



**CITY OF KIRKLAND**

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**MEMORANDUM**

**To:** Kurt Triplett, City Manager

**From:** Dave Van Valkenburg, Deputy Fire Chief  
Michael Olson, Director of Finance and Administration  
Andrea Peterman, Budget Analyst  
Nate Islip, Budget Intern  
Radu Smintina, Budget Intern

**Date:** October 12, 2020

**Subject:** FIRE OPERATIONS OVERTIME

As part of the 2009-2010 and 2017-2018 Budget processes the Fire Department produced an issue paper looking at fire overtime and strategies to reduce future liabilities. Those issue papers made recommendations on the ideal staffing levels to cover overtime, as well as establishing a fire overtime reserve. While these measures helped to stabilize costs in the short term, overtime costs continue to fluctuate up significantly. The table below shows overtime costs for each of the past four years.

**Fire Overtime Costs**

	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020 (Estimate)</b>
Overtime	\$1,222,441	\$1,966,065	\$1,456,581	\$1,222,802

This issue paper is an updated analysis of the causes of fire overtime, and how they have contributed to the recent increase in costs. Additionally, this paper addresses how the COVID-19 pandemic and mobilization due to the wildfires in 2020 impacted overtime costs. Furthermore, this paper makes recommendations for actions that may help stabilize fire overtime.

Due to staffing policy changes in the last few years, our analysis will focus on the past two budget cycles, 2017-2018 and 2019-2020. In 2017, the department increased on-duty staffing levels from 19 to 20 at each station, so that a position previously filled with overtime hours would be staffed with regular shift hours. This was achieved through the addition of 5 new firefighters to fill one 24/7 position. The increased staffing was added to improve coverage to annexed neighborhoods previously covered by Woodinville Fire & Rescue.

## **Fire Operations Structure**

Before looking at how and why overtime occurs, it is important to understand the shift structure of fire operations in Kirkland. The Kirkland Fire Department has a total of 105 firefighters. The vast majority of these (95) are assigned to operations and split evenly between three shifts (A/B/C), with each shift lasting 48 hours, beginning and ending at 7:00 am. Each shift is 24 hours, and two 24-hour shifts are worked consecutively to produce a 48-hour shift. An example two-week period from June 13, 2016 to June 26, 2016 is shown below. Shift A works from 7:00 am on Sunday the 13<sup>th</sup> until 7:00 am on Tuesday the 15<sup>th</sup>, at which point shift B takes over, and so on.

<b>JUNE</b>						
<b>S</b>	<b>M</b>	<b>T</b>	<b>W</b>	<b>Th</b>	<b>F</b>	<b>S</b>
13	14	15	16	17	18	19
20	21	22	23	24	25	26

A SHIFT - B SHIFT - C Shift

When the department is fully staffed, there are 31 or 32 firefighters assigned to each shift (two shifts have 32 firefighters, one has 31 firefighters). On each day the minimum staffing is 20, made up of a three-person crew at stations (21/22/26/27), a four-person crew at station 25, plus a second crew at Station 27, and the Battalion Chief at Station 26. As a result, on any given day 11-12 members of the shift can be absent before overtime is needed.

This structure is key to understanding the overtime issue. The requirement for minimum staffing creates the possibility of large amounts of overtime, while the ratio of total staffing, allowable leave, and required minimum staffing dictates the amount of overtime. For example, as there must always be 20 firefighters on shift, as well as the requisite number of company officers (those in charge at each station), each absence brings the total number of staff available closer to the minimum requirement. There are a wide variety of work absences, which are broadly broken down (by department policy and the labor contract) into two categories:

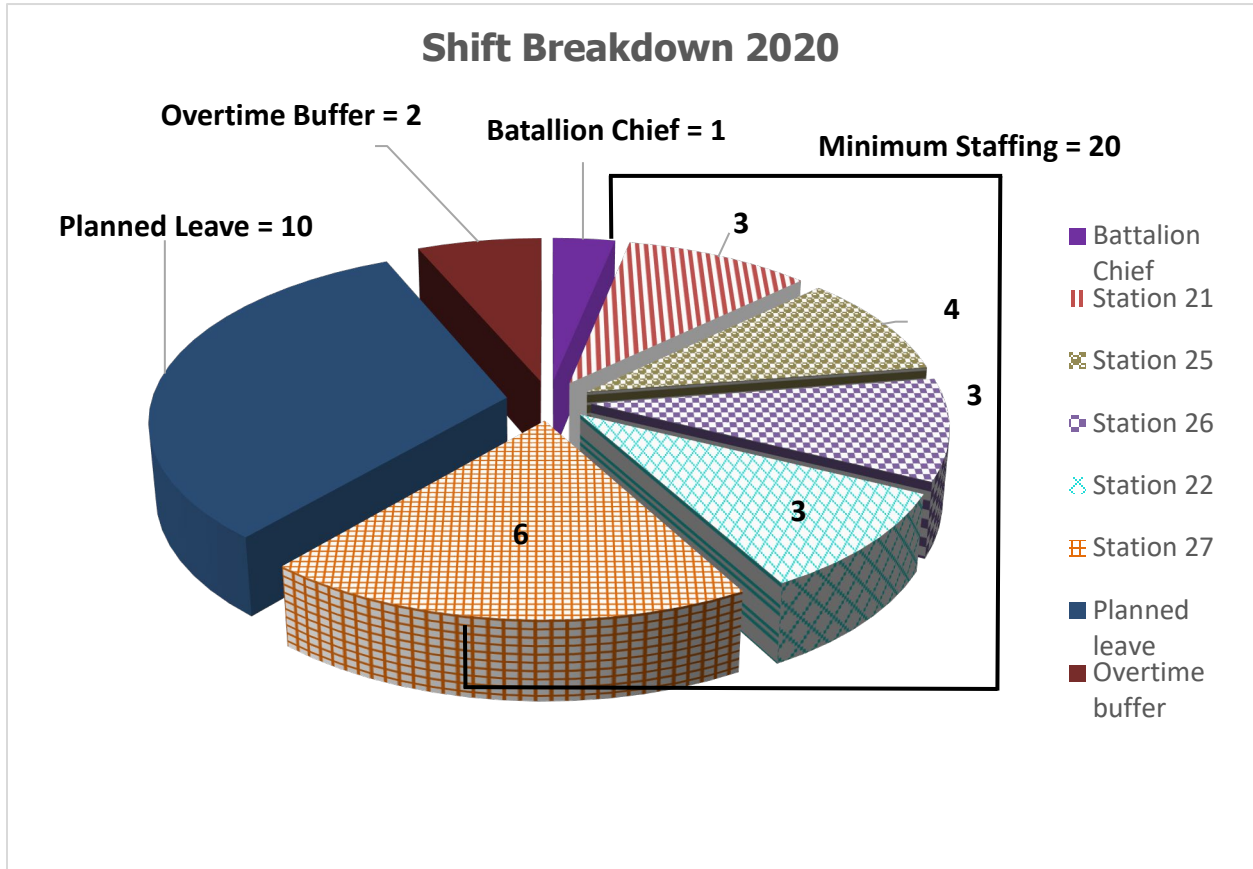
1. **Planned leave** – vacation, holiday and 'Kelly Days'<sup>1</sup>
2. **Other leave** –
  - a. **Overtime-causing leave** -including sick leave, Family Medical Leave (FMLA), on or off duty injury, light duty, training backfill and other leaves which are not part of the bidding process
  - b. **Vacancies** – generally occurring due to retirements
  - c. **Pandemic** – due to COVID-19

To ensure firefighters can take leave they are contractually entitled to, 'planned leaves' account for nine or ten of the 11-12 available slots (depending on whether the shift is fully staffed at 31 or 32 firefighters). This leaves two slots for other leave, known as the 'overtime buffer'. The

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<sup>1</sup> Kelly leave is common in fire departments. It provides for additional time off to ensure a shift structure remains compliant with the Fair Labor Standards Act (FLSA) guidelines governing overtime. In the case of Kirkland, each firefighter receives one shift off after 6 shifts of work. This makes work hours 48 hours per week on an annualized basis.

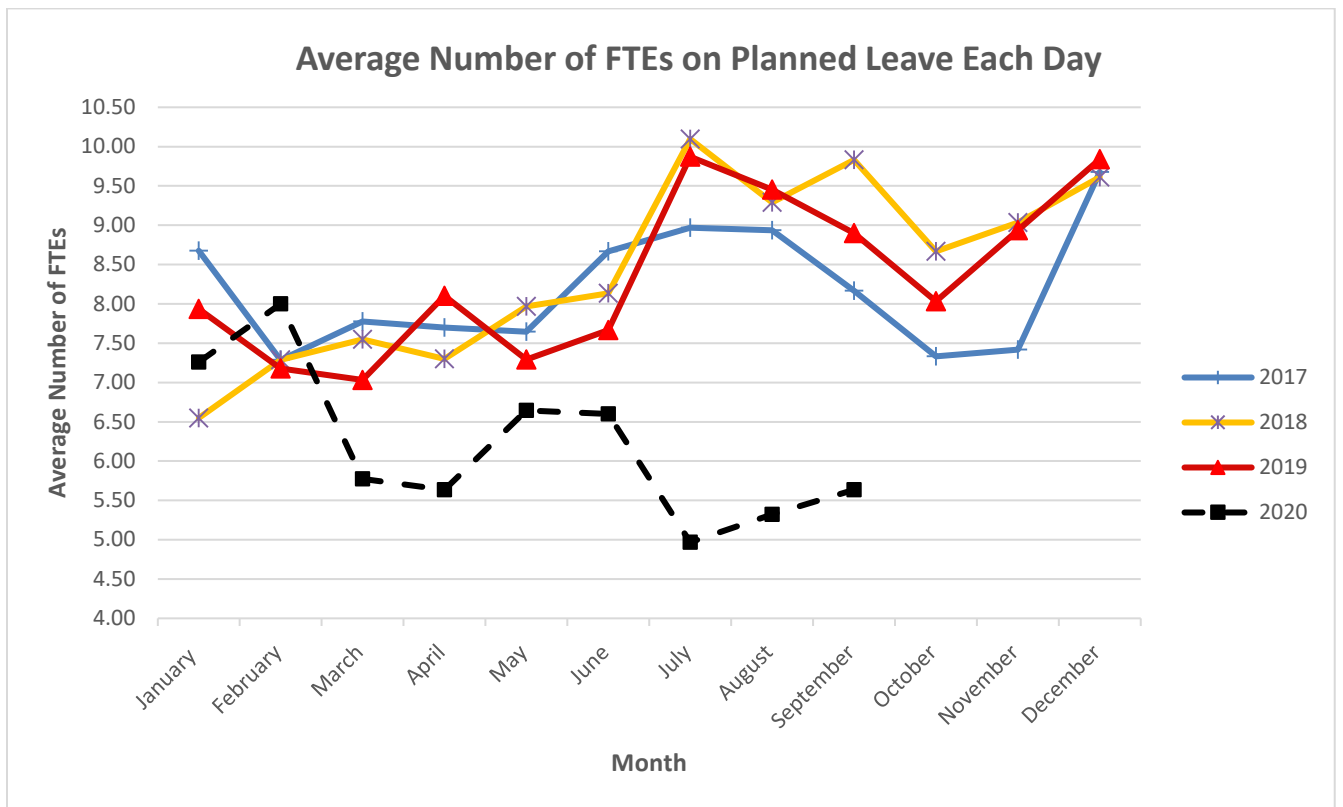
chart below shows the assumed allocation of staffing when the department is operating at minimum staffing.



### 1. Planned Leaves

As mentioned, assuming a fully staffed shift of 32, ten of the 12 slots above the required minimum staffing fall into the category of planned leave. These are split between Kelly Days, vacation days, and holidays, with most time being allocated through an annual bidding process, established in the collective bargaining agreement. Firefighters bid for Kelly Days annually, with a maximum of 5 people away on Kelly leave each day. Once Kelly Days have been issued there is a process of vacation and holiday bidding. Following this bid either all 10 slots are taken on a certain day, or the remainder are available for 'routine' vacation, which can be used as needed any time there is a spare planned leave slot.

Kelly Days fall on the same two days throughout the year for each individual. For example, if a firefighter bids and receives Saturday and Sunday, they would be off each time their shift rotation would have them working Saturday and Sunday (shift A on the June 19/20 in the example shown above). As there are a maximum of 5 slots per day, this gives 35 slots per week per shift. Historically, all 5 slots tend to be taken around the weekend, with fewer in midweek. Because Kelly shifts are the same two days throughout the year, there is no seasonal peak.



There is a clear seasonal trend to vacation leave, with the lowest amounts taken in winter and early spring, and peaks in July and December. The chart above shows the average number of people on planned leave, including Kelly, vacation and holiday leave, in each month from 2017 to September of 2020. The seasonal pattern is clearly visible in the chart, with the exception of 2020. The pandemic has lowered planned leave, and this makes sense as travel restrictions and social distancing policies have disincentivized people from taking vacation days.

Except for 2020, each year in February there were around seven people on planned leave. If there are no vacancies, sickness, or other unplanned leaves during this time of year, there would be 24 or 25 firefighters available for work, three or four more than required for minimum staffing. In contrast, in July, the average number of people away on leave was over nine. During this time period, if there are ever more than two people on any other leave, overtime would be required. This is significant, as there are times during the year when the city has a high risk of overtime being generated.

Current department practice works with the assumption that all nine or ten planned leave slots can be filled without causing overtime. While this is true, the seasonal increases in leave put pressure on the overtime buffer, helping to increase the amount of overtime in summer months. Strategies to help smooth out the seasonal trend in leave, such as pushing more leave into the spring months, could reduce overtime. This would require changes to the bidding system and would need to be negotiated between labor and management.

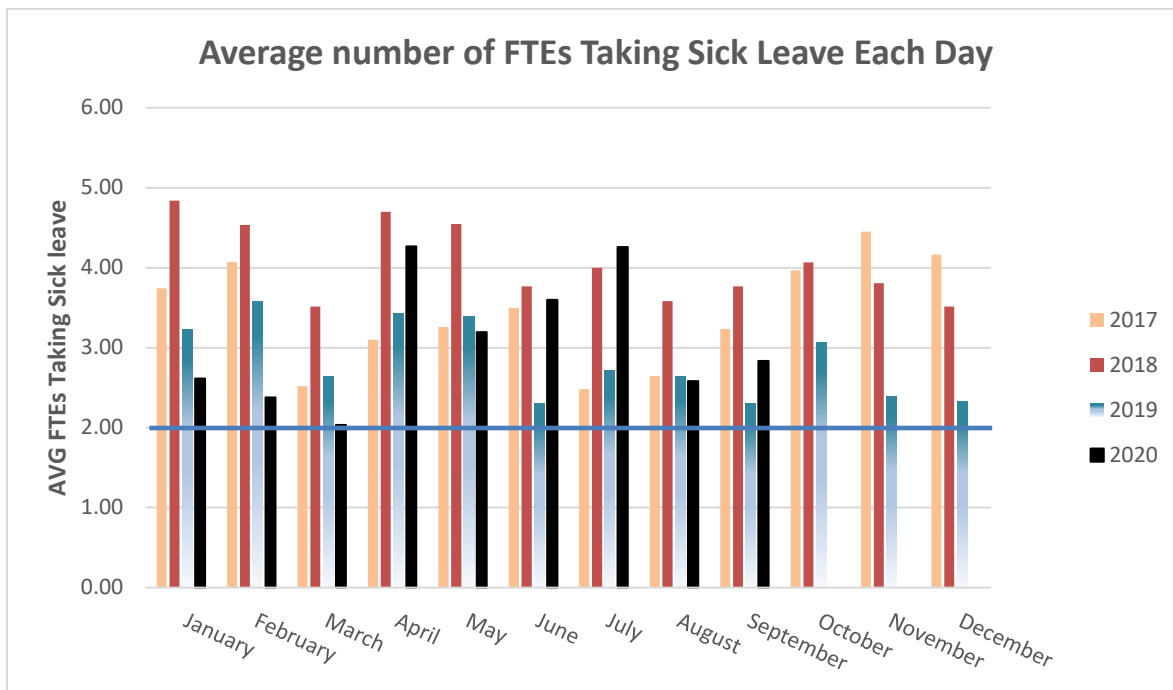
## 2. The Overtime Buffer

Under the current structure, if the maximum allowable number of firefighters are absent on planned leave, there are two remaining positions above minimum staffing. These slots constitute a buffer to protect the city from incurring overtime costs every time there is a vacancy or use of any 'overtime-causing leave'. This overtime buffer is used in two major ways:

### a) Overtime-Causing Leave

Current department practice and policy separates the planned leaves described above from 'overtime causing leave', which is essentially any leave that is not part of a bidding process.<sup>2</sup> The most significant of these categories is sick leave. However, this also includes a range of other leaves such as light duty, on-duty injury, administrative, well child/FMLA, bereavement, and emergency leave.

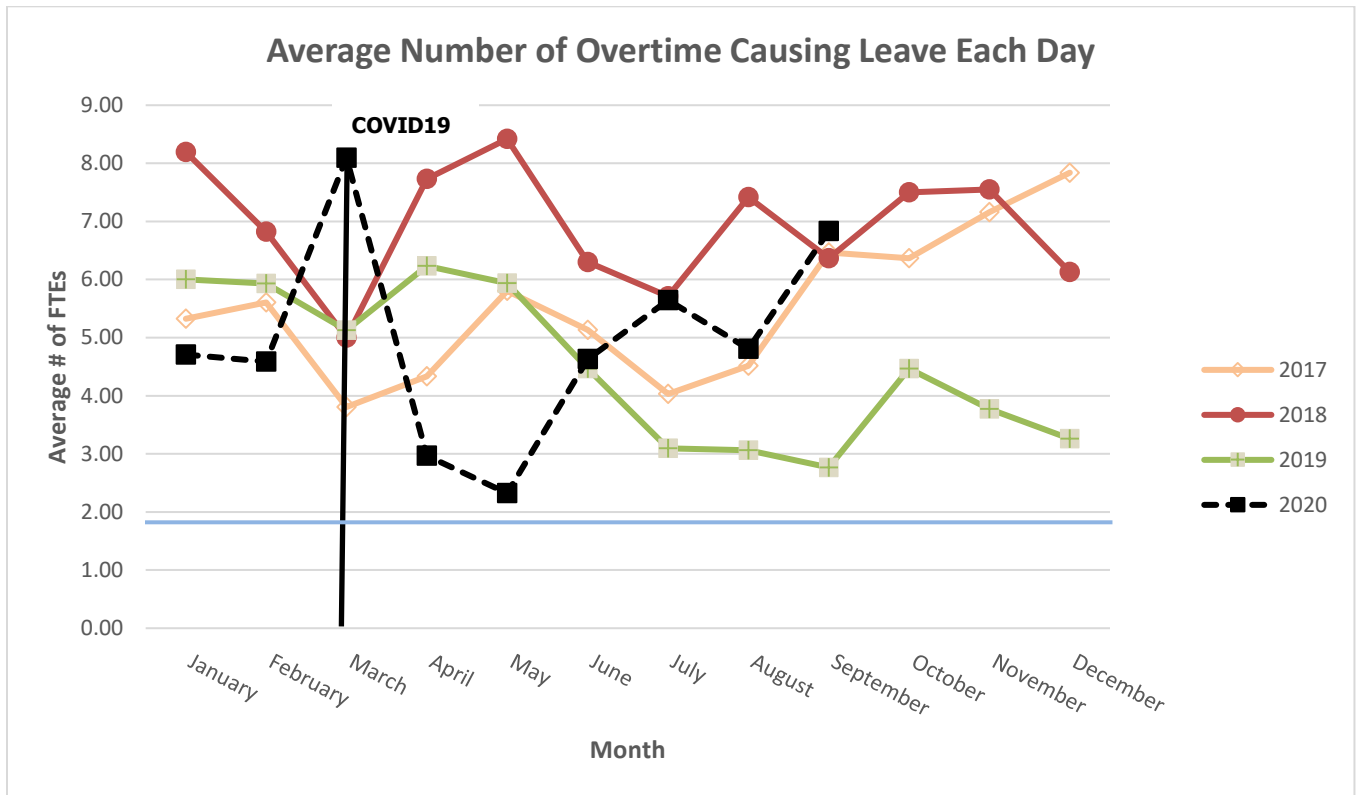
The bar graph below depicts the average number of FTEs taking sick leave per day from 2017 to 2020. Note, the bar graph includes family sick leave, but it does not depict the average number of FTEs taking pandemic leave. The line across the chart shows the 'overtime buffer', set at two, thus each time the bar chart is above that line the average number of people on sick leave triggers a need for overtime if all planned leave slots were taken. In 2018, there was a steady, high average of FTE fire fighters taking sick leave. Moreover, seasonal trends did not have a major impact on 2018 numbers. In all the other years (2017, 2019, and 2020) seasonal trends did follow. There tended to be a peak towards the end of the year, and a steady decline as the following year continued. 2020 followed a similar trend to 2019, with a few exceptions. Both April and June 2020 saw a dramatic increase in FTEs taking sick leave. Both instances could be explained by the presence of COVID-19. Between March and September of 2020, an average of 3.25 FTE took pandemic leave.



<sup>2</sup> This is defined in Department policy 3.001

The previous issue paper on fire overtime also highlighted the issue of a relatively high average FTE taking sick leave and suggested a long-term wellness strategy, working with employees to reduce sick leave usage over time. This option could still be explored as the department moves forward with staffing and other planning.

Below is a graph showing the average number of overtime-causing leave per day by month through September 2020. Overtime-causing leave consists of any unplanned leave. Since 2017, the average amount of overtime causing leave has exceeded the buffer of two FTEs. In addition to sick leave, unplanned leave consists of administrative leave, bereavement, emergency leave, light duty, military leave (paid/unpaid), and all on duty leave. Note, when COVID-19 impacted Kirkland, pandemic leave was coded as administrative leave. Like trends seen above with sick leave, 2018 showed a much higher average than other years. 2017 and 2019 showed a more consistent trend. However, 2020 showed sharp increases and decreases unlike the previous years. Most notably, March of 2020 showed a sharp increase then decrease going into April, and a steady increase since. Just as with sick leave, it is important to note that overtime causing leave averages exceed the daily buffer of 2.0 FTEs.



**b) Vacancies**

In the Kirkland Fire Department, most vacancies are the result of retirements, which, due to state retirement rules, generally happen between January and June. In addition, for the past few years, fire academy classes have run from January to March, often leading to long gaps between retirements and hiring. For example, if someone retires in February a replacement will not be hired until the following January and will not exit the academy until the end of March, with the intervening months covered by overtime. Unlike other types of leave, vacancies are at

least partially offset by salary savings, although this doesn't always show in the fire overtime budget.

There have also been temporary vacancies since 2013. For instance, in 2015, during the transitional period between Fire Chiefs, there were consecutive three-month periods during which a Battalion Chief from Operations was temporarily assigned as Deputy Chief of Administration, requiring backfill of those shifts on the line. In addition, as part of the Eastside Metro Training Group, Kirkland has provided an instructor to the academy for the three months between January and March. Some of these instructors have been taken from line positions, which also impacted the overtime buffer.

As there are three shifts, one vacancy means that two shifts will still have the full complement of staffing, and as there is no guarantee that retirements happen evenly across the three shifts, there can be multiple retirements from the same shift, leaving unbalanced shifts for long periods.

As mentioned above, each additional vacancy likely requires a greater percentage of shifts to be covered by overtime, as it reduces the overtime buffer. One option for overtime management is to recognize when overtime is less expensive than hiring a new staff member. Based on a model that calculates average overtime cost, and the ongoing salary and benefit cost of a firefighter, it is cheaper for the City of Kirkland to staff with overtime if fewer than 89% of shifts require overtime. The City could choose not to hire to full staffing levels and instead carry vacancies with the explicit recognition that salary savings would cover the increased overtime. Only after a certain number of vacancies are opened would the new hires be added. This would be a significant departure from current policy, and would require further study, and would need to be negotiated and bargained with the IAFF. However, as discussed above, on average all shifts currently require overtime which exceeds salary expenditures, as shown in the table below.

	Salary	Benefits	Total
Firefighter V max. Longevity	8,142	3,302	11,445
100% Overtime Coverage*	11,102	1,546	12,648

\*Average overtime rate

As an interim policy solution, given the long lead times between retirements and the next year's academy, a service package was brought forward in the 2017-2018 budget process to authorize unfunded over-hire positions. The purpose of this service package was to offset the time between pending retirements and replacements. As a result, 3.0 FTE ongoing positions were added to the 2017-2018 budget. These positions are unfunded "over-hires" that allow the department to act on upcoming retirements and hire replacements to prevent long periods of understaffing. This helps by training replacement firefighters prior to the summer immediately following a retirement, when overtime tends to be highest.

Currently, there are three vacancies in Fire, two firefighter positions, and one office specialist. Furthermore, there are three firefighter over-hire positions. Again, these over hire positions serve the purpose of offsetting any effect future retirements and replacements may have on the department.

One way of measuring the impact of vacancies on overtime is to assume that most overtime caused by vacancies is offset by savings in regular salaries. Although the relationship isn't completely one for one, vacancies do create salary savings, and as the table above shows, they are of a similar magnitude to additional overtime. The table below shows how far under budget regular salaries have been from 2015 to 2020.<sup>3</sup>

<b>Regular Salaries to Budget 2015-2020</b>			
	<b>Budget</b>	<b>Actuals</b>	<b>Difference</b>
<b>2015</b>	\$ 8,681,315	\$ 8,499,244	\$ (182,071)
<b>2016</b>	\$ 8,898,109	\$ 8,521,752	\$ (376,357)
<b>2017</b>	\$ 10,139,403	\$ 10,027,353	\$ (112,050)
<b>2018</b>	\$ 9,833,202	\$ 9,624,614	\$ (208,588)
<b>2019</b>	\$ 9,967,324	\$ 9,846,710	\$ (120,614)
<b>2020</b>	\$ 10,572,208	--	--

### **C) Pandemic Leave and Wildfire Mobilization**

In early March, the City of Kirkland was affected by COVID-19. In order to suppress the increasing impact of COVID-19 on the community, the Kirkland Fire Department was dispatched and frequently exposed to community members that tested positive for the virus. For instance, the Fire department responded to one of the earliest outbreaks in the U.S. at the Kirkland Life Care Center. This paper provides an update on how Kirkland's fire department has been impacted by COVID-19 and how pandemic leave has driven overtime costs throughout the period of the pandemic.

Pandemic leave is available at any time to all firefighters who believe they have been exposed to or are experiencing COVID-19 symptoms and must quarantine. Pandemic leave covers 48 hours of work, or an entire shift in terms of the firefighter's schedule. Note, pandemic leave is separate from sick leave, and planned leave.

With an extended number of firefighters being exposed to COVID-19, 220 FTE-days of pandemic leave were taken. As with any type of leave, this caused reduced staffing for the Fire Department and inevitably forced the department to use overtime irregularly. The table below shows monthly actual amounts for 2020. During March, the Fire Department experienced significant overtime costs of \$186,523 or 16% of the total current year actuals (through September 2020), due to the initial outbreak of COVID-19. Fortunately, nearly all of the overtime costs driven by COVID-19 will be reimbursed by FEMA or federal/state CARES Act money allocated to cover municipal costs of responding to the pandemic.

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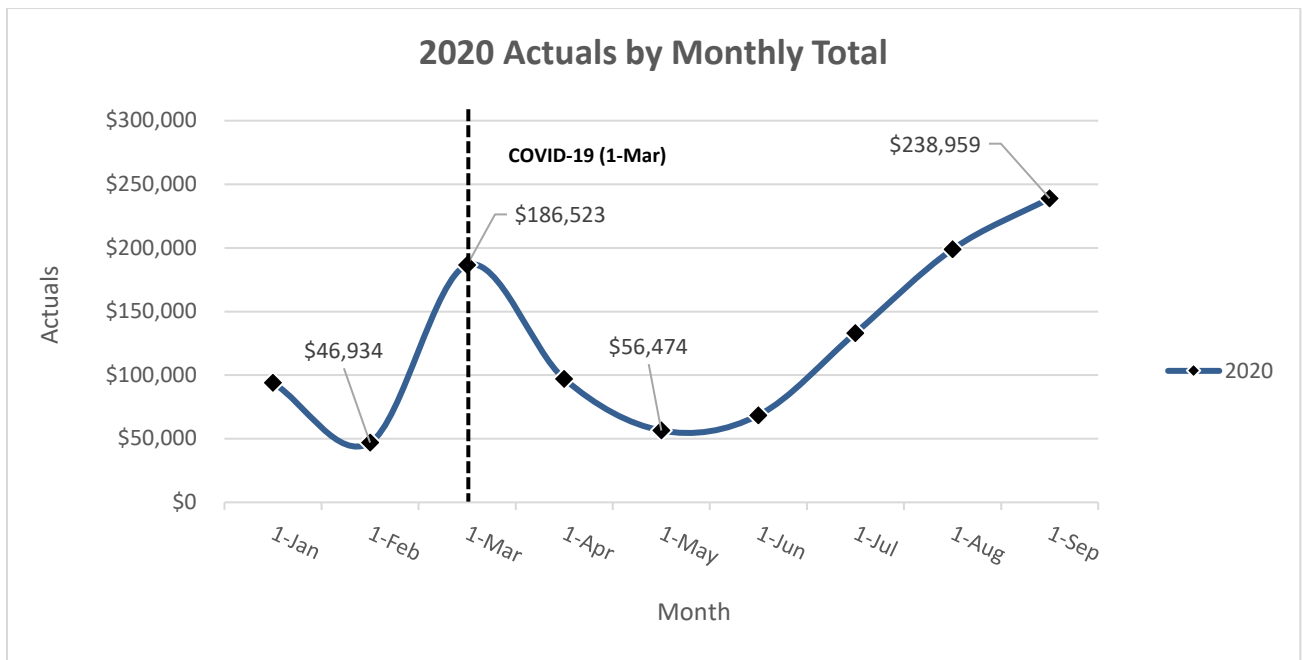
<sup>3</sup> 2020 actuals will be added at year's end. This will include reimbursement for FEMA pandemic leave and wildfire mobilization



Month	CY Actuals by Monthly Total
1-Jan	\$93,949
1-Feb	\$46,934
1-Mar	\$186,523
1-Apr	\$97,057
1-May	\$56,474
1-Jun	\$68,496
1-Jul	\$133,131
1-Aug	\$198,902
1-Sep	\$238,959
Total:	\$1,120,425

While COVID-19 has had a substantial impact on monthly overtime costs during 2020, it is not the only factor contributing to Fire overtime. Mobilizations to wildfires across the region caused significant overtime costs during the months of July, August, and September. The sum of July, August, and September contributed to 51% of the total 2020 actuals, to-date. However, the state reimburses for firefighters deployed, including firefighters used for backfilling. The rate is determined by the loaded pay rate for each employee deployed and the employee that works the backfill overtime.

The graph below uses the data provided above and depicts the monthly actual amounts for firefighter overtime from January 1, 2020 through September 1, 2020. There was an initial spike in overtime during the month of March. However, between April and June, overtime costs trended downward before incurring significant increases through the months of July, August, and September. This late and sharp increase in overtime pay could be explained by mobilizations responding to wildfires across the state of Washington and out of state.



## **Next Steps**

There are a few actions that can be taken to help manage overtime in the next biennium.

### **1. Recognize salary savings created by vacancies**

While it is currently recognized that vacancies create salary savings, this recognition is not always formalized in the budget adjustment process. In the future, staff could develop an estimate of the increased overtime costs that a vacancy will cause, meaning an adjustment could be made to the overtime line item. This would help clarify how much of the increase in overtime costs was the result of vacancies, and would improve the clarity of dashboards, and other tools that seek to assess fire overtime actuals against budget. More refined estimates such as these would help with long term planning.

### **2. Continue to authorize over-hire positions**

Currently, the fire department budgets for supplies and academy costs under the assumption that there will be three retirements per year. Actual firefighter retirements are currently below this line as there are currently two firefighter vacancies. However, a significant challenge in replacing retired staff is the long lead time between retirements and getting a replacement trained and into a line position. This is in part because there is often only one academy per year, running from January to March. This means if there is a retirement in February, it can be over a year until a new firefighter is trained to take that place. Consequently, over-hire positions need to continue to account for this gap in firefighter turnover. The three over-hire positions are included in the 2021-2022 preliminary budget proposal.

### **3. Administrative changes**

Fire Administration intends to implement a more robust on-the-job injury reporting system to gather more information on the reasons for injury and identify problem areas in the workplace. This is also a city-wide goal and one of the reasons for the City's decision to transition to the Association of Washington Cities (AWC) Worker Compensation Program in the fall of 2020. The AWC program will help make progress in this area. Identification of problem areas will allow for the department to develop strategies to address the cause of leave, particularly on-duty injuries. Additional administrative changes, many of which may require collective bargaining, are also being explored by Fire Administration.

## **Summary and Conclusion**

Overtime in the fire department is a product of the requirement for minimum staffing and will always occur at some level. 2020 has been a particularly unique year for overtime costs due to the effects of the COVID-19 pandemic and the wildfires raging throughout the Pacific Northwest. However, overtime costs have been weighing on this department for several years as the average daily number of overtime-causing leave consistently exceeds the buffer of two FTEs. Overtime costs have not constantly risen from year to year, but the city has spent on average over \$1.46 million a year on fire overtime. There are some near-term actions that can help reduce this costly expenditure, but partnerships with the International Association of Firefighters are needed to identify longer term strategies to substantively address the issue.