

MEDIC ONE/EMERGENCY MEDICAL SERVICES

STRATEGIC PLAN & LEVY REAUTHORIZATION

ALS Subcommittee meeting 4/10/2024

Summary

Topics included a report out on issues being considered in the other levy planning subcommittees, projecting future medic unit needs, funding for ALS-based programs outside the allocation, and a review of 2026-2031 ALS Status Quo funding levels.

Attendees

Chair: Keith Scully, City of Shoreline

Will Aho, Eastside Fire & Rescue

Cynthia Bradshaw, King County EMS

Matt Burrow, Bellevue Fire

Helen Chatalas, King County EMS

Andrea Coulson, King County Medic One

Brian Culp, KCFD #27 – Fall City

Andrea DeCaro, Northeast KC Medic One

Chuck DeSmith, Renton RFA

Chris Drucker, King County EMS

Becky Ellis, King County EMS

Jason Hammond, King County EMS

Cory James, NORCOM

Bill Newbold, Kirkland Fire

Kelly O'Brien, King County EMS

Andres Orams, Shoreline Fire

Mark Peterson, Shoreline Fire

Michele Plorde, King County EMS

Josh Pratt, Kirkland Fire

Mark Sawdon, King County Medic One

Dmitry Sharkov, King County EMS

Eric Timm, Paramedic Training Program

Brad Thompson, Valley RFA

Aaron Tyerman, Puget Sound RFA

Brian Wallace, Seattle Fire

Todd Wollum, Shoreline Fire

Rose Young, King County EMS

Report from other subcommittees

BLS Subcommittee: The group is considering the BLS Allocation funding level and distribution methodology. King County EMS staff is running different distribution options for review. There is interest in better understanding the current methodology, which uses the metrics of Assessed Valuation and call volumes, and looking at other possible methodologies.

Regional Services Subcommittee: The first three meetings will focus on program and Initiative review, starting with Training & Education. Workforce issues - hiring, retirements and retention – are front and center, and there is support across the region for increased training for all first responders.

Future medic unit needs

Overview:

Identifying whether a new medic unit may be needed during the next levy span is a critical piece of levy planning. Projecting future ALS demand/future medic unit needs is necessary to ensure the financial plan accommodates potential new unit costs. Workload, response times, population growth, and capacity are all reviewed. The region has not added a medic unit outside Seattle

since 2011 because the system has had capacity. However, the last two levies have included funding in a reserve for a potential new unit to protect the system, should projections significantly change/service demands require additional units to be added.

Discussion:

The EMS Division conducts an annual medic unit analysis to identify any service gaps in the regional system. The typical criteria reviewed include call volumes, median unit and call processing response times, fractile response times, and medic exposure to critical patients and skills. The most recent review in 2023 indicated that at a system level:

- paramedic services are stable;
- paramedic agency performance falls within established standards; and
- no new service or unit relocations are necessary.

Data shared at the meeting showed that although population is increasing, ALS call volume is decreasing. ALS responses are historically correlated with population growth of seniors (65 years or older), but King County's population growth is in a younger age group.

DECISIONS MADE:

The following proposal was made and endorsed by the Subcommittee:

1. Include two half-time units in the Financial Plan as a placeholder should additional units need to be added during the next levy span;
2. Continue conducting the annual medic unit analysis; and
3. Financially model the "placeholder" to determine the impact on the 2026-2031 levy

Next steps:

Subcommittee participants requested the data from the 2023 medic unit analysis. This information will be provided to regional partners along with the meeting notes.

ALS-specific programs

Overview:

The EMS Division created the ALS Support for BLS Activities program in 2023 which provides funding to ALS agencies to conduct BLS Run review, training, and ALS/BLS interaction drills and activities. The program receives additional support via the BLS Training & QI funds that BLS agencies delegate to ALS partners. The Division also made funding available starting in 2023 to pay for paramedics to train paramedic students at the Paramedic Training program at Harborview.

Discussion:

Subcommittee participants discussed whether to continue these opportunities, increase the funding level, and/or enhance the scope of the program.

DECISIONS MADE:

1. ALS Support for BLS Activities

The Subcommittee endorsed having the ALS Support for BLS Activities program be sufficiently funded so that the BLS Training & QI monies are no longer needed and can be “returned” to BLS agencies as use as needed. It was proposed that a smaller group convene to determine a possible enhanced program scope.

2. Paying for paramedics to train paramedic students at Paramedic Training

There was support for continuing funding this training opportunity, but it was undetermined whether the scope should increase.

2026-2031 Programmatic Status Quo funding

The Subcommittee reviewed the cost of current ALS funding projected into the 2026-2031 levy period. The continuation of programs at the forecast inflation levels results in a 30% levy to levy increase. This framework provides one ‘bookend’ when considering total funding for ALS agencies.

Next Meeting

May 8, 2024: 1:00 – 3:00 pm

Seattle Joint Training Facility – Classroom 4
9401 Myers Way South in Seattle

This meeting will include reviewing actual ALS costs to better understand funding challenges.

ALS FUNDING -- 2020-2025 Inflated to 2026-2031

PRELIMINARY STATUS QUO

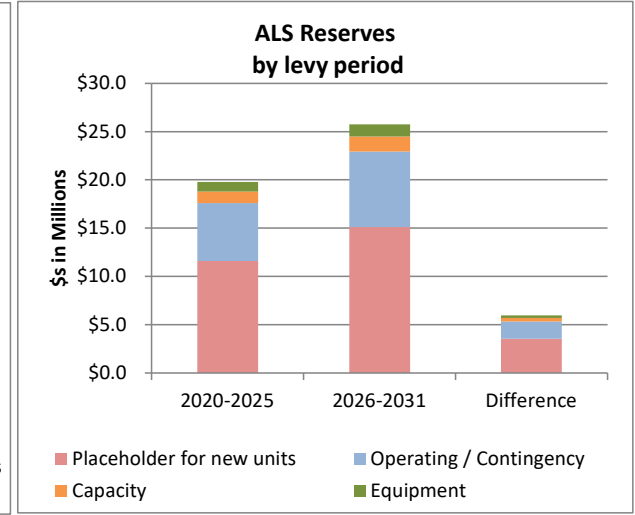
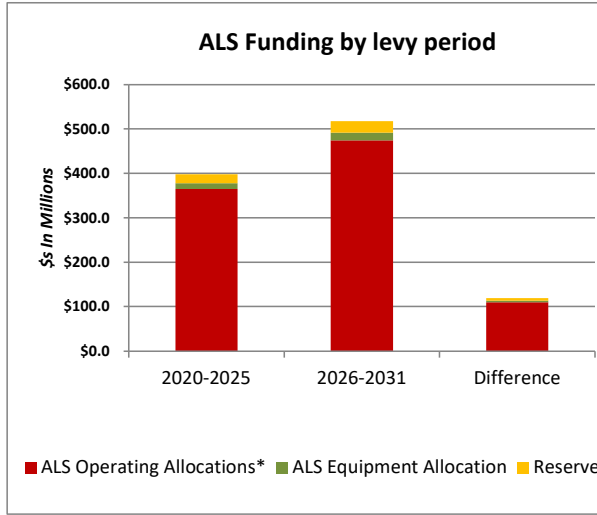
(In Millions)

ALS Funding Categories	2020-2025	2026-2031	Difference	% Increase
ALS Operating Allocations*	\$364.7	\$474.5	\$109.8	30%
ALS Equipment Allocation	\$13.3	\$17.0	\$3.7	27%
Reserves	\$19.8	\$25.8	\$6.0	30%
TOTAL	\$397.8	\$517.2	\$119.4	30%

Reserves	2020-2025	2026-2031	Difference	% Increase
Operating / Contingency	\$6.0	\$7.8	\$1.8	30%
Equipment	\$1.0	\$1.3	\$0.3	27%
Capacity	\$1.2	\$1.6	\$0.4	30%
Placeholder for new units	\$11.6	\$15.1	\$3.5	30%
ALS Subtotal	\$19.8	\$25.8	\$6.0	30%

Other Program Funding	\$2.6	\$6.1	\$3.5	136%
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*Including Unit, Program/Supv, and System Allocation

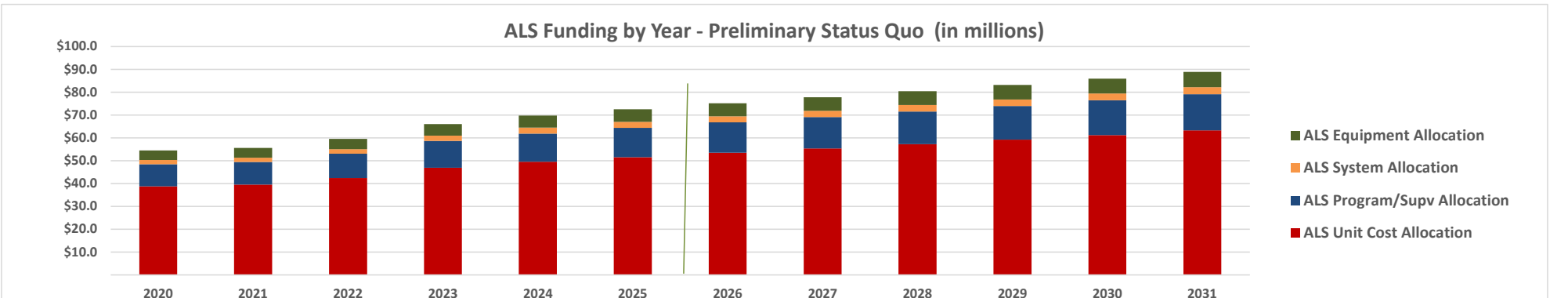


ALS Categories	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2020-2025	2026-2031	Difference
ALS Unit Allocation*	\$38,814,656	\$39,594,841	\$42,481,295	\$46,958,866	\$49,546,278	\$51,577,657	\$53,495,486	\$55,362,478	\$57,278,026	\$59,231,206	\$61,262,837	\$63,370,269	268,973,593	350,000,302	81,026,709
ALS Program/Supv Allocation	\$9,686,656	\$9,881,349	\$10,601,696	\$11,719,124	\$12,364,839	\$12,871,797	\$13,345,486	\$13,811,252	\$14,289,121	\$14,776,376	\$15,283,201	\$15,808,950	67,125,461	87,314,386	20,188,925
ALS System Allocation	\$4,122,905	\$4,205,783	\$4,512,386	\$4,987,994	\$5,262,829	\$5,478,612	\$5,680,221	\$5,878,467	\$6,081,862	\$6,289,247	\$6,504,973	\$6,728,736	28,570,509	37,163,506	8,592,997
ALS Equipment Allocation	\$1,866,750	\$1,912,103	\$1,995,247	\$2,355,202	\$2,581,530	\$2,632,906	\$2,680,558	\$2,736,323	\$2,801,987	\$2,866,150	\$2,929,211	\$2,993,070	13,343,738	17,007,299	3,663,561
Contingencies/Reserves	\$1,636,667	\$3,136,667	\$2,886,667	\$3,246,667	\$4,246,667	\$4,636,667	\$2,092,000	\$3,982,000	\$3,822,000	\$4,232,000	\$5,472,000	\$6,152,000	19,790,000	25,752,000	5,962,000
TOTAL	\$56,127,634	\$58,730,743	\$62,477,291	\$69,267,853	\$74,002,143	\$77,197,639	\$77,293,751	\$81,770,520	\$84,272,996	\$87,394,979	\$91,452,222	\$95,053,025	397,803,301	517,237,493	119,434,192

Reserves/Contingency	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2020-2025	2026-2031	Difference
Operating (now Contingencies)	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	\$1,300,000	6,000,000	7,800,000	1,800,000
Equipment	166,667	166,667	166,667	166,667	166,667	166,667	212,000	212,000	212,000	212,000	212,000	212,000	1,000,000	1,272,000	272,000
Capacity	200,000	200,000	200,000	200,000	200,000	200,000	260,000	260,000	260,000	260,000	260,000	260,000	1,200,000	1,560,000	360,000
Placeholder for new units	270,000	1,770,000	1,520,000	1,880,000	2,880,000	\$3,270,000	320,000	2,210,000	2,050,000	2,460,000	3,700,000	4,380,000	11,590,000	15,120,000	3,530,000
ALS Subtotal	1,366,667	1,366,667	1,366,667	1,366,667	1,366,667	1,366,667	2,092,000	3,982,000	3,822,000	4,232,000	5,472,000	6,152,000	19,790,000	25,752,000	5,962,000

* New EMS system wide Rainy Day Reserve includes most of the elements of the previous ALS Risk Abatement Reserve.

Other Program Funding	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2020-2025	2026-2031	Difference
ALS Support for BLS				\$570,000	\$601,407	\$626,065	\$649,104	\$671,758	\$695,001	\$718,701	\$743,352	\$768,923	1,797,472	4,246,839	2,449,367
Initial PM Trng/Harborview				\$250,000	\$263,775	\$274,590	\$284,695	\$294,631	\$304,825	\$315,219	\$326,031	\$337,247	788,365	1,862,647	1,074,282
TOTAL	\$0	\$0	\$0	\$820,000	\$865,182	\$900,654	\$933,799	\$966,389	\$999,826	\$1,033,920	\$1,069,383	\$1,106,170	2,585,836	6,109,486	3,523,650



4/10/2024 ALS Subcommittee meeting
2026-2031 Medic One/EMS levy planning

Reports from Other Subcommittees - BLS

3/27/24 & 4/4/24 – BLS SUBCOMMITTEE

Thorough review of the issues the group will be considering, how the levy supports BLS, grounding in BLS allocation, MIH presentation.

Key Takeaways:

1. Would like to better understand the current BLS allocation distribution methodology.
2. Should the BLS allocation increase since BLS responsibilities have?

Reports from
Other
Subcommittees –
REGIONAL
SERVICES

3/21/24 – REGIONAL SERVICES SUBCOMMITTEE

Review of the various Training and Education programs and financial overview of those investments.

Key Takeaways:

1. Concerns about hiring, retention, having enough trainers.
2. Regional support for increased training.

Topics for discussion

1. Medic unit needs for next levy span

2. Programs outside allocation

3. 2026-2031 Status Quo funding

Future Medic Unit Needs



REGIONAL MEDIC UNIT ANALYSIS

Prepared for the September 2023 annual review

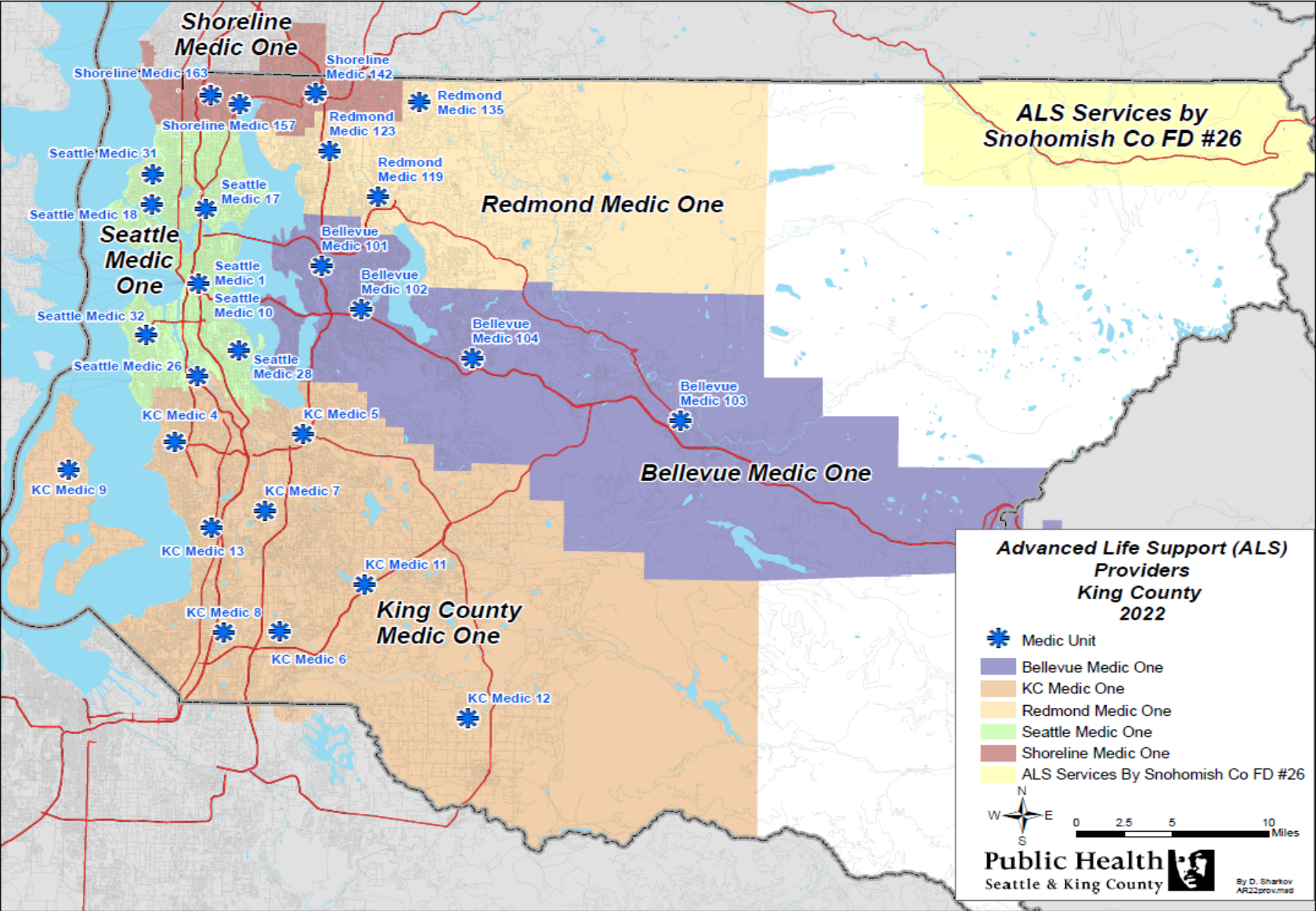
REGIONAL MEDIC UNIT ANALYSIS

OVERVIEW

- Conduct annual assessment of medic unit performance
- Review medic service trends (5-year) outside Seattle from 2018-2022:
 - Countywide
 - Medic Program
 - Medic Unit
 - *ALS response to local service areas outside of King County*
- Identify any service gaps and assess magnitude of impact to medic service
- Recommend next steps

REGIONAL MEDIC UNIT ANALYSIS

OVERVIEW



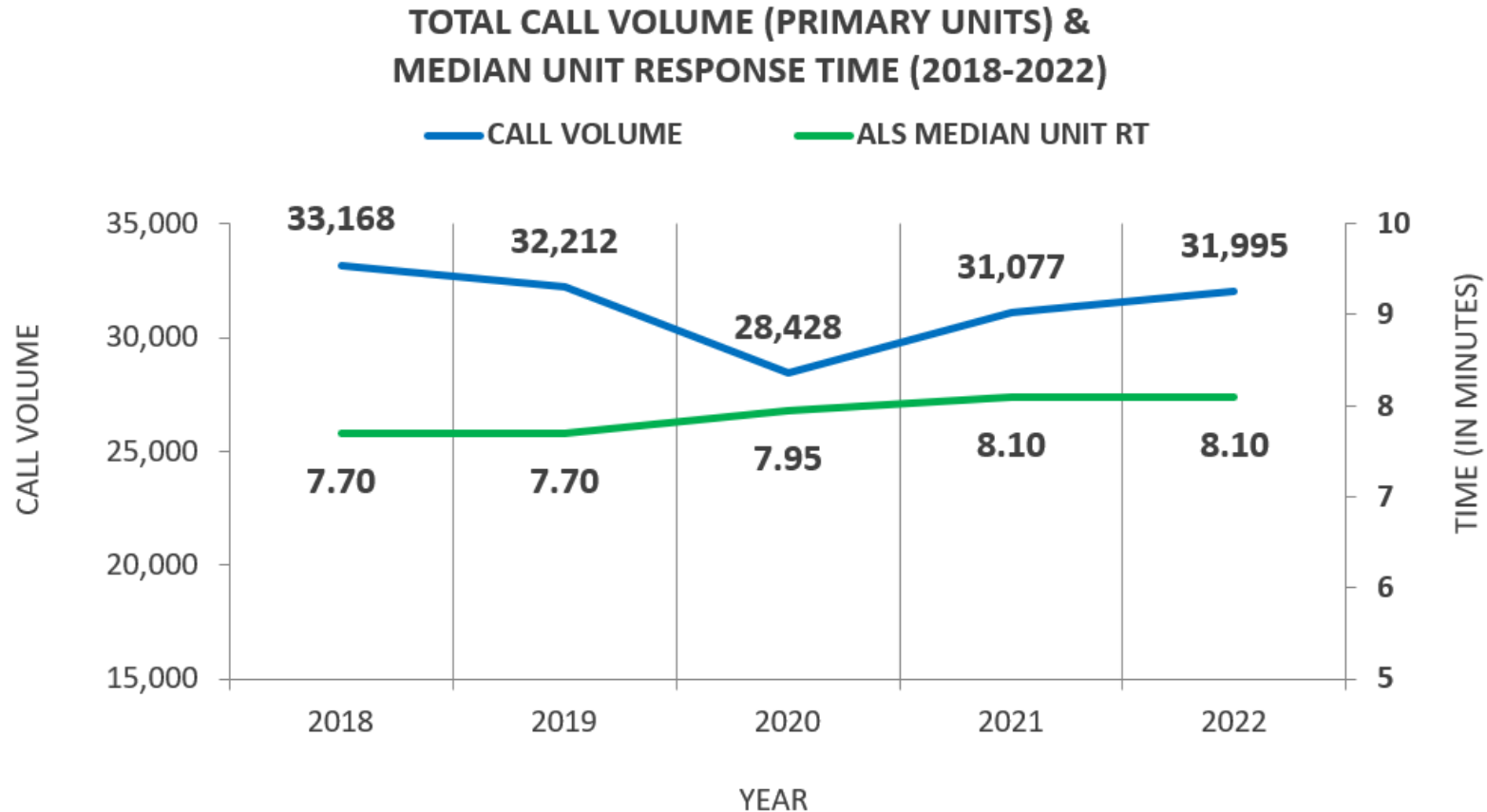
REGIONAL MEDIC UNIT ANALYSIS

CRITERIA FOR REVIEW

- ❑ **Workload trends - call volume** (1,400 – 2,500 calls per medic unit with exceptions to outlying areas)
- ❑ **Median unit and call processing response times** (≤ 10 minutes for all calls)
- ❑ **Fractile response time trends** (80% of all ALS calls with response time of 14 minutes or less)
- ❑ **Critical patient exposures and skill trends** (cardiac arrest, intubations, IV/IO placements)

REGIONAL MEDIC UNIT ANALYSIS

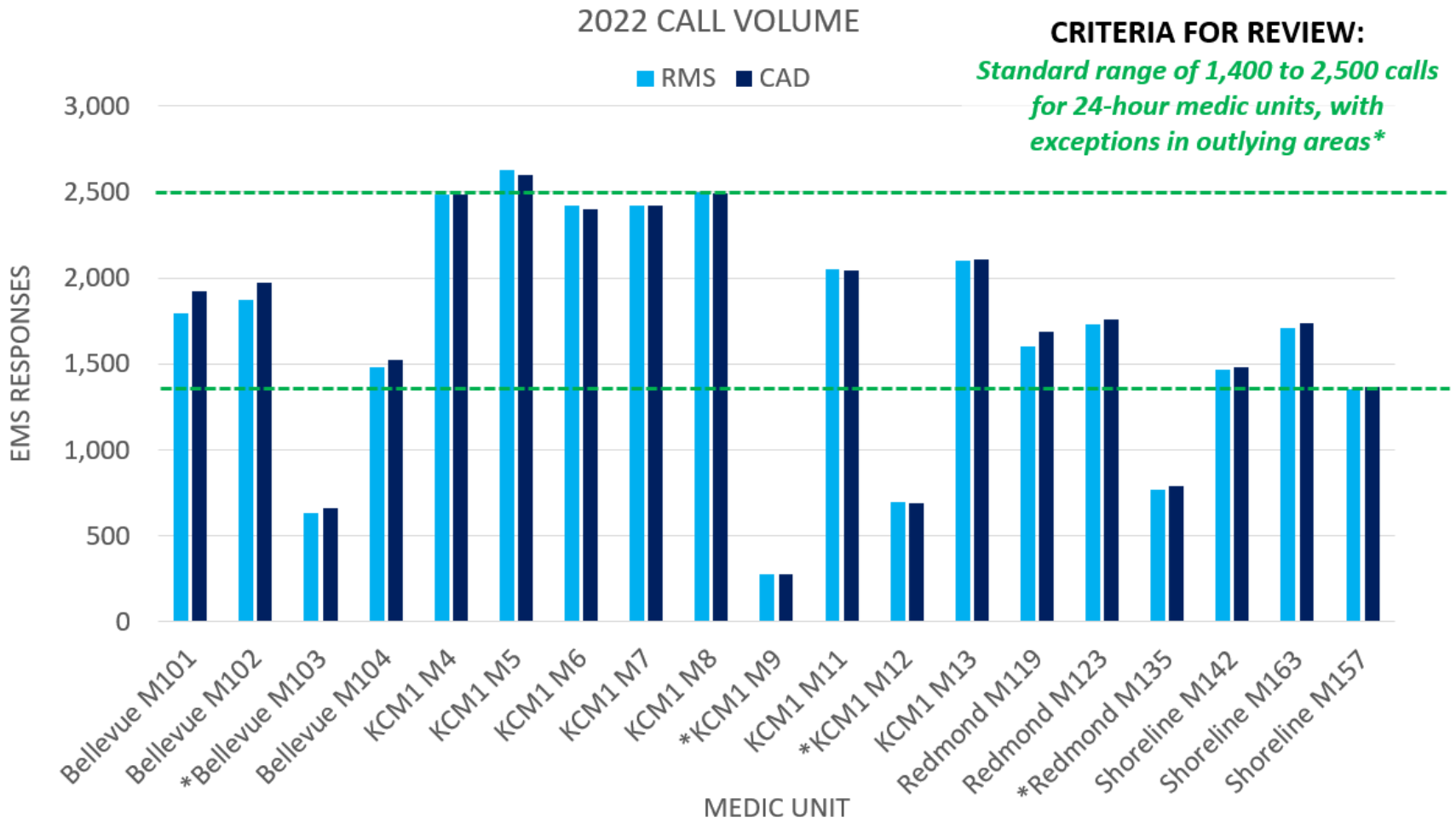
CALL VOLUME & UNIT RESPONSE TIMES



Key Findings: Medic units respond to approximately 25% (31,500 calls/year on average) of all EMS responses annually. The region's median unit response time meets the standard (≤ 10 minutes for all calls).

REGIONAL MEDIC UNIT ANALYSIS

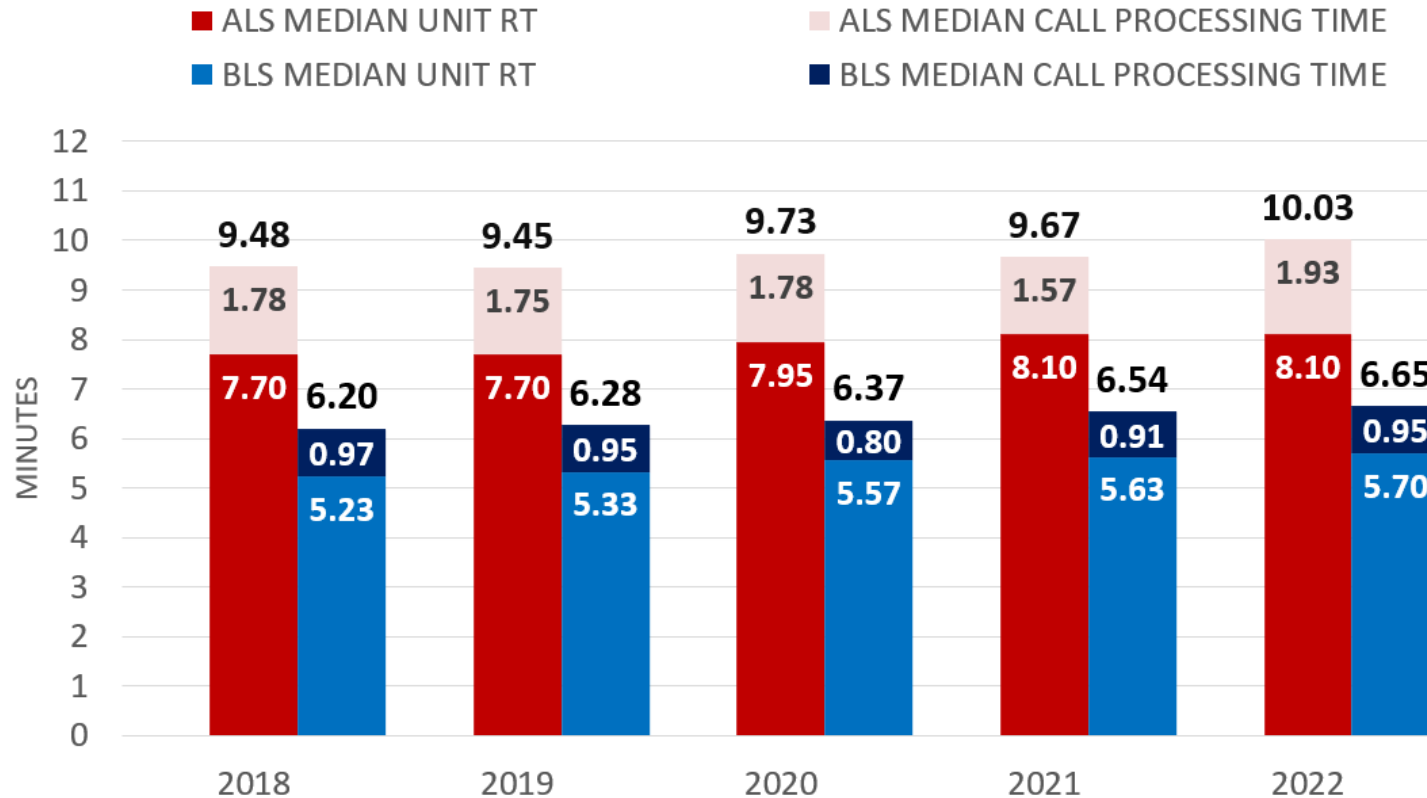
CALL VOLUME BY MEDIC UNIT



REGIONAL MEDIC UNIT ANALYSIS

MEDIAN UNIT & CALL PROCESSING TIMES

KING COUNTY MEDIAN TIMES (IN MINUTES)



CRITERIA FOR REVIEW

ALS median response time 10 minutes or less

REGIONAL MEDIC UNIT ANALYSIS

FRACTILE RESPONSE TIMES

	2018	2019	2020	2021	2022
RMS	7.70	7.70	7.95	8.10	8.10
CAD	7.78	7.80	8.03	8.16	8.17

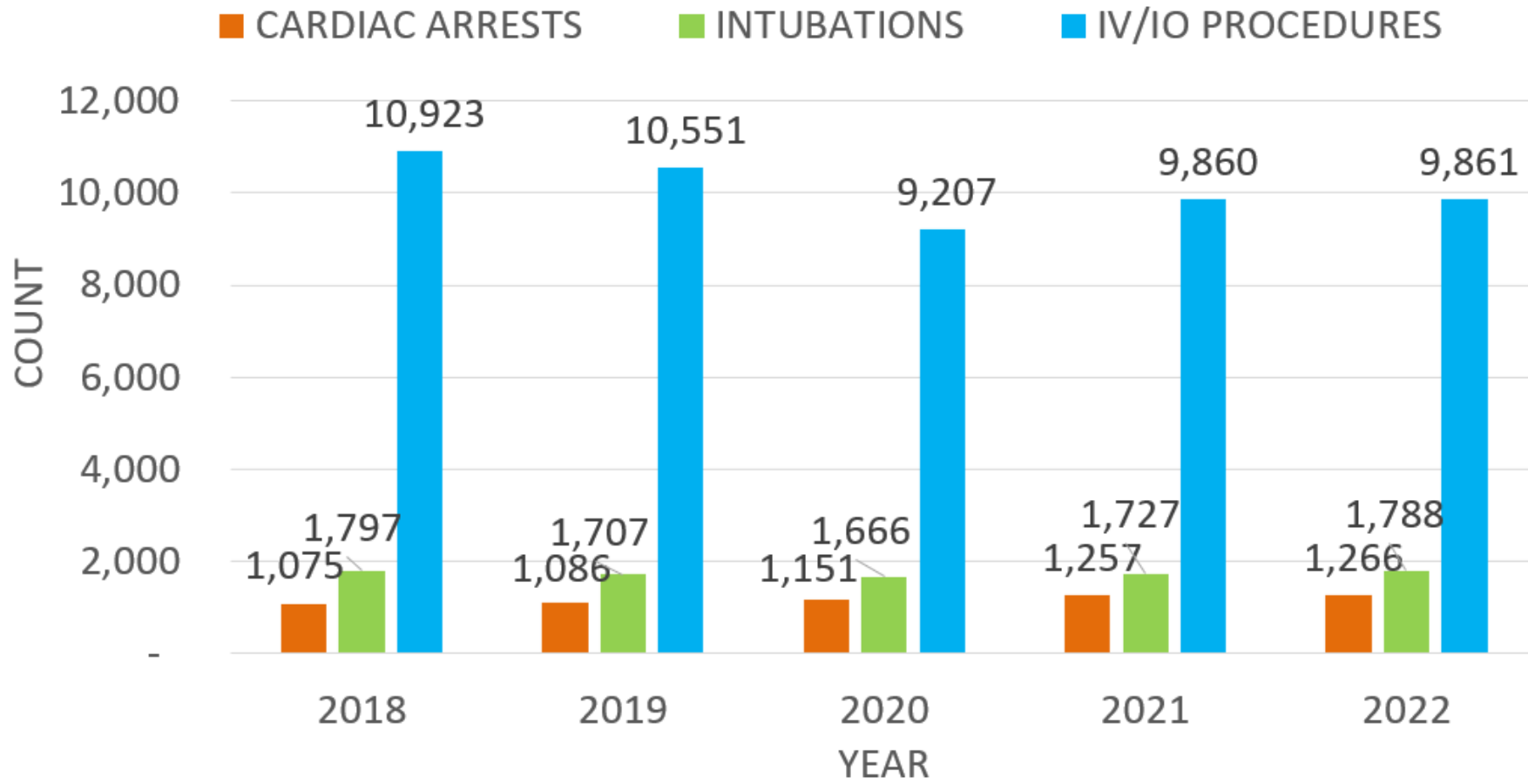
Fractiles:

% < 08 min.	54%	52%	50%	48%	48%
% < 10 min.	75%	74%	72%	71%	71%
% < 12 min.	88%	86%	85%	85%	85%
% < 14 min.	93%	92%	91%	91%	91%

Key Findings: The region continues to meet its goal of 80% of all calls within 14 minutes or less.

REGIONAL MEDIC UNIT ANALYSIS

CRITICAL PATIENT EXPOSURES & SKILLS



Key Findings: Across the 5-year period, cardiac arrest incidents and intubations gradually increased. In 2020 and 2021, IV/IO procedures decreased.

REGIONAL MEDIC UNIT ANALYSIS

SUMMARY OF KEY FINDINGS

At a system level:

- ✓ Paramedic service **throughout the region continues to remain stable**
- ✓ Paramedic agency performance is **within established standards**
- ✓ **Based on the review of the data, no new service or unit relocations are necessary at this time**
- ✓ The region should continue its annual review process 2019-2023 data in 2024 to ensure alignment with standards

Historical Approach: Projecting Medic Unit Needs

WHY? Assess future medic unit needs to ensure the Financial Plan accommodates potential new unit costs.



HOW? Use unit performance trends and critical factors driving demand



1. Workload, Response Times and Skills

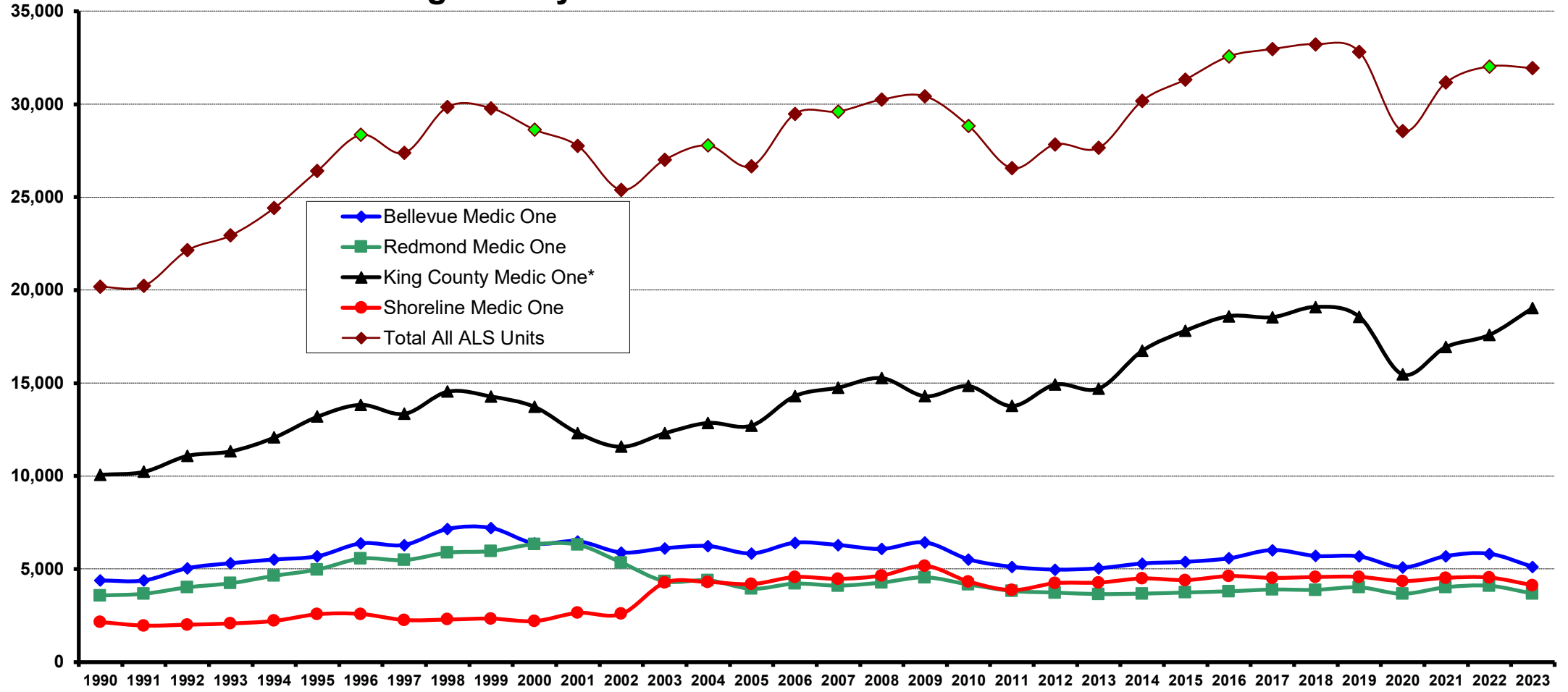


2. Population Growth and 'Capacity'



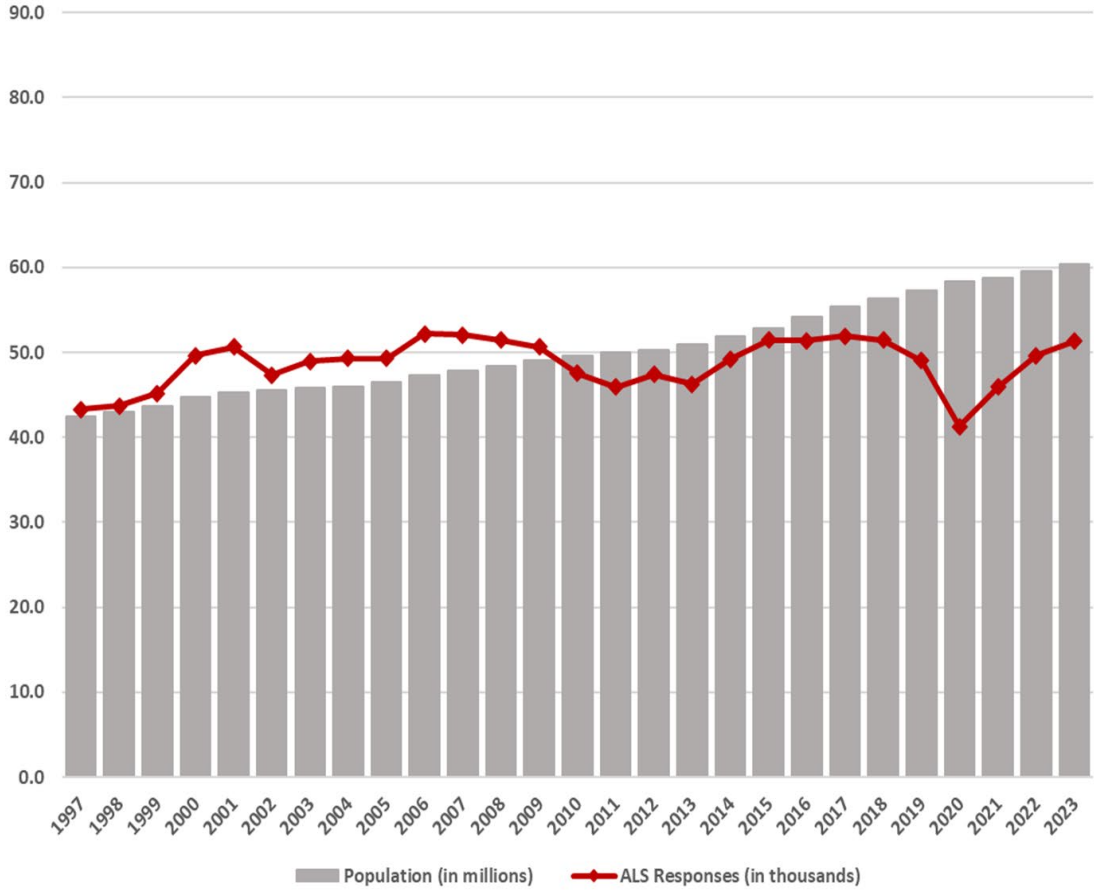
3. Projected Gap

King County Paramedic Service Trends 1990-2023

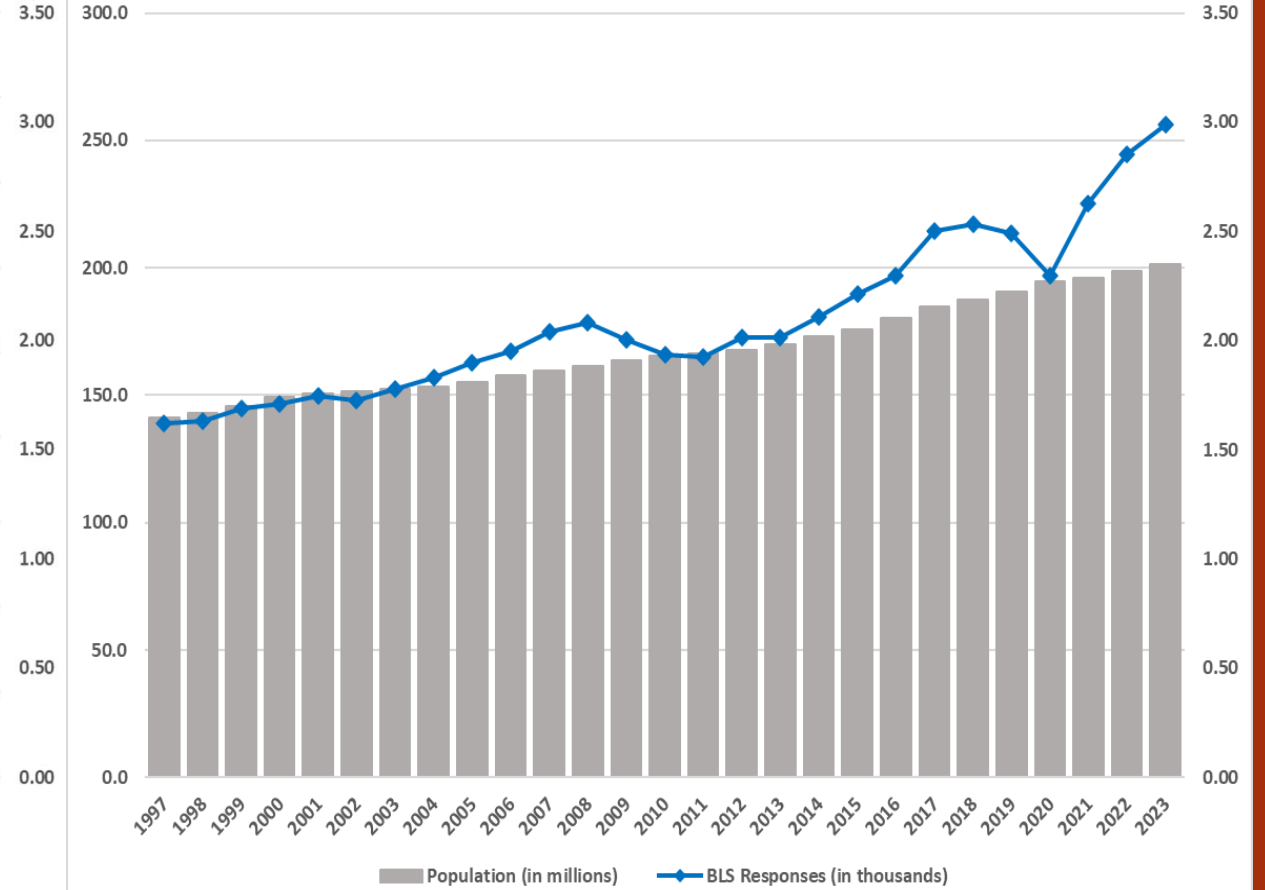


The green neon diamond ◆ reflects a year in which CBD revisions were implemented.

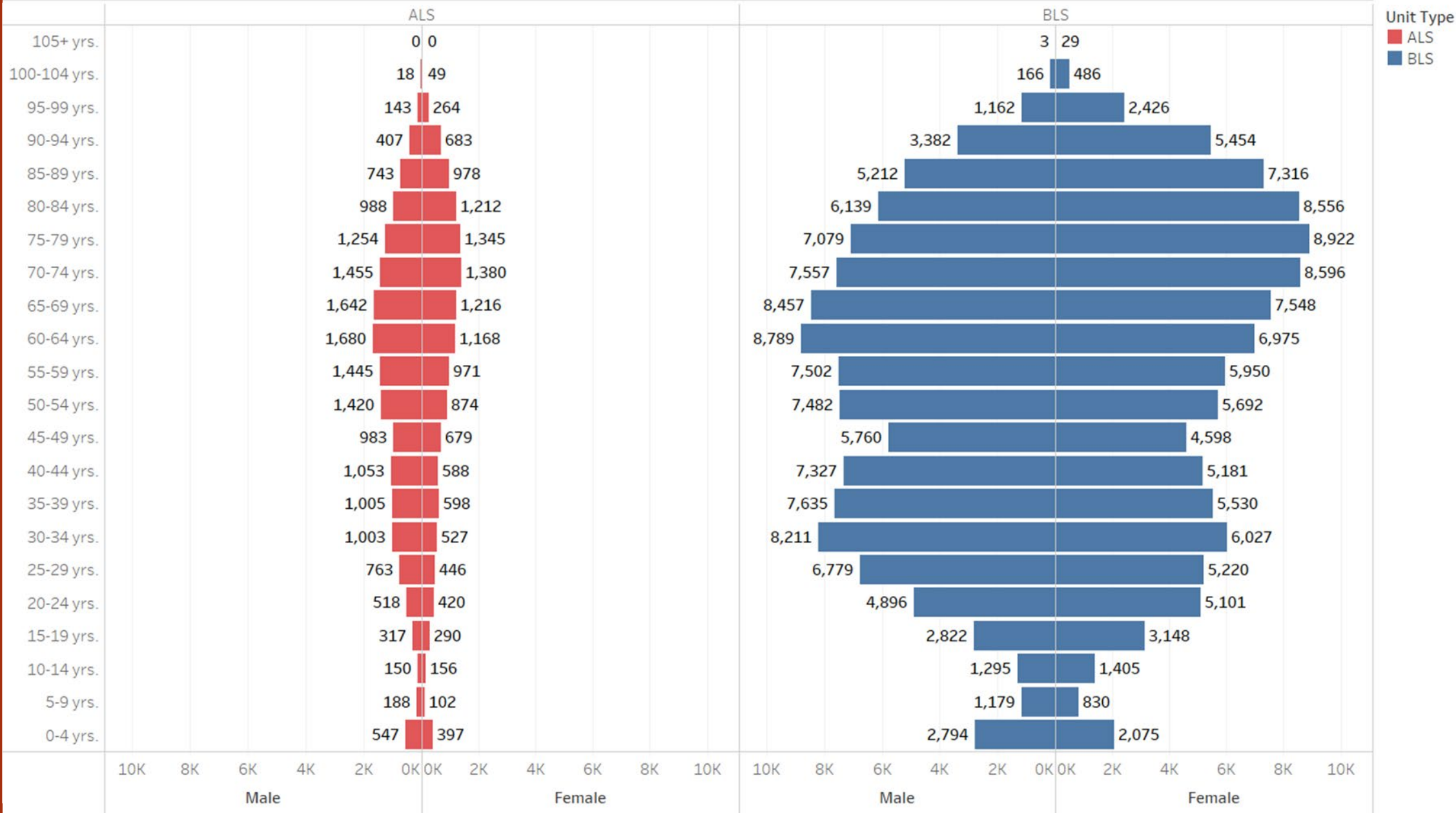
Seattle-King county Population & ALS Responses 1997-2023



Seattle-King county Population & BLS Responses 1997-2023



Responses by Age and Sex: 2022



Female as an attribute and Male as an attribute for each Age Group broken down by Unit Type . Color shows details about Unit Type . The data is filtered on Sex, which keeps Female and Male.

Future Medic Unit Needs

Proposal:

- Include two (2) 0.5 'placeholder' medic units in reserves
- Evaluate financial impacts of timing

ALS Programs Outside Allocation

ALS Support for BLS Activities: Run Review/QI & Training
\$570,000 in 2023; inflated annually by CPI-W + 1%

Initial Paramedic Training: Supporting paramedics teaching and leading drills at Harborview Paramedic Training Program
\$250,000 in 2023; inflated annually by CPI-W +1%

Use of Paramedics in EMS Division Programs: (SEI, SME)

ALS Support for BLS Activities

New Program in 2023

- New ALS agency funding from Contingency
- Also supported by BLS Agencies delegating BLS QI \$s

History:

- Developed due to interest in enhanced training for BLS by utilizing ALS Providers
- Initial Review: well-received
- Why now? Particularly important with less experienced work force

ALS Support for BLS Activities

Current Scope:

- Clinical QI/Run Review and follow-up
- Enhanced BLS Training
 - Supplemental/Enhanced BLS Training
 - ALS/BLS Interaction Drills
 - Mentoring
- Management, oversight and program coordination
- Can include Admin QI/run review & follow-up (BLS agency responsibility; can be delegated to ALS)

Available Funding & Methodology

Funding: 50% distributed by agency
50% distributed by unit

Distribution	2023	2024	2025
TOTAL	570,000	601,407	626,065
Per Agency	71,250	75,176	78,258
Per Unit	15,000	15,827	16,475

Funding increased yearly at CPI-W +1%

ALS Agency	Units	2023	2024	2025
Bellevue	4	\$ 131,250	\$ 138,482	\$ 144,160
NEKCM1	3	\$ 116,250	\$ 122,655	\$ 127,684
Shoreline	3	\$ 116,250	\$ 122,655	\$ 127,684
KCM1	9	\$ 206,250	\$ 217,614	\$ 226,537
TOTAL Added	19	\$ 570,000	\$ 601,407	\$ 626,065
BLS QI & Training*		\$ 402,179	\$ 424,339	\$ 441,737
TOTAL ALS & BLS		\$ 972,179	\$ 1,025,746	\$ 1,067,802

*Not all BLS agency BLS QI & Training funds allocated to agencies

ALS Support of BLS Activities

Actuals: Start up Year

2023 Estimates	ALS Support for BLS \$\$	BLS QI & Training \$\$*	Total
Expenditures	\$396,092	\$378,852	\$774,944
Budget	\$570,000	\$402,179	\$972,179
Difference	\$173,908	\$23,327	\$197,235
% spent (est)	69%	94%	80%

**Not all BLS agency BLS QI & Training funds allocated to ALS agencies*

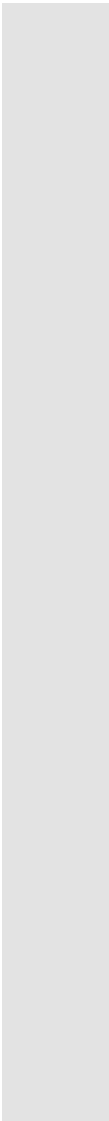
2023 was start-up year

- Developed based on previous support funded with BLS Agency QI & Training \$\$
- Programs at different places in development cycle
- Agencies project spending 2024 budgeted amounts



ALS Support for BLS Activities

Questions:

- Fund program without BLS Agency QI \$s?
 - Continue “as is” or enhance existing scope?
 - Other?
- 


ALS Provider Support of Initial Paramedic Training at Harborview

Scope:

- Reimbursing ALS agencies to support initial paramedic training at Harborview
- 2023 was initial start up year

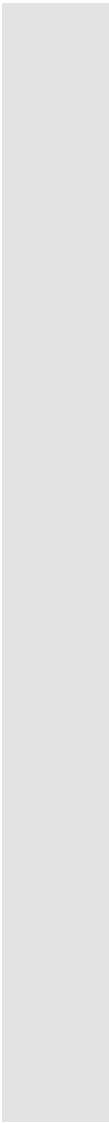
Funding:

- Funded at \$250k in 2023; inflated each year by CPI-W +1%
- Expended \$155k in 2023
- Agencies forecast expenditures close to overall budget in 2024



ALS Provider
Support of
Initial Paramedic
Training at
Harborview

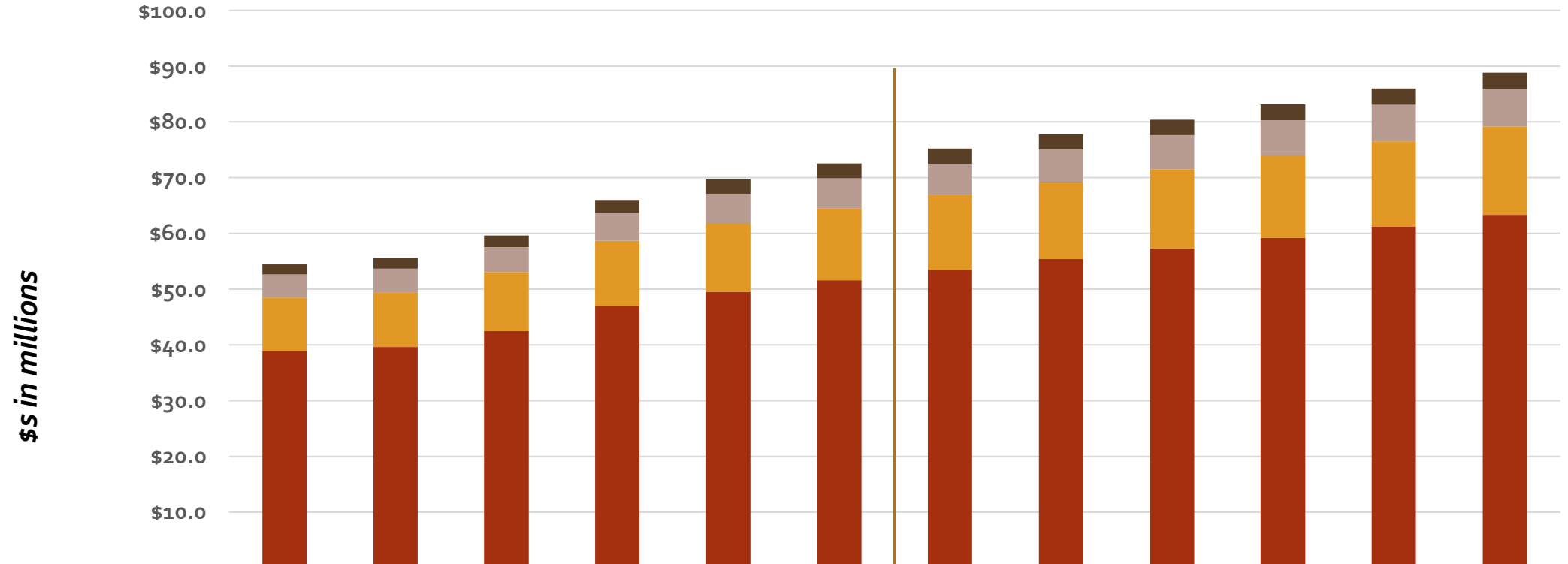
Questions:

- Continue “as is”, enhance existing scope?
 - Other potential impacts?
- 

PRELIMINARY STATUS QUO FUNDING –

**What if existing funding inflated
through next levy period?**

ALS Status Quo Funding for 2026-2031



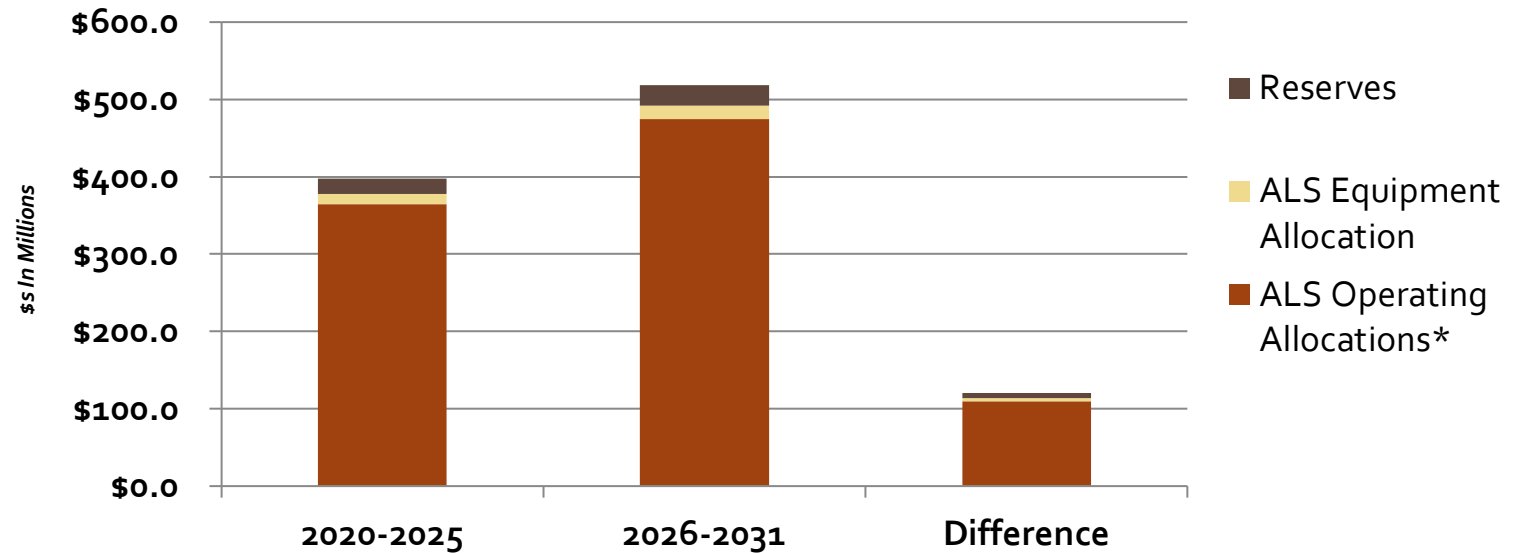
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
■ ALS Equipment Allocation	\$1.9	\$1.9	\$2.0	\$2.4	\$2.6	\$2.6	\$2.7	\$2.7	\$2.8	\$2.9	\$2.9	\$3.0
■ ALS System Allocation	\$4.1	\$4.2	\$4.5	\$5.0	\$5.3	\$5.5	\$5.7	\$5.9	\$6.1	\$6.3	\$6.5	\$6.7
■ ALS Program/Supv Allocation	\$9.7	\$9.9	\$10.6	\$11.7	\$12.4	\$12.9	\$13.3	\$13.8	\$14.3	\$14.8	\$15.3	\$15.8
■ ALS Unit Cost Allocation	\$38.8	\$39.6	\$42.5	\$47.0	\$49.5	\$51.6	\$53.5	\$55.4	\$57.3	\$59.2	\$61.3	\$63.4

Preliminary Status Quo Funding (\$s in millions)

ALS Funding Categories	2020-2025	2026-2031	Difference	% Increase
ALS Operating Allocations*	\$364.7	\$474.5	\$109.8	30%
ALS Equipment Allocation	\$13.3	\$17.0	\$3.7	27%
Reserves / Contingency	\$19.8	\$25.8	\$6.0	30%
TOTAL	\$397.8	\$517.2	\$119.4	30%

*Includes Unit, Supervisory/Program & System Allocations

ALS Funding by Levy Period



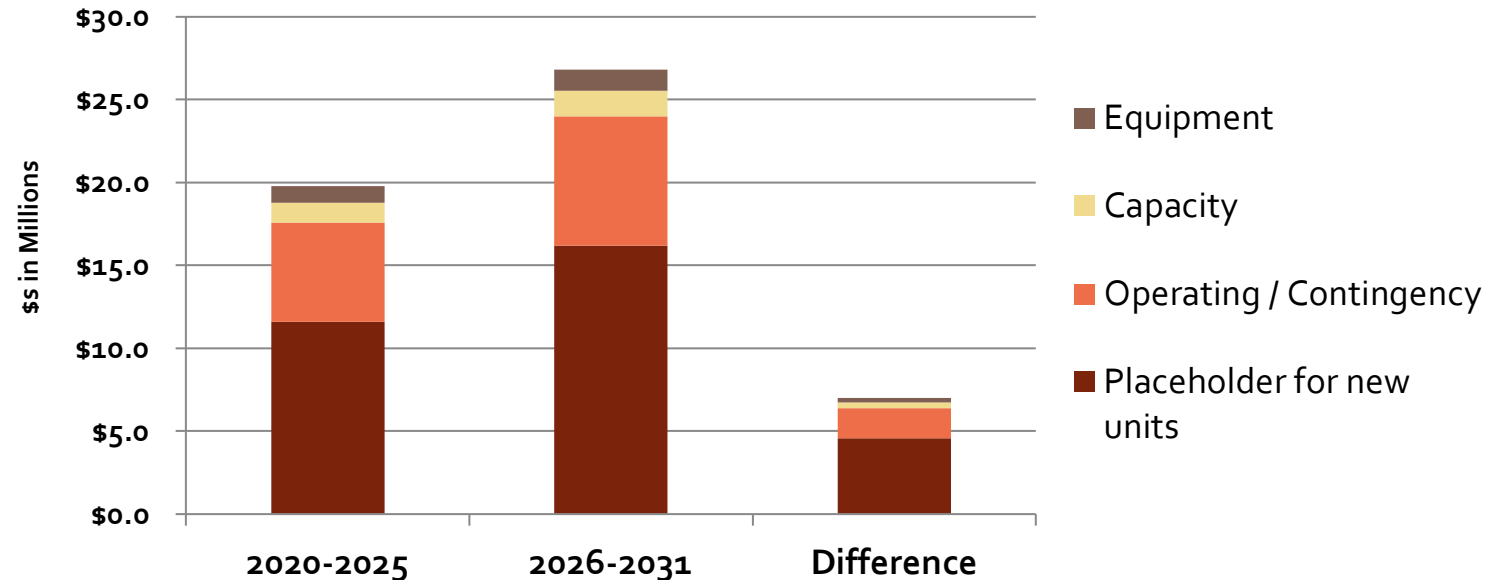
Preliminary Status Quo Funding

Reserves

(\$s in millions)

Reserves	2020-2025	2026-2031	Difference	% Increase
Operating / Contingency	\$6.0	\$7.8	\$1.8	30%
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Capacity	\$1.2	\$1.6	\$0.4	30%
Placeholder for new unit	\$11.6	\$15.1	\$3.5	30%
TOTAL	\$19.8	\$25.8	\$6.0	30%

ALS Reserves by levy period



Preliminary
Status Quo
Funding

Non-ALS
Program
Funding

(\$s in millions)

New Programs started in 2023

- 2020-2025 levy covers 3 years of funding
- 2026-2031 levy covers 6 years of funding

Program Funding	2020- 2025	2026- 2031	Difference	% Increase
ALS Support of BLS Activities	\$1.8	\$4.2	\$2.5	136%
Support of Initial Paramedic Training at Harborview	\$0.8	\$1.9	\$1.1	136%
TOTAL	\$2.6	\$6.1	\$3.5	136%

ALS Allocations per unit: 2026-2031 Preliminary Status Quo

