

Nevada Department of Corrections - Shift Relief Factors

What is a shift relief factor?

A shift relief factor estimates the number of hours (or days) required to fill a post during a given shift, when the person who is regularly assigned to that post on that shift is unavailable to fill that post because he or she is occupied elsewhere, either on annual leave, sick leave, attending training, injured, or otherwise not available for assignment to that post. To account for the time that the regularly assigned person is not available, additional staff time must be allocated to that post to ensure the duties assigned to that post are completed.

Importance of applying accurate shift relief factors

Because in almost every case, a single officer assigned to a post is not available to fill that post every day and every hour it is to be filled, agencies need to know how many additional staff they should have in order to fill all posts in the manner determined to be necessary and appropriate. By applying the appropriate shift relief factor to every post, and then summing the resulting numbers, an agency can determine the total number of personnel required to fill all posts in the prescribed manner without having to resort to assigning staff on an overtime basis to fill posts.

What are the shift relief factors within the Department?

Shift relief factors were calculated for custody staff working shifts for the department.

Custody Staff: Shift relief factors for the custody staff personnel for ranks that included: Lieutenants, Sergeants, Senior Correctional Officers, Correctional Officers and Correctional Officer Trainees.

The shift relief factors for the custody staff are presented in the following tables segregating major institutions and camps. Please refer to the appendix of this report for relief factor information for restitution center/transitional housing and transportation. Posts are categorized as either 5-day or 7-day, while shifts are 8-hour, 10-hour or 12-hour. Detail for the calculations for the major institutions and camps can be found in the appendix to this report.

Table 1: Shift Relief Factor – Major Institutions					
Institution	5-Day, 8 Hour	7-Day, 8 Hour	7-Day, 10 Hour	7-Day, 12 Hour	24- Hour Shift
Warm Springs Correctional Center	1.20	1.68	2.10	2.53	5.05
Northern Nevada Correctional Center	1.25	1.76	2.19	2.63	5.27
Southern Desert Correctional Center	1.22	1.71	2.14	2.56	5.12
Ely State Prison	1.22	1.70	2.13	2.56	5.11
Lovelock Correctional Center	1.18	1.65	2.06	2.47	4.95
Florence McClure Women’s Correctional Center	1.20	1.68	2.10	2.52	5.05
High Desert State Prison	1.20	1.69	2.11	2.53	5.06
Major Institution Average	1.21	1.70	2.13	2.55	5.10
Current Relief Factor	1.20	1.60	2.00	2.40	4.80

As noted in the above table, 1.21 FTE's are required to fill a five-day post, eight hours per day. A seven-day post, eight hours per day, will require 1.70 FTE's. A seven-day post, 10 hours per day requires 2.13 FTE's, and a seven-day post, 12 hours per day requires 2.55 FTE's. A 24-hour post whether filled using 8 or 12-hour shifts requires 5.10 FTE's. This information is presented with a comparison with the NDOC's current SRF.

Table 2: Shift Relief Factor – Camps					
Institution	5-Day, 8 Hour	7-Day, 8 Hour	7-Day, 10 Hour	7-Day, 12 Hour	24- Hour Shift
Stewart Conservation Camp	1.19	1.67	2.09	2.50	5.01
Pioche Conservation Camp	1.18	1.65	2.06	2.47	4.94
Three Lakes Valley Conservation/Boot Camp	1.42	1.99	2.49	2.99	5.97
Wells Conservation Camp	1.15	1.60	2.01	2.41	4.81
Humboldt Conservation Camp	1.23	1.72	2.15	2.59	5.17
Ely Conservation Camp	1.24	1.74	2.18	2.61	5.22
Jean Conservation Camp	1.21	1.69	1.11	2.53	5.06
Carlin Conservation Camp	1.23	1.72	2.15	2.58	5.17
Tonopah Conservation Camp	1.17	1.64	2.05	2.46	4.92
Camp Average	1.23	1.73	2.16	2.59	5.18
Current Relief Factor	1.20	1.60	2.00	2.40	4.80

Hours unavailable for assignment were based on FY 2013 personnel data supplied by the Nevada Department of Corrections.

Because the Department does not record the number of hours employees are away from their posts for annual training (in-service, these annual training hours were estimated based on information supplied by the Department at 24 hours annually per authorized FTE (no reduction was made for vacant positions). It is recommended the Department record in-service training on time sheets to accurately account for time for which an employee is not available to provide staffing at an institution. Additionally, since the Department does not track the length of time positions are vacant (by days), the calculation of the shift relief factor is predicated on the "average number of vacant positions" on an annual basis multiplied by the total annual hours available contracted for work per FTE. For example, if an institution reports a total of 144 Correctional Officers vacant for the year (12 reported per month for an annual total of 144), the average annual vacancy would be 12 which would be multiplied by 2,086 hours for a total of 25,032 hours for which Correctional Officers are not available to provide services for any given post at the institution and therefore "relief" is required for the posts.

An additional issue noted in the review of information supplied by the Department, which resulted in an understatement of the calculated relief factor. The Department appears to fill positions utilizing "position control numbers" that may not be assigned to the institution to which the employee is eventually assigned. For example, it appears the Department may fill a position at Ely

State Prison for training purposes, however, the employee may be trained in southern Nevada and assigned to High Desert State Prison (or some other institution or camp, etc.), which results in an understatement of vacant positions at Ely State Prison. This results in a reduction in the credit for vacant positions at the Ely State Prison (in this example), which in turn, reduces the calculated relief factor. Similar to annual in-service training, the Department does not record pre-service training on their time sheets. This results in a reduction in the relief factor since no credit is given for pre-service training in the calculation of the relief factor (position is shown as being filled, however, since the position is in training, the position is not available to provide services at any given institution, camp, etc.). It is strongly recommended the Department refrain from filling positions at institutions other than where the employee will eventually be employed. Similar to the recommendation for annual in-service training, it is also recommended the Department record pre-service training hours on the time sheets since the employee is not available to provide services at the institution.

Leave for Holidays and Furloughs were not factored into the relief factor calculation. Holiday leave was not factored in since the Department is funded for "Holiday Overtime" and Furlough Leave was not factored in since this is a "budget saving" tool implemented to reduce expenditures and specifically does not permit "back-filling" of positions that are on furlough leave.

How do current shift relief factors compare to those previously estimated?

Current and Prior Shift Relief Factors Compared:

The shift relief factor (SRF) as used by the Nevada Department of Corrections has not been revised since prior to 1979. This SRF provides staffing of 1.20 FTE's for 5-day posts requiring relief and 1.60 FTE's for 7-day posts requiring relief. It should be noted the SRF has not been updated to reflect the addition of two holidays as approved by the 1987 Legislature (Assembly Bill 116, Chapter 120, 1987).

The detailed calculations of the current SRF results in 1.18 for 5-day posts, which was rounded to 1.20 and 1.64 for 7-day posts, which was rounded to 1.60. The updated calculation for the SRF including the two additional holidays is 1.19 for 5-day posts, which is rounded to 1.20 and 1.66 for 7-day posts, which is rounded to 1.70.

The Governor's Executive Branch Internal Audit Division, in their report as completed in September 2006 utilizing data for the year ending March 2006, estimated the relief factor Department-wide for a 7-day post, 8-hours per day at 1.825; or simply stated 1.825 officers being required to fill a 7-day post, 8-hours per day (no estimate was provided for shifts other than the 7 day, 8 hour).

How were the shift relief factors determined?

Shift relief factors were estimated by applying a universally accepted methodology. Detailed descriptions of it may be found in many authoritative publications including *Staffing Analysis Workbook for Jails* published in 2003 and *Prison Staffing Analysis: A Training Manual* published in

2008.¹ That methodology involves identifying the total number of hours employees in a specific rank or job category could be available for work (Total Annual Hours Contracted for Work). Next, the total number of hours all of those employees were not available for work throughout the year is calculated (Total Hours Off Duty). Subtracting the number of hours all employees are off-duty from the total number of hours available for work produces the actual number of hours (Net Annual Work Hours) those same employees were really available to fill their posts.

Finally, by dividing the total Net Annual Work Hours by the total number of employees in that specific rank or job category, the shift relief factor is determined. However, since posts are generally filled either five days or seven days per week, and may be filled by staff working either an eight, ten or twelve hour shift, shift relief factors are produced for each type of post. The resulting shift relief factors indicate how many employees it actually takes to fill those posts on an annual basis. For example, if a post is to be filled five days per week, eight hours a day, it would take one employee to fill that post, but only if the employee was at work every week, five days per week, and for eight hours during every one of those five days. In reality, employees do not come to work every day because they may be sick, or taking annual leave, etc. Therefore, it actually takes more than one person to fill a post, and in the Department it actually takes 1.20 Correctional Officers to fill a five-day, 8-hour post throughout the course of a year (based on NDOC's current SRF). Thus, to properly plan and budget for the number of staff required to fill posts, without the use overtime or closing posts, the shift relief factor should be applied to all posts to determine the number of staff require to fill all posts.

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¹ See Liebert and Miller, *Staffing Analysis Workbook for Jails*, 2nd ed. (2003) and Camp, *Prison Staffing Analysis: A Training Manual*, (2008)