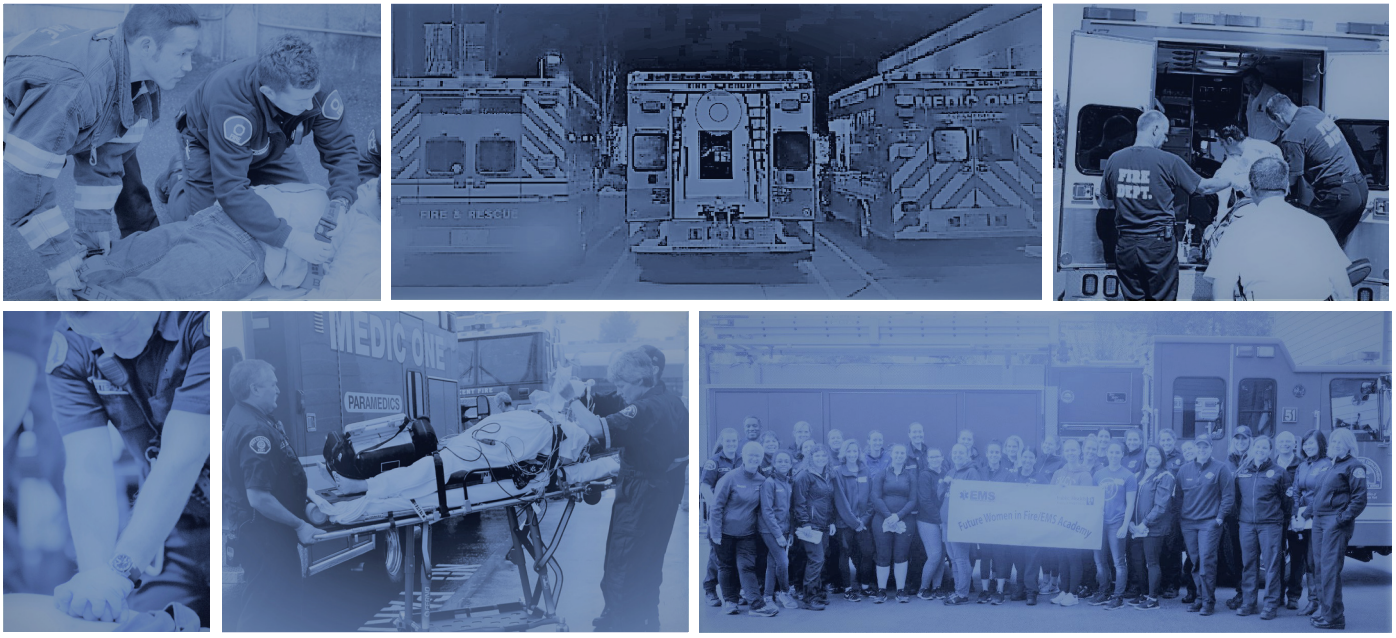
ORDINANCE 18932 **Attachment A**

Medic One/Emergency Medical Services

2020-2025
STRATEGIC PLAN



June 12, 2019

Acknowledgements

Developing a strong regional consensus about Medic One/EMS priorities was critical to drafting the 2020-2025 Strategic Plan. The King County EMS Division would like to thank the *EMS Advisory Task Force* and the numerous participants who so willingly gave us their time, insight and expertise to ensure our nationally-recognized system will continue to thrive far into the future. We appreciate your commitment to this undertaking.

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King County Council

Reagan Dunn	Councilmember

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John Marchione	Mayor, City of Redmond, Finance Subcommittee Chair
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Keith Scully	Councilmember, City of Shoreline, ALS Subcommittee Chair
Penny Sweet	Councilmember, City of Kirkland

Cities under 50,000 in Population

Tom Agnew	Councilmember, City of Bothell, Regional Services Subcommittee Chair
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Vic Kave	Councilmember, City of Pacific

King County Fire Commissioners

Kevin Coughlin	Fire Commissioner, Woodinville Fire & Rescue
Larry Rude	Fire Commissioner, King County Fire District 10; Director of Eastside Fire and Rescue
Mark Thompson	Fire Commissioner, South King Fire & Rescue

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For over 40 years,
the region has worked together to create
a system with patient outcomes
that people from all corners of the world
seek to replicate.

This speaks to the strength of its partnerships,
and the ability for King County jurisdictions
to collectively recognize these regional benefits
and consider needs beyond
their local boundaries and interests.

The expertise shared, and
efforts expended, by our partners
during this levy planning process
are constant reminders of exactly why
the Medic One/EMS system of
Seattle and King County
continues to succeed and serve
as an international model.

EXECUTIVE SUMMARY

The Medic One/EMS system serving Seattle and King County is known worldwide for its excellent medical results. By simply dialing 9-1-1, all residents have immediate access to the best possible medical care, regardless of location, circumstances, or time of day. For over 40 years, the system's commitment to medicine, science, innovation, and partnerships has resulted in thousands of lives saved and an EMS program that is second to none.

The system is primarily funded by a countywide, voter-approved EMS levy (per RCW 84.52.069). Mandated by state law to be exclusively used to support emergency medical services, the levy is a reliable and secure source for funding our successful and highly acclaimed system.

The current six year levy expires December 31, 2019. To ensure continued emergency medical services in 2020 and beyond, the region undertook an extensive planning process in 2018 to develop a Strategic Plan and financing plan (levy) for King County voters to renew in 2019. This process brought together regional leaders, decision-makers, and stakeholders to assess the needs of the system and collectively develop recommendations to direct the system into the future. As in past years, an *EMS Advisory Task Force* oversaw the development of the recommendations, and was responsible for endorsing broad policy decisions, including the levy rate, length, and ballot timing.

On September 18, 2018, the *Task Force* endorsed the Programmatic and Financial recommendations that form the basis of this Medic One/EMS 2020-2025 Strategic Plan. As the EMS system's primary policy and financial document, the Strategic Plan defines the roles, responsibilities, and programs for the system in addition to establishing a levy rate to fund these approved functions.

The 2020-2025 Medic One/EMS Strategic Plan endorses:

- A six-year Medic One/EMS levy at $.265 per $1,000 Assessed Value (AV);
- Fully funding eligible Advanced Life Support (referred to as ALS, or paramedic services) costs;
- Including a "placeholder" should service demands increase beyond what is anticipated, requiring new units;
- Continued funding for Basic Life Support (referred to as BLS, or "first responders"), with simplified and streamlined administration of the funds;
- A commitment to the continued exploration of Mobile Integrated Healthcare (MIH) models to address community needs;
- Sustained funding for regional programs that provide essential support to the Medic One/EMS system and are critical for providing the highest emergency medical care possible;
- Initiatives that encourage efficiencies, innovation, and leadership by building upon existing investments;
- Policies that provide additional protection and flexibility to protect the system from unforeseen financial risks, including the ability to direct balances into reserves or buy down a future levy rate;
- Carrying forward $20 million of 2014-2019 reserves into 2020-2025 reserves for additional security; and
- Running the EMS levy at either the August 2019 primary election or November 2019 general election, with the final decision made in 2019.

The proposed levy rate of 26.5 cents /$1,000 AV means that an owner of a $500,000 home in our region will pay $133 in 2020 for some of the nation's most highly-trained medical personnel to arrive within minutes of an emergency – at any time of day or night, no matter where in King County.

The Medic One/EMS 2020-2025 Strategic Plan is designed to meet the needs of the EMS system, its users, and our community. It provides the means to continue high level service to residents along with the flexiblility to address and adapt to emerging challenges to the system.

KEY COMPONENTS

The Medic One/EMS system in King County is recognized as one of the best emergency medical services programs in the country. Serving two million people throughout the region, it offers uniform medical care regardless of location, incident circumstances, day of the week, or time of day. The system has garnered an international reputation for innovation and excellence, and provides life-saving medical services on average every three minutes.

Survival from cardiac arrest is an EMS system benchmark measure used throughout the nation. This is due to the discrete nature of a cardiac arrest: a patient has stopped breathing and their heart is not pumping. Whether a patient is discharged alive following a cardiac arrest is identifiable and measurable, and therefore it is easily comparable. It also tests all pieces of the EMS system emergency response - hands-on technical skills, critical decision-making, communication, and coordination.

In 2017, the survival rate for witnessed ventricular fibrillation (VF) cardiac arrest in Seattle and King County was 56%. Because of our strong collaborative and standardized programs, cardiac arrest victims here are 2 to 3 times more likely to survive, compared to other communities. This resuscitation success is a tribute to the immense dedication and efforts by all the stakeholders of our regional EMS system, one that continues to strive to do more, regardless of the challenge.

The system's success can be traced to its design, which is based on the following:

Regional System Based on Partnerships

The Medic One/EMS system is built on partnerships that are rooted in regional, collaborative, and cross-jurisdictional coordination – while each provider operates individually, the care provided to the patient operates within a "seamless" system. It is this continuum of consistent, standardized medical care and collaboration between 29 fire agencies, five paramedic agencies, four EMS dispatch centers, over 20 hospitals, the University of Washington, and the citizens throughout King County that allows the system to excel in pre-hospital emergency care. Medical training is provided on a regional basis to ensure no matter the location within King County (whether at work, play, at home, or traveling between locations) the medical triage and delivery of medical care is the same.

Tiered Medical Model

Medicine is the foundation of the Medic One/EMS system. The services provided by EMS personnel are derived from the highest standards of medical training, clinical practices and care, scientific evidence, and close supervision by physicians experienced in EMS care. The system uses a tiered response model, which is centered on having BLS agencies respond to every incident to stabilize the patient and reserving the more limited resource of ALS (known locally as paramedic service) to respond to serious or life-threatening injuries and illnesses. Reserving the number of calls to which paramedics respond ensures that paramedic services will be readily available when needed for those serious calls, keeping paramedics well practiced in the life-saving patient skills required for critical incidents.

Compared to systems that send paramedics on all calls, the Medic One/EMS system in King County can provide excellent response and patient care with fewer paramedics. It is this Tiered Medical Model response system, working hand-in-hand with our regional medical program direction, intensive dispatch, and evidence-based EMT and paramedic training and protocols, that have led to great success in providing high-quality patient care in the region.

Programs & Innovative Strategies

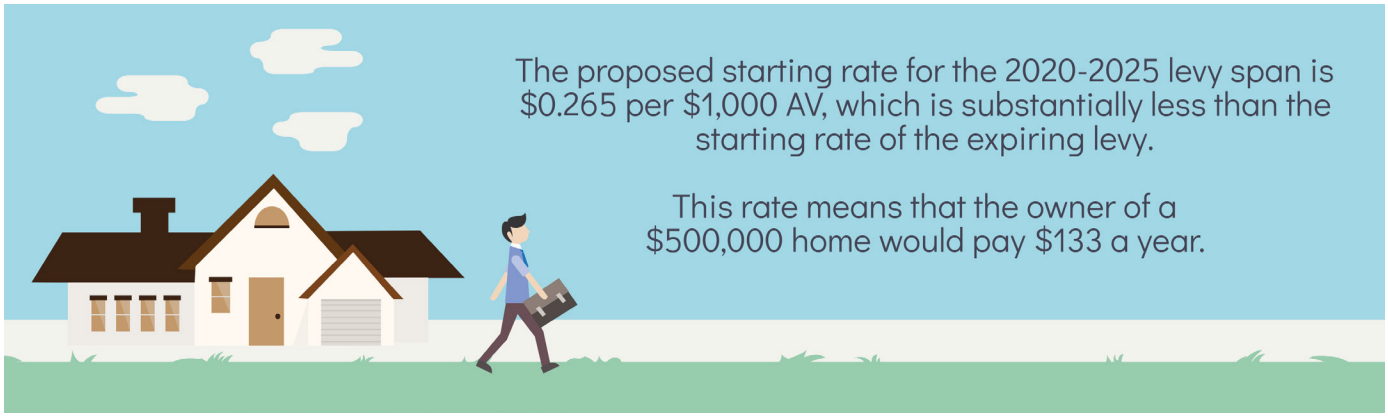
Programmatic leadership and state of the art science-based strategies have allowed the Medic One/EMS system in King County to obtain superior medical outcomes. Rather than focusing solely on ensuring a fast response by EMTs or paramedics, the system is comprised of multiple elements – including a strong evidence-based medical approach. Continual medical quality improvement activities – distinguishing the signs of a severe allergic reaction and administering epinephrine appropriately; recognizing early stroke symptoms; and reviewing every cardiac arrest event for the past 40 years - help support the best possible outcomes of care. The result of this on-going quality improvement is a steadily rising cardiac arrest survival rate, which is currently among one of the highest reported in the nation.

Focus on Cost Effectiveness and Efficiencies

The Medic One/EMS system has maintained financial viability and stability due to the region's focus on operational and financial efficiencies. The tiered response improves the efficiency and effectiveness of the Medic One/EMS system by ensuring the most appropriate level of services is sent. Projects like the Community Medical Technician Pilot and the Vulnerable Populations Strategic Initiative focus on better understanding and serving complex and lower acuity patients in the field, improving the quality of care, and contributing to the overall efficiency of service delivery. The innovative Check & Inject program, developed in response to the rising cost of EpiPens®, has saved lives and money, improving patient care and the bottom line for all King County residents. Strategies that address operational and financial efficiencies are continually pursued and practiced.

Maintaining an EMS Levy as Funding Source

The Medic One/EMS system serving Seattle and King County is primarily funded with a countywide, voter-approved EMS levy. Allowed by RCW 84.52.069 and mandated to be exclusively used to support emergency medical services, the levy is a reliable and secure source for funding this world-renowned system. The EMS levy falls outside the King County statutory limits with senior and junior taxing districts, and therefore does not "compete" for capacity, which is a significant concern in the region. The proposed starting rate for the 2020-2025 levy span is 26.5 cents per $1,000 AV, which is substantially less than the starting rate of the expiring levy. This rate means that the owner of a $500,000 home would pay $133 a year to know that at any time of day or night, no matter where in the County, the most highly-trained medical personnel will be there within minutes to treat any sort of medical emergency.



SYSTEM OVERVIEW

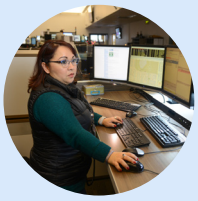
Any time you call 9-1-1 for a medical emergency, you are using the Medic One/EMS system. The Medic One/EMS system serving Seattle and King County is distinctive from other systems, in that it is a regional, medically based and tiered out-of-hospital response system. Its successful outcomes depend equally upon citizen involvement as well as extensively trained dispatchers, firefighter/emergency medical technicians (EMTs) and highly-specialized paramedics. Strong and collaborative partnerships provide a continuum of consistent, standardized medical care that allows the system to excel and achieve the best possible patient outcomes.

The response system is tiered to ensure 9-1-1 calls receive medical care by the most appropriate care provider. There are five major components in the tiered regional Medic One/EMS system:

EMS TIERED RESPONSE SYSTEM

ACCESS TO EMS SYSTEM

Bystander calls 9-1-1



TRIAGE BY DISPATCHER

Use of Emergency Medical Response Assessment Criteria

FIRST TIER OF RESPONSE

Basic Life Support (**BLS**) by firefighter/EMTs, CMTs, and Nurseline

SECOND TIER OF RESPONSE

Advanced Life Support (**ALS**) by paramedics

ADDITIONAL MEDICAL CARE

Transport to hospital

EMS SYSTEM ACCESS: A patient or bystander accesses the Medic One/EMS system by calling 9-1-1 for medical assistance. Bystanders' reactions and rapid responses to the scene can greatly impact the chances of patient survival – studies have shown that survival rate increases from 10% to 43% if CPR is given within 4 minutes, and defibrillation in less than 8 minutes. The EMS Division offers programs to King County residents so that they know how to administer life-saving treatments on the patient until the providers arrive at the scene. Comprehensive CPR classes train thousands of secondary school students in CPR and automated external defibrillator (AED) training each year. The regional coordinated AED program registers and places instruments in the community within public facilities, businesses, and even private homes of high-risk patients, and provides training in AED use. Thanks to this program, the number of registered AEDs is nearing 5,000 in King County.

TRIAGE BY DISPATCHER: 9-1-1 calls are received and triaged by telecommunicators at one of four dispatch centers. Dispatchers are the first point of contact with the public, asking medically-based questions to determine the appropriate level of care to be sent. Amid a wide range of needs, they calmly provide pre-hospital instructions and even guide callers through providing life-saving steps, such as CPR and using a defibrillator, until the Medic One/EMS providers arrive. The medical dispatch triage guidelines that King County Dispatchers follow were developed by the EMS Division, and have been internationally-recognized as an innovative approach to emergency medical dispatching.

FIRST TIER OF RESPONSE - BASIC LIFE SUPPORT (BLS) SERVICES: BLS personnel are the "first responders" to an incident, providing immediate basic life support medical care (first aid, CPR, defibrillation) and stabilizing the patient. Staffed by firefighters trained as Emergency Medical Technicians (EMTs) aboard fire trucks and aid cars, BLS arrives at the scene in under five minutes (on average). In response to low acuity calls, Community Medical Technician units may be dispatched to respond. The 4,300 EMTs throughout King County are among the most trained and - more importantly - most practiced providers of BLS care of systems anywhere. EMTs are certified by the State of Washington and must complete initial and ongoing continuing education and training to maintain certification. The EMS Division provides extensive quality BLS training, continuing education, and oversight of the recertification process. BLS is supported by a combination of city and fire district operating revenues. The EMS levy provides some funding to BLS providers to help ensure uniform and standardized patient care, and enhance BLS services to reduce the impact on ALS resources. However, the great majority of BLS funding is provided by local fire departments.

SECOND TIER OF RESPONSE - ADVANCED LIFE SUPPORT (ALS) SERVICES: Paramedics provide out-of-hospital emergency medical care for critical or life-threatening injuries and illnesses. As the second on scene, they provide airway control, heart pacing, the dispensing of medicine and other life saving procedures. ALS is provided by highly trained paramedics who have completed an extensive program at Harborview Medical Center in conjunction with University of Washington School of Medicine, and are certified by the state. The UW training is provided by leading physicians in emergency medicine, anatomy and physiology, pharmacology, and other subjects. These paramedics remain well practiced and use their skills on a daily basis to provide effective care when it is needed most. Paramedics operate in teams of two, riding aboard medic units. There are 26 medic units strategically placed throughout King County that are deployed regionally to life-threatening emergencies. A contract with Snohomish County Fire District 26 provides EMS services to the Skykomish and King County Fire District 50 area, from Baring to Stevens Pass. Unit placement is reviewed on an annual basis to ensure the best mix of short response time, appropriately high levels of ALS calls per unit, and upper limits on extremely difficult to serve areas of the county (typically rural or isolated areas). ALS is the primary recipient of regional funding and is the first commitment for funding within the EMS system. The EMS levy provides virtually 100% of support for paramedic services in the regional system.

ADDITIONAL MEDICAL CARE: Once a patient is stabilized, EMS personnel determine whether transport to a hospital or clinic for further medical attention is needed. Transport is provided by an ALS or BLS agency, private ambulance, or taxi for lower-acuity situations.

SYSTEM OVERSIGHT

Statutes, policies, and governing bodies at the state, county, agency, and EMS Division levels regulate and influence the Medic One/EMS system of Seattle and King County.

The **Medic One/EMS Strategic Plan** is the primary policy and financial document directing the Medic One/EMS system in its work. Defining the responsibilities, functions, and programs of the EMS system, the Plan presents a comprehensive strategy to ensure the system can continue to meet its commitments. It documents the system's current structure and priorities and outlines the services, programs and initiatives supported by the county-wide, voter-approved EMS levy.

The **King County EMS Division** of Public Health - Seattle & King County works with its regional partners to implement the Strategic Plan. The EMS Division manages core support functions that tie together the regional model, providing consistency, standardization and oversight of the direct services provided by the system's 30+ partners. It is far more medically-effective and cost efficient for the EMS Division to produce, administer and share initial training, continuing education and instructor education for 4,300 EMTs; to manage the certification process for EMTs county-wide; and to provide medical oversight, quality improvement and performance standards for the system as a whole; than to have each local response agency develop, implement, and administer its own such programs. Regional support services managed by the EMS Division can be found in Appendix A: Proposed 2020-2025 Regional Services on page 54.

The **EMS Advisory Committee** monitors the uniformity and consistency of the Medic One/EMS system. This Committee has provided key counsel to the EMS Division since 1997 on regional Medic One/EMS policies and practices in King County. Members convene on a quarterly basis to review implementation of the Strategic Plan and other proposals, including Strategic Initiatives and medic unit recommendations.

Adopted **Regional System Policies** document the general framework for medical oversight and management of EMS in King County, and financial guidance of the EMS levy.

The **Revised Code of Washington (RCW)**, the **Washington Administrative Code (WAC),** and **King County Code** regulate different aspects of EMS, from defining "emergency medical services" to financing service delivery. **Appendix E: EMS Citations** on page 60 compiles the different codes that govern EMS.

The **RCW 84.52.069** allows jurisdictions to levy a property tax "for the purpose of providing emergency medical services." The 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.

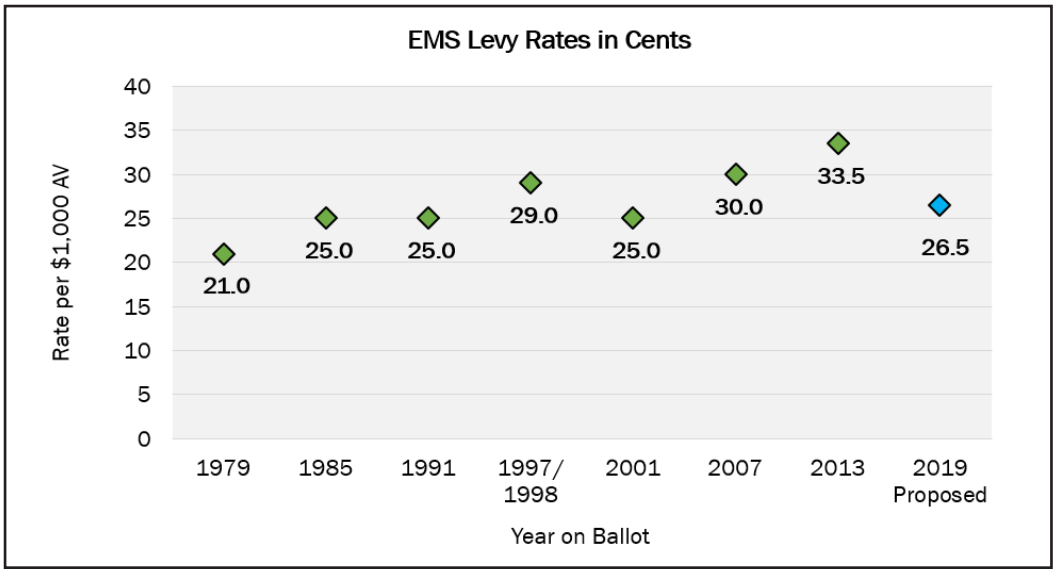
Specifically, RCW 84.52.069:

- Allows a jurisdiction to impose an additional regular property tax up to $0.50 per $1,000 Assessed Value (AV);
- Allows for a six-year, 10-year or permanent levy period;
- Mandates that the legislative bodies of King County and 75% of cities with populations in excess of 50,000 authorize the levy proposal prior to placement on the ballot; [1] and
- Requires a simple majority vote for passage.

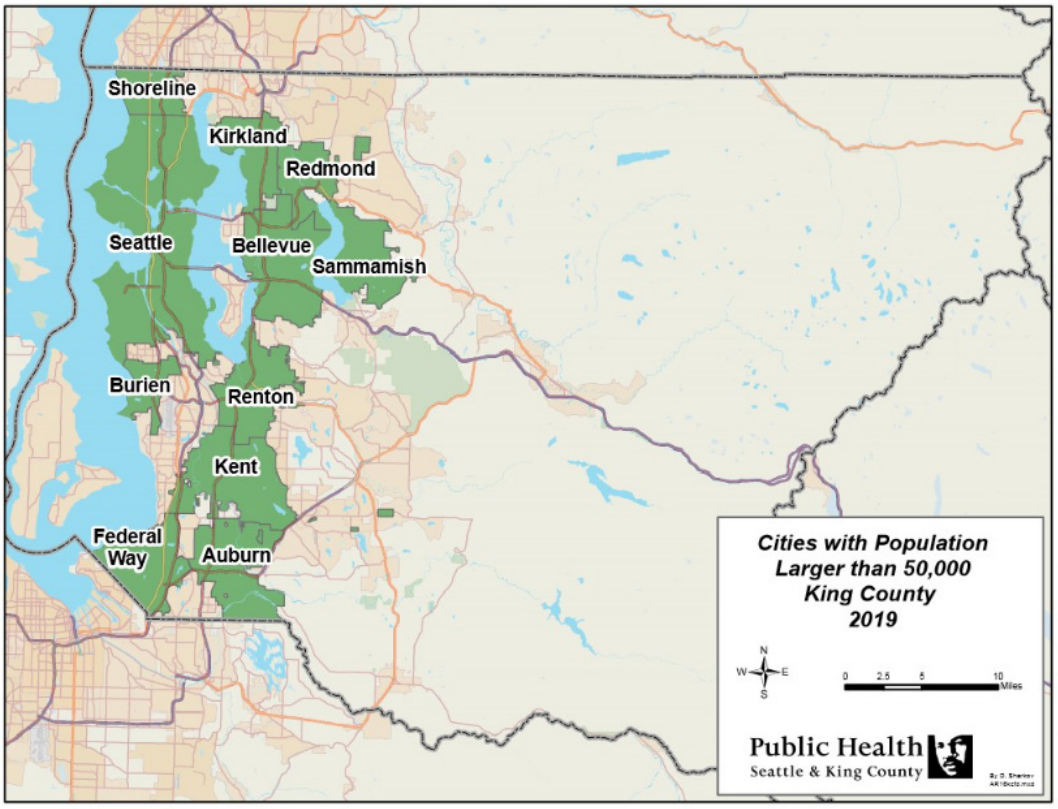
[1] Amended approval and validation requirements effective June 7, 2018, per SHB 2627.

As shown in the graph to the right, the Medic One/EMS levies in King County have never been authorized for more than six years, and require voter approval every levy period.

The maximum levy rate approved by voters in King County is $0.335 per $1,000 AV.



Prior to putting a county-wide EMS levy to the voters, RCW 84.52.069 requires that 75% of cities with 50,000+ in population approve placing the measure on the ballot. Since King County currently has 11 such cities (the most recent additions in **bold**) - Auburn, Bellevue, **Burien**, Federal Way, Kent, Kirkland, Redmond, Renton, **Sammamish**, Seattle and Shoreline - it would need to gain the approval from at least 9 out of the 11 cities, as well as the King County Council.



Per an agreement with King County in place since the creation of the countywide EMS levy, Seattle receives all Medic One/EMS levy funds raised within the city limits. County funds are placed in the KC EMS Fund and managed regionally by the EMS Division based on EMS system and financial policies ratified by Public Health – Seattle & King County, Strategic Plan guidelines, and EMS Advisory Committee recommendations.

THE STRATEGIC PLAN & LEVY PLANNING PROCESS

UPDATING THE STRATEGIC PLAN AND REAUTHORIZING THE EMS LEVY

With the 2014-2019 levy ending December 31, 2019, a new strategic plan, outlining 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.

The *EMS Advisory Task Force*

Levy planning processes have historically used a formal committee of some sort to oversee the development and vetting of the Strategic Plan and levy. Executive Order PHL - 9-1 - EO authorized the use of an *EMS Advisory Task Force* to guide the planning, programs, and financing of emergency medical services for the 2020-2025 levy span.

Responsibilities included evaluating and endorsing recommendations regarding:

- Current and projected EMS system needs;
- A Financial Plan based on those needs; and
- Levy type, levy length, and when to run the levy.

Current and Projected EMS System Needs

The Strategic Plan must safeguard the regional system's commitment to providing cohesive, medically-based patient care, using a tiered response system designed to ensure the highest level of patient care through the coordination and collaboration of all Medic One/EMS partners.

Financial Plan to Meet Those Needs

The Strategic Plan must support quality emergency medical services and supply adequate funding to provide these services. However, the plan must recognize individual jurisdictions' needs for local autonomy to meet their communities' expectations and Medic One/EMS services.

Levy Type, Length, and When to Run the Levy:

Levy Type: 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 do not require that cities with over 50,000 in population approve placing the levy on the ballot, nor are they all subject to the 1% growth limitation ratified by Initiative 747, but they could negatively impact junior taxing districts.

Levy Length: State law offers three levy length options for a Medic One/EMS levy: six years, ten years, or permanent. While the Medic One/EMS levy in King County has historically been approved for six-year periods, providers and elected officials alike have considered pursuing a permanent levy to ensure a more stable funding source for the Medic One/EMS service, as opposed to 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 Timing: EMS levy validation requirements at the state level were recently amended, opening up the option of running the levy measure at a primary election. *Task Force* members were interested in considering this, contingent upon what other issues may be on the same ballot.

Levy Planning Process

The *EMS Advisory Task Force* convened on January 18, 2018, officially launching the start of the 2020-2025 Medic One/EMS levy planning process. This all-inclusive process brought together regional leaders, decision-makers, and stakeholders to assess the needs of the system and develop recommendations to direct the system into the future.

For eight months, the stakeholders identified the financial and policy needs of the Medic One/EMS system. The *Task Force* formed four subcommittees organized around the primary service areas to conduct the bulk of the program and cost analysis. Each subcommittee was chaired by an *EMS Advisory Task Force* member, involved subject matter experts from all aspects of the Medic One/EMS system, and met regularly to review system needs and priorities.

Subcommittees placed emphasis on allowing all participants the opportunity to bring forth concerns and provide input in an open and transparent manner. They followed guiding principles calling for using resources efficiently, allowing data and patient outcomes to drive services decisions, and maintaining strong collaboration between partners. Each subcommittee reported back to the *Task Force* every two to three months and involved both the ALS and BLS Working Groups for some of the more complex issues.

After months of meetings, numerous refinements, and much discussion, the subcommittees finalized their draft programmatic and financial recommendations, which were adopted in September 2018 by the entire *Task Force,* and which became the basis of this Medic One/EMS 2020-2025 Strategic Plan.

The recommendations reflect the collective efforts of public and private regional partners, cities, the King County Executive, and the EMS Division. This collaboration by Medic One/EMS stakeholders was crucial to ensure continued regional support of critical emergency medical services currently funded by the Medic One/EMS levy.

2020-2025 STRATEGIC PLAN HIGHLIGHTS

The 2020-2025 Strategic Plan builds upon the system's successful medical model and regional approach. It commits to innovative strategies and leadership while remaining focused on effectiveness and efficiencies. In outlining the roles and responsibility of EMS providers, it further strengthens the foundation for ongoing coordination and regionalization.

Funding

The Strategic Plan recommends spending County EMS levy funds in these five (5) main areas:

ADVANCED LIFE SUPPORT (ALS) SERVICES

Funding ALS services has been, and continues to be, the priority of the Medic One/EMS levy, which fully funds ALS services predominantly through the ALS unit allocation model. ALS services are provided by five agencies: Bellevue, Redmond, Seattle, Shoreline, and King County Medic One. Exceptions to the unit allocation model are sometimes required, as in the case of Snohomish County Fire District #26 for service in the Skykomish/Stevens Pass area, and are made based on the specifics of the service issue. ALS is proposed to account for 55.7% of KC EMS expenditures (2020-2025 levy).

BASIC LIFE SUPPORT (BLS) SERVICES

BLS providers receive an annual distribution of levy revenue to help offset the costs of providing EMS services. The level of funding is based on a combination of the volume of responses to calls for EMS services and assessed property values within the fire agencies' jurisdictions. The allocation was developed as a way to recognize and support BLS for its significant contribution to the success of the EMS system but was never intended to fully fund BLS. Local jurisdictions cover the majority of BLS costs, which has helped King County seek a lower levy rate. BLS services are provided by 29 fire agencies, including Seattle. BLS, including Mobile Integrated Healthcare (MIH), is proposed to account for 25.1% of KC EMS expenditures (2020-2025 levy).

REGIONAL SUPPORT (RS) SERVICES

The EMS Division manages core regional Medic One/EMS programs critical to providing the highest quality out-of-hospital emergency care available. The programs and services emphasize uniformity of medical care across jurisdictions, consistency in excellent training, medical quality assurance, centralized data collection, and contract and financial management. Delivering these services on a regional basis is more effective and/or economical. RS is proposed to account for 11.9% of KC EMS expenditures (2020-2025 levy).

STRATEGIC INITIATIVES (SI)

Strategic Initiatives are pilot programs designed to improve the quality of Medic One/EMS services and manage the growth and costs of the system. Successful initiatives may be incorporated into Regional Services as ongoing programs. Strategic initiatives are proposed to account for 1.0% of KC EMS expenditures (2020-2025 levy).

RESERVES

Reserves and contingencies are available to fund unanticipated/one-time costs. EMS reserves follow adopted use and access policies, and meet reserve policies applied across all of King County government. Reserves are proposed to account for 6.3% of KC EMS expenditures (2020-2025 levy).

ALIGNMENT WITH SYSTEM AND KING COUNTY GOALS AND OBJECTIVES

The 2020-2025 Strategic Plan fully aligns with the objectives, policies, and goals of the regional EMS system and the King County government.

Alignment with Regional EMS System Global Objectives

The plan is built upon the system's current configuration and strengths, advancing the following global objectives to ensure the EMS system remains tiered, regional, cohesive, and medically-based:

1. Maintaining 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 residents and rapidly triage the call to send the most appropriate level of medical aid to the patient while providing pre-arrival instructions to the caller.
    - Firefighters, trained as Emergency Medical Technicians (EMTs), 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 Harborview Medical Center in conjunction with the University of Washington School of Medicine, provide out-of-hospital emergency medical care for serious or life-threatening injuries and illnesses. As has been adopted in prior Medic One/EMS strategic and master plans, Advanced Life Support services will be most cost effective through the delivery of paramedic services on a sub-regional basis with a limited number of agencies.
    - Regional programs support the uniformity of medical care across jurisdictions, consistency and excellence in training, and medical quality assurance.
2. Making regional delivery and funding decisions cooperatively, and balancing the needs of Advanced Life Support (ALS), Basic Life Support (BLS), and regional programs from a system-wide perspective.
3. Developing and implementing strategic initiatives to provide greater system efficiencies and effectiveness to:
    - 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.

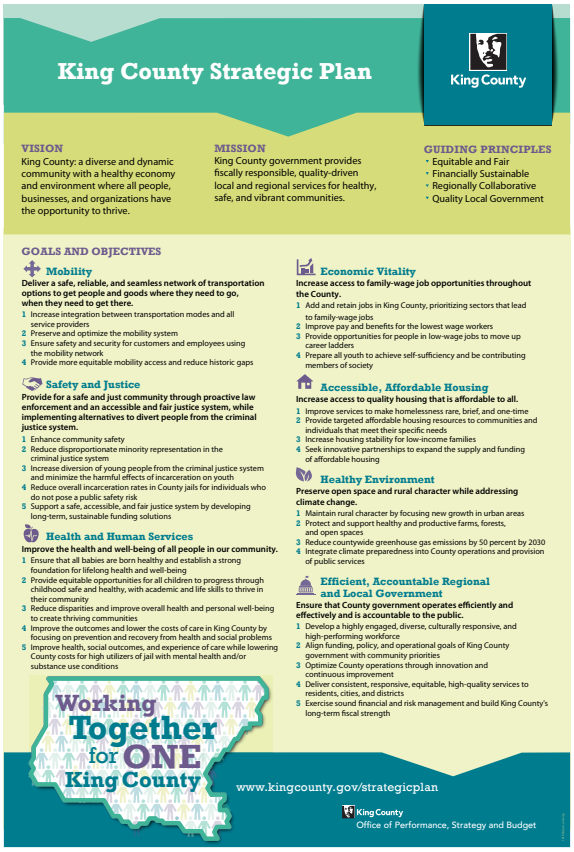
EMS System Policies

The Medic One/EMS 2020-2025 Strategic Plan reinforces adopted EMS System Policies that establish a general framework for medical oversight and financial management of emergency medical services in King County. The EMS System Policies (PHL 9-1) underscore the regional commitment to the medical model and tiered system, while the EMS Financial Policies (PHL 9-2) provide guidance and oversight for all components related to financial management of the EMS levy fund. In addition, policies regarding ALS services outside King County (PHL 9-3), including the formation of a service threshold for the purpose of cost recovery, are established.

2020-2025 STRATEGIC PLAN HIGHLIGHTS

EMS System Policies - PHL 9-1
The EMS Division will **work in partnership** with regional EMS partners to regularly review and assess EMS system needs and develop financial and programmatic policies and procedures necessary to meet those needs.
The EMS Division will ensure the EMS system in King County remains an **integrated regional system** that provides cohesive, medically-based patient care within a tiered response system to ensure the highest level of patient care.
The EMS Division will ensure the EMS system in King County provides **paramedic training through the UW/HMC-based educational program** that meets or exceeds the standards.
The EMS Division will **maintain a rigorous and evidence-based system** with medical oversight of the EMS system to ensure the provision of quality patient care.
The Medical Program Director will **adhere to the principles of regional medical oversight** of EMS personnel.
The EMS Division advocates for the provision of automatic aid between agencies; should established service thresholds be reached, affected EMS agencies will review options and establish terms for reasonable cost recovery.

Alignment with King County Goals and Objectives



The King County Strategic Plan is the highest-level strategic planning document for the County, establishing the strategic priorities for the overall government. The Medic One/EMS 2020-2025 Strategic Plan fosters King County's mission to provide fiscally responsible, quality driven local and regional services, and embodies the County's goals of operating efficiently and effectively, and being accountable to the public. Working with cities and EMS partners to provide services more efficiently; pursuing technologies that improve patient outcomes while reducing delivery cost; and managing assets in a way that maximizes their productivity and value exemplify the EMS system's commitment to delivering high-quality services with sound financial management.

In addition, EMS programs integrate seamlessly with King County's equity vision and strategies. EMS responses are distributed throughout the region based on service criteria, so that areas with economic challenges are provided the same level of service as areas with economic prosperity. This ensures access to health and human services, and furthers King County's Equity and Social Justice Program (ESJ). Many EMS projects and grants include ESJ-related elements in their criteria, such as the proximity to low income housing, or addressing limited English proficiency.

Finally, the EMS system's mission aligns with the core values and priorities of Public Health – Seattle & King County. Public Health's focus is to protect and improve the health and well-being of all people in King County. The provision of EMS services is an integral part of achieving optimum health, helping the Department meet its goal of increasing the number of healthy years lived.

Operational and Financial Proposals for the Medic One/EMS 2020-2025 Levy

The *EMS Advisory Task Force* endorsed the following at its September 18, 2018 meeting:

Reauthorize a six-year EMS levy, per RCW 84.52.069
to fund the EMS system for the years 2020-2025.

Enact levy rate of 26.5 cents/$1,000 Assessed Valuation
to fund projected expenditures of $1.115 billion over 2020-2025. This levy rate is substantially less than the starting rate of the expiring levy. An owner of a $500,000 home will pay $133 a year in 2020 for highly trained medical personnel to arrive within minutes of an emergency, any time of day or night, no matter where in King County.

Renew the EMS levy in 2019
at either the Primary or General election, with the King County Council making the final determination.

Continue using financial policies
guiding the most recent levy; refine if necessary. The financial policies directing the 2014-2019 levy period have provided a very strong foundation for the upcoming levy and should meet the needs of the 2020-2025 levy span.

Continue services from 2014-2019 levy
through the 2020-2025 levy. The next levy should fully fund and continue operations with the current 26 ALS units in service; partially fund first responder services for local fire and emergency response departments; maintain programs that provide essential support to the system; and pursue initiatives that encourage efficiencies, innovation and leadership.

Meet future demands
over the span of the 2020-2025 levy. Services include better understanding the needs of lower acuity and complex patients in the field; committing to explore a Mobile Integrated Healthcare model to address community needs; initiating programs modernizing existing data and eLearning technology; and including a “placeholder” for the equivalent of a new unit, should service demands be higher than originally anticipated.

Operational and Financial Fundamentals of the Medic One/EMS 2020-2025 Levy

Endorsed by the EMS Advisory Task Force on 9/18/2018

CONTINUE with EMS levy:

- Six-year EMS levy, per RCW 84.52.069
- Forecasted budget of $1.115 billion over six-year span, including reserves
- Levy rate of 26.5 cents/$1,000 Assessed Valuation
- Run at either the 2019 Primary or General election, with the King County Council determining which election

ADVANCED LIFE SUPPORT (ALS) RECOMMENDATIONS

- CONTINUE using the unit allocation to fund ALS, but with slight revisions, to better ensure full funding and prevent cost shifting to providers
- MAINTAIN 26 units; INCLUDE a "placeholder" in the Financial Plan to protect the system, should service demands require additional units over the span of the 2020-2025 levy
- MAINTAIN contingencies and reserves to cover unanticipated and one-time expenses
- CONTINUE pursuing system effectiveness and efficiencies; EXPLORE options to increase operational efficiencies system-wide through regional collaboration

BASIC LIFE SUPPORT (BLS) RECOMMENDATIONS

- CONTINUE providing the BLS allocation to help offset costs of providing EMS services
- CONSOLIDATE BLS funding awards into a single allocation to streamline contract administration; EARMARK USE for specific programs in the contract
- DISTRIBUTE the allocation using a methodology that more accurately reflects agencies' current assessed valuation and service levels; ADD FUNDING to ensure consistency in the first year
- COMMIT to exploring a Mobile Integrated Healthcare (MIH) model to address community needs, that includes:
  - ALLOCATING $4 million a year of levy funding for MIH
  - DISTRIBUTING the first year of MIH funding to agencies using the same methodology as the BLS allocation; inflate in future years; and
  - ESTABLISHING guidelines to create consistency around data collection, measures and program reporting

REGIONAL SERVICES & STRATEGIC INITIATIVES (RS/SI) RECOMMENDATIONS

- CONTINUE delivering programs that provide essential support to the system
- MAINTAIN regional focus on creating additional efficiencies and system effectiveness to improve patient care and outcomes
- CONVERT OR INTEGRATE five Strategic Initiatives with other programs to supplement system performance
- CONTINUE AND IMPLEMENT Strategic Initiatives that leverage previous investments made by the region to improve patient care and outcomes

FINANCE RECOMMENDATIONS

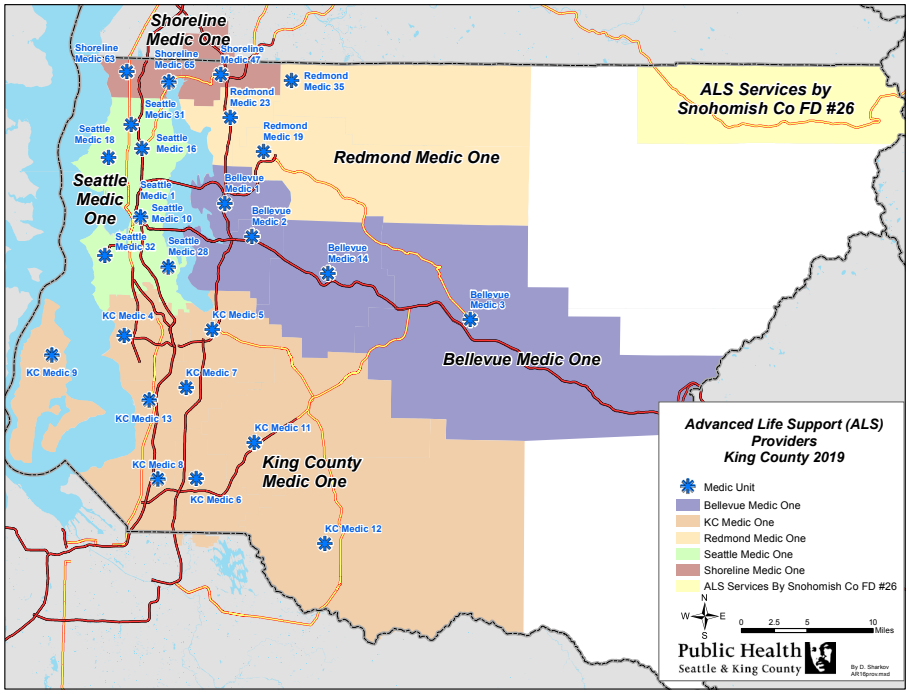
BASE FINANCIAL PLAN on financial policies that provide stability to the system by:

- Incorporating sufficient reserves to mitigate unforeseen financial risk;
- Adapting existing reserve policies to meet King County financial policies; and
- Ensuring additional protection and flexibility to meet emerging needs

ADVANCED LIFE SUPPORT (ALS)

Paramedics provide out-of-hospital emergency care for serious or life-threatening injuries and illnesses. As typically the second on scene for critically-ill patients, paramedics deliver Advanced Life Support (ALS) to patients including airway management, heart pacing, the dispensing of medicine, and other life-saving out-of-hospital procedures under the medical supervision of the Medical Program Director. Paramedic interns receive over 2,500 hours of highly- specific and intensive emergency medical training through the Paramedic Training Program at Harborview Medical Center in conjunction with the University of Washington School of Medicine, nearly double the required number of hours for Washington State paramedic certification.

In King County, a paramedic unit is typically staffed by two paramedics and provides service 24-hours per day, 365 days per year. The two-paramedic provider model was developed in Seattle in the early 1970s and has proven to be the most effective model for enhanced patient care outcomes when incorporated into a regionally-coordinated tiered response system that includes dispatch and Basic Life Support (BLS).



Medic units are positioned throughout the region to best respond to service demands. As of 2018, there are 26 units in Seattle and King County managed by five agencies: Bellevue Medic One, King County Medic One, Redmond Medic One, Seattle Medic One, and Shoreline Medic One. Of these five agencies, four are fire-based with firefighters trained as paramedics and King County Medic One operates as a paramedic-only agency. Paramedic service is provided to the Skykomish area through a contract with Snohomish Fire District #26. Units may respond to areas where the municipal boundaries or the fire agency's response district crosses into neighboring counties. If service into these areas exceeds established levels, the receiving jurisdictions reimburse for such services as outlined in EMS policies.

Adding a medic unit to maintain critical service levels and address service challenges is a complex undertaking. Prior to adding a unit, the region conducts a thorough analysis considering workload, response time, availability in primary service area, frequency and impact of multiple alarms, and medic exposure to critical skills. Analysis also includes an assessment of whether medic units could be moved to other locations to improve workload distributions and response times. The decision to add or relocate units requires regional consensus. Appendix B: Advanced Life Support (ALS) Units on page 56 provides a complete history of medic units in King County, highlighting when and where units were added.

ALS

When planning the 2014-2019 levy, ALS agencies concluded that the region had sufficient capacity to address the growth expected over the six-year span, and no additional units would be needed. Trends reviewed for the 2020-2025 levy span indicate the total number of ALS responses will increase across the next levy period which may warrant new service.

In 2017, paramedics responded to more than 51,000 calls for emergency medical care throughout the region. The average response time of medic units is 7.7 minutes, and units respond to 95% of the calls in less than 14.0 minutes. These response times have remained stable over the past two levy periods despite increases in King County's overall population. Paramedics are more likely to respond to cardiac conditions (24% of ALS calls) and attend to older patients (30% of ALS calls are for 65+ years of age).

ALS SUBCOMMITTEE

Chair: The Honorable Keith Scully, Shoreline City Councilmember

The ALS Subcommittee's charge included determining the number of medic units needed in the upcoming levy period, and establishing the cost of each ALS medic unit. At the first meeting, members agreed to norms committing that ALS remain the levy priority and be fully funded; resources be used efficiently; and that data, sound practices, and patient outcomes drive service decisions.

Workload, service trends and demographics were all factors considered by the group as it assessed future service demands and system needs. The ALS Subcommittee identified key financial drivers and system-wide challenges as well as possible efficiencies to help refine costs. Revisiting the unit allocation resulted in minor revisions that will help ensure appropriate funding. The Subcommittee also sought the expertise of the ALS Working Group to resolve some of the more-complex issues and provide additional insight.

The ALS Subcommittee recommendations are as follows:

ALS RECOMMENDATION 1:

CONTINUE using the unit allocation methodology to determine costs. Slightly revise methodology to help ensure sufficient funding for program oversight and support.

The **standard unit allocation** is the basis for funding each full-time, 24-hour medic unit in King County. This allocation methodology is based on covering ALS-related expenses to prevent cost-shifting to agencies. This cost model calculates the average annual costs, across all ALS agencies, to run a two-paramedic, 24-hour medic unit. Each individual paramedic agency's annual ALS funding is determined by multiplying the number of operating medic units by the unit allocation.

In principle, calculating the ALS costs from each agency's average could cause cost-shifting to those agencies with expenses exceeding the average standard unit cost. However, the historic range among agencies has not varied significantly, and agencies' costs have fluctuated below and above the average standard unit cost. Contingencies and reserves are available for agencies that experience higher than average costs for specific reasons (i.e., higher than normal paid time off resulting in overtime to cover more shifts than normal.)

The unit cost allocation was developed to ensure a fair and equitable distribution of funds across agencies. It provides a set amount of funding to each agency with the flexibility to manage funds based on their specific cost structure and needs. Annual comparison of costs on a unit basis allows the region to understand differences between agencies, share efficiencies, or identify potential new costs being experienced early by one or two agencies. These annual reviews help document and justify ALS allocation costs and evaluate if the allocation is covering 100% of eligible ALS costs. Importantly, it provides each agency the flexibility to manage its funds based on its particular cost structure and needs.

The 2008-2013 levy span adjusted the standard unit allocation to have two sub-categories: the operating allocation and the equipment allocation. The equipment allocation was added for three primary reasons: 1) an increase in the amount and cost of equipment such as defibrillators; 2) the ability to have a more stable and consistent operating allocation without fluctuations based on large equipment purchases; and 3) to facilitate each agency's ability to manage a fund designed to cover a wide variety of equipment expenses.

During the 2020-2025 levy planning process, stakeholders proposed revising the methodology to simplify and better accommodate different types of costs. The proposal breaks down the overall unit allocation into four parts:

The **Unit Cost Allocation** includes direct paramedic services costs, such as paramedic salaries and benefits, medical supplies, pharmaceuticals, vehicle and facility operating and maintenance costs, communications and other costs associated with direct paramedic services.

The **Program Administration Allocation** includes costs related to the management and supervision of direct paramedic services such as the management, administration, supervision, and analysis (including quality improvement) of direct paramedic services.

The **ALS System Cost Allocation** addresses costs that vary significantly between providers or are expected to vary during the levy period. An excellent example of this is retirements - a report published in 2017 by the King County Auditor's Office noted that approximately 30% of the EMS workforce would be eligible for retirement by 2019. These costs will differ among agencies, making the potential costs associated with retiring a significant unknown.

This allocation is intended to reimburse agencies for highly mutable costs associated with paramedic students and dispatch as well as costs associated with the paramedic recruitment cycle and any changes in program medical direction. While the funds budgeted are shown on a per unit basis, agencies will be reimbursed for actual costs incurred, and overall use of the funds will be tracked and reported annually.

The **Equipment Allocation** covers expenses related to equipment. Included are medic units, Medical Services Officer (MSO) and staff vehicles, defibrillators, stretchers, radios and communications equipment, and other equipment with a lifespan of more than one year. This allocation includes items, such as radios and mobile data computers that could be classified as operating by individual agencies.

ALS RECOMMENDATION 2:

FUND ALS units starting at $2,894,000 per year. Inflate annual operating allocation costs using CPI-W + 1 inflator; inflate equipment costs using equipment inflator.

Inflator: In previous levies, ALS allocations were increased by a compound inflator that included five different indices and calculations. An analysis of operating costs concluded there was not a significant difference between inflating with the compound inflator and CPI-W+1%.

Consistent with the focus on streamlining and simplifying whenever possible, it was determined that inflating using CPI-W+1% should adequately cover increases and reduce administrative efforts. The subcommittee recommended moving to the simplified inflator and reviewing its adequacy during the levy period.

The estimated allocation is based on actual 2017 costs inflated by forecast CPI-W. Final 2020 allocations will be based on actual CPI-W indices. The City of Seattle distributes ALS allocations using a different methodology. For more information on forecasted inflators and ALS financial assumptions used in the 2020-2025 levy financials, **please see Financials, Key Assumption Section**, on page 44.

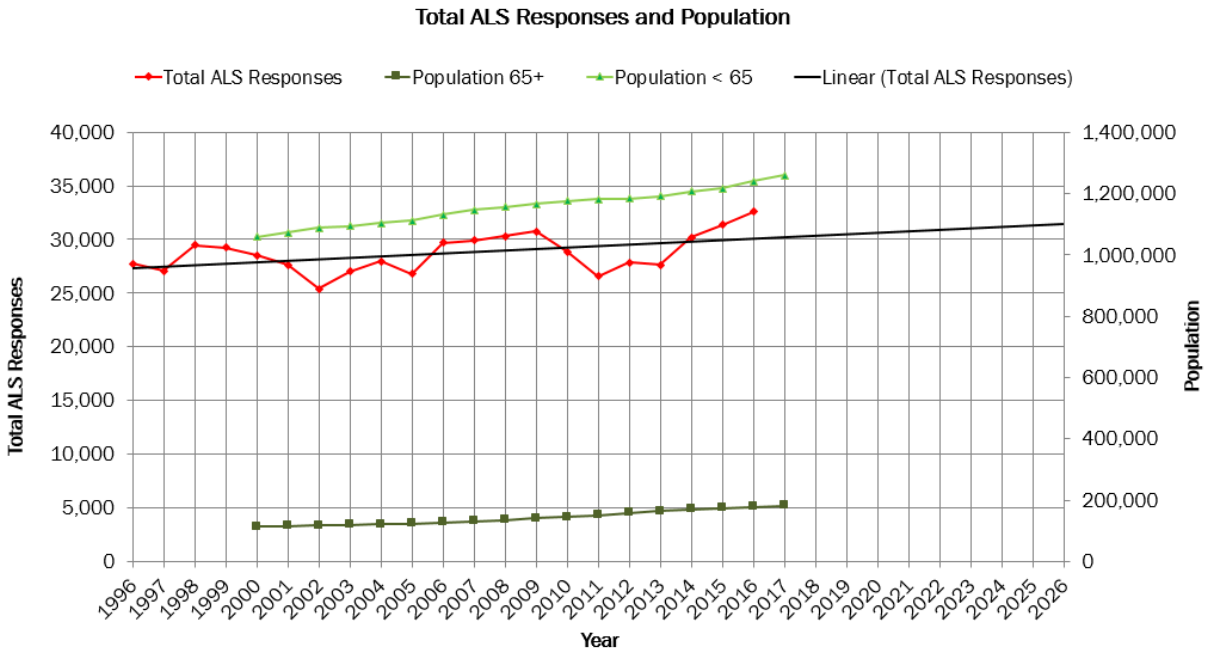
ALS RECOMMENDATION 3:

MAINTAIN 26 medic units. The regional system has sufficient ALS capacity to address growth and does not anticipate a need to add any new units over the span of the 2020-2025 Medic One/EMS levy.

ALS Capacity Analysis

Identifying whether a new medic unit(s) may be needed during over 2020-2025 is another important piece of levy planning. This involves projecting future paramedic service demand, and assessing the ability of current medic units to accommodate the anticipated increase in total ALS responses.

The ALS Subcommittee reviewed unit performance trends and critical factors driving demand, such as actual data for the total number of ALS responses, population growth of seniors (65+ years of age or older), and ALS capacity based on EMS responses, and projected demand for ALS services. The trend in total ALS responses, based on 20 years of prior years, indicated that the total number of ALS responses and senior population will increase across the 2020-2025 levy period. Despite this increase, ALS agencies concluded that they would be able to address the anticipated level of growth without adding or relocating units or agencies. Based on this report, the Subcommittee concluded that adequate capacity exists within the region to manage the anticipated demand for the duration of the 2020-2025 levy period.



Medic Unit Analysis

Although the Subcommittee concluded that no new medic units are needed in the 2020-2025 levy period, it is critical to conduct an annual review of medic units to ensure continued high performance. The regional medic unit analysis considers the following key performance indicators: unit workload (call volumes), median unit response times, availability in the primary service area and responses from units outside of the primary service area; and paramedic exposure to critical skills (e.g. intubations, response to cardiac arrest events).

ALS RECOMMENDATION 4:

ESTABLISH a placeholder (reserve) in the financial plan to protect the system, should projections significantly change/service demands require additional units over the 2020-2025 levy span.

Establishing a placeholder in a reserve fund would help support additional service should projections change and the identified ALS response capacity be significantly compromised. ***This is a resource to be used only if demand for ALS services increases significantly and exceeds the existing capacity served by 26 medic units; it is not included as a plan for adding medic units.***

Prior to any request for access to this reserve fund, a comprehensive regional medic unit analysis and discussion would occur to consider alternative options. Use of reserves requires review by the EMS Advisory Committee Financial Subcommittee, the EMS Advisory Committee and appropriation authority from the King County Council (usually through the normal budget process).

ALS RECOMMENDATION 5:

CONTINUE to use contingencies and reserves to cover unanticipated/one-time expenses. Contingencies and reserves are appropriate mechanisms to cover such expenses.

CONTINGENCIES can be used to cover measurable increases in operating costs that cannot be covered by the ALS allocation or program balances. This includes paid time off (PTO) above amounts included in the allocation, and other potential cost increases outside of allocations. Contingency funding may also cover unplanned expenses related to regional services and initiatives.

2014-2019: The 2014-2019 EMS levy financial plan originally had the ALS Operating Reserve, not contingencies, covering excess PTO and additional paramedic student costs. A review of EMS financial policies conducted in 2017 to ensure alignment with King County Financial Policies revealed that the ALS Operating Reserve covering those types of uses would be more properly described as an Operating Contingency. In December 2017, the region formally adopted this change.

2020-2025: Analysis conducted within the ALS Subcommittee resulted in a funding recommendation of $1 million a year for the 2020-2025 levy span. Additional information about contingency requests and the approval process can be found in the **Finance Subcommittee Recommendation #2** on page 39, and Appendix D: Proposed Financial Policy Changes.

EXPENDITURE RESERVES can be used for other ALS expenses that may not be covered by allocations, program balances or contingencies. The ALS Subcommittee recommended the 2020-2025 levy include expenditure reserves related to ALS Equipment and ALS Capacity (including a "placeholder for a potential new unit(s)" in **ALS Subcommittee Recommendation #4**. In addition, the group proposed that the Rainy Day Reserve be accessed for risk issues including responses to major events and other issues as appropriate.

EQUIPMENT RESERVES

The ALS Subcommittee recommended funding ALS Equipment Reserves at $1 million. This could cover ALS equipment costs not included or accommodated within the equipment allocation or contingencies. The estimate was based on a $25,000 increase in vehicles/equipment for each medic transportation unit (both primary and back-up/secondary).

CAPACITY RESERVE

The ALS Subcommittee recommended funding the ALS Capacity Reserve at a total of $12.8 million. This includes $1.2 million for facility renovations to accommodate moving a medic unit into a station, and temporary capacity increases. It was estimated that this could accommodate three to five events (either related to facilities or temporary capacity increases). The remainder, ~$11.6 million, is set aside as a placeholder for a potential new unit, per **ALS Subcommittee Recommendation #4**.

For more information on Contingencies and Reserves see **Finance Subcommittee Recommendation #2** on page 39.

ALS RECOMMENDATION 6:

CONTINUE to pursue system effectiveness and efficiencies. Explore options to increase operational efficiencies system-wide through regional collaboration.

Subcommittee members identified a number of efficiencies, which can be categorized into two distinct areas:

- Specific interest in looking at paramedic recruitment opportunities; and
- Exploring options to improve efficiency through regional collaboration and resource sharing or potential standardization across agencies.

ALS RECOMMENDATION 7:

CONTINUE to address service challenges presented in outlying areas through a regional approach.

The provision of paramedic services in the **Skykomish region** in the northeast corner of King County offers an example of this type of challenge. This isolated area of King County is accessed via US-2 and is approximately 30 miles by road to the remainder of King County. The county border starts just before the town of Baring and continues to Stevens Pass to a border with Chelan County. This area is primarily forest service and includes the towns of Skykomish and Baring as well as Stevens Pass Ski Resort.

There are a number of unique aspects in Skykomish relative to other provider areas, such as required passage through Snohomish County in order to access to the region, call volumes less than 100 per year, seasonal demand for services peaks during the wintertime, a high percentage of trauma patients, and response and transport times that exceed the average urban and suburban times.

Snohomish County Fire District 26 (SCFD26) provides paramedic services to the adjacent areas in Snohomish County with a fire station located approximately 15 minutes from the King County border. After an extensive review, EMS stakeholders determined that SCFD26 was in the best position to be able to provide consistent 24/7/365 service to the isolated area, and recommended that it continue providing contract services for that area.

ALS Programmatic Comparison Between Levies

2014-2019 Levy	2020-2025 Levy
Starting levy span with 26 medic units: 19 medic units - King County 7 medic units - Seattle	Starting levy span with 26 medic units: 19 medic units - King County 7 medic units - Seattle
0 planned additional units *$2,291,000 placeholder/ reserve to fund a 12 hour medic unit during last two years of the levy span, if needed	0 planned additional units *$11.6 million "placeholder"/reserve should service demands require additional units over the span of the 2020-2025 levy
Determine costs using the unit allocation methodology	Determine costs using the unit allocation methodology
Average Unit Allocation over span of levy (KC): $2.3 million	Average Unit Allocation over span of levy (KC): $3.2 million
4 Reserve categories to cover unanticipated/one-time expenses - Capacity - Operations - Equipment - Risk	4 Reserve/Contingency categories to cover unanticipated/one-time expenses - Operational Contingencies - Expenditure Reserves - Rainy Day - Rate Stabilization
Operating Allocation Inflator: Compound inflator (using CPI-W) to inflate annual costs Equipment allocation: Transportation Equipment PPI	Operating Allocation Inflator: CPI (using CPI-W + 1%) to inflate annual costs Equipment allocation: Transportation Equipment PPI
Equipment allocation: 8-year medic unit life cycle (4 years primary, 4 years back-up)	Equipment allocation: 8-year medic unit life cycle (4 years primary, 4 years back-up)

Total Projected ALS Service Expenses During the 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
City of Seattle	$22,688,960	$23,557,169	$24,391,220	$25,252,303	$26,136,130	$27,110,861	**$149,136,643**
King County	$56,382,364	$58,501,941	$60,538,188	$62,640,361	$64,798,030	$67,177,617	**$370,038,501**
Total	**$79,071,324**	**$82,059,110**	**$84,929,408**	**$87,892,664**	**$90,934,160**	**$94,288,478**	**$519,175,144**

Basic Life Support (BLS)

Basic Life Support (BLS) personnel are the "first responders" to an incident, providing immediate basic life support medical care that includes advanced first aid, High Performance CPR, and AED use to stabilize the patient. Provided by approximately 4,300 Emergency Medical Technicians (EMTs) throughout the region, BLS is the foundation of all medical responses within the EMS system of King County.

EMTs in our regional system are among the most trained in the nation; they receive more than 160 hours of emergency medical response training and hospital experience with additional training in CPR, cardiac defibrillation (electrical shocks given to restore a heart rhythm), and airway management. EMTs are certified by the state of Washington and must complete ongoing continuing education and quarterly trainings to maintain their certification. Like their ALS counterparts, EMTs are highly practiced and use their BLS skills daily.

As the first-on-scene provider, BLS contributes significantly to the success of the Medic One/EMS system. BLS agencies must arrive quickly, assess each situation, and provide effective and precise medical care. Although BLS receives limited funding through the EMS levy, it is an integral piece of the interdependency on which the entire King County EMS response system is built.

In 2017, EMTs responded to over 211,550 calls for emergency medical care throughout the region. The average response time of BLS units in Seattle and King County is 5.2 minutes. EMTs are more likely to respond to incidents involving trauma (20.5% of BLS calls), and younger patients (49.1% of BLS calls 25-64 yrs).

BLS SUBCOMMITTEE

Chair: The Honorable Denis Law, Mayor of Renton

The BLS Subcommittee undertook the tasks of reviewing the BLS allocation, identifying and supporting regional priorities, and addressing system effectiveness. Their discussions focused on addressing community needs and "keeping things simple, equitable, and stable," a mantra that became the foundation of the group's decision-making.

They considered modifying the BLS funding formula to help address equity and need, along with an entirely new approach of using a BLS unit allocation, similar to the ALS program, to fund BLS. Members supported pursuing levy funding to help support programs that connect callers to the right resources, and grappled with how best to implement a coordinated approach across the region. All participants concurred that conducting activities on a regional/multi-agency/zonal level are key to bringing about greater efficiencies and system effectiveness.

The BLS Subcommittee recommendations are described on the following pages.

BLS RECOMMENDATION 1:

CONTINUE to use EMS levy funds to support agency costs, as appropriate, using the BLS allocation.

Since its inception, the regional Medic One/EMS levy has provided BLS agencies with an allocation to help offset costs of providing EMS services. The allocation was developed as a way to recognize and support BLS for its significant contribution to the success of the EMS system, but was never intended to fully fund BLS. Agencies use the allocation to pay for a variety of EMS-specific items including personnel, equipment, and supplies.

BLS RECOMMENDATION 2:

CONSOLIDATE the Regional Programs that specifically reduce impacts on BLS agencies into the BLS allocation.

In addition to the annual allocation, BLS agencies have received support over the 2014-2019 levy span through programs and Strategic Initiatives managed by the EMS Division. These programs have enhanced quality improvement (QI) opportunities and helped cover unanticipated expenses, thereby increasing system effectiveness while reducing BLS costs.

The region recognizes the benefits provided by these programs, and well as the complexities of managing the different contracts. The BLS Subcommittee recommends consolidating the programs' funding into the BLS allocation. Agency contracts will stipulate the specific program funding levels, and agencies will remain required to comply with the appropriate program requirements to be eligible to receive the funds. Creating a single BLS allocation and contract will streamline and minimize the time, effort, and expense of administering BLS funding.

BLS RECOMMENDATION 3:

DISTRIBUTE funding to BLS Agencies using the current methodology that is based equally on Assessed Valuation (AV) and call volume.

- Establish a base for each agency in the first year (2020) by distributing total allocation funding across agencies based 50% on AV and 50% on call volume.
- Increase funding to ensure that agencies are "kept whole" and not negatively impacted by this first year rebase.
- Distribute annual increases across all agencies using the same 50% AV and 50% call volume formula, and add the increase to each agency's base funding received in the previous year.

The Subcommittee examined numerous funding alternatives and distribution options. Considerations were geared toward **simplicity, equity, consistency and flexibility**. The group determined that using a methodology reflecting AV and calls (service level) acknowledges and balances jurisdictions' financial investments with service needs. Establishing each agency's starting funding level for the first year using the most updated data more accurately reflects the true AV and call volume of each agency at that point in time; distributing increases using the same formula preserves the accuracy. In addition, supplementing the allocation so that agencies avoid financial impacts (are "kept whole") in this first year upholds consistency.

BLS RECOMMENDATION 4:

INFLATE annual costs using CPI-W + 1. This inflator will be based on the forecast of the economist at the King County Office of Economic and Financial Analysis.

BLS agencies use the Medic One/EMS levy allocation to pay for a variety of EMS specific items including personnel, equipment, and supplies. Since these items have differing inflationary trends, no one specific inflator would accurately reflect their increasing costs. However, since most BLS costs are related to wages and benefits, the BLS Subcommittee determined that using a standard CPI inflator tied to wages (CPI-W) as forecast by the King County economist was preferable.

BLS Programmatic Comparison Between Levies	
2014-2019 Levy	**2020-2025 Levy**
• Allocate funds to BLS agencies using methodology that is based on 50% Assessed Valuation and 50% Call Volumes. • Inflate costs at CPI-W + 1%	• Consolidate the funding for the BLS Core Services program and the BLS Training and QI Initiative with the allocation to simplify contract administration; maintain designated programmatic funding and usage requirements. • Allocate funds to BLS agencies using methodology that is based on 50% Assessed Valuation and 50% Call Volumes; use updated data that better reflects agencies' current Assessed Valuation and service levels; increase funding to ensure consistency in the first year. • Inflate costs at CPI-W + 1%

Total Projected BLS Service Expenses During the 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
City of Seattle	$47,662,463	$48,888,076	$49,912,395	$50,953,113	$51,970,322	$52,798,535	**$302,184,904**
King County	$21,340,659	$22,175,079	$22,980,035	$23,807,316	$24,654,856	$25,589,275	**$140,547,220**
Total	**$69,003,122**	**$71,063,155**	**$72,892,430**	**$74,760,429**	**$76,625,178**	**$78,387,810**	**$442,732,124**

BLS RECOMMENDATION 5:

COMMIT to exploring a Mobile Integrated Healthcare (MIH) model to address community needs, region-wide. The EMS levy should support a regional, coordinated and inclusive approach.

The Subcommittee identified MIH as a priority, and requested that the EMS levy support a regional approach. To address challenges regarding program standardization, populations served, and agency participation, the Subcommittee recommended that:

1. EMS levy funds be available to all agencies for the purpose of providing MIH services; and
2. The region work collaboratively to standardize data collection methods, performance measures, and program reporting.

The Subcommittee endorsed distributing EMS levy funds earmarked for MIH services across all agencies, using the BLS allocation methodology of 50% AV and 50% call volumes for the first year, and inflating each agency's funding in the subsequent years of the levy by CPI-W + 1.

It is the intent of the EMS levy funding for MIH to support approaches that facilitate appropriate cross-linkages between individuals accessing 9-1-1 and broader healthcare settings and resources. In addition to emergency and urgent healthcare services (including urgent care), this approach may include referrals and activities coordinating with primary care, behavioral healthcare, sobering facilities, fall prevention services, and other complementary services to mitigate future 9-1-1 utilization.

Mobile Integrated Healthcare (MIH)
Programmatic Comparison Between Levies

2014-2019 Levy	2020-2025 Levy
• Two initiatives focus on providing the most appropriate care for lower acuity and complex patients: **Community Medical Technician**: Funding for 3 units, plus reserve for additional units if project is successful **EMS Efficiencies & Evaluation Studies**: Funding for 2 "alternative to CMT" units in Bellevue and Redmond	• Transitions the funding from the **EMS Efficiencies & Evaluation Studies,** and **Community Medical Technician** into **MIH** exploration. • Distributes $4 million each year across all agencies using the BLS allocation methodology of 50% AV and 50% call volumes for the first year, and inflates each agency's funding in the subsequent years of the levy by CPI-W + 1.

Total Projected Annual MIH Expenses During the 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
King County EMS Fund	$4,000,009	$4,156,400	$4,307,277	$4,462,339	$4,621,198	$4,796,341	**$26,343,555**

Regional Services & Strategic Initiatives (RS/SI)

Regional Services and **Strategic Initiatives** support the direct service activities and key elements of the Medic One/EMS system.

Regional Services are critical to providing the highest quality out-of-hospital emergency care available. Helping to tie together the regional medical model components, these programs support the system by providing uniform regional medical direction, standardized EMT and emergency dispatch training, EMT and paramedic continuing education, centralized data collection and expert analysis, collective paramedic service planning and evaluation, and administrative support and financial management of the regional EMS levy fund.

Strategic Initiatives are innovative pilot programs and operations aimed to improve the quality of Medic One/EMS services, and manage the growth and cost of the system. Testing new approaches, Strategic Initiatives are continually assessed and may be reconfigured, if needed, to broaden the reach, advance their objectives, or meet emergent needs. Once completed and having achieved their intended outcomes or demonstrated efficacy, they may be incorporated into Regional Services as ongoing programs. Strategic Initiatives have not only allowed the Medic One/EMS program in King County to maintain its role as a national leader in the field of emergency medical services but have also been instrumental in the system's ability to manage its costs.

Regional Services and Strategic Initiatives contribute greatly to the regional system's medical effectiveness. These programs extend across the different segments of the entire Medic One/EMS system and are not centered solely on ensuring fast response by EMTs or paramedics. For example, the system includes injury prevention programs designed to help ensure the safe use of car seats for infants and prevent falls among the elderly. These are important programs in managing the occurrence of medical emergencies that impact our system. Citizen CPR and automated external defibrillator (AED) programs help ensure bystander witnesses to cardiac arrests have the necessary training to leap in and help by notifying 9-1-1 quickly and providing initial care at the scene until EMTs and paramedics arrive. Having these programs coordinated at the regional level ensures prehospital patient care is delivered at the same standards across the system; policies and practices that reflect the diversity of needs are maintained, and local area service delivery is balanced with regional interests.

The **EMS Division** oversees these Regional Services and Strategic Initiatives and plays a significant role in developing, administering and evaluating the following critical EMS system activities.

REGIONAL SERVICES SUBCOMMITTEE

Chair: The Honorable Tom Agnew, Bothell City Councilmember

Although *Regional Services and Strategic Initiatives* are two distinct programs with distinct funding identities, both programs were combined for consideration into this one subcommittee. The Subcommittee agreed to using the basic principles of collaborating with partners; providing the best possible standards of care; meeting community needs; and using resources efficiently to develop its programmatic recommendations.

The group systematically reviewed the Medic One/EMS system's current core programs and responsibilities, including each program's focus, benefits and costs. Participants examined the strategic initiatives undertaken in the current levy span to assess how well the programs were reaching their audiences and accomplishing intended goals. This detailed review identified EMS system emergent needs and generated ideas to bring greater benefits to the system.

Concerns brought forth at this Subcommittee – the need to prepare for upcoming retirements; the desire for an integrated mental wellness program; the investment in additional quality improvement opportunities; and the commitment to standardization and consistency across agencies - were echoed by both the ALS and BLS subcommittees, showing how acutely these issues pervaded all tiers of the EMS system, and would require a regional solution. The EMS Division worked with various interested stakeholders to develop particular proposals and bring ideas back to the Regional Services Subcommittee for review. All subcommittees were updated as proposals evolved.

The Regional Services Subcommittee recommendations are as follows:

RS/SI RECOMMENDATION 1:

CONTINUE delivering programs that provide essential support to the system.

The Regional Services Subcommittee recommended continuing core regional services that support the key elements of the Medic One/EMS system. **Such programs and services are the foundation of the direct services provided by EMS personnel, ensuring consistency and standardization throughout the system. Refer to Appendix A: Proposed Regional Services for the 2020-2025 levy span** on page 54 for a description of these programs.

Regional Medical Control

Best medical practices drive every aspect of the Medic One/EMS system and are a main component in the system's success. Vital to this is a strong Medical Program Director to oversee all aspects of medical care and hold people within the system accountable. Responsibilities include writing and approving the patient care protocols for both paramedics and EMTs, approving initial and continuing EMT medical education, approving Criteria Based Dispatch (CBD) Guidelines, undertaking new and ongoing medical quality improvement activities, initiating disciplinary actions, and working closely with the Central Region Trauma Council.

Regional Medical Quality Improvement

At the heart of quality patient care is the practice of quality improvement, or QI. EMS Medical QI is the on-going, programmatic, and scientific review of the EMS system's performance to assure excellence in patient care. Impacting all components of the regional system, QI projects and programs require collaboration across both the academic and operational Medic One/EMS community. For example, extensive reviews of EMT epinephrine administration for anaphylaxis, how to best triage stroke patients, and naloxone administration by EMTs will help to advance the science of EMS care throughout the region.

Training

EMT Training: The EMS Division provides initial training, continuing education, and instructor/evaluator education for EMTs in King County. Through considerable research, coordination, and communication among Medic One/EMS stakeholders and the regional Medical Program Directors, the Division develops the curricula to ensure the training and educational programs meet individual agency, Washington State Department of Health, and National requirements. The Division is the liaison between the Washington State Department of Health and the 29 EMS/fire agencies in King County, oversees the recertification and regulatory and policy changes to Medic One/EMS agencies.

Dispatch Training: Sending the appropriate resource in the appropriate manner is a critical link in the EMS system. The EMS Division provides comprehensive initial and continuing education training to dispatchers in King County, outside the City of Seattle. King County dispatchers follow medically approved emergency triage guidelines called Criteria Based Dispatch (CBD) guidelines which were developed by the EMS Division. CBD uses specific medical criteria, based on signs and symptoms, to send the appropriate level of care with the proper urgency.

CPR/AED Training: The EMS Division offers programs to King County residents teaching them to administer life-saving techniques until EMS agencies arrive at the scene. This includes CPR classes with an emphasis on training teachers and students. Thousands of secondary school students receive instruction on CPR and AED training each year. In addition, regionally coordinated AED programs register and place automated defibrillators in the community within public facilities, businesses, and even private homes for high-risk patients, along with providing training in their use.

Growth Management

Managing growth reduces the stress on the Medic One/ EMS system, contributing to the overall efficiency and effectiveness of the program. The region applies many different approaches to manage the rate of call growth in the EMS system and address the demand for services. Programs like the Communities of Care and the Vulnerable Populations Strategic Initiative identify and target specific users of the EMS system to reduce "repeat" callers or the inappropriate activation of 9-1-1 services. Significant focus is placed on providing alternative, more cost-effective responses that offer appropriate, high quality care to 9-1-1 patients with lower acuity medical needs including the Taxi Voucher Program, Nurseline, and access to a variety of Community Medical Technician programs. Dispatch guidelines are reviewed and changed to safely limit the frequency with which ALS responds to specific calls. Finally, the EMS Division works with its partners on efforts preventing the need to call 9-1-1 in the first place, with programs designed to appropriately install child seats, educate people about the dangers of distracted driving, and mitigate potential falls among older adults.

Regional Leadership and Management

Financial and administrative leadership and support to internal and external customers are roles the EMS Division plays to ensure the integrity and transparency of the entire system. The EMS Division actively engages with regional partners to implement the Medic One/EMS Strategic Plan, manage EMS levy funds, monitor contract and medical compliance and performance, identify and participate in countywide business improvement processes, facilitate the recertification process for the 4,300 EMTs in King County, and maintain the continuity of business in collaboration with Medic One/ EMS stakeholders. Included in this is regional planning for the Medic One/EMS system which monitors medic unit performance, the periodic assessment of medic unit placement and other system parameters. Regional planning analyzes medic unit demand projections and measures the impacts of regional programs, supported by ongoing data quality improvement activities.

Center for the Evaluation of Emergency Medical Services (CEEMS)

The CEEMS section conducts research aimed at improving the delivery of pre-hospital emergency care and advancing the science of cardiac arrest resuscitation. It is funded by grants from private foundations, state agencies, and federal institutions. CEEMS is a collaborative effort between the EMS Division and academic faculty from the University of Washington who are recognized nationally for their contributions in the care and treatment of cardiac emergencies. Achievements made by this collective effort continue to improve outcomes from sudden cardiac arrest and advance evidenced-based care and treatment.

RS/SI RECOMMENDATION 2:

CONVERT OR INTEGRATE five Strategic Initiatives with other programs to supplement system performance.

CONVERT the BLS Efficiencies and the Regional Records Management System (RMS) Strategic Initiatives into ongoing programs. These efforts enhance the consistency of training, the timeliness and quality data, and the management of current BLS demand, thereby increasing EMS system effectiveness.

CONVERT the Community Medical Technician (CMT) and the Efficiencies & Evaluation (E&E) Initiative into the new *Mobile Integrated Healthcare (MIH) pilot.* Both CMT and E&E supported projects helping frequent and lower acuity callers and complex patients receive the most appropriate medical care. The Regional Services Subcommittee supported the BLS Subcommittee's recommendation to redirect the two Initiatives into supporting the new MIH pilot, which will improve the quality of care and help manage the rate of growth of the system **(BLS Subcommittee Recommendation #5)**.

INTEGRATE the BLS Training and QI Initiative, formerly known as the BLS Lead Agency, into the BLS allocation. This Initiative better connects data review to training and improvement activities, increasing knowledge proficiency and collaboration. The Regional Services Subcommittee supported the BLS Subcommittee's recommendation to move this Initiative into the BLS allocation, specifically for the sake of ease and streamlining BLS funding administration (**BLS Subcommittee Recommendation #2)**.

RS/SI RECOMMENDATION 3:

MAINTAIN a strong regional focus when pursuing additional efficiencies and system effectiveness to improve patient care and outcomes.

Efforts should enhance standardization, consistency, and coordination while supporting increased regionalization and the sharing of resources across the system. Providing opportunities consistently across the region, to all agencies, is paramount for the Medic One/EMS system to excel.

RS/SI RECOMMENDATION 4:

CONTINUE AND IMPLEMENT Strategic Initiatives that leverage previous investments made by the region to improve patient care and outcomes. Areas identified include continued focus on vulnerable populations, enhancing quality improvement capabilities, and modernizing the continuing medical education program.

Based on the regional needs and issues identified by Stakeholders over the course of levy planning, each of the following proposals is centered on using a solid regional approach to strengthen standardization, coordination, interconnectedness and partnerships.

1. Vulnerable Populations Strategic Initiative (VPSI) – CONTINUING

This Initiative seeks opportunities to improve interactions between EMS and vulnerable populations, such as those with limited English proficiency or the elderly. Launched during the 2014-2019 levy span, this project was developed with the assumption there were populations throughout the region that could be served better. The next iteration continues the outreach efforts and projects with community partners and fire departments to ensure the highest quality delivery of prehospital care for vulnerable populations. Additional areas of focus endorsed during the levy planning process include enhancing support to the Equity and Social Justice (ESJ) work related to workforce diversity and to regional activities related to improving mental wellness among our EMS providers by continuing current outreach and education efforts. This would entail training, supporting pilot studies, and ensuring access to programs on the regional and local levels.

2. Accelerating Evaluation and Innovation: an Opportunity for Unprecedented Quality Improvement (AEIOU) Strategic Initiative – NEW

This Initiative builds upon the technological work of the last decade between regional partners from all parts or the EMS system to bolster the region's quality improvement abilities, capacity and efforts. Key regional partners include dispatch centers, fire departments, hospitals, the University of Washington, and the King County EMS Division. This Initiative addresses the real challenge and need to leverage the electronic data record to generate meaningful clinical information intended to improve patient care. Nimble and comprehensive IT integration will enable a whole new chapter of evaluation leading to: improved data access and timeliness, increased opportunities for quality improvement projects, and greater analysis at the local and regional levels are anticipated outcomes.

3. EMS Online Strategic Transition in Regionalized Innovation, Value and Education (S.T.R.I.V.E.) Strategic Initiative – NEW

This Initiative modernizes the online King County EMS continuing medical education (CME) platform, EMS Online, to meet the changing educational, data, and technological needs of the eLearning environment. The proposal would address cross-platform functionality by implementing a Learning Management System (LMS), and extending the LMS functionality to agencies not yet using a LMS platform. The ability to export data would increase, allowing agencies to share and collaborate regionally as desired, and also customize training, based on needs. It would reduce duplication, increase efficiency, and support the region in meeting the eLearning expectations of our EMS workforce.

Programmatic Comparison Between Levies

2014-2019 Levy	2020-2025 Levy
Regional Services (RS)	
• Fund regional services that focus on superior medical training, oversight and improvement; innovative programs and strategies, regional leadership, effectiveness and efficiencies. • Enhance and rescope programs to meet emergent needs. • Inflate costs at CPI-W + 1%	• Fund regional services that focus on superior medical training, oversight and improvement; innovative programs and strategies, regional leadership, effectiveness and efficiencies. • Move **BLS Core Services** program out of Regional Services budget and into BLS allocation. • Inflate costs at CPI-W + 1%
Strategic Initiatives (SI) and other programs	
Convert 10 Strategic Initiatives into ongoing/Regional Services; eliminate 2 Initiatives. Reconfigure 2 Strategic Initiatives - BLS Efficiencies - EMS Efficiencies & Evaluation Studies (E&E) Add 3 Strategic Initiatives: - Records Management System (RMS) - BLS Lead Agency (renamed BLS Training & QI) - Vulnerable Populations **Other programs:** Community Medical Technician: Funding for 3 units, plus reserve for additional units if project is successful Audit: Two audits over levy span by KC Auditor's Office Inflate costs at CPI-W + 1%	Convert or integrate 5 Strategic Initiatives with other programs to supplement system performance. Explore a Mobile Integrated Healthcare, or MIH, model to address community needs. - Convert BLS Efficiencies into ongoing programs - Transition E&E into **MIH exploration** - Convert RMS into ongoing programs - Integrate the BLS Training and QI SI into the BLS allocation Support existing and new Strategic Initiatives that leverage previous investments made to improve patient care and outcomes. - Continue implementing next stages of Vulnerable Populations - Develop 2 new Initiatives: 1) AEIOU and 2) STRIVE Transition Community Medical Technician into MIH exploration Provide regular updates to past audit recommendations Inflate costs at CPI-W + 1%

Total Projected Regional Support Services Expenses for 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
King County EMS Fund	$11,976,022	$12,444,285	$12,896,013	$13,360,269	$13,835,894	$14,360,274	**$78,872,757**

- Funds to support overall infrastructure and expenses related to managing the regional system are budgeted in RS
- Regional Services are inflated at CPI-W + 1% per year

Total Projected Strategic Initiatives Expenses for the 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
AEIOU - QI	$268,542	$279,042	$289,171	$299,581	$310,246	$322,004	**$1,768,587**
STRIVE - Training	$630,429	$652,209	$672,931	$310,986	$318,947	$327,846	**$2,913,348**
VPSI	$310,761	$322,911	$334,633	$346,680	$359,022	$372,629	**$2,046,635**
KC EMS Fund	$1,209,732	$1,254,162	$1,296,735	$957,247	$988,215	$1,022,479	**$6,728,570**

- Continue funding projects with 2020-2025 lifetime budgets. This includes inflationary assumptions similar to those used by Regional Services, but is not adjusted to reflect small changes in CPI.
- Allocation across years is considered a cashflow and is expected to be adjusted to meet final project plans.
- The EMS Division has the discretion to move funds between approved SIs to ensure the success of the projects.
- Continue funding projects with 2020-2025 lifetime budgets.
- Allocation across years is considered a cashflow and is expected to be adjusted to meet final project plans.

FINANCE SUBCOMMITTEE

Chair: The Honorable John Marchione, Mayor of Redmond

The Finance Subcommittee assessed the programmatic recommendations developed by the other subcommittees, and provided financial perspective and advice to the *Task Force*. As the ALS, BLS and Regional Services Subcommittees each developed its own set of recommendations specific to its program areas, the Finance Subcommittee reviewed the proposals as a whole package, rather than as individual and independent pieces, to ensure the financial plan was well balanced and financially prudent.

The subcommittee also looked at the recommendations within the perspective of the levy planning economic environment, economic forecasts, and the potential for changes in the economic forecast. Significant efforts went toward analyzing financial implications of changes in economic conditions in order to develop appropriate contingency and reserve levels and policies.

Economic Forecast

The financials for the levy are based on the continuation of strong AV growth (double digits) in 2019, followed by slower growth from 2020 to 2025 with 2020 growing at an 8.53% pace and the slowest pace occurring in 2023 at a 2.75% increase. The most important year for the EMS levy is 2020 since it sets the initial levy amount. After the first year, levy growth is limited to 1% plus new construction. While King County new construction was at its highest level ever in 2018 and remained high in 2019, the economic forecast assumes lowered new construction levels beginning in 2020 through most of the levy period as construction activity moderates.

When asked by subcommittee members about potential recessions, the King County Economist mentioned that although economists do not typically forecast downturns, they do look for signs of weakening of the economy. He also stated that based on the history and length of the current economic expansion, it would be prudent for the subcommittee to consider the possibility of an economic downturn in their planning assumptions for the 2020-2025 levy.

Sensitivity (What-if) Analysis

One of the overarching and often mentioned issues was the need to safeguard the system from unforeseen financial risk. To better understand the level of risk, King County staff prepared different "what-if" scenarios (sensitivity analyses) to evaluate how changes to the proposed revenue and expenditures could impact the system's ability to weather an economic downturn. The scenarios assumed:

- Potential of higher inflation that could increase costs of planned services
- Potential of reduced property taxes
- Using patterns from the 2008-2013 levy as a reasonable "worst" case scenario
- Changes in economic conditions would affect either expenses or revenues, but not both (based on experience from the 2008-2013 levy)

The **expenditure scenarios** looked at potential increased inflation. One scenario evaluated inflation at 1% higher than planned, which resulted in an additional $4.6 million; the other evaluated inflation at 2% higher than planned, resulting in an additional $9.3 million.

The **revenue scenarios** considered three different ways property taxes could be less than planned: starting AV less than planned; reductions in AV; and reduced new construction. Each scenario contained two options - one less severe and more probable, and one more severe and less probable. Also evaluated was a change in the proportion of funds between the City of Seattle and King County. Overall, the less severe options ranged from decreases of $3.5 million (new construction 10% below forecast) to $22 million (first year AV growth ~2% less than planned). The more severe options ranged from a low of $10.4 million (new construction 30% below forecast) to $89 million (AV follows 2008-2013 growth rate).

Subcommittee members used this information to determine whether the planned reserves could accommodate a potential change in economic conditions. Since the City of Seattle funds reserves separately from EMS levy funds, the subcommittee focused on appropriate reserves for the King County EMS Levy fund. The potential impacts on the King County EMS Fund ranged from a decrease of $2.1 million (CPI higher than planned) to a decrease of $52.2 million (AV drop similar to 2008-2013 levy). The Financial Plan included a total of $49.4 million in reserves ($41.6 million in programmatic reserves, and an estimated $9.2 million in supplemental reserves with a 26.5 cent levy) that allow the EMS levy to remain whole under these circumstances, except under the unlikely worst case scenario of $52 million. Based on this information, the subcommittee recommended fully funding reserves and placing any additional funds into supplemental reserves.

The Finance Subcommittee recommendations are as follows:

FINANCE RECOMMENDATION 1:

CONTINUE to use the financial policies guiding the 2014-2019 levy to provide stability for the 2020-2025 levy. Adjust as needed for consistency with King County financial policies and 2020-2025 Strategic Plan recommendations.

Financial Oversight and Management

The EMS Division is responsible for managing the levy fund in accordance with the EMS Strategic Plan, the EMS Financial Plan, EMS Financial Policy PHL 9-2 (see below), and ordinances and motions as adopted by the King County Council. Financial policies will continue to be updated to document and meet system needs including adapting to updated King County Financial Policies (within funding limits of the levy) and reflect financial decisions and recommendations from the adopted Medic One/EMS 2020-2025 Strategic Plan. Public Health - Seattle & King County's Chief Financial Officer provides general oversight. EMS Division responsibilities include the review and evaluation of allocations, and the management of Regional Services, Strategic Initiatives, Contingencies and Reserves as reflected in the Plan, the EMS Financial Plan and associated King County ordinances.

EMS Financial Policies - PHL 9-2
Oversight and management of EMS levy funds;
Methodology for fairly **reimbursing ALS agencies** for eligible costs, including responsibilities by both the EMS Division and ALS agencies related to Operating and Equipment Allocations;
Required reporting by ALS agencies with review and analysis by EMS Division;
Methodologies for **BLS, Regional Services and Strategic Initiatives** funding;
Regional Services and Strategic Initiatives management; and
Review and management of reserves and designations including program balances.

Proposed Financial Policy Changes

There are three significant policy related changes recommended in the Medic One/EMS 2020-2025 Strategic Plan, and reflected in the Financial Plan:

1. Converting the ALS Operating Reserves to Operating Contingencies, which amends the review and approval process for use;
2. Restructuring reserves to comply with updated King County Financial Policies, such as the 90-day Rainy Day fund; and
3. Reconfiguring the ALS Operating Allocation into three distinct parts to better accommodate different types of costs and enhance full funding.

A list of significant policy changes can be found in **Appendix D: Proposed Financial Policy Changes** on page 59.

FINANCE RECOMMENDATION 2:

INCORPORATE sufficient reserves and contingencies, with appropriate access policies, to mitigate financial risk and provide flexibility; adapt policies as needed for alignment with King County financial policies.

Reserves were first included explicitly in the 2008-2013 Medic One/EMS Financial Plan when regional partners wanted to ensure that funds were available to address emerging needs, particularly larger one-time expenses and unexpected/unplanned expenses. Now an integral and expected part of the levy's Financial Plan, EMS reserves are routinely reviewed and adjusted to better meet the needs of the regional system and consistency with updated King County Financial Policies.

2020-2025 Proposed Contingencies and Reserves

Subcommittee members unanimously agreed that the Financial Plan must include adequate, reasonable reserves and contingencies to fund unanticipated or one-time costs, and supported preparing for a potential economic downturn by fully funding Programmatic and King County required Rainy Day Reserves (90-day funding). Any additional funding would be placed in Rate Stabilization Reserves to supplement existing reserves, and/or be used to buy down a future levy rate. Reserves and contingencies should have appropriate access and usage policies, and should be consistent with King County financial policies. While the subcommittee wanted to maintain the review of reserve requests through the EMSAC Financial Subcommittee and EMSAC, they also wanted to provide more flexibility to access Contingencies.

Based on system's programmatic needs, as determined in the other three subcommittees, and the desire to be prepared in the event of an economic downturn, the Financial Subcommittee recommended the following for Contingencies and Reserves.

- **Fund Contingencies** at $1 million a year to cover significant increases in operating costs that cannot be accommodated by the ALS allocation or program balances. An example is paid-time-off above amounts included in the allocation (due to the need to backfill paid-time-off). On a limited basis, allow contingency funding to be available to cover unplanned expenses related to regional initiatives and regional services.
- **Fund Expenditure Reserve** that includes:

  $1 million for ALS equipment – covers unplanned costs related to equipment including potential addition of new equipment, decreased lifespans of equipment or need for early replacement, and increased costs not accommodated within the Equipment Allocation; and

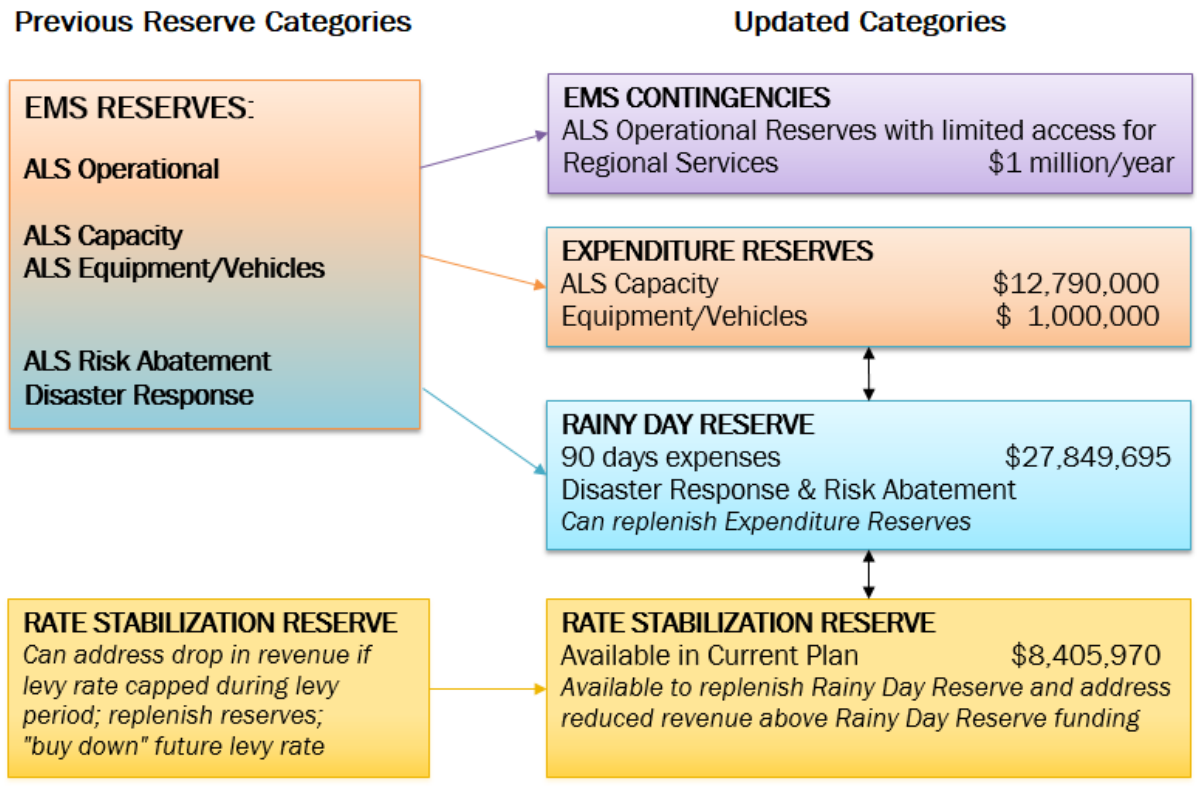
  $12.8 million for ALS Capacity – this includes $1.2 million for costs related to avoiding adding new units such as relocating units (facility improvements to accommodate paramedics), and $11.6 million as a placeholder for new units (consistent with **ALS Subcommittee Recommendations #4 and #5**).

FINANCE

- **Funding the Rainy Day Reserves** consistent with King County policies (currently 90-days). Includes functions previously included in Risk Abatement Reserve and potential unreimbursed disaster response. This is estimated at $27,849,695.
- **Placing** any other available **funds in Rate Stabilization Reserve** to accommodate potential economic downturn. The current estimate is $9,223,119, of which $8,405,970 is targeted for the King County Rate Stabilization Reserve. The remainder, $817,149, is targeted for supplemental revenues at the City of Seattle.

Total Reserves Budget for the 2020 - 2025 Levy Period	
	2020-2025 Total
Expenditure Reserves	**$13,790,000**
Rainy Day Reserve	**$27,849,695**
Total Programmatic Reserves	**$41,639,695**
Supplemental/Rate Stabilization	$9,223,119

The following chart shows a simplified version of the transition from Reserves in the 2014-2019 levy plan to recommended reserves in the 2020-2025 levy plan. This transition includes changes recommended by EMSAC in 2017 to be consistent with updated King County Financial Policies.



Supplemental funding totals $9,223,119, of which $8,405,970 is distributed to the King County Rate Stabilization Reserve, and $817,149 to the City of Seattle. Please refer to the Financial Plan on page 63.

FINANCE RECOMMENDATION 3:

MAXIMIZE savings from the existing levy period toward funding reserves for additional protection. Continue good financial stewardship and appropriately save funds to reduce funding level needed to be raised in next levy period.

During the 2014-2019 levy period, additional funds were used to not only address unforeseen increased costs, but to also fund a new King County requirement of a 90-day Rainy Day Fund. The 2020-2025 levy financial plan assumes that $20 million from the existing Rainy Day Fund will carry forward to the 2020-2025 levy period, thereby reducing the need to raise funds in the 2020-2025 to fund reserves.

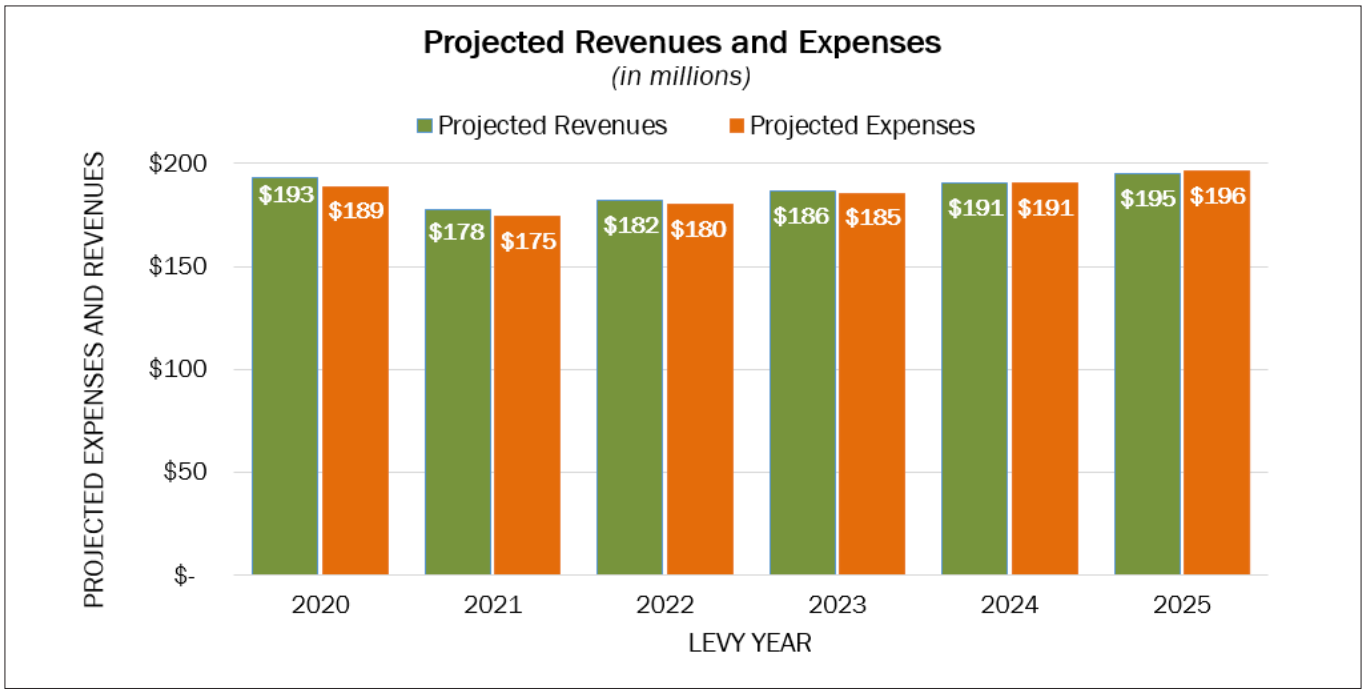
The region prioritized having supplemental reserves during the 2020-2025 levy period to cover continued EMS services in the event of an economic downturn. The levy plan currently estimates approximately $9.2 million in supplemental reserves that could be used along with the Rainy Day Reserves in the case of an economic downturn. Any funding received in excess of anticipated program and reserve needs will be placed in a Rate Stabilization Reserve. This funding, if not needed during the levy period, could be used to reduce or "buy down" a future levy rate.

FINANCE RECOMMENDATION 4:

EXPENDITURES AND RESERVES projected at $1.15 billion over six-year span; supplemental reserves at $9.2 million. The budget supports maintaining current services and meeting anticipated future demand.

The proposed budget maintains funding for the system's key 2014-2019 services of ALS, BLS, Regional Services programs and Initiatives. Stakeholders supported expanding the Community Medical Technical pilot from the 2014-2019 levy into a pilot Mobile Integrated Healthcare (MIH) program for 2020-2025, as well as initiating two new Strategic Initiatives. Some existing programs were reconfigured and consolidated into BLS allocation for simplicity, and funding was added to the newly reset allocation so that all BLS agencies would be kept whole in the first year of the levy.

The following chart compares projected revenues to expenditures for the 2020-2025 levy. The starting revenue in 2020 is high due to the carryforward of $20 million of reserve funding from the 2014-2019.



FINANCE

FINANCIAL PLAN OVERVIEW

The **2020-2025 Financial Plan** endorsed by the *EMS Advisory Task Force* meets the programmatic needs identified in the subcommittees, builds on key services from the previous levy, and provides adequate reserves to ensure continuation of essential EMS services in the case of an economic downturn.

It was developed based on widely understood and accepted regional principles of the tiered system:

- The Medic One/EMS levy will continue to support the delivery of quality pre-hospital emergency medical services and supply adequate funding to provide these services;
- Advanced Life Support (ALS) services will remain the priority of the Medic One/EMS levy;
- Basic Life Support (BLS) services will be funded through a combination of local taxes and Medic One/EMS levy funds;
- The EMS Division is responsible for:
  - coordinating and convening regional partners to facilitate collaborative activities necessary to assure the success of the regional strategic and financial plans;
  - managing and ensuring the transparency of system finances; and
  - continuing to innovate and evaluate the efficacy and funding of programs from a system-wide perspective.

Considerations & Drivers

This Financial Plan is based on the key regional priorities to aggressively manage resources and the growth of services, create efficiencies, address uncertainty, and build on previous investments. Although experiencing a strong economy, the region voiced concerns about potential economic changes during the span of the next levy. The issue of mitigating financial risk was front and center at subcommittee and *Task Force* meetings alike, with members emphasizing the need to be prepared for whatever economic circumstances might occur.

Steps taken to help remedy uncertainties included changing the ALS allocation structure, using the more conservative 65% confidence level in forecasting revenues (per King County policy) and ensuring sufficient contingencies and reserves. Reserve recommendations include fully funding programmatic and "Rainy Day" reserves plus a recommendation to use any additional funds available in a 26.5 cent levy as supplementary reserves that could be used in the case of an economic downturn. In determining reserve levels, King County prepared five different "Scenarios" to evaluate how changes to the proposed AV, new construction, inflation, and City of Seattle AV could impact the EMS levy financials. A review of this "sensitivity analysis" confirmed that the reserve recommendations could mitigate the risks identified and would allow the system to provide critical EMS services during an economic downturn.

Primary cost drivers relate to increases in the costs of providing services, demand for services, and changes in the types of services to meet community needs. Primary revenue drivers include 2020 starting Assessed Valuation (AV) and assumptions related to new construction AV.

Expenditures are based on the recommendations of the subcommittees and are inflated yearly based on forecasts from the King County Office of Economic and Financial Analysis. Reserves and contingencies are based on programmatic needs and updated for compliance with King County Financial Policies, including a 90-day Rainy Day Reserve requirement for all levy supported funds.

Revenues are planned to cover expenditures across the 2020-2025 levy period. Consistent with King County Financial policies, revenues are forecast at a 65% confidence level. Revenue needs were reduced by including carryover related to reserves of approximately $20 million from the 2014-2019 Financial Plan.

The recommended 26.5 cent per $1,000 AV levy rate allows supplemental reserves and revenues of $9.2 million that could be available in an economic downturn.

Medic One/Emergency Medical Services 2020-2025 Levy (in millions)	
Expenditures	$1,073.9
Reserves (Expenditure & Rainy Day)	$41.6
Total Expenditures	**$1,115.5**
2020-2025 Property Tax Forecast	$1,096.7
Other Revenues (King County)	$8.0
Carryforward Reserves from 2014-2019	$20.0
Total Revenues	**$1,124.7**
Funds available to supplement reserves	$9.2
Levy Rate	**26.5 cents**

Medic One/Emergency Medical Services 2020-2025
Proposed Financial Plan
(in millions – 26.5 cent levy rate)

	Seattle	KC EMS	Total
Property Taxes	$452.1	$644.6	$1,096.7
Other Revenue (KC EMS Fund)		$8.0	$8.0
Carryforward from 2014-2019 levy		$20.0	$20.0
Total Revenues	**$452.1**	**$672.6**	**$1,124.7**
Advanced Life Support (ALS)	$149.1	$370.1	$519.2
Basic Life Support (BLS)	$302.2	$140.6	$442.8
Mobile Integrated Healthcare (MIH)		$26.3	$26.3
Regional Services (RS)		$78.9	$78.9
Strategic Initiatives (SI)		$6.7	$6.7
Total Expenditures	**$451.3**	**$622.6**	**$1,073.9**
Expenditure Reserves		$13.8	$13.8
Rainy Day Reserves		$27.8	$27.8
Total Programmatic Reserves		**$41.6**	**$41.6**
Total With Reserves	**$451.3**	**$664.2**	**$1,115.5**
Supplemental Reserves/Revenues	$0.8	$8.4	$9.2

FINANCIAL PLAN ASSUMPTIONS OVERVIEW

The 2020-2025 Financial Plan, like other financial plans, is based on numerous assumptions and acknowledges that actual conditions may differ from the original projections. The objective is to make the plan flexible enough to handle changes as they occur while remaining within expected variance. Key financial assumptions provided by the King County economist include new construction growth, assessed value, inflation, and cost indices. Actuals, when presented, are through 2017. Most of the assumptions for the 2020-2025 Financial Plan include inflation and growth assumptions for 2018 and 2019 as well as 2020-2025.

This section documents key assumptions and shows projected rates related to inflation increases and distribution of property taxes. It also details revenues, expenditures and reserves that constitute the 2020-2025 Financial Plan. Note that when numbers are rounded to millions for presentation purposes, some rounding errors will occur.

Total expenditures for the Medic One/EMS system in King County are projected to be $1.15 billion over the 2020-2025 levy span. Funds are projected for the Medic One/EMS program areas of Advanced Life Support, Basic Life Support, Mobile Integrated Healthcare pilot, Regional Services and Strategic Initiatives and reserves. The financial plan includes carrying forward $20 million in Rainy Day Reserves which reduces the funding needed in 2020-2025. A 26.5 cent per $1,000/AV rate is proposed to fund the 2020-2025 levy period.

KEY ASSUMPTIONS

Revenues

The Medic One/EMS 2020-2025 Financial Plan is based on an EMS property tax levy as the primary source of funding. The revenue forecast is built on assumptions including the assessed valuation (AV) at the start of the levy period, AV growth, new construction AV, and a 99% collection rate (1% delinquency rate) as forecast by the King County Economist. Other considerations include the division of property tax revenues between the City of Seattle and the King County EMS fund, interest income on fund balance, and other revenues received by property tax funds at King County.

The plan, with its lowered levy rate, is based on significant increases in AV from 2014 to 2019 followed by a forecast of more moderate increases between 2020 and 2025. The forecast assumes slower growth of new construction AV beginning in 2020 from a high of $11.7 billion in 2019 to $10.5 billion in 2020 (first year of the levy) and end the levy period at $9.1 billion in 2025. Total tax revenue based on new construction is estimated at $11.6 billion for the 6-year levy period. The EMS levy does not receive new construction funds in the first year of the levy.

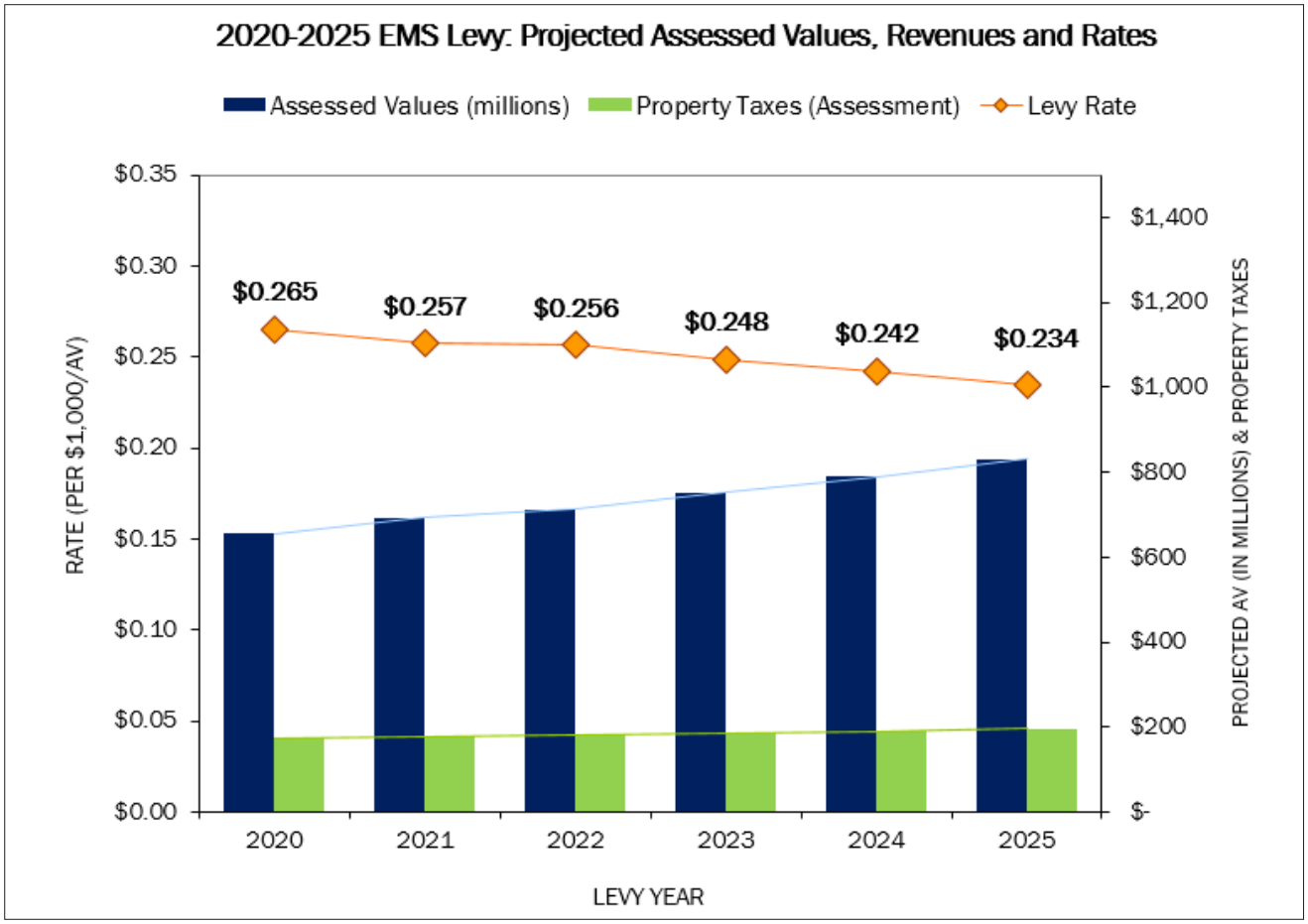
Key Assumptions: 2020 - 2025 Forecast

Rate of Growth	2020	2021	2022	2023	2024	2025
New Construction		(8.52%)	(3.61%)	(4.31%)	1.75%	1.95%
Reevaluation Existing Properties	8.53%	5.67%	2.75%	5.49%	4.94%	5.44%

Assessment (Property Taxes):

Increases in assessments (property taxes) are limited to 1% plus assessments on new construction. Forecast property tax increases exceeding 1% are due to new construction.

The following chart and table show the interrelationship between assessed valuations, levy assessment/ property taxes, and levy rate as currently forecasted. While the growth in AV from 2020 to 2025 averages just under 5% per year, projected property taxes (property taxes/assessment) are projected to average just over 2% per year. Assessment includes a 1% increase on existing properties and the addition of new construction. Based on these increases, the levy rate is projected to decline from 26.5 cents to 23.4 cents per $1,000 AV by the end of the levy in 2025.



Levy Year	Projected Assessed Value	Property Taxes (Assessment)	Forecasted Levy Rate	Growth in AV	Growth in Assessment
2020	$656,319,197,968	$173,924,587	$0.265		
2021	$693,524,944,440	$178,513,101	$0.257	5.67%	2.64%
2022	$712,596,618,825	$182,676,134	$0.256	2.75%	2.33%
2023	$751,691,052,134	$186,778,325	$0.248	5.49%	2.25%
2024	$788,827,836,006	$190,889,449	$0.242	4.94%	2.20%
2025	$831,746,638,767	$195,028,265	$0.234	5.44%	2.17%

FINANCE

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 King County EMS Fund. The percentage of overall AV in the City of Seattle has increased during the current economic upturn from 37% in 2013 to 40% in 2018. Seattle AV is forecast to continue to grow slightly higher than the rest of the county throughout the 2020-2025 levy period.

The following table shows AV distribution trends:

Division and Estimated Value of Assessments for the 2020-2025 Levy Period (in millions)

	Average % of Assessed Value	Estimated Tax Revenue *	Estimated Other Revenue *	Estimated Total *
City of Seattle	41.22%	$452.1		**$452.1**
KC EMS Fund	58.78%	$644.6	$8.0	**$652.6**
Total	**100.00%**	**$1,096.7**	**$8.0**	**$1,104.7**

* $ in millions, total assuming 1% delinquency rate.

Based on the forecast division of property taxes by the King County economist, the following tables show forecast property tax assessments for the City of Seattle and King County EMS Fund. This represents the full estimated assessment prior to under-collection (delinquency) assumptions. Forecast levy revenue above 1% is due to new construction.

Forecast Property Tax Assessment 2020 - 2025 (in millions)

	2020	2021	2022	2023	2024	2025	2020-2025 Total
City of Seattle	$71.1	$73.3	$75.2	$77.1	$79.1	$80.9	**$456.7**
KC EMS Funds	$102.8	$105.2	$107.5	$109.6	$111.8	$114.2	**$651.1**
Total	**$173.9**	**$178.5**	**$182.7**	**$186.7**	**$190.9**	**$195.1**	**$1,107.8**
Growth in Total Levy		2.65%	2.35%	2.19%	2.25%	2.20%	

*Total **does not include** 1% delinquency rate.*

The following table shows the revenue estimates that the KC EMS levy has adopted in the levy financial plan. The table shows estimated revenues based on assumed division of assessed value for both the City of Seattle and the King County EMS Fund. This revenue includes a 1% delinquency rate which better represents the actual amount collected.

Total Forecast Property Tax Revenue 2020 - 2025 (in millions)

	2020	2021	2022	2023	2024	2025	2020-2025 Total
City of Seattle	$70.4	$72.5	$74.4	$76.4	$78.3	$80.1	**$452.1**
KC EMS Funds	$101.8	$104.2	$106.4	$108.5	$110.7	$113.0	**$644.6**
Total	**$172.2**	**$176.7**	**$180.8**	**$184.9**	**$189.0**	**$193.1**	**$1,096.7**
Growth in Total Levy		2.61%	2.32%	2.27%	2.22%	2.17%	

*Total **includes** 1% delinquency rate. Forecast levy revenue above 1% is related to new construction.*

Other Revenues: In addition to property taxes from the Medic One/EMS levy, the KC EMS Fund receives interest income on its fund balance, and other miscellaneous King County revenues distributed proportionately to property tax funds (such as lease and timber taxes).

Other Revenue Assumptions		
Revenues	**Estimate**	**% of Total Revenue**
Interest Income	$7,010,000	87.8%
Other Revenue Sources	$973,200	12.2%
Total Other Revenue	**$7,983,200**	**100.0%**

Expenditures

Medic One/EMS revenues support Medic One/EMS operations related to direct service delivery or support programs:

- Advanced Life Support (ALS) Services
- Basic Life Support (BLS) Services
- Mobile Integrated Healthcare (MIH)
- Regional Services (RS)
- Strategic Initiatives (SI)
- Contingencies and Reserves

Expenditures are shown for each fund – City of Seattle and KC EMS Fund. The KC EMS Fund finances five main program areas: Advanced Life Support, Basic Life Support, Mobile Integrated Healthcare, Regional Services and Strategic Initiatives. In addition, there is funding for contingencies and reserves. The City of Seattle places all funds not targeted for ALS into BLS. Other city funds are used for programs similar to those in the KC EMS Fund.

Programs are increased yearly with inflators appropriate to the program. All programs, except for the ALS equipment allocation, are proposed to be increased by the local CPI-W + 1%. The 1% accommodates benefits and other costs, such as pharmaceuticals, that often increase at rates higher than CPI-W. The CPI assumptions used in this Financial Plan were provided by the King County Economist. Expenditures are inflated by the previous year's actuals (through June).

CPI Assumptions – CPI-W							
Levy Year	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
CPI-W	3.65%	3.41%	2.91%	2.63%	2.60%	2.56%	2.79%

The current CPI-W for the Seattle area is CPI-W Seattle-Tacoma-Bellevue (CWURS49DSA0). The ALS equipment allocation is inflated by PPI for Transportation Equipment: Other Trucks and Vehicles, Complete, Produced on Purchased Chassis, including upfitting (WPU1413029). If the definition of these indices are updated or discontinued, EMS will use the updated indices (such as the change in the local CPI-W in the past levy period) or choose a closely aligned index as reviewed by the King County Office of Economic Analysis. If needed, an alternative index could be proposed and reviewed by the EMS Advisory Committee and King County Office of Economic and Financial Analysis.

The 2020 expenditure level for each program area was determined by projecting the costs of providing services. This included re-costing existing services looking at needs and efficiencies (including sunsetting some existing programs). Expenditure levels for 2020 through 2025 are based on an increase by an appropriate inflator for the program, the timing of new services, and cash flow projections of individual Strategic Initiatives. Actual allocations will differ slightly based on actual (rather than forecast) economic indices.

FINANCE

Expenditures by Program Areas

The following table includes the expenditures by program area. The use of funds differs between the City of Seattle and the KC EMS Fund. The City of Seattle designates all funds not used for ALS to BLS.

Expenditures by Program Areas

Program Area Expenses	Seattle	King County	Total
Advanced Life Support (ALS)	$149,136,643	$370,038,501	**$519,175,144**
Basic Life Support (BLS)	$302,184,904	$140,547,220	**$442,732,124**
Mobile Integrated Healthcare (MIH)		$26,343,555	**$26,343,555**
Regional Support Services		$78,872,757	**$78,872,757**
Strategic Initiatives		$6,728,570	**$6,728,570**
Sub-Total	**$451,321,547**	**$622,530,603**	**$1,073,852,150**
Reserves		$41,639,695	$41,639,695
Total Programmatic Proposal	**$451,321,547**	**$664,170,298**	**$1,115,491,845**
Supplemental Reserves/Revenue	$817,149	$8,405,970	$9,223,119

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 forecasted 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. Contingency and reserve funds are available if needed. Contracts with Bellevue, Redmond, Shoreline and King County Medic One are allocated on a per unit cost basis, as shown in the chart below.

Advanced Life Support (ALS) Standard Unit Cost: 2020 Allocations

Category	Average Costs	%
Unit Allocation	$2,056,435	71.10%
Program Allocation	$518,413	17.90%
System Allocation	$220,651	7.60%
Subtotal Operating Allocations	**$2,795,499**	**96.60%**
Equipment Allocation	$98,501	3.40%
ALS Per Unit Total	**$2,894,000**	**100.00%**

The Equipment Allocation was developed after reviewing the average cost of equipment purchases, the expected lifespan of the equipment, and the number needed per unit. Each medic unit is budgeted to have two vehicles – primary and back-up for when the primary is out-of-service, there is an overlap between shifts, and times when an extra response unit may be needed (such as in the event of a snowstorm or flood).

The operating portion of the ALS allocation was previously inflated by a compound inflator. After analysis, it was determined that moving to a standard yearly increase of CPI-W+1% would accommodate costs increases and eliminate the extra work required by the compound inflator. ALS Operating allocations are proposed to increase yearly by CPI-W + 1%. The equipment allocation will remain inflated a PPI related to Transportation equipment, as recommended by the King County Auditor's Office.

ALS Allocation - Inflation Assumptions

Inflation Assumption	Calculation Basis	Source	2020	2021	2022	2023	2024	2025
Wage Inflation	Local CPI-W +1%	KC Economist	4.41%	3.91%	3.63%	3.60%	3.56%	3.79%
Vehicle Costs	WPU1413029	KC Economist	2.04%	1.46%	0.94%	1.45%	1.67%	1.85%

The following table shows estimated ALS costs for the City of Seattle and KC EMS Fund. City of Seattle costs, due to compact area with higher call volumes, are assumed to be slightly higher per unit. The city uses levy funds to cover ALS fully and then allocates the remaining funds to BLS.

Total Projected ALS Service Expenses During the 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
City of Seattle	$22,688,960	$23,557,169	$24,391,220	$25,252,303	$26,136,130	$27,110,861	**$149,136,643**
King County	$56,382,364	$58,501,941	$60,538,188	$62,640,361	$64,798,030	$67,177,617	**$370,038,501**
Total	**$79,071,324**	**$82,059,110**	**$84,929,408**	**$87,892,664**	**$90,934,160**	**$94,288,478**	**$519,175,144**

The 2020-2025 Financial Plan recommends an annual review of ALS costs to minimize cost-shifting to agencies. As has been the practice, a group that includes representatives from the different ALS agencies will meet annually to review costs and provide recommendations on the adequacy of the allocations.

As part of reconciliation to new King County Financial Policies, ALS Operational Reserves were converted into ALS Contingencies. The KC EMS Fund ALS budget includes $1 million per year in contingency to use for unplanned and unforeseen circumstances. On a limited basis, these contingencies can be used to support needs in other programs.

FINANCE

Basic Life Support (BLS) Services

The levy provides partial funding to 28 BLS agencies to help ensure uniform and standardized patient care and enhance BLS services. Funding previously distributed separately are included in BLS for the 2020-2025 levy period. The BLS allocation is inflated at CPI-W + 1% per year. The 1% added to CPI acknowledges expenses, such as step increases, benefits, and other expenses such as pharmaceuticals that typically increase at rates higher than the inflationary assumptions included in the regional CPI-W.

The City of Seattle allocates all estimated levy funds not designated to ALS to BLS. For additional information on BLS, please refer to page 28.

Total Projected BLS Service Expenses During the 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
City of Seattle	$21,340,659	$22,175,079	$22,980,035	$23,807,316	$24,654,856	$25,589,275	**$140,547,220**
King County	$47,662,463	$48,888,076	$49,912,395	$50,953,113	$51,970,322	$52,798,535	**$302,184,904**
Total	**$69,003,122**	**$71,063,155**	**$72,892,430**	**$74,760,429**	**$76,625,178**	**$78,387,810**	**$442,732,124**

Mobile Integrated Healthcare (MIH)

The 2020-2025 levy includes a commitment to exploring a MIH model to address community needs. The initiative's proposed funding is $4 million beginning 2020 and will be distributed the first year using the same methodology as the BLS allocation. Each agency's 2020 allocation will be increased by CPI-W+1% from 2021-2025. For additional information on MIH, please refer to page 30.

Total Projected Annual MIH Expenses During the 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
King County EMS Fund	$4,000,009	$4,156,400	$4,307,277	$4,462,339	$4,621,198	$4,796,341	**$26,343,555**

Regional Support Services

The EMS Division is responsible for managing of regional Medic One/EMS programs and services that support critical functions that are essential to providing the highest quality out-of-hospital emergency care available. Funds to support overall infrastructure and expenses related to managing the regional system are budgeted in Regional Services. Regional Services are inflated at CPI-W + 1% per year. For additional information on Regional Support Services, please refer to page 32.

Total Projected Regional Support Services Expenses for 2020-2025 Levy Period

	2020	2021	2022	2023	2024	2025	2020-2025 Total
King County EMS Fund	$11,976,022	$12,444,285	$12,896,013	$13,360,269	$13,835,894	$14,360,274	**$78,872,757**

Strategic Initiatives (SI)

Strategic Initiatives are pilots geared to improve the quality of EMS services, contain costs, and/or manage the rate of system growth. Strategic Initiatives are funded with lifetime budgets that include inflationary assumptions similar to those used by Regional Services. Increased funding for the programs or new projects are reviewed and recommended by the EMS Advisory Committee and by the King County Council through the normal budget process. For additional information on Strategic Initiaitives, please refer to page 32.

Total Projected Strategic Initiatives Expenses for the 2020-2025 Levy Period							
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2020-2025 Total**
AEIOU - QI	$268,542	$279,042	$289,171	$299,581	$310,246	$322,004	**$1,768,586**
STRIVE - Training	$630,429	$652,209	$672,931	$310,986	$318,947	$327,846	**$2,913,348**
VPSI	$310,761	$322,911	$334,633	$346,680	$359,022	$372,629	**$2,046,636**
KC EMS Fund	$1,209,732	$1,254,162	$1,296,735	$957,247	$988,215	$1,022,479	**$6,728,570**

Reserves and Contingencies

Reserves were added during the 2008-2013 levy planning process and continue to be refined. Current reserve proposal includes updates adopted in 2017 to conform to updated King County Financial Policies and reflect the *Task Force's* concerns about being sufficiently resilient and able to provide services during a potential economic downturn.

By converting ALS Operating Reserves into Contingencies (budgeted under ALS), reserves are now simplified into the Expenditure, Rainy Day and Rate Stabilization categories. Expenditure reserves are designed to cover potential ALS costs related to equipment and expanding capacity (including $11.6 million "placeholder" that could cover costs related to adding up to two (2), 12-hour ALS units). The plan includes a 90-day Rainy Day Reserve, in adherence with King County financial policies. To ensure resiliency, funds above the amount needed to cover programmatic needs (expenditures, contingencies and reserves) will be placed in a Rate Stabilization Reserve. These funds will be available to address funding if there is an economic downturn and can supplement and replenish Rainy Day Reserves or be used to "buy down" a future levy rate. Consistent with the 2014-2019 levy, reserves can be replenished and use of reserves will be reviewed by the EMSAC Financial Subcommittee and the EMS Advisory Committee in addition to requiring King County appropriation.

If needed to address emerging conditions, changed economic circumstances and/or King County policies, changes to reserves can be implemented during the 2020-2025 levy period. Such changes would require review and approval by the EMS Advisory Committee and the King County Council.

Reserves included in the 2020-2025 levy plan are shown in the following table:

Total Annual Reserves Levels: 2020-2025 Levy						
	2020	**2021**	**2022**	**2023**	**2024**	**2025**
Expenditure Reserves	$13,790,000	$13,790,000	$13,790,000	13,790,000	$13,790,000	$13,790,000
Rainy Day Reserve	$14,028,342	$20,808,400	$25,155,184	$25,946,515	$26,851,609	$27,849,695
Total Programmatic Reserves	**$27,818,342**	**$34,598,400**	**$38,945,184**	**$39,736,515**	**$40,641,609**	**$41,639,695**
Supplemental/ Rate Stabilization			$1,419,925	$5,545,389	$8,232,405	$9,223,119

Note: Reserves roll over year-to-year; total budget dedicated to programmatic reserves is $41.6 million

To encourage cost efficiencies and allow for variances in expenditure patterns, program balances were added during the 2002-2007 levy and have remained in practice. Program balances allow agencies to save funds from yearly allocations to use for variances in expenditures in future years. They are primarily used by ALS agencies to accommodate cashflow peaks related to completing labor negotiations – particularly related to back wages. Within Regional Services, use of program balances may be related to the timing of special projects (particularly projects supporting ALS or BLS agencies). Program balances are proposed to continue in the 2020-2025 levy period. Program Balances are not shown in the proposed levy financial plan.

King County Medic One, the south King County ALS service provided directly by King County, has an equipment replacement fund. These funds are not shown in the levy financial plan.

CONCLUSION

Reflected throughout the Medic One/EMS 2020-2025 Strategic Plan is our system's long and vibrant legacy of regional collaboration and commitment. As such, activities will remain conducted on a regional/ multi-agency/zonal level; standardization, consistency and coordination will remain on the forefront; and expanding these benefits to all agencies, throughout all tiers, regardless of agency size or budget, will remain a priority. The resulting Plan is a well-balanced approach that builds upon the system's current successful medical model, allows for continual improvement and innovation, remains flexible and responsive to community and system needs, and streamlines policies to be more effective and useful to all parts of the system.

Appendix A: Proposed 2020-2025 Regional Services

Regional Services planned in the 2020-2025 levy, including converted Strategic Initiatives (SI), are as follows:

TRAINING AND EDUCATION

EMT TRAINING

- **Basic Training:** Entry-level training to achieve WA State certification
- **EMS Online Continuing Education (CE) Training:** Web-based training to maintain/learn new skills and meet state requirements
- **CBT Instructor Workshops:** Training for Senior EMT instructors
- **Regionalized Initial Training:** Condensed training conducted zonally
- **EMT Certification Recordkeeping:** Monitor and maintain EMS certification records
- **Strategic Training and Research (STAR) program:** Training opportunities for traditionally under-represented students
- **HIPAA for EMS Agencies:** Use of Public Health Department's HIPAA training tool

PARAMEDIC TRAINING

- **EMS Online Continuing Education modules:** Web-based training to maintain skills, developed in coordination with UW Harborview Paramedic Training program
- **Harborview Series:** Posting of "Tuesday Series" on EMS Online

EMERGENCY MEDICAL DISPATCH (EMD) TRAINING

- **Basic Training:** 40 hours entry level dispatch training
- **Continuing Education:** Four-hour in-class training to maintain skills/learn new skills
- **EMS Online Continuing Education Training – Dispatch:** Web-based training to maintain/learn new skills
- **Advanced EMS Training:** Advanced training to enhance key concepts (SI converted to RS for 2014-2019 levy)
- **EMS Instructor Training:** Instructor training for Criteria Based Dispatch

CPR/AED TRAINING: Secondary School Students: Conduct CPR instructor training, purchase training supplies and equipment, train students

GROWTH MANAGEMENT

INJURY PREVENTION

- **Fall Prevention for Older Adults:** Home fall hazard mitigation and patient assessment (SI converted to RS for 2014-2019 levy, and scope enhanced)
- **Child Passenger Safety Program**: Proper car seat fitting and installation for populations not served by other programs
- **Shape-up 50+ for a Healthy & Independent Lifestyle:** A community awareness campaign regarding exercise opportunities for seniors to prevent falls and injuries
- **Targeted Age Driving:** Safety interventions, include preventing driving and texting

CRITERIA-BASED DISPATCH (CBD) GUIDELINES: **CBD Revisions:** Analysis to safely limit frequency that ALS is dispatched

TRP/NURSELINE: **TRP/Nurseline:** Divert low-acuity BLS calls to Nurseline for assistance in lieu of sending a unit response

BLS EFFICIENCIES

- **Taxi Transport Voucher:** Transport patients at lower costs using taxis as an alternative to private ambulances
- **Communities of Care:** Evaluate 9-1-1 calls for services, and educate licensed care facilities on appropriate use of EMS resources

REGIONAL MEDICAL QUALITY IMPROVEMENT (QI)

REGIONAL MEDICAL DIRECTION: Oversight of all medical care; approval of protocols, continued education, and quality improvement projects

PATIENT SPECIFIC MEDICAL QI: Review medical conditions to improve patient care

CARDIAC CASE REVIEW: Assessment and feedback re: cardiac arrest events throughout King County

EMERGENCY MEDICAL DISPATCH QI: Evaluation and improvement of medical 9-1-1 call handling and dispatch decisions

DISPATCHER-ASSISTED CPR QI: Review of the handling of cardiac arrest calls; evaluate and provide feedback

PUBLIC ACCESS DEFIBRILLATION (PAD):

- **PAD Registry:** Maintain registry/ provide PAD location to dispatchers
- **Project RAMPART:** Funding to buy/place AEDs in public areas; provide CPR training to public sector employees
- **PAD Community Awareness:** Increase public placement and registration of AEDs (SI converted to RS for 2014-2019 levy

ALS/BLS PATIENT CARE PROTOCOLS: Development of EMT and Medic protocols/standards for providing pre-hospital care

BLS TRAINING AND QI: Review BLS care/effectiveness to improve patient care; feed into various training opportunities

REGULATORY COMPLIANCE: Ensure system-wide contractual/ quality assurance compliance

EMS DATA MANAGEMENT

EMS DATA COLLECTION: Oversee collection/integration/use of EMS system data, including Medical Incident Reports

EMS DATA ANALYSIS: Analyze system performance and needs

REGIONAL RECORDS MANAGEMENT SYSTEM (RMS) /SEND: Improved network of data collection throughout the region with numerous EMS partners, including dispatch and hospitals

REGIONAL LEADERSHIP AND MANAGEMENT

REGIONAL LEADERSHIP, MANAGEMENT, AND SUPPORT: Provide financial and administrative leadership and support to internal and external customers; implement EMS Strategic Plans, best practices, business improvement process

MANAGE EMS LEVY FUND FINANCES: Oversee all financial aspects of EMS levy funding

CONDUCT LEVY PLANNING AND IMPLEMENTATION: Develop EMS Strategic Plan; implement programs

MANAGE HR, CONTRACTS, AND PROCUREMENT: Oversee contract compliance and continuity of business with EMS Stakeholders

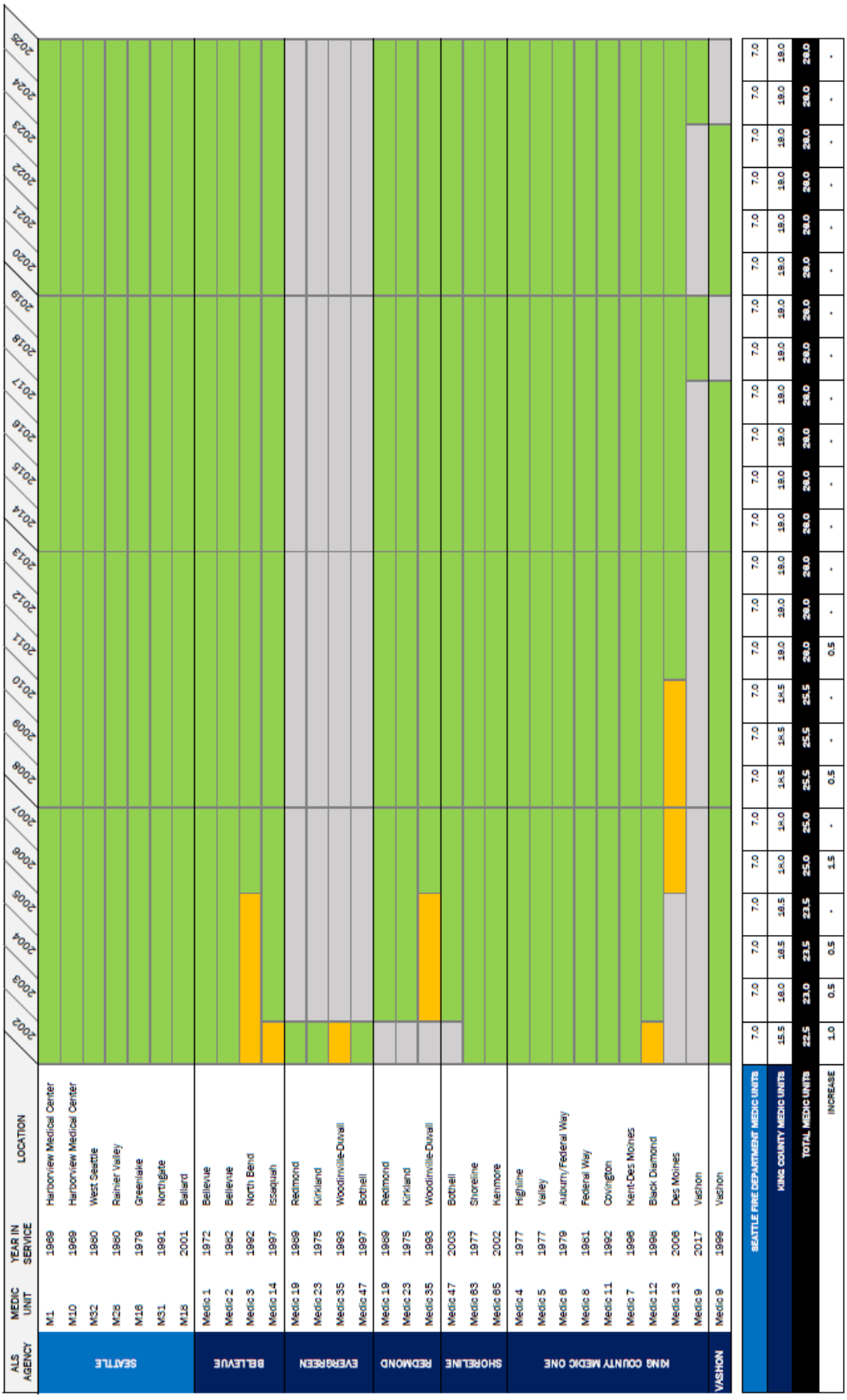
INDIRECT AND INFRASTRUCTURE

INFRASTRUCTURE SUPPORT: Infrastructure costs needed to support EMS Division including leases, vehicles, copier, etc.

INDIRECT AND OVERHEAD (INCLUDES INFORMATION TECHNOLOGY & BUSINESS SYSTEMS): Costs associated with EMS Division including payroll, human resources, contract support, other services and overhead

Appendix B: Advanced Life Support (ALS) Units

This table reflects medic unit additions over the past two decades. Highlights indicate where service has increased. Of note is the broad distribution of additions across ALS agencies and over time.



ALS AGENCY	MEDIC UNIT	YEAR IN SERVICE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
SEATTLE	M1	1969	Harborview Medical Center																								
	M10	1969	Harborview Medical Center																								
	M32	1980	West Seattle																								
	M26	1980	Rainier Valley																								
	M18	1979	Greenlake																								
	M31	1981	Northgate																								
	M16	2001	Ballard																								
BELLEVUE	Medic 1	1972	Bellevue																								
	Medic 2	1982	Bellevue																								
	Medic 3	1992	North Bend																								
	Medic 14	1997	Issaquah																								
EVERGREEN	Medic 19	1989	Redmond																								
	Medic 23	1975	Kirkland																								
	Medic 35	1993	Woodinville-Duvall																								
	Medic 47	1997	Bothell																								
REDMOND	Medic 19	1989	Redmond																								
	Medic 23	1975	Kirkland																								
	Medic 35	1993	Woodinville-Duvall																								
SHORELINE	Medic 47	2003	Bothell																								
	Medic 83	1977	Shoreline																								
	Medic 85	2002	Kenmore																								
KING COUNTY MEDIC ONE	Medic 4	1977	Highline																								
	Medic 5	1977	Valley																								
	Medic 8	1979	Auburn/Federal Way																								
	Medic 8	1981	Federal Way																								
	Medic 11	1992	Covington																								
	Medic 7	1998	Kent-Des Moines																								
	Medic 12	1998	Black Diamond																								
	Medic 13	2008	Des Moines																								
	Medic 9	2017	Vashon																								
VASHON	Medic 9	1999	Vashon																								
	SEATTLE FIRE DEPARTMENT MEDIC UNITS			7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
	KING COUNTY MEDIC UNITS			15.5	16.0	16.5	16.5	16.0	16.0	14.5	14.5	14.5	14.5	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0
	TOTAL MEDIC UNITS			22.5	23.0	23.5	23.5	25.0	25.0	25.5	25.5	25.5	25.5	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
	INCREASE			1.0	0.5	0.5	-	1.5	-	0.5	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix C: Comparisons Between Levies

PROGRAMMATIC COMPARISONS BETWEEN LEVIES		
Program Area	**2014-2019 Levy**	**2020-2025 Levy**
Advanced Life Support (ALS)	Starting levy span with 26 medic units: 19 medic units - King County 7 medic units - Seattle	Starting levy span with 26 medic units: 19 medic units - King County 7 medic units - Seattle
	0 planned additional units *$2,291,000 placeholder/ reserve to fund a 12 hour medic unit during last two years of the levy span, if needed	0 planned additional units *$11.6 million "placeholder"/reserve should service demands require additional units over the span of the 2020-2025 levy
	Determine costs using the unit allocation methodology	Determine costs using the unit allocation methodology
	Average Unit Allocation over span of levy (KC): $2.3 million	Average Unit Allocation over span of levy (KC): $3.2 million
	4 Reserve categories to cover unanticipated/ one-time expenses - Capacity - Operations - Equipment - Risk	4 Reserve/Contingency categories to cover unanticipated/one-time expenses - Operational Contingencies - Expenditure Reserves - Rainy Day - Rate Stabilization
	INFLATORS Operating allocation: Compound inflator (using CPI-W) to inflate annual costs Equipment allocation: Transportation Equipment PPI	INFLATORS Operating allocation: CPI (using CPI-W + 1%) to inflate annual costs Equipment allocation: Transportation Equipment PPI
	Equipment allocation: 8-year medic unit life cycle (4 years primary, 4 years back-up)	Equipment allocation: 8-year medic unit life cycle (4 years primary, 4 years back-up)
Basic Life Support (BLS)	Allocates funds to BLS agencies using methodology that is based on 50% Assessed Valuation and 50% Call Volumes. Costs inflated at CPI-W + 1%	Consolidates the funding for the BLS Core Services program and the BLS Training and QI Initiative with the allocation to simplify contract administration; maintains designated programmatic funding and usage requirements. Allocates funds to BLS agencies using methodology that is based on 50% Assessed Valuation and 50% Call Volumes; uses updated data that better reflects agencies' current Assessed Valuation and service levels; increases funding to ensure consistency in the first year. Costs inflated at CPI-W + 1%

Appendix C: Comparisons Between Levies

PROGRAMMATIC COMPARISONS BETWEEN LEVIES		
Program Area	**2014-2019 Levy**	**2020-2025 Levy**
Regional Services (RS)	Fund regional services that focus on superior medical training, oversight and improvement; innovative programs and strategies, regional leadership, effectiveness and efficiencies. Enhanced and rescoped programs to meet emergent needs. Costs inflated at CPI-W + 1%	Fund regional services that focus on superior medical training, oversight and improvement; innovative programs and strategies, regional leadership, effectiveness and efficiencies. Moved **BLS Core Services** program out of Regional Services budget and into BLS allocation. Costs inflated at CPI-W + 1%
Strategic Initiatives (SI) and other programs	Converts 10 Strategic Initiatives into ongoing/Regional Services; eliminates 2 Initiatives; Reconfigures **2 Strategic Initiatives** to better meet future growth and enhance focus on continuous improvement: - BLS Efficiencies - EMS Efficiencies & Evaluation Studies (E&E) Adds **3 NEW Strategic Initiatives:** - Record Management System (RMS) - BLS Lead Agency (renamed the BLS Training and QI Strategic Initiative) - Vulnerable Populations **Other programs:** Community Medical Technician - Funding for 3 units, plus reserve for additional units if project is successful Audit - Two audits over span of six years by King County Auditor's Office Costs inflated at CPI-W + 1%	Converts or integrates 5 Strategic Initiatives with other programs to supplement system performance; explores a **Mobile Integrated Healthcare, or MIH,** model to address community needs; support existing and new Strategic Initiatives that leverage previous investments made to improve patient care and outcomes - Converts BLS Efficiencies into ongoing programs - Transitions E&E into **MIH** exploration - Converts RMS into ongoing programs. - Integrates the BLS Training and QI SI into the BLS allocation. - Continue implementing next stages of Vulnerable Populations - Transitions Community Medical Technician into MIH exploration. - Provide regular updates to past audit recommendations Develop **two new Strategic Initiatives**: - AEIOU - STRIVE Costs inflated at CPI-W + 1%

Appendix D: Proposed Financial Policy Changes

1. **Convert the ALS Operating Reserves to Operating Contingencies.**
   Retains similar use for funds; amends the review and approval process to allow Division Director to approve use, based on recommendations of ALS Working Group or EMSAC Financial Subcommittee.

2. **Restructure reserves to comply with updated King County Financial Policies.**
   Allows for using supplemental funding in Rate Stabilization Reserve in addition to Rainy Day Funding in the event of an economic downturn; allows for replenishing Operating Reserves with other available reserves and placing any funds above the amount required for the 90-day Rainy Day Reserve in a Rate Stabilization Reserve to be available for funding needs.

3. **Reconfigure the ALS Operating Allocation into three distinct parts:**
   - **Unit Cost Allocation:** covering direct paramedic services; provided to agencies on a unit cost basis (number of units provided multiplied by unit allocation amount);
   - **Program Administration Allocation:** covering management and supervision costs; provided to agencies on a unit cost basis (number of units provided multiplied by unit allocation amount); and
   - **System Cost Allocation:** for costs that can vary significantly between agencies and levy years; expressed on a per unit basis, but agencies will invoice and be reimbursed for actual costs. Actual use of these funds could be higher or lower than the stated allocation, and unused funds will be carried forward and tracked by King County. Allocation can be supplemented via contingencies should additional funds be needed.

4. **Amend access and use policies and procedures:**
   Contingencies and Reserves:
   - Use of Reserves will continue to be reviewed and recommended by the EMSAC Financial Subcommittee and EMS Advisory Committee.
   - All use of contingencies and reserves must be included in appropriation authority from the King County Council.
   - Reserves may be replenished if used; if use of reserves in any one line item exceeds the budgeted amount, funds from other reserves can be used based on review and approval of the EMS Advisory Committee;
   - To address emerging needs during the levy period, reserves can be reconfigured, amounts adjusted, and new reserves established with review by the EMS Advisory Committee; and
   - Within limitations of levy funding, reserves can be adjusted to meet King County policies as they are adopted.

5. **Proposes new Contingency Review and Approval Process:**
   - ALS requests to be reviewed and recommended to the EMS Director by the ALS Working Group; other requests to be reviewed and recommended to the EMS Director by EMSAC Financial Subcommittee.
   - EMS Director can approve and start processing the request through the King County approval process (including requesting King County appropriation authority if needed) or request review and recommendation by EMS Advisory Committee Financial Subcommittee and the EMS Advisory Committee (EMSAC) prior to starting the King County approval process.
   - Approved use of contingencies will be reported to EMSAC Financial Subcommittee and EMS Advisory Committee with a yearly review of use of contingency by EMSAC Financial.
     - Allow carryforward of unused contingencies to future years.
     - Allow changes in contingencies based on need and review and recommendation by EMSAC Financial Subcommittee and EMS Advisory Committee (plus King County appropriation). If needed contingency funding can be replenished from Reserves.

Appendix E: EMS Citations

Citation	Chapters
Chapter 18.71 RCW	**Defining EMS personnel requirements: Physicians**
18.71.021	License required.
18.71.030	Exemptions.
18.71.200	Emergency medical service personnel -- Definitions.
18.71.205	Emergency medical service personnel -- Certification.
18.71.210	Emergency medical service personnel -- Liability.
18.71.212	Medical program directors -- Certification.
18.71.213	Medical program directors -- Termination -- Temporary delegation of authority.
18.71.215	Medical program directors -- Liability for acts or omissions of others.
18.71.220	Rendering emergency care -- Immunity of physician or hospital from civil liability.
Chapter 18.73 RCW	**Defining EMS practice: Emergency medical care and transportation services**
Chapter 35.21.930 RCW	**Community Assistance Referral and Education Services program (CARES)**
Chapter 36.01.095 RCW	**Authorizing counties to establish an EMS System: Emergency medical services — Authorized — Fees**
Chapter 36.01.100 RCW	**Ambulance service authorized — Restriction**
Chapter 70.05.070 RCW	**Mandating public health services** by requiring the local health officer to take such action as is necessary to maintain the health of the public Local health officer — powers and duties
Chapter 70.46.085 RCW	**County to bear expense of providing public health services**
Chapter 70.54 RCW 70.54.060 RCW 70.54.065 RCW 70.54.310 RCW 70.54.430 RCW	**Miscellaneous health and safety provisions** Ambulances and drivers. Ambulances and drivers—Penalty. Semiautomatic external defibrillator–duty of acquirer—immunity from civil liability. First responders—Emergency response service—Contact information
Chapter 70.168 RCW	**Revising the EMS & trauma care system: Statewide trauma care system**
Chapter 74.09.330 RCW	**Reimbursement methodology for ambulance services—Transport of a medical assistance enrollee to a mental health facility or chemical dependency program**
Chapter 84.52.069 RCW	**Allowing a taxing district to impose an EMS levy: Emergency medical care and service levies**

Title 246-976 WAC	Establishing the trauma care system: Emergency medical services and trauma care systems
	TRAINING
246-976-022	EMS training program requirements, approval, reapproval, discipline.
246-976-023	Initial EMS training course requirements and course approval.
246-976-024	EMS specialized training.
246-976-031	Senior EMS instructor (SEI) approval.
246-976-032	Senior EMS instructor (SEI) reapproval of recognition.
246-976-033	Denial, suspension, modification or revocation of SEI recognition.
246-976-041	To apply for EMS training.
	CERTIFICATION
246-976-141	To obtain initial EMS agency certification following the successful completion of Washington state approved EMS course.
246-976-142	To obtain reciprocal (out-of-state) EMS certification, based on a current out-of-state or national EMS certification approved by the department.
246-976-143	To obtain EMS certification by challenging the educational requirements, based on possession of a current health care providers credential.
246-976-144	EMS certification.
246-976-161	General education requirements for EMS agency recertification.
246-976-162	The CME method of recertification.
246-976-163	The OTEP method of recertification.
246-976-171	Recertification, reversion, reissuance, and reinstatement of certification.
246-976-182	Authorized care -- Scope of practice.
246-976-191	Disciplinary actions.
	LICENSURE AND VERIFICATION
246-976-260	Licenses required.
246-976-270	Denial, suspension, revocation.
246-976-290	Ground ambulance vehicle standards.
246-976-300	Ground ambulance and aid service -- Equipment.
246-976-310	Ground ambulance and aid service -- Communications equipment.
246-976-320	Air ambulance services.
246-976-330	Ambulance and aid services -- Record requirements.
246-976-340	Ambulance and aid services -- Inspections and investigations.
246-976-390	Trauma verification of pre-hospital EMS services.
246-976-395	To apply for initial verification or to change verification status as a pre-hospital EMS service.
246-976-400	Verification -- Noncompliance with standards.

Appendix E: EMS Citations (continued)

	TRAUMA REGISTRY
246-976-420	Trauma registry -- Department responsibilities.
246-976-430	Trauma registry -- responsibilities.
	DESIGNATION OF TRAUMA CARE FACILITIES
246-976-580	Trauma designation process.
246-976-700	Trauma service standards.
246-976-800	Trauma rehabilitation service standards.
	SYSTEM ADMINISTRATION
246-976-890	Inter-hospital transfer guidelines and agreements.
246-976-910	Regional quality assurance and improvement program.
246-976-920	Medical program director.
246-976-930	General responsibilities of the department.
246-976-935	Emergency medical services and trauma care system trust account.
246-976-940	Steering committee.
246-976-960	Regional emergency medical services and trauma care councils.
246-976-970	Local emergency medical services and trauma care councils.
246-976-990	Fees and fines.
King County Code Section 2.35A.030	Establishing a Division of EMS within the Public Health and describing the duties of the department: 2.35A.030 Emergency medical services (EMS) division duties: A. Tracking and analyzing service and program needs of the EMS system in the county, and planning and implementing emergency medical programs, services and delivery systems based on uniform data and standard emergency medical incident reporting; B. Providing medical direction and setting standards for emergency medical and medical dispatch training and implementing EMS personnel training programs, including, but not limited to, public education, communication and response capabilities and transportation of the sick and injured; C. Administering contracts for disbursement of Medic One EMS tax levy funds for basic and advanced life support services and providing King County Medic One advanced life support services; D. Coordinating all aspects of emergency medical services in the county with local, state and federal governments and other counties, municipalities and special districts for the purpose of improving the quality of emergency medical services and disaster response in King County; and E. Analyzing and coordinating the emergency medical services components of disaster response capabilities of the department. (Ord. 17733 § 5, 2014).
PHL 9-1 & PHL 9-2 (DPH DP)	Emergency Medical Services (EMS) System & Financial Policies
Updated EMS Financial Plan	Approved annually through King County budget process

EMERGENCY MEDICAL SERVICES LEVY OVERVIEW - PROPOSED FINANCIAL PLAN (March 2019 Forecast) - 26.5 cents

5/30/2019

	2020 Proposed	2021 Proposed	2022 Proposed	2023 Proposed	2024 Proposed	2025 Proposed	2020-2025
REVENUES							
Countywide Assessed Value[1]	656,319,197,968	693,524,944,440	712,596,618,825	751,691,052,134	788,827,836,006	831,746,638,767	
Countywide EMS Levy	173,924,587	178,513,101	182,676,134	186,778,325	190,889,449	195,028,265	1,107,809,863
Countywide EMS Levy with Undercollection	172,185,342	176,727,970	180,849,373	184,910,542	188,980,555	193,077,983	1,096,731,764
Levy Rate	*0.2650*	*0.2574*	*0.2564*	*0.2485*	*0.2420*	*0.2345*	0.2277
Proportion	40.91%	41.05%	41.16%	41.30%	41.42%	41.47%	
Projected Seattle EMS Levy	71,152,549	73,279,628	75,189,497	77,139,448	79,066,410	80,878,222	456,705,753
Projected Seattle Undercollection	(711,525)	(732,796)	(751,895)	(771,394)	(790,664)	(808,782)	(4,567,058)
Projected Net Seattle Property Taxes	70,441,023	72,546,832	74,437,602	76,368,054	78,275,746	80,069,439	452,138,696
Seattle Revenue	**70,441,023**	**72,546,832**	**74,437,602**	**76,368,054**	**78,275,746**	**80,069,439**	**452,138,696**
Proportion	59.09%	58.95%	58.84%	58.70%	58.58%	58.53%	58.78%
Projected King County EMS Levy	102,772,039	105,233,473	107,486,637	109,638,877	111,823,039	114,150,044	651,104,109
Projected Undercollection	(1,027,720)	(1,052,335)	(1,074,866)	(1,096,389)	(1,118,230)	(1,141,500)	(6,511,041)
Projected Net King County Property Taxes	**101,744,318**	**104,181,139**	**106,411,771**	**108,542,488**	**110,704,809**	**113,008,543**	**644,593,068**
Projected King County Other Revenue	893,200	1,029,200	1,239,200	1,439,200	1,616,200	1,766,200	7,983,200
King County Revenue	**102,637,518**	**105,210,339**	**107,650,971**	**109,981,688**	**112,321,009**	**114,774,743**	**652,576,268**
TOTAL REVENUE	**173,078,542**	**177,757,170**	**182,088,573**	**186,349,742**	**190,596,755**	**194,844,183**	**1,104,714,964**
EXPENDITURES							
Advanced Life Support Services – Seattle	(22,688,960)	(23,557,169)	(24,391,220)	(25,252,303)	(26,136,130)	(27,110,861)	(149,136,643)
Advanced Life Support Services – King County	(56,382,364)	(58,501,941)	(60,538,188)	(62,640,361)	(64,798,030)	(67,177,617)	(370,038,501)
Total Advanced Life Support Services	**(79,071,324)**	**(82,059,110)**	**(84,929,408)**	**(87,892,664)**	**(90,934,160)**	**(94,288,478)**	**(519,175,144)**
Basic Life Support Services – Seattle	(47,662,463)	(48,888,076)	(49,912,395)	(50,953,113)	(51,970,322)	(52,798,535)	(302,184,904)
Basic Life Support Services – King County	(21,340,659)	(22,175,079)	(22,980,035)	(23,807,316)	(24,654,856)	(25,589,275)	(140,547,220)
Mobile Integrated Healthcare (MIH) - King County	(4,000,000)	(4,156,400)	(4,307,277)	(4,462,339)	(4,621,198)	(4,796,341)	(26,343,555)
Total Basic Life Support Services	**(73,003,122)**	**(75,219,555)**	**(77,199,707)**	**(79,222,768)**	**(81,246,376)**	**(83,184,151)**	**(469,075,679)**
Regional Services	**(11,976,022)**	**(12,444,285)**	**(12,896,013)**	**(13,360,269)**	**(13,835,894)**	**(14,360,274)**	**(78,872,757)**
Strategic Initiatives	**(1,209,732)**	**(1,254,162)**	**(1,296,735)**	**(957,247)**	**(988,215)**	**(1,022,479)**	**(6,728,570)**
TOTAL EXPENDITURES	**(165,260,199)**	**(170,977,112)**	**(176,321,863)**	**(181,432,948)**	**(187,004,644)**	**(192,855,383)**	**(1,073,852,150)**
DIFFERENCE Revenues/Expenditures	7,818,342	6,780,058	5,766,710	4,916,794	3,592,111	1,988,800	30,862,814
RESERVES (not cumulative)							
KC ALS Reserves	(13,790,000)	(13,790,000)	(13,790,000)	(13,790,000)	(13,790,000)	(13,790,000)	(13,790,000)
KC Rate Stabilization Reserves							
KC Rainy Day Reserves (90 day requirement)[2]	(23,402,164)	(24,295,529)	(25,155,184)	(25,946,515)	(26,851,609)	(27,849,695)	(27,849,695)
TOTAL RESERVES	**(37,192,164)**	**(38,085,529)**	**(38,945,184)**	**(39,736,515)**	**(40,641,609)**	**(41,639,695)**	**(41,639,695)**
Difference needed to cover yearly cashflow and increase in reserves		**Est Avail Reserves from 2014-2019 levy**		**(20,000,000)**	**Reserve Funding Needed**		**(21,639,695)**
DIFFERENCE (including reserves and carryforward funding from 2014-2019 levy)							9,223,119
King County Supplemental Reserves							8,405,970
City of Seattle Supplement Revenue							817,149

[1] *Does not include City of Milton*

[2] *Financial Plan assumes KC Rainy Day Reserves fully funded in 2022, the third year of the proposed levy.*