

**Systematic Random Sample****The following criteria will be used to create payment data file:**

1. Only firm fixed price contracts are to be sampled.
2. Sample will be taken from payments during the period of April 1, 2002, and June 30, 2002.
3. Fifteen percent of the randomly selected payments will be reviewed.

**Steps to follow to achieve a systematic random sample of payments:**

1. Create a data file of all payments for Firm Fixed Price contracts for the period of 1 April 2002 to 30 June 2002 (inclusive). The data file must include enough information to locate and verify the actual payment documentation. At a minimum, contract number, voucher number, payment date, and payment amount.
2. Sort the data file by payment amount. (Ascending order)
3. Number the payments in the data file from 1 to N (N = Number of payments in data file.)
4. Calculate the sample size (n). Multiply Number of payments by 15% (n = N X .15) (Round up to next whole number.)
5. Calculate interval size; k = N/n (Round up to next whole number.)
6. Randomly select an integer between 1 to k (interval size).
7. Then take every kth unit starting with the integer selected in prior step until the end of file is reached.

**Example:**

1. Data file: 720 payments
2. Payments numbered from 1 to 720.
3. Sample size: 108, 15% of 720, (720 X .15 = 108)
4. Interval size: 7 (720 / 108 = 6.667; rounded up to 7)
5. Integer: 5 (random selection between 1 and 7)
6. Starting with record 5, select every seventh record until end of file is reached. (5, 12, 19, 26, 33, 40, ..... EOF)

102 payments will be selected for review.

