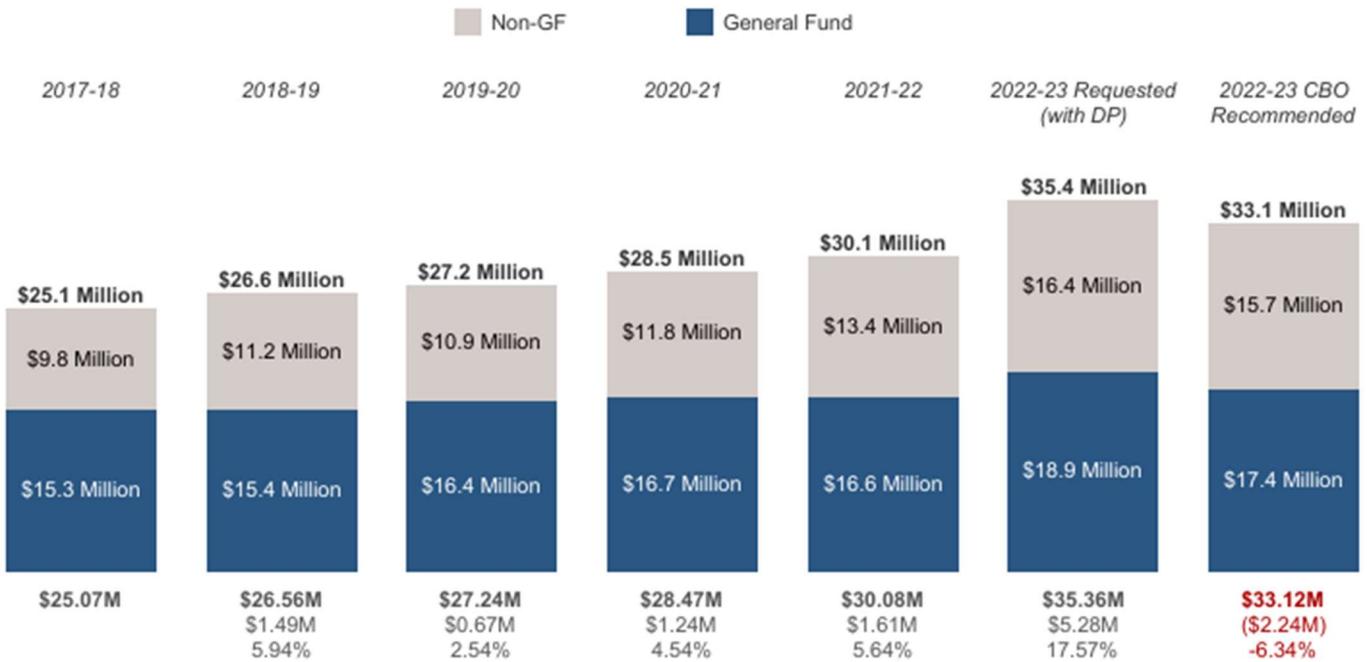




# Emergency Communications

Analysis by Ruth Levine

## Adopted Budget Revenues | 5-Year Lookback



### Adopted Full-time Equivalent Totals

187.00	<b>186.50</b>	<b>155.00</b>	<b>151.50</b>	<b>164.50</b>	<b>182.50</b>	<b>168.50</b>
	-0.50	-31.50	-3.50	13.00	18.00	-14.00
	-0.27%	-16.89%	-2.26%	8.58%	10.94%	-7.67%

## EXECUTIVE SUMMARY

The Bureau of Emergency Communications (BOEC) submitted a requested budget totaling \$35,364,789, which is an 18% increase over the FY 2021-22 Adopted Budget.

- BOEC's Requested Budget includes \$18,932,943 of appropriation from the General Fund, which is a 14% increase over the previous year's budget. General Fund discretionary resource accounts for roughly 54% of the bureau's requested total resources, with another 16% from the State of Oregon 9-1-1 tax revenue. 19% of the bureau's budgeted resources are from user agencies that are part of the Regional Emergency Communication System.
- The bureau has budgeted \$5,643,998 in State 9-1-1 tax revenue which equates to a 3% increase over the prior year due to State legislation passed in 2019 that raised the 9-1-1 Emergency Communication Tax.
- The bureau requested to add a total of \$1,537,448 of ongoing General Fund resources without identifying an internal offset in their FY 2022-23 Requested Budget. This is contrary to the Mayor's Budget Guidance instructing bureaus to identify an internal offset if the bureau is requesting ongoing resources.
- CBO does not recommend new General Fund resources for the bureau's requests, given the lack of available General Fund, available personnel underspending, and the recent increase in the bureau's State 9-1-1 tax revenue.
- ***DP 13079 - \$847,231 Ongoing General Fund - Emergency Dispatchers; DP 13081 - \$254,169 One-time General Fund – Training Pipeline Limited Term Positions; DP 13076 - \$218,024 Ongoing General Fund – ProQA Quality Assurance Analysts; DP 13078 - \$218,024 Ongoing General Fund – Emergency Operations Supervisors:*** CBO recommends that these requests be considered for funding through carryover of the bureau's FY 2021-22 vacancy savings in FY 2022-23. Additionally, the bureau can choose to absorb costs with increased State 9-1-1 tax revenue. These decision packages would be incorporated into the bureau's FY 2022-23 Adopted Budget if approved in the Spring Supplemental Budget Monitoring Process.

## BASE BUDGET & KEY ISSUES

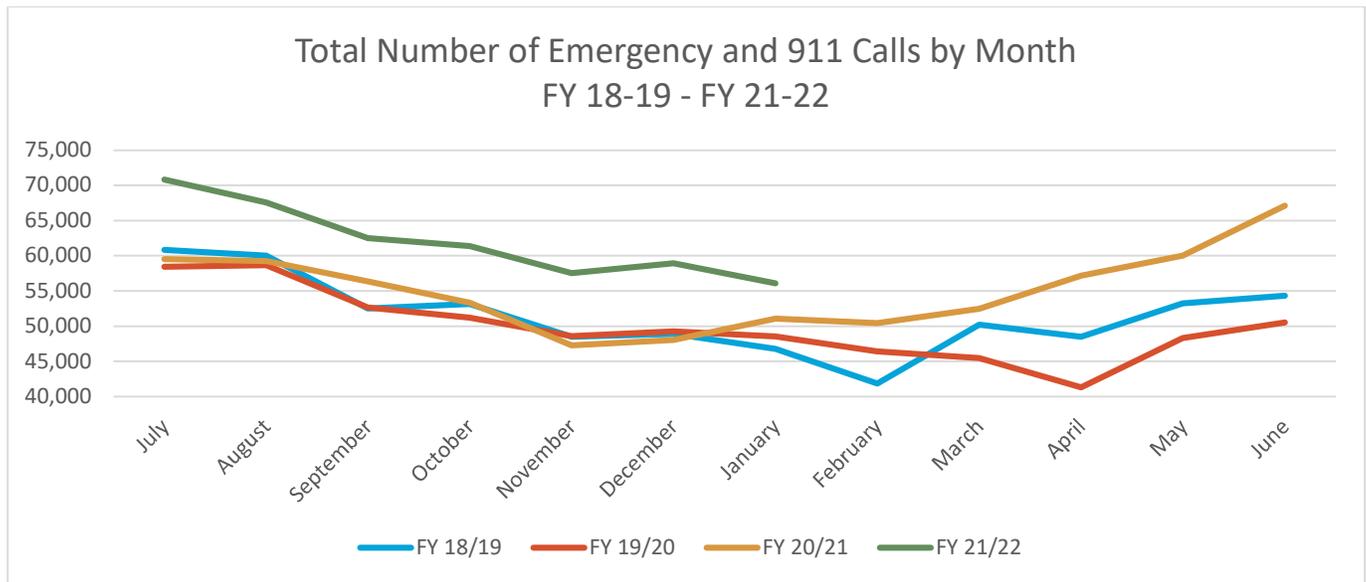
### Call Volume and Call Wait Times

A key issue for BOEC that is driving their requests for resources is the average call wait times for calls coming in to 9-1-1. There is a national standard set by the National Emergency Number Association (NENA) for all Public Safety Answering Points (PSAPs) that 90% of all calls should be answered within 15 seconds and 95% of calls should be answered within 20 seconds. In FY 2020-21, BOEC took an average of 33.9 seconds to answer a call and was only able to answer calls within 20 seconds 59% of the time.

One factor contributing to call wait times is an increase in the volume of emergency calls that BOEC answered over the past two Fiscal Years. Since January 2021, the average monthly volume of 9-1-1 calls compared with the same month in FY 2018-19 (pre-pandemic) was roughly 16% higher and is consistently

higher in each month. Figure 1, below, shows the total monthly calls over that time frame.

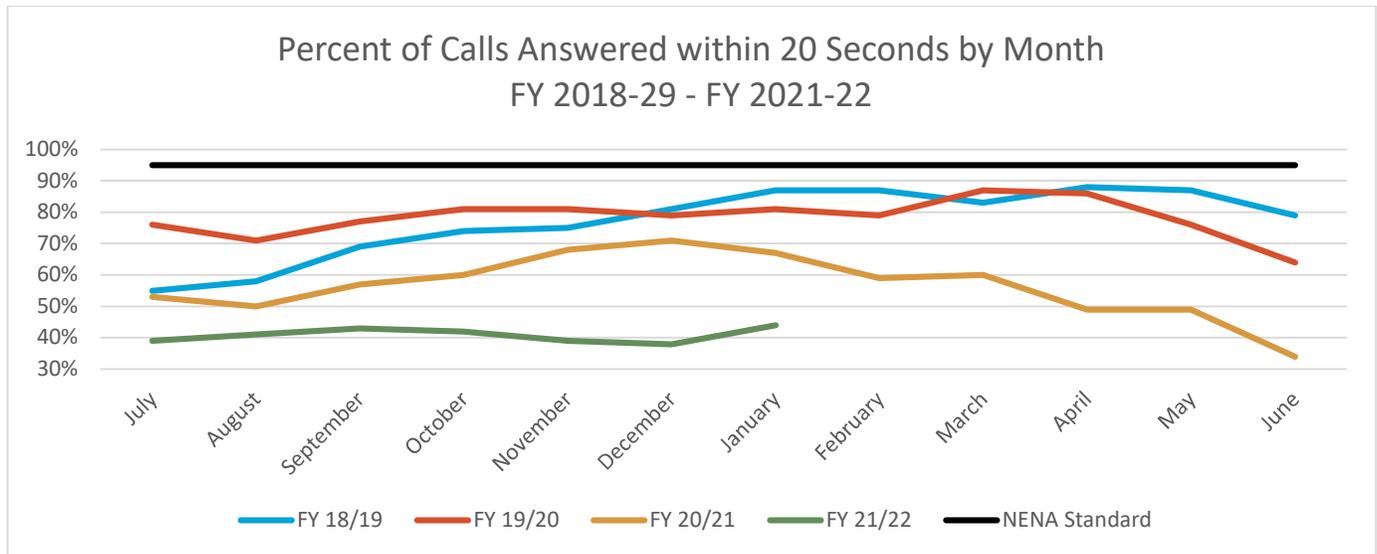
Figure 1



It is interesting to note that the actual number of dispatched incidents has not increased along with the number of incoming 9-1-1 calls. In fact, the total number of dispatched calls in FY 2020-21 was 15 percent lower than the number in FY 2018-19. The bureau points to the fact that it often receives multiple calls for a single incident, and fewer officer-initiated calls for service as reasons why the numbers of dispatched calls have not increased with total call volume. A reduction in dispatched calls likely has only a marginal effect on BOEC's workload. However, the finding points to possible policy options for reducing incoming calls to 9-1-1, which will impact BOECs long-term workload.

Since FY 2018-19 the average number of seconds it takes for BOEC to answer a call increased from 14.3 in FY 2018-19 to 33.9 in FY 2020-21. The FY 2021-22 Year-to-Date average is 39.1 seconds higher than the average for the same months in FY 2018-19. Figure 2, below, shows the percent of call answered within 20 seconds between July 2018 and January 2022.

Figure 2



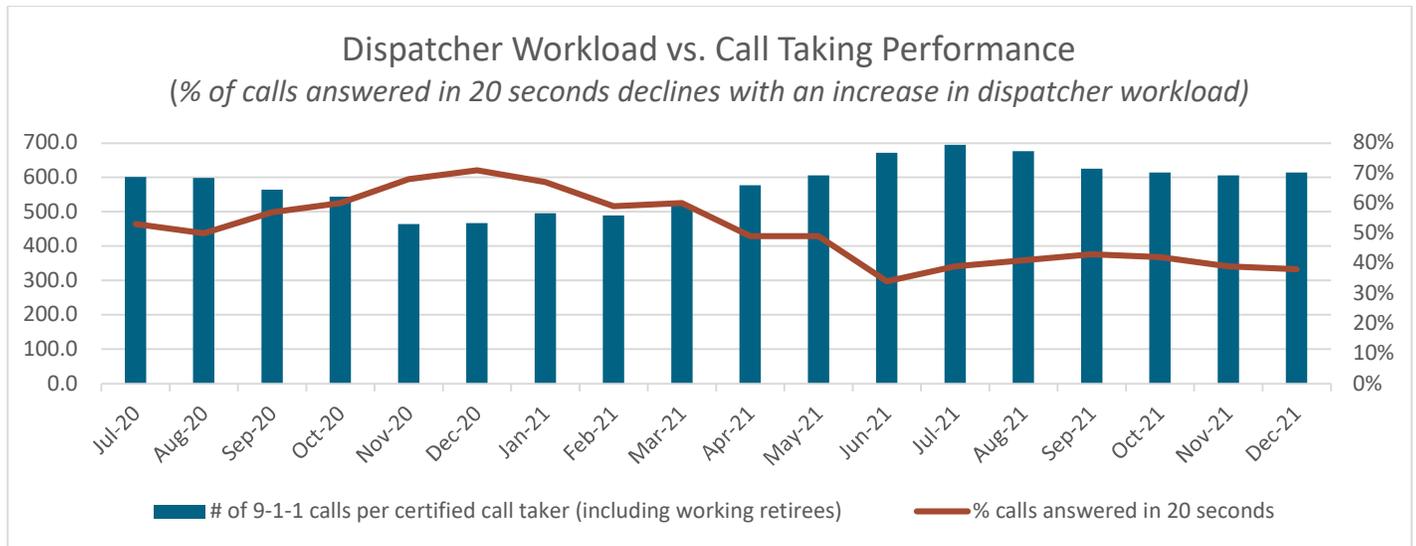
### Emergency Operations Staffing Levels

Aside from call volume, another key variable in determining call wait times is the number of certified 9-1-1 call takers available to answer calls.

BOEC currently has a total of 131 authorized dispatcher and call taker positions (including 3 LTE and 10 call taker positions). The bureau currently has 110.5 of those positions filled. BOEC’s FY 2022-23 Requested Budget includes requests for 10 additional FTE dispatcher positions, three limited term Training Pipeline positions, two Emergency Operations Supervisor positions, and two ProQA Quality Assurance Analysts, at a total cost to the General Fund of \$1.9 million. The bureau is also proposing to transfer three Business Operations positions to the Community Safety Division. These new positions and the transferred positions will be discussed in the decision package section of this review.

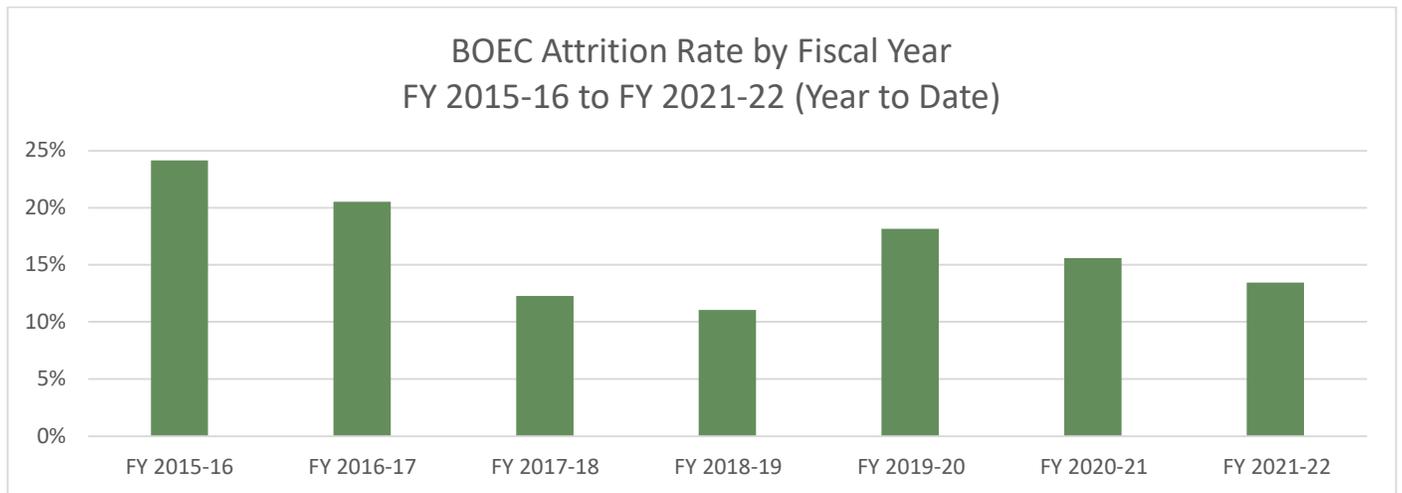
Looking at the relationship between the number of certified call takers and the call taking performance, there is correlation between the call taker’s workload (the number of 9-1-1 calls received per certified call taker each month) and the percentage of calls answered within 20 seconds, as shown in Figure 3, below.

Figure 3.



An important factor in the number of certified call takers is the bureau’s ability to retain employees. As an organization, BOEC experiences a higher average turnover rate than other City bureaus due to retirements, trainee drop-out, burnout, or other voluntary leaves and separations. BOEC has worked to find ways to support their employees both on and off the job to improve retention. As shown in Figure 4, below, there was an increase in the attrition rate during FY 2019-20, coinciding with the beginning of the pandemic. Attrition rates appear to be coming back down, though the FY 2021-22 rate is only for the first two quarters of the year, so it is likely to increase.

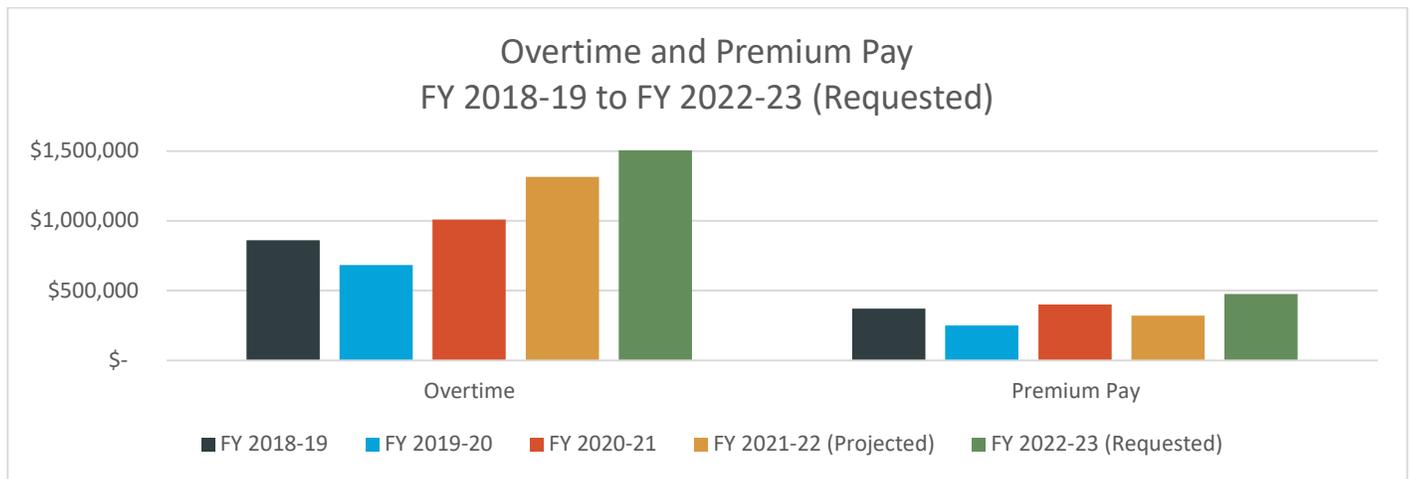
Figure 4.



In addition to impacting dispatcher workload, high attrition rates can contribute to the bureau’s total expenditures for overtime and paid premiums. BOEC uses overtime to backfill shifts, and premium pay for certified dispatchers who serve as coaches for trainees. As seen in Figure 5, below, the bureau has seen increases in the use of overtime in recent years and is budgeting additional premium pay in FY 2022-23 to cover anticipated coaching costs associated with new trainees. BOEC does not have the overtime broken out by specific cause codes to further quantify driving factors in overtime use (e.g. training backfill, covering approved vacation, or sick leave absences). To increase transparency and reporting for

Council, CBO recommends that BOEC begin using Internal Order master data to track different uses of overtime, akin to the process that Portland Police Bureau uses.

Figure 5



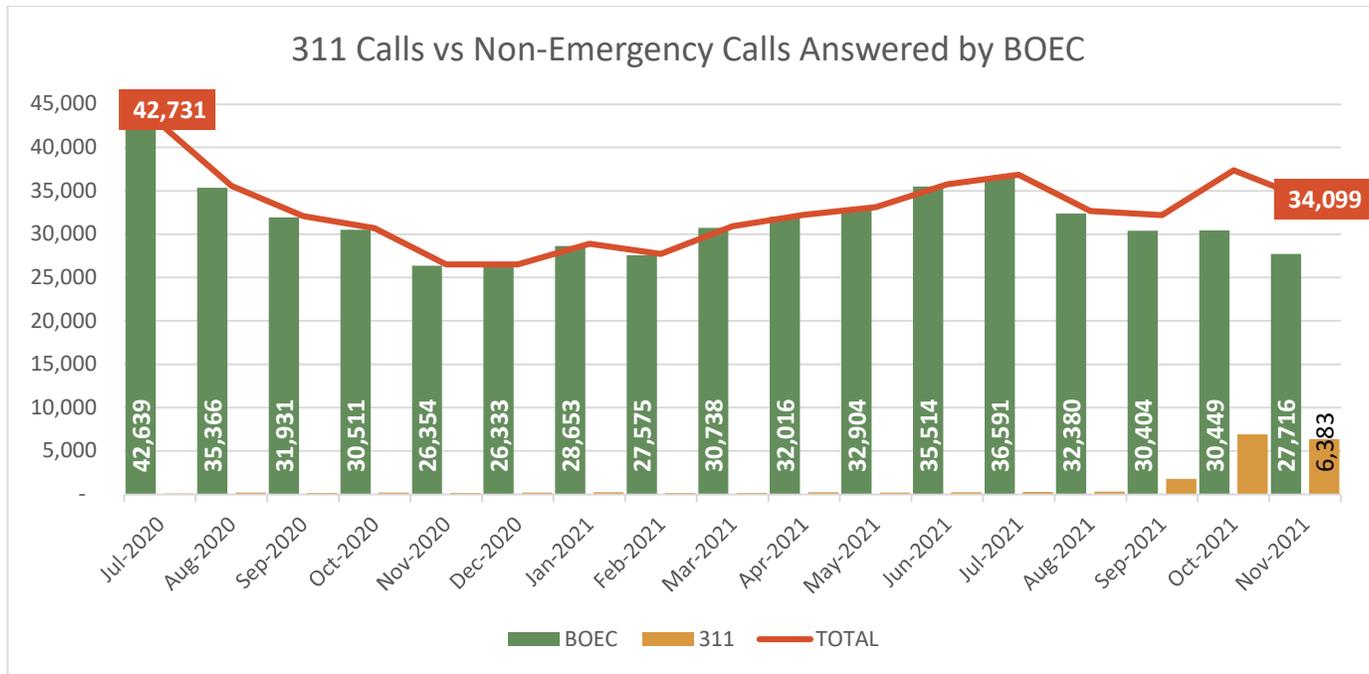
While the bureau is expecting to spend more on overtime in FY 2021-22, it is also projected to substantially underspend its personnel budget because of the vacancies it is experiencing. As of February 1, CBO projects that the bureau will **underspend its total personnel budgets (including salaries, benefits, overtime, and premium pay) by \$1,923,291**. The Decision Package analysis section of this review will discuss how this projected underspending could be used to allow the bureau to hire additional dispatchers that they expect to recruit over the next year.

### Innovations to Reduce Call Volume

To improve call answering times, BOEC has begun implementing changes aimed at reducing call volumes and workload for dispatchers. Over the past year, BOEC has been working with the 3-1-1 program in the Office of Management and Finance to transfer non-emergency calls currently answered by BOEC to 3-1-1. Since FY 2018-19, non-emergency calls have represented nearly 40 percent of BOEC’s total call volume, which includes calls to both 9-1-1 and the non-emergency number. The bureau and 3-1-1 are working on a multi-step process through which they intend for many of those calls answered by 3-1-1 instead of BOEC call takers.

The first step in that process was implemented on September 1, 2021, when BOEC added 3-1-1 as an option in their phone tree. While the results of that change are nascent, they appear promising: in the first three months of implementation, the number of non-emergency calls increased at 3-1-1, and the BOEC non-emergency call volume decreased by 13 percent.

Figure 6



The next phases of work to transition calls from BOEC to 3-1-1 include a planned public information campaign, which the bureau and 3-1-1 anticipate will lead to a substantial shift in call volumes.

BOEC is also implementing a new technology called Versaterm Case Service that enables online reporting and includes the ability for users to choose a non-emergency option. This technology could be another method for triaging out non-emergency calls and reducing workload for BOEC call takers and dispatchers.

In addition to shifting non-emergency calls, in the FY 2021-22 Fall BMP, BOEC requested funding for software that automatically calls back dropped calls (Automatic Abandoned Callback). In August 2021, BOEC had 12,219 abandoned calls requiring a call-back. Each call back took on average 2 to 3 minutes, which implies that over 500 total hours of call-takers' time in that month were spent responding to abandoned calls. The Automatic Abandoned Callback software is expected to reduce the amount of time spent returning those calls. BOEC expects the software to be implemented by June 2022 and will begin to evaluate the results after implementation.

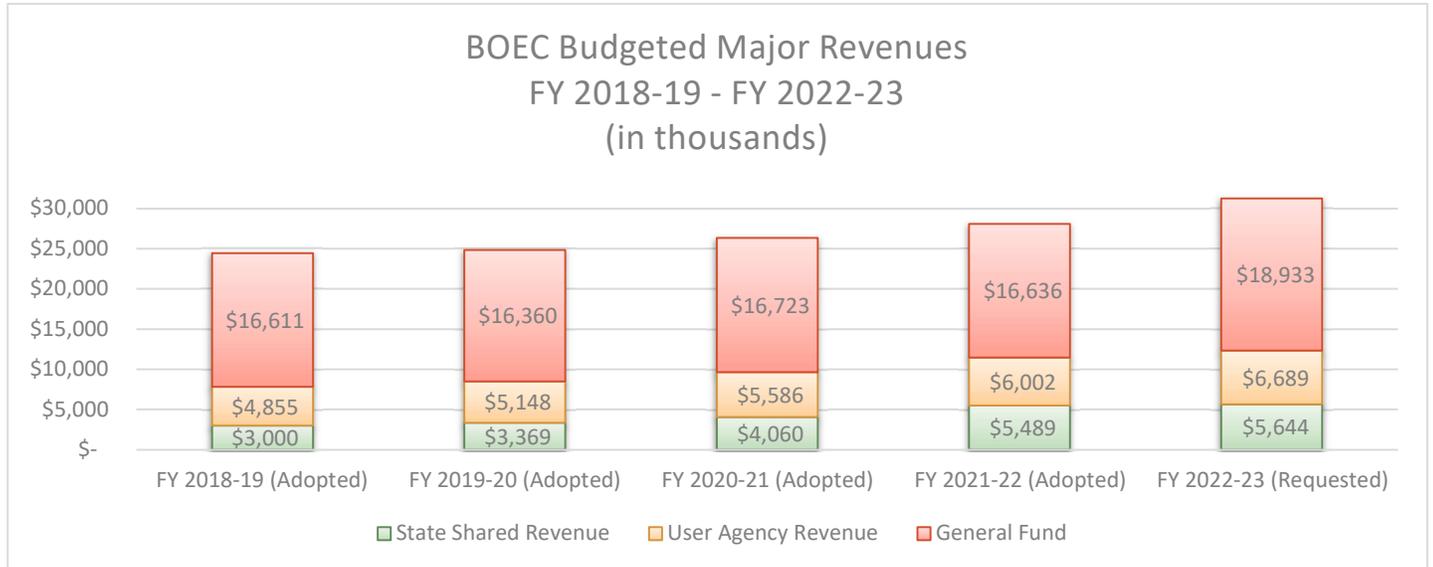
Beyond the changes that the bureau is making specifically to reduce call volume and workload, there is a broader context of major systemic change within the community safety system to send an appropriate response to each call. The introduction of Portland Street Response as an option for dispatchers and the bureau's recent conversion to a priority dispatch system for Fire and Medical calls are part of this larger transition.

BOEC has been partnering with the Community Safety Division in the Office of Management and Finance to support strategic planning, data analysis, and innovations to further a community safety transition. BOEC has a Decision Package that is part of the proposed consolidation of community safety finance functions into the Community Safety Division that is discussed in the Decision Package analysis section of the review.

## Intergovernmental Revenue

BOEC has three primary revenue sources: City of Portland General Fund discretionary resource, Charges for Services to the user agencies, and State Shared Revenue, shown in Figure 7, below.

Figure 7



In 2019, State legislation raised the 9-1-1 Emergency Communication Tax rate by \$0.50 in two increments over the course of two years. The increase in the tax rate raised the amount of revenue the bureau receives from the State. In FY 2020-21 the bureau received \$4,628,173 of State 9-1-1 revenues, which was \$1,340,576 higher than the previous fiscal year. In the current fiscal year, the first three quarters of receipts have totaled \$4,447,533, which suggests that another sizable increase in revenues is possible by the end of the year. BOEC notes that these increased resources have allowed the bureau to budget additional overtime and capital expenses. Overtime was previously funded in part through vacancy savings. As noted in the staffing section, above, CBO projects significant personnel underspending in the current Fiscal Year. Additionally, the State 9-1-1 revenues may exceed their budgeted amount if the fourth quarter revenues are on pace with the first three quarters of the Fiscal Year.

The Decision Package analysis section of this review discusses options for the bureau to use some of that newly recognized revenue as a source to fund requested positions.

## DECISION PACKAGES

### Emergency Communications Dispatchers

*DP 13079, \$847,231 Ongoing, 10.00 FTE*

#### Request Summary

This request is for 10.0 FTE Emergency Dispatch positions to address the recent increase in call volumes and long wait times. This package would bring the bureau's total authorized FTE and LTE for dispatcher and call taker positions to 141.0 FTE. The bureau requests \$847,231 of ongoing General Fund resources to fund these positions.

#### CBO Analysis

The number of positions BOEC requested in this Decision Package is based on the bureau's model of the number of call taker and dispatcher positions required for a given call volume to meet the NENA standards for call wait times. The bureau stated that if call volumes continue as they have been over the past 12 months, they would need nearly 170 FTE to answer calls within the national targets. This request is scaled down to 138 FTE (plus 3 existing LTE) in anticipation of reduced workload due to the innovations discussed in the Key Issues section, above.

The requested number of FTE is based on reasonable analysis by the bureau, and reducing call wait times is clearly aligned with Council's priorities. However, CBO does not recommend new General Fund resources for this request due to constrained General Fund resource and due to the potential for an alternative funding source. This Decision Package includes a request for ongoing General Fund resources, which the Mayor's Budget Guidance directed bureaus not to request without identifying an internal realignment or trade-off for consideration.

CBO also notes that the bureau is projected to have current year underspending, as discussed in the Key Issues section of this review, which could be deployed as a carryover request to fund this proposal in FY 2022-23 if this package is deemed a Council priority for resources that would otherwise fall to General Fund balance. This recommendation is dependent on two factors: the bureau's ability to garner one-time savings in the current fiscal year, and Council's determination that this decision package is a high enough priority to support with carryover resources. This decision package would be incorporated into the bureau's FY 2022-23 Adopted Budget if approved in the Spring Supplemental Budget Monitoring Process.

CBO notes that use of current year underspending to fund this request would be a one-time allocation for an explicitly ongoing need. However, as discussed in the Key Issues section, the bureau's ongoing State tax revenues have increased substantially in the past two fiscal years. The bureau could choose to fund new ongoing dispatcher positions with this additional revenue, should the resource outpace currently budgeted amounts.

Finally, given the substantial changes BOEC is implementing to reduce call volumes and workload, as well as the larger changes in the community safety system, it is difficult to project the long-term number of positions the bureau needs to adequately handle emergency calls.

**CBO Recommendation: \$0 ongoing | \$0 one-time | 0.00 FTE**

## Training Pipeline Limited Term Positions

*DP 13081, \$254,169 One-time, 3.00 LTE*

### Request Summary

This request is for 3 Limited Term Emergency Dispatcher positions to allow BOEC to hire more dispatchers than its ongoing authorized position count would allow. The bureau requests \$254,169 of one-time General Fund resources to fund these positions.

### CBO Analysis

Decision Package 13079 requests 10 additional ongoing FTE, bringing the bureau's authorized dispatcher and call taker FTE count to 138, plus 3 Limited Term positions that are already funded. This Decision Package would add another 3 Limited Term positions. Given BOEC's attrition rate and the time it takes for newly recruited staff to become fully certified, the bureau would need these Limited Term positions to be able to maintain a stable number of certified dispatchers.

While CBO recognizes that this is an important request, and that having a training pipeline is generally a cost-effective way to smooth staffing changes and manage the bureau's personnel budget. However, CBO does not recommend new General Fund resources for this request due to constrained General Fund resource and due to the potential for an alternative funding source.

As in the previous decision package, CBO also notes that the bureau is projected to have current year underspending, which could be deployed as a carryover request to fund this proposal in FY 2022-23 if this package is deemed a Council priority for resources that would otherwise fall to General Fund balance. This recommendation is dependent on two factors: the bureau's ability to garner one-time savings in the current fiscal year, and Council's determination that this decision package is a high enough priority to support with carryover resources. This decision package would be incorporated into the bureau's FY 2022-23 Adopted Budget if approved in the Spring Supplemental Budget Monitoring Process.

**CBO Recommendation: \$0 ongoing | \$0 one-time | 0.00 FTE**

## Emergency Operations Supervisors

*DP 13078, \$218,024 Ongoing, 2.00 FTE*

### Request Summary

This request is for 2.0 FTE Emergency Operations Supervisor positions to provide training for dispatcher training academies. The bureau requests \$218,024 of ongoing General Fund resources to fund these positions.

### CBO Analysis

BOEC requests these positions to staff known upcoming academies, and for future training needs. The bureau currently has 20.5 vacant dispatcher positions that it expects to fill in the next year through four planned academies. CBO notes that the bureau has averaged roughly 16 separations per year over the past two fiscal years, which suggests that additional academies would be needed to maintain the bureau's desired level of staffing. However, the need for additional academies will depend on the total vacancies and authorized position count going forward.

While CBO recognizes that this is an important request, CBO does not recommend new General Fund

resources for this request due to constrained General Fund resource and due to the potential for an alternative funding source. This Decision Package includes a request for ongoing General Fund resources without an internal offset, which the Mayor's Budget Guidance directed bureaus not to request.

As in the previous decision packages, CBO also notes that the bureau is projected to have current year underspending, which could be deployed as a carryover request to fund this proposal in FY 2022-23 if this package is deemed a Council priority for resources that would otherwise fall to General Fund balance. This recommendation is dependent on two factors: the bureau's ability to garner one-time savings in the current fiscal year, and Council's determination that this decision package is a high enough priority to support with carryover resources. This decision package would be incorporated into the bureau's FY 2022-23 Adopted Budget if approved in the Spring Supplemental Budget Monitoring Process.

CBO notes that use of current year underspending to fund this request would be a one-time allocation for an explicitly ongoing need. However, as discussed in the Key Issues section, the bureau's ongoing State tax revenues have increased substantially in the past two fiscal years. The bureau could choose to fund new ongoing dispatcher positions with this additional revenue.

**CBO Recommendation: \$0 ongoing | \$0 one-time | 0.00 FTE**

## **ProQA Quality Assurance Analysts**

*DP 13076, \$218,024 Ongoing, 2.00 FTE*

### **Request Summary**

This request is for 2.0 FTE Quality Assurance Analyst positions to coach dispatchers based on quality assurance information regarding the calls taken by each dispatcher. The bureau requests \$218,024 of ongoing General Fund resources to fund these positions.

### **CBO Analysis**

BOEC requests these positions to significantly expand the bureau's Quality Assurance (QA) program. Currently, the bureau only has one QA Manager. BOEC recently implemented the ProQA software, which is a priority dispatch software that prompts call takers and dispatchers with questions and decision points related to each call. ProQA digitized a process that was previously paper-based, and as a result the bureau now has more QA data. With the current QA Manager, BOEC does not have staff capacity to use the QA data it receives for coaching purposes.

Quality assurance is an important function for the bureau to get the right response to the right call. While CBO recognizes that this is an important request, CBO does not recommend new General Fund resources for this request due to constrained General Fund resource and due to the potential for an alternative funding source. This Decision Package includes a request for ongoing General Fund resources without an internal offset, which the Mayor's Budget Guidance directed bureaus not to request.

As in the previous decision packages, CBO also notes that the bureau is projected to have current year underspending, which could be deployed as a carryover request to fund this proposal in FY 2022-23 if this package is deemed a Council priority for resources that would otherwise fall to General Fund balance. This recommendation is dependent on two factors: the bureau's ability to garner one-time savings in the current fiscal year, and Council's determination that this decision package is a high enough priority to support with carryover resources. This decision package would be incorporated into the bureau's FY 2022-23 Adopted Budget if approved in the Spring Supplemental Budget Monitoring Process.

CBO notes that use of current year underspending to fund this request would be a one-time allocation for an explicitly ongoing need. However, as discussed in the Key Issues section, the bureau's ongoing State tax revenues have increased substantially in the past two fiscal years. The bureau could choose to fund new ongoing dispatcher positions with this additional revenue.

**CBO Recommendation: \$0 ongoing | \$0 one-time | 0.00 FTE**

## **CSD – Community Safety Consolidation**

*DP 13083, \$0, (3.00) FTE*

### **Request Summary**

This request is to transfer three FTE from BOEC to the Community Safety Division (CSD) within the Office of Management and Finance. This Decision Package would move the BOEC Business Operations team to CSD, abolishing three positions within BOEC and adding them to CSD.

### **CBO Analysis**

A full analysis of the Community Safety Division finance consolidation decision packages within the Office of Management and Finance, Portland Police Bureau, and BOEC is in the Office of Management and Finance Community Safety Division review.

CBO notes potential risks and benefits of consolidation for BOEC specifically because the bureau is substantially smaller than Police and Fire. The bureau's Business Operations team members play diverse roles. Moving them to CSD creates risks to BOEC's delivery of business operations services as well as the other roles that the team members play. On the other hand, as a smaller bureau, BOEC would benefit from the expertise of the larger roster of business operations staff within the consolidated CSD Finance section if staff were able to successfully cross-train across multiple bureaus.

**CBO Recommendation: \$0 ongoing | \$0 one-time | 0.00 FTE**

# SUMMARY OF REQUESTS & RECOMMENDATIONS (ALL FUNDS)

## Bureau of Emergency Communications

		2021-22 Adopted Budget	2022-23 Requested Base (A)	Bureau Decision Packages (B)	CBO Recommended Adjustments (C)	Total Recommended Budget (A+B+C)
Revenue	Miscellaneous	\$45,000	\$23,596	\$0	(\$23,596)	\$0
	Intergovernmental	\$11,491,601	\$11,951,922	\$703,244	(\$12,655,166)	\$0
	Fund Transfers - Revenue	\$16,635,809	\$17,395,495	\$1,537,448	(\$18,932,943)	\$0
	Charges for Services	\$407,881	\$443,301	\$0	(\$443,301)	\$0
	Beginning Fund Balance	\$1,500,000	\$3,309,783	\$0	(\$3,309,783)	\$0
<b>Revenue</b>	<b>Sum:</b>	<b>\$30,080,291</b>	<b>\$33,124,097</b>	<b>\$2,240,692</b>	<b>(\$35,364,789)</b>	<b>\$0</b>
Expense	Personnel	\$20,555,168	\$22,553,353	\$1,795,281	(\$24,348,634)	\$0
	Internal Materials and Services	\$4,843,411	\$5,297,226	\$500,411	(\$5,797,637)	\$0
	Fund Transfers - Expense	\$942,812	\$1,015,674	\$0	(\$1,015,674)	\$0
	External Materials and Services	\$2,448,693	\$2,301,671	(\$55,000)	(\$2,246,671)	\$0
	Debt Service	\$311,037	\$323,478	\$0	(\$323,478)	\$0
	Capital Outlay	\$979,170	\$1,632,695	\$0	(\$1,632,695)	\$0
<b>Expense</b>	<b>Sum:</b>	<b>\$30,080,291</b>	<b>\$33,124,097</b>	<b>\$2,240,692</b>	<b>(\$35,364,789)</b>	<b>\$0</b>