Part 1: Usability Evaluation

Things to decide

Tasks
- Difficulty (varied, increasing)
- Number of tasks (3)
- Specific tasks to do (focus on census data)

Training
- What? (Demo, review of relational databases, practice creating a few census interfaces)
- How long? (open-ended – fixed set of training tasks)
- How similar to test tasks? (Reasonably similar)

Help
- How much?
- What form? (provided screen shots for first 2 tasks)

Measures (learning time, completion time, success, observations)
- What is successful?
- How much time / how many errors are reasonable? (did not specify ahead of time)

Participants
- Who? (3-4 census experts, 2-3 novices)
- How many? (total 6 – small sample b/c not a formal experiment)

Part 2: Experiment on Coordination

Hypothesis: (Not specifically stated.) Users will be faster with a coordinated overview + detail display than with an uncoordinated display or a detail-only display when the task requires reading details.

Things to decide

What type of coordination? (they compare overview + detail to detail alone)
- Drill down, brush & link, overview & detail, synchronized scrolling

Tasks & displays
- How many tasks? How complex? (Several of varied complexity)
- What order of tasks (Fixed order – note that this may affect results on particular tasks, but will not affect comparison of displays)
- What data & domain? (Census data – does not require a lot of domain knowledge)
- What displays? Fixed or flexible? (Fixed – built beforehand for control)

Participants
- Expert vs. novice? (novice – mainly students)
- How many? (18 – many more than in the usability study, multiple of 6 groups)

Design
- Between vs within-subjects? (within-SS)
    o Order effects (counterbalanced for display, not dealt with for task)
    o Repetition effects – can't use same tasks 3 times (use 3 related but different sets of questions, their order is fixed but display order varies)

	Task set 1	Task set 2	Task set 3
Group 1	Display A	Display B	Display C
Group 2	C	B	A
…			
Group 6	A	C	B

- What displays need to be compared? (O+D with coordination, O+D w/o coordination, Detail alone) – careful control of one factor at a time.

Measures? (time, user ratings)