

Great topic

very well done questionnaire

excellent analysis and writeup

**I hope this information finds
some use somewhere on
campus!**

all best,

-BJ

Knowledge and Utilization of CMU SafeWalk and Escort Services

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Introduction

Our survey is a study of Carnegie Mellon University's late night transportation options. In order to evaluate the effectiveness of both SafeWalk and Escort services, it was necessary to evaluate the students' knowledge of how the services work as well as how much the students utilize these services.

CMU SafeWalk is a student run organization, which provides student volunteers that serve as walking escorts around campus as well as to any of the CMU Oakland house communities. This service operates nightly from 10p.m. to 2a.m. An escort can be requested by calling the hotline or visiting the headquarters in the basement of the University Center can request an escort. CMU Escort is a shuttle which drives students from designated pickup locations to anywhere within a 1.5 mile radius from campus. This service operates nightly from 6:30p.m. to 6:30a.m., and to be picked up students simply wait at one of the pickup sites.

The motivation for this study was a general concern for the safety of Carnegie Mellon students. The Carnegie Mellon police send out safety alerts almost biweekly with reports of students being robbed while walking home late at night. Fortunately, the campus community has access to late night transportation options. The two late night services are CMU SafeWalk and Escort. However, these services are not effective if students do not use them. An Internet search for research done on CMU safety services turned up multiple results about studies done at other universities concerning campus safety (National Safety Survey, 2008 & Santucci, 1993), escort services (Sari, 2006) and the costs of these safety measures (Shuttle Review, 2005). Therefore, the results of this survey will provide useful information about the effectiveness of the CMU late night transportation options as well as any demographic correlations. Finally, the results will be analyzed in order to increase both knowledge and utilization of these safety services.

Methods

The Sample

Because all members of the campus community are eligible to use both SafeWalk and Escort services, and because it was assumed that primarily students (rather than faculty) are on campus late at night, the target population for the study was all Carnegie Mellon undergraduate and graduate students who live within the region these safety services cover (i.e. within a 1.5 mile radius of campus). This includes full-time and part-time students who live both on and off campus. The sample was generated using the C-book, an annually-published directory of all members of the Carnegie Mellon community. While it is possible that there may be members of the target population who are not included in the C-book (e.g. an exchange student who arrived after the book was published) or ineligible units that are included in the C-book (e.g. students who live further than 1.5 miles from campus), this directory is overall a very complete list of people included in the target population. Students were selected into the study via a simple random sample of the C-book. Assuming a total population size of 11,371 students (the total number of students at Carnegie Mellon University, including ineligible units) and a desired margin of error of 5%, a desired sample size of 372 students was calculated. Assuming a 20% response rate for email-based surveys, we quintupled this number and emailed a total of 1878 students. After the initial email inviting students to participate in the survey, a total of three reminder emails were sent out at four-day intervals.

A total of 299 participants completed the survey. An additional 56 partially completed it. 177 abandoned it and never progressed beyond the consent form, and the remainder never opened the link. This represents a 16% response rate for completion (19% including partially completed surveys).

since the actual sample size was different from your target, you should report the actual MOE here also.

← (I see now that it is down on p. 8...)

The Survey

The web-based survey contained four sections: demographic information, current use of SafeWalk/Escort services, specific knowledge of *how* to use SafeWalk and Escort services, and questions about what might make students more likely to utilize these services (see Appendix A for a complete list of questions). The demographics section included only three questions: gender, year in school, and home college. The second section asked students which safety services they had heard of and/or used at least once during their time at Carnegie Mellon. There were also questions about frequency of use, and if students replied that they “rarely” or “never” used SafeWalk or Escort services, why not. The section concluded by asking students how comfortable they felt walking on and off campus after dark and how useful they found the SafeWalk and Escort websites to be, if they had ever been there.

The third section of the survey asked about specific knowledge of the logistics of using the two services. Because students might have a hard time self-assessing the accuracy and completeness of their knowledge, this section was structured and scored like a quiz. Students were asked the operating hours of each service, as well as how to get the SafeWalk volunteers and Escort shuttle to pick them up. For each of these questions, students were also asked to rate on a three-point scale their confidence that their answer was correct (1 = “I have no idea what the correct answer is,” 2 = “This is my best guess,” 3 = “I am sure this is the right answer”). The section concluded by asking participants where they live and whether SafeWalk and Escort would drop them off at their current residence.

After taking the quiz, students were presented with accurate information about how SafeWalk and Escort actually work (see Appendix A for details) and then asked a series of questions about what might make them more likely to use the services. The first question asked

how likely students would be to use SafeWalk if volunteers would drop them off at their current residence (currently, students can only be walked home if they live in campus housing). For each service type there were also closed-format questions about what might make students more likely to utilize services. For these questions students could check as many items as they wanted to, and they could also write in open-ended responses for the “other, please specify” options. Finally, participants were asked on a four-point scale ranging from “extremely uncomfortable” to “extremely comfortable” how comfortable they would be walking home with various combinations of SafeWalk volunteers (one male, one female, two males, two females, one male and one female).

Statistical Analyses

In order to explore the data collected, we first had to code it numerically. In the demographics portion of our survey, gender was coded 0-male and 1-female. For the quiz portion, we coded questions that had right and wrong answers as a 0-incorrect and a 1-correct. For quiz questions which had partially correct answers we coded on a 0-2 scale with a 1 being partially correct and a 2 being completely correct. For questions asking the survey taker to “check all that apply” we assigned each answer choice its own variable name and then gave 0 if the answer was not selected and a 1 if it was selected. Each of the questions which asked the survey taker to evaluate their personal comfort with a given situation or gauge the correctness of their previous answer were automatically coded on a number scale with the lowest number being the least comfortable or the least confident in their answer. Free response answers were left uncoded and analyzed separately. Once the data was coded numerically it was weighted and/or analyzed, which shall be explained below.

According to the CMU Factbook, 64.2% of the campus population is male and 33.8% of the campus population is female. Our sample, however, is 54% males and 46% female, which are more than 10% different than the actual values for Carnegie Mellon. Given that we feel our survey results will be definitely influenced by gender, we will perform post-stratification weighting by gender. We also believe that year in school will have an effect on the responses of the students in our sample, so we examined how our responses were distributed by class and compared this to the actual values for the university, which is shown in Table 1. Clearly our sample is heavily influenced by the lower years in school, so we deemed it necessary to weight our data by class as well.

Table 1 – Distribution of Year in School at Carnegie Mellon and in Our Sample

	Freshmen	Sophomores	Juniors	Seniors	Fifth Years	Graduate
Actual	13.45528	13.1123	12.08337	11.93387	1.750066	47.66511
Sample	24.83222	22.14765	16.44295	11.74497	1.342282	23.48993

Table 2 shows the breakdown of the actual Carnegie Mellon breakdown by home college as well as the proportion of the students in our survey. We decided, though not all of our proportions are perfect, that home school should really not have a large effect on how safe you feel walking home at night, so we decided not to weight our data by home school.

Table 2 - Distribution of Home College at Carnegie Mellon and in Our Sample

	CIT	HSS	MCS	SCS	CFA	Tepper	BXA	Heinz
Actual	25.83	11.92	8.83	11.96	10.76	12.32	3.84	10.41
Sample	31.4	20.4	15.2	12.8	11.6	6.1	.9	.9

Thus, we calculated appropriate weights for each demographic based on gender and class as shown in Table 3.

Table 3 – Demographic Proportions by Gender and Year in School / Weighting Scheme

Actual CMU Proportions						
	Freshmen	Sophomores	Juniors	Seniors	Fifth Years	Graduate
Male	0.086475	0.084271	0.077658	0.076697	0.011247	0.306338
Female	0.048929	0.047682	0.04394	0.043397	0.006364	0.173331
Sample Proportions						
	Freshmen	Sophomores	Juniors	Seniors	Fifth Years	Graduate
Male	0.134161	0.119657	0.088836	0.063454	0.007252	0.126909
Female	0.114162	0.10182	0.075593	0.053995	0.006171	0.107991
Assigned Weights						
	Freshmen	Sophomores	Juniors	Seniors	Fifth Years	Graduate
Male	0.644566	0.704274	0.874175	1.208703	1.550961	2.413843
Female	0.428598	0.4683	0.581274	0.803715	1.031296	1.605061

Note that these weights will only be used when we are describing the overall data. There are many analyses we will run that involve breaking down results by gender or class and comparing over gender or class. In these analyses, we will use the raw data because the weighted data will severely affect the results and make them nonsensical, for the weighted data is not proportionally accurate when we run a test based on one or more of the demographics we weighted with.

In our data, we ended up having a fair amount of item non-response to deal with. We considered imputation, but realized that our data was not missing at random. This was because many of our questions tested knowledge, so we could not tell if someone accidentally left the question blank, did not care enough to answer the question, or they did not know the answer and

define abbreviation before
using it

left it blank to emphasize that fact. Since MNAR data makes it extremely difficult to impute data, we decided not to impute values at all and just ignore those respondents who failed to provide an answer for a particular question if we were analyzing that question.

this is ok for this project, but you should know that under MNAR, just ignoring respondents with missing data doesn't avoid possible bias, it just changes it (MNAR is really irritating that

We started this project with a goal of a 5% margin of error. However, we did not get as many respondents as we would have like, so we recalculated margin of error and found that, with

our given sample size, we would have at an alpha level of .05 we would have a margin of error of 5.6%.

Results

Weighted responses reveal the extent to which Carnegie Mellon students currently utilize both types of safety services. 75.4% of students have heard of SafeWalk and 91.0% have heard of CMU Escort. In terms of utilization, during their time at Carnegie Mellon, 4.0% have used SafeWalk and 40.3% have used Escort at some point (Figure 1 displays a gender breakdown of usage of SafeWalk and Escort, as well as Shuttle service). In order to assess the frequency with which students used each service during the 2009-2010 school year, participants rated their usage on a 0-4 point scale, with 0 corresponding to “never” and 4 to “daily” use (see Figure 2). The weighted average for SafeWalk was .042, which is only slightly more than “never.” The average frequency of Escort use was higher, at .978; this corresponds to the average student using the Escort shuttle “at least once this year.”

Figure 1 – SafeWalk, Escort, and Shuttle Use by Gender

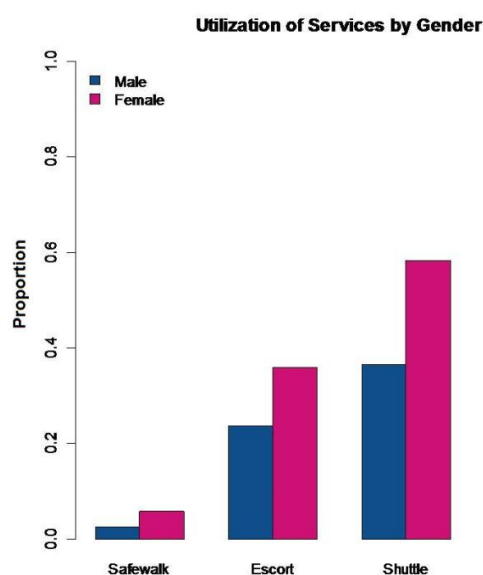
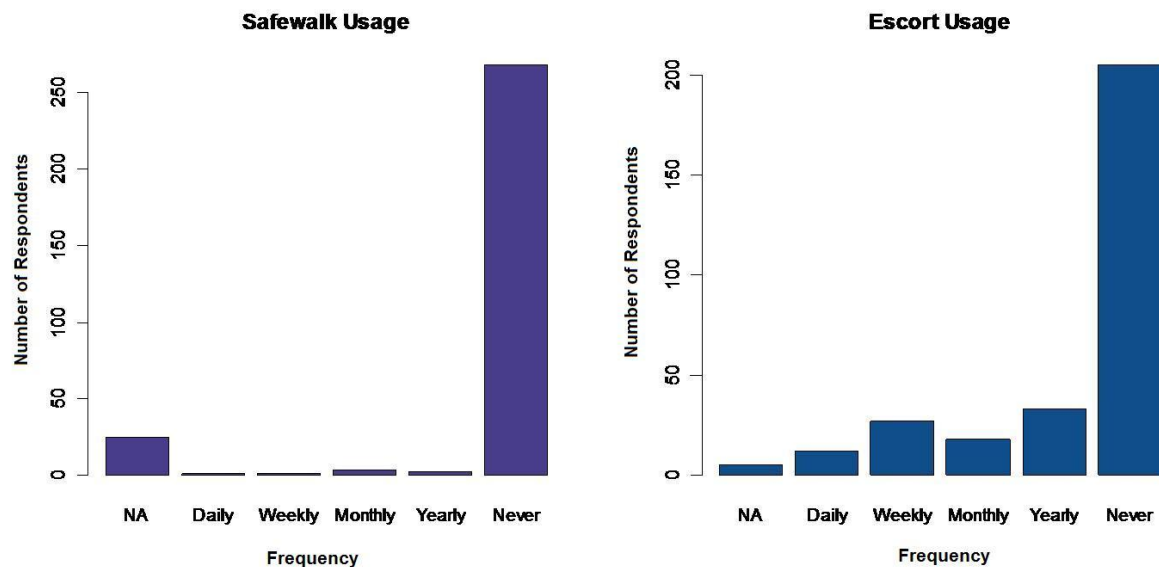


Figure 2 – Frequency of SafeWalk and Escort Use



One-way ANOVAs using unweighted scores reveal gender differences in these variables. There are no significant differences in the proportions of men and women who have heard of or used SafeWalk, nor are there significant differences in frequency of use of either service. There are, however, differences in Escort familiarity and utilization. More of the sampled women than men (93% versus 86%) had heard of Escort, and this difference was marginally significant ($F(296,1)=3.14, p<.01$). Additionally, significantly more women than men had actually used Escort services (36% versus 24%; $F(296,1)=5.99, p<.05$). great

Those students who reported “rarely” or “never” using either service were asked why not; Figures 3 and 4 summarize the results. Of particular interest are the proportions of students who do not currently use the services because they have not heard of them, or because they don’t know how to use them. Weighted data reveal that 19.1% of students across campus do not use SafeWalk because they haven’t heard of it, and another 30.1% do not know how to use it. For Escort, the numbers are 3.0% and 22.1%, respectively.

Figure 3 – Reasons for SafeWalk Non-use by Gender

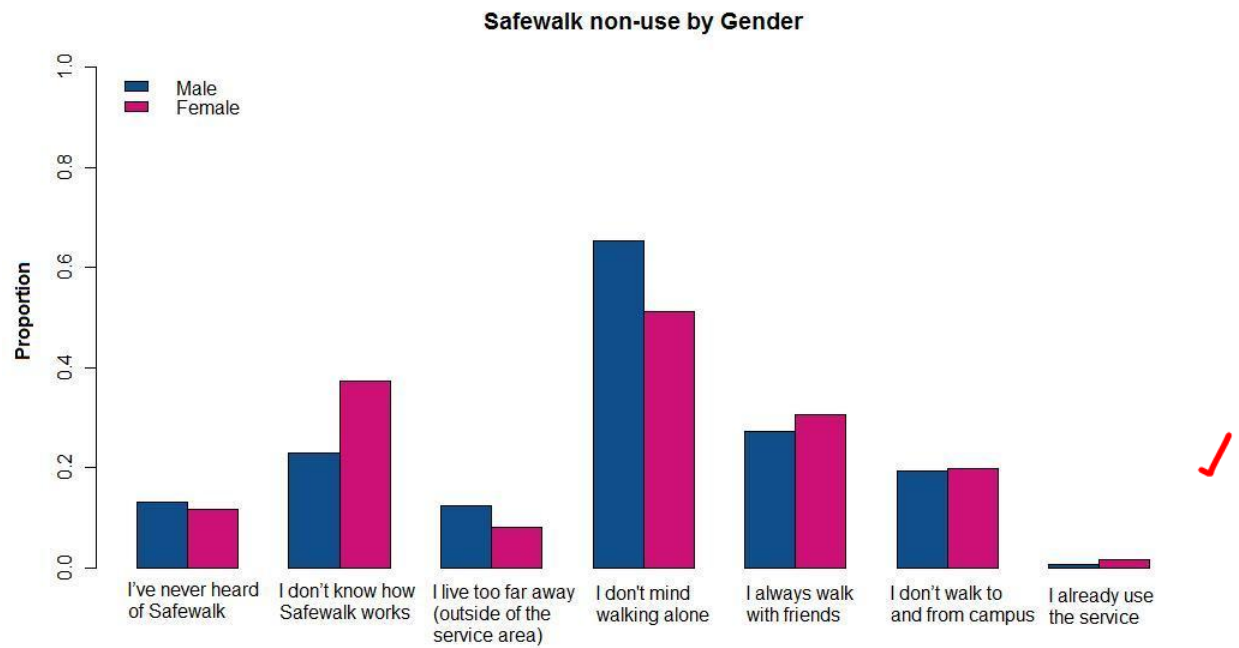
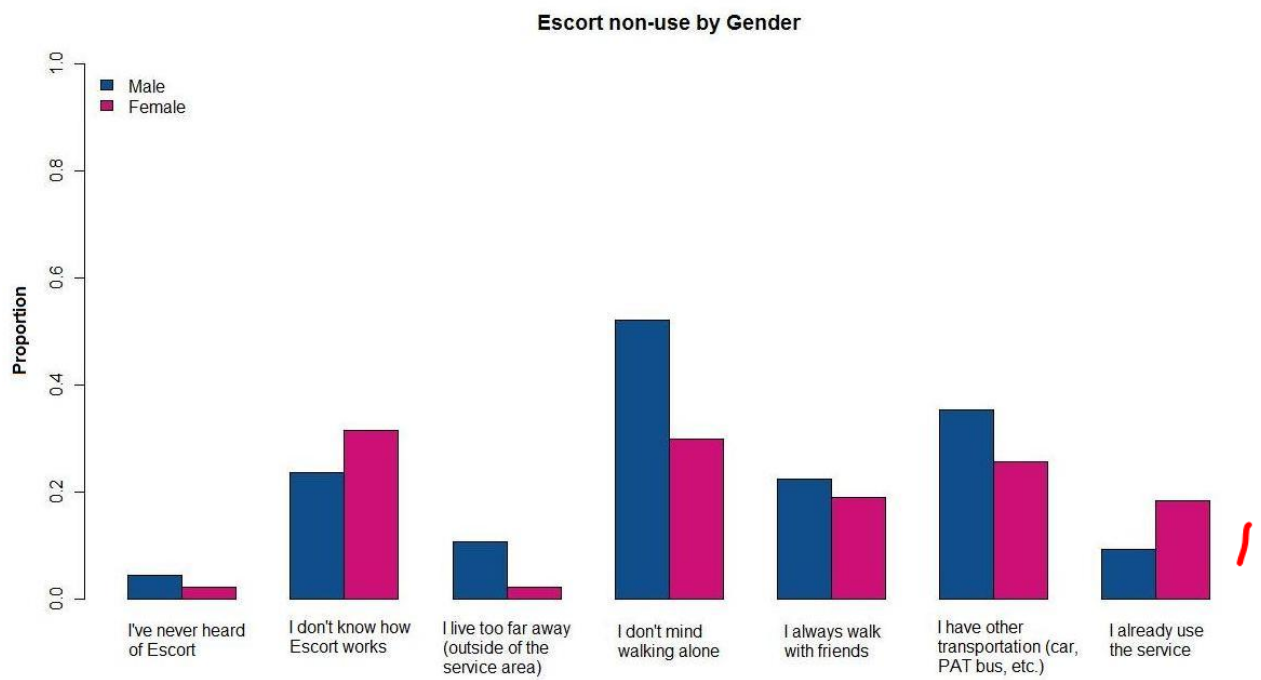
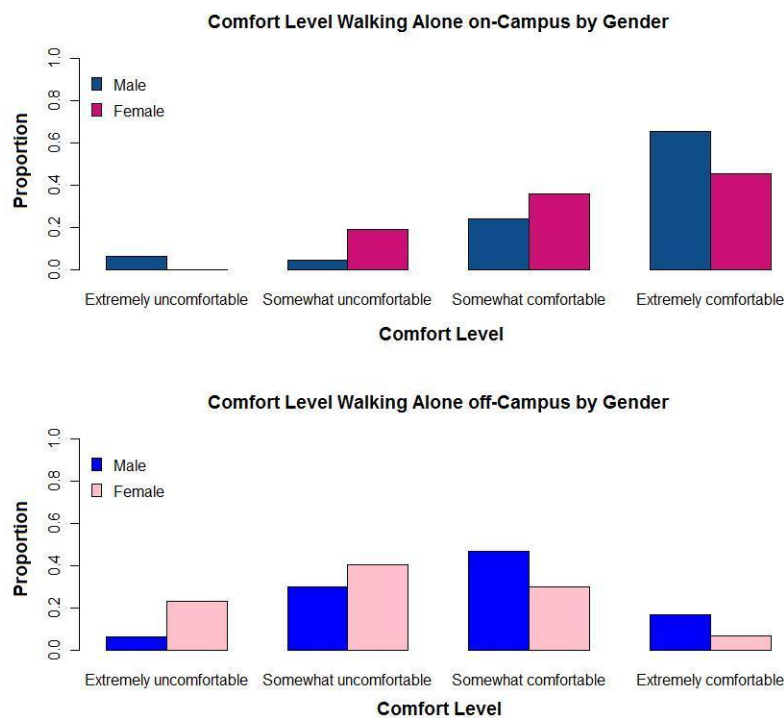


Figure 4 – Reasons for Escort Non-use by Gender



Participants were asked how comfortable they were walking on and off-campus by themselves after dark. They rated their comfort on a 1-4 scale with 1 corresponding to “extremely uncomfortable” and 4 to “extremely comfortable;” there was no neutral point. As expected, a paired-sample t-test using unweighted data shows that on average students feel safer walking on-campus than off-campus ($t(295)=20.67, p<.001$). Men also felt more comfortable than women both on-campus (3.48 versus 3.27; $F(293,1)=5.07, p<.05$) and off-campus (2.74 versus 2.20; $F(295,1)=21.47, p<.001$). Figure 5 shows these gender differences in greater detail.

Figure 5 – Comfort Levels Walking Alone After Dark



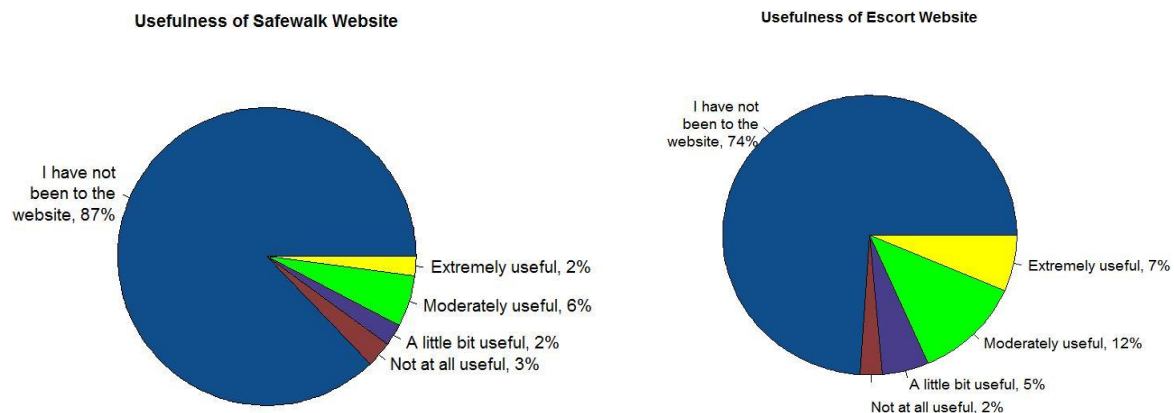
It was predicted that people who felt more uncomfortable walking alone might be more likely to use SafeWalk and Escort services. Results show that this is not entirely true. Although all correlations between comfort and usage are in the correct direction (they are negative, indicating that lower comfort corresponds with higher use), they are weak, and those for

SafeWalk, they are insignificant. Apparently even those students who feel **unSafeWalking** on and off-campus after dark are no more likely than their comfortable peers to enlist the SafeWalk volunteers to walk them home. For Escort, the correlations are significant. Those students who feel unsafe off-campus are more likely to take the Escort ($r=-.193$, $p<.001$). Interestingly, those who feel uncomfortable on-campus are also more likely to use Escort ($r=-.130$, $p<.05$) even though Escort's service area covers a wider geographic area. This is likely because those students who feel uncomfortable on-campus after dark are also likely to feel uncomfortable off-campus ($r=.617$, $p<.001$).

There was no significant difference in the proportion of men and women to visit either the SafeWalk or Escort websites. There was also no significant correlation in having heard of SafeWalk or Escort and visiting their sites. The correlation between site visits and actually using the two services was significant, however (SafeWalk: $r=.232$, $p<.001$; Escort: $r=.495$, $p<.001$).

Figure 6 shows how useful those students who have visited the websites found the information posted on them. Students tended to find the websites at least somewhat useful. Interestingly, students' perceived usefulness of the information posted on each website was significantly related to whether or not they ended up using the service (SafeWalk: $r=.225$, $p<.001$; Escort: $r=.476$, $p<.001$).

Figure 6 – Perceived Usefulness of SafeWalk and Escort Websites



The quiz section of our survey measured the specific knowledge that students had about how to use the two safety services. The majority of these questions were coded with a 1, signifying that the participant identified exactly the right answer, or a 0, indicating that they did not. The one exception was the question about how to let SafeWalk volunteers know that you wanted to be picked up: there are two correct answers to this question, and students were awarded 0 point if they identified neither method, 1 if they identified one, and 2 if they identified both.

Weighted results reveal that 52.7% of students across campus know what days SafeWalk runs (the answer is everyday), but only 8.4% know that volunteers are available to walk students home between 10p.m. and 2a.m. Out of the two possible pick-up possibilities (calling the SafeWalk phone number or going to SafeWalk headquarters), the average student could identify .81 of them. 6.9% of students can correctly identify SafeWalk headquarters (in the basement of the UC near the package pickup window). SafeWalk will walk students from campus to any campus-affiliated building, including Oakland apartments that are associated with University housing. It will not drop students off at other off-campus residences. Only 36.0% of students correctly identified whether or not SafeWalk would drop them off at their current residence.

Students tend to know more about how Escort works. Sixty-eight percent of students know that the service runs seven days per week and 12.7% know that it runs between 6p.m. and 6a.m. 61.9% of students know that they must stand at designated stops around campus in order to pick up the Escort shuttle. Although Escort will only pick up students at designated stops outside campus-affiliated buildings, it will drop students off anywhere within a 1.5 mile radius from campus; 65.2 percent of students correctly identify whether or not Escort will drop them off at their current residence.

In addition to answering the questions, participants were asked to rate their confidence in their answers. A three-point scale was used where 3 corresponded to “I am sure this is the right answer,” 2 to “this is my best guess,” and 1 to “I have no idea what the correct answer is.” Unweighted analysis shows that the average confidence levels for most questions fall between one and two, indicating that most people are not confident in their knowledge of how to use these services. The single exception is that the average confidence rating for the question “How does the CMU Escort know to come pick you up?” was 2.09. This only indicates, however, that participants’ answers tended to be their “best guess,” rather than wild guesses or blank answers. Some people may have been correct by luck, rather than because they actually know how to use these safety services. Nevertheless, people tended to have a weak-to-moderate—but significant—understanding of the quality of their own knowledge, as evidence by the positive correlations (r ranging from .272 to .550, all with $p < .001$) between the correctness of answers and confidence.

There are weak but significant correlations between students’ overall confidence about how to use a particular service (the average of the confidence about all questions relating to that service) and whether or not they have ever used it (SafeWalk: $r = .282$, $p < .001$; Escort: $r = .214$,

these
'confidence'
questions
were a good
idea.

$p < .001$). Correlations between overall confidence and frequency of service use is also significant, and for Escort in particular the relationship is quite strong (SafeWalk: $r = .294$, $p < .001$; Escort: $r = .652$, $p < .001$). Likewise, total knowledge of each service (the sum of scores for all questions relating to that service) tends to be correlated with whether students have ever used the service (SafeWalk: $r = .303$, $p < .001$; Escort: $r = .147$, $p < .05$) and the frequency with which they use Escort services ($r = .497$, $p < .001$), although this relationship with SafeWalk is insignificant.

When both confidence in knowledge and knowledge itself are included in binary logistic regression on use and frequency, both were still significant predictors for Escort, but only confidence remained significant for SafeWalk (see Table 4). These models account for a great

deal or the variance in whether or not students use safety services and how often they use them;

this is particularly true for Escort, where approximately half of the variance is accounted for by the models.

Table 4 – Quiz Confidence and Knowledge Regressed onto Utilization

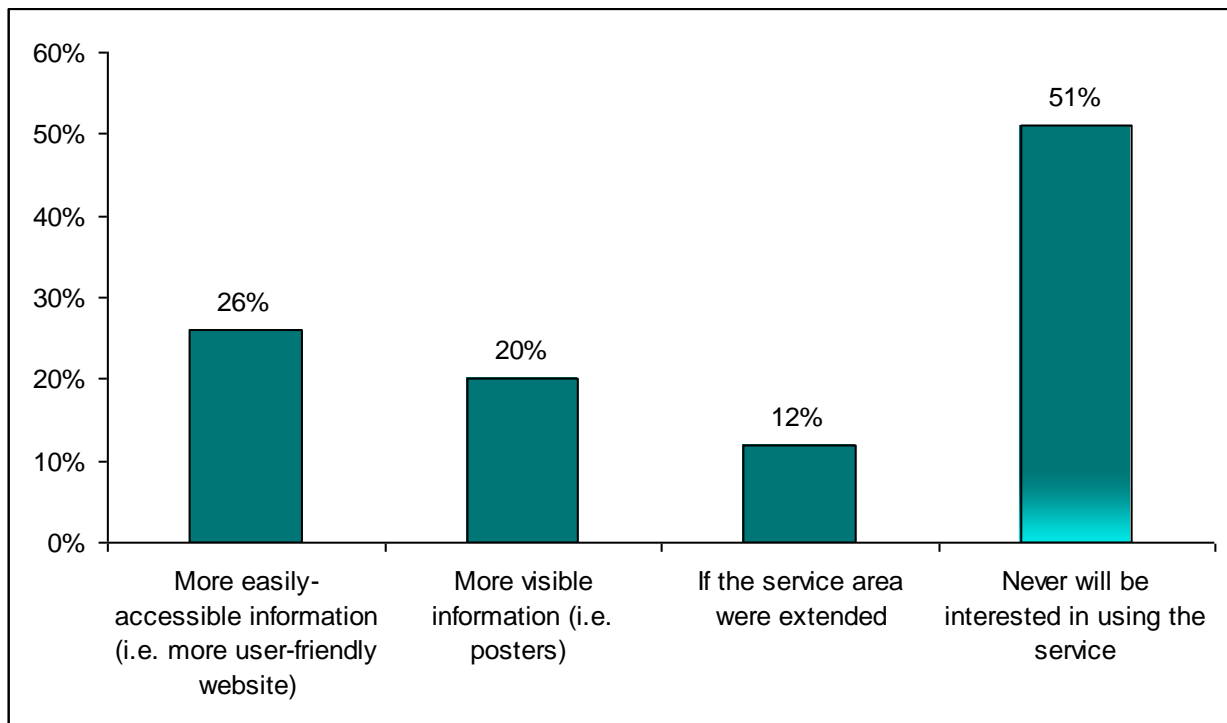
Variables Included in Regression	Dependent Variable			
	<i>SafeWalk Use</i>	<i>SafeWalk Frequency of Use</i>	<i>Escort Use</i>	<i>Escort Frequency of Use</i>
<i>SafeWalk Confidence</i>	1.409† (.804)	.333*** (.072)		
<i>SafeWalk Knowledge</i>	.605 (.407)	-.050 (.037)		
<i>Escort Confidence</i>			2.560*** (.376)	.940*** (.097)
<i>Escort Knowledge</i>			.594* (.257)	.261*** (.076)
<i>Constant</i>	-7.079*** (1.437)	-.408*** (.122)	-7.205*** (.830)	-1.461*** (.157)
R-squared	.224	.113	.536	.449

Note: Significance levels are noted as † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$. Standard errors are reported in parentheses.

After learning about how SafeWalk and Escort actually work, students were asked several questions about what might make them more likely to use both services.

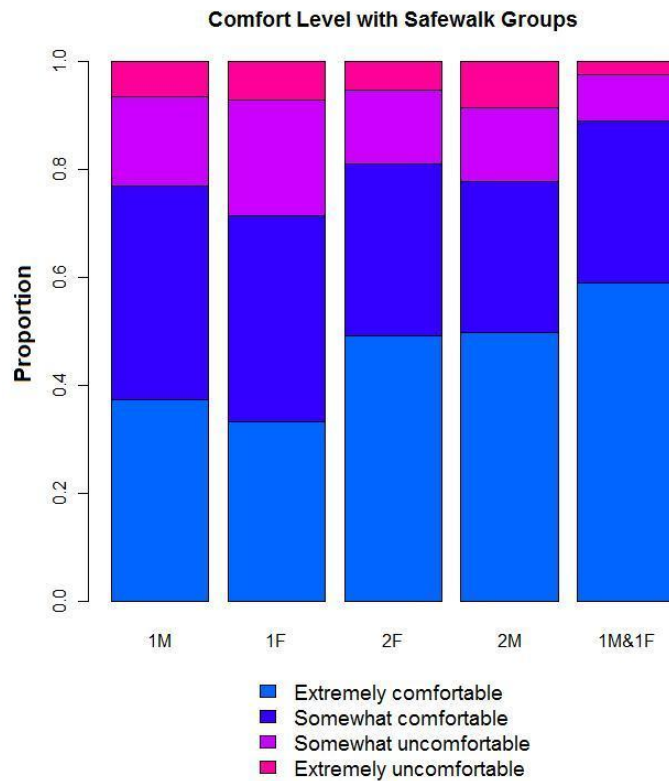
On a five-point scale ranging from “extremely unlikely” to “extremely likely,” they were asked whether they would use SafeWalk if service were extended such that it would drop them off at their current residence (recall that it will only deliver students to University-affiliated housing). The weighted average score was 1.53, which falls between “extremely unlikely” and “unlikely.” This is not surprising, given that only four percent of students have ever used SafeWalk, and that approximately fifty percent of students say that they would never be interested in using the service. Nevertheless, Figure 7 summarizes responses to the question “If you have never used CMU SafeWalk, what might make you more likely to use it?” Of note is that the most common responses concerned dissemination of information on how to use the service. Students were also permitted to write in open-ended “other” responses; the most common of these essentially said that if something happened to make students feel more unsafe (if they were ever attacked, if there were a sudden spike in the crime rate, etc.), they would use the service.

Figure 7 – Ideas for Increasing SafeWalk Utilization



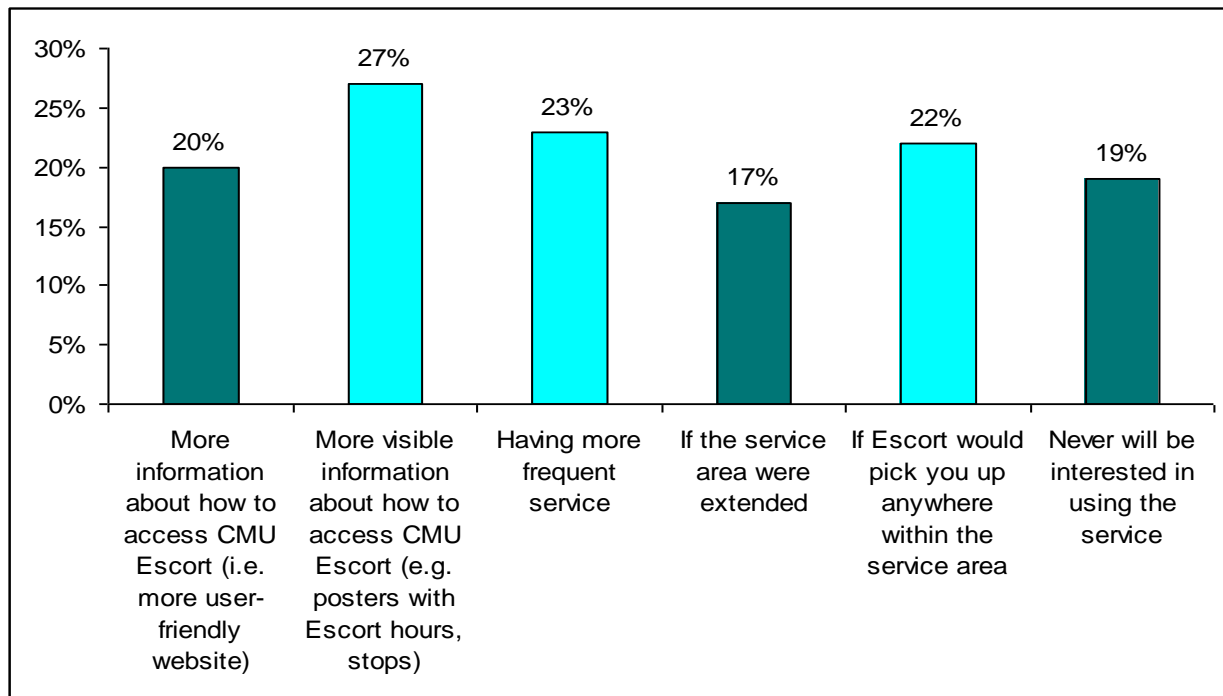
Students were also asked how comfortable they would be walking home with various combinations of SafeWalk volunteers: one male, one female, two females, two females, and one male and one female. Figure 8 shows the results. The majority of students would feel the most comfortable walking with one male and one female volunteer. Interestingly, they would feel least comfortable walking with one female.

Figure 8 – Comfort Level with SafeWalk Volunteer Combinations



Students were also asked the question “If you have never used CMU Escort, what might make you more likely to use it?” Their responses are summarized in Figure 9. Again, many students responded that better access to information would be beneficial. In addition, 23% would like to see the Escort shuttles running more frequently and they would like Escort to pick them up anywhere in the service area in addition to dropping them off anywhere.

Figure 9 – Ideas for Increasing Escort Utilization



Discussion

Limitations

In the analysis of survey responses, we computed post-stratification weights using the gender and class of the respondents. Therefore, in the statistical analysis of gender differences we used only unweighted data. This may have created bias in the analysis due to high response rates for underclassmen, which contributed the biggest number of responses to the survey. It would have been better to compute different weights for different analyses, such that the data were weighted using all post-strata except those that were directly compared in that analysis.

Another limiting factor to the strength of the analysis is the relatively small sample size in relation to SafeWalk usage. No significant gender differences were found in terms of service utilization, but we hypothesize that this is due to the relatively small sample size (four percent of 297 respondents) rather than an actual lack of a significant difference. A bigger sample size is

"relatively small portion of the sample that actually use safewalk"...

likely to result in higher numbers of respondents who utilize SafeWalk, which in turn would decrease the standard error of the difference in the estimates of the usage rates.

Analysis of Results

There are many points brought up in our analysis that beg further discussion. We will show in more concise form exactly what the important and significant results were in our survey. It should first be noted that a prevalent theme throughout most of our discussion will be the general lack of use of SafeWalk services. Because of this lack of use, there are going to be very slim and insignificant differences between the different demographics in our sample. Escort services, however, has a much higher usage rate, which allows us to look at demographic breakdowns and draw conclusions from those.

One would expect that gender plays a role in the usage of these services. We can conclude from our analysis that significantly more women know about and use Escort services than men, though we cannot claim a similar result for SafeWalk. As mentioned, this result for Escort services makes sense, especially given our analysis of comfort walking alone at night. Significantly more men than women are comfortable walking alone at night either on or off campus.

These gender conclusions are nothing terribly surprising, but they confirmed (?) asserted some of our initial hypotheses for our survey. The more interesting results deal with how Carnegie Mellon students in general find out about the services and what motivates the students to use the services. It should be noted that we can claim that, if a student visited a website for either of the services, the subjective usefulness of the website for a student was significantly related to whether or not a student used the services. However, simply hearing about a service was not a

significant influence on a student to go to the website. Thus, students must have a different motivation to visit one of the websites, which we may presume is because they are interested in using the service. It would appear, then, that the websites are in fact influential on usage of the services, which would imply that if the websites are ensured to provide the most useful information possible in a coherent way, students that do use the websites will be more inclined to take advantage of the services.

From our quiz within our survey, we learned many things regarding knowledge of both SafeWalk and Escort services on campus. As expected from the above discussion, students know significantly more about Escort than they do SafeWalk. In fact, more than twice as many students know if Escort will drop them off at their current residence than if SafeWalk will drop them off there. This large difference can be confounded with Escort usage though, for it is conceivable that the main reason people know if Escort will drop them off at home is if they already use Escort to bring them home. With that in mind, though, there is still a severe lack of knowledge of the workings of SafeWalk within the community.

As noted in the survey section, we also had respondents state the confidence in which they answered the quiz questions. As one would expect, there was a significant positive correlation between both frequency of usage for SafeWalk as well as just having used it once and confidence in SafeWalk-related answers, and similarly for Escort as well. We can also say that there was significant positive correlation between both frequency of usage for Escort as well as just having used it once and overall knowledge of Escort-related questions.

Our respondents we also asked to comment on what would make them more likely to use either Escort or SafeWalk. In line with what we have witnessed so far, a vast majority of respondents said that they would never use SafeWalk services. However, many people stated that

more accessible information or more visible information may cause them to use the service in the future. Escort, on the other hand, did not have nearly as many people say they would never use Escort. This fact may be confounded with the fact that Escort is a motorized transportation service, so in addition to keeping you safe, it also makes the trip back home significantly easier, especially if the weather is not terribly good. However, as far as suggestions were concerned, roughly the same percentages as for SafeWalk responded for increases accessibility and visibility of information. People would also like more frequent service as well as a greater diversity of pick-up locations.

We also examined the comfort of our respondents walking with different pairings of SafeWalk escorts, and most people felt the most comfortable with one male and one female, while most people felt the least comfortable with two males, which again makes a lot of sense, for a female respondents may feel much less comfortable with two males walking her home, given she does not know them.

Conclusions

Our data provides some powerful insight into the knowledge and utilization of SafeWalk and Escort services on Carnegie Mellon's campus. Across the board, it is clear that better promotion of information regarding the usage of both services would be extremely beneficial to the student body and could possibly increase usage of the services. Perhaps the best mediums for information are the websites for each service since there is a significant correlation between website usefulness and service usage. Unfortunately, many people do not feel like they will ever utilize SafeWalk services, and for those people there is not much we can do. For the remainder, following our above suggestions regarding information dissemination and the website should increase SafeWalk usage. Escort services, however, are taken advantage of much more often

than SafeWalk. This most likely has to do with the mode of transportation (vehicle versus walking), though increasing the usefulness of the website as well as promoting it around campus will definitely increase usage of Escort services.

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Appendix A

Questionnaire: Knowledge and Utilization of CMU SafeWalk and Escort Services

What is your gender?

- ☐ Male
- ☐ Female

What year in school are you?

- ☐ First Year
- ☐ Second Year
- ☐ Third Year
- ☐ Fourth Year
- ☐ Fifth Year
- ☐ Graduate Student

What is your home college?

- ☐ Carnegie Institute of Technology
- ☐ College of Fine Arts
- ☐ College of Humanities and Social Sciences
- ☐ Heinz College
- ☐ Mellon College of Science
- ☐ School of Computer Science
- ☐ Tepper School of Business
- ☐ BXA

The Carnegie Mellon community has several transportation options for students. Which of the following programs have you heard of? Check all that apply.

- ☐ SafeWalk
- ☐ CMU Escort
- ☐ CMU Shuttle
- ☐ I have not heard of any of these programs

Which of the following programs have you used at least once during your time at Carnegie Mellon? Check all that apply.

- ☐ SafeWalk
- ☐ CMU Escort
- ☐ CMU Shuttle
- ☐ I have not used any of these programs

as a matter of completeness it would be nice to include with this list of the survey questions the number and percent of responses in each category for each question.

-BJ

This school year (August '09 – Present), how often do you use the following services, on average?

	<i>Daily</i>	<i>Weekly</i>	<i>Monthly</i>	<i>At least once this year</i>	<i>Never</i>
Safewalk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CMU Escort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you rarely or never use SafeWalk services, why not? Check all that apply.

- ☐ I've never heard of SafeWalk
☐ I don't know how SafeWalk works
☐ I live too far away (outside of the service area)
☐ I don't mind walking alone
☐ I always walk with friends
☐ I don't walk to and from campus
☐ Other (please specify) _____

If you rarely or never use CMU Escort, why not? Check all that apply.

- ☐ I've never heard of CMU Escort
☐ I don't know how CMU Escort works
☐ I live too far away (outside of the service area)
☐ I don't mind walking alone
☐ I always walk with friends
☐ I have other transportation (car, PAT bus, etc.)
☐ Other (please specify) _____

How comfortable are you walking across campus by yourself after dark (please circle)?

Extremely uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Extremely comfortable
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How comfortable are you walking off-campus by yourself after dark?

Extremely uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Extremely comfortable
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If you have been to the SafeWalk or CMU Escort websites, how useful was the information on those sites?

	<i>Not at all useful</i>	<i>A little bit useful</i>	<i>Moderately useful</i>	<i>Extremely useful</i>	<i>I have not been to the website</i>
Safewalk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
CMU Escort	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

On what days does CMU Escort 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 CMU Escort 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 does the CMU Escort know to come pick you up? Check all that apply.

- ☐ You stand at specified stops around campus, and they will pick you up as they make rounds
- ☐ You call the Escort number and they will come pick you up
- ☐ You go to Escort headquarters and ask them to drive you home

How confident are you that your answer above is correct?

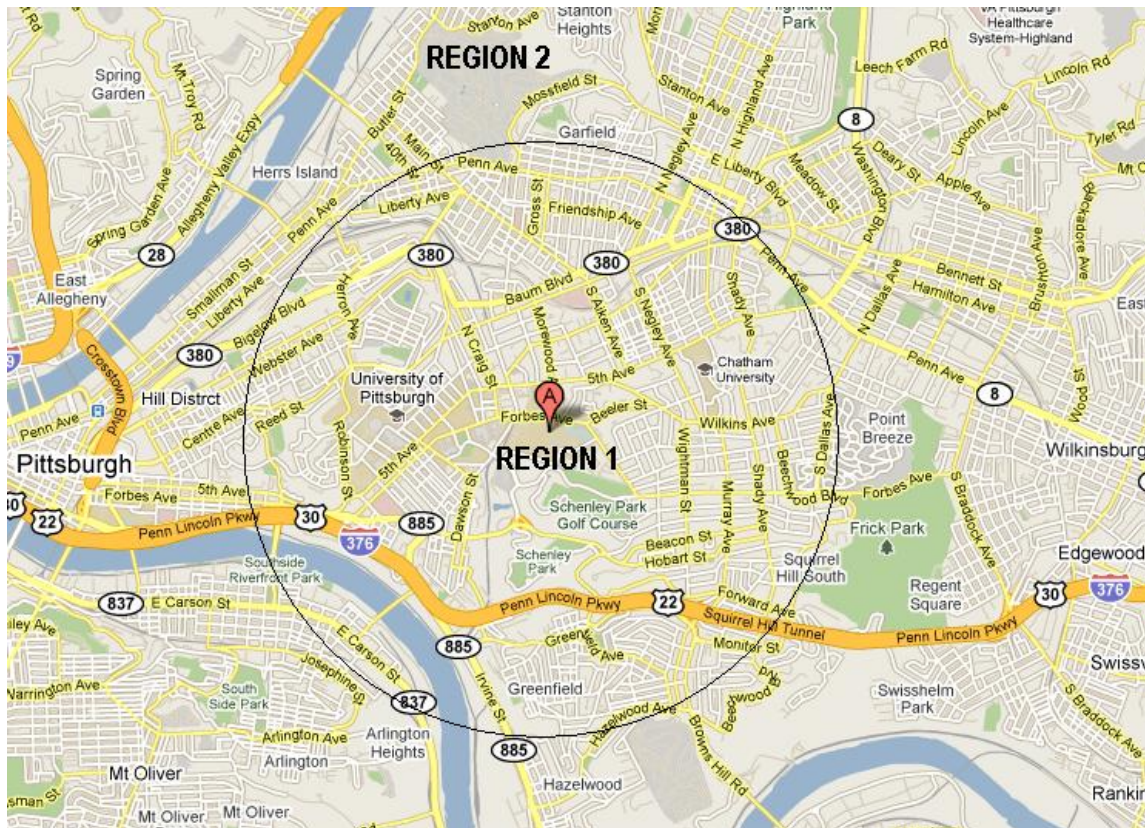
- ☐ I am sure this is the right answer
- ☐ This is my best guess
- ☐ I have no idea what the correct answer is

Where do you live?

- ☐ Morewood Ave. dorms [Mudge, Stever, or Morewood Gardens/E Tower]
- ☐ Greek Quad
- ☐ Margaret Morrison Street [Roselawn Terrace, Woodlawn Apartments, Boss, McGill, Hamerschlag, Donner, Welch, Henderson, Scobell, Greek Housing, Margaret Morrison Apartments, Spirit House, Tech House]
- ☐ Oakland campus housing [Fairfax, London Terrace, Shirley, Shady Oak, Veronica, Webster, Neville Co-op]
- ☐ Doherty Apartments
- ☐ West Wing/Resnik
- ☐ Other, off-campus (Please look at map below and specify region) _____

Will SafeWalk drop you off at your current residence? Yes No I don't know

Will CMU Escort drop you off at your current residence? Yes No I don't know



Please read the following information about SafeWalk and CMU Escort services, and then answer the final four questions in the survey.

SAFEWALK

- Student volunteers will walk you to campus and Oakland house communities
- Operates nightly from 10p.m. until 2 a.m.
- To request an escort:
 - Call 412-268-SAFE (x8-7233)
 - Visit headquarters (in the lower level of the UC, by the TV near the package pick-up window)

CMU ESCORT

- Escort shuttle drives you from designated pickup locations to anywhere within a 1.5 mile radius from campus
- Operates daily from 6:30p.m. to 6:30 a.m.
- To be picked up, wait at one of the following locations:
 - Morewood Gardens (E-tower parking lot)
 - Hamburg Hall
 - University Center (Forbes Avenue in front of building)
 - Margaret Morrison Plaza (MM Storefronts)
 - GSIA/Tepper School of Business (at the corner of Tech & Frew streets)
 - Porter Hall (lower Frew Street exit)
 - Mellon Institute
 - SEI - Rear entrance on Heanry St.
 - 4616 Henry Street (INI)
 - 300 South Craig St.

If you live in off-campus, non-university housing, how likely would you be to utilize SafeWalk if it brought you to your current residence?

Extremely unlikely	Somewhat unlikely	Neither likely nor unlikely	Somewhat likely	Extremely likely	I live in campus housing
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If you have never used CMU SafeWalk, what might make you more likely to use it?

___ Having more easily-accessible available about how to access SafeWalk (e.g. a more user-friendly website)

___ Having more visible information about how to access SafeWalk (e.g. posters with SafeWalk hours and access information posted around campus)

___ If the service area were extended

___ Other (please specify) _____

___ I would never be interested in using the service

If you have never used CMU Escort, what might make you more likely to use it?

___ Having more easily-accessible available about how to access Escort services (e.g. a more user-friendly website)

___ Having more visible information about how to access CMU Escort (e.g. posters with Escort hours, stops, and access information posted around campus)

___ Having more frequent service

___ If the service area were extended

___ If Escort would pick you up anywhere within the service area

___ Other (please specify) _____

___ I would never be interested in using the service

How comfortable would you be walking home with the following combinations of SafeWalk escorts (assume that you don't personally know either person). Please check one box per row.

	Extremely uncomfortable	Somewhat uncomfortable	Somewhat comfortable	Extremely comfortable
1 male				
1 female				
2 males				
2 females				
1 male and 1 female				