King County Auditor's Office

Kymber Waltmunson, King County Auditor



Emergency Medical Services: Actions Needed to Address Upcoming Retirements and Workforce Diversity

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January 24, 2017

Executive Summary

Without regional workforce planning actions, emergency medical services in King County could be impacted by large numbers of retirements and a lack of workforce diversity. We recommend that the Emergency Medical Services Division work with its partner agencies to focus on strategic workforce planning and diversity efforts. Implementing these recommendations will help address potential equity, financial, and staffing impacts to emergency medical service agencies throughout King County.



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King County Auditor's Office

Kymber Waltmunson, King County Auditor



Emergency Medical Services

Report Highlights

January 24, 2017

Why This Audit Is Important

The 2014 – 2019 Emergency Medical Services (EMS) levy is projected to collect over \$450 million in revenue, which supports life-saving services in Seattle and King County. King County and its partner agencies employs more than 4,000 paramedics and emergency medical technicians (EMTs) who provide these services. This audit focuses on how King County and its partner agencies are addressing workforce planning and financial management.

What We Found

Nearly 30 percent of King County's EMT and paramedic workforce will be eligible for retirement by the end of the 2014 – 2019 levy period. High turnover rates could present cost and staffing challenges such as retirement payouts and hiring costs and an increased need for recruitment. In addition, about 85 percent of King County emergency medical responders are white males, a number which is consistent with national statistics. This lack of gender and racial diversity presents legal and staffing risks. Further, it may result in missed opportunities for enhanced efficiency and customer service that could be gained through broadening the skills, experiences, and perspectives on response teams. While there has been effort by some individual agencies to address these challenges, these efforts have not included key strategic workforce planning best practices. Finally, while EMS has been largely successful at managing budget variances, EMS is missing opportunities for further managing unanticipated revenues.

What We Recommend

To help address potential equity, financial, and staffing impacts to emergency medical service agencies throughout King County, we recommend EMS work with its partner agencies to focus on strategic workforce planning and diversity efforts. We also recommend policy and financial planning improvements to strengthen EMS's ability to manage economic uncertainties that cause levy expenditures and revenues to be higher or lower than forecasted.

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Section Summary

Upcoming retirements of emergency medical technicians (EMTs) and paramedics could create regional challenges that impact the cost and quality of emergency medical services. Nearly 30 percent of King County's EMT and paramedic workforce will be eligible for retirement by the end of the 2014 – 2019 levy period. Challenges associated with these retirements include related costs such as retirement payouts and hiring and staffing costs, and an increased need for recruitment and training as emergency medical service agencies around the region bring on new staff. While there have been some efforts by individual agencies to address these challenges, King County's Emergency Medical Services Division (EMS) and associated levy governing bodies have not engaged in strategic workforce planning efforts to identify and implement improvements at the regional level and to help minimize financial and staffing impacts to emergency medical service agencies throughout King County.

Nearly 30
percent of King
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period

More than 20 percent of paid EMTs and paramedics are eligible to retire as of January 2017 and nearly 30 percent will be eligible to retire by June 2019. The Emergency Medical Service levy supports the county's 6 Advanced Life Support service providers and partially supports 28 Basic Life Support service providers. Together, these agencies employ over 4,000 EMTs and paramedics throughout King County. Partner agencies and the Washington Department of Retirement Services have reported that some emergency medical staff have been delaying retirement due to the 2008 economic recession. While retirement rates statewide did slow during the recession, Retirement Services stated that retirement levels for public safety personnel, including firefighters, have returned more quickly to prerecession levels than other retirement systems. This means that retirement predictions based on the last eight years might underestimate the rate of retirements in the coming years.

Retirements will create regional challenges for agencies, including covering costs associated with retirement and an increased need for recruitment and training. These costs could mean higher-than-anticipated levy expenditures. Costs associated with retirements include payouts upon retirement (which ranged from \$16,200 to \$90,000 per person in 2015 – 2016 among the King County agencies with which we spoke),² the costs of recruiting, testing, and training new employees, and overtime costs. While some of these costs are predictable and can be offset by comparatively

¹Basic Life Support (BLS) services provide immediate medical care, such as advanced first aid and CPR/AED to stabilize the patient, while Advanced Life Support (ALS) provides out-of-hospital emergency medical care for critical or life-threatening injuries and illness.

²Costs reported were for 12 partner agencies for the time period between June 2015 and June 2016. These costs include payout of sick and vacation time and longevity pay.

lower salaries for new staff, unexpected turnover has already impacted some agencies. Agencies with lean staffing models or that lack funding support from cities will be particularly impacted. For example, Shoreline recently experienced an unexpected amount of turnover, including retirements, which caused the agency to rely on paying overtime to experienced paramedics while also paying for hiring and training an unanticipated number of new paramedics. The agency estimated the associated training and overtime costs amounted to over \$900,000 over two years, some of which needed to be covered by levy reserves.

King County's
EMT and
paramedic
workforce
challenges are
not being
addressed at the
regional level

An EMS working group has had several discussions about the potential cost impacts of retirements, but no formal workforce planning has occurred at the regional level. Some partner agencies have taken some steps to address the cost and staffing challenges created by retirements. Not all agencies have conducted workforce planning, however, which may affect agencies' ability to manage these challenges. Several agencies in King County have implemented some workforce planning best practices, such as analysis of workforce demand. For example, Redmond and Renton have both taken steps to look at their rates of retirement eligibility and consider associated future costs. However, these agencies and others have not done formal workforce planning.

Federal guidelines define workforce planning as "the process of turning what is known about a workforce into plans, activities, and tools that help ensure enough workers are available to meet the demand." According to the National Association of State Emergency Medical Services Officials, strategic workforce planning can include some basic practices such as

- 1. analyzing data on trends that will impact how many EMTs and paramedics will need to be hired:
 - a. workforce supply (e.g., number of workers; number of students in pipeline)
 - b. workforce demand (e.g., vacancy and turnover rates)
 - c. factors that may lead to an increase in services such as population growth
- 2. conducting cost analysis, including budget considerations.⁴

During interviews, agencies attributed this lack of planning to insufficient resources and the need for discussions to be elevated to the regional level

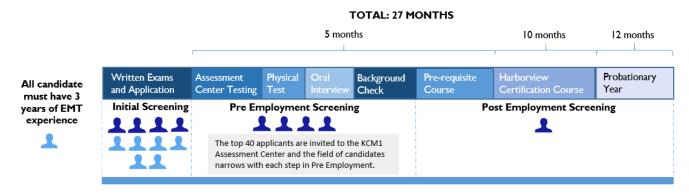
³ National Highway Traffic Safety Administration (2011). *Emergency Medical Services Workforce Agenda for the Future* (Report Number DOT HS 811 473). Washington, DC: United States Department of Transportation.

⁴ National Association of State Emergency Medical Services Officials (2014). EMS Workforce Planning & Development: Guidelines for State Adoption. Falls Church, VA.

where, for example, certification processes are decided. Specifically, hiring new paramedics and EMTs in King County is dependent on a number of external certification courses and testing processes that limit the number of candidates who are available to be hired per cycle.

To become a paramedic, a candidate must accrue at least three years of EMT experience and also complete more than two additional years of testing, certification, and probation.⁵ Exhibit A shows the steps necessary to becoming a paramedic with King County Medic One (KCM1). This process is the same for nearly all candidates regardless of previous work experience or external certifications.⁶

Exhibit A: Paramedic candidates for King County Medic One (KCMI) must complete more than two years of testing, certification, and training prior to becoming a paramedic.



Source: King County Auditor's Office visualization based on interviews with the Department of Public Health and information from the KCM1 recruiting website.

EMS Division and EMS regional bodies have not performed a formal review to assess whether this recruitment and training pipeline will be able to meet future workforce demands. Reviewing whether hiring practices, requirements, and timing will allow agencies to adjust processes to meet future needs and is a workforce planning best practice.

National EMS workforce guidelines call for national, state, and/or regional agencies to provide needed support to workforce planning for individual agencies. National EMS professional organizations have reported that strategic workforce planning is still rare among partner agencies and industry-specific resources are scarce. While workforce decisions are ultimately left to individual agencies, the EMS Division and its planning bodies can provide support and a venue for sharing best practices. This may

⁵ This does not include the EMT testing and hiring process, which King County Auditor's Office found can also take more than a year.

⁶ The exception to this process is if a candidate was certified through the Harborview program in the past, the candidate may be able to have some requirements waived.

be particularly helpful to smaller agencies and agencies dealing with specific concerns like volunteer workforces. Without raising workforce planning to a regional level, county and partner agencies funded by the levy might miss whether changes to regional practices and requirements will be necessary to meet workforce demand and maintain quality EMS service as retirements increase.

Recommendation I

The Emergency Medical Services Division should work with levy partners on developing, implementing, and documenting strategic workforce planning practices, such as the practices identified in this report.

Section Summary

King County emergency medical service providers lack workforce diversity, missing opportunities for enhanced efficiency and customer service, and potentially presenting legal risks to agencies and King County. Partner agencies report challenges recruiting and hiring women and people of color. Limited staff diversity may result in missed opportunities to achieve benefits related to patient care and response efficiency. However, while the EMS Division and several partner agencies in the region have taken steps to understand and improve workforce diversity, lack of data and

action in other partner agencies may present risks to staffing as well as legal

risks such as lawsuits under the Civil Rights Act.

International
Association of
Firefighters
diversity goal is
for EMS first
responders to
mirror the
demographics of
the population
they serve

In contrast with King County's increasingly diverse population, EMTs and paramedics are predominantly white and male. About 93 percent of EMTs and paramedics in King County are male and 80 percent are white. These numbers are consistent with national statistics. Agency leaders and EMS experts in King County and around the country have expressed concern that the demographic makeup of the EMS workforce is increasingly different from that of the communities it serves. According to the Seattle Fire Department, this makes it more difficult to provide the same high quality of service to all communities. As shown in Exhibit B below, racial diversity is projected to increase further, with people of color accounting for as much as 54 percent of the regional population by 2040.8

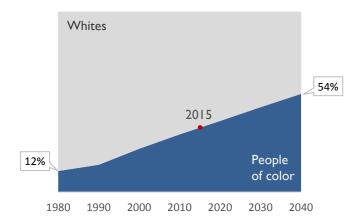


Exhibit B: Racial diversity in the King County region is increasing.

Source: Analysis of US Census and other data by PolicyLink and PERE for Seattle-Tacoma-Bellevue Metro Area, King County Auditor's Office.

⁷In King County, fire agencies provide EMS service with the exception of King County Medic One.

⁸Some cities in King County are already more racially diverse than the region as a whole. For example, people of color made up 48 percent of Renton's population in 2015.

The International Association of Firefighters reported that recruiting for diversity is among the most critical issues facing the fire/emergency medical service. It cited the goal of diversity as agency staff mirroring the demographics of the communities they serve.

Factors such as lack of workforce diversity and barriers in the application process may impede partner agencies' ability to hire diverse candidates

EMS leaders in King County have expressed concern that their recruitment efforts have not yielded more female and minority hires.

Officials from the EMS Division and one local agency stated that the overall number of applicants has declined significantly in recent years. They expressed concern that if there are barriers preventing diverse candidates from applying or passing written and physical tests, the agency may miss some high-quality candidates. Research shows that the current lack of diversity in fire/partner agencies may act to deter highly-qualified women and people of color from applying for jobs. As one study found, half of African American candidates consider whether there are other African Americans in the organization when deciding whether to apply for a job. In addition, some King County fire chiefs noted that although their recruitment efforts yielded more applications from diverse candidates, relatively few made it through the testing process. For example, one King County fire chief estimated that although 30 percent of his applicants come from diverse backgrounds, only 10 percent make it through testing, which limits diversity in the pool of potential hires.

Actual or perceived barriers to entering the fire/EMS service may limit the number of applicants from diverse backgrounds. Through a literature review and interviews with local agencies and stakeholders, we identified barriers that may hinder potential applicants, such as:

- Time and expense: The application and training process to become a
 firefighter/EMT in King County is lengthy and can cost more than
 \$1,500 in application and testing fees and EMT training. King
 County Medic One reported travel costs as a barrier for some
 applicants.
- **Exposure:** Fire and EMS careers often run in families, which may perpetuate a narrow demographic range. People who did not grow up with role models in the fire/EMS service may not see those careers as an option.
- Bias: Perception or experience of bias against women and/or people
 of color may deter some applicants or reduce the likelihood that they
 are hired.

Increasing staff
diversity can
provide benefits
related to
patient care and
response
efficiency

Not only is diversity important for recruiting high-quality employees, having staff from diverse genders and backgrounds may increase the quality of service fire/partner agencies can provide. According to *EMS* Workforce for the 21st Century, a National Assessment, "Many experts interviewed expressed a desire to diversify the workforce by making it more representative of the population, both to provide more culturally sensitive care and to access largely untapped sources of workforce supply." 9

EMS staff from diverse backgrounds can raise the level of understanding and sensitivity with which response teams approach patients, enhancing the quality of care. Emergency situations can be frightening and confusing for patients. Research shows that assistance from responders of their own race or gender can increase trust, helping to mitigate the stress of the situation and facilitating high-quality care. One fire chief gave an example of a victim of domestic violence who would only allow a female firefighter/EMT to treat her. He commented that in many situations, patients are more comfortable approaching female first responders.

According to a study by the Society for Academic Emergency Medicine, "Emergency room services continue to be disproportionately used by racial and ethnic minorities for many aspects of medical care and are often the entry point into medical care for immigrant populations." This can present cultural challenges for EMTs and paramedics, who are often the first health care providers to reach these patients. Unmitigated, these challenges can result in inefficient or unpleasant patient experiences. Cultural considerations are particularly important for EMTs and paramedics, because more than half of EMS incidents occur inside people's homes, where family members may be present and cultural differences more apparent.

Experience from King County medics is consistent with research indicating that even when medical treatment follows best practices, connecting with an EMT or paramedic from within a patient's cultural community presents an opportunity to enhance patient experience and develop credibility within the community.

Response efficiency can be increased by broadening the diversity of experience and perspectives on response teams. The faster an emergency medical response team can navigate the myriad challenges that may arise in a given call for EMS service (logistical, emotional, physical, linguistic,

⁹EMS Workforce for the 21st Century: A National Assessment

cultural), the more efficient and effective the team will be. King County emergency personnel cited more efficient problem-solving and first responders relating better to customers as benefits of diverse staffing. Speed is often a critical factor in successful outcomes, including saving lives.

National EMS best practices indicate that focus on and commitment to improving workforce diversity is necessary to make progress. Leading practices identified in literature and through interviews with regional partners and stakeholders are shown in Exhibit C.

Exhibit C: Leading practices to improve workforce diversity.



Top leadership commitment—a vision of diversity demonstrated and communicated throughout an organization by top-level management



Diversity objectives and actions as part of an agency's strategic plan



Barrier analysis to identify factors that may disadvantage groups of people throughout the hiring process



Recruitment materials and activities that reach out to diverse communities

Source: King County Auditor's Office analysis of Government Accountability Office's January 2005 report, "Diversity Management: Expert-Identified Leading Practices and Agency Examples" and other scholarly reports.

The EMS Division and a few partner agencies have made workforce diversity a strategic focus Several agencies, including the Seattle and Renton Fire Departments, King County Fire District 20, King County Medic One, and the EMS Division have made efforts to attract and hire diverse applicants. These efforts include

- partnering with community organizations, schools, and others to reach youth and adults who may not have considered fire/EMS professions
- communicating the desire to recruit applicants from diverse backgrounds on websites and in recruiting materials (see Exhibit D)
- ensuring that interview panels include women and people of color
- providing anti-bias training to hiring and interviewing staff
- offering scholarships for EMT training
- mentoring applicants from the hiring process through the end of their probationary period.

Exhibit D: Seattle Fire Department recruiting materials highlight staff from diverse backgrounds.



Source: Seattle Fire Department

The Seattle Fire Department (SFD) has seen positive results of its efforts to recruit applicants of color, although it has been less successful at increasing the number of female applicants. Specifically, SFD increased the percentage of non-white applicants from 21 to 30 percent between 2005 and 2015. Female applicants remained at 9 percent over the same time period. In addition, while some King County agencies have struggled to hire candidates from diverse backgrounds, 40 percent of SFD's hires were people of color and 10 percent were female in 2015. ¹⁰

Work to increase staff diversity is just beginning at a regional level

A few fire chiefs within King County (including the chief of the SFD) have partnered with the EMS Division to create an informal working group on workforce diversity that held its first meeting in August 2016. They came together with common concerns about the lack of diversity in their agencies. The group identified goals to increase diversity in the applicant pool and evaluate the hiring process.

Recommendation 2

The Emergency Medical Services Division should work with regional partners to develop, document, and implement a plan to improve workforce diversity, including leading practices such as barrier analysis.

¹⁰ Hiring is not the only measure of diversity. Employee retention is also a key consideration. Some agencies see higher attrition rates for employees of color.

Lack of demographic data hampers efforts to improve diversity and presents legal risks

Because some fire/partner agencies do not collect demographic data, they cannot quantitatively measure the diversity of their staff or quantify the impact of any efforts to improve diversity. Specifically, less than half of the 28 King County partner agencies we spoke with collect data on employee ethnicity. About 70 percent collect data on gender. Data are important in implementing leading practices such as establishing diversity objectives in strategic plans and conducting barrier analyses.

Data on workforce gender and race can help leaders make the strategic decisions necessary to develop and maintain a diverse workforce. While gender and race are not the only elements of diversity that are important, they represent a starting place for measuring equity and workforce diversity. For example, one fire chief we interviewed said that he tries to hire diverse and non-diverse candidates in equal numbers. Knowing that he has a large number of slots to fill because of retirements, he planned on a phased approach where he could hire a certain number of experienced firefighters with technical skills (likely to be white males because 93 percent of currently employed firefighter/EMTs are white males) and hire a group of recruits without experience, which he hoped would include a larger number of women and people of color.

Not collecting data on the gender and race of applicants could leave agencies vulnerable to claims of discrimination in their hiring practices and EMS levy funds could be necessary for payment of penalties. Federal regulations state that if an employer does not maintain data on race, sex, or ethnicity of job applicants, federal enforcement agencies may infer that the employer's hiring procedures are discriminatory. Fire/partner agencies around the country have been sued for discriminatory hiring practices under Title VII of the Civil Rights Act, which prohibits discrimination in any aspect of employment including hiring, testing, and promotion. Most King County partner agencies (other than SFD) do not collect demographic data on applicants, which could hamper those agencies' ability to adequately respond to questions about their hiring procedures. We found that applicant testing companies can supply demographic information to their clients, however.

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¹¹ Title 29 CFR Part 1607 – Uniform Guidelines on Employee Selection Procedures, Section 1604.4 Information on Impact, paragraph D. Adverse Impact

¹² Civil rights lawsuits can result in large settlement costs, such as the \$98 million settlement awarded in 2014 from a racial discrimination suit against the New York City Fire Department.

Recommendation 3

To mitigate risk and obtain key information to inform workforce diversity efforts, the Emergency Medical Services Division should modify its contracts with partner agencies to require them to collect, maintain, and report data on self-identified race and gender of staff and applicants.

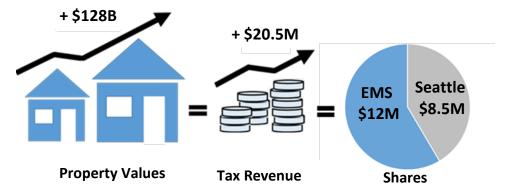
Section Summary

The EMS Division is mitigating unanticipated increases in revenues and expenditures during the 2014 – 2019 levy, but opportunities exist to improve its financial management practices. The financial forecast used for the 2014 – 2019 levy has proven somewhat inaccurate during the first three years (2014 – 2016) of the levy. This has resulted in revenues and expenditures being higher than expected and led to a growing undesignated fund balance. EMS is using its existing financial policies to manage the variances, but opportunities exist to improve financial management practices. These include establishing a policy to administer the undesignated fund balance and reviewing if the levy rate should be reduced during periods of higher than forecast growth in assessed property values.

Levy plan underestimated economic growth

King County's economy has experienced stronger growth than anticipated during levy planning. As shown in Exhibit E below, the county's economic forecasts available to EMS during levy planning underestimated the county's actual cumulative property value for 2014 – 2016 by \$128 billion. This resulted in \$20.5 million more property tax revenue than planned. EMS' share was \$12 million, with \$8.5 million going to the City of Seattle per the levy agreement.

Exhibit E: Unanticipated property value growth during first three years of levy increased tax revenue.



Source: Actual and forecast property values – Assessor's Office, Office of Economic and Financial Analysis. Actual Revenues – Assessor's Office. Forecast revenues – EMS.

EMS is experiencing additional revenues and expenditures

Since property taxes provide 99 percent of the revenues supporting EMS, underestimating the growth in assessed property values affected the budget assumptions used to plan the 2014 - 2019 levy.

• First, the levy rate was set at \$0.335 per thousand in assessed value. At current property values, this is higher than necessary, resulting in \$20.5 million more tax revenue than expected during the first three years of the levy. EMS is depositing the county's share of the unanticipated tax revenue into an undesignated fund account, which is expected to have \$15.9 million deposited in it by the end of 2016.

• Second, the county and its regional partners agreed to reduce expenditures, concerned that voters would not support an even higher levy rate 13 needed at the lower property value forecast to continue funding EMS at the 2008 – 2013 levy level. According to the officials we interviewed, the reductions proved too optimistic due to unanticipated salary increases, employee retirements, and equipment costs. This resulted in EMS using \$3.92 million in reserves and supplemental designations to help pay for increased costs experienced by the county's regional partners, not including the City of Seattle, during the first two years of the levy. 14

EMS budget is not at risk

As shown in Exhibit F below, EMS is forecasting the excess revenues will exceed the excess expenditures through the end of the levy. EMS also carried over a \$34.9 million balance from the 2008 – 2013 levy, giving them a substantial financial cushion should unexpected changes in revenues or expenditures occur. This balance is forecast to increase to \$37.3 million by the end of the levy period. 15

Exhibit F: EMS forecasts excess revenues will exceed excess expenditures during all six years of levy.



Source: King County Auditor's Office analysis of EMS Division forecasts

¹³ Greater than \$0.35 per thousand

¹⁴ Including \$3.70 million in ALS Operating, Equipment, and Risk Abatement reserves and \$0.22 million in supplemental BLS allocations. Seattle administers its EMS account separately from EMS and the other regional partners.

¹⁵ Balance reported in EMS year-end forecast published September 1, 2016. The City of Seattle maintains its own EMS budget and is not included in these figures.

EMS has sound financial policies but improvements can be made

EMS and the county's regional partners are using a collaborative process to navigate unplanned increases in revenues and expenditures. ¹⁶

EMS financial policies include a system for reviewing and approving financial decisions, annual expenditure reporting by the county's regional partners, and use of reserve accounts to help mitigate unplanned expenditures. ¹⁷ These are best practices identified by the Government Finance Officers Association but opportunities for improvement exist, including

- establishing procedures to manage the undesignated fund balance resulting from excess revenue
- exploring approaches to reduce excess revenue.

EMS monitors, but does not have formal policies to manage an undesignated fund balance

As of the end of 2015, EMS had \$12.2 million in excess levy revenues deposited in an undesignated fund account, which is forecast to grow to \$15.9 million by the end of the current levy. EMS reviews the undesignated fund account annually with the county's regional partners, but its process could be improved by adopting the best practice guidelines recommended by the Government Finance Officers Association, including

- establishing formal policies on the size and use of undesignated funds
- identifying the time period during which the fund balance can be accessed
- identifying the purposes the fund balance may be used for
- identifying the source(s) used to replenish the fund balance if depleted.

The EMS Division director indicates the undesignated funds could be used to respond to a major disaster or to reduce future levy rates. EMS has already used some undesignated funds to provide additional resources to the county's BLS partners and replenish reserve funds depleted by higher expenditures than planned. EMS anticipates some of the undesignated fund balance will be used to cover the additional cost increases forecast through the end of the levy period.

Recommendation 4

The Emergency Medical Services Division should establish guidelines addressing the best practices identified by the Government Finance Officers Association for managing the undesignated fund maintained by the county.

¹⁶ The City of Seattle participates in regional discussions, but maintains its own financial policies and reserves, which were not reviewed by the Auditor's Office.

¹⁷ Public Health Document 9-2 "Emergency Medical Services (EMS) Financial Policy"

ems is missing an opportunity to discuss banking levy capacity with partner agencies

EMS is currently collecting property taxes at the maximum legal rate approved by voters, which has resulted in excess revenue. There are multiple approaches available to EMS and its levy partners to manage excess revenues. Banking levy capacity is one approach that has not yet been considered. This approach is authorized by state property tax law that is intended to allow tax districts like EMS to address unanticipated changes in revenue. When an entity like EMS lowers its levy rate, it can bank the unused levy capacity for optional recapture at a later date. This approach allows entities to be fiscally conservative without losing their ability to recapture unused levy capacity if needed. Exhibit G illustrates how banking unused levy capacity works. ¹⁹

Exhibit G: Banking unused levy capacity allows agencies to recapture capacity if needed.

YEAR ONE		C. Bankable Levy Capacity from	YEAR TWO MAXIMUM	
A. Maximum Allowable Levy	B. Amount Actually Levied	Year One (A - B)	D. Without Banked Capacity (A x 1.01)	E. With Banked Capacity (D + C x 1.01)
\$110,000	\$100,000	\$10,000	\$101,000 (1 % Effective Increase)	\$111,100 (11% Effective Increase)

Source: Adapted from MRSC "A Revenue Guide for Washington Counties" (May 2010)

The steps required to bank levy capacity are relatively straightforward. In order to bank levy capacity, the King County Council would need to pass an ordinance or resolution stating the EMS tax district's intention to do so before reducing the levy rate. Using banked capacity would also require issuing a notice to the King County Assessor's Office, which calculates how much unused capacity is available and adjusts the tax rate accordingly. A number of local governments, including the cities of Bellevue, Kirkland, Lacey, and Sammamish have either banked or used banked levy capacity since 2007.

EMS and its partner agencies would need to consider a number of factors when deciding whether to utilize this option. For example, the City of Seattle receives about 36 percent of the levy's funds, which might be impacted by banking capacity. Additionally, banking levy capacity does not guarantee that the banked funds will be fully available at a later date. The amount of reclaimable revenue available through banked levy capacity can vary greatly depending on property values at the time an entity claims banked revenue and the rights of other levies. In addition, reclaiming banked revenue can impact junior taxing districts. For these reasons, banking levy capacity

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¹⁸ RCW 84.55.092

¹⁹ The one percent maximum annual increase in property taxes established by Initiative 747 is assumed. The maximum annual increase available could be less depending on the change in the implicit price deflator published annually by the Bureau of Economic Analysis. The annual increase could also be more than one percent depending on the value of new construction, which is not limited by Initiative 747.

should be viewed as an optional tool available to help EMS prepare for unanticipated financial changes. It is also important to note that there is no requirement that the banked capacity ever be used. This means EMS could choose to leave banked levy capacity untouched if the funds were not needed or if circumstances did not otherwise support drawing on banked capacity.

EMS and its partner agencies will soon begin the process of planning for the 2020 - 2025 levy. This planning process presents an opportunity to discuss and evaluate mechanisms for dealing with financial uncertainty among stakeholders. Not evaluating banking levy capacity reduces the number of tools available to EMS and its partners to manage unexpected financial changes.

Recommendation 5

The Emergency Medical Services Division should work with its partner agencies to evaluate if banking levy capacity would be a useful levy financial management tool and document its evaluation as part of the 2020 – 2025 levy planning process.

Executive Response



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DEC 13, 2016
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December 13, 2016

Kymber Waltmunson King County Auditor Room 1033 C O U R T H O U S E

Dear Ms. Waltmunson:

Thank you for the opportunity to review and comment on the proposed final report on Actions Needed to Address Upcoming Retirements and Workforce Diversity within Emergency Medical Services. The audit required extensive communications and data gathering outside the County government structure, and I appreciate the conscientious and collaborative nature of your staff as they conducted this review.

This financial and programmatic review is the first of two audits to be conducted during the Medic One/EMS 2014-2019 levy, as outlined in the current Medic One/EMS Strategic Plan. In addition to examining financial policies currently in place to mitigate economic uncertainties, the audit analyzed the workforce issues confronting our regional partners. There are a large number of retirements anticipated over the span of the current levy which will have significant cost and staffing impacts. The demographic makeup of the EMS workforce is increasingly different from that of the communities it serves, and EMS leaders are having challenges recruiting and hiring women and people of color. Additionally, not all EMS agencies collect demographic data, which restricts their ability to measure the diversity of their staff or quantify the impact of any efforts to improve diversity. All in all, the audit confirms the region's need for cohesive strategic workforce planning and diversity efforts.

We concur with the recommendations from this proposed final report. The EMS Division will continue to work with its regional partners to develop and implement strategic workforce planning practices and approaches to improve workforce diversity, such as analyzing barriers and requiring agencies to collect demographic data. EMS will also establish guidelines addressing best practices for managing the undesignated fund maintained by the County, as identified by the Government Finance Officers Association, and include levy banking as an option to consider when planning for the 2020-2025 levy begins late next year. Progress made by the region on these recommendations will be included in the EMS Division's Annual Report, due to the King County Council by September of each year.

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Executive Response (continued)

Kymber Waltmunson December 13, 2016 Page 2

As always, I appreciate the great level of cooperation and support that occurred between the King County Auditor's Office, EMS Division management and staff, and the numerous EMS partner agencies. Additionally, I thank you for your work in identifying strategies that will help ensure the high quality of emergency medical services as well as provide for improved patient care and response efficiency. If you have any questions regarding our audit response, please contact Michele Plorde, EMS Division Director, at 206-263-8603.

Sincerely,

Dow Constantine

King County Executive

Enclosure

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

Rhonda Berry, Deputy Executive for Operations, KCEO

Dwight Dively, Director, Office of Performance, Strategy and Budget Patty Hayes, Director, Public Health - Seattle & King County (PHSKC) Michele Plorde, Director, Emergency Medical Services Division, PHSKC

Executive Response (continued)

Recommendation No. 1

The Emergency Medical Services Division should work with levy partners on developing, implementing, and documenting strategic workforce planning practices, such as the practices identified in this report.

Select concurrence below	Implementation date or N/A	Responsible agency
Concur	Continue discussions with	The EMS Division
	regional partners in 2017;	and its regional
	report progress and	partners.
	results in EMS Division	
	Annual Reports to King	
	County Council due by	
	September of each year.	
	C 1	C 1

Agency concurrence comment, or reason for partial or non-concurrence for recommendation

Using its standing committees, the EMS Division will continue working with its regional partners to develop, implement and document strategic workforce planning practices.

Recommendation No. 2

The Emergency Medical Services Division should work with regional partners to develop, document, and implement a plan to improve workforce diversity, including leading practices such as barrier analysis.

Implementation date or N/A	Responsible agency
Continue discussions with	The EMS Division
regional partners in 2017;	and its regional
report progress and	partners.
results in EMS Division	
Annual Reports to King	
County Council due by	
September of each year.	
	Continue discussions with regional partners in 2017; report progress and results in EMS Division Annual Reports to King County Council due by

Agency concurrence comment, or reason for partial or non-concurrence for recommendation

Using its standing committees, the EMS Division will continue working with its regional partners to develop a plan to improve workforce diversity.

Executive Response (continued)

Recommendation No. 3

To mitigate risk and obtain key information to inform workforce diversity efforts, the Emergency Medical Services Division should modify its contracts with partner agencies to require them to collect, maintain, and report data on self-identified race and gender of staff and applicants.

Select concurrence below	Implementation date or N/A	Responsible agency
Concur	2017	The EMS Division
		and its regional
		partners.

Agency concurrence comment, or reason for partial or non-concurrence for recommendation

The EMS Division will work collaboratively with its partner agencies to determine the steps needed to be taken to start collecting and maintaining such data and a feasible implementation date to begin collection. The Division will modify its contracts to require that this data be collected.

Recommendation No. 4

The Emergency Medical Services Division should establish guidelines addressing the best practices identified by the Government Finance Officers Association for managing the undesignated fund maintained by the county.

Select concurrence below	Implementation date or N/A Responsible agency		
Concur	2017	The EMS Division	
Agency concurrence comment, or reason for partial or non-concurrence for recommendation			
The EMS Division will establish guidelines addressing best practices for managing			
undesignated fund maintained by the county			

Recommendation No. 5

The Emergency Medical Services Division should work with its partner agencies to evaluate if banking levy capacity would be a useful levy financial management tool and document its evaluation as part of the 2020 – 2025 levy planning process.

Select concurrence below	Implementation date or N/A	Responsible agency
Concur	2017	The EMS Division
		and its regional
		partners.
	C (1	C 1 4'

Agency concurrence comment, or reason for partial or non-concurrence for recommendation

The EMS Division will work with its partners to evaluate the feasibility of banking levy capacity as a financial management tool for the 2020-2025 levy.

Statement of Compliance, Scope, Objective & Methodology

Statement of Compliance with Government Auditing Standards

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

Scope of Work on Internal Controls

We assessed internal controls relevant to the audit objectives. This included review of selected policies, plans, processes, and reports, as well as interviews with knowledgeable Emergency Medical Service (EMS) Division and partner agency staff. In performing our work, we identified concerns related to financial planning processes.

Scope

This audit examined key elements of workforce strategy and planning by the Emergency Medical Services Division and its levy partner agencies. We also examined levy fund balances and financial management and planning practices.

Objectives

- 1. What are projections for emergency medical technician and paramedic staffing turnover, and to what extent are the EMS Division and emergency medical service providers prepared to address recruitment challenges?
- 2. To what extent do EMS levy fund balances align with funding levels forecast during the levy planning process, and what are the risks resulting from any variances?
- 3. To what extent does EMS Division have and use mechanisms for managing economic forecasting uncertainty?

Methodology

To achieve the objectives listed above, we conducted literature reviews and interviewed subject matter experts on workforce planning, diversity, and financial management best practices. We interviewed representatives from the following King County agencies: EMS Division; King County Medic One; Public Health - Seattle & King County; Human Resources Division; Office of Economic and Financial Analysis; Office of Performance, Strategy & Budget; and Department of Assessments. In addition, we interviewed representatives from local industry associations such as Fire 20/20 and the Seattle Black Fire Fighters Association.

We contacted all EMS partner agencies to understand their human resource data and received and analyzed human resource data from agencies that responded to our requests. We used this information to calculate the demographic makeup and retirement eligibility of paramedics and emergency medical technicians throughout the region. Retirement eligibility was calculated using data from individual

Statement of Compliance, Scope, Objective & Methodology (continued)

agencies merged with data from the Washington State Department of Retirement Services. We projected the data forward through 2020 and adjusted our figures to account for future retirements and new hires. In addition, we conducted a number of interviews with EMS partner agencies. Table 1 below lists partner agencies where we interviewed staff and/or requested data.

Table 1: Emergency Medical Service partner agencies which participated in interviews and provided human resource data for this audit

Agency	Interviewed	Retirement Data	Demographic Data
Bellevue Fire Department	Х	X	X
Eastside Fire & Rescue		X	X
King County Fire District 20	X		
King County Fire District 45		X	
King County Medic One	X	X	X
Mercer Island Fire Department		X	X
Port of Seattle Fire Department	Х		
Redmond Fire Department	Х	X	Х
Renton Regional Fire Authority	X		
Seattle Fire Department	X	X	X
Shoreline Fire Department	X	X	X
Snoqualmie Fire Department		X	X
South King Fire & Rescue	X		
Valley Regional Fire Authority		X	X
Vashon Fire & Rescue		X	X
Woodinville Fire & Rescue		X	

Lastly, we gathered and reviewed levy revenue and expenditure data from 2008 to 2015. To better understand banking levy capacity, we reviewed written material and interviewed a representative from the Washington State Department of Revenue.

List of Recommendations & Implementation Schedule

Recommendation 1: The Emergency Medical Services Division should work with levy partners on developing, implementing, and documenting strategic workforce planning practices, such as the practices identified in this report.

Implementation Date: Continue discussions with regional partners in 2017; report progress and results in EMS Division Annual Reports to King County Council due by September of each year. **Estimate of Impact:** Implementing strategic workforce planning practices will better enable the county's EMS system to respond to impending EMT and paramedic retirements, which will require hiring and training staff to replace highly experienced retiring employees.

Recommendation 2: The Emergency Medical Services Division should work with regional partners to develop, document, and implement a plan to improve workforce diversity, including leading practices such as barrier analysis.

Implementation Date: Continue discussions with regional partners in 2017; report progress and results in EMS Division Annual Reports to King County Council due by September of each year. Estimate of Impact: Improving workforce diversity offers multiple benefits, including the potential for more sensitive care in an increasingly diverse county population and increasing the pool of potential EMS employees.

Recommendation 3: To mitigate risk and obtain key information to inform workforce diversity efforts, the Emergency Medical Services Division should modify its contracts with partner agencies to require them to collect, maintain, and report data on self-identified race and gender of staff and applicants.

Implementation Date: 2017

Estimate of Impact: Collecting employees' self-identified demographic information from the county's regional partners will enable the EMS Division to understand how diverse the EMT and paramedic workforce is, which is essential to implementing a plan to improve workforce diversity. Maintaining this information may also help protect the county from legal actions based on neglecting diversity requirements included in federal contracts and grants.

List of Recommendations & Implementation Schedule (continued)

Recommendation 4: The Emergency Medical Services Division should establish guidelines addressing the best practices identified by the Government Finance Officers Association for managing the undesignated fund maintained by the county.

Implementation Date: 2017

Estimate of Impact: Establishing guidelines to administer undesignated fund balances will improve the EMS Division's ability to manage the variances from plan in revenues and expenditures which occur during levies and will increase transparency with partners and other key stakeholders.

Recommendation 5: The Emergency Medical Services Division should work with its partner agencies to evaluate if banking levy capacity would be a useful levy financial management tool and document its evaluation as part of the 2020 - 2025 levy planning process.

Implementation Date: 2017

Estimate of Impact: Evaluating the usefulness of banking levy capacity as a financial management tool will provide the EMS Division with a more complete understanding of the options available to manage unanticipated increases in levy revenue. This is important because the EMS Division needs to balance the tax impact on county property owners against the need to provide contingency funds to protect against service cuts during economic downturns.