

Section 1- 4: Design of Experiments

You work for a research firm that won a bid to Ford Motor Company to determine **the proportion of Fremont County adults that prefer to purchase Ford pick-ups over other brands of pick-ups**. Your firm's bid amount was \$22,000.

Design and explain all details for:

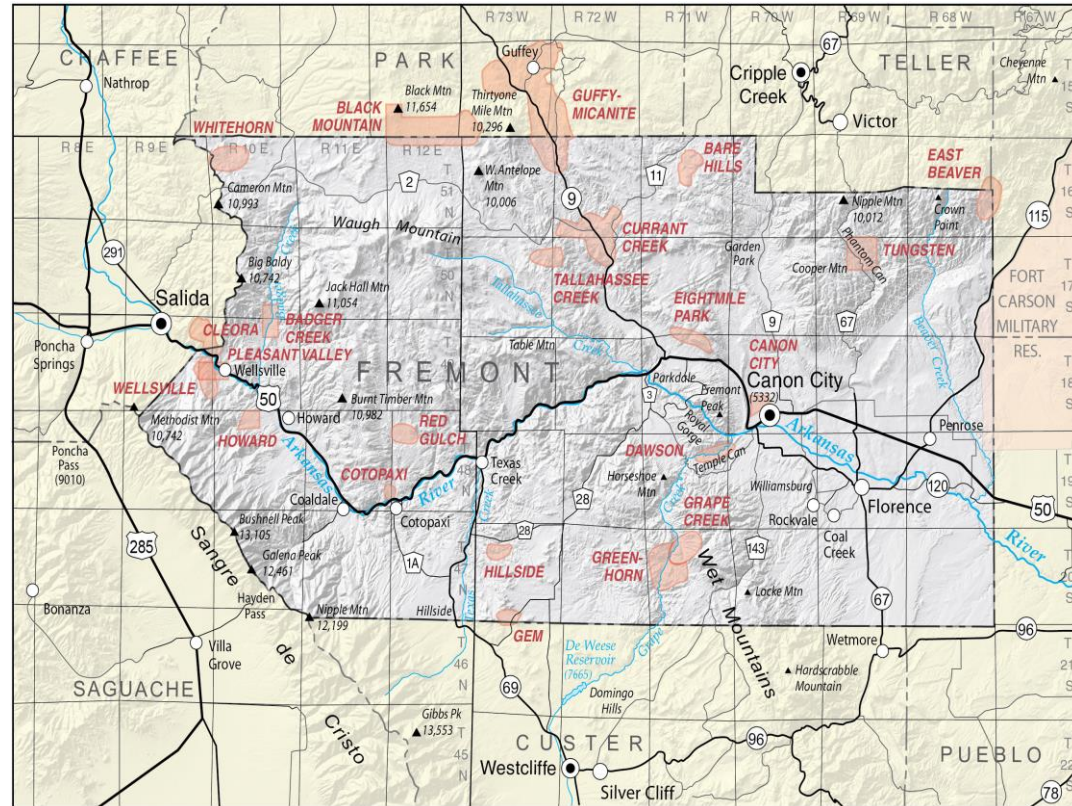
- 1. A multistage, **observational** study
- OR
- 2. An **experimental** study

to secure the most accurate statistical data about *Fremont County's* preference of Ford pick-ups relative to other brands.

Explain non-sampling and sampling errors that might occur in your design.

Suggest how to theoretically conduct a simple random sample (SRS) experiment to obtain the required information sought by Ford Motor Company in *Fremont County*.

Provide all sampling instruments such as survey forms, etc.



Read / study all of text Section 1-4. **Pay particular attention** to the multi-stage example explained on the lower part of page 29 concerning multi stage sampling.

Submit your experiment design as a quality MS Word document via e-mail attachment NLT midnight Monday 2/2/2015 to mheinen_1@msn.com. Ensure the file name is formatted as follows: Your_Last_name-ExperimentDesign.docx (Word will add the *.docx suffix automatically for you.)