

*Final Draft*

**Pre-Release Center (PRC) Staffing Analysis**

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## **Introduction**

This report describes the work that has been accomplished by a team of Montgomery County Department of Corrections and Rehabilitation (MCDOCR) employees, with the assistance of a consultant<sup>1</sup>. Their efforts have applied the staffing analysis methodology developed and promoted by the National Institute of Corrections (NIC)<sup>2</sup>.

The methodology described in NIC's *Workbook* involves 10 sequential steps:

### **The NIC Staffing Analysis Process**

- *Step 1. Profile the Jail*--describing the context in which staffing occurs
- *Step 2. Calculate Net Annual Work Hours*-- understanding how many hours we really derive from each full time position (called “workyear” in Montgomery County), and ensuring the budget math is correct
- *Step 3. Develop a Facility Activity Schedule*-- examining hour-to-hour levels of activity in the jail and identifying opportunities for new efficiencies
- *Step 4. Develop the Staff Coverage Plan*-- determining what type of staff are needed, where, and when
- *Step 5. Complete a Staff Summary*-- taking a first look at the level of staffing that is implied by the previous steps
- *Step 6. Develop a Schedule*-- finding efficient and effective ways to deploy staff to meet coverage needs
- *Step 7. Evaluate, Revise, and Improve the Plan*-- identifying deficiencies in the plan before it is implemented and making adjustments in previous work products
- *Step 8. Calculate Operational Costs*-- asking for the right amount of resources by converting staffing plans into precise budget estimates
- *Step 9. Prepare a Report*-- documenting findings
- *Step 10. Implement the Plan and Monitor the Results*-- continuously assessing the plan as it is implemented and making adjustments as needed

The Department first adopted elements of the NIC process three years. Initial work focused on Step 2, the calculation of Net Annual Work Hours (NAWH) for the Montgomery County Correctional Facility (MCCF) and the Montgomery County

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<sup>1</sup> Rod Miller, CRS Incorporated (Community Resource Services), Gettysburg, PA. [www.correction.org](http://www.correction.org). CRS was incorporated in 1972 as a non-profit organization.

<sup>2</sup> *NIC Staffing Analysis Workbook for Jails*, First and Second Editions. Miller, Rod and Dennis Liebert. National Institute of Corrections, 1987 and 2001.

Detention Center (MCDC). In the past year, the Department has expanded the scope of its staffing analysis efforts to include the first six steps of the NIC process, first at the Pre-Release Center (PRC) and concurrently with the health services unit.

This report describes the findings and conclusions pertaining to the operations and staffing of the Pre-Release Center. Please note that our work with the schedule (Step 6) was constrained by the pending arbitration decision.

The following pages describe findings associated with each step of the staffing analysis process. An appendix provide additional detail.

### **Step 1: Profiling the Setting**

Staffing practices respond to the unique physical, technical and operational settings in which services are provided. Describing the characteristics of the setting provides the starting point for any comprehensive staffing analysis.

The Pre-Release Center (PRC) was one of the earliest residential facilities of its kind. PRC continues to innovate and has enjoyed renewed attention as concept of “reentry” has gained support at the local and national level.

The characteristics of residents who are housed at the Pre-Release Center have changed over the past 20 years. PRC officials recently compared past and current resident characteristics and discovered that the current resident population presents more challenges. More recently, PRC occupancy has increased sharply, mirroring the overall increase in the MCDOCR population.

During Step 1 it is also important to identify the many ways in which the context has changed in recent years, and ways that it might change in the future. PRC staff identified the following elements of the context that have changed or that are expected to change:

- Resident population
- Standards (newest standards are in the performance-based format)
- Laws and caselaw
- Contracts/contractors
- Facilities (aging facilities and systems pose increasing difficulties)
- Union contract
- New county executive and council
- Economy, cost of living
- County demographics

Security is an emerging area of concern voiced by staff and their union. Because the PRC facility was never intended to provide a physically-secure setting, the use of equipment (such as fences) and technology (such as video surveillance) has been expanded. Staffing needs are also being reconsidered.

**Step 2: Calculating Net Annual Work Hours**

Figure 1 presents our calculations for NAWH-- the average number of hours that a Resident Supervisor is *actually* available to work on his/her post.

**Figure 1: Net Annual Work Hour Calculations for Resident Supervisors (RS)**

Category	Description	PRC-RS
		2005
1	<b>TOTAL HOURS</b> contracted annually	<b>2086</b>
	<b>HOURS OFF</b>	
2	Average Vacation Hours (see notes)	103.1
3	Average Compensatory Hours	37.3
4	Average Sick Leave Hrs (projected, recent experience)	36.2
5A	Required Training Hours (see notes) (mandated)	98
5B	Average Trainer Hours (staff <i>servicing as</i> trainers)	0
6	Personal Leave Hours (CLE, PER)	7.5
7	Average Military Hours (Active)	5.3
8	Average Medical Exam Hours	3
9	Admin 2 (AD2) Union Business	2.5
10A	Admin 5 (AD5) Temp. Disability Pending	0
10B	Average Disability Hours (DAL) Uncontested Disability	52
11	Administrative (AML) incl. Court, bereavement, military (reserve)	2.1
12	Leave W/Out Pay (LWOP)	0
***	PIL	4.2
13	Holidays	72
14	<b>TOTAL HOURS OFF-POST per employee per year</b>	<b>423.2</b>
15	<b>NET ANNUAL WORK HOURS</b> (Line 1 minus Line 14)	<b>1662.8</b>
16	NAWH expressed as a "relief factor" (for reference)	5.27

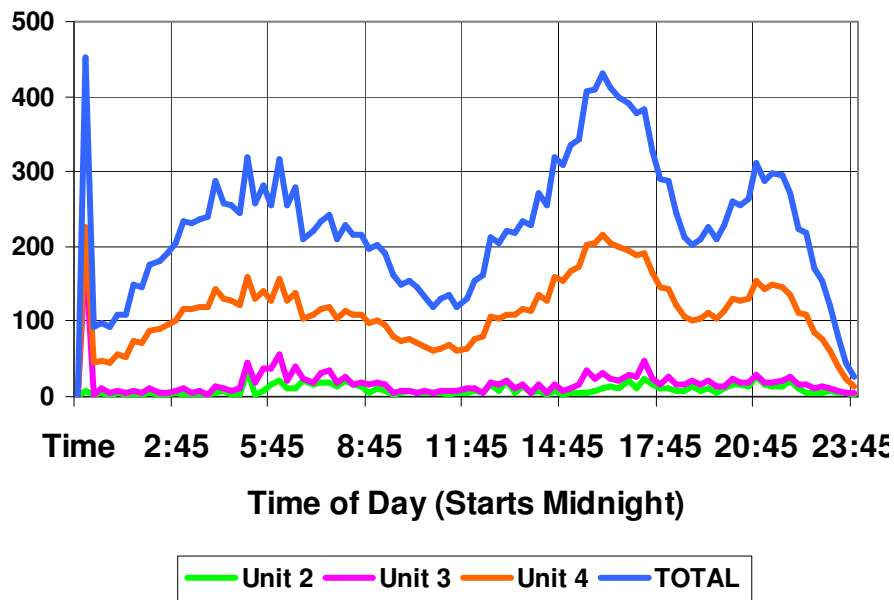
The NAWH figure represents a “full-time equivalent” (FTE) for the Resident Supervisor classification of staff. In Montgomery County, an FTE is often referred to as a “workyear.” One full-time RS will yield 1,662.8 *scheduled* hours on his/her post. By comparison, a correctional officer (CO) at MCDC will be available for only 1,534 scheduled hours. The difference between the NAWH for RS and CO’s is primarily explained by a higher level of sick leave and disability at MCDC.

The 423.2 hours that Resident Supervisors are paid but are not available to be scheduled for a post, represent 20.3% of the total annual hours (2,086 hours) for which they are paid. In other words, for one of every five days a staff member is scheduled, he/she will not be available to work his/her post. These figures are crucial to ensure that budget allocations are sufficient to provide full-time staff *and* to make provisions for part-time staff and overtime to fill vacancies in schedules.

### **Step 3: Activity Schedules**

The next step in the staffing analysis process examined the ebb and flow of activities in the facility, 24-hours daily, for each day of the week. Several PRC Resident Supervisors completed detailed activity sheets that provided a starting point. Figure 2 shows the initial findings from the activity sheets for PRC.

**Figure 2: Preliminary Activity Levels for PRC**



The activity level data collection effort was somewhat inconsistent, but the results are sufficient to suggest the ebb and flow of activity levels at PRC.

The work associated with Step 3 provoked PRC managers to reconsider the manner in which some services are delivered, such as the collection of drug tests and supervision of the front entry. Several enhancements and efficiencies are incorporated into the coverage needs developed in Step 4. By finding ways to “work smarter” efficiencies are realized.

The process of identifying *current* activities set the stage for developing a revised approach to “covering” the facility and its operations in Step 4.

#### **Step 4: Determining Coverage Levels**

This step requires participants to “think outside of the schedule.” We become so fixated on how we currently schedule staff, that it is difficult to step back and look at what our actual needs are-- hour by hour, day by day. PRC managers embraced this approach and seized the opportunity to consider staff coverage needs with a new eye.

A coverage plan identifies the *minimum* levels of staffing needed for the facility under the current conditions and operations. The coverage plan:

- Establishes the number and type of staff needed to safety and effectively operate the facility
- For each hour of the day, and
- Each day of the week.

The plan was developed by examining each post and activity and identifying the *exact* number of hours of coverage needed for each day of the week. This process demands that managers ignore current and potential staff schedules, and focus solely on the actual hours of coverage needed. When finished, the coverage plan becomes the foundation on which staff schedules may be evaluated and improved.

Managers were encouraged not only to “think outside of the schedule,” but also to identify changes in policies, procedures and practices that would be more effective and efficient, and that would enhance safety.

Managers used a new form to design coverage plans that were ideal, without considering scheduling constraints. It is hard to make a schedule fit the needs if the needs are not clearly depicted.

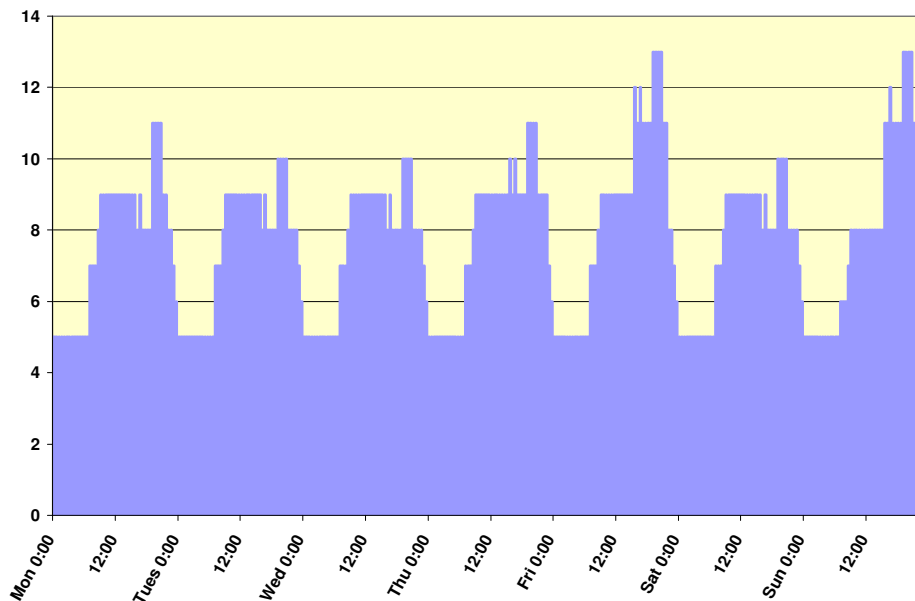
The coverage plan introduces several changes in current practices, including:

1. The collection of urine samples from residents, former residents, and offenders referred by the court, will be accomplished by a single staff member rather than asking Resident Supervisors from various units to be involved. This will reduce movement of non-residents into the facility.

2. Coverage of the entry post has been increased substantially to improve security by limiting unauthorized and unmonitored entry into the facility.
3. Seeking full-time supervision for staff (not shown on coverage chart).

The initial results of their efforts are depicted in Figure 3 for a full week, beginning Monday. The more detailed worksheet is presented in Appendix A.

**Figure 3: Coverage Levels, 7 days beginning Monday**



In the process of developing the coverage plan, changes in the following practices were considered and adopted:

- Drug testing (how tests are supervised and when they are conducted)
- Front Desk operation (creating a fixed post that will be staffed whenever the front door is unlocked)
- Increasing staffing for “verification,” ensuring that site visits may be made as needed
- Providing 24-hour supervision for staff.

The last point deserves elaboration. The team concluded that full-time supervision must be provided to enhance the safety and security of the facility. A supervisor should be provided at all times, and he/she should not be tied to a post, nor expected to assume any

routine line duties (such as relieving staff for breaks.) Rather, the supervisor must be able to move throughout the facility, observing staff as they perform their duties, evaluating performance, delivering training as needed, and responding to emergencies. The classification of this proposed new position needs to be determined.

### **Step 5: Complete a Staff Summary**

The fifth step in the process involves stepping back for a reality check. In some jurisdictions, the coverage step produces levels of staffing that are simply not economically feasible. By translating the coverage hours into Full-Time Equivalents (FTE) it is possible to compare the level of staffing suggested by coverage levels to the amounts in the current budget. A quick review of the coverage hours associated with Step 4 suggested a substantial increase in RS staffing levels.

### **Step 6: Schedules**

Whether the Department has the authority to change staff schedules without union permission is the subject of pending arbitration. A decision has not been issued as of the date of this report. Hopefully, the outcome will provide the basis for the development of new efficiencies in schedules, for the benefit of all parties.

Ideally, a schedule is a means to an end. A good schedule efficiently assigns individual staff to posts and positions in a manner that closely corresponds to coverage needs. That is why it is important to clearly establish coverage needs *before* attempting to create a schedule.

For the purpose of this report, we must assume that schedules are fixed and may be not be revised. If this is the case, the challenge will be to find ways to make better use of the hours that are currently scheduled.

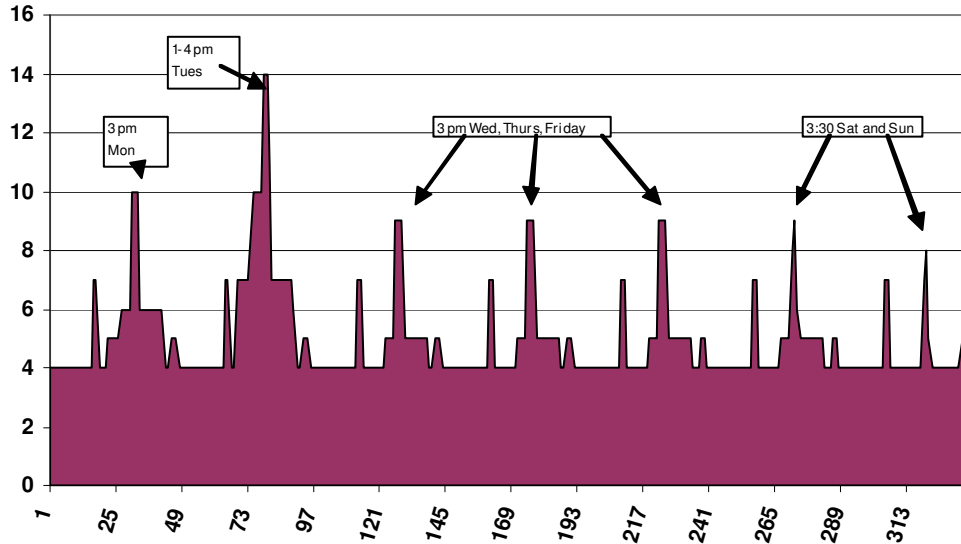
Using the results from Step 4 (coverage), we may evaluate the current schedule in terms of:

- Effectiveness-- does the schedule assign staff at all of the times they are needed?
- Efficiency-- does the schedule minimize the number of hours that staff are assigned when the coverage plan suggests they are not needed?

Figure 4 shows the number of hours scheduled by day for a one-week period. It demonstrates the somewhat unique characteristics of the current schedule, including the provision of large numbers of staff for very short periods on selected days. While the current schedule was not designed to fit coverage needs, it does show that a schedule has the ability to create short-term peaks.



**Figure 4: Current PRC Resident Supervisor Schedule**



The current PRC schedule for Resident Supervisors is unusual in many regards, including the basic shift structure for many of the posts (10-hour work days). When the current schedule is transposed into a time-series chart, the results show the number of Resident Supervisors who are scheduled to work each of the day.

Comparing Scheduled Hours to Coverage Needs

Another way to analyze the current schedule is to use the coverage levels from Step 4. These provide an indication of the levels of staff that are needed during a 24-hour day. Figure 5 compares coverage needs (Step 4) to current scheduled staff hours.

**Figure 5: Coverage Needs vs. Scheduled Hours**

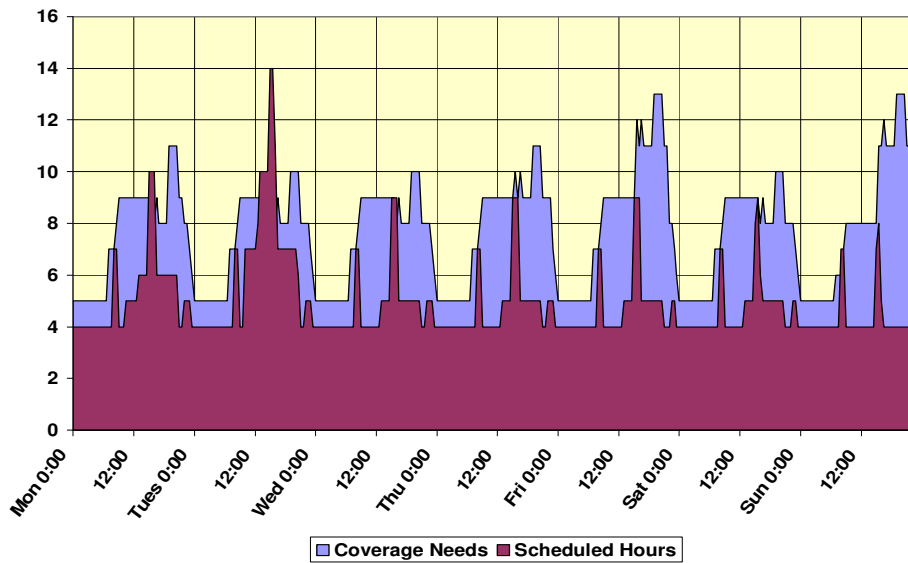


Figure 5 shows that the current schedule:

- Matches coverage needs for 6.5 hours weekly
- Exceeds coverage needs for 5.5 hours weekly<sup>3</sup>
- Falls short of coverage needs for 156 hours weekly

The net difference between the Resident Supervisor hours deployed through the current schedule (833 hours per week) and minimum coverage needs (1,297 hours) suggests that the magnitude of shortfall (464 hours, or 55.7%) poses serious safety and security concerns.

### **Doing the Math to Inform the Budget**

Figure 6 shows the calculations that convert proposed coverage levels into Full-Time Equivalent (FTE) items in the budget.

**Figure 6: FTE (Workyear) Calculations for Resident Supervisors**

Number of coverage hours in 7-days	1,297.....	hours in one week
<b>Times</b> 52.14 (number of weeks in a year)	67,625.....	annual hours needed to fill coverage needs
<b>Divided by</b> 1,662.8 (NAWH for this class of staff)	40.7.....	FTEs or Workyears needed in budget

The 40.7 FTE (workyears) does *not* mean that there should be 40.7 full-time *positions* in the budget for Resident Supervisors. Rather, it means that budget allocations for the following categories must add up to 40.7 FTEs:

- Full-time staff
- Part-time staff
- Overtime

Also, the preceding calculations are based on coverage needs, *not* scheduled hours. Once the arbitration decision has been issued, it will be necessary to revisit the current schedule in order to find the most efficient ways to work toward coverage needs.

<sup>3</sup> The schedule exceeds coverage needs on Monday 15:00 to 16:30, Tuesday 13:00 to 16:00, Wednesday 16:00, and Sunday 08:00.

Figure 7 provides a formula that may be used to evaluate the sufficiency of the current budget, or proposed budgets.

**Figure 7: Worksheet to Test Adequacy of Budget Allocations**

	<b>1. Allocation</b>	<b>2. Function</b>	<b>3. Numerator/ Denominator</b>	<b>4. Product</b>
A	Full-time staff (number of positions in the budget)	Times	NAWH (1662.8)	Hours funded for full-time staff
B	Part-time staff budget allocation	Divided by	Average cost per hour for part-time staff	Hours funded for part-time staff
C	Budget for overtime	Divided by	Average cost per hour for overtime	Hours funded for overtime
F	<b>The sum of A4 + B4 + C4 <i>should</i> equal the total number of annual hours called for in the coverage plan (67,625 hours)</b>			

### Summary

Each of the steps in the staffing analysis process produced important findings:

- Step 1 (Profile) described the complexity and evolving characteristics of the current context in which PRC operates.
- Step 2 (NAWH) concluded that a full-time Resident Supervisor (RS) will actually deliver 1,662.8 hours on his/her post each year.
- Step 3 (Activities) revealed marked variations in the level of activities each day and provided the foundation for changing current practices to improve efficiency and to “work smarter.”
- Step 4 (Coverage) showed that staffing needs vary significantly from hour-to-hour and from day to day-- and often do not correspond to the current schedule.
- Step 5 (Initial Summary) showed that levels of staffing are substantially lower than the need for coverage suggests (464 hours short per week).
- Step 6 (Schedule) provided the basis to evaluate the current schedule, and it was found to be lacking in many ways.

- Doing the “math” concluded that minimum coverage needs will require additional budget allocations.

Note: The preceding analysis addressed staff posts and positions that were *relieved* (e.g. the post/position is always filled, even if the primary staff member assigned to it is absent.) In addition to these relieved posts/positions, there are several non-relieved positions at PRC. Each of these non-relieved positions represents one FTE for budget purposes.

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**Appendix:**

A. Coverage Worksheet and Notes

**APPENDIX A: Coverage Plan Worksheet and Notes**

The chart below provides a summary of the proposed coverage plan, identifying each post or assignment, the classification of staff to be assigned, the actual hours of operations and the days of the week to be staff. Each line of the chart describes a unique post of task, not a “staff position.” This process demands identifying the actual hours associated with the task, allowing tasks to be grouped into posts and assignments in later stages of the staffing analysis. The chart is drawn from an Excel spreadsheet that was developed by the National Institute of Corrections (NIC) as a component of its innovative staffing analysis methodology.

**Coverage Plan (Form C, Staffing Analysis Workbook)**

<b>CODE [#] refers to notes</b>	<b>Description of post or activity</b>	<b>Job Clas s</b>	<b>Actual times of Coverage</b>	<b>Hours per Day</b>	<b>Number of Days Per Week</b>	<b>Which Days of the Week</b>	<b>Number of Hours Per Week</b>	<b>Hours of Cover. Per Year</b>
U1[1]	Unit 1	RS	24 hours	24	7	all	168	8,760
U2	Unit 2	RS	24 hours	24	7	all	168	8,760
U3	Unit 3	RS	24 hours	24	7	all	168	8,760
U4	Unit 4	RS	24 hours	24	7	all	168	8,760
CD[2]	Control Desk (front door)	RS	24 hours	24	7	all	168	8,760
HC	Home Confinement	RS	07:00 - 24:00	17	7	all	119	6,205
MNT[3]	Maintenance/Flo ater	RS	07:00 - 16:00	9	6	Not Su	54	2816
DT[4]	Drug Test (urine drops)	RS	16:30 - 23:30	7	7	all	49	2,555
FL[5]	Floater (In Central)	RS	08:30 - 17:00	8.5	7	all	59.5	3,102
V1[6]	Visiting 1 (Rover)	RS	19:00 - 21:00	2	7	all	14	730
V2	Visiting 2 (Rover)	RS	19:00 - 21:00	2	7	all	14	730
V3	Visiting 3- property (Mon Only)	RS	19:00 - 22:00	3	1	Mon	3	156
U2-2	Unit 2 Second RS	RS	15:30 - 22:00	6.5	2	F, Su	13	678
U3-2	Unit 3 Second RS	RS	15:30 - 22:00	6.5	2	F, Su	13	678
U4-2	Unit 4 Second RS	RS	15:30 - 22:00	6.5	2	F, Su	13	678
Fed	Fed Night	RS	15:30 - 23:00	7.5	1	Thu	7.5	391
Ver	Verification RS (incl site visits)	RS	09:00 - 23:00	14	7	all	98	5110
	<b>TOTALS</b>						<b>1,297 hours</b>	<b>76,385 hours</b>

References notes from Figure 1.

- [1] Unit 1 Post becomes full time. When count is low in Unit 1, various tasks and duties are imported. These will be specific and prioritized in policies, procedures and post orders.
- [2] The front desk becomes a full-time post. Whenever the front door is unlocked, the RS assigned to this post must remain at the desk. During the few early morning hours that the front door is locked, the RS will supervise cleaning activities and be involved in other tasks, but will respond to all requests to open the front doors.
- [3] The maintenance liaison post moves throughout the facility to assist outside workers with repairs and maintenance and to implements other tasks as time allows, including perimeter checks, escorts, and relief.
- [4] The drug test post reflects a substantial change in the current practices, centralizing this activity and moving it toward the front of the facility (thereby limiting movement into the facility.) The courts will be asked (very politely) to change their orders in order to have offenders report for drug testing after 3 pm.
- [5] The “floater” is an additional RS to help with transports, social security runs, escorts, perimeter checks, breaks and relief, and other tasks.
- [6] On Sundays the visiting posts assists with meetings, which occur at the same times as visits on the other 6 days.

In addition to the preceding notes, the following comments might help clarify the assumptions and strategies associated with this coverage plan:

- Residents’ property- consider changing limits and types allowed, accept and receipt it at front desk area, hold it up front until checked, then deliver to resident. Try to secure a signed receipt describing the contents from person who drops off.
- Interns must not be considered coverage. They offer adjunct assistance and support. They make it possible to enhance operations, such as chaperoning community trips and recreation activities.
- Once the front desk is staffed full time (when the front door is unlocked) the employee will also be able to keep track of meetings and activities in the facility and direct visitors to them.
- The employee contract should be reviewed to clarify requirements for breaks and relief. Many posts in the PRC are able to take breaks without having a replacement. The most problematic time is during the midnight hours when there is no case manager to relieve unit staff.

- Schedules needs to be mindful of gender issues to ensure adequate female staff presence at all times.
- Room searches may be conducted when the schedule assigns more than coverage needs to a shift.
- The schedule should make provisions for the RS team members (or at least 3 of 5 assigned to a team) to meet for 1-2 hours every other week.
- Unit shakedowns should be conducted at least monthly, and require a much higher level of staffing for a relatively short period. If the schedule cannot be designed to accommodate this, it may have to be staffed using overtime.
- An overlap of at least 30 minutes should be built into any schedule to provide the opportunity for staff who are leaving to brief staff who are assuming a post.