SM 625: Week 10 Sampling Project Notes

There are four primary tasks for your team to consider over the next week:

1. Given your overall m_{opt}, n_{opt} and N (based on the sampling frame), you've already computed the overall sampling fraction, f. For each of the nine strata, compute the required number of students to subsample from each sampled school based on the stratified PPeS design **in order to maintain epsem across all strata.**

2. Do each of the schools that you sampled in a given region have the minimum sufficient size, given the stratum-specific subsample sizes computed in Task #1? Do subsequent schools on the list have the minimum sufficient size? If not, what will you do?

3. Begin to describe how you will physically select the subsample of students within a given sampled school (or set of linked schools). What will your second-stage sampling rate be for a given school within a given stratum? How will you acquire the updated rosters from each school? What technique will you use to select the sample at the specified second-stage rate?

4. Write down the overall sampling fraction based on the stratified PPeS design, indicating the overall probability of inclusion for a given student, from a given school (or linked set of schools), in a given stratum. Be careful with notation. *Keep in mind that the MOS values used for the sampled schools at the first stage and the denominator at the second stage (Did you sample a single school? Or a linked set of schools?) will depend on your response to Task #2 above.*