Suggested Methods for Determining Random Evaluations Sample Size

There are many factors to consider when composing a sample. For example, what population will thisevaluation study and why? A few factors often utilized to outline these considerations may connect to mission critical occupations, certain "high risk" actions, specified/targeted concerns and potential problem areas. This document and the table below provides an example to determine a random evaluation sample size.

The evaluation team lead determines the evaluation sample size ensuring the intent of reporting findings result in an acceptable level of reliability. In general, the sample size will be determined using an establishedstatistical sampling methodology with the intent of obtaining a cross-section of perceptions, concerns, and system documentation in the least invasive and non-disruptive manner possible. Historically, OPM recommended the review of a minimum of 10 percent of the total number of files for the audit period and DCPAS recommended a minimum of 7 files or 10 percent of the total number of files, whichever is greater.

A random sample is one generated through a random number or other criteria and does not necessarilyrepresent the population as a whole (i.e., "of those surveyed, a majority believe that…"). A random sample does not have the same level of confidence (generally lower) as a representative sample. A representative sample reflects the demographics and other factors of the population as a whole, resulting in inferences about the command or activity in its entirety (i.e., "the workforce of this command believes that…").

Use data from the Defense Civilian Personnel Data System (DCPDS) to develop reports to identify actions processed during a specified period. Components may use corporate reports extracted data from DCPDS, i.e. Business Objects, Total Workforce Management Services (TWMS), etc. Use the reports to retrieve various listings of actions processed during the review period. The random sampletable reflects minimum sample sizes sufficient to reflect program conditions. The random sample number was determined using a confidence level (CL) of 90% except where the table indicates a confidence level of 95%. The 90% CL means the evaluator can be 90% certain that the results of thereview will accurately determine the health of the program.

Based on the number of actions select a random sample using the table below

Total # of Actions	Minimum # for Review	Minimum # Appraisals/Awards
Less than 10	4	4
10	8	8
20	12	12
30	15	15
50	20	20
100	25	25
200	27	27
500	30	30
1000	33 - 36	40
1500	36 - 42	40
Over 1500	42 (CL 95%)	50