

Think Outside the Schedule: Determine Coverage Needs

By Rod Miller, founder of CRS, a nonprofit organization created in 1972 to provide research, planning and publications for detention and corrections, and John Wetzel, warden of Franklin County Jail in Chambersburg, PA

This is the fifth of a series on staffing of jails. The articles explore the jail staffing analysis methodology developed by the National Institute of Corrections and enhancements that have been developed since NIC's latest workbook was published. The first four articles addressed the calculation of "Net Annual Work Hours," the development of a "Facility Activity Schedule," and "Using Participation and Profiling to Improve Jail Staffing." This article examines the process of determining staff coverage needs.

In many jails, the tail is wagging the dog. Staff *schedules* have evolved and have been given priority to the point that the underlying staffing *needs* are sometimes not being met. More often, schedules provide significantly more staff than are actually needed a various times, placing a strain on budgets and staff. In a perfect world (which of course none of us live in), *needs* are identified and then *staff schedules* are devised to respond efficiently to the needs. Absent that perfect world, we challenge you to look at your needs, separate from your current staff schedule.

This series of articles builds on the groundbreaking staffing analysis methodology created by the National Institute of Corrections (NIC) and describes many enhancements developed since the NIC *Workbook*¹ was last revised.

The methodology developed by NIC promotes a proactive and creative approach that has proven successful in counties of all sizes. In previous articles we have addressed the first three steps that comprise the 10-step methodology created by NIC:

- *Step 1. Profile the Jail*
- *Step 2. Calculate Net Annual Work Hours (first and second articles)*
- *Step 3. Develop a Facility Activity Schedule (third article)*
- *Step 4. Develop the Staff Coverage Plan*
- *Step 5. Complete a Staff Summary*
- *Step 6. Develop a Schedule*
- *Step 7. Evaluate, Revise, and Improve the Plan*
- *Step 8. Calculate Operational Costs*
- *Step 9. Prepare a Report*
- *Step 10. Implement the Plan and Monitor the Results*

¹ **Staffing Analysis Workbook for Jails**, First Edition. Rod Miller and Dennis Liebert. National Institute of Corrections, Washington D.C. 1987. Second Edition published in 2003.

The fourth step in the staffing analysis process focuses on the actual needs for staff at each hour of the day. Throughout this step you must attempt to ignore current staff schedules and examine:

- what type of staff members are needed
- when (exact hours of need and days of the week)
- where (location in the facility)

A reminder about this process. Although it is comprised of a series of steps, you will often find it advisable to take a step or two backward to fix a problem that you discover in a subsequent step. In this coverage step, you will likely identify additional improvements and efficiencies in your daily operations. A “spike” in the coverage chart might suggest another refinement in your daily activities plan (Step 3). Similarly, coverage irregularities may prompt you to go back and reconsider some of your underlying policies, procedures and practices that were identified in Step 1. Remember that you control many aspects of the jail’s daily operations, and you should exercise this authority to “work smarter.”

Form C from the *Workbook* provides a useful tool for developing a coverage plan. The version of Form C that was presented in the Second Edition has been significantly improved as it has been applied in various facilities. Several enhancements were created by a group of jail administrators who participated in an NIC-sponsored staffing analysis training event in Phoenix.

To accomplish this step, you will use the materials and insights that you assembled in Step 1 (profile of the facility including facility layouts, mission and such), Step 2 (Net Annual Work Hours) and Step 3 (facility activities).

Have a copy of the facility floor plan in front of you when you start to draft Form C. In the first column (A) of the form you will record an identifying code, and then you will mark the location of the corresponding activity on the floor plan. Describe the activity (or post) in Column B.

Create a new line for each new activity and for each block of time associated with an activity. Note that in the sample in Figure 1, there are three lines for “staff breaks and relief” because there are three different blocks of time associated with this activity.

Column C identifies the classification of staff who will be assigned to each activity, such as Correctional Officer 1 (CO1) or sergeant. Describe the actual hours for which coverage is needed in Column D, and be sure to record only the needs-- not what might be currently scheduled. Column E reports the number of hours per day for each activity, and the number of days per week is shown in Column F. If you are using the Excel forms that are available, Columns G (total hours per week) and H (total hours per year) will be automatically calculated.

Figure 1: Sample of Coverage Form

Sample of FORM C: Coverage Needs								
A	B	C	D	E	F	G	H	I
CODE (for each post or position)	Enter each post or position, by function, in a line below (describe each)	Job Class	Hours of Coverage (e.g. 0730 to 1130)	Hours per Day	No. of Days per Week (1 to 7)	No. of Hours per Week (E x F)	No. of Hours of Coverage per Year (G x 52.14)	Is this post/posit. relieved? (Y / N)
1	Master Control	CO2	0000 to 2400	24	7	168	8760	Y
2	Housing Sub Control A	CO1	0530 to 2300	17.5	7	122.5	6387	Y
3	Housing Sub Control B	CO1	0530 to 2300	17.5	7	122.5	6387	Y
4	Intake and Booking Supr	Sgt	0000 to 2400	24	7	168	8760	Y
5	Intake/Booking Officer 1	CO1	0500 to 1700	14	5	70	3650	Y
6	Int/Book Off 2 (weekend)	CO1	0000 to 1800	18	2	36	1877	Y
7	Classification Director	Lt		8	5	40	2086	N
8	Classification Officer	CO2	0800 to 0400	8	7	56	2920	Y
9	Exercise/Rec Officer	CO2	0900 to 0300	6	6	36	1877	Y
10	Housing Pod A1 Officer	CO1	0000 to 2400	24	7	168	8760	Y
11	Housing Pod A2 Officer	CO1	0600 to 2300	17	7	119	6205	Y
12	Housing Pod A3 Officer	CO1	0600 to 2300	17	7	119	6205	Y
13	Housing Pod B1 Officer	CO1	0000 to 2400	24	7	168	8760	Y
14	Housing Pod B2 Officer	CO2	0600 to 2300	17	7	119	6205	Y
15	Housing Unit Manager	Lt		8	5	40	2086	N
16	Jail Administrator	Capt		8	5	40	2086	N
17	Rover/Escort	CO1	0000 to 2400	24	7	168	8760	Y
18	Rover/Escort #2	CO1	0530 to 2400	18	7	126	6570	Y
19	Property Manager	Sgt		8	5	40	2086	N
20	Records and Backup	CO1	2130 to 1000	12	7	84	4380	Y
21	Visiting and Programs	CO1	0930 to 2230	13	6	78	4067	Y
22	Staff Breaks and Relief	CO1	1100 to 1330	2.5	7	17.5	912	Y
23	Staff Breaks and Relief	CO1	1630 to 1900	2.5	7	17.5	912	Y
24	Staff Breaks and Relief	CO1	0430 to 0630	2	7	14	730	Y
25	Court Escort #1	CO1	0600 to 1600	10	5	50	2607	Y
26	Court Escort #2	CO1	0700 to 1700	10	5	50	2607	y

Column I is used to identify whether the activity is relieved or not. If the activity is always implemented, even when staff might be on vacation or out sick, it is considered relieved. Another way to determine if relief is required is to ask “if the person who is usually assigned to that activity or position does not report for work, does someone else take his/her place?” Many administrative positions are not relieved. Some lower-level positions are also not relieved. By identifying whether relief is provided, the calculation of Full-Time-Equivalent (FTE) staffing needs is facilitated.

The remaining columns in Form C are use to record annual hours for relieved activities, according to their staff classification (Columns J through N) and the number of FTE

positions for non-relieved activities (Columns O through S). At the bottom of the form, the Excel program will automatically total the number of annual hours and FTE's. When you enter the corresponding Net Annual Work Hours (NAWH) in the space at the bottom, the number of FTE's will be calculated.

Form C contains a wealth of information, but this is just a starting point. Figure 2 displays the information in columns A through I in a graphic format.

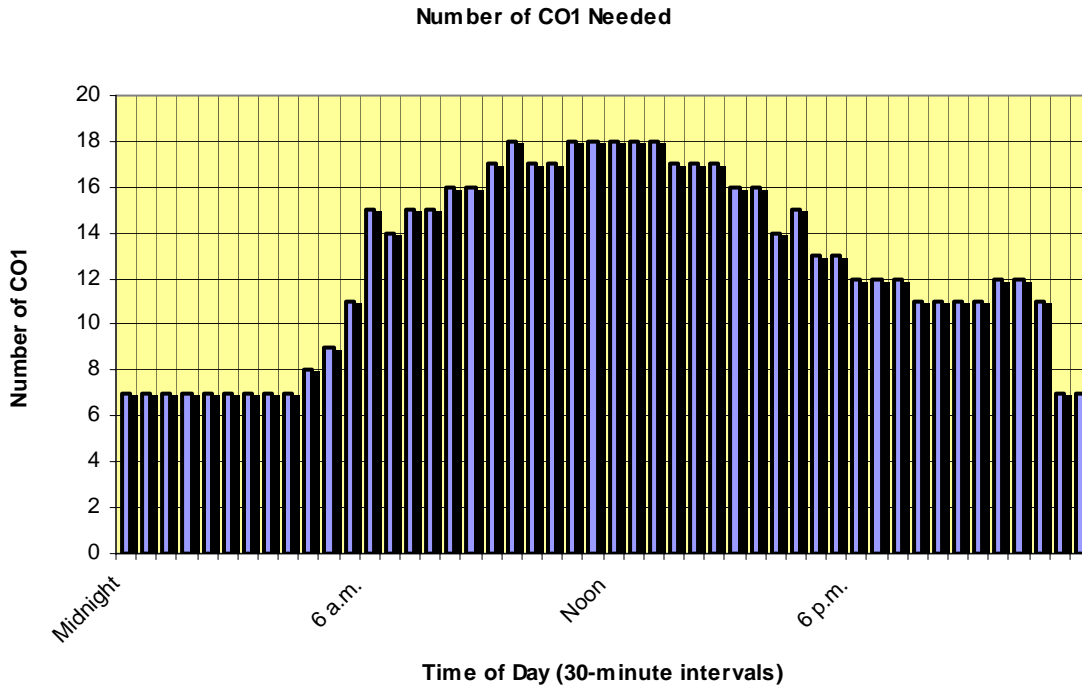
Figure 2: Coverage Worksheet (Form C)

By shading the hours that correspond to each activity, a graphic image is constructed. By entering the number “1” in each shaded cell, it is possible to calculate the total number of staff for each classification at the bottom of the worksheet. Note that a new worksheet should be developed for each classification of staff.

By taking the totals at the bottom of the worksheet, a chart may be created that shows the ebb and flow of coverage needs for each classification of staff, as shown in Figure 3.

Figure 3 offers an important tool that will be used in Step 6 (scheduling). The chart shows how much staff are actually needed, for each half-hour period of a twenty-four hour day. More important, these coverage needs have been developed by examining the activities and tasks associated with daily jail operation, and have not been influenced by scheduling considerations.

Figure 3: Graph of Coverage Levels



A note about schedules is in order at this point. Try to think of schedules as a means to an end. Schedules allocate individual staff members to specific time periods and days of the week. Coverage needs, as described here, represent what is really needed in the jail at a given time. An efficient schedule will assign the right numbers and types of staff to correspond with coverage needs, with a minimum amount of “slippage.” While some of us struggle to get enough staff, and really have no control of how much staff we are allocated, we *are* in control of how we use our personnel. Think of this coverage activity as a tool that might help you increase the effectiveness of your current resources--a tool to help you work smarter with what you already have.

It is at this point that we bring back a technique that was introduced in the First Edition of the *Workbook*. By calculating the number of coverage hours for each classification of staff, we create a benchmark from which the efficiencies of schedules may be evaluated. In Step 6 you will be calculating the number of *scheduled* hours, and comparing it to coverage needs. Invariably, there will be more scheduled hours than coverage hours, but the objective is to bring these two numbers as close together as possible. An efficient schedule might require only a few percent more scheduled hours than coverage needs. At the other extreme, we have seen schedules that call for nearly 30 percent more scheduled hours than coverage needs demand.

Developing an initial staff coverage plan is a trial-and-error process, so be patient and persistent. Make a first attempt, step back and review the results, and then try to find improvements. Be sure to identify all of the tasks and activities that need to be addressed. The *Workbooks* provide some helpful tools to remind you of the range of issues to be

considered. These and other tools are available at a new on-line staffing analysis clearinghouse, located at www.StaffingAnalysis.com.

Determining Minimum Coverage Needs.

Figure 3 shows the fluctuation in the number of staff needed to operate the facility for a 24-hour day. You will note that the lowest number of staff (7) occurs late and night into the early morning, essentially when inmates are locked down for the night. It makes sense that coverage needs would fall substantially when inmates are confined to their cells for the night.

You will need to evaluate the adequacy of this “minimum staffing level” to be sure that enough staff are available to handle the tasks, activities, and unplanned contingencies that are constant throughout each day and night, seven days each week. These include but are not limited to:

- Implementing ongoing prisoner supervision (15-, 30- and 60-minute checks)
- Admitting new prisoners
- Releasing prisoners
- Supervising and controlling prisoner movement
- Providing “backup” support for emergencies (e . g . , evacuating the building when there is a fire, and for planned uses of force such as cell extractions)
- Supervising staff
- Providing breaks for staff

The preceding narrative provides a brief introduction to the process of determining coverage. If you are able to separate your thinking from schedules, you will identify many opportunities for new efficiencies. Several resources and tools are available through the National Institute of Corrections at www.nicic.org, or through a new national clearinghouse at www.StaffingAnalysis.com. The clearinghouse is a free service provided by CRS, Incorporated, a non-profit organization (www.correction.org).

Rod Miller has headed CRS Inc. since he founded the non-profit organization in 1972. He is the author and co-author of numerous texts and articles on various aspects of jail planning, design, and operations. For more information, contact him at rod@correction.org, 925 Johnson Drive, Gettysburg, PA 17325, and (717) 338-9100.

John Wetzel is the warden of Franklin County Jail in Chambersburg, PA. For more information, contact him at jewetzel@co.franklin.pa.us, 625 Franklin Farm Lane, Chambersburg, PA 17201, and (717) 264-9513.
