

PS COMMITTEE #1
January 24, 2013

MEMORANDUM

January 22, 2013

TO: Public Safety Committee

FROM: Susan J. Farag, Legislative Analyst *SJF*

SUBJECT: FY13 Staffing Update: Police and Corrections

Today the Committee will receive an update on staffing for police and corrections. Those expected to brief the Committee:

Chief J. Thomas Manger, Montgomery County Police Department (MCPD)
Art Wallenstein, Director, Department of Correction and Rehabilitation (DOCR)
Assistant Chief Betsy Davis, MCPD
Assistant Chief Russ Hamill, MCPD
Robert Green, Warden, DOCR
Lt. Darren Francke, MCPD
Bill Ferretti, Deputy Director, Emergency Communications Center, MCPD
Craig Dowd, Budget Manager, DOCR
Bruce Meier, Office of Management and Budget (OMB)

BACKGROUND

After several years of significant budget and staffing cuts in both departments, the County was able to add staff to both the Police Department and the Department of Correction and Rehabilitation in FY13. This meeting will provide staffing updates for both departments and look at any challenges either department may have faced this year.

DOCR

Over the past five fiscal years, DOCR staffing has decreased almost 11%. The department cut staffing most significantly in FY11 due to the severe fiscal constraints facing the County. That year, DOCR collapsed five operational divisions into three, and abolished 33 positions.

DOCR Staffing - FY08 - FY13								
	FY08 Actual	FY09 Actual	FY10 Actual	FY11 Actual	FY12 Approved	FY13 Approved	Change	% Change
Full Time	573	562	548	515	511	515	-58	-10.1%
Part Time	6	6	4	4	5	2	-4	-66.7%
Total	579	568	552	519	516	517	-62	-10.7%

The FY13 operating budget added \$176,000 for background investigators (term positions) and added \$184,489 to restore three correctional officers to staff a visitor's security post at the Montgomery County Correctional Facility (MCCF). The FY13 operating budget also included \$1.5 million to address the department's ongoing overtime expenses.

Background Investigators: Historically, all background investigations for DOCR had been performed by DOCR's Human Resources (HR) section. In response to budget reductions in FY12, two full time positions responsible for the background investigations were eliminated. Under an agreement, the MCPD took over all background investigations of all DOCR's positions. Both DOCR and MCPD fall under the Maryland State Police and Correctional Training Commission same certification process for the uniformed and non-uniformed staff. DOCR advised that while both DOCR and Police worked well together, there were significant problems in processing applicants due to the volume and continuous DOCR's recruitment requirements for its various classifications.

With priority being placed on MCPD positions, background investigations of DOCR's applicants were delayed resulting in positions remaining unfilled for a significant period of time. To address DOCR's background investigation requirements, the FY13 operating budget included \$176,000 for the conduct of background investigations utilizing one or more contractors.

DOCR advises that the County approved two term positions with benefits, with an extended term of up to three years. Formal interviews for both positions were conducted on January 17, 2013. Job offers were extended and both finalists accepted the appointments. Their fulltime work begins on January 28, 2013. *Council staff asked if adding background investigator positions has helped to expedite the hiring process for employees who need background checks before being hired. Because the term positions have not yet started, the Committee may wish to ask whether the Police Department has continued to perform background investigations for DOCR over the past six or seven months. If not, has the inability to perform background checks on new staff had an adverse impact on DOCR's overall vacancy rate? Has this contributed to overtime costs? Once the background investigator positions are filled, how long does DOCR anticipate it will take to fill most vacant positions?*

MCCF Visitor's Post: In FY12, one post at MCCF was collapsed due to budgetary constraints. This change reduced the times when inmates could receive visitors to evenings only. DOCR reported several security incidents at the post over FY12 due to heightened frustration on the part of both inmates and visitors, due to long lines, inability to accommodate all visitors, visitor overflow into parking lot and lobby, and other barriers to visitation. There had been

several acts of vandalism, as well as at least two arrests, and one injury to a staff member. There is no type of physical barrier between staff and visitors. As a result, the Council restored the daytime visiting hours by approving funding for three new correctional officers. Twice-a-week visitation for prisoners was restored on September 9, 2012. Executive staff advises the post is staffed by a “combination of new positions and overtime.” Executive staff also advise security incidents have diminished and returned to previous levels.

Overtime and the Net Annual Work Hours Study: The FY13 budget includes \$1.5 million to address an ongoing departmental deficit, due mostly to overtime. Over the past year, DOCR has been working on a New Annual Work Hours Study to first determine actual staffing needs for each 24/7 post, and then determine the most appropriate staffing mix of new staff and backfill overtime. The study identified a shift relief factor of 6.15 for each 24/7 post. *The Committee may wish to ask whether the Department is closer to identifying the number of new permanent staff necessary to minimize the use of overtime.*

Police Department

The FY13 operating budget included significant staffing increases for the Police Department. The FY13 budget also included two police officer candidate (POC) classes of 30 each (July 2012 and January 2013). Major staffing additions included:

- 34 New Sworn Staff in Field Services (\$2,906,288): This item will allow the Police Department to create one District Community Action Team (DCAT) for each of the six police districts;
- Seven New Detectives in Investigative Services (\$613,807): This adds two each in 1D and 2D, and three in 6D);
- Implement Universal Call Taking System in Emergency Communications Center (\$1,868,593): The ECC adds 17 new positions (10 of which are shifted from MCFRS) to provide a universal call taking system.

DCAT Teams/Detectives

MCPD staff advise implementation of DCAT teams are on track as planned. Three teams will be implemented after current POCs graduate from the Academy and complete field training, which is expected to be in June. When the next candidate class completes its field training, the other three teams will be put in place by December 2013. Full implementation is expected by January 2014. *The Committee may wish to ask how collective bargaining impacts the formation and deployment of the DCAT teams.* In addition, the Department indicates that the loss of some POCs and overall attrition has reduced staffing. This reduced staff may limit the initial three teams to a sergeant, corporal, and three (rather than five) police officers, with two officers assigned temporarily as staffing allows. *The Committee should understand how reduced staffing will impact DCAT operations or effectiveness, if at all. Will one PCAT team still remain and be available for deployment anywhere in the County?*

The seven new detective positions will not be added until the candidate class finishes field training (approximately 4-5 months).

Universal Call Taking at the Emergency Communications Center (ECC)

The FY13 operating budget included \$1.9 million to implement a new universal call taking system. The change also added 17 new positions to the Police budget (10 of which were transferred over from the Fire and Rescue Service budget). The new system would combine and cross-train all call-takers so that all calls can be processed without the need for a second transfer step. It was Council staff's understanding that the Department plans to have the new system in place by June 2013. In order to implement the new system, various renovations will need to be made both to the existing ECC as well as the back-up ECC centers.

The Police Department advises that the Universal Call Taking program transition has been delayed due to difficulties in the implementation of the call taking protocol system due to software issues. The Department is currently exploring different options, but it is likely the transition will not be complete by June 30, 2013. All new call taker positions have been reviewed and designated within the Police Department as Universal Call Takers. Specialist and Supervisor/Manager positions still need to be submitted to the Office of Human Resources for review. Training for the new functions has been put on hold pending the outcome of software issues. *The Committee may wish to ask what the Department's new estimate is on full transition. Has the delay had any impact on current operations? Are site renovations delayed by software issues as well?*

This packet contains

DOCR Responses	© 1-2
Budget calculations for DOCR Staffing Needs	3-12
Police Responses	13-14

DOCR RESPONSES

1. When were you able to add the visitor's post?

Twice a week visitation for prisoners was restored on September 9, 2012. The officers reassigned to return inmate visitation to twice weekly remain a combination of new positions and overtime at present.

2. Do you have any data in FY13 showing security incidents related to that post? Has there been any change since FY12? How has it helped improve operations?

Security incidents have diminished and have returned to previous levels when inmates knew two visits weekly were possible giving good behavior. The element of personal family/significant other visitation in a correctional environment is about as clear as any element of correctional operations. Restoration of visitation through restoring the three correctional officer's position was an enormous step forward.

Comment [m1]: What is the data???

3. When were you able to add the background investigator positions?

DOCR has not yet been able to add the background investigator positions – it is a work in progress. The county approved two term positions with benefits but with an extended term of up to three years. After detailed executive branch review, two positions were approved: ASII and OSC. Formal interviews for both positions were conducted on January 17, 2013. Job offers were extended and both finalist accepted the appointments. Their full time work begins January 28, 2013.

4. Has their addition helped expedite the hiring process for employees who need background checks?

As their addition/selection just happened (January 17, 2013 and they do not formally start their work until January 28th) a specific comment cannot be offered. We do know without hesitation, that having full-time background investigators on board will significantly speed up the selection process, diminish vacancies and reduce overtime that is a function of having vacant positions where mandatory backfill overtime is a normal and routine course to ensure core security coverage in inmate housing units and designated security posts.

5. Have you made progress on the Net Annual Work Hours study and determined the appropriate balance between additional positions and backfilling with overtime?

Significant progress has been made with Net Annual Work Hours (NAWH) calculations for the position of correctional officer within DOCR. A copy of the budget research and calculations, fully reviewed with CountyStat and OMB is attached for your consideration dated March 18, 2012. The NAWH Study developed hard data outcomes using all of 2010 & 2011 for major categories of time away from work. We learned that it now takes over 6.0 correctional officers to staff a 24/7 post as a result of growing leave use amongst over 17 categories covered under County policy, State policy and the Collective Bargaining Agreement with MCGEO.

MCDC and MCCF Budget Research and Calculations

Revised March 18, 2012

This document describes the methodology that was used to project 2013 staffing needs for MCDC and MCCF. This work was based on the latest edition of the National Institute of Corrections (NIC) jail staffing analysis handbook and tools.

The principal author of the NIC process, Rod Miller, was closely involved with every aspect of the following calculations.

Methodology

An accurate staffing budget request is based on the following elements:

1. Identifying annual coverage hours in two categories
 - a. Relieved posts and positions
 - b. Non-relieved posts and positions
2. Calculating the Net Annual Work Hours (NAWH) for each classification of employee as the basis for determining the number of Full Time Equivalent (FTE) employees needed to deliver relieved coverage hours.
3. Determining the number of FTEs required to provide the coverage hours—
 - a. Relieved coverage hours *divided by* NAWH = FTE
 - b. Non-relieved positions expressed as 1 FTE for each full-time position
4. Calculating the “scheduling factor” to determine the number of FTEs that should be added to the budget to compensate for the inefficiency of current schedules (number of hours that more employees are deployed for relieved posts, above minimum requirements, using regular hours that are not accounted for anywhere else in the budget).

Using this methodology, the budget request is assembled as shown in Figure 1.

Once the total FTEs have been calculated, it is important to consider the right balance between coverage hours delivered by “regular hours” (full time employees working their scheduled shifts) and “overtime hours.” It is important to find the right balance between the number of employees who will be retained and the extra hours (overtime) they will be asked to work throughout the year.

Figure 1: Methodology

Element	Operation	Element	Product
1a. Total relieved coverage hours	Divided by	2. NAWH (Figure 1)	3a. FTEs needed for relieved posts/positions
1b. Non-relieved posts/positions	One FTE for each full-time position	→	3b. FTEs needed for non-relieved posts and positions
Total number of hours worked by employees above the minimum levels required for relieved posts/positions (scheduling efficiency)	Applied to NAWH from 1a produces 4. Scheduling Efficiency Factor	Added to 1a Total FTEs	Total FTEs

Summary of Findings

Figure 2 presents the findings. Each element is examined in more detail in the subsequent narrative.

Figure 2: Findings

Element	Operation		Product
1a Relieved coverage hours MCDC: 145,575 MCCF: 294,070	Divided by	2. NAWH MCDC: 1,425 MCCF: 1,455	3a. FTEs needed for relieved posts/positions MCDC: 102 MCCF: 202
1b Non-relieved posts/positions	One FTE for each full-time position	-	3b. FTEs needed for non-relieved posts and positions
Scheduling Efficiency Factors MCDC: 3.49% MCCF: 2.88%	4. Applied to FTEs for each division (1a) MCDC: 3.6 FTE MCCF: 5.8 FTE	Plus FTEs (1b) MCDC: 102 MCCF: 202	TOTAL FTEs MCDC: 105.6 FTE MCCF: 207.8 FTE

The MCDC NAWH (1,425 hours) may also be expressed as a "Shift Relief Factor" for comparison. The 1,425 NAWH translates into a 6.15 Shift Relief Factor (SRF). For every 24/7 post that is added at MCDC the county will need to provide 6.16 full-time equivalent employees.

Relieved Coverage Hours (1a.)

The minimum number of employees needed to operate each facility has been analyzed and revised in recent years. DOCR officials have found ways to reduce the number of relieved posts on some days of the week, for some shifts. Some of these efficiencies have been realized by “collapsing” posts—finding ways to get the work done at a different time, or to work more efficiently. These innovations have reduced the total number of relieved shifts each year.

The efficiencies were facilitated by the current shift configuration used at MCDC and MCCF. Employees are scheduled for 5 consecutive 8-hour days, followed by two days off. This schedule cycles (repeats) every 7 days, which makes it possible to vary the number of employees scheduled by day of the week. Minimum requirements have been established for 2013, as shown in Figure 3.

Figure 3: Minimum Shift Requirements, MCDC and MCCF, 2013

MCDC	Sunday	Monday	Tuesday	Wed.	Thursday	Friday	Saturday
1	13	13	14	14	14	14	14
2	17	20	19	19	19	20	18
3	17	18	17	17	17	18	17

MCCF	Sunday	Monday	Tuesday	Wed.	Thursday	Friday	Saturday
1	29	30	30	30	30	30	29
2	32	36	36	36	36	36	32
3	34	37	37	37	37	37	34

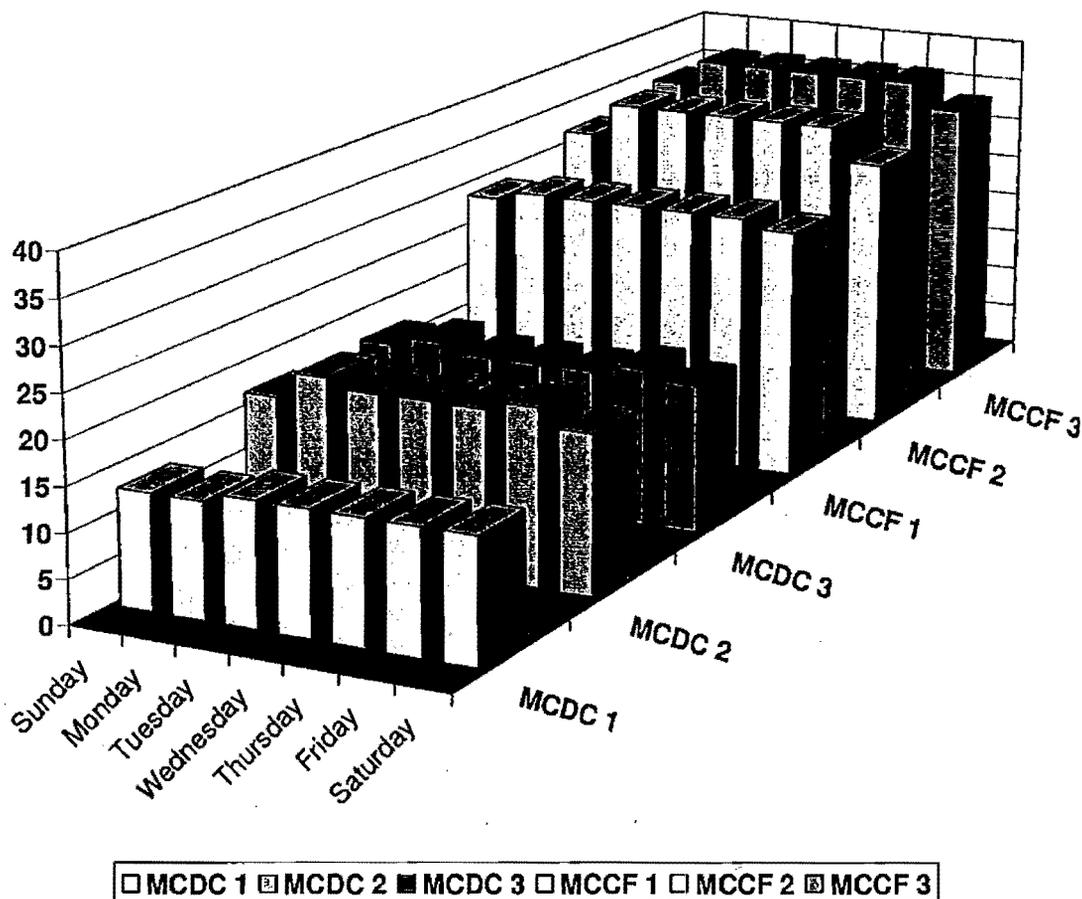
Figure 4 presents the minimum requirements in another format. illustrates the variation

Figure 4: Minimum Shift Requirements, MCDC and MCCF 2013

	MCCF Shift 1	MCCF Shift 2	MCCF Shift 3	MCDC Shift 1	MCDC Shift 2	MCDC Shift 3
Sunday	29	32	34	13	17	17
Monday	30	36	37	13	20	18
Tuesday	30	36	37	14	19	17
Wednesday	30	36	37	14	19	17
Thursday	30	36	37	14	19	17
Friday	30	36	37	14	20	18
Saturday	29	32	34	14	18	17

The 2013 minimum shift structure is illustrated in Figure 5.

Figure 5: Minimum Shift Requirements, MCDC and MCCF 2013



Coverage patterns differ significantly between MCDC and MCCF, reflecting the different populations that are housed. MCDC is responsible for receiving all incoming prisoners, while MCCF primarily houses inmates who will be held longer, including sentenced offenders.

Both facilities have significantly lower staffing levels on all weekend shifts, and on the first shift, thanks in large part to the flexibility offered by the 5/2 8-hour shift configuration.

Figure 6 shows the calculations that convert the weekly minimum shift requirements into annual relieved coverage hours.

Figure 6: From Minimum Shift Requirements to Annual Coverage Hours

SHIFT	A. Shift Per Week	B. Shifts per Year (B times 52.14 weeks/year)	C. Total Annual Hours (B. times 8 hours per shift)
MCDC			
1	96		
2	132		
3	121		
	349 Shifts/Week	18,197 Shifts/Year	145,575 Hours/ Year
MCCF			
1	208		
2	244		
3	253		
	705 Shifts/Week	36,759 Shifts/Year	294,070 Hours/Year

Non-Relieved Posts and Positions (1b)

Budgeting for non-relieved posts and positions is simple. Each position is entered into the budget as a Full-Time-Equivalent (FTE) or a fraction of an FTE.

The net hours delivered by these employees is not a budgeting concern. When employees in these positions do not report for work, there is no attempt to replace them with another employee—to provide “relieve.”

Net Annual Work Hours (NAWH) (2)

“Net Annual Work Hours” (NAWH) is a number that describes the average annual hours that each classification of employee reports for duty on a relieved post. These figures are needed to determine how many employees must be hired (gross regular hours) to “net” the required annual coverage hours.

An average correctional officer is scheduled to work 5 days per week, 52.14 weeks per year. This represents 2,086 regular hours of scheduled work for each officer per year.

According to 2011 calculations, the average CO I, CO II or CO III assigned to MCDC will report for duty on a post only 1,410 hours. Put another way, a CO will not report for duty on a post 32.4% of the times that he/she is scheduled to work.

DOCR has been calculating NAWH for several years. In 2010, CO’s worked on post 1,625 hours per year. The 2011 NAWH is 13.2% lower than the 2010 NAWH. More employees were required to fill the same number of relieved hours in 2011.

The net reduction in NAWH was the result of several factors:

- FMLA leave (4a) is now broken out as a separate category, and at the same time increased in 2011.
- New Employee Training Hours (5A) increased due to an increase in staff turnover and the first-year training that is required for new hires.
- Average Disability Hours (10) at least doubled for each classification of employee.
- 26 Hours Compensatory Leave (15) did not occur in 2010, but subtracted 14 to 19 hours from employee time on post in 2011. This was offset somewhat by the Compensatory Leave Credit for Longevity (16) in 2010.
- A new category, *Additional Hours Off Post for Details* (17) was added to the calculations.

The *Hours Off Post for Details* category identifies the average hours worked by employees to address intermittent staffing demands caused by:

- Report Writing
- Maintenance Projects
- CPU Overflow
- Temporary Assignment
- HP2
- W2-6

These events are not frequent enough to require weekly staffing, but when they occur they must be addressed immediately, usually by taking an employee off of a post and then backfilling with an employee who is brought in to supplement the shift.

It should be noted that the list of activities and factors that keep an employee from working a scheduled post is comprised of elements that:

- Benefit the employee—vacation, sick time, holidays, etc.
- Benefit the agency—training time, hours spent as trainers, details, etc.

The NAWH figures operate throughout the year, whether they are calculated or not. The effort dedicated to collecting and analyzing NAWH data helps DOCR managers to predict net hours for the coming year, bringing a much higher degree of accuracy to budget requests.

Officers assigned to MCDC have the lowest NAWH (1,410 hours). This may also be expressed as a "Shift Relief Factor" for comparison. The 1,410 NAWH translates into a 6.21 Shift Relief Factor (SRF). For every 24/7 officer post that is added at MCDC the county will need to provide 6.21 full-time equivalent employees.

Calculating FTEs (3b)

The NAWH figures represent the number of hours a full-time employee will work on post in a year. NAWH effectively defines the FTE for each classification of employee:

- *In 2011, the average CO I, II or III at MCDC worked 1,410 hours on post (NAWH)*
- *A full time officer delivered an average of 1,410 hours (FTE)*

NAWH figures are divided into the total annual relieved coverage hours to determine how many FTEs will be required to deliver the hours.

Because the coverage hours have not been divided by classification of employee (Cos and Sgts are combined), it is necessary to calculate a *weighted average NAWH* for the combined employee group. These calculations are shown in Figure 8:

Figure 8: Calculating Weighted NAWH for MCDC and MCCF

Classif. of Employee	Division	(1) FTE	(2) 2011 NAWH	(1) times (2)	Divided by Total FTE
COI-III	MCDC	72	1,410	101,520	
Sgt	MCDC	10	1,541	15,410	
Total		82		116,930	1,426 weighted NAWH
COI-III	MCCF	162	1,456	235,872	
Sgt	MCCF	34	1,437	5,748	
Total		196		241,620	1,453 weighted NAWH

Calculating the number of FTEs needed to deliver the annual coverage hours requires dividing the total hours by the weighted NAWH, as shown in Figure 9.

Figure 9: Total FTEs for Annual Coverage Hours

	Total Coverage Hours	Weighted NAWH	Total FTEs
MCDC	145,575	1,426	102.1
MCCF	294,070	1,453	202.4

Calculating Scheduling Efficiency Factor

The final step in the process examines the efficiency of current scheduling practices. To accomplish this, deployment information was analyzed to determine:

- The number of *times* more employees reported for a shift than were required
- The number of *shifts* worked by these employees

No schedule is perfect because it is impossible control the timing of unscheduled employee absences. There are times that "extra" employees report for duty. When this occurs, DOCR officials offer employees the opportunity to take a vacation day, which often reduces the number of employees to match the minimum requirements.

When extra employees work a shift they are always provided with duties, such as conducting surprise shakedowns and searches. But the regular hours used by these "extra" employees has not yet been included in the budget. To accomplish this, the deployment data is analyzed to determine a "scheduling efficiency factor" that describes the total number of employee hours that may be expected to exceed minimums. Figure 10 shows those calculations.

Figure 10: Scheduling Factor

MCDC

609	shifts over in prior year	4,872 hours over minimums	Scheduling Factor
17,449	Min. shifts	139,592 total minimum hours	3.49% (hours over divided by total hours)

MCCF

1,109	shifts over in prior year	8,872 hours over minimums	Scheduling Factor
38,561	Min. shifts	308,488 total minimum hours	2.88% (hours over divided by total hours)

These scheduling efficiency factors are applied to the FTEs that were calculated in the previous step as a *premium* that is added to the total FTE count. This is shown in Figure 11.

Figure 11: Adding the Scheduling Efficiency Factor

Division	FTEs	Sched. Efflc. Factor	Additional FTEs (FTEs times Factor)	Total FTEs (FTEs plus Add'l FTEs)
MCDC	102.1	3.49%	3.6	105.7
MCCF	202.4	2.88%	5.8	208.2

The Bottom Line

While the number of posts have been trimmed and total relieved coverage hours has decreased, the number of FTEs needed provide coverage increased markedly because the average FTE delivers fewer hours on post each year. Figure 12 summarizes the bottom line for relieved posts and positions.

Figure 12: Weighted NAWH and FTEs, 2010 and 2011

	2010 NAWH	2011 NAWH	2010 FTE	2011 FTE	Net Increase
MCDC	1,628 hours	1,426 hours	82 FTE	102.1 FTE	20.1 FTE
MCCF	1,586 hours	1,453 hours	196 FTE	202.4 FTE	6.4 FTE

Conclusions

The staffing analysis process requires a lot of work, but it produces a degree of budgeting accuracy that is not possible any other way.

All of the forces and factors that are analyzed in the staffing analysis process will occur in the coming year. Failing to make an accurate prediction of these forces increases the likelihood of unexpected expenses during the budget year.

The process also offers the opportunity to focus on each element in an effort to find additional efficiencies, such as reducing sick leave (NAWH) or improving scheduling efficiency.

POLICE RESPONSES

1. Please provide a status update on the new DCAT teams. Have any been created? Or is this initiative still waiting for the first graduating candidate class? What is your projected timeline for full implementation?

The DCAT teams are on track as planned. We are currently in the formation planning stage. We will approach the union in January to negotiate the structure of the new teams. Due to the number of officers needed, it is necessary to implement three teams after the current POC's complete their field training, which is anticipated to be June 2013. Those teams will be placed in 3D, 4D, and 6D (subject to approval of the Chief), due to crime trends and workload. The other three teams (2D, 5D, 6D) will be implemented after the next rookie class completes their field training. That is anticipated to be December 2013. The loss of POC's during the academy combined with attrition will limit the initial three teams to a sergeant, corporal and three police officers. Two officers will be assigned temps as staffing allows. We are planning to finish staffing those teams in December 2013 when the last three teams are implemented. We expect full implementation by January 2014

In the interim until the final three teams are established. We will have the 5th district use the 6th district team to address their needs, and the 1st and 2nd district will use the current PCAT which will remain in place.

Please describe any challenges you have had implementing these new positions, if any.

The challenges to creating the DCAT are twofold. First the formation of the unit needs to be negotiated with Lodge 35. This will be accomplished but the process takes time and we must generally adhere to what has been established in the contract. Second, the loss of POC's affects our ability to staff the teams right away. Due to attrition our staffing is down many officers. We must ensure that basic police services are handled first. The number of officers assigned to the teams in the short term may be affected if there are further POC losses in either academy class.

We currently plan to staff each team with a sgt, cpl, and 5 officers

2. Please provide a status update on the addition of 7 new detectives. Are these new positions filled? What impact are they having on case closures?

– these positions don't start until this class gets out of FTO. In approx 4 to 5 months they will start

3. Please provide a status update on the ECC's transition to a universal call-taking system.

Overall: The UCT program transition has been delayed due to difficulties in the implementation of the call taking protocol system due to software issues. Options around this are currently being explored. It is very likely the transition will not be complete by June 30, 2013.

Personnel: All new positions have been filled or will be filled by May 2013. Call taker positions have been reviewed and re-designated within police department as Universal Call Takers. Specialist and Supervisor/Manager positions still need to be submitted to OHR for review.

Facility: AECC -- Design work complete. Permits are being obtained. PSCC -- Modifications associated with Administrative positions complete. Modifications to Operations Floor are tied to PSCC lease renovations. Currently in design phase.

Equipment: Phone and CAD equipment being procured.

Training: On hold, pending outcome of implementation of call taking protocol decisions