

**BOARD OF SUPERVISORS
FINANCE/GOVERNMENT OPERATIONS AND
ECONOMIC DEVELOPMENT COMMITTEE
INFORMATION ITEM**

SUBJECT: **FY 2018 Budget Development – Fire and Rescue Staffing and Overtime Analysis**

ELECTION DISTRICT: Countywide

STAFF CONTACTS: Erin McLellan, Management and Budget
W. Keith Brower, Jr., Fire and Rescue

PURPOSE: The purpose of this item is to address current and future staffing levels and the corresponding impact on overtime in the FY 2018 budget development process for Fire and Rescue.

BACKGROUND: This item is part of a series of service level discussions being brought to the Board of Supervisors (Board) as part of the FY 2018 budget development process. It is meant to provide additional information on issues that need to be considered in advance of the Proposed Budget development so that they might be fully reviewed and so that the Board has time to engage in meaningful discussion at a time where distinct action is not required. There are currently several areas in which staff has identified issues that are affecting current or required service levels. This item will present those issues associated with overtime and staffing in Loudoun County Fire and Rescue.

ISSUES: Loudoun County Fire and Rescue (LCFR), as a component of the combined fire and rescue system, is responsible for delivering mandated essential fire, rescue, hazardous materials, and emergency medical services to the citizens of Loudoun County, as well as mutual aid to surrounding jurisdictions. As the County has grown in population and density, the Board has added additional fire and rescue stations and career staff to ensure continuity of services. Given these additions, the personnel budget, including salaries and fringe benefits, has increased; however, the Department's overtime budget has lagged behind. Associated personnel costs, including overtime, has increased at a rate greater than projected requirements. As all County departments must, LCFR was able to absorb these overtime needs by restricting spending in other areas of its operating budget; however, continuing that practice is not sustainable without having an adverse effect on the Department's ability to meet its core mission. This paper presents strategies to mitigate a portion of those factors that lead to overtime; however, some overtime expenditures are part of the cost of doing business as a public safety agency.

Table 1: Overtime Expenditure Summary

	FY 2014	FY 2015	FY 2016	FY 2017
Adopted Total FTE	559.11	590.94	634.87	638.13
Adopted Overtime Budget	\$4,196,974	\$4,573,944	\$5,665,957	\$5,883,365
Overtime Expenditures	\$6,573,622	\$7,806,340	\$8,629,064	\$7,426,457 ¹
Overtime per FTE	\$11,757	\$13,210	\$13,592	\$11,638 ¹

As reflected in Table 1 (above), the adopted overtime budget for LCFR increased 40.2 percent between FY 2014 and FY 2017. However, between FY 2014 and FY 2016, LCFR’s actual overtime expenditures have exceeded the adopted overtime budget by at least 50 percent. In addition, overtime expenditures per FTE increased by 15.6 percent during this same time period.²

Total overtime hours worked between FY 2008 and FY 2015 increased 60.8 percent, from 43,857 hours to 70,539 hours, as the FTE count increased by 19.9 percent. Additionally, during this same time period, 83.34 percent of this overtime used was to meet minimum staffing requirements.³ Paid time off (e.g., annual leave, sick leave, injury leave) also increased 32.7 percent between FY 2008 and FY 2015, 53.3 percent of this time being related to sick, injury leave, and restricted duty assignments, with the remainder used for annual leave. Thus, the use of overtime is correlated to the amount of leave taken and the number of personnel in a restricted duty capacity.

Within any typical public safety agency, overtime is necessary to ensure minimum staffing levels are maintained for emergency response. LCFR’s minimum staffing requirements ensure that the appropriate number and type of staff are available to execute incident response according to mandates, regulations, and adopted practices. Table 2 below details the number of station level positions needed as minimum staffing during each hour of the week by battalion. Battalions are geographic sub-parts of the County, supervised by a senior command officer. Each Battalion supervises an average of seven stations and commands significant incidents when multiple stations respond simultaneously. This minimum staffing structure is what is considered the Department’s current service level, excluding Communications and the Fire Marshal’s Office. A more detailed table is included as Attachment 1.

¹ Projected

² By state code, overtime is paid to sworn LCFR staff who work beyond their regularly scheduled hours of 42 hours per week, consistent with applicable FLSA laws. Prior to 2010, the County had paid straight time up until 53 hours per week, and this shift significantly increased the amount of overtime paid by the County. LCFR’s overtime budget was rightsized at that time.

³ See Attachment 1.

Table 2: LCFR Minimum Staffing Requirements

	Monday – Friday (6:00 a.m. – 6:00 p.m.)	Saturday – Sunday (6:00 a.m. – 6:00 p.m.)	All Nights (6:00 p.m. – 6:00 a.m.)
Battalion 601	41	31	11
Battalion 602	51	46	27
Battalion 603	31	31	29
Total	123	108	67

The daily minimum staffing for an engine is three trained staff; four for a ladder truck or heavy rescue; two for an EMS unit (basic life support and advanced life support); and one for a tanker. All of the minimum staffed positions must be filled without interruption to provide the established level of service for emergency incidents. As such, when scheduled staff is unavailable to work, it is often nonscheduled staff on overtime that fills those positions. For example, if a scheduled engine driver calls out due to illness or an injury, a nonscheduled engine driver, who may have already be scheduled to work 42 hours in a week, will fill that empty seat on overtime.

LCFR uniformed employees are scheduled to work 2,184 hours per year (42 hours per week for 52 weeks per year). Factoring all forms of leave usage, an employee actually works, on average, between 1,750 and 1,780 hours per year. The resulting delta (400 to 430 hours) must be filled by other qualified personnel. When multiplied across each minimum staffed position, the total number of hours requiring coverage equates to a gap that must be filled via overtime or through the hiring of additional FTE. The concept of having additional FTE available to fill the void is often referred to as a “staffing factor.” The staffing factor equates to the number of FTE required to ensure that a minimum staffed position is filled by an employee working regular time (as opposed to overtime). In Loudoun County, uniformed employees work one of three regular schedules and the same “staffing factor” can be calculated for each of the shifts that employees work.

The staffing factor gap can also be met through the payment of overtime. In the past, policy decisions were made that relied solely on overtime to fill the gap when employees were not at work, and when the workforce was small, the amount of overtime was correspondingly small. In the past 16 years, the number of employees has grown exponentially in response to an ever-increasing demand for service coupled with a need to ensure uninterrupted service. As a result, the amount of overtime needed to cover the delta has also increased. In recent years, as positions were added to fill new stations, those enhancement packages often included additional FTE to meet the identified “staffing factor” need.

Compounding Factors in Use of Overtime

LCFR uses overtime appropriately and effectively; however, over recent fiscal years, lagging base budget adjustments in addition to outside factors have compounded the Department’s ability to absorb these overtime increases. This paper attempts to describe those compounding factors and identify strategies to mitigate them for the purpose of relieving pressure on the finances and operations of LCFR. These compounding factors include:

- *Emergency Staffing Requests/Volunteer Station Staffing Difficulties:* In varying degrees of frequency, volunteer stations have found themselves unable to supply full shifts of volunteers at their stations, requiring LCFR to use career staff (recurrently on overtime) to maintain minimum staffing requirements. Additionally, as volunteer companies approached the County with emergent staffing requests outside of the budgetary process, career staff that had previously been added to offset overtime as part of the “staffing factor” were redeployed to staff those stations, eroding LCFR’s ability to continue to make improvements in controlling overtime expenditures.
- *Attrition.* Attrition in public safety departments presents different consequences than in non-public safety departments in the County. For example, if a firefighter leaves employment with the County, that position is not immediately filled. Rather, replacement employees must be hired, trained, and deployed upon graduation from training academy. This process typically takes 12 to 18 months, during which time overtime is required to fill vacancies. In 2015, the Department lost six employees in one day to the District of Columbia and has only recently operationalized their replacements. In FY 2015, the Department’s overall turnover rate was 7.3 percent. While this may be lower than some County agencies, the cost to train and length of time needed further complicates the use of overtime to maintain minimum staffing.
- *Holidays and Closure Days:* Firefighters are compensated 8.5 hours of time and a half for the holiday benefit as it is considered scheduled hours above regular; further, there are financial implications during instances of County closure for those employees scheduled to work. Both holiday pay and closure pay grows the overtime expenditures. Though holidays are established each year, depending on the actual schedule, the Board may choose to add additional holidays to the established schedule. Closure days for natural disasters are not predictable, and as weather events continue to increase in severity, closure days increase in number.
- *Injury Leave:* Because a firefighter’s job is highly physical, it is not uncommon for injuries to occur. Often these injuries result in staff being unavailable to work for periods of time. The Department sees an average of 10 to 15 firefighters out on injury leave at any one time. Staff must work overtime to fill these temporarily vacated positions. The total number of reported injuries declined from 172 in FY 2015 to 146 in FY 2016.
- *Other Factors in Overtime:* A myriad of other leave factors result in employees not being available to be in their regularly scheduled position. Training is a primary on-going requirement to ensure minimum competencies and skill verification. In FY 2016, the Department also absorbed the costs of a complete second recruit academy as a result of greater than anticipated enhancements during the budgeting process. Overtime was also required to meet federal regulatory requirements including annual facepiece fit testing for all career and volunteer uniformed personnel. Finally, non-work related Family Medical Leave Act (FMLA) absences contribute to an employee being away from work for legitimate reasons. These do not account for regular vacation or incidental sick leave usage which must also be factored into the “staffing factor.”

- As the mission of LCFR has expanded to include meeting basic human resources, health and safety, and logistical needs firefighters have been re-assigned from operational duty to provide essential support to the Management Services, Training, and Personnel and Asset Management divisions. The paradox is evident: LCFR must have human capital to accomplish required actions, but doing so demands that personnel are drawn from its only resource pool, namely uniformed employees in the Operations Division, further exacerbating a clearly identified adverse pressure on the overtime budget. Properly staffing LCFR’s administrative needs with new, civilian employees would help keep highly trained and skilled firefighters in the field and reduce overtime.

In summary, LCFR is unique in that its mission requires the uninterrupted ability to ensure minimum staffing. Taken in totality, LCFR is currently averaging 10 to 15 individuals in some type of leave status considered long-term (greater than 96 consecutive hours). Table 3 provides a summary of all leave usage, by type and hours, for FY 2016. The total hours of leave usage in minimum staffed positions in fire stations was 101,743, representing 58 FTE at 1,750 hours per FTE. To fill 100 percent of the vacancies through overtime would require approximately \$5.1 million; with FTE enhancements, the cost is estimated at \$4.5 million. It is important to note that this does not reflect the entire overtime need but rather the comparison between the costs of meeting the need through overtime versus increasing the number of FTE.

Table 3: FY 2016 Leave Usage

Type Of Leave (Annual)	Hours – Total Department	Hours – Field Operations Only (Batt 1, 2, And 3)
Annual Leave	70,896	60,781
Sick Leave	41,481	34,781
Injury Leave	6,680	4,333
Bereavement Leave	2,155	1,848
Daily Averages		
Annual Leave	194.23	166.52
Sick Leave	113.65	95.29
Injury	18.3	11.87
Bereavement Leave	5.9	5.06

Actual overtime expenditures have exceeded their adopted budgets by over 50% over the past several fiscal years. To ensure the Department does not overspend its budget, certain purchases that would have otherwise been completed have been deferred. Reliance on overtime directly impacts incumbent personnel who are subject to fatigue, increased injuries, increased errors in decision-making, critical medication administration errors, and mandatory holdovers to maintain minimum staffing levels.

Concurrently, the administrative personnel required to support a 24-hour emergency services operation comprised of both career and volunteer responders cannot be adequately met with current staffing levels; in an attempt to address some of the workload, the Department has begun to convert its administrative and support personnel from 1.00 FTE (37.5 hours per week) to 1.07 FTE (40 hours per week). Presently, there are 20 positions requiring conversion to this 40-hour work week. This conversion could result in increased productivity among this group of employees by a combined 50 hours per week. If the Department had more flexibility within its personnel budget, it could likely accomplish this conversation by requesting additional FTE authority but absorbing the cost of those increased work schedules. Many other departments are able to prioritize this budgetary flexibility. This request will be presented during the FY 2018 budget process.

Alternatives to Reduce Overtime

The Board and LCFR have worked hard to contain costs through strategies designed to maintain service levels without exceeding existing budget constraints. However, continuous growth in the County reflected in increasing population, housing units, and commercial construction (critical to the fiscal health of the County) simultaneously place pressure on Fire and Rescue to ensure essential service levels. The evidence reflects that overtime will need to be relied upon as one, but not the only means of ensuring minimum staffing and actual overtime expenditures continue to exceed the adopted overtime budget. It is thus recommended that the Board continue to assess the need to increase overtime funding in gradual steps. These funds will allow LCFR to meet minimum service levels by allocating both personnel and operating resources appropriately.

While minimum staffing positions may require overtime to be filled, efforts can be made to reduce this amount by continuing to incrementally hire employees to meet minimum staffing requirements. Recognition of the “staffing factor” as a valid mechanism to accurately estimate the appropriate number of FTE required to ensure safe staffing can be an effective mechanism to control costs. LCFR calculated a staffing factor as follows: 2.0 employees for a five-day, 12-hour shift; 3.0 employees for a seven-day, 12-hour shift; and 5.0 employees for a 24-hour shift. Since FY 2011, most requests for expanded career service have included the staffing factor to provide enough coverage to reduce the need for overtime, although, as previously mentioned, emergent requests for new minimum staffing positions have thwarted this effort.

In addition to this strategy, staff recommends over hiring recruit academies. The typical recruit academy size for new firefighters is 30 individuals. Historically 10 percent of the recruits will not complete the academy. Thus, the system has a number of vacancies before new firefighters enter the field. Overstaffing an academy class in anticipation of recruits dropping out would reduce the vacancy rate upon graduation. Coupled with the staffing factor, ensuring that all vacancies are filled upon graduation would help reduce the amount of needed overtime. This would require a change in current policy, acknowledging the need to ensure that “over hires” would be retained for employment if they successfully completed the academy and the Department remained above its authorized FTE strength.

Another option is to re-evaluate the current workweek hours of employees. The Department currently operates on three independent shift schedules borne of a desire to maximize the potency of Loudoun's volunteer fire and rescue personnel (long-recognized as an essential asset to the County). As a result, genuine savings have been realized by not having to hire career staff to fill shifts that are currently filled by volunteer members. Notwithstanding, the dissimilar work schedules have had a negative influence on retention of employees. The issue of balancing the retention of volunteers and career personnel simultaneously is a complicated one. It would be irresponsible, however, to not make the Board aware of the economic benefit that increasing the work week of career personnel would have on overtime in moving fire rescue employees from a 42-hour workweek to a 48-hour (14.3% increase) or even 56-hour (33% increase) workweek. One cannot escape the postulate that increasing the presence of career personnel in a station can have a negative impact on volunteerism, a point made clear in other jurisdictions that have witnessed the artificially rapid decline of active volunteers as a result of moving to a more homogenous work schedule. Additionally, increasing the workweek would include its own attendant costs, for example base salary increases that would have to be more fully evaluated to understand their impact.

Maintaining Public Safety through Safe Staffing

The Kirkpatrick Farms Station is expected to open in late fall or early winter of FY 2018 and will be staffed by a 24-hour career engine, tanker, and EMS unit. During the FY 2018 budget process, LCFR plans to submit a request for staffing and operational needs for this station that will include staffing levels above the current minimum requirements. The request will propose a level that the Department believes meets nationally-recognized safety standards, responds to a long-standing requirement identified in the Virginia Occupational Safety and Health Administration (VOSH) citation issued in 2008 after the Meadowood Court incident that critically injured several personnel, and positions the Department to more effectively maintain essential levels of service. Over the next several fiscal years, LCFR plans to bring to the Board modern and updated staffing requests for all stations in a systematic planned structure.

FICAL IMPACT: Based on the analysis and evaluation of LCFR's staffing level and overtime usage, the following options could be considered by the Board to address service level priorities. First, incrementally increasing the base budget for overtime would ensure adequate funding. Additionally, the Board could address the staffing factor gap in the Department through a multi-year plan for additional FTE designed to offset the need for overtime in accordance with the "staffing factor." Authorizing a change in the staffing policy to allow for the over hiring of recruit academies by 10 percent could result in all vacancies being filled upon graduation. Staffing for the upcoming opening of the Kirkpatrick Farms Station could be hired at a level currently above the minimum requirements and future staffing for stations should consider this model. Finally, the Board could consider the future of workweek hours based on economic feasibility and its impact on volunteerism in the County.

The Department of Management and Budget will continue to work with LCFR to assess the resources needed to maintain current service levels and present prioritized needs in the FY 2018 Proposed Budget.

Loudoun County Department of Fire, Rescue, and Emergency Management - Operations Division **minimum staffing** breakdown

Monday - Friday (6am-6pm)		Saturday-Sunday (6am-6pm)		All Nights (6pm-6am)	
Unit/Station	Personnel	Unit/Station	Personnel	Unit/Station	Personnel
Battalion 601		Battalion 601		Battalion 601	
BC 601	1	BC 601	1	BC 601	0
*SO 600	1	*SO 600	1	*SO 600	1
*EMS 601	1	*EMS 601	1	*EMS 601	1
FS06: Ashburn	9	FS06: Ashburn	9	FS06 (Medic)	2
FS11: Sterling Fire	7	FS11: Sterling Fire	0	FS11: Sterling Fire	0
FS18: Cascades Fire	3	FS18: Cascades Fire	0	FS18: Cascades Fire	0
FS22: Lansdowne	5	FS22: Lansdowne	5	FS22: Lansdowne	0
FS23: Moorefield	7	FS23: Moorefield	7	FS23: Moorefield	7
FS24/35: Kincaid	7	FS24/35: Kincaid	7	FS24/35: Kincaid	0
Sub-total (Battalion 601):	41	Sub-total (Battalion 601):	31	Sub-total (Battalion 601):	11
Battalion 602		Battalion 602		Battalion 602	
BC 602	1	BC 602	1	BC 602	1
FS02: Purcellville Fire	8	FS02: Purcellville Fire	8	FS02: Purcellville Fire	0
FS04: Round Hill	5	FS04: Round Hill	5	FS04: Round Hill	5
FS05: Hamilton Fire	6	FS05: Hamilton Fire	6	FS05: Hamilton Fire	4
FS10: Lucketts	6	FS10: Lucketts	6	FS10: Lucketts	6
FS12: Lovettsville	5	FS12: Lovettsville	0	FS12: Lovettsville	0
RS13: Loudoun Rescue	4	RS13: Loudoun Rescue	4	RS13: (medic) Loudoun Rescue	2
FS20: Leesburg Fire	11	FS20: Leesburg Fire	11	FS20: Leesburg Fire	4
FS26: Loudoun Heights	5	FS26: Loudoun Heights	5	FS26: Loudoun Heights	5
Sub-total (Battalion 602):	51	Sub-total (Battalion 602):	46	Sub-total (Battalion 602):	27
Battalion 603		Battalion 603		Battalion 603	
BC 603	1	BC 603	1	BC 603	1
Staffing Officer	1	Staffing Officer	1	Staffing Officer	1
FS03: Middleburg	6	FS03: Middleburg	6	FS03: Middleburg	6
FS07: Aldie	5	FS07: Aldie	5	FS07: Aldie	5
FS08: Philomont	4	FS08: Philomont	4	FS08: Philomont	4
FS09: Arcola	5	FS09: Arcola	5	FS09: Arcola	3
FS19: South Riding	9	FS19: South Riding	9	FS19: South Riding	9
Sub-total (Battalion 603):	31	Sub-total (Battalion 603):	31	Sub-total (Battalion 603):	29
Monday-Friday (6am-6pm):	123	Saturday-Sunday (6am-6pm):	108	All Nights (6pm-6am):	67
Revised: 06-02-16					

As of: 06-02-16