Team I I.5a.txt
Biking in Pittsburgh Survey | 36-303 Spring 2010 Group I | Assignment I.5

Research Question: How does the unique weather patterns present in Pittsburgh affect the area's bicycle riding adult (18+) residents?

Our research question, "How do the unique weather patterns present in Pittsburgh affect the area's bicycle riding adult (18+) residents?" seeks to find out how the weather patterns in the Pittsburgh region adversely or otherwise affect the bicycle riding patterns of bicycle riders in Pittsburgh. This question is relevant because of the significant bicycle ridership within the city, increasingly high fuel prices and the affect of the multi-billion dollar bicycle industry in the United States.Also, bikes are "greener" and better for the environment even than public transportations, and as a city that wants to lead the nation in terms of clean energy and creating less of a carbon footprint, it would be useful to city policy makers to know how to maximize bikers riding thier bikes during all kinds of weather.

We will utilize a "stratified random sampling" (proportionate allocation) method while conducting our survey. We decided to use this method because it allows us to reflect the diversity of the Pittsburgh region fairly accurately. A rough outline of our procedure is included below.

please see attached pages on your methods

We will obtain the sampling frame is by listing of all the prefixes in Pittsburgh (area code 412) from http://phones.whitepages.com/412. Then, in order to ensure that we get a representative sample in the sense that no one prefix is favored more heavily than it should be, we will use the same website's information on the number of telephone numbers that use that prefix. This allows us to weight the probability of selecting any individual prefix in proportion to the number of people that can be reached using that prefix. Then after a prefix has been selected, random-digit dialing can be used to determine the remaining numbers. Spreadsheet of prefixes is available upon request.

you are missing a sample size calculation

Questionnaire:

How old are you?

What is your gender?

Do you live within the Pittsburgh city limits?

What area/neighborhood do you live in?

What is your ethnicity?   *why is this important to your research question? if not, don't ask*

How much did your bike cost?   *wrong place for this question!*

What is your income? (Scales: <25)   *?*

What sector of the economy do you work in?
(a) are you employed?
(b) what sector? probably need to give examples to get people thinking about what sectors you are thinking about .

____

Do you ride a bicycle?

Do you mainly ride on the street, the sidewalk, or both?

Do you find the weather in Pittsburgh to be conducive to cycling?   *do you need to ask this general question if you are asking several related q's below?*

break into 4 questions, by season (3-month chunks)?

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to and from work

Do you commute on your bicycle?

Is your bike your main mode of transportation?

Do you have a bus pass or ride the bus often?

Do you have an automobile?

What kinds of weather do you not ride your bike in?

If so, do you commute in all four seasons of the year?

Do you ride your bike less often in winter or any other season?

If so, why?

How far would you estimate that you ride your bike in a week? (in Miles)

Why do you choose to ride your bike?

On a scale of 1 to 7, how well kept would you say the roads/sidewalks
are in Pittsburgh?

Do you ride any of the bike trails available in the Pittsburgh area?
If so, which ones?

The above is a good start, and I'm excited that you will try a phone survey. However, you have much to do.

(a) the above still looks too much like a "few ideas thrown together" and not like a coherent survey that is trying to get at some specific aspects of use of bikes in pittsburgh. It needs much more focus, both for people to feel good about responding, and for you to have anything interesting to write about in your final report.

(b) the questionnnaire really isn't ready to be tried out this weekend yet. Need to remake into an "interview script" and actually interview people the way you will do it on the phone.

(c) I've attached some pages with some suggestions for how to proceed.

(d) we definitely need to meet next week to discuss your interview script (which you should have by then!) and also your sampling method. I want to encourage you to try these things, and to help you succeed, but you should also be aware that doing a good job will require more care than other groups. that's ok, I will account for it in grading if you take care to do a good job even if the results are not wonderful.

please suggest times we can meet as a group next week. my best times are thu noon to 430. I may be able to fit some other times in if nothing thu works for you---give me several possibilities to work with in that case!

Sampling plan

- Great to be trying a phone survey, and great that you found phones.whitepages.com/412.

- Don't call cell #'s. Generally speaking people have to call for incoming minutes; this is a burden you shouldn't impose.

- You might want to stratify by major region of the city (Downtown, Oakland/campus area, east end, South side, etc.) but I advise against stratifying by neighborhood or telephone exchange.

  - Actually, I **strongly suggest** you do a srs, using a method for phone numbers similar to what i suggested for cbook: for each xxx-yyyy number randomly choose an (xxx,yyyy) pair where xxx is a random choice of one of the non-cellphone exchanges in 412, and yyyy is a random # from 0000 to 9999.

  - since you are asking for neighborhood in your survey anyway you can get some regional information without stratifying, and it will greatly simplify your data collection.

  - you will need to keep track of not-answered phones, etc, in order to followup non-responses, compute a nonresponse rate, etc.

  PLEASE PROVIDE AN ESTIMATED SAMPLE SIZE FOR YOUR SURVEY. THAT IS PART OF THIS ASSIGNMENT!

Questionnaire and interview script

- Your questionnaire needs to be reformatted into an interview script, so that you make the same introduction, ask for the same type of person, and ask the same questions in the same way, with every household you successfully contact.

  you need to set the script up as soon as possible and try it out, both for "successful" interviews and for ones that go off-track, so you can anticipate some of the possible problems that will arise, and so that you can refine and clarify your questions.

- I am attaching a couple of documents that have advice on how to set up the beginning of a phone interview script, and what some of the issues are.

  Generally a script should have the following elements (some example text is provided, it will need to be improved for your script!)

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Introduction Hello, I am XXX, a student at Carnegie Mellon University, calling you as part of a survey for our class ZZZZ.

- Is this a home, or apartment? [if not, apologize, thank the person and end call]
- I would like to speak to XXXX (you have to choose who you want to talk to, and make the same choice for every household. if that kind of person is not avail, apologize, thanks, and end call)

when person you want gets on the phone:

- Hello, I am XXX, a student at Carnegie Mellon University, calling you as part of a survey for our class ZZZZ.

  (if asked at any time during survey) Please feel free to contact our instructor, Brian Junker, 412 268 8874, at Carnegie Mellon University, with any questions you may have about this survey or our class.
- your phone # was randomly selected for this survey. The survey is about bicycle usage in pgh. The survey has XX questions and will take approximately YY minutes to complete.
- Your phone number will not be associated with your responses, and the information from the survey will only be reported in summarized form, and your responses will be kept confidential. *Your participation is completely voluntary and you may refuse to answer any question you wish, and you may stop at any time.*
- Do you wish to start the survey? [if no, sorry, thanks, end call]

Body of survey This is where you ask the survey questions.

- Every question should be carefully worded, and practiced by you, for clear speaking, simple and easy to follow formal English, etc.
- Structure the survey so that similar questions are grouped together. If possible a "key question" can eliminate others.
  * For example, "do you own or use a bike"... "No" eliminates most of the rest of the survey!
- Anticipate problems and have something in the script to address them.
  * For example: does the person not understand something (what is a neighborhood? what is a sector of the economy?)? Give examples.
- Have a plan for recording the answers as you get them. Eg.
  * design a paper form that you can xerox copies of for each call. it should be easy to read off the script from the form, and it should be easy to write answers — even unusual ones! — in the space after each question.

    ∗ if you prefer do the same thing on a laptop with an appropriately formatted msword or excel file – make a copy of the file for each phone contact, and fill it out as you do the interview. Remember to save the file!

The person doing the interview should practice practice practice reading the questions and recording the data so that it goes smoothly and easily when you are talking to a "real" respondent.

    ∗ Always polite

    ∗ Always clear

    ∗ Easy to understand speaking

    ∗ Get all the data

    ∗ don't ask the interviewee to repeat unless you really have to

    ∗ unfazed by anything that might come up (e.g being cussed at)

    ∗ Always polite

    ∗ Always clear

    ∗ Easy to understand speaking

End of survey – whether respondent completed all the questions or not! Thank you very much for your time. If you would like to find out the results of this survey [tell them how, e.g. maybe download your report from a website after date XXX?]

Please feel free to contact our instructor, Brian Junker, 412 268 8874, at Carnegie Mellon University, with any questions you may have about this survey or our class.