

Proposed Safety System Oversight (SSO) Staffing Analysis Method

Instructions for completing SSO Staffing Analysis Worksheet

This Staffing Analysis calculation is completed using an Excel worksheet. Information locations are identified by titles in column or row headings and worksheet locations based on the unmodified blank worksheet attached. Use caution when making worksheet modifications since changes to the worksheet format may inadvertently change included formula referenced cells.

Column Headings (worksheet row 5)

Identify the years the staffing analysis will evaluate.

Calendar years or fiscal years can be identified depending on your end use. The FTCP Workforce Analysis requests calendar year data. Budgeting and staffing decisions are often based on fiscal year data. The resulting average number of SSO staff required over several years will be the same.

Out-year analysis has more uncertainty in the estimates but still provides useful information for planning staffing for future needs and succession planning. The information also supports requested data in the FTCP Workforce Analysis.

Columns for years can be added or deleted; if columns are added, use the “fill across” function to extend formulas to additional columns. Changes in the number of years considered will require modification to the formula in cell B35 to account for the actual number of years evaluated.

Activities Column (worksheet column A)

List the activities to be completed as part of Safety System Oversight as implemented at your Site. Separate the activities by Program Tasks and Individual Tasks. Ensure entries are made in the appropriate rows as identified by column sub-headings.

Program Tasks - those activities to be completed by the SSO Program assuming adequate staffing. For example: “The SSO program is expected to complete assessments of safety class systems.”

Individual Tasks - those activities to be completed by each assigned SSO. For example: “Each SSO must complete the SSO Site Specific Qualification Standard.”

The attached example provides a list of activities assigned SSOs at one site; not all these activities are necessarily assigned to SSOs at your Site and may be accomplished by other organizations or not required. Your Site may assign additional duties to SSO personnel. A review of the Site FRAM and SSO implementing procedure may assist with the development of an accurate list of tasks.

Blank rows can be added or deleted. Use caution to avoid deleting rows containing formulas.

Days for Each Activity (worksheet columns B, C, D, E, F, G)

Identify the amount of time each task will take in days and enter it in the appropriate row and column.

For Program Tasks enter the total amount of time to complete the full task. For example, if it will take 2 SSOs 6 days to complete one safety class system assessment, and 7 assessments are required in that year, enter 84 days ($2*6*7=84$).

For Individual Tasks enter the amount of time each individual is expected to spend on the identified tasks. In the qualification example it may be a weighted average of the amount of time required per individual if different SSOs will be at a different stages of qualification. Note that this could vary depending on the actual number of SSOs assigned and become an iterative calculation depending on the overall staffing analysis results. Performing this iteration would result in a more mathematically correct answer but would imply a greater accuracy than the overall estimate will likely produce. Recommend using informed judgment based on the number of SSO FTEs you expect to be authorized. For example, if it takes a new employee 77 training days in the first year, a second year employee 38 training days, and fully qualified employee 0 training days, and you expect to have 4 SSO, 2 new, 1 second year and 1 fully qualified, enter 48 days ($[2*77+38+0]/4=48$).

The amount of time required for each task may change by year based on maturing Contractor Assurance Systems, assessment cycles, project stages, facility status, etc.

Time required for tasks is entered in 8 hour days. Alternate units could be utilized; however it would require modifying included formulas to maintain unit consistency.

Notes (worksheet column H)

Record the basis for the identified task and time required.

Most will recognize that a staffing analysis is an informed estimate, not an exact prediction of man-hours required. The notes are useful for management when evaluating the integrity of the analysis, helpful when explaining the analysis to oversight entities, and useful for determining the impact of staffing shortfalls. They also support consistency in estimates or informed estimate changes when the staffing analysis is updated in following years.

If the activity implements a specific requirement, it is helpful to list the origin of the requirement. For example, sometimes activities are added as commitments from actions

in response to oversight activities, or the results of lessons learned, that someone reviewing the analysis or updating the analysis in later years may not be aware of.

Total Task Days (worksheet row 23)^{*1}

This is the calculated sum of the identified Program Tasks for each year.

=SUM(B7:B22)

Total Individual Days (worksheet row 32)^{*1}

This is the calculated sum of activities that need to be completed by each individual.

=SUM(B25:B31)

Percent of Individual Time available for Program Tasks (worksheet row 33)

This is the calculated percent of each individual's time available to work on the Program Tasks, on average. This assumes that the Individual Tasks will be completed, even at the expense of completing Program Tasks.

=1-B32/260 [1-(total individual based days)/(260 days per year)]

FTEs Required (worksheet row 34)^{*1}

This is the calculated number of FTEs required in the identified year to complete the Program Tasks and Individual Tasks specified for that year.

=B23/(B33*260) (Total task days)/[(% time available for tasks)*(260 days per year)]

Average FTE need over 6 years (worksheet row 35)^{*1}

This is the calculated average of FTEs needed over the years evaluated.

=(B34+C34+D34+E34+F34+G34)/6

Note that if the number of years evaluated is different from 6, this formula will have to be modified to change to the actual number of years evaluated.

Workload often varies by year. Calculating an average number of FTEs and staffing to that number is much more achievable than trying to adjust staffing annually. Once an FTE number is established and filled, workload leveling across years, and temporary staff augmentation can be utilized to manage peak workloads.

Footnotes

1. This cell contains a formula. Entering data in this cell will overwrite the formula and disable the calculation.