the ALS funding allocation would be based on a standard unit cost allocation model applied to each ALS provider equally based on the number of ALS units.

Standard Unit Costs

Item	King County EMS Fund	City of Seattle
2008 Operational Cost	**$1,678,868**	**-**
2008 Capital Cost	**$75,411**	**-**
2008 Total Unit Cost	**$1,754,279**	**$2,201,022**

Note that the City of Seattle combines the operational and capital allocations.

Standard Unit Cost Allocation

In 1996, during the planning for the *Medic One/EMS 1998-2003 Strategic Plan*, ALS providers developed a 'standard unit cost allocation' model that calculated across all ALS agencies, the average annual operating costs to run a two-paramedic, 24-hour medic unit. This methodology ensured a fair and equitable distribution of funds, assisted in documenting and justifying the ALS allocation, and established 100% funding of ALS services.

The 'standard unit allocation' is the basis for funding each full time medic unit (with the exception of Seattle Medic One). Twelve-hour units receive 50% of the standard unit allocation. In calculating the average standard unit allocation for the 2008-2013 levy period, each ALS provider submitted expenditures for years 2004-2007 for a 24-hour medic unit. The yearly total expenditures for each ALS provider were used to project costs during the next levy period and averaged to establish the standard unit cost for each specific year.

The primary categories of operating expenditures include:

- Personnel Wages and Benefits
- Medical Supplies and Equipment
- Facility Costs
- Dispatch & Communications
- Vehicle Maintenance & Fuel
- Training
- Other Operational Costs
- Indirect Costs

The 'standard unit allocation' is designed to include all ALS-related operating expenses in order to prevent cost-shifting to providers. In principle, averaging ALS costs from each of the providers would cause cost-shifting to those agencies above the average standard unit cost. However, the historic range between agencies has been less than $100,000 per unit, thus enabling agencies to modestly adjust their expenditures to prevent cost-shifting.

One issue that surfaced during these discussions was the challenge of stabilizing costs over the six-year levy span. The current methodology did not allow agencies to build reserve funds for the purchase of capital items, nor were major purchases included in the standard unit allocation template. The ALS Subcommittee recommended the incorporation of a capital allocation that includes funding

the purchases of major cost items such as vehicles, defibrillators, and IT equipment. Members also recommended examining the feasibility of enhancing the Regional Purchasing Program by adding vehicles and defibrillators. Another recommendation supported establishing reserve funds over the next levy period, in case the economic forecast is lower than what actually occurs, or unplanned expenditures must be funded.

As endorsed by the Technical Stakeholders, the total 'standard unit cost allocation' now includes two subcategories: the operating allocation and the capital allocation. An individual paramedic provider's annual ALS allocation will be determined by multiplying the number of operating medic units both by the operating allocation and the capital allocation, and combining these two amounts. Start-up costs for new units will continue to be funded separately from the unit allocations.

In the 2002-2007 levy, funding for replacing medic units was provided to agencies every three years. In contrast, the new capital allocation formula provides 1/3 of the cost of a new unit to agencies every year, instead of a lump sum every three years. To fully fund those vehicles that were scheduled for replacement during the first two years of the levy, a vehicle replacement transition plan was developed.

The tables below reflect the 2008-2013 projected standard unit cost allocations for the City of Seattle and King County EMS Fund.

2008-2013 - Future Levy Funding Levels - King County EMS Fund

YEAR	OPERATIONS ALLOCATION	CAPITAL ALLOCATION	TOTAL ALLOCATION	TOTAL % INCREASE	LEVY INFLATOR (FORECASTED CPI)	DIFFERENCE
2008	$1,678,868	$75,411	$1,754,279	13.3%	2.60%	10.7%
2009	$1,746,360	$77,296	$1,823,656	4.0%	2.50%	1.5%
2010	$1,817,310	$79,229	$1,896,539	4.0%	2.50%	1.5%
2011	$1,894,670	$81,344	$1,976,014	4.2%	2.67%	1.53%
2012	$1,976,184	$83,516	$2,059,700	4.2%	2.67%	1.53%
2013	$2,062,151	$85,746	$2,147,897	4.3%	2.67%	1.63%

2008-2013 - Future Levy Funding Levels - City of Seattle

YEAR	TOTAL ALLOCATION	TOTAL % INCREASE	LEVY INFLATOR (FORECASTED CPI)	DIFFERENCE
2008	$2,201,022	7.6%	2.60%	5.0%
2009	$2,282,994	3.7%	2.50%	1.2%
2010	$2,368,702	3.8%	2.50%	1.3%
2011	$2,462,050	3.9%	2.67%	1.2%
2012	$2,559,866	4.0%	2.67%	1.3%
2013	$2,662,433	4.0%	2.67%	1.3%

Note that the City of Seattle combines the operational and capital allocations.

RECOMMENDATION #2: ADD 3.0 MEDIC UNITS

The Subcommittee recommended adding 3.0 medic units over the length of the six-year Medic One/EMS levy: 1.0 medic unit in the City of Seattle, and 2.0 medic units in the balance of King County.

- **This recommendation was based on an anticipated moderate growth in call volumes, primarily in suburban areas, and supported anticipated increases in an aging population in the region.**

- **For the balance of King County, the placement of units will be addressed on a regional basis analyzing established criteria that include unit response time, unit workloads, backup coverage, and exposure to advanced skill sets. The City of Seattle uses a similar process for placing units.**

Number of New Units (outside the City of Seattle)

In addition to establishing the standard unit cost, identifying the number of new medic units to be added during the 2008-2013 levy period was a critical activity. As indicated below in *Figure 2*, the pattern of growth in paramedic calls, outside the City of Seattle, has changed dramatically since the early 1990's. This is due, in large part, to the successful implementation of the ALS Dispatch Criteria revisions - one of the major strategic initiatives from the *Medic One/EMS 1998-2003 Strategic Plan*. As *Figure 2* illustrates, the annual rate of growth during the early 1990's was ~6% per year, ranging from 4% to 8%.

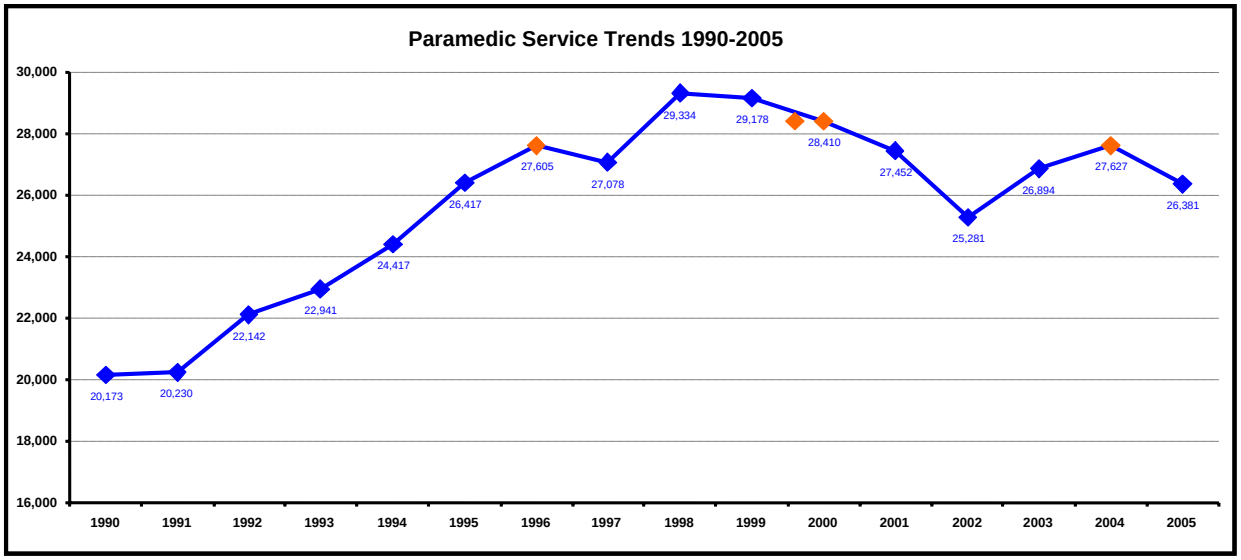


Figure 2: Paramedic Service Trends, outside the City of Seattle, 1990-2005
◆ *indicates a year in which the Criteria Based Dispatch Guidelines revisions were implemented.*

However, from 1996 through 2005, the average annual rate of growth averaged about 2% per year, with annual increases ranging from 8.7% to -7.6%. The pattern of decreases in paramedic calls following changes to the dispatch criteria punctuated with sudden increases has been previously observed historically in this region. This is likely due in part to the demand for calls linked to growth in population no longer being masked by the impact from revisions to the dispatch criteria. Overall, this pattern of containment of demand has allowed the Medic One/EMS system to reduce the rate of growth in paramedic calls and delay the addition of costly paramedic units. A summary of the addition of ALS services in King County is included in *Appendix A* on page 73.

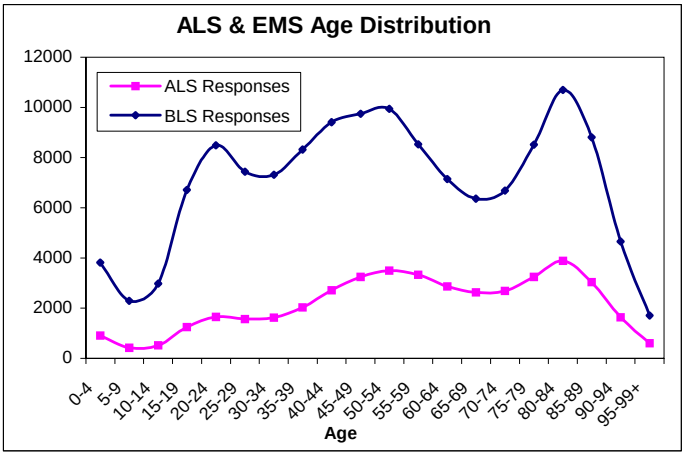
Projecting future paramedic demand was one of the most important steps in estimating the need for additional medic units. Since a multiple-year-funding package was being proposed, it was critical to have reasonable projections of when additional paramedic services would be needed so that the costs could be factored into the *2008-2013 Medic One/EMS Financial Plan.* Underestimating the need for future paramedic services could weaken the level of care provided to the residents of King County; overestimating the need for paramedic services could needlessly increase costs.

The ALS Subcommittee reviewed a variety of growth projections that reflected a range of options (1% - 5% per year) in conjunction with a variety of estimated workload capacities (average of 2,000 - 2,300 calls per medic unit). The ALS Subcommittee opted for a modest growth estimate of 1.6% per year, and moderate average workload capacity of 2,000 calls per unit. The increase in demand equated to approximately 52,000 annual calls by the year 2013 requiring an additional 2.0 medic units to manage this demand. This conservative recommendation acknowledged the current capacity by all ALS providers to manage potential workload increases and took into consideration additional demand created by an aging population.

Projected Timing of Adding Paramedic Services

	2008	2009	2010	2011	2012	2013
King County	0.5 unit	-	0.5 unit	-	0.5 unit	0.5 unit
Seattle	-	1.0 unit	-	-	-	-

Unlike previous occasions, the ALS Subcommittee did not recommend identification of the specific locations for the 3.0 new medic units. Instead, all ALS providers agreed that the best approach would be to place the new medic units based on a thorough regional analysis using the established criteria for medic units. In the *1995 Medic One/EMS Master Plan Update*, indicators were adopted for measuring and tracking paramedic unit and system performance. These measures included the traditional Medic One/EMS yardsticks of patient workload and average response time, but also included other factors for determining when existing service was stressed.



The Medic One/EMS system in King County is committed to the medical model of service delivery. The underlying premise of this model is to reserve the ALS response for life-threatening emergencies such that critical patient care skills are preserved. As such, a new indicator was added during the subcommittee review process that measures the potential for exposure to critical skills sets such as airway management and major traumatic injury. This requires either the placement of medic units in locations that accrue enough life-threatening calls such that paramedics are adequately exposed to these life-saving skills, or the rotation of paramedics through busier medic unit locations in order to acquire adequate exposure.

The major unit indicators now include the following:

- Unit workload;
- Unit 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 (new).

These performance indicators do not by themselves serve as automatic triggers for adding new paramedic services, but they do help direct attention to a geographical area of the Medic One/EMS system, which may need further examination. This broad approach to medic unit analysis is needed since there are a variety of medic unit environments. Some units operate in small, highly dense areas with high call volumes and short response times, while others operate in large, more rural areas with lower call volumes and longer response times.

Prior to implementation of any new paramedic service, the region outside the City of Seattle conducts a thorough analysis of medic unit performance. The major unit indicators are used to ascertain the degree of need for additional service. Moving medic units to new locations in order to mitigate the increased stress on the system is attempted prior to the addition of new service. If the regional review concludes that additional medic unit service is required, a process of approval by the EMS Advisory Committee and the King County Council ensues.

RECOMMENDATION #3: USE COMPOUND INFLATOR

Based on the experience of the last levy, the Subcommittee recommends that an inflator with a greater level of precision in forecasting agency expenses be used during the 2008-2013 levy.

- **Rather than apply one inflator to the entire ALS allocation, the Subcommittee recommended inflating the four major areas of the allocation using factors specific to those areas.**

  - **<u>Categories and Inflators Used for the 2008-2013 Allocation Increases</u>**

Category	Inflator
Wages	**CPI + 1% (based on history of labor negotiations)**
Flex benefits	**Based on the average of individual agencies' experience**
Retirement	**LEOFF 2 as forecast by state actuary**
All other areas	**Forecast CPI**

Annual Inflator

The 2002-2007 Financial Plan used the Consumer Price Index (CPI) as the annual inflator. However, costs incurred by ALS providers have increased at a rate higher than CPI due to increases in labor agreements and the rising cost of pharmaceuticals, medical supplies and equipment. *Figure 3* reflects the degree to which ALS providers would have had to cover expenses, thus encounter cost-shifting, had the ALS allocation increase remained at CPI. However, due to unexpected higher rates in new construction and the regional commitment to prevent cost-shifting to ALS providers, the ALS funding allocation increased above CPI three times following thorough regional review and approval.

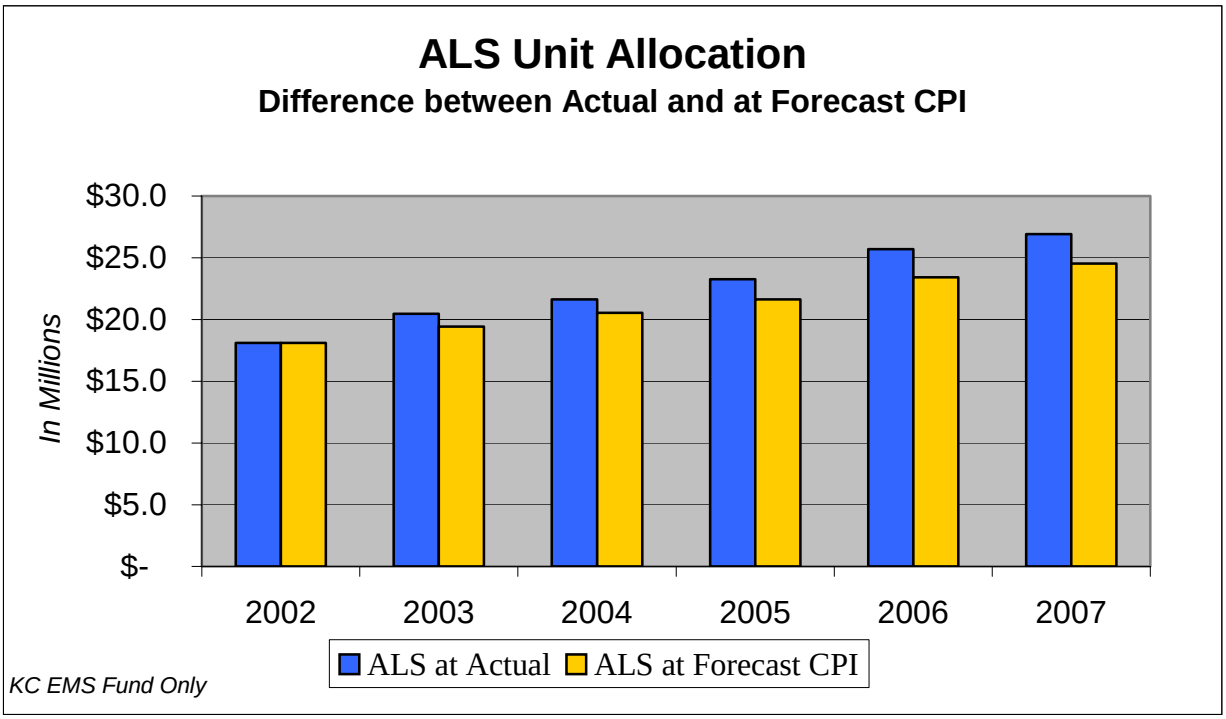


Figure 3: Actual ALS allocation vs Forecast CPI, 2002-2007

	2002	2003	2004	2005	2006	2007	Total
ALS at Actual	$18,110,310	$20,465,331	$21,634,033	$23,266,865	$25,711,120	$26,908,927	$136,096,585
ALS at Forecast CPI	$18,110,310	$19,423,115	$20,532,300	$21,627,794	$23,431,232	$24,522,822	$127,647,573
Yearly Difference	$0	($1,042,216)	($1,101,733)	($1,639,071)	($2,279,888)	($2,386,105)	($8,449,013)
Running Total		($1,042,216)	($2,143,949)	($3,783,020)	($6,062,908)	($8,449,013)	

King County EMS Fund Only. Allocation is for units only and does not include vehicle replacement and new unit start-up costs

In developing the annual inflator for the 2008 - 2013 levy period, the ALS Subcommittee wanted to prevent cost-shifting from occurring again and committed to finding a model that would more accurately forecast system expenses. The discussion reviewed a variety of inflation measures (CPI-U, CPI-U S-T-B, Shelter S-T-B, PPI - Finished Goods, ECI - S&L Total, ECI - S&L Wages, and ECI - S&L Benefits), and a composite inflation model.

Compound Inflator

ALS agencies were tasked with designing an inflator that would accurately reflect potential cost increases in the 2008-2013 levy period. While acknowledging CPI + 1% was a good estimate for increases in wage rates, the ALS Subcommittee did not believe this would represent some of the most volatile costs – those related to employee benefits. Retirement rates are set at the state level while benefits are negotiated with insurers and other providers of benefits at an agency level.

Given the fact that wages and benefits average over 80% of ALS costs, and benefits represent over 20% of the personnel costs (averaging almost $300,000 per unit a year), the ALS Subcommittee felt it prudent to individually inflate two key components of the benefits: flex benefits (medical, dental and vision benefits) and retirement (LEOFF). In addition, social security benefits were calculated as a percentage of total wages. The model estimates the percentage of wages subject to social security. It was felt that, on average, CPI was an adequate inflator for other costs.

A model was developed to compute a compound inflator based on the unit cost allocation. This model inflates different line items by the categories listed on page38. This formula, and particularly the assumption that the CPI inflator covers cost increases, will need to be reviewed annually during 2008-2013 levy period. If necessary, changes to the formula would be forwarded as recommendations for approval by the EMS Advisory Committee. Any changes resulting in increases would be limited to the availability of funds.

RECOMMENDATION #4: DEVELOP GUIDELINES FOR SERVICE TO OUTLYING AREAS

The Subcommittee recommends Draft Guidelines for proving paramedic service to outlying areas.

- **Guidelines recommend defining outlying areas as those areas to which the thresholds for the established medical model of providing paramedic services may not be applicable, due to being geographically isolated and having low call volumes and long response and out-of-service times.**

- **Guidelines also state that providing services will require analysis on a case-by-case basis regarding identified medic unit criteria, potential impact on the region and fiscal feasibility.**

Plan for Outlying Areas

During the 2002-2007 levy period, proposals for providing paramedic services outside the Medic One/EMS Strategic and Financial Plans presented a challenge to the region. In particular, the demand for paramedic services in outlying areas where the workload, by comparison, is significantly below the standard level and yet the unit response times are significantly longer than the average unit. Development of a regional approach to the allocation of a costly resource in areas that may not meet the standard criteria was an important task.

The provision of paramedic services in the **Skykomish region** in the northeast corner of King County offers an example of this type of challenge. There are a number of unique aspects in Skykomish relative to other provider areas, including required passage through Snohomish County in order to

access to the region, call volumes less than 100 per year, seasonal demand for services that peaks during the wintertime, a high percentage of trauma patients, and response and transport times that exceed the average urban and suburban times.

Although there were no provisions in the *Medic One/EMS 2002-2007 Strategic Plan* for financial support, Medic One/EMS agencies in the region were able to devise an interim arrangement to offer paramedic services to the residents of Skykomish Fire District via a two-year contract with Snohomish Fire District #26 until long-term support could be included in the next levy plan. The Medic One/EMS levy provided a total of $120,000 during the contract period.

The terms of the contract included full-time paramedic service during a five-month peak period, unit staffing of one Washington State certified paramedic and one EMT,, and medical direction provided by the regional medical program director of Snohomish County. The agreement also required medical incident report form review by the King County Regional Medical Program Director for program evaluation by the King County Medical Directors and the EMS Advisory Committee.

The *Medic One/EMS 2008-2013 Strategic Plan* provides financial support for the provision of paramedic services at the equivalency of 0.1 medic unit for each year of the levy. Based on the outcome analysis of the arrangement, Medic One/EMS levy funds will be available for a renewal contract with Snohomish County Fire District #26 or other regionally agreed upon arrangements.

The following policy recommendation was adopted:

> The *Medic One/EMS 2008-2013 Strategic Plan* outlines the provision of current and anticipated paramedic services in the region based on a two-paramedic unit model developed by Seattle in the mid-1970's. This adopted King County medical model supports paramedics, trained at Harborview Medical Center/UW Medical School, with paramedic oversight provided by designated medical program directors. Medic units are regularly monitored regarding workloads, response times, backup ratios, and skill set exposure standards to maximize patient care. Anticipated demand for paramedic services includes an analysis of the projection of calls and general population trends, including the growing proportion of baby-boomers in the region.
>
> However, there are some small areas in King County where the thresholds for the recognized medical model may not be applicable. These 'outlying areas' share certain characteristics, such as a relatively remote setting, geographic separation from urban and suburban areas of the county, a lower residential population compared to the rest of the county, and substantially lower paramedic workloads. These areas are often destination points because there may be major recreational areas nearby, such as national forests, wilderness areas, and ski resorts. Because King County residents routinely visit these routes for recreation or travel, it creates large pockets of people passing through and therefore impacts the demands for Medic One/EMS response.
>
> The demand for paramedic services in outlying areas greatly differs from our urban and suburban areas and therefore applying the usual criteria or standards does not work. In these outlying areas, it is common to have lower workloads in the range of 100-700 calls per year, yet a far higher percentage of trauma cases than the more urban ALS units. It is also typical to have longer paramedic response times and longer transport times to hospitals due to the distances traveled, the limited road networks, inclement weather and difficult access to the scene.

With these differences in their nature, outlying areas are thus defined as areas to which the thresholds for the established medical model of providing paramedic services may not be applicable, due to being geographically isolated with low call volumes, and long response and out-of-service times. The provision of paramedic service in outlying areas will require analysis on a case-by-case basis regarding the identified medic unit criteria, potential impact on the region, and fiscal feasibility.

Total Projected ALS Service Costs During the 2008-2013 Levy Period

	2008	2009	2010	2011	2012	2013	Total
City of Seattle	$16,793,794	$18,560,563	$20,655,077	$21,469,080	$22,322,030	$23,216,417	$123,016,961
KC EMS Fund	$37,024,310	$38,197,278	$39,734,805	$41,801,724	$43,935,030	$46,947,111	$247,640,258
Combined Total	**$53,818,104**	**$56,757,841**	**$60,389,882**	**$63,270,804**	**$66,257,060**	**$70,163,528**	**$370,657,219**

Basic Life Support (BLS) Program

Basic Life Support (BLS) or rapid, first-on-scene medical care is provided by over 3,500 Emergency Medical Technicians (EMTs) employed by 32 different fire-based agencies throughout King County. EMTs receive 120 hours of basic training and hospital experience with additional training in cardiac defibrillation (electrical shocks given to restore a heart rhythm). EMTs are certified by the state of Washington and are required to complete ongoing continuing education to maintain certification.

The various BLS provider boundaries are identified in *Figure 4* below.

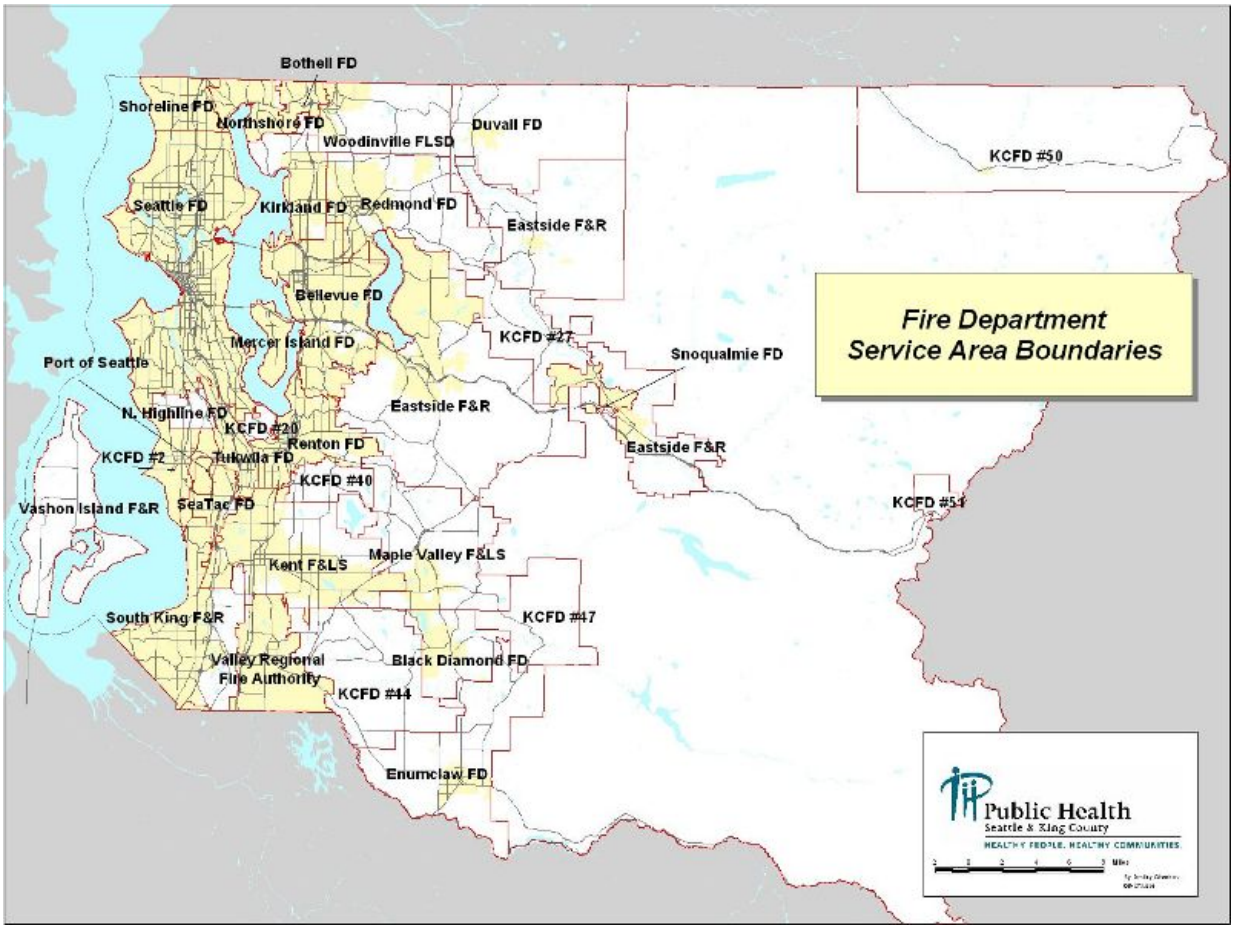


Figure 4: Basic Life Support Providers in King County

As the first-on-scene provider, BLS contributes significantly to the success of the Medic One/EMS system. In 2005, EMTs responded to over 162,000 calls for emergency medical care in King County. *Figure 5* reflects a trend of steady growth in BLS calls over the past four years, mostly likely due to the increasing population in the region.

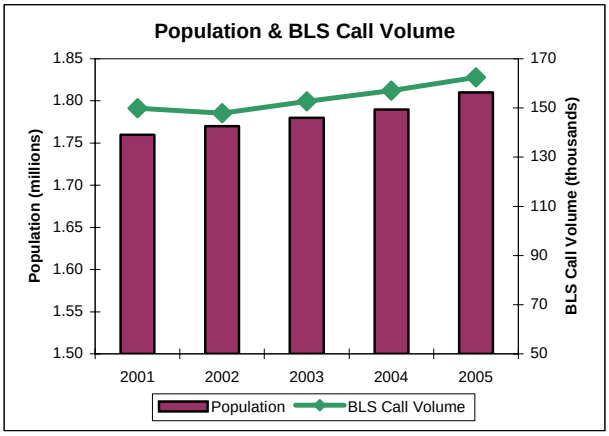


Figure 5: Population & BLS Call Volume

The average response time of BLS units in the county is 4.7 minutes with units responding to over 84% of the calls in less than 6.0 minutes. EMTs are more likely to tend to younger patients (25-64 yo - 48.6%) for trauma conditions (28.5%), although they do not transport 39.4% of the time.

BLS SUBCOMMITTEE:

During the process of identifying objectives to ensure the continued support of Basic Life Support services, a number of themes emerged. BLS agencies acknowledged that Advanced Life Support (ALS) was the priority within the Medic One/EMS levy and that the levy was designed to contribute limited funding to BLS providers to help ensure uniform and standardized patient care and enhance BLS services. Subcommittee members also wished to do no harm to the current Medic One/EMS system, but work to enhance it.

However, since the beginning of the regional Medic One/EMS levy, increases to the BLS allocation have been limited to growth in the total levy amount, kept frozen, or limited to CPI. This greatly concerns BLS providers because BLS costs have continued at a rate higher than the increases in the BLS allocation via the Medic One/EMS levy. Historically, there has been no method to tie the BLS allocation to the Medic One/EMS system and thus no rationale for how to address the increased costs.

The BLS Subcommittee developed the following work plan objectives:

- Estimate the total costs of the BLS system;
- Tie the BLS funding allocation to the Medic One/EMS system;
- Review the BLS funding formula for improvements; and
- Identify any service enhancements and/or efficiencies.

The final recommendations from the BLS Subcommittee regarding each of these objectives are as follows:

RECOMMENDATION #1: INCREASE LEVY SUPPORT FOR BLS

The Subcommittee recommends a BLS funding increase to better cover the costs of providing these services.

BLS Cost Estimate

The specific recommendation for increasing levy support for BLS agencies, with the exception of the Seattle Fire Department and the Port of Seattle, evolved from the work the BLS Subcommittee completed estimating the costs of BLS services and discussing how to tie funding to the Medic One/EMS system. BLS services are deeply embedded in local fire department and district operations and local tax collections provide a major source of financial support. The Medic One/EMS levy was originally designed to support only a portion of the overall costs when the proportion of Medic One/EMS calls to total calls was relatively small. However, as Medic One/EMS calls steadily climbed, the BLS allocation increased at a fraction of the rate. *Figure 6* reflects this pattern of growth over the past ten years – an average 2.24% call volume increase and 1.51% BLS allocation increase per year.

Call Growth

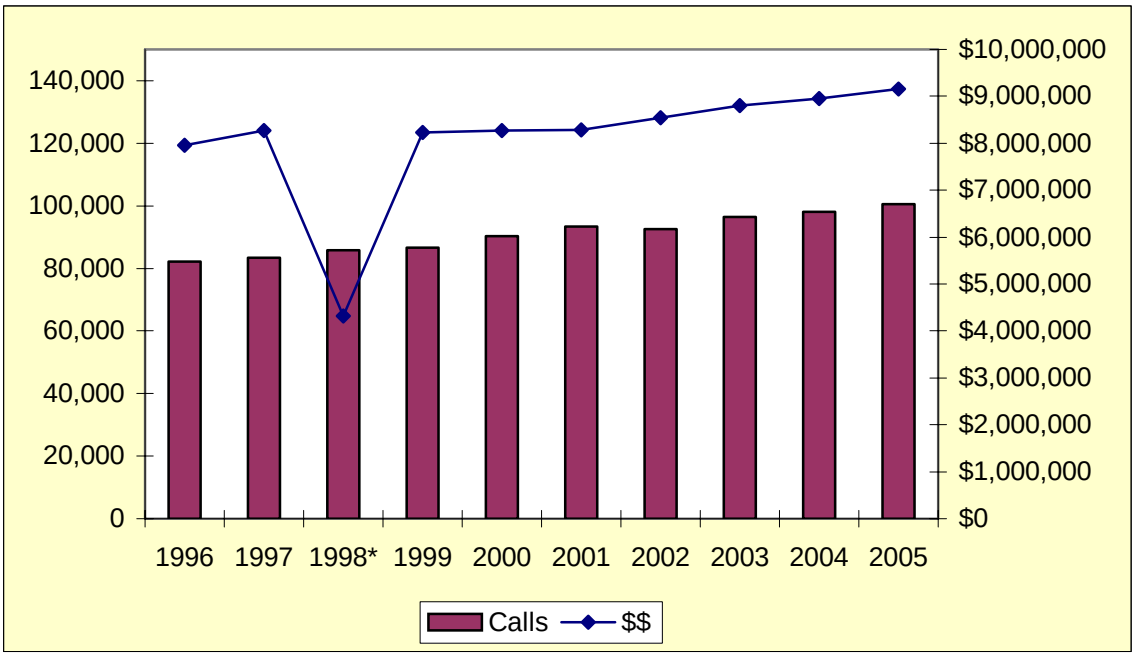


Figure 6: Growth Pattern, 1996-2005 for King County EMS Fund only. Failure of the levy in 1997 reduced the BLS funding by half.

Estimating the true costs of providing BLS service posed a significant challenge to the BLS Subcommittee as costing methodologies varied significantly from agency to agency, in particular how to allocate marginal costs to Medic One/EMS or fire expenditures. However, a costing template was developed by the Seattle Fire Department to standardize the process, and although not every agency provided the template, a reasonable estimate was believed to have been obtained. The table below reflects the findings of the effort and validated the sense that the Medic One/EMS levy underfunds the BLS system

Estimated Total BLS Costs* for 2004

Jurisdiction	Estimated BLS Costs
Seattle	$35,763,990
King County EMS Fund	$73,194,811

* Does not include Pierce County and Milton

Although the Medic One/EMS levy supports primarily paramedic (ALS) service, the BLS Subcommittee advocated for a levy amount that would provide as close to 100% as possible of BLS costs, within the 50-cent limit allowed by a Medic One/EMS levy. However, Subcommittee members realized the subsequent impact of 100% support of BLS costs on the total Medic One/EMS levy rate may not be accepted regionally and thus reviewed lesser options, analyzing the number of BLS calls that most directly support paramedic service. They considered the number of BLS patients receiving a paramedic response, the number of patients requiring paramedic transport, and the

number of acute patients requiring IV lines or intubation by paramedics. The BLS allocations were derived by using the various rates of BLS response to ALS supported calls to total BLS calls and applying them to the total estimated BLS costs.

BLS Funding Level Options for King County EMS Fund

	IVs	Transports	Arrived on Scene
Dollar Amount	$13,393,754	$14,086,534	$29,250,727

Following the Technical Stakeholder Committee's decision to remain at a 30-cent levy rate, the BLS Subcommittee decided to tie the BLS allocation to the number of patients resulting in actual paramedic transports as the preferred option. Paramedic transports reflect patients with acute or life-threatening emergencies that continue to need advanced medical care and monitoring before they arrive at the hospital. Paramedics typically transport approximately 33%-36% of the patients they see (approximately 18,700 in 2005). This approach to BLS funding now specifically links BLS support to direct acute patient care and paramedic service in an appropriate way.

RECOMMENDATION #2: USE A DIFFERENT FUNDING FORMULA FOR ALLOCATING THE BLS FUNDING AMONG AGENCIES.

The Subcommittee recommends a new method of allocating funding to replace the 2002-2007 funding formula.

- **This funding allocates the total yearly increase to agencies based 50/50 on Assessed Value and Call Volumes. The individual agency increase would be added to the base funding that each agency received the previous year.**

The BLS funding formula has been in place since the beginning of the regional Medic One/EMS levy, albeit in various forms. It uses a complex methodology for distributing a fixed dollar amount to BLS agencies in King County, with the exception of the Seattle Fire Department and the Port of Seattle, based on system demand, jurisdictional contribution to Assessed Value (AV), and the protection of small rural agencies.

One additional component of the BLS funding formula is a concept called 'hold harmless'. This term describes a condition where no BLS agency is to receive less than the amount they received the year before, except in cases of annexation and/or incorporations. However, if at any given time the formula calculates that a specific agency is to receive a lesser amount based on AV and or call volume, the deficit amount is replenished proportionately from dollar increases allocated to other agencies.

Following the levy failure in 1997, the BLS baseline total dollar amount was frozen and no agency received an increase until 2002 when the new Medic One/EMS levy was put into place. By that time, the hold harmless amount had ballooned to almost $900,000 and it was determined that continuation with the formula would likely hold every agency harmless with no ability to reflect growth. BLS

agencies met and agreed to make changes to the formula to maximize reduction of the hold harmless amount as long as protecting smaller agencies remained the primary priority. During the past six years, the hold harmless amount has been reduced by over 50%, allowing a greater amount of funding to go to agencies with relatively higher levels of growth.

Proposed Formula: The BLS Subcommittee examined 14 funding alternatives to the 2002-2007 BLS funding allocation formula in an effort to better reflect growth of some jurisdictions while continuing to protect the small rural areas. Following this extensive review process, a formula that ensured an annual increase for all agencies, more closely reflected jurisdictional contribution to AV and service demands, and eliminated the 'hold harmless' concept was selected. The King County EMS Division is committed to annually reviewing this new formula to ensure the assumptions are realized.

RECOMMENDATION #3: USE CPI AS THE INFLATOR

- **This inflator will be based on the forecast of the economist at the King County Budget office.**

BLS agencies use the Medic One/EMS levy allocation to pay for a variety of items including services, equipment and supplies. Since these items have differing inflationary trends, no one specific inflator would accurately reflect their increasing costs. The BLS Subcommittee determined that using a standard CPI inflator, as forecast by the King County economist, was the best choice.

RECOMMENDATION #4: CREATE TWO STRATEGIC INITIATIVES TO REVIEW BLS FUNDING SHORTFALLS

The Subcommittee recommends the basic outline for two Strategic Initiatives that address the gap between Medic One/EMS funding for BLS services. The focus of these Strategic Initiatives will be to address:

- **The disparity between how much it actually costs to provide BLS services and how much the BLS agencies receive through the Medic One/EMS levy. Medic One/EMS providers, as a region, need to strategize how to address this funding gap, and what can be done so that BLS costs are better covered.**

- **The funding needs of vulnerable agencies and how improved BLS support can be provided to such areas.**

As indicated in the narrative following Recommendation #1, BLS agencies have been struggling to cover the costs of providing BLS services during the past levy period. When the Medic One/EMS levy was first conceived in 1979, the ratio of Medic One/EMS calls to fire calls was relatively small, and the bulk of financial support for BLS agencies came from local city and district taxes.

Almost thirty years later, 70%-80% of the responses BLS agencies provide are for Medic One/EMS calls and yet the BLS allocation has increased only an average of 8% per year in the last decade within the KC EMS fund. Due to the inherent difficulties in approving increases to a regional Medic One/EMS levy for local area jurisdictions, the BLS Subcommittee recommended development of a Strategic Initiative that convenes Medic One/EMS agencies to discuss how to better cover BLS costs in the future.

In addition, the BLS Subcommittee recognized the increasing challenge facing the smaller, more vulnerable BLS agencies in trying to keep up with costs and recommended the development of a Strategic Initiative to bring together Medic One/EMS agencies to discuss how to better support such areas.

Total Projected BLS Service Costs During the 2008-2013 Levy Period

	2008	2009	2010	2011	2012	2013	Total
City of Seattle	$16,864,511	$15,827,289	$14,695,634	$14,642,238	$14,800,405	$14,945,447	$91,775,524
KC EMS Fund	$14,790,939	$15,160,712	$15,539,729	$15,954,640	$16,380,629	$16,817,992	$94,644,641
Combined Total	**$31,655,450**	**$30,988,001**	**$30,235,363**	**$30,596,878**	**$31,181,034**	**$31,763,439**	**$186,420,165**

Regional Services & Strategic Initiatives

Regional Services are the core services managed by the King County EMS Division, Public Health - Seattle & King County that support and supplement the direct service activities and key elements of the Medic One/EMS system. These regional services are essential to providing the highest quality of out-of-hospital emergency medical care available. They emphasize uniformity of medical care across jurisdictions, consistency in excellent training, and medical quality assurance. Strategic Initiatives complement these activities and are usually specific funded projects that assist in achieving the primary goals of the *Medic One/EMS 2008-2013 Strategic Plan*.

The King County EMS Division oversees the following core Regional Services and functions:

Regional Medical Direction: The Medical Program Director provides medical oversight and guidance to Emergency Medical Technicians (EMTs), paramedics, and the entire Medic One/EMS system. The Medical Program Director directly oversees the performance of EMTs and paramedics, performs quality improvement/quality assurance with respect to the medical care provided by EMTs and paramedics, and dispatchers, and conducts research and evaluation of new approaches to the delivery of emergency medical care.

Medic One/EMS Training: The King County EMS Division provides initial training, continuing education and oversight of the recertification process for approximately 4,000 EMTs and 350 EMT instructors in King County. The King County EMS Division develops curricula that ensure the training and education programs meet Medic One/EMS agency needs and WA State requirements.

Community Programs: Approximately 150 dispatchers from four dispatch agencies receive Emergency Medical Dispatch (EMD) training and continuing education that is administered through the King County EMS Division. The community-based programs provide CPR and AED training to an average of 20,000 people per year, and educate King County residents on recognizing medical emergencies, injury prevention and health education. The King County EMS Division also supports the critical incident stress management program with 19 volunteers to provide emotional and psychological services for public field personnel (police, fire, Medic One/EMS, dispatch etc.).

Medic One/EMS Planning and Evaluation: The King County EMS Division collects and manages regional Medic One/EMS data for long-term quality program management and evaluation, and the development of new service options.

Administration: The King County EMS Division is the regional leader and coordinator for the countywide Medic One/EMS system. It administers all Medic One/EMS central programs, provides financial oversight and monitoring, ALS and BLS contract administration, and division management to support ALS and BLS agencies.

Working in tandem with Regional Services are **Strategic Initiatives**, pilot programs and operations designed to improve the quality of Medic One/EMS services and manage the growth and costs of the system. Once completed and proven successful, they are incorporated into Regional Services as ongoing core programs. Regional Strategic Initiatives have allowed the Medic One/EMS program in King County to maintain its role as a national leader in its field, and have been key in the system's ability to manage its costs.

REGIONAL SERVICES AND STRATEGIC INITIATIVES (RS/SI) SUBCOMMITTEE:

Although Regional Services and Strategic Initiatives are two distinct programs and have two distinct funding identities, members of the Technical Stakeholders Committee chose to combine these two programs into one subcommittee for review and discussion. The RS/SI Subcommittee undertook a systematic and detailed evaluation of the 2002-2007 Medic One/EMS core programs and responsibilities. The initial review process and discussion focused on whether each program should be maintained, enhanced, or terminated and whether the efforts of the programs might duplicate other programs' deliverables. The significance and success of the 2002-2007 Strategic Initiatives were also assessed to determine whether these programs warranted integration into Regional Services, and therefore, should transition into 'on-going' programs within the King County EMS Division and receive continued operations funding. This detailed review exposed what sort of programs might be missing from the system and may need to be developed.

Committee members collectively recognized and agreed that the Medic One/EMS system was working well, and that eliminating entire programs was not beneficial. They determined that some programs may need modification, while others needed to be established to meet emerging community needs. Program evaluation was stratified into the following categories:

- Continue the program;
- Adjust/enhance the program;
- Add new program; and
- Create efficiencies within the program.

The overall principles of the Regional Services/Strategic Initiatives Subcommittee were:

- Enhance existing programs and add new programs to meet emerging community needs to maintain or improve standards of patient care;
- Use existing resources more efficiently to improve operations of the system to help contain costs;
- Ensure success of long-term strategic directions and maintain these directions;
- Ensure funding for Regional Services and Strategic Initiatives;
- Identify contingencies for needed services or new programs;
- Develop appropriate cost inflator; and
- Incorporate formal emergency management support.

The final recommendations from the RS/SI Subcommittee meeting these principles are as follows:

RECOMMENDATION #1: CONTINUE TO PROVIDE EXISTING 2002-2007 CORE REGIONAL SERVICES PROGRAMS

- **With the <u>exception of King County Employee CPR Program</u>, the existing Core Regional Services programs that support the Medic One/EMS system should continue to be provided. *Appendix B* on page 75 lists and describes these programs.**

In all, there are about twenty-five separate programs included in Regional Services and each one was carefully reviewed during the planning process. The Subcommittee's evaluation of the current programs entailed King County EMS Division managers speaking candidly about the programs they

oversee, addressing the intent and significance of each program, discussing whether the programs had achieved set performance goals, and any consequences that could occur if the program were terminated.

RECOMMENDATION #2: ENHANCE EXISTING REGIONAL SERVICES PROGRAMS

- **A number of programmatic changes that advance the goals of programs should be made to the existing Core Regional Services programs. *Appendix C* on page 79 lists and describes these programmatic enhancements**.

Improvements and innovations in the management, scope, and standards of core programs are integral to maintaining any high quality Medic One/EMS system. The majority of enhancements recommended and developed by the Subcommittee address the areas of dispatch, injury prevention, and planning. Reviewing dispatch guidelines over a shorter span of time if necessary, better linking the registration of defibrillators with dispatch, and expanding the injury prevention programs to reach and assist a larger number of citizens were all advised and accepted.

RECOMMENDATION #3: CONVERT THE PROVEN 2002-20007 STRATEGIC INITIATIVES INTO ONGOING MEDIC ONE/EMS REGIONAL SERVICES PROGRAMS

- **The Subcommittee recommends that the majority of the 2002-2007 Strategic Initiatives be converted into ongoing Medic One/EMS Regional Services Programs. *Appendix D* on page 81 lists and describes these 2002-2007 Strategic Initiatives.**

Previous Initiatives Recommended to be Made into Regional Services Programs

2002-2007 Strategic Initiative Summary Table	
I. Dispatch Enhancements:	
Review and Revision of the Criteria Based Dispatch (CBD)	Ongoing - moved into RS; Completing CAD integration portion as SI in 2008-2013
ALS Triage Criteria	Ongoing - moved into RS
EMD Quality Improvement	Ongoing – moved into RS
Enhanced CBD Basic Training and Continuing Education Curricula	Ongoing – moved into RS
II. Advanced Technology Projects:	
Web-based Training for Medic One/EMS Personnel and Dispatchers	Ongoing – moved into RS
Regional Electronic Data Collection Project	Completed 12/03 - Maintenance of program through RS
Regional Medic One/EMS Tracking Resource - Online (RETRO) Project	Ongoing – moved into RS

III. Medic One/EMS System Efficiencies:	
Financial Review of Medic One/EMS Sub-Funds	Ongoing – moved into RS
Injury Prevention Programs	Ongoing – moved into RS; Falls Program continues to be SI in 2008-2013
Paramedic and EMT Procedure and Patient Treatment Evaluations	Ongoing – moved into new RS Medical QI program
Enhanced Care for Specific Medic One/EMS Patients	Ongoing – moved into new RS Medical QI program
Assessment of the Impact of State Budget Cuts on the Medic One/EMS System	Ongoing
IV. Strategic Plan	Initiated 7/05

The Subcommittee supported converting, and thereby continuing through Regional Services, the Strategic Initiatives already in progress. These programs strengthened Web-based Training for Medic One/EMS Personnel, Paramedic/ EMT Procedure and Patient Treatment Evaluations, and Enhanced Care for Specific Populations.

RECOMMENDATION #4: CREATE A NEW MEDICAL QUALITY IMPROVEMENT (QI) REGIONAL SERVICE PROGRAM

- **The Subcommittee recommends that Medic One/EMS focus on continuous improvement of the medical care that it delivers in the regional system, and thereby approves a proposal to implement a more systematic approach to Medical QI. Additionally, Medical QI should become a section within the King County EMS Division. *Appendix E* on page 83 highlights this proposal.**

Stakeholders praised the development of an enhanced medical quality improvement system, under the direction of the Medic One/EMS medical directors, as a means of systematically evaluating and improving the medical care provided in the regional Medic One/EMS system.

RECOMMENDATION #5: USE CPI+1 AS THE INFLATOR FOR REGIONAL PROGRAMS

- **This inflator will be based on the forecast of the economist at the King County Budget office.**

CPI did not work for this levy period. However, due to the nature of the program and its history of savings and cost efficiencies, the Subcommittee did not feel a need to budget as precisely as the ALS program and determined CPI + 1 would be a sufficient inflator.

Total projected costs for Regional Services for 2008-2013 Levy

	2008	2009	2010	2011	2012	2013	Total
KC EMS Fund	$6,255,763	$6,474,715	$6,701,330	$6,947,269	$7,202,234	$7,466,556	**$41,047,867**

RECOMMENDATION #6: CONTINUE WITH 2002-2007 STRATEGIC INITIATIVES FOR INJURY PREVENTION AND CAD INTERFACE

The following Strategic Initiatives from the 2002-2007 levy have been recommended to continue in the future 2008-2013 levy:

- **The Falls Pilot Project**: ***Originally created to assess the feasibility of a fall prevention intervention, the project will expand to be region wide. The Falls Project entails home assessments of elderly adults and the identification of risk reduction devices to decrease the chance of accidents.***

- **The CAD Integration component of the CBD software**: ***As a 2002-2007 Strategic Initiative, this project entailed the creation and implementation of a stand-alone version of software to automate dispatch criteria. Phase II of this project updates the software and expands the integration to a larger and more sophisticated dispatch center.***

RECOMMENDATION #7: CREATE A NUMBER OF NEW STRATEGIC INITIATIVES FOR DISPATCH, INJURY PREVENTION, TRAINING, AND STRATEGIC PLANNING/DATA COLLECTION

- ***Appendix F* on page85 lists and describes these proposed Strategic Initiatives.**

Subcommittee members developed new programs and initiatives that would meet the directive of managing growth, improving Medic One/EMS care, and developing efficiencies. One recommended Strategic Initiative would focus on enhanced dispatch training and call management to effectively control the use and of, and stress on, the entire Medic One/EMS system.

Expanding the injury prevention programs, in operations and out in the communities, gained approval from the Subcommittee, as did a program to enhance electronic data collection. Also heavily endorsed was the All-Hazards Emergency Preparation program that would assess the Disaster Management program to ascertain whether the Medic One/EMS system is prepared, with its staff, supplies and education, should a disaster befall our region.

RECOMMENDATION #8: USE CPI AS THE INFLATOR FOR STRATEGIC INITIATIVES

- **This inflator will be based on the forecast of the economist at the King County Budget office.**

The lifetime budgets of Strategic Initiatives are based on specific year to year expenditures. The Subcommittee determined that an increase above CPI was not necessary for Strategic Initiatives, because those costs that escalate above CPI were included for in the project budgets.

2008-2013 Strategic Initiative Summary Table

S U M M A R Y	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**Total**
Injury Prevention Strategic Initiative Programs	234,089	243,613	241,608	239,775	239,216	235,598	**$1,433,899**
Emergency Medical Dispatch Strategic Initiatives							
Address non-emergency calls	104,769	163,464	103,952	177,087	-	-	**$549,272**
Dispatch Center funding tied to Performance Standards	12,571	289,908	297,156	305,090	313,236	321,599	**$1,539,560**
Advanced EMD training	150,847	38,654	39,621	40,679	41,765	42,880	**$354,446**
Public Access Defibrillation	94,279	-	66,035	-	-	-	**$160,314**
Interactive Enhancements to CBT On-Line	171,694	152,894	172,733	159,961	188,220	175,071	**$1,020,573**
Enhanced Network Design	182,273	154,618	269,096	186,490	194,226	123,698	**$1,110,401**
Emergency Management	31,426	32,212	33,017	33,899	34,804	35,733	**$201,091**
Levy Planning				66,425	154,461	152,391	**$373,277**
SUBTOTAL	**981,948**	**1,075,363**	**1,223,218**	**1,209,406**	**1,165,928**	**1,086,970**	**$6,742,833**
With 5% Contingency	49,098	53,768	61,161	60,470	58,296	54,349	$337,142
TOTAL w/CONTINGENCY	**$1,031,046**	**$1,129,131**	**$1,284,379**	**$1,269,876**	**$1,224,224**	**$1,141,319**	**$7,079,975**

MEDIC ONE/EMS 2008-2013 FINANCIAL PLAN/FORECAST

This section presents both revenue and expenditure assumptions and details for the **30-cents per $1,000 Assessed Value (AV) Preferred Funding Option** levy rate that was endorsed by Technical Stakeholders and Elected Officials. This 30-cent rate supports expenditures estimated at a total of $605 million from 2008-2013. Contingency reserves are included within each program.

The **30-cent Preferred Funding Option** levy rate is 5 cents higher than the previous levy rate. The difference relates primarily to the increased cost of providing ALS services, the inclusion of new ALS services added in the 2002-2007 levy, increased support of BLS funding, the incorporation of Strategic Initiatives into Regional Services, and the inclusion of contingency reserves.

This plan, like other financial plans, is based on numerous assumptions and acknowledge that actual conditions will differ from the original projections. The objective is to make the plan flexible enough to handle changes as they occur while remaining within the expected variance. Key financial assumptions that are provided by the King County economist include new construction growth, assessed value, and consumer price index (CPI).

This is the first strategic plan where the financial section has included combined City of Seattle and KC EMS Fund levy information at a detailed level. However, there may be places where only KC EMS Fund information may be presented to illustrate a point. We have labeled this information as KC EMS Fund. There may also be places where the information aggregating the two funds is not fully integrated or easily developed.

BACKGROUND

The *Medic One/EMS 2008-2013 Financial Plan* for King County is premised upon a combination of program and service initiatives to control costs, increase operating efficiencies, and manage continued growth in demand for service. To accomplish this, the *2008-2013 Financial Plan* incorporates the following general principles:

- The Medic One/EMS levy will support continuation of quality emergency medical services and supply adequate funding to provide these services;
- Funding decisions will be approached from a system-wide perspective;
- As an essential public service, Advanced Life Support (ALS) services will continue to be funded through the Medic One/EMS levy;
- As an essential public service, Basic Life Support (BLS) services will be funded through a combination of local taxes that support fire service functions together with Medic One/EMS levy funds to support the incremental cost of BLS;
- The financial plan recognizes individual jurisdictions' need for local autonomy to meet their communities' expectations for Medic One/EMS services;
- The plan depends upon coordination and collaboration between Medic One/EMS providers and other health care entities; and
- The King County EMS Division is responsible for coordination and facilitation of collaborative activities necessary to assure the success of the regional strategic and financial plan.

These principles are necessary to meet the Stakeholders' decision to keep the current Medic One/EMS system in place, thereby generating the development of key financial objectives to meet these goals.

Financial Objectives

Specific financial objectives for the *Medic One/EMS 2008-2013 Financial Plan* are:

- Fully funding ALS costs to avoid cost shifting to local agencies, including the use of an adequate inflator;
- Continued funding of current paramedic units, including units added during the 2002-2007 levy period;
- Continuing Regional Services and Strategic Initiatives supporting the entire region and system;
- Developing new Strategic Initiatives that support the objectives of the *Medic One/EMS 2008-2013 Strategic Plan* to reduce the rate of growth of Medic One/EMS calls, produce system efficiencies, and promote enhanced patient care; and
- Creating a reserve fund to address unanticipated service or demand needs, potential emergencies, and/or significant changes in strategic and financial plan assumptions.

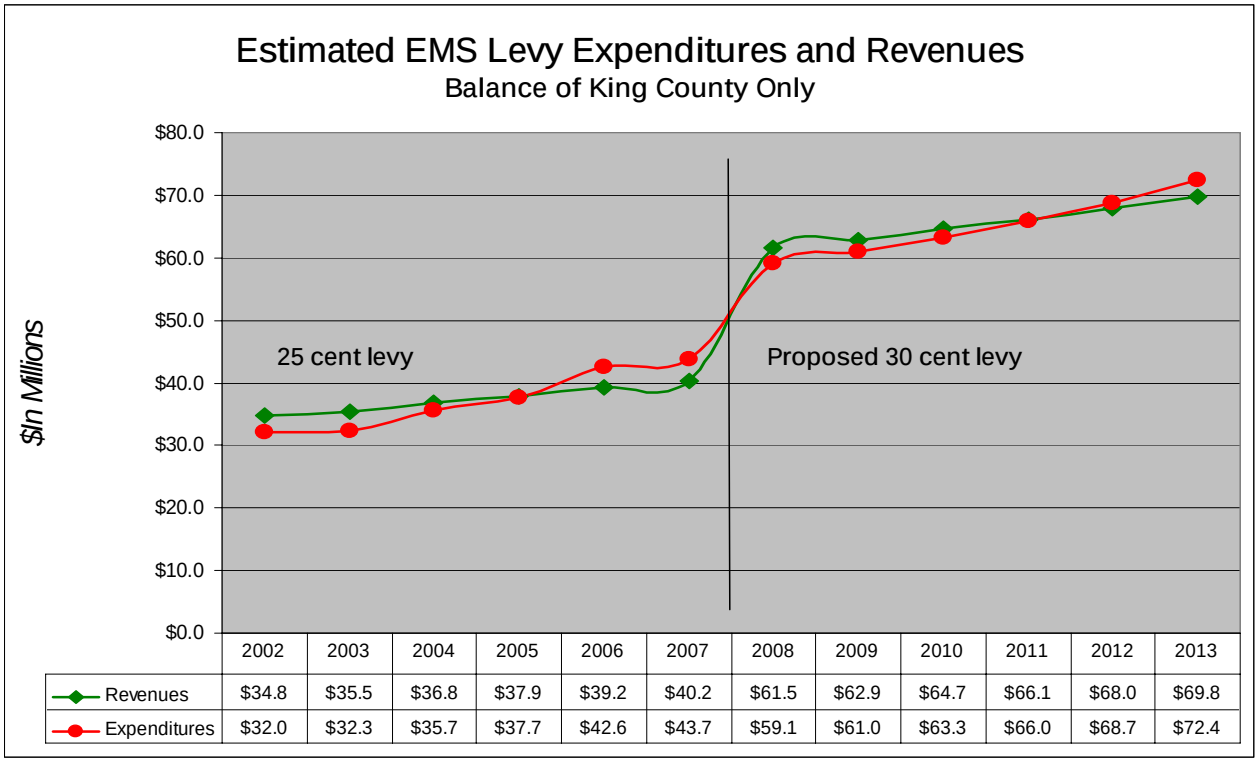
REVENUES

The *Medic One/EMS 2008-2013 Financial Plan* assumes modest growth in property values, continued low inflation, and a 1% plus new construction growth limit on revenues from existing properties. The plan includes the required End Fund Balance (EFB) of 1/12 yearly expenditures from earlier levies.

Levy expenditures increase at a higher rate per year than revenues. Revenue increases, limited to 1% plus new construction growth, have been roughly equivalent to the Consumer Price Index (CPI) over the period of the 2002-2007 levy. Expenditures have increased at a rate higher than CPI. There are two primary reasons for expenditures increasing higher than revenues. First, basic costs have exceeded CPI, including salaries (usually COLA as a % of CPI plus longevity increases), employee benefits, and medical supplies. The second reason is the addition of new ALS units to support increased demand in services. During the 2002-2007 levy, yearly expenditures increases averaged 6.5% per year while revenues increases averaged 3 % per year.

The *Medic One/EMS 2008-2013 Financial Plan* was developed to accommodate expenditures that increase at a higher rate than revenues over the duration of the levy. Therefore, the revenue collected in the early years of the levy will be placed in the fund balance to cover the higher expenditures during the later years of the levy.

The following chart shows how the levy is structured to save funds in the early years for use in the later years of the levy. The difference was larger in the 2002-2007 levy than the proposed 2008-2013 levy due to lower projections of new ALS needs.



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Revenues	$34.8	$35.5	$36.8	$37.9	$39.2	$40.2	$61.5	$62.9	$64.7	$66.1	$68.0	$69.8
Expenditures	$32.0	$32.3	$35.7	$37.7	$42.6	$43.7	$59.1	$61.0	$63.3	$66.0	$68.7	$72.4

There is a significant increase from 2007 to 2008 which results from:

1. Continuing to fund services that were added during the 2002-2007 levy: Over the span of the 2002-2007 levy, 3.5 ALS units were added, 2 ALS units were increased from .5 to 1.0 funding, additional funding was added for Vashon and Fire District #50, and 12 Strategic Initiatives were implemented. The costs of running these programs are now the new "Baseline" from which the expenditures for the next levy are calculated and a levy rate is developed. Continuing to fund these services and programs will require a higher starting levy rate for the 2008-2013 levy.

2. The nature of the levy/cashflow: Expenditures increase at a higher rate than revenues. Therefore, the revenue collected in the early years of the levy is saved to cover the higher expenditures during the later years of the levy. The chart above shows that expenditures in 2007 are expected to exceed revenues by approximately $3.5 million; the revenues saved from earlier years in the levy period will be used to cover this deficit. The starting levy rate in the new levy period must begin at a level great enough to cover this deficit, as well as collect funds to cover expenditures in 2012 and 2013.

3. Increased costs of current services: It is more expensive to provide ALS, BLS, and RS/SI services and programs now than at the beginning of the 2002-2007 levy. Specifically, ALS costs have risen significantly. The costs of these services have increased above the rate of revenue, and therefore, the new levy rate must begin at a level great enough to cover the costs of running these services and programs.

4. Services added during 2008-2013 levy span: The 30-cent Recommended Option proposes the addition of 3.0 new units to accommodate anticipated growth, an increased BLS allocation, and new Regional Services and Strategic Initiatives. The starting levy rate must be high enough to accommodate these new services throughout the span of the levy.

KEY ASSUMPTIONS

The revenue forecast is based on assumptions of the assessed value at the start of the levy period, assessed value growth, and new construction growth, as forecast by the King County Economist. In addition, based on past experience, the King County Economist recommended assuming a 99% collection rate for property taxes (1% delinquency rate). Other considerations are the division of revenues between the City of Seattle and the King County EMS fund, and other revenues.

The following charts show assumptions in the growth of new construction and assessed value for both the 2002-2007 and 2008-2013 levies.

Key Assumptions: Actual 2002-2007 Increases

Rate of Growth	2002	2003	2004	2005	2006	2007*
New Construction	2.37%	1.76%	1.86%	2.08%	2.03%	2.43%
Reevaluation Existing Properties	9.72%	5.04%	2.95%	3.41%	6.54%	7.00%

*Forecast

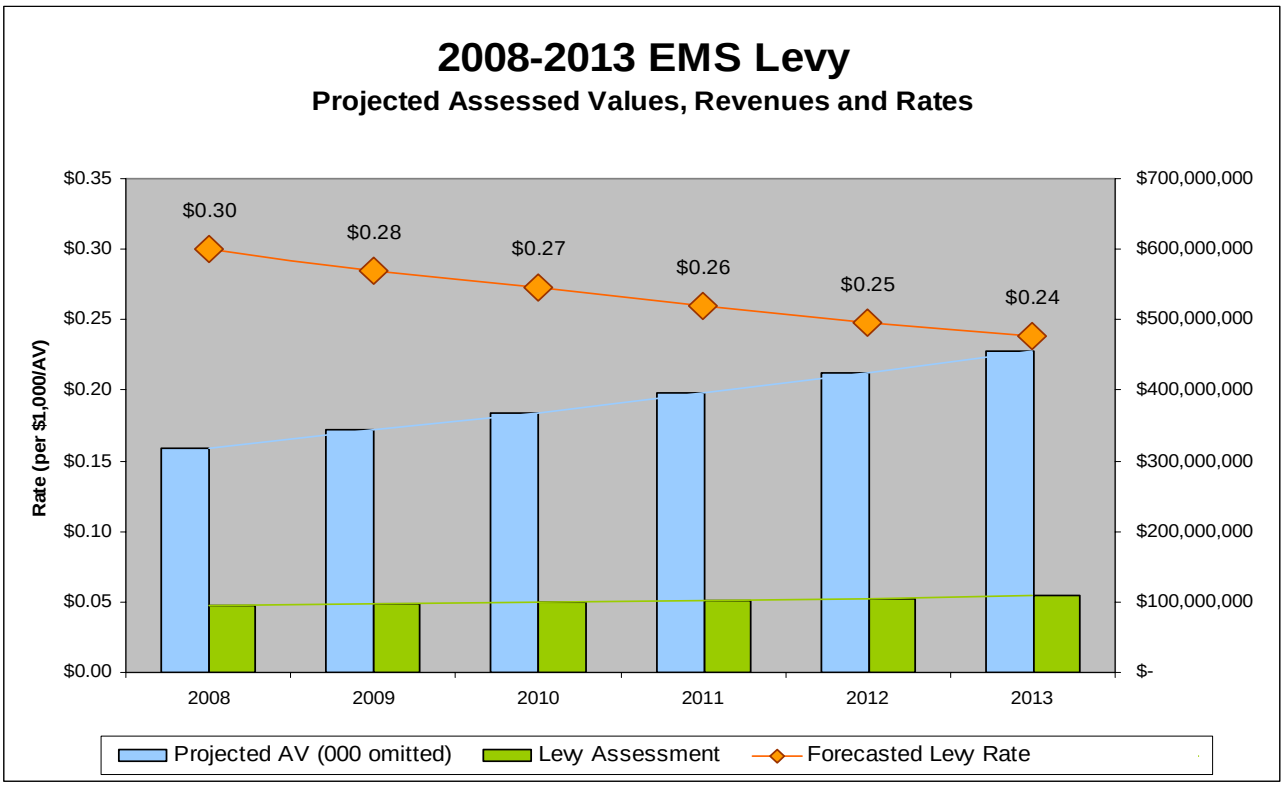
Key Assumptions: 2007-2013 Levy Span

Rate of Growth	2007	2008	2009	2010	2011	2012	2013
New Construction	2.43%	2.03%	1.84%	1.8%	1.8%	1.8%	1.8%
Reevaluation Existing Properties	7.00%	6.5%	6%	5.5%	5.5%	5.5%	5.5%

Growth in New Construction: A key assumption for the growth of revenue within the 2008-2013 levy period is the growth in new construction. Since growth in the assessment on existing properties is limited to 1%, the primary growth in total assessment has been related to new construction.

Assessed Values: A key assumption is 13.5% of growth in assessed value of existing properties between the actual 2006 total assessed value for the county and the projected 2008 total assessed value (the beginning year of a new levy). This is an average of 6.75% per year. Average yearly increases in overall assessed values in King County during the 2002-2007 levy period were 5%. If assessed values are higher than forecasted, the levy would have a starting assessment that is slightly higher than forecasted. If lower than projected, the levy may not produce sufficient funds to cover planned expenditures.

The *Medic One/EMS 2008-2013 Financial Plan* assumes the beginning assessed value for King County in 2008 as $319 billion dollars. At 30-cents per $1,000 AV, the total forecasted assessment is $96 million. With new construction, it is estimated that property tax assessment increases will average 2.6% per year over the span of the 2008-2013 levy period. However, it is expected that increases in assessed values of properties will average 7.4% per year. This results in a lowering levy rate.



Levy Rate and Growth Assumptions

	2008	2009	2010	2011	2012	2013
Projected Assessed Value	318,616,947,551	343,469,069,460	368,542,311,530	395,445,900,272	424,313,450,992	455,288,332,914
Levy Assessment	$95,585,084	$97,656,896	$100,391,290	$102,551,312	$105,422,749	$108,374,586
Forecast Rate	$0.3000	$0.2843	$0.2724	$0.2593	$0.2485	$0.2380
AV Growth		7.80%	7.30%	7.30%	7.30%	7.30%
Assessment Growth		2.17%	2.80%	2.15%	2.80%	2.80%

Division of Revenues: Revenues associated with the City of Seattle are sent directly to the City by King County; revenues for the remainder of King County are deposited in the KC EMS Fund. Based on past trends, the *2008-2013 Financial Plan* assumes a similar ratio of Seattle AV to King County AV through the span of the levy.

Division and Estimated Value of Assessments for the 2008-2013 Levy Period

	Percentage of Assessed Value	Estimated Tax Revenue	Estimated Other Revenue	Estimated Total
City of Seattle	35.6%	$ 214.8		$ 214.8
KC EMS Fund	64.4%	$ 389.1	$ 3.9	$ 393.0
Total		$ 603.9	$ 3.9	$ 607.8

$ in Millions, total assuming 1% delinquency rate.

Beginning assessed value and new construction growth are factors that drive forecast assessments.

Total Forecast Property Tax Assessments 2008-2013 (in millions)

	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**Total**
City of Seattle	$34.0	$34.7	$35.7	$36.5	$37.5	$38.6	$217.0
KC EMS Fund	$61.6	$62.9	$64.7	$66.1	$67.9	$69.8	$393.0
TOTAL	**$95.6**	**$97.6**	**$100.4**	**$102.6**	**$105.4**	**$108.4**	**$610.0**
Growth in Total Levy		*2.17%*	*2.80%*	*2.15%*	*2.80%*	*2.80%*	

Total not including 1% delinquency rate.

Based on a 1% delinquency rate, property tax revenue is forecasted at 99% of assessments.

Forecast Property Tax Revenue 2008-2013 (in millions)

	2008	**2009**	**2010**	**2011**	**2012**	**2013**	**Total**
City of Seattle	$33.7	$34.4	$35.4	$36.1	$37.1	$38.2	$214.8
KC EMS Fund	$61.0	$62.3	$64.0	$65.4	$67.3	$69.1	$389.1
TOTAL	**$94.7**	**$96.7**	**$99.4**	**$101.5**	**$104.4**	**$107.3**	**$603.9**
Growth in Total Levy		*2.17%*	*2.80%*	*2.15%*	*2.80%*	*2.80%*	

Total assuming 1% delinquency rate.

Other Revenues: In addition to property taxes from the Medic One/EMS levy, the KC EMS Fund receives interest income on its fund balance, a contribution of $375,000 per year from the County General Fund, and monies from other sources reimbursing King County for the costs of providing services to agencies and organizations.

Total Revenue Assumptions

MEDIC ONE/EMS 2008-2013 Financial Plan

Estimated Revenue

REVENUES	**Estimate**	**%**
Property Taxes	$ 603,882,097	99.3%
Other (Reimburseables)	$ 312,000	0.1%
Interest Income	$ 1,364,781	0.2%
CX - KCM1	$ 2,250,000	0.4%
TOTAL REVENUES	$ 607,808,878	100.0%

EXPENDITURES

This section lists the key expenditure assumptions for each program area and shows projected expenditures for each program. Medic One/EMS revenues support four major Medic One/EMS operations related to direct service delivery or support programs:

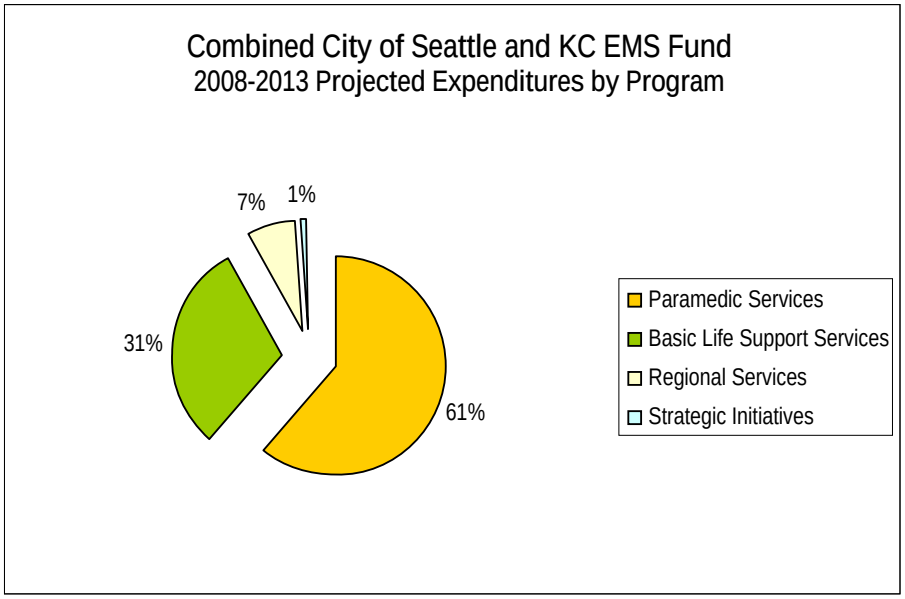
- Advanced Life Support (ALS) Services
- Basic Life Support (BLS) Services
- Regional Support Programs
- Strategic Initiatives

Expenditures are shown for each fund – City of Seattle and KC EMS Fund. The City of Seattle finances two program areas: Advanced Life Support and Basic Life Support. The KC EMS Fund finances four program areas: Advanced Life Support, Basic Life Support, Regional Services and Strategic Initiatives.

Medic One/EMS Program Areas

Fund	Advanced Life Support	Basic Life Support	Regional Services	Strategic Initiatives	Total
City of Seattle	$123,016,961	$91,775,524			$214,792,485
KC EMS Fund	$247,640,258	$94,644,641	$41,047,867	$7,079,975	$390,412,741
Combined Total	$370,657,219	$186,420,165	$41,047,867	$7,079,975	$605,205,226

ALS services are provided by six primary agencies, BLS services are provided by 32 fire departments and Regional Services and Strategic Initiatives are provided by the King County EMS Division.



The division of funds between program areas is similar to the 2002-2007 levy. Due to the increase in the BLS allocation, the BLS percentage of the levy is slightly higher while the ALS allocation is slightly smaller (see page 15 for a pie chart showing distribution by program for the 2002-2007 levy).

As mentioned on page 58, expenditures have increased for a variety of reasons. Foremost is the increase in costs of ALS service. Others include the increased BLS allocation, Regional Services expenses, incorporating the proven 2002-2007 Strategic Initiatives into Regional Services as ongoing core programs, and the creation of new Strategic Initiatives.

Each program's 2008 expenditure level was determined by projecting costs of providing services: existing services that will continue to be provided, and new services added for the 2008-2013 levy (as detailed in the Recommendation Section). Expenditure levels for 2009 through 2010 are based on an increase by an appropriate inflator for the program, the timing of new services, and cashflow projections of individual Strategic Initiatives.

A contingency reserve of 5% was added to the BLS, Regional Services and Strategic Initiative programs. Due to the higher probability of increased costs a 9% contingency reserve was added to the ALS program. Contingency reserve is 7% of overall budget.

Projected Expenditures by Fund for 2008-2013 Levy

Fund	2008	2009	2010	2011	2012	2013	Total
City of Seattle	$33.7	$34.4	$35.3	$36.1	$37.1	$38.2	$214.8
KC EMS Fund	$59.1	$60.9	$63.3	$66.0	$68.8	$72.3	$390.4
Combined TOTAL	**$92.8**	**$95.3**	**$98.6**	**$102.1**	**$105.9**	**$110.5**	**$605.2**

In Millions (000,000 omitted)

ASSUMPTIONS

All programs are increased yearly with inflators appropriate to the program. These inflators include a CPI assumption. The CPI assumptions used in the Financial Plan were provided by the King County Economist.

CPI Assumptions

	2008	2009	2010	2011	2012	2013
Forecast CPI	2.6%	2.5%	2.5%	2.67%	2.67%	2.67%

To encourage cost efficiencies and allow for variances in expenditure patterns, designated reserves were added during the 2002-2007 levy. This allows agencies to save funds from one year to use for variances in expenditures in future years. This is primarily used by ALS providers to accommodate cashflow peaks related to completing labor negotiations – both increases and instances where contracts are negotiated after they have expired and include back wages. Within Regional Services, use of designated reserves may be related to the timing of special projects (particularly projects supporting ALS or BLS agencies).

EXPENDITURES BY PROGRAM AREAS

Advanced Life Support (ALS) Services

Since the first Medic One/EMS levy in 1979, regional paramedic services have been largely supported by, and are the funding priority of, the Medic One/EMS levy. Costs have been forecast as accurately as feasible, but should the forecasts and method for inflating the allocation be insufficient, ALS remains the first priority for any available funds.

The Medic One/EMS levy supports ALS services using a *standard unit cost* methodology determined by staffing paramedic units 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 Medic One/EMS-related expenses. Contracts with the major paramedic providers from the KC EMS Fund are allocated on a per unit cost basis. The contract with Snohomish County Fire Protection District #26 is on a per year basis.

ADVANCED LIFE SUPPORT (ALS) UNIT COSTS

2008 Estimated Costs

(based on self reported costs)

Category	Avg Cost per Unit	Percentage of Total
Salaries and benefits	$ 1,399,021	83%
Medical Supplies & Equipment	$ 49,673	3%
Office & Misc Costs	$ 19,583	1%
Uniforms, Fire & Safety Supplies	$ 10,162	1%
Dispatch & Communications	$ 55,983	3%
Vehicle Maintenance Costs	$ 40,030	2%
Facility Costs	$ 18,058	1%
Indirect/Overhead Costs	$ 86,356	5%
OPERATIONAL EXPENSE GRAND TOTAL	$ 1,678,866	100%

In addition, a capital allocation starting at $75,411 per year was developed. These funds are to be used by agencies to set up internal reserves to cover the costs of replacing items including vehicles, defibrillators and other equipment.

2008 ALS Operating and Capital Unit Allocations by Fund

Fund	Operating Allocation	Capital Allocation	Total
City of Seattle	$ 2,125,611	$ 75,411	$ 2,201,022*
KC EMS Fund	$ 1,678,868	$ 75,411	$ 1,754,279

This is assuming the same capital allocation for the City of Seattle as within the KC EMS Fund.

This *2008-2013 Financial Plan* recommends an annual review of ALS costs to minimize cost shifting expenses to provider agencies. An ALS Subcommittee, comprised of representatives of the different ALS providers, is expected to meet each year to review costs and provide recommendations to the EMS Advisory Committee. During the 2002-2007 levy period, this process revealed a significant difference between the cost of providing services and the annual CPI inflator. As a result, since ALS is the priority of the levy as funds became available, the unit cost allocation was increased over CPI three times.

During the planning process, ALS providers met to develop an updated per unit cost allocation for the 2008-2013 levy. In addition to reviewing individual line items in the cost allocation, they reviewed in detail what was escalating the costs. Based on this evaluation, they recommended two major changes to the way ALS is funded.

The first change was to provide both an operational and a capital portion of the allocation, including revisions to the vehicle replacement program. It was decided that each ALS provider would develop internal reserve funds for replacement of all items included in the capital allocation. Agencies are to keep records of the deposits into these accounts and the expenditures made from these accounts. Any unused capital funds need to be reported and returned to the KC EMS Fund.

The second recommended change was to the inflator. For the 2008-2013 levy period, the ALS unit allocation amount will be increased by the use of a compound inflator. A financial model was developed that inflates the major categories of ALS funding – wages and benefits – by appropriate escalators.

Assumptions Used to Inflate the ALS Allocation

Title	Calculation Basis	Source	2008E	2009E	2010E	2011E	2012E	2013E
Wage inflation	CPI + 1%	KC Economist	3.60%	3.50%	3.50%	3.67%	3.67%	3.67%
Medical benefit inflation	Annual % change	Average of agencies	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%
LEOFF 2	Pctg of Salaries	State Actuary	5.46%	5.39%	5.39%	5.39%	5.39%	5.39%
Seattle Metro CPI	Annual % change	KC Economist	2.60%	2.50%	2.50%	2.67%	2.67%	2.67%
FICA %	% of labor charged FICA	KCM1 Avg 2002-2005	96.5%	96.5%	96.5%	96.5%	96.5%	96.5%

Currently, Vashon Medic One is funded as a 0.9 unit. ALS agencies acknowledged that Vashon medics would greatly benefit by incorporation into a larger agency, thus allowing paramedics greater exposure to critical skills and complex patient care. The *2008-2013 Financial Plan* includes funding the Vashon Medic One unit at a 1.0 level when it is transitioned into a larger ALS agency.

The total Medic One/EMS levy allocation for *each paramedic provider* is determined by the number of units staffed with two paramedics. Start-up costs for any new paramedic units are added separately. Paramedic vehicle replacement transition funds are included for 2008 and 2009 until the new capital allocation fully funds vehicle replacements on a three-year cycle.

Medic units (vehicles) are currently replaced every three years and then placed in a backup vehicle status for three additional years. The new capital allocation fund includes allocation for one-third of a vehicle's replacement each year, and a vehicle transition plan was developed to ensure full funding of vehicles scheduled for replacement in 2008 and 2009.

2008-2013 ALS Expenditure Projections by Area

	# of Existing Units	Costs of Existing Units	Allocation for Outlying Areas	Vehicle Transition Plan and Other *	New Unit Start Up Costs/Expanded Unit Costs	Contingency	Total
2008	25.0	$47.0	$0.2	$1.3	$0.9	$4.4	$53.8
2009	25.5	$49.8	$0.3	$1.0	$1.0	$4.7	$56.8
2010	26.5	$54.0	$0.4	$0.4	$0.6	$5.0	$60.4
2011	27.0	$57.3	$0.4	$0.4	$0.0	$5.2	$63.3
2012	27.0	$59.6	$0.4	$0.4	$0.4	$5.5	$66.3
2013	27.5	$63.2	$0.4	$0.4	$0.3	$5.8	$70.1
Total		$330.9	$2.1	$3.9	$3.2	$30.6	$370.7

***Includes CX contribution to King County Medic One and estimate of reimbursables for services KCM1 provides to others.*

Total Projected ALS Funding for the 2008-2013 Levy

	2008	2009	2010	2011	2012	2013	Total
City of Seattle	$16,793,794	$18,560,563	$20,655,077	$21,469,080	$22,322,030	$23,216,417	$123,016,961
KC EMS Fund	$37,024,310	$38,197,278	$39,734,805	$41,801,724	$43,935,030	$46,947,111	$247,640,258
Combined Total	**$53,818,104**	**$56,757,841**	**$60,389,882**	**$63,270,804**	**$66,257,060**	**$70,163,528**	**$370,657,219**

Basic Life Support (BLS) Services

The levy provides partial funding to BLS providers to help ensure uniform and standardized patient care and enhance BLS services. Basic Life Support services are provided by 32 local fire departments and fire districts.

A BLS Subcommittee was formed to help determine the financial needs of regional BLS agencies. A model to estimate the total costs of providing BLS services for fire departments in King County was developed and completed by 20 out of 32 agencies. Costs for the remaining 12 agencies were interpolated based on agencies that were close to them in terms of both operational and geographic characteristics. It was determined that in 2004, the BLS allocation covered approximately 14% of the costs of providing BLS services.

This process was useful to determine a desired increase in the total BLS allocation. It was decided to tie the 2008 BLS allocation to the cost of BLS responding to the most critical of ALS calls. After extensive review, this was defined as the number of calls requiring ALS transport since BLS provides critical services for these calls by being first on the scene and stabilizing the patient.

The KC EMS Fund is structured to allow increases to the total BLS allocation at CPI each year, and along with a revised allocation formula, now guarantees that each agency will receive at least a small increase each year.

Total Projected BLS Funding for the 2008-2013 Levy

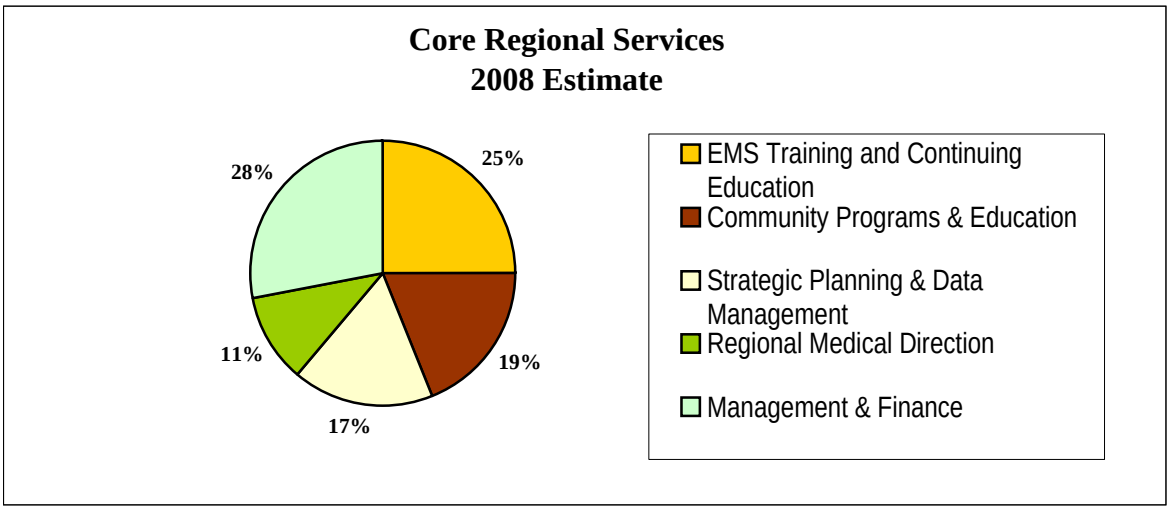
	2008	2009	2010	2011	2012	2013	Total
City of Seattle	$16,864,511	$15,827,289	$14,695,634	$14,642,238	$14,800,405	$14,945,447	$91,775,524
KC EMS Fund	$14,790,939	$15,160,712	$15,539,729	$15,954,640	$16,380,629	$16,817,992	$94,644,641
Combined Total	**$31,655,450**	**$30,988,001**	**$30,235,363**	**$30,596,878**	**$31,181,034**	**$31,763,439**	**$186,420,165**

Regional Services

Regional Medic One/EMS programs and services support critical functions that are 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, and maintaining the balance of local area service delivery with centralized interests.

Following extensive review by the Regional Services/Strategic Initiatives Subcommittee, proposed core Regional Services remain similar to those funded in the 2002-2007 levy period. Recommended variations are the creation of a medical quality improvement program and the addition of a 'small grants' program for Medic One/EMS providers. The 'small grants' program, funded at $50,000 per year, will be used to help offset some of the costs to Medic One/EMS agencies participating in pilot programs and/or projects.

Inflator Reflecting the fact that the primary inflator for core Regional Services are salaries and benefits (which account for almost 60% of the costs of providing these services) it was decided to use forecast CPI + 1% as the inflator.



Management and Finance includes expenses supporting all of Regional Services. These additional expenses include general office supplies, vehicles, and lease costs.

Projected Expenditures by Regional Services Program for 2008-2013 Levy

Program	2008	2009	2010	2011	2012	2013	Total
Community Programs and Education	$1,167,973	$1,208,853	$1,251,162	$1,297,080	$1,344,683	$1,394,033	$7,663,784
Strategic Planning and Data Management	$1,081,941	$1,119,809	$1,159,003	$1,201,538	$1,245,635	$1,291,349	$7,099,275
Regional Medical Direction	$687,680	$711,749	$736,660	$763,696	$791,723	$820,780	$4,512,288
EMS Training and Continuing Education	$1,570,318	$1,625,279	$1,682,164	$1,743,900	$1,807,901	$1,874,251	$10,303,813
Management and Finance	$1,747,850	$1,809,025	$1,872,341	$1,941,056	$2,012,292	$2,086,143	$11,468,707
Total (KC EMS Fund)	**$6,255,763**	**$6,474,715**	**$6,701,330**	**$6,947,269**	**$7,202,234**	**$7,466,556**	**$41,047,867**

Management and Finance provides services for the entire levy. The majority of expenses are related to management of the KC EMS Fund. The total is less than 3% of the KC EMS Fund. General expenses supporting Regional Services are also paid from this section. These additional expenses include general office supplies and equipment, vehicle and lease costs.

Strategic Initiatives

Strategic Initiatives are new programs geared to meet the success of the strategic directions. Strategic Initiatives are funded with lifetime budgets that include inflationary assumptions similar to those used by Regional Services. However, the overall lifetime budgets are not adjusted to reflect small changes in CPI. The King County EMS Division has the discretion of moving funds between approved Strategic Initiatives to ensure the success of the projects. Increased funding for the programs or new projects are approved by the EMS Advisory Committee.

Lifetime Budgets for 2008-2013 Strategic Initiatives

2008-2013 MEDIC ONE/EMS LEVY

Proposed Strategic Initiatives

S U M M A R Y	**Total**
Injury Prevention Strategic Initiative Programs	$1,433,899
Emergency Medical Dispatch Strategic Initiatives	
Address non-emergency calls	$549,272
Dispatch Center funding tied to Performance Standards	$1,539,560
Advanced EMD training	$354,446
Public Access Defibrillation	$160,314
Interactive Enhancements to CBT On-Line	$1,020,573
Enhanced Network Design	$1,110,401
Emergency Management	$201,091
Levy Planning	$373,277
SUBTOTAL	**$6,742,833**
With 5% Contingency	$337,142
TOTAL w/CONTINGENCY	**$7,079,975**

Total Projected Strategic Initiatives funding for the 2008-2013 Levy

	2008	2009	2010	2011	2012	2013	Total	Average
Strategic Initiatives								
	$1,031,046	$1,129,131	$1,284,379	$1,269,876	$1,224,224	$1,141,319	**$7,079,975**	$1,179,996

Contingency Reserve

Having no planned contingency and reserve posed a significant challenge in the 2002-2007 levy. During the planning process, the ALS and Regional Services/Strategic Initiatives Subcommittees requested that contingency be included in the *2008-2013 Financial Plan*.

Subcommittee members agreed a reserve was needed to cover unplanned expenditures – whether these related to an emergency situation, significant changes in economic assumptions, or new operational and programmatic needs. Particular concerns related to the economic assumptions in the Financial Plan include the initial estimated assessed value for 2008 (that serves as the starting point for the levy), rates of new construction growth, and the estimated growth in CPI.

Out of this discussion came the addition of contingency reserves for the 2008-2013 levy. Each program received a specific percentage to create reserves for possible unplanned expenditures. Because history has shown that ALS operations are the primary services that require contingency funding, it received a larger percent than the other programs were allotted. Contingency reserves included in the *2008-2013 Financial Plan* are shown on the following table:

2008-2013 Proposed Contingency Reserve

	ALS	BLS	RS/SI	Total
City of Seattle	$10,157,364	$4,370,263		$14,527,627
KC EMS Fund	$20,447,361	$4,506,888	$2,291,802	$27,246,051
Total	$30,604,725	$8,877,151	$2,291,802	$41,773,678
% added to Technical Stakeholder's Recommendations	9%	5%	5%	

Total estimated costs	$605,205,227
Total budgeted contingency	$41,773,677
% of budget	7%

The Elected Officials Group adopted the following **Contingency Reserve policy language.** At the suggestion of the King County Prosecuting Attorney's Office, two changes were made to the originally-adopted language.

The following language is proposed for inclusion in the Emergency Medical Services Levy Ordinance. Once enacted by the King County Council and approved by voters, this ordinance cannot be amended without subsequent voter approval.

FINDINGS:

A. The council finds that it is in the best interest of the county and its taxpayers to codify financial policies to assure the stability of the Medic One/EMS program.

B. The council finds that temporary suspension of these financial policies may be necessary through a declaration of emergency under extraordinary circumstances.

NEW SECTION

> Medic One/EMS Contingency Reserve. A contingency reserve balance shall be maintained at all times in the emergency medical services fund. Contingency reserve levels for the 2008-2013 levy shall be equal, at a minimum, to the contingency reserve levels specified in the concurrently adopted Medic One/EMS levy financial plan.

NEW SECTION

Declaration. The contingency reserve requirement in this chapter may be temporarily suspended by the county executive if necessary to protect the public health, safety, and welfare. Any such declaration must be immediately transmitted to the County Council and the EMS Advisory Committee, outlining extraordinary measures that must be taken to protect the public health, safety, and welfare. A declaration of temporary suspension shall be limited in duration to 60 days unless confirmed by a majority vote of the EMS Advisory Committee. Any expenditure of reserve funds would require an appropriation from the County Council.

NEW SECTION

Inflation. The contingency reserve requirement in this chapter may be temporarily suspended by declaration of unexpected inflation by the county executive. Any such temporary suspension must be immediately transmitted to the county council and the EMS Advisory Committee. A temporary suspension can be made after inflation in the preceding year is more than one percent above the level anticipated in the adopted levy financial plan. Any expenditure of reserve funds would require an appropriation from the County Council.

Appendix A: Advanced Life Support (ALS) Units*

	1st Year	Location	previous	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Seattle																			
Seattle M1 & M10	1969	HMC	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Seattle M14	1976	So. Sea Industrial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seattle M17	1976	Univ District	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seattle M32	1980	West Seattle	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seattle M28	1980	Rainier Valley	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seattle M16	1979	Greenlake	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seattle M31	1991	Northgate	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Seattle M18	2001	Ballard											0.5	1	1	1	1	1	1
Total			**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6**	**6.5**	**7**	**7**	**7**	**7**	**7**	**7**
Bellevue Medic																			
Bellevue Medic 1	1972		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bellevue Medic 2			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bellevue Medic 3 (EMT/P)	1992	North Bend		0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1
Bellevue Medic 14	1997	Issaquah							0.5	0.5	0.5	0.5	0.5	0.5	1	1	1	1	1
Total			**2**	**2.5**	**2.5**	**2.5**	**2.5**	**2.5**	**3**	**3**	**3**	**3**	**3**	**3**	**3.5**	**3.5**	**3.5**	**4**	**4**
Evergreen (thru 2003) / Redmond (2003 thru present)																			
Evergreen Medic 19	1975		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Evergreen Medic 23			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Evergreen Medic 35 (EMT/P)	1993	Woodinville-Duvall			0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1	1
Evergreen Medic 47	1997	Bothell							0.5	0.5	0.5	0.5	0.5	1	-	-	-	-	-
Total			**2**	**2**	**2.5**	**2.5**	**2.5**	**2.5**	**3**	**3**	**3**	**3**	**3**	**3.5**	**2.5**	**2.5**	**2.5**	**3**	**3**
King County																			
KC Medic 4	1977	Highline	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KC Medic 5	1977	Valley	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KC Medic 6	1979	Auburn/Fed Way	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KC Medic 8	1981	Fed Way	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KC Medic 11	1992	Covington		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
KC Medic 7	1996	Kent-Des Moines						1	1	1	1	1	1	1	1	1	1	1	1
KC Medic 12	1998	Black Diamond								0.5	0.5	0.5	0.5	0.5	0.5	1	1	1	1
KC Medic 13	2006	Des Moines																0.5	0.5
Total			**4**	**5**	**5**	**5**	**5**	**6**	**6**	**6.5**	**6.5**	**6.5**	**6.5**	**6.5**	**6.5**	**7**	**7**	**7.5**	**7.5**
Shoreline																			
Shoreline Medic 63	1977	Shoreline	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Shoreline Medic 65	2002	Kenmore												0.5	0.5	0.5	0.5	0.5	0.5

Shoreline Medic 47		2004	Bothell													1	1	1	1	1
Total				**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1.5**	**1.5**	**2.5**	**2.5**	**2.5**	**2.5**
Vashon-Maury ALS																				
Vashon Medic 9			Vashon									1	1	1	1	1	1	1	1	1
Total				**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
City of Seattle				6	6	6	6	6	6	6	6	6	6	6.5	7	7	7	7	7	7
Remainder King County				9	10.5	11	11	11	12	13	13.5	14.5	14.5	14.5	15.5	15.5	16.5	16.5	18	18
Total				**15**	**16.5**	**17**	**17**	**17**	**18**	**19**	**19.5**	**20.5**	**20.5**	**21**	**22.5**	**22.5**	**23.5**	**23.5**	**25**	**25**
Increase					1.5	0.5	0	0	1	1	0.5	1	0	0.5	1.5	0	1	0	1.5	0

Appendix B

REGIONAL SERVICES PROGRAMS
RECOMMENDED TO BE FUNDED DURING THE 2008-2013 LEVY

The Technical Stakeholders recommend supporting Regional Services as follows:

- Funding the core Regional Services/Programs that are currently funded in the 2002-2007 levy;
- Funding enhancements to these Regional Services/Programs that are currently funded in the 2002-2007; and
- Funding new Regional Services/Programs in addition to the programs that are currently funded in the 2002-2007 levy.

I. Community Programs:

The Community Programs and Education Section provides community-based programs to educate citizens of King County on recognizing medical emergencies, CPR, AED training, and injury prevention and health education.

It consists of 4 different services:

A. Emergency Medical Dispatch (EMD)

Provides guidelines for approximately 175 emergency 9-1-1 dispatchers in King County and assists them in triaging 9-1-1 calls to provide pre-arrival instructions to assist callers in providing first aid, CPR or defibrillation prior to the arrival of emergency medical personnel.

Current programs are:

1. **Telephone Referral Program**: This program routes 9-1-1 emergency medical calls that meet certain non-urgent dispatch criteria, as approved by the Medical Program Director, to a nurse consulting line rather than sending a BLS response.

2. **Dispatcher – Assisted Resuscitation Trial (DART):** This is an international study involving dispatch centers in King County, Thurston County, and London, England. The study will determine the best method of telephone CPR and may serve to define the national standard for the delivery of telephone CPR instructions.

B. Injury Prevention Programs

These programs are designed to address specific high risk populations to help reduce injuries.

Current programs are:

1. **Smart Kids Safe Kids**: Classes on injury/fire prevention for preschool teachers.

2. **Think Again**: An in-classroom DUI prevention program for high school students that discusses the consequences of drinking and driving. Medic One/EMS administers this in tandem with the Washington State Traffic Safety Commission and the King County Fire and Life Safety Association.

3. **Fire Dept Kids Day at Boeing Flight Museum**: A day for the community to learn about fire and life safety from local fire departments. In 2005, 500+ people came to see the firefighters and learn about injury and fire safety.

4. **Mature Driver Project**: The is the implementation of an assessment program that determines a mature driver's cognitive, physical, and vision abilities related to driving, and integrating it with the Washington State Department of Licensing.

C. CPR/AED Program

Helps public facilities, businesses, and private homes implement an appropriate training course, determine proper placement of the device(s) and register their Automated External Defibrillators (AEDs) with their local Medic One/EMS.

Current CPR/AED programs are:

1. **Public Access Defibrillation**: This program provides training, consultation on placement of AEDs, and registers AEDs (including input into the dispatch system showing availability and location). There are approximately 1,800 AEDs currently registered in this program throughout the region.

2. **School CPR Program**: Secondary school students (grades 6-12) in King County are trained to perform Cardiopulmonary Resuscitation (CPR) and use an Automated External Defibrillator (AED) in American Heart Association (AHA) approved classes taught by their teachers and local firefighters. Part of this is the CPR Train the Trainer program that focuses on training school teachers and Fire Department personnel to provide training for the school program.

3. **Targeted CPR Program**: This program provides in-home CPR/AED classes for patients who are at high risk for cardiac arrest.

D. Critical Incident Stress Management (CISM):

1. This program provides emotional and psychological services to emergency services professionals.

II. Training Programs:

King County EMS provides initial training, continuing education and oversight of the recertification process for approximately 3,500 EMTs in King County. The King County EMS Division develops the curricula that ensure the training and education programs meet agency need and Washington State requirements.

1. **Patient Care Guidelines**: Also know as the "Blue Book", this resource outlines the standards/protocols for providing pre-hospital care of patients.

2. **EMT Initial Training**: Training courses are offered in the spring and fall, and are open to personnel from all fire/EMS agencies in King County. Each course consists of 120 hours of classroom and practical instruction in addition to 10 hours of hospital observation time to ensure EMT certification is in accordance with Washington State regulations.

3. **Competency Based Training (CBT) Basic Program aka EMS on-line**: This is an interactive format that provides training services on-line. More than 32,000 courses have been taught via this medium.

4. **Competency Based Training (CBT) Enhanced Program**: Mandated by the State of Washington, EMTs must complete 10 hours of continuing medical education and evaluation each year. The King County EMS BLS staff develops, writes and implements the curriculum each year.

5. **EMT Defibrillation Program**: This program focuses on the training, education, and maintenance of devices.

III. Regional Medical Direction:

The Medical Program Director is tasked under Washington Administrative Code and the Revised Code of Washington with providing quality medical oversight and guidance to EMTs and Paramedics, and the entire Medic One/EMS system. The Medical Director performs Quality Improvement/Quality Assurance by reviewing and improving, as necessary, the medical care being provided by Paramedics, oversees the on-going performance of EMTs and Paramedics in the system, and conducts research and evaluation of new kinds of care for Paramedics, EMTs and dispatchers. Medical directors from each ALS provider agency meet quarterly to provide general program oversight in order to address pertinent medical issues.

IV. Planning & Evaluation:

The King County EMS Division collects and manages regional data for the purposes of long-term quality program management and evaluation, and the development of new service options.

1. **EMS Advisory Committee**: This committee meets quarterly to provide direction and insight to Medic One/EMS programs and operations.

2. **Regional Purchasing Program**: This voluntary program is designed to reduce equipment and supply expenses by maximizing the joint purchasing power of Medic One/EMS providers. Medic One/EMS agencies in King County are able to "coat-tail" on the contract through joint purchasing agreements.

3. **ADAPT:** The Alternative Destination and Patient Treatment Program provides less critical patients (those that require minimal treatment/minimal medical risks) with care by offering treatment at a local urgent care facility as an alternative to treatment at an emergency department.

V. Administration/Finance:

1. Regional Leadership and Coordination for County-wide Medic One/EMS system
2. Financial Management
3. Implementation of Core programs
4. Levy and Contract Management

Costs of Continuing Core Regional Services Programs

Regional Services	2008	2009	2010	2011	2012	2013	Total
Existing Core Regional Services	**$4,952,029**	**$5,125,351**	**$5,304,738**	**$5,499,422**	**$5,701,251**	**$5,910,487**	**$32,493,278**

Appendix C

PROGRAMMATIC CHANGES RECOMMENDED TO BUILD UPON AND ENHANCE THE 2002-2007 REGIONAL SERVICES PROGRAMS FOR THE 2008-2013 LEVY

I. Regional Medical Direction:

1. Move Nursing Home/Adult Care Facilities (part of the Enhanced Care for Specific Populations) program into Regional Services.
2. Move End of life decisions program (part of the Enhanced Care for Specific Populations) into Regional Services.
3. Move Paramedic CE Support to Training Section.

II. Training Programs:

1. Video Conferencing as a way to conduct Run-Review for providers that are spread throughout County.
2. Paramedic CE Support funds moved to Training Section.

III. Community Programs:

A. Emergency Medical Dispatch (EMD)

1. As needed, review Criteria Based Dispatch (CBD) Guidelines more often than every 3 years.
2. Add component of Patient Outcomes to EMD and include feedback to dispatchers and trainers.
3. Direct more funding toward Training/Continuing education for Dispatch Centers.
4. Determine methods to improve linking registration of defibrillator devices to CAD premise information.

B. Injury Prevention Programs

1. Partner with private sector for the Injury Prevention Program. Secure $ from Safeco/Home Depot/Loews and companies that make products used to prevent falls such as fall assist mechanisms/devices (grab bars).
2. Partner with other entities (Fire Departments, DMV, volunteer groups) to run some of these programs. Increase public education by using these programs as a resource for increased public knowledge of other Medic One/EMS programs.
3. Continue to evaluate programs to assess how well they work and how we should continue to utilize them.

C. Public Access Defibrillator Program:

1. Enhance efforts to link Defibrillator Registry to dispatch so that caller can be told there is a defibrillator in facility.

IV. Planning & Evaluation:

1. Review role, authority and make-up of EMS Advisory Committee.
2. Expand the Regional Purchasing Program for ALS vehicles and possibly BLS vehicles.
3. Expand the Regional Purchasing Program to apply to new equipment and technologies (MDCs, Life Packs, computers/IT/radios) particularly those items recommended/approved by Medical Directors.
4. Enhance ADAPT and integrate into the New Strategic Initiative to examine non-emergency calls.
5. Consider options for better organizing the SI Support within the King County EMS Division to meet the new Strategic Plan programs.

V. Administration:

1. Reassess staffing models to determine how to shift staff support when Strategic Initiatives are moved into Regional Services.
2. Create system for periodic review of Regional Services and Strategic Initiatives.

Costs of Enhancing Core Regional Services Programs

Regional Services	2008	2009	2010	2011	2012	2013	Total
Enhanced Regional Services	$56,587	$58,567	$60,617	$62,842	$65,148	$67,539	**$371,300**

Appendix D

PROVEN 2002-2007 STRATEGIC INITIATIVES
RECOMMENDED TO BE CONVERTED INTO REGIONAL SERVICES AND RECEIVE FUNDING DURING THE 2008-2013 LEVY

I. Community Programs:

Emergency Medical Dispatch (EMD):
The programs below (revising guidelines, training and education of dispatchers and enhance quality improvements practices demonstrated improved effectiveness and efficiency of ALS dispatch.

1. Continued Review and revision of the Criteria Based Dispatch (CBD) Guidelines is a major component of decreasing the rate of growth of ALS calls.
2. Web based CBD Guidelines
3. CBD Basic Training and Continuing Education Curricula
4. EMS On-Line (Web-based Training for Dispatchers)
5. Emergency Medical Dispatch (EMD) Quality Improvement involves reviewing dispatch tapes and associated reports to discover where improvements can be made within the dispatch program.

B. Injury Prevention Programs

1. Child Passenger Safety (CPS): This is a partially self-sustaining child car seat program at various Public Health Centers for Maternity Support Service (MSS) clients.

II. Training Programs:
Training programs that utilize current web-based technologies allows for expedient and cost-efficient delivery of training services.

2. Competency Based Training (CBT) Enhanced Program: This is the EMS on-line program that provides continuing education via the web.
3. Regional EMS Tracking Resources (RETRO): This on-going project consolidated close to 700,000 paper documents into electronic imaging with database since its inception.

III. Regional Medical Direction:
These programs have been rolled into the NEW Medical QI Regional Service program.

1. Paramedic and EMT Procedure and Patient Treatment Evaluations
2. Enhanced Care for Specific Medic One/EMS Patients

IV. Planning & Evaluation:

1. Regional Data Collection (RDC) and Alternate Input Device Project (AID): This program allows for creating a truly electronic incident report data collection system and distribution of Medic One/EMS data for use by Medic One/EMS personnel in the field.

V. Administration:

1. Annual Subfund Review

Costs of These Converted Strategic Initiatives in the 2008-2013 Levy Would Be:

Regional Services	2008	2009	2010	2011	2012	2013	Total
Converted Strategic Initiatives	$814,914	$843,436	$872,956	$904,994	$938,207	$972,639	**$5,347,146**

2002-2007 Strategic Initiative Summary Table – status report

Strategic Initiative	
I. Dispatch Enhancements:	
Review and Revision of the Criteria Based Dispatch (CBD)	**Ongoing - moved into RS** **Completing CAD integration portion as SI in 2008-2013**
ALS Triage Criteria	**Ongoing - moved into RS**
EMD Quality Improvement	**Ongoing – moved into RS**
Enhanced CBD Basic Training and Continuing Education Curricula	**Ongoing – moved into RS**
II. Advanced Technology Projects:	
Web-based Training for EMS Personnel and Dispatchers	**Ongoing – moved into RS**
Regional Electronic Data Collection Project	**Completed 12/03** **Maintenance of program through RS**
Regional EMS Tracking Resource - Online (RETRO) Project	**Ongoing – moved into RS**
III. Medic One/EMS System Efficiencies:	
Financial Review of EMS Sub-Funds	**Ongoing – moved into RS**
Injury Prevention Programs	**Ongoing – moved into RS** **Falls Program continues to be SI in 2008-2013**
Paramedic and EMT Procedure and Patient Treatment Evaluations	**Ongoing – moved into new RS Medical QI program**
Enhanced Care for Specific Medic One/EMS Patients	**Ongoing – moved into new RS Medical QI program**
Assessment of the Impact of State Budget Cuts on the Medic One/EMS System	**Ongoing**
IV. Strategic Plan	**Initiated 7/05**

Appendix E

CREATION OF A NEW REGIONAL SERVICE FOR MEDICAL QUALITY IMPROVEMENT

I. Regional Medical Direction:

Creation of a NEW Regional Service to create a seamless systematic program for Regional Medical Direction

This new program would entail:

a. Embarking on a system-wide evaluation for Medical Quality Improvement

- Creating small team of researchers to craft process/questions that will focus on:
  - QI for Paramedics
  - QI for EMTs
  - QI for Dispatching

b. In addition to Medical QI, it will assess issues related to alternative transport methods, such as:

- How to obtain better utilization of the ADAPT Program;
- Whether a TAXI Voucher program is feasible.

c. Putting QI under the direction of Medical Program Director

d. Clarifying responsibilities that fall under supervision of Medical Director by formalizing supervision of:

- Medical students
- Grants administration and coordination
- Interaction between Community Programs/Planning
- CEEMS

Medical Quality Assurance/Quality Improvement Program in the 2008-2013 Levy Would Be:

Regional Services	2008	2009	2010	2011	2012	2013	Total
Medical QA/QI Program	$432,233	$447,361	$463,019	$480,011	$497,628	$515,891	**$2,836,143**

2002-2007 - Current Levy Funding Levels for Regional Services

	2002	2003	2004	2005	2006	2007	Total
Regional Services							
	$2,847,419	$2,974,647	$3,555,429	$3,500,575	$4,292,891	$5,073,536	$**22,244,497**

2008-2013 - Future Levy Funding Levels for Regional Services – Projections based on CPI + 1%

	2008	2009	2010	2011	2012	2013	Total
Regional Services							
	$6,255,763	$6,474,715	$6,701,330	$6,947,269	$7,202,234	$7,466,556	**$41,047,867**

Includes 5% contingency

Itemization of the 2008-2013 Recommendations are as Follows:

Regional Services	2008	2009	2010	2011	2012	2013	Total
Existing Core Regional Services	$4,952,029	$5,125,351	$5,304,738	$5,499,422	$5,701,251	$5,910,487	$32,493,278
Converted Strategic Initiatives	$814,914	$843,436	$872,956	$904,994	$938,207	$972,639	$5,347,146
Enhanced Regional Services	$56,587	$58,567	$60,617	$62,842	$65,148	$67,539	$371,300
Medical QI/QA	$432,233	$447,361	$463,019	$480,011	$497,628	$515,891	$2,836,143
TOTAL	**$6,255,763**	**$6,474,715**	**$6,701,330**	**$6,947,269**	**$7,202,234**	**$7,466,556**	**$41,047,867**

Includes 5% contingency

Appendix F

NEW STRATEGIC INITIATIVES
RECOMMENDED TO BE FUNDED DURING THE 2008-2013 LEVY

I. Community Programs:

A. Emergency Medical Dispatch (EMD)

1. Strengthen the Recognition Program for Dispatch Centers and create criteria/list of standards and tie funding to meeting these standards and for their participating in required training and quality improvement activities.

2. Provide advanced level EMD Training for dispatchers.

3. Help Medic One/EMS better manage non-emergency calls and reduce stress on the entire Medic One/EMS system.

The focus would be on creating a system-wide approach that utilizes the already established EMD program to address the issues of non-emergency calls while effectively managing growth and resources.

Analysis would include a complete review of issues at the dispatch level as well as at the referral level.

Issues related to dispatch include, but are not limited to, review of:

A. Response times criteria (specific review NFPA standard for life threatening calls);
B. Different models that Dispatch might use such as a dedicated Fire/EMS dispatcher/call receiver; and
C. Mechanisms to separate calls so they can be directed in different ways.
D. Methods to better connect to and utilize Referral Programs
   - TRP
   - Frequent/Repeat Callers
   - Special populations
   - Medicare/Medicaid Patients
   - Non-emergency calls
   - Potential to partner with the 211 program
   - Off-loading non-critical calls
   - Whether creating a CSO, based on the Community Services Officer type of position that would be in neighborhood responding to the types of calls that BLS agencies often must respond, would help reduce number of frequent users and be a feasible alternative.
E. Increase public education about Medic One/EMS programs that are available. This could entail partnering with other entities to increase public awareness and reduce non-emergency calls.

B. Injury Prevention Programs

1. Expand the Falls Program (a research and implementation project to prevent falls in older adults) to be region wide. This is a 2002-2007 Strategic Initiative that has been proposed to continue as a Strategic Initiative over the span of the next levy. The program entails conducting home assessments in the homes of elderly adults and installing risk reduction devices (Handrails, shower bars, bed rails, non-slip rugs) if needed.

Agencies that have participated in the program include:

South King County
King County FD #40
Seattle
Shoreline
Eastside Fire
Woodinville
Redmond
Kirkland
Fall City
KC #20
Kent
Bothell

2. Create a "Small Grant Program" for BLS agencies to help comply with these mandated prevention programs: Agencies that lack the funding to comply with providing these programs can apply for grants.

3. Conduct a community awareness campaign on Injury Prevention to remind the public of the importance of properly installing car seats, the need to assess homes of the elderly so that they are safe and can prevent falls, and encouraging citizens to take a mature drivers assessment.

4. Accelerate efforts to seek and obtain grants for Injury Prevention from such agencies as the National Institute of Aging, the Washington Safety Restraint Coalition and miscellaneous private foundations.

C. Public Access Defibrillation Program:

1. Enhanced Public Access/Public Awareness of CPR-AED Program
   - More extensively market the program to get more devices in communities.
   - Identify businesses located within high risk areas or with high risk employees.
   - Increase training on devices.
   - Encourage owners to register their devices.

II. Training Programs:

1. Interactive Enhancements/alternative media to CBT on-line: Expand and enhance the EMS-on-line program. It is both expedient and cost efficient to delivering training services via current web-based technologies.

III. Regional Medical Direction:

None.

IV. Planning & Evaluation:

1. New Enhanced Data collection network project: This would build upon and improve the Regional Data Collection project by creating a central repository with direct CAD (dispatch) delivery, and allow for a more centralized, and thus efficient, electronic data collection system.

V. Administration:

1. Levy Planning –Development of Strategic and Financial Plan for next levy.

VI. Miscellaneous:

1. All-Hazards Management Preparation: This would entail assessing the current Disaster Management program to determine whether the Medic One/EMS system is prepared in its staff, supplies, and education. The Strategic Initiative could result in creating a reserve so that additional funds are available should a disaster befall our region.

Current Levy - 2002-2007 Funding Levels for Strategic Initiatives

	2002	2003	2004	2005	2006	2007	Total
Strategic Initiatives							
	$217,000	$123,551	$326,147	$370,965	$854,676	$924,478	**$2,816,817**

2008-2013 - Future Levy Funding Levels for NEW Strategic Initiatives– Projections based on CPI

	2008	2009	2010	2011	2012	2013	Total
Strategic Initiatives							
	$1,031,046	$1,129,131	$1,284,379	$1,269,876	$1,224,224	$1,141,319	**$7,079,975**

Includes 5% contingency

Appendix G

EMS LEVY REVENUE/EXPENDITURE SUMMARY

COMBINED CITY OF SEATTLE & KING COUNTY EMS FUND

	Forecast 2008	Forecast 2009	Forecast 2010	Forecast 2011	Forecast 2012	Forecast 2013	2008-2013	% of Total
BEGINNING FUND BALANCE	$ 3,643,507	$ 6,048,684	$ 7,987,784	$ 9,430,840	$ 9,581,739	$ 8,800,158		
REVENUES								
Property Taxes	$ 94,629,233	$ 96,680,327	$ 99,387,377	$101,525,799	$104,368,521	$107,290,840	$603,882,097	99.3%
Other	$ 52,000	$ 52,000	$ 52,000	$ 52,000	$ 52,000	$ 52,000	$ 312,000	0.1%
Interest Income	$ 109,306	$ 181,461	$ 239,633	$ 282,925	$ 287,452	$ 264,004	$ 1,364,781	0.2%
CX - KCM1	$ 375,000	$ 375,000	$ 375,000	$ 375,000	$ 375,000	$ 375,000	$ 2,250,000	0.4%
TOTAL RESOURCES	$ 95,165,539	$ 97,288,788	$100,054,010	$102,235,724	$105,082,973	$107,981,844	$607,808,878	100.0%
Growth in Resources		*4.43%*	*5.67%*	*4.35%*	*5.58%*	*5.54%*	*60.62%*	
EXPENDITURES								
Paramedic Services	$ 53,818,104	$ 56,757,841	$ 60,389,882	$ 63,270,804	$ 66,257,060	$ 70,163,528	$370,657,219	61.2%
Basic Life Support Services	$ 31,655,450	$ 30,988,001	$ 30,235,363	$ 30,596,878	$ 31,181,034	$ 31,763,439	$186,420,165	30.8%
Regional Services	$ 6,255,763	$ 6,474,715	$ 6,701,330	$ 6,947,269	$ 7,202,234	$ 7,466,556	$ 41,047,867	6.8%
Strategic Initiatives	$ 1,031,045	$ 1,129,131	$ 1,284,379	$ 1,269,874	$ 1,224,226	$ 1,141,320	$ 7,079,975	1.2%
TOTAL EXPENDITURES	$ 92,760,362	$ 95,349,688	$ 98,610,954	$102,084,825	$105,864,554	$110,534,843	$605,205,226	100.0%
Growth in Expenditures		*5.31%*	*6.57%*	*6.44%*	*7.00%*	*8.08%*	*0.00%*	*0.0%*
REVENUES LESS EXPENDITURES	$ 2,405,177	$ 1,939,100	$ 1,443,056	$ 150,898	$ (781,581)	$ (2,552,999)	$ 2,603,652	
ENDING FUND BALANCE	$ 6,048,684	$ 7,987,784	$ 9,430,840	$ 9,581,739	$ 8,800,158	$ 6,247,159		
Projected Levy Rate (per $1,000/Assessed Value)	$0.3000	$0.2843	$0.2724	$0.2593	$0.2485	$0.2380		

For more information, please contact:

King County Emergency Medical Services at 206-296-4693

or

Visit the webpage at http://www.metrokc.gov/HEALTH/ems