Safety Survey: An Analysis of Student's Knowledge and Utilization of CMU SafeWalk and Escort Services

Group F:
Jaclyn Bernard
Ivan Busharov
Evan Korol
Katherine Swintek

Research Question

What portions of CMU students know about and/or utilize safe walk and escort services and how could we increase both knowledge and utilization of these services?

http://www.cmu.edu/police/shuttleandescort/index.html

Survey Format

- Four Sections:
  - Demographics
  - Utilization
  - Knowledge
  - Improvement

We are interested in how much you know about Safewalk and Escort services. For each of the following questions, please answer to the best of your ability. Then indicate how confident you are that your answer is correct. Do not ask anyone for help or look up the answers.

On what days does Safewalk operate? Check all that apply.
___Sunday
___Monday
___Tuesday
___Wednesday
___Thursday
___Friday
___Saturday

How confident are you that your answer above is correct?
___I am sure this is the right answer
___This is my best guess
___I have no idea what the correct answer is

During what hours does Safewalk operate?
_____p.m. until _____a.m.

How confident are you that your answer above is correct?
___I am sure this is the right answer
___This is my best guess
___I have no idea what the correct answer is

How do the Safewalk volunteers know to come pick you up? Check all that apply.
___You stand at specified pick-up points around campus, and they will pick you up as they make rounds
___You call Safewalk and they will come pick you up
___You go to Safewalk headquarters and ask them to walk you home

How confident are you that your answer above is correct?
___I am sure this is the right answer
___This is my best guess
___I have no idea what the correct answer is

Where is Safewalk headquarters? _____

How confident are you that your answer above is correct?
___I am sure this is the right answer
___This is my best guess
___I have no idea what the correct answer is

Survey Set-Up

- Used SurveyGizmo

- Manually entered questionnaire

- Re-coded response values

- Generated a random list of two numbers: page number and location on page

- Divvied up work between group members to go through C-Book and type names

- Generated more numbers since 1860 units was not reached due to too large of a bound on location on page

- Created an Andrew Mailman list to generate mass email

Sampling

- Simple random sample from C-Book

- Sent out 1860 students

- E-mail Timeline
  - 1st e-mail: March 26
  - Reminder 1: March 30
  - Reminder 2: April 3
  - Reminder 3: April 7

"Dear student,

   If you have filled out the survey already, thank you very much if you have not had to opportunity to fill it out yet, please take 5 - 10 minutes to do so. Please click on the following link to go to the survey:

http://www.surveygizmo.com/s/263516/m1dmt

   We are a team of undergraduates working on a survey project for a class. Our survey is about CMU SafeWalk and Escort Services, and we need your input to make our project a success.

   You have been randomly selected to fill out our survey. Your identity will remain anonymous.

   We appreciate your help,
      Jaclyn, Ivan, Katherine, and Evan"

Data Coding

For "Check all that apply" and questions with right and wrong answers:

- Answer choices for "Check all that apply" questions were given their own variable name

- These questions were coded using 0 for an incorrect/unchecked answer and 1 for a correct/checked answer

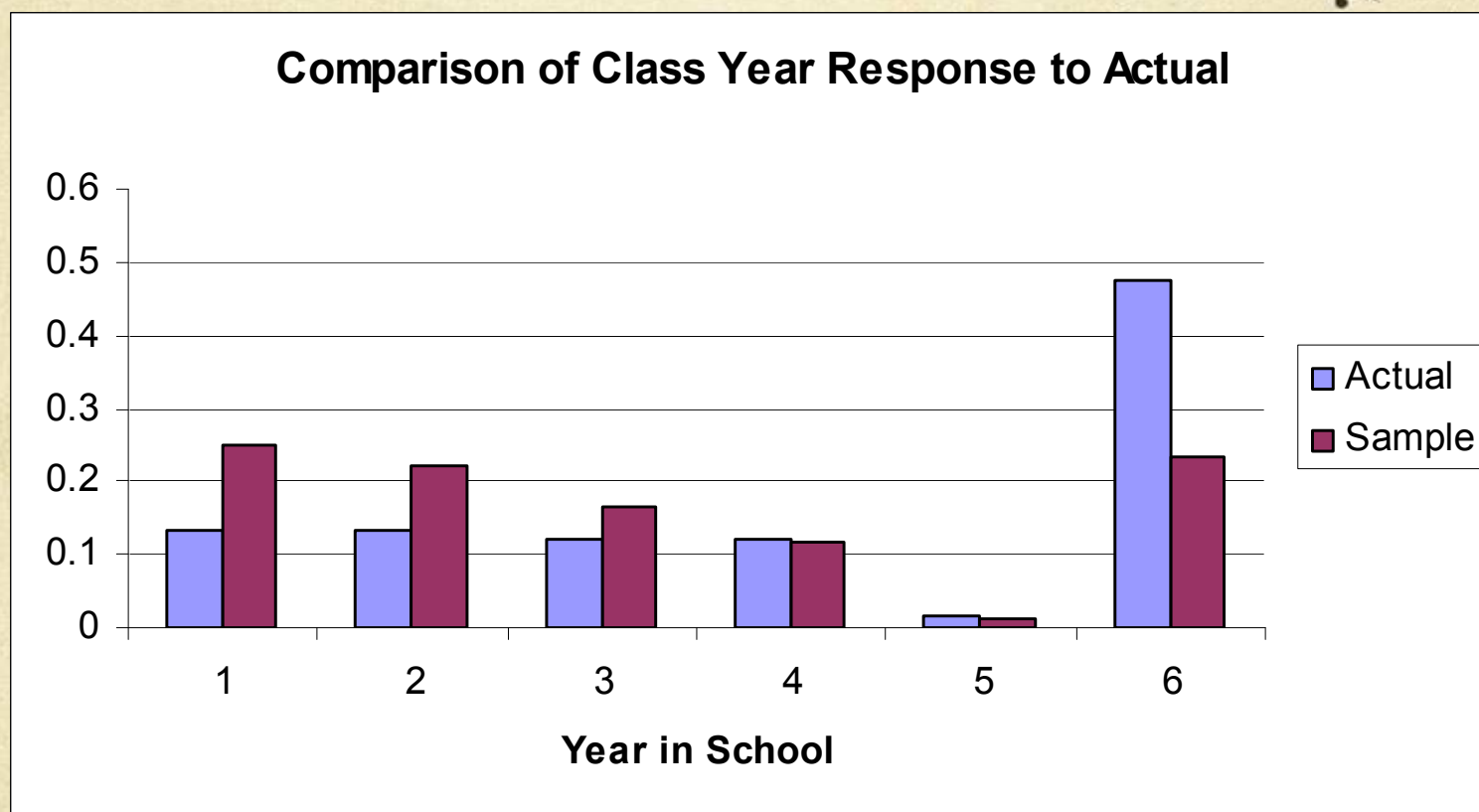For questions with varying degrees of correctness:

- These questions were coded on scales from 0-2, 0-3, or 0-4

- 0 denoted completely incorrect while the largest number denoted completely correct

Demographics
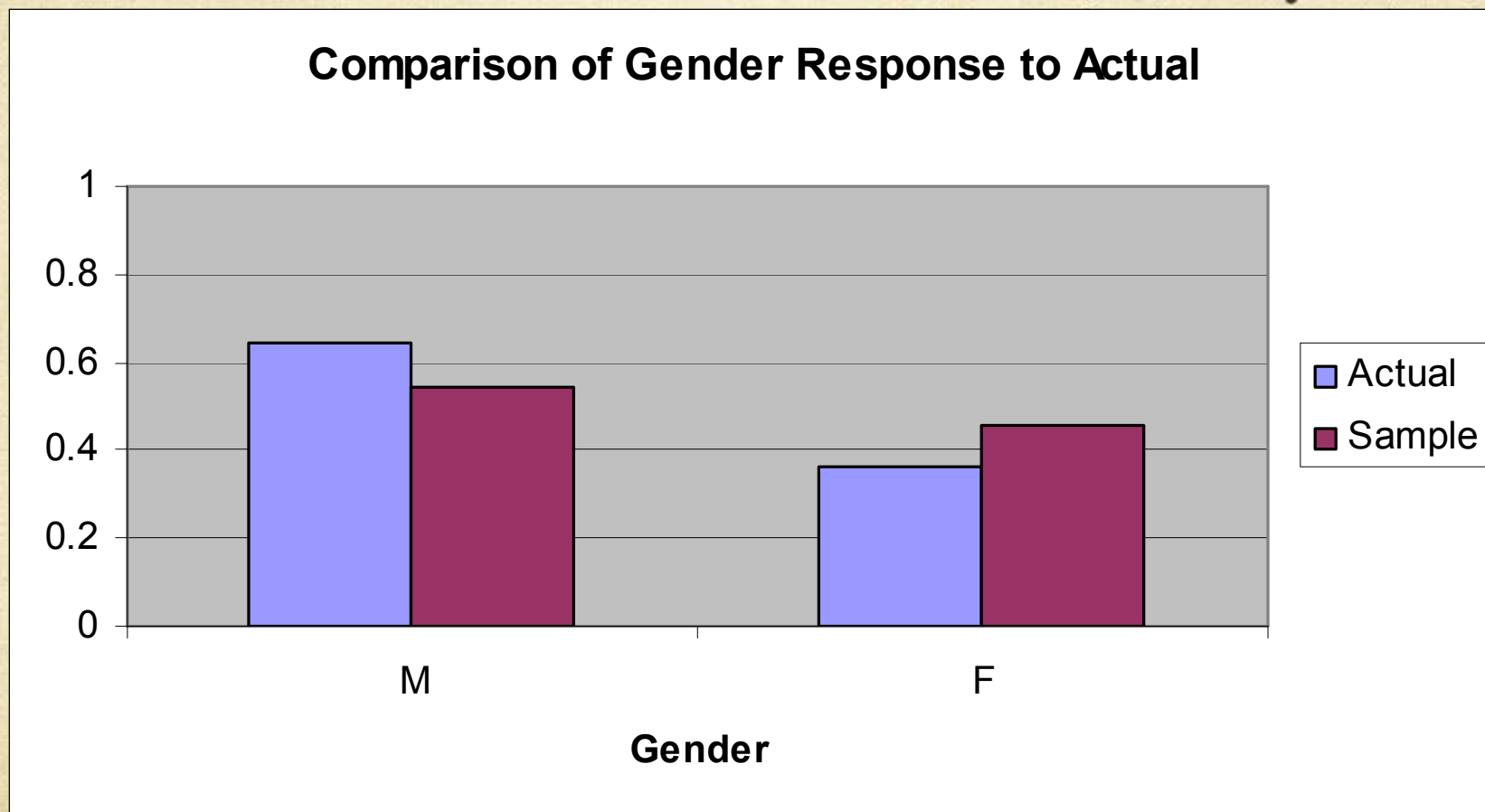
Demographics

Post-Stratification Weights

• Calculated weights by gender and year in school

•(Population Proportion / Sample Proportion)

•Weights only used in 'overarching' analyses

Actual CMU Statistics*						
	FR	SO	JR	SR	5th	Grad
M	0.086475	0.084271	0.077658	0.076697	0.011247	0.306338
F	0.048929	0.047682	0.04394	0.043397	0.006364	0.173331

Sample Statistics						
	FR	SO	JR	SR	5th	Grad
M	0.134161	0.119657	0.088836	0.063454	0.007252	0.126909
F	0.114162	0.10182	0.075593	0.053995	0.006171	0.107991

Assigned Weights						
	FR	SO	JR	SR	5th	Grad
M	0.644566	0.704274	0.874175	1.208703	1.550961	2.413843
F	0.428598	0.4683	0.581274	0.803715	1.031296	1.605061

*http://www.cmu.edu/ira/factbook/pdf/facts2010/2_fact-book_webversion_2009_10_enrollment1.pdf

Non-response

Unit non-response: 177 Abandoned, 57 Partial, 3 Unusable

Item non-response: 417 total missing responses

- Data is not missing at random, so we cannot use imputation

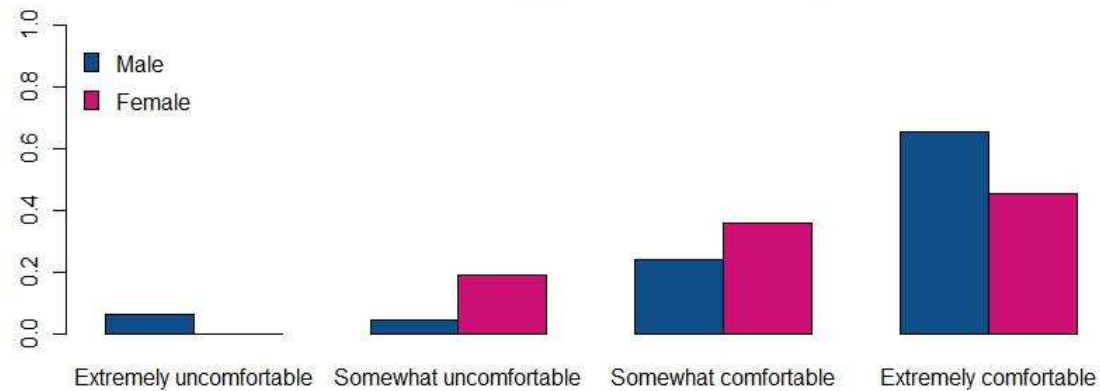- Missingness is ignorable, so we can use the weights calculated earlier
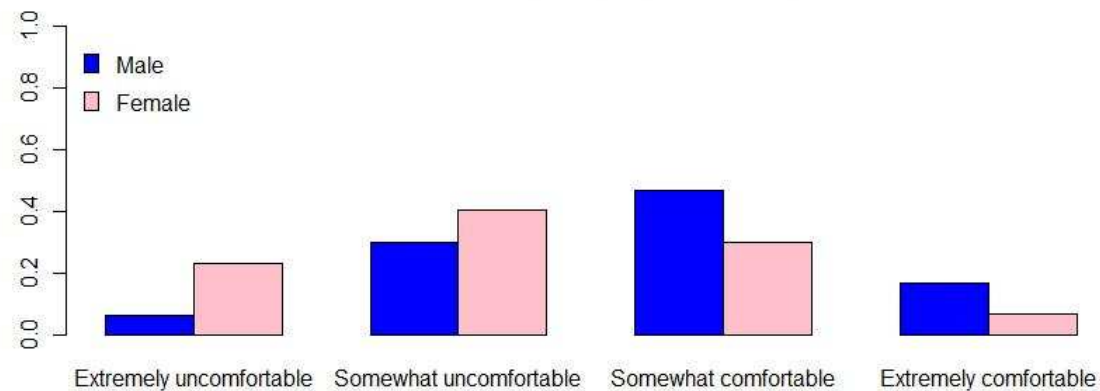
Margin of Error

- Using 95% confidence and a sample size of 372, we sought a margin of error of 5%

- We only received 300 complete responses, 3 of which were unusable

- Recalculating, we now have a margin of error of 5.6%

Perceptions of Safety

Comfort Level Walking Alone on-Campus by Gender
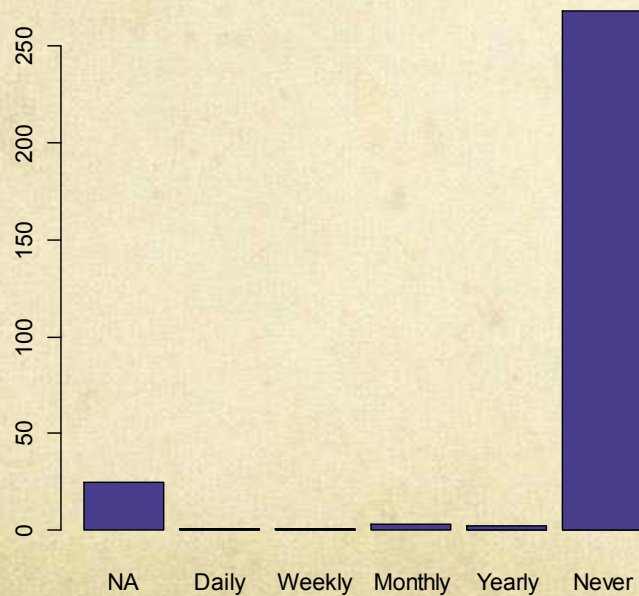
Comfort Level Walking Alone off-Campus by Gender

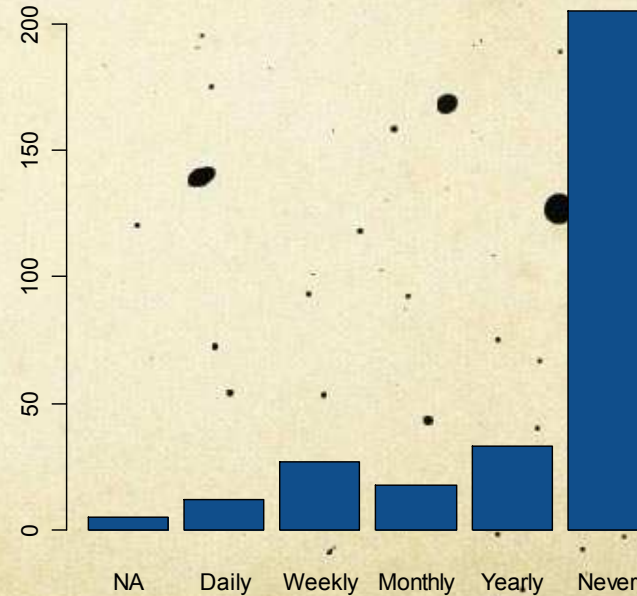# Current Utilization

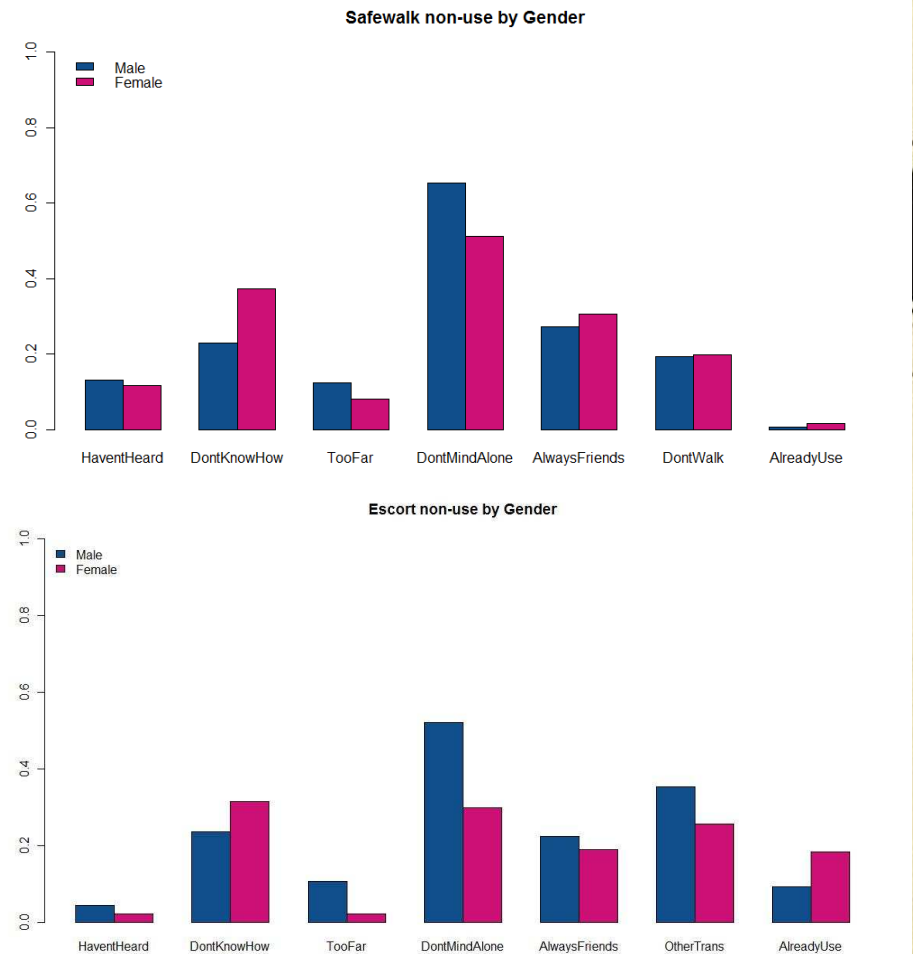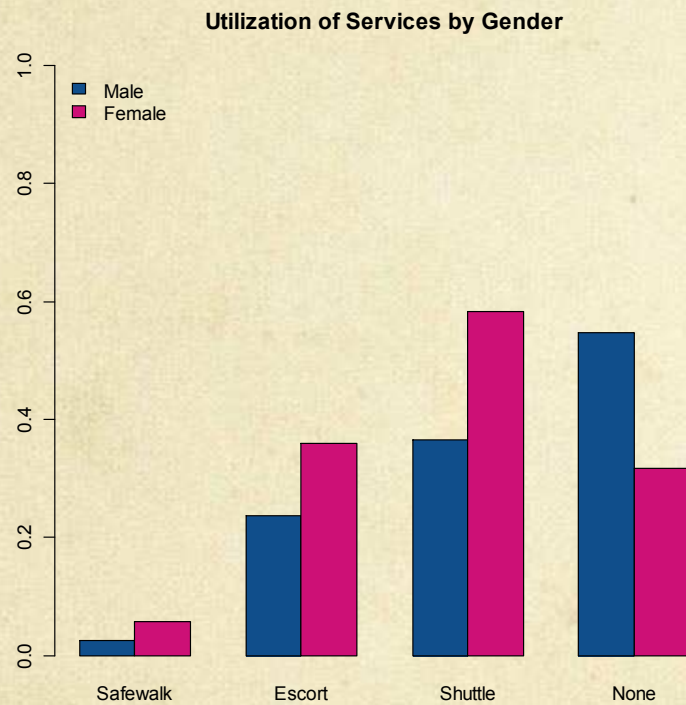- 75% have heard of Safe Walk

- 4% have used Safe Walk

- 91% have heard of Escort
- 40% have used Escort

Safewalk Usage

Escort Usage

Current Utilization

Usefulness of Websites

Usefulness of Safewalk Website

I have not been to the website, 87%

Extremely useful, 2%

Moderately useful, 6%

A little bit useful, 2%

Not at all useful, 3%

Usefulness of Escort Website

I have not been to the website, 74%

Extremely useful, 7%

Moderately useful, 12%

A little bit useful, 5%

Not at all useful, 2%

- Correlation between visiting website and using SafeWalk: r=.232; p<.001
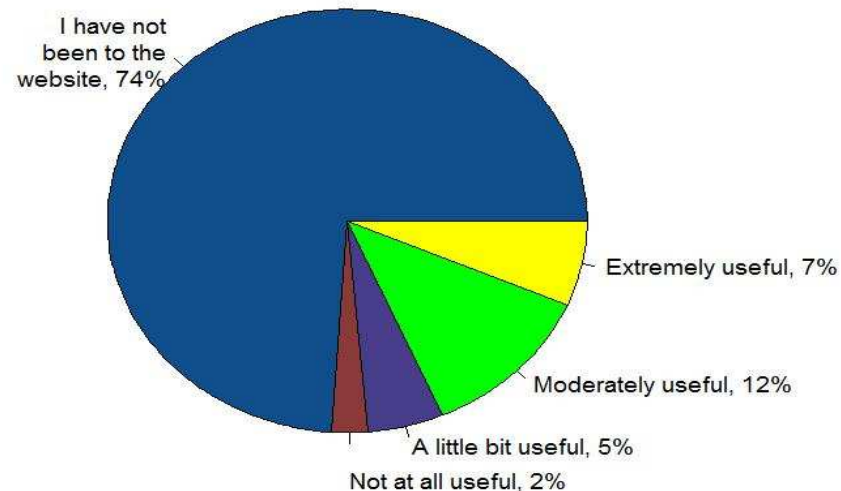
- Correlation between visiting website and using Escort services: r=.495; p<.001

Knowledge of How to Use Services

Safe Walk
- 53% know what days it runs
- 8% know what hours it runs
- 6% know where headquarters is
- 36% know whether Safe Walk will drop them off at home

Escort
- 68% know what days it runs
- 13% know what hours it runs
- 62% know how to access the bus
- 65% know whether Escort will drop them off at home

- Correct answers tend to be significantly, although weakly, correlated with confidence.
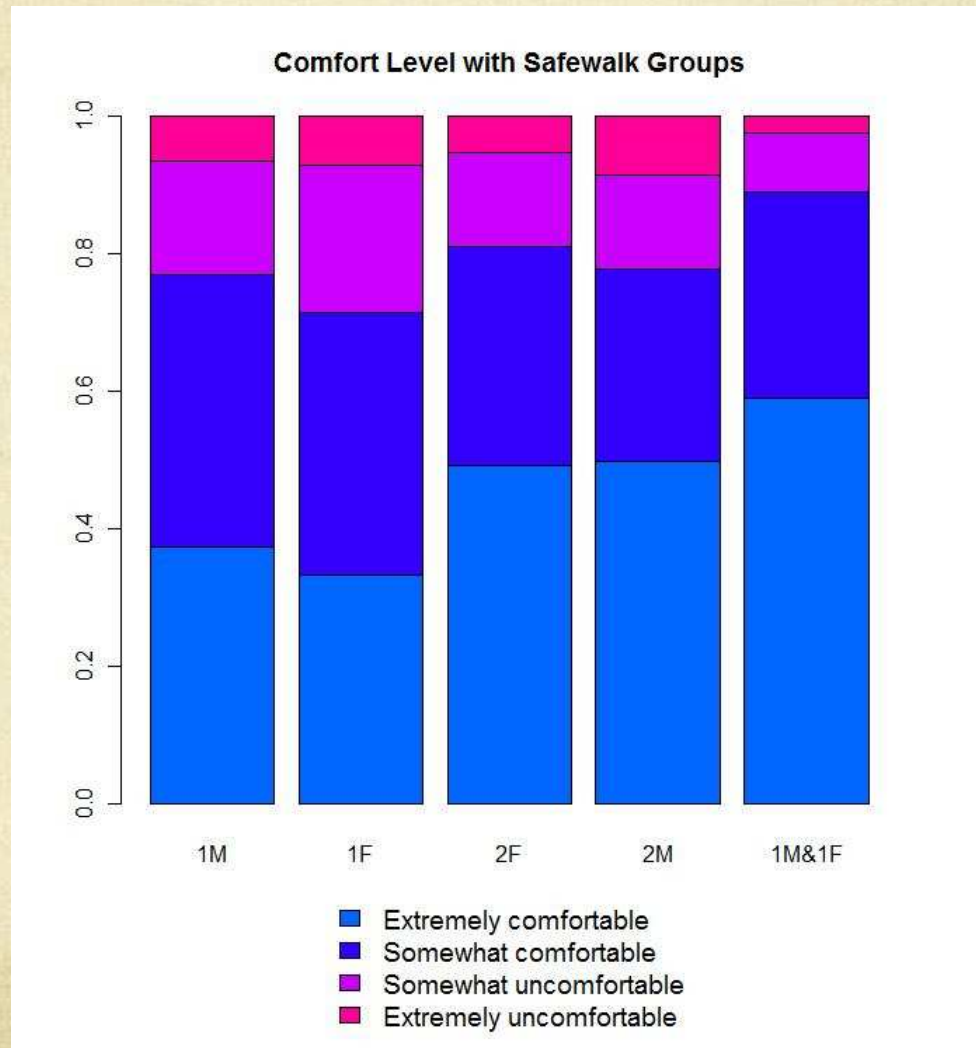
Recommendations

If you have never used CMU Safewalk, what might make you more likely to use it?
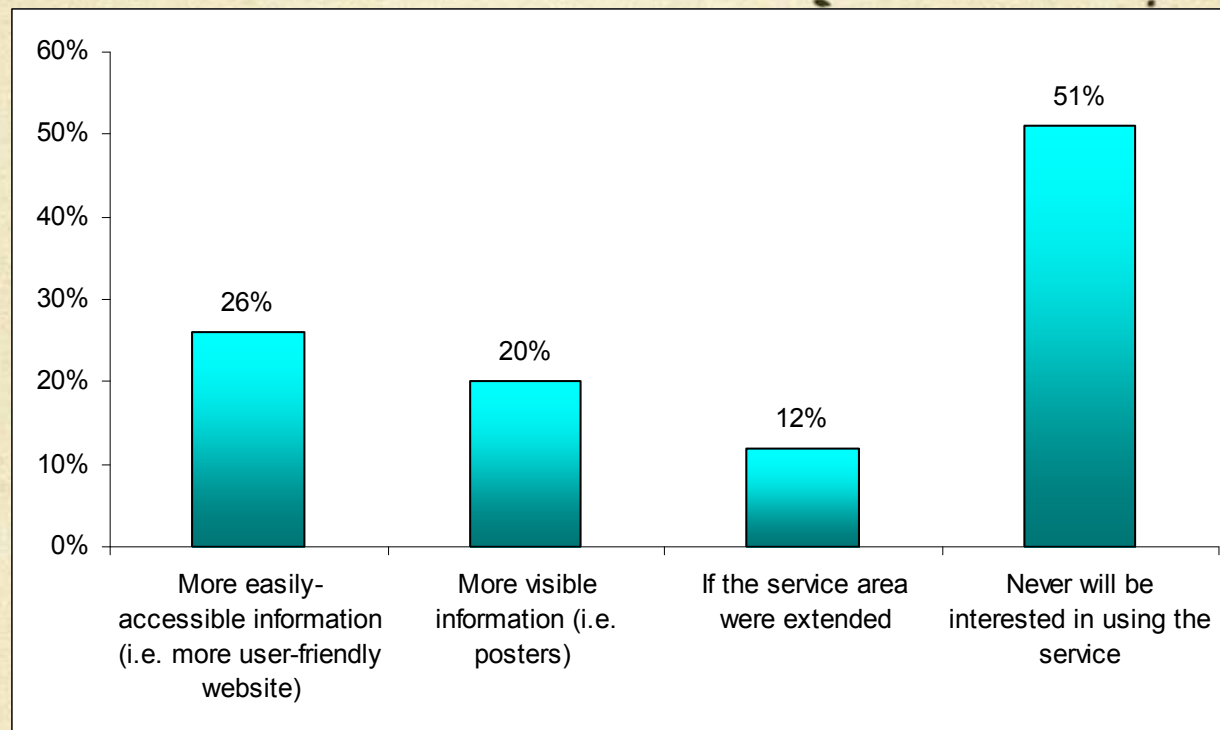
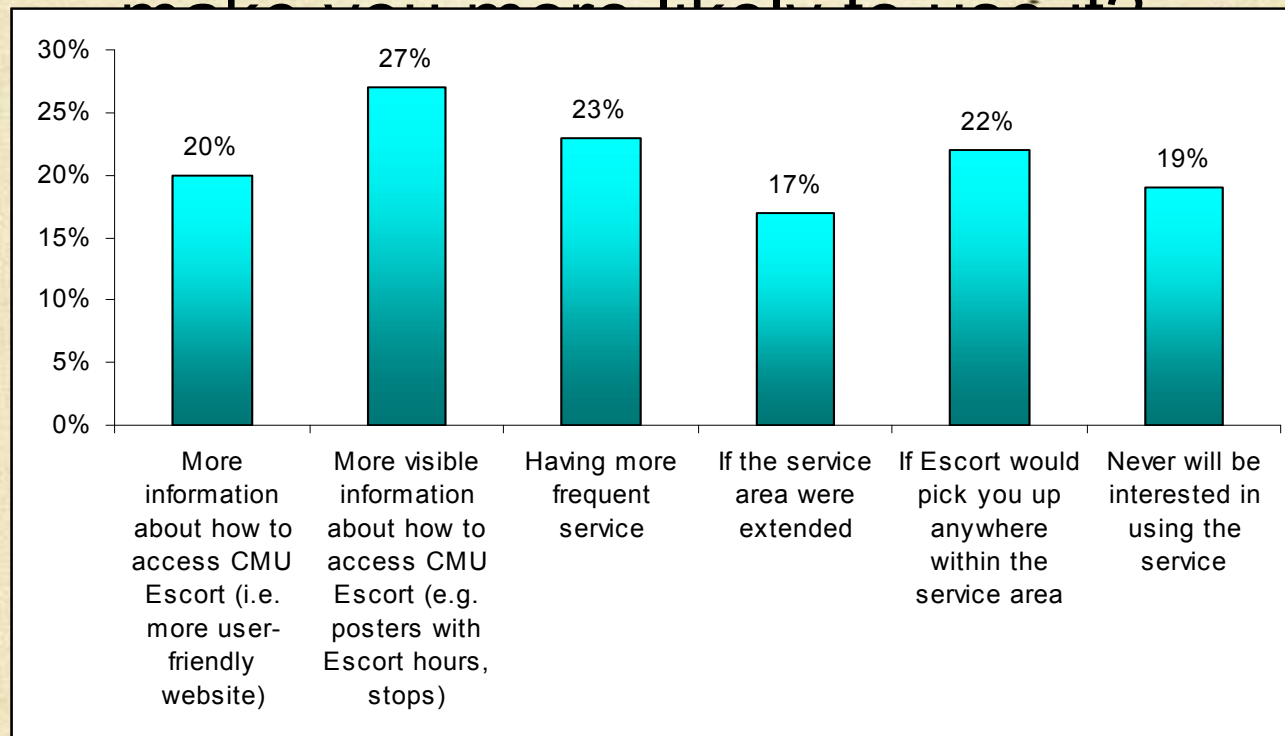*Other* category most common: something happening to make them feel less safe

Recommendations

Recommendations

If you have never used CMU Escort, what might

Other category most common: something happening to make them feel less safe, friendlier drivers, if they lived further away

Research Question

What portions of CMU students know about and/or utilize safe walk and escort services and how could we increase both knowledge and utilization of these services?

http://www.cmu.edu/police/shuttleandescort/index.html

Conclusions
Questions

http://www.thetartan.org/2010/3/29/news/safewalk