SELECTING A SIMPLE RANDOM SAMPLE (SRS) USING A TABLE OF RANDOM DIGITS

Step 1: Construct a sampling frame.

Step 2: Each element (individual, object, event) in the population must be assigned a unique number from 1 to N. If the population was comprised of 99 elements the numbering would proceed from 01, 02, 03, . . . 99. If the population was comprised of 999 elements the numbering would be from 001, 002, 003, . . . 999. If there were 9999 elements the numbering would be 0001, 0002, 0003, . . . 9999. Note that you must use as many digits in the numbering process as there are elements in the entire set.

Step 3: Enter the table of random numbers (Appendix A, pp. 383-386) anywhere and move consistently down or across taking as many digits as are contained in the numbering process above. For example, if the universe contained 138 elements, you start with the first three digits in a row number 00000----"100"---- then move down the columns to "375," "085," "990," etc. Everytime you come across a number in the random digits columns that includes one of your elements in the population you consider this to be a randomly selected observation. Continue this process until your sample reaches the designated size, disregarding digits that do not apply to your numbering the population elements.

Step 4: Compute whatever statistic(s), e.g., mean, standard deviation, is/are relevant for the randomly selected cases.