

Undergraduates' Perception and Utilization of Mandatory Fees

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Motivation

Freshmen Fall 2009			
Per-Unit Tuition Rate - \$560			
	Resident	Commuter	Off-Campus
Tuition	\$40,300	\$40,300	\$40,300
Orientation Fee	192	192	192
Activity Fee	184	184	184
Port Authority Fee	84	84	84
Media Fee	10	10	10
Technology Fee	150	150	150
Room & Fees ¹	6,060	0	5,560
Dining ²	4,280	1,670	3,970
Books & Supplies ^{3,4}	1,000	1,000	1,000
Personal/Misc. ³	1,400	1,400	1,400
Transportation ⁴	0	640	0
Totals	\$53,660	\$45,630	\$52,850



Questionnaire

- Demographics
 - Year
 - Gender
 - On/Off Campus
 - Student Organizations
 - International Student
- Perception
 - Awareness of a particular fee
 - Estimate of fee
- Attitude
 - Subjects' feelings on particular fees
- Utilization
 - Students' actual usage of services provided by fees



Our Sample

- We were looking for a 10% SE
- There are 5,892 Undergraduates so we needed 96.04 responses
- expected a 20% response rate
- Need a sample of approximately 500

Selecting the Sample

- Used random numbers and C-Book
- Wrote a web app that gave 3 random variables: page, column and row.
- If issue, just got new random numbers
- Selected 500 people

Sending Out The Survey

- Sent out the email to 496 people
- 4 people had previously opted-out of Survey Monkey Survey
- Sent 3 emails so far
 - Initial - Mar 29
 - 1st reminder - March 31
 - 2nd reminder - April 4

The Email

- Subject:What do you think about mandatory student fees?
Body:Dear Student,

We're a team of students doing a survey for our 36-303 survey class. Our survey is about your attitude towards how our tuition and mandatory fees are used for non-academic resources.

We have randomly selected you to complete our survey, which should not take more than 5 minutes. We need your help to make this project a success, so please fill it out!

Here is a link to the survey:

<http://www.surveymonkey.com/s.aspx>

With much appreciation,

Joe Burgess
Alexandra Lecompte
John Lee
Ben McGrath

Please note: If you do not wish to receive further emails from us, please click the link below, and you will be automatically removed from our mailing list.

<http://www.surveymonkey.com/optout.aspx>

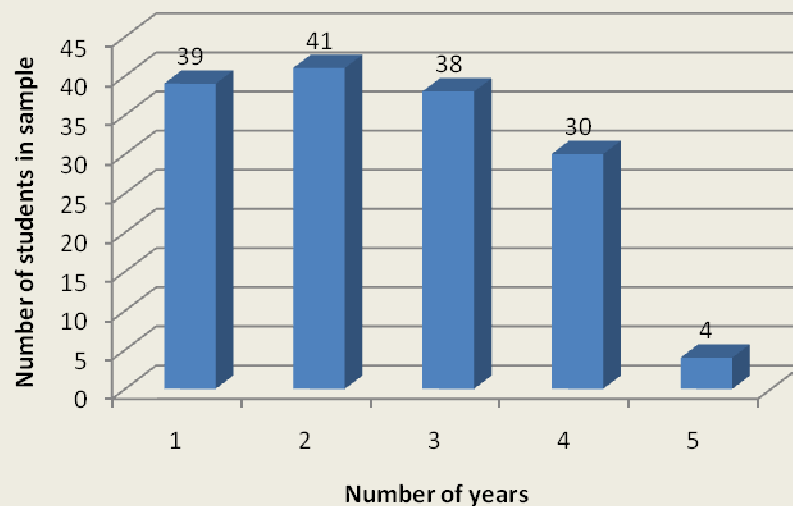
What's New

- Post-Stratification
 - School, Year
 - Not by Gender
- Imputation
 - Done for item non-response

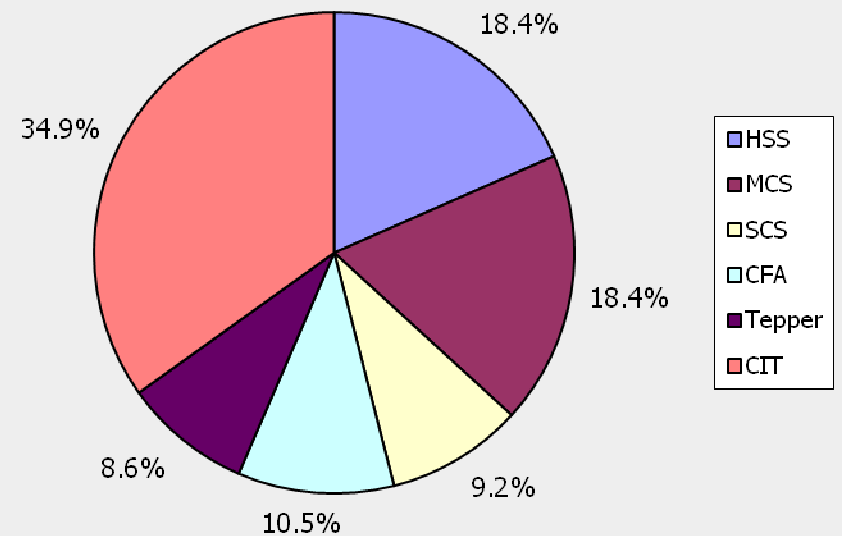
Our Respondents

-Demographic Results

How many years have you been a Carnegie Mellon student?



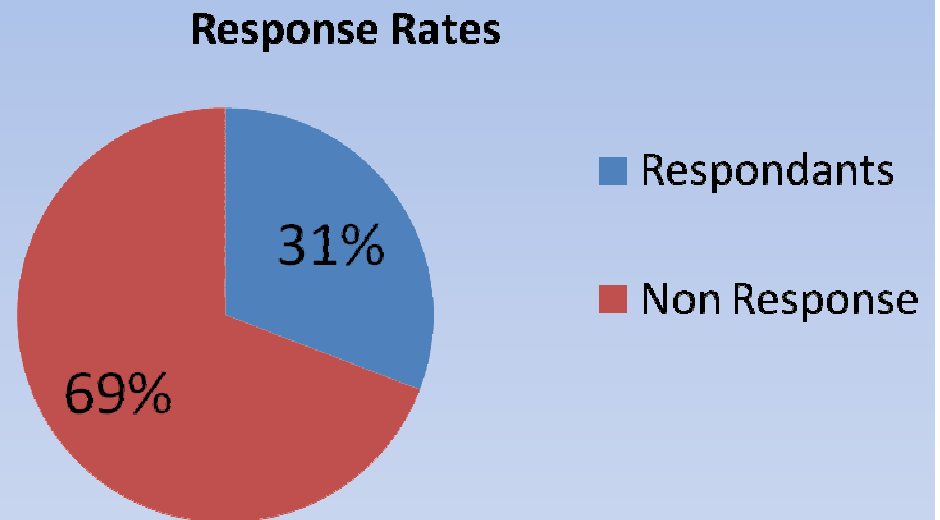
What college are you in?



- Male to Female Ratio: 1.235:1 compared to school-wide ratio of 1.5:1.
- 57.2% live on campus, 42.8% off campus.
- 75% are members of student organizations, 25% are not.

Post Processing

- Response Rate: $153/496 = 30.8\%$



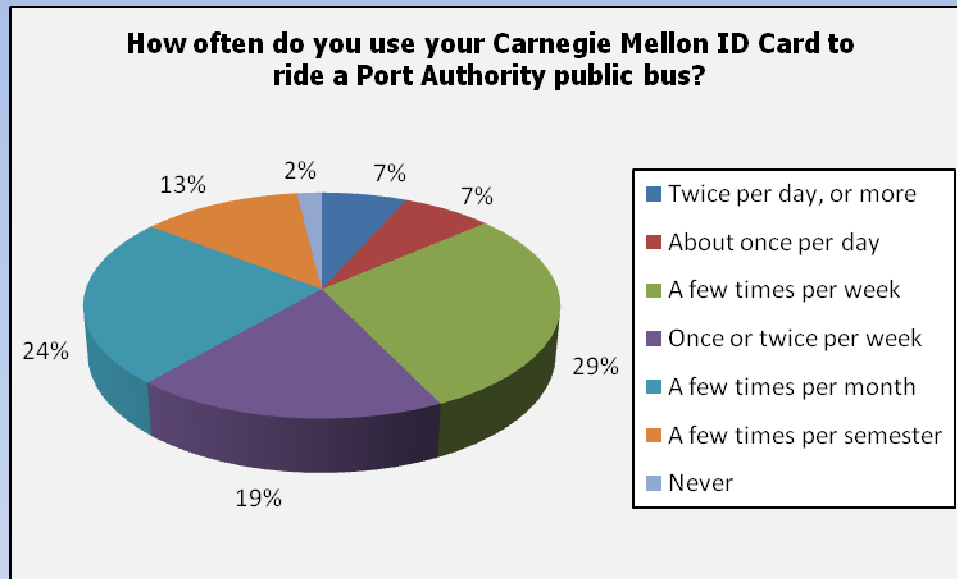
- Post-Stratification
 - Weight = Population proportion/Sample proportion
 - Stratified across College/Year
 - Gender didn't seem as important
 - Population numbers from CMU Factbook

Pre-Stratified Results

- Are you aware of the mandatory Port Authority/Media/Technology/Student Activities Fee that you are charged each semester?
 - Port Authority Fee: 77% Yes, 23% No
 - Media Fee: 50% Yes, 50% No
 - Technology Fee: 64.5% Yes, 35.5% No
 - Student Activities Fee: 75.7% Yes, 24.3% No
- If you are, how much do you think each fee costs per semester?
 - Port Authority Fee: \$63.82 (excluding two responses) vs. actual fee of \$46
 - Media Fee: \$32.16 (excluding one response) vs. actual fee of \$5
 - Technology Fee: \$91.52 (excluding two responses) vs. actual fee of \$75
 - Student Activities Fee: \$87.35 (excluding two responses) vs. actual fee of \$92

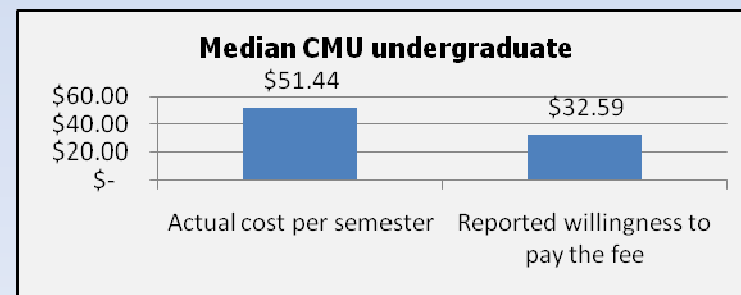
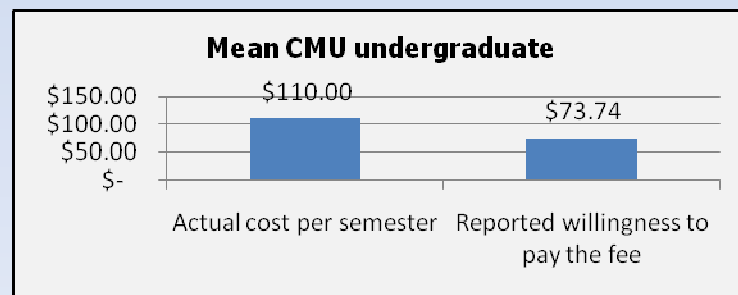
Our Results

-Port Authority Fee



• Asked two primary questions: how much each undergraduate *is* willing to pay for the Port Authority Fee, and how much each undergraduate student *should* be willing to pay for the Port Authority Fee, based on answers they gave for how often they ride the busses.

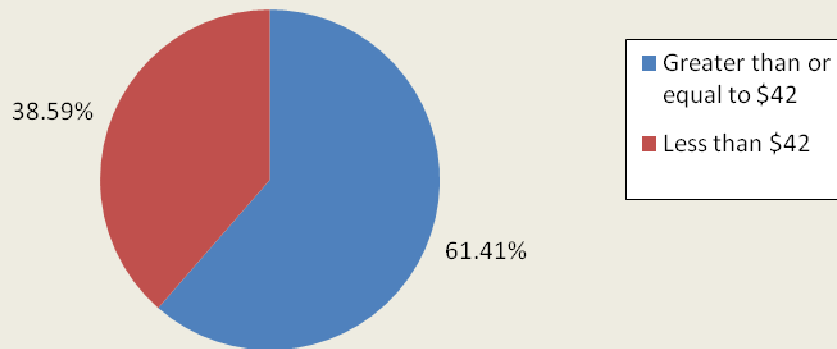
- We applied both of these questions to the mean CMU undergraduate student, the median student and each student individually.
- The average number of times each student rode the bus per semester was 55 times. The median was 25.72 rides.



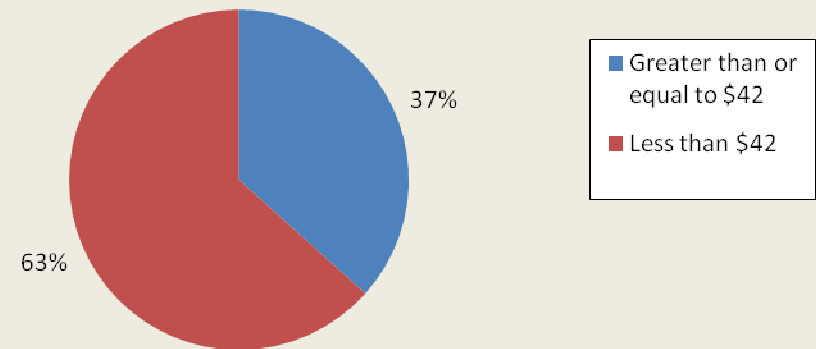
Our Results

-Port Authority Fee

Had you had to pay per ride of the Port Authority busses, how much would you actually pay per semester?

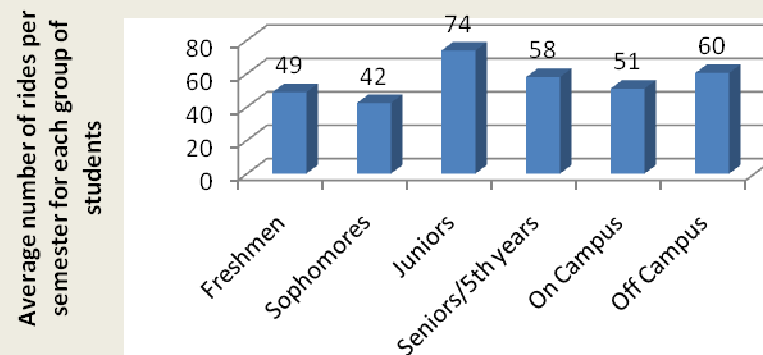


Had you had to pay per ride for the Port Authority busses, how much would you be willing to pay per semester?



- Despite the fact that a minority of respondents claimed to be willing to pay at least \$42, 61.41% are getting their money's worth from the fee.
- Some of the variance in rides per semester can be explained by differences in year in school or housing situation.

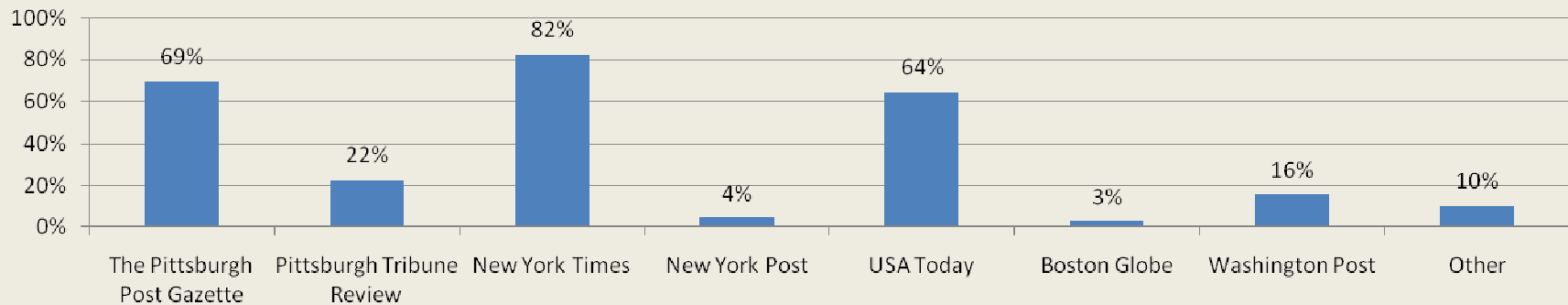
How often do you ride the Port Authority busses per semester?



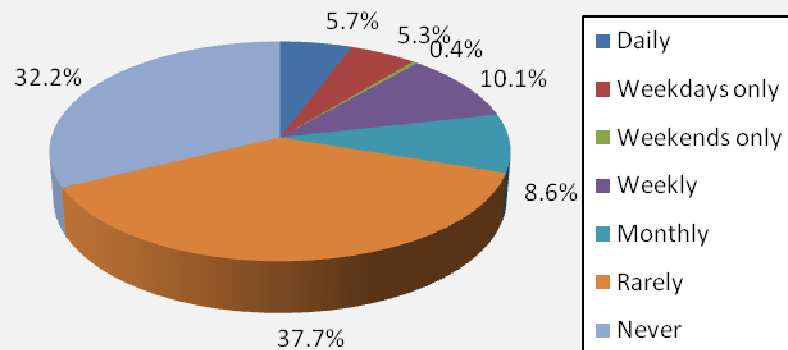
Our Results

-Media Fee

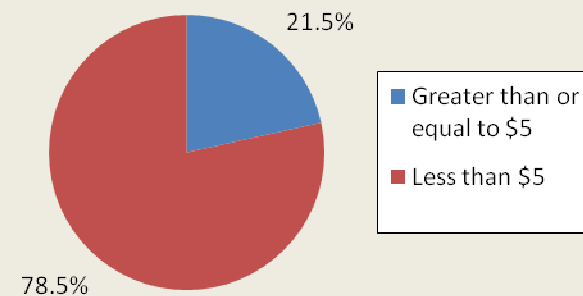
The Newspapers that are provided by the media fee are located in red boxes across campus, which newspapers can be found in those boxes Choose all that apply:



How often do you read the local and national newspapers provided by the Media Fee?



Had you had to pay for each newspaper you read, how much would you pay per semester?

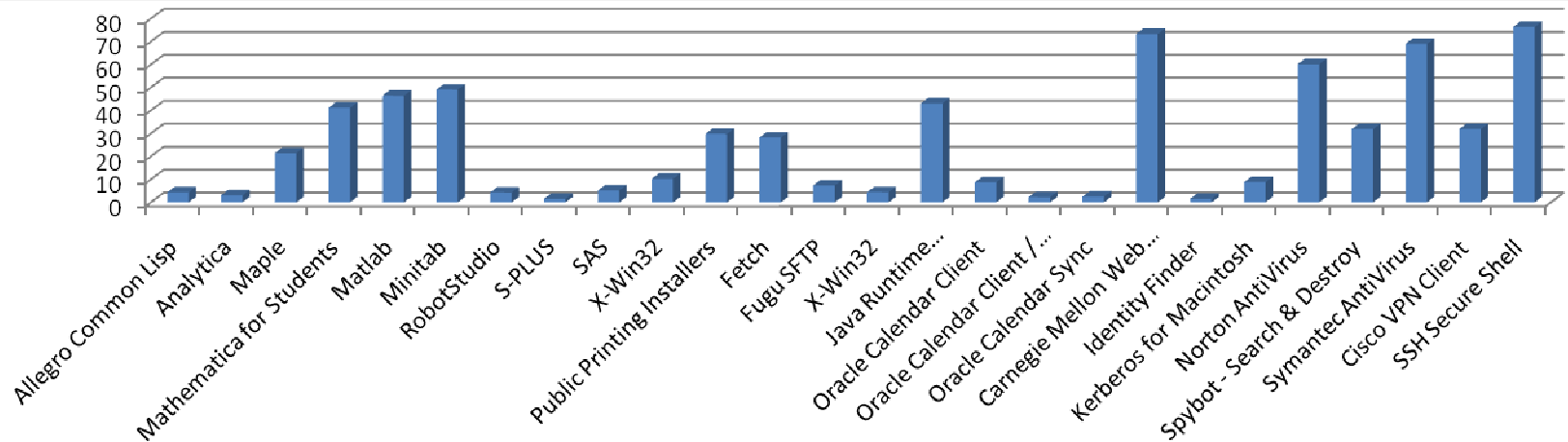


- The average amount spent on newspapers had there not been a fee is \$14.38.
- The median is \$2.

Our Results

-Technology Fee

The following is a list of downloadable licensed software that Carnegie Mellon Students have access to and are supported by the tech fee. Select all that you have at one point downloaded and used.

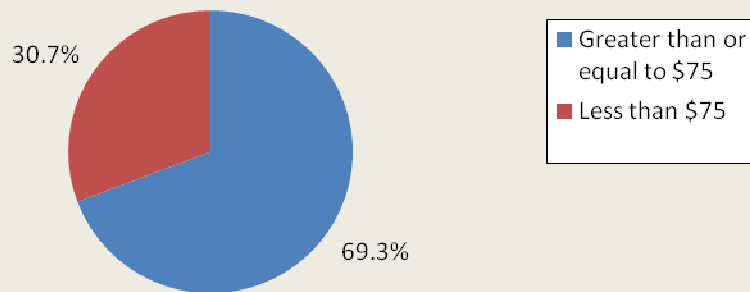


- In a similar fashion to what we did with the Port Authority Fee and Media Fee, we can assign a dollar value to each software package and compare the cost of purchasing each package individually to the total cost of the fee per semester.
- The mean value that a CMU undergraduate would have spent per semester on software is \$2,439.10. The median is \$1,778.20.
- The fee per semester is only \$75.
- As with the other two fees, we can also compare these costs on an individual basis.

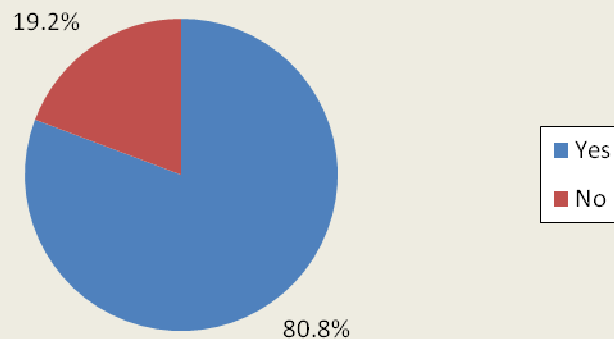
Our Results

-Technology Fee

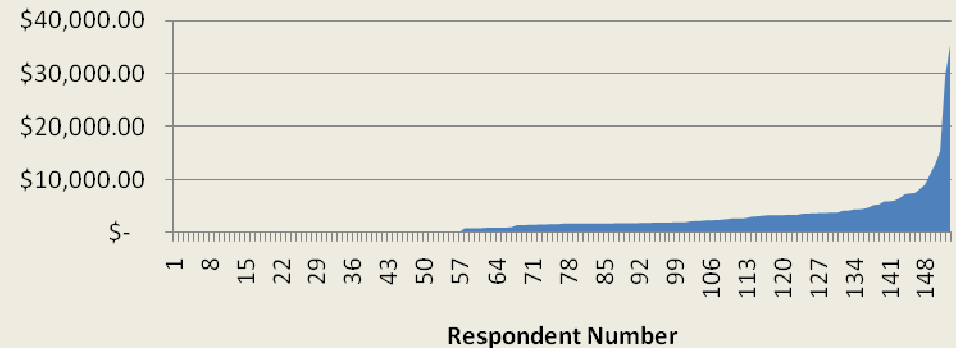
How much money would you have spent on technology had you had to purchase all of the software you used on your own?



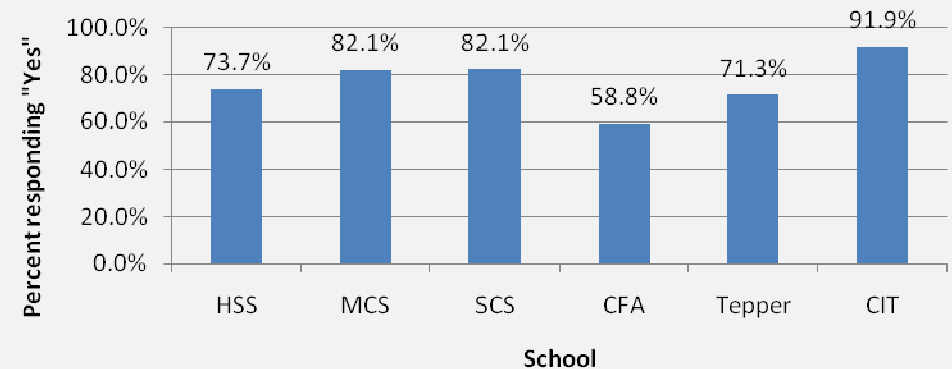
Do you feel that your major require use of the technology fee?



How much money would you have spent on technology had you had to purchase all of the software you used on your own?



Do you feel that your major require use of the technology fee?

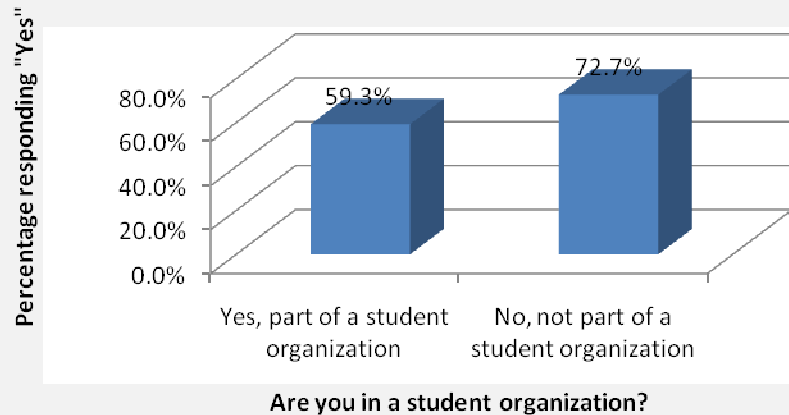


•Despite the fact that the mean and median values for the money that would have been spent on software are much higher than the fee, there is still a somewhat large minority of people who used only the free or very cheap software packages.

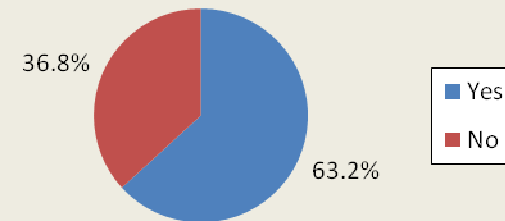
Our Results

-Student Activities Fee

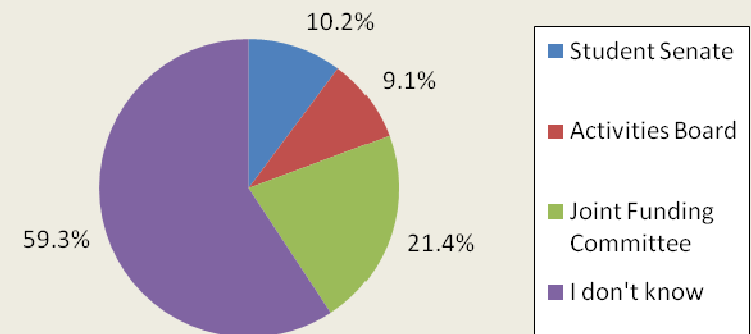
Do you feel the student activities fee is fair?



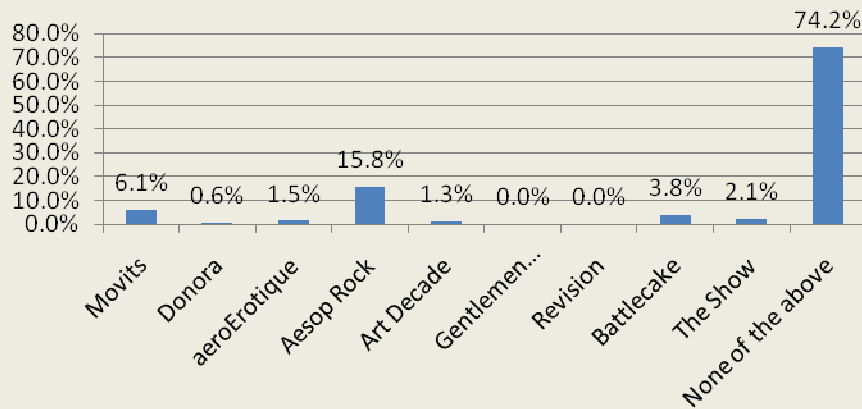
Do you feel that the Student Activities Fee is fair?



Who decides how most of the student activities fees are allocated?



Which of these concerts put on by ABConcerts have you seen this school year?

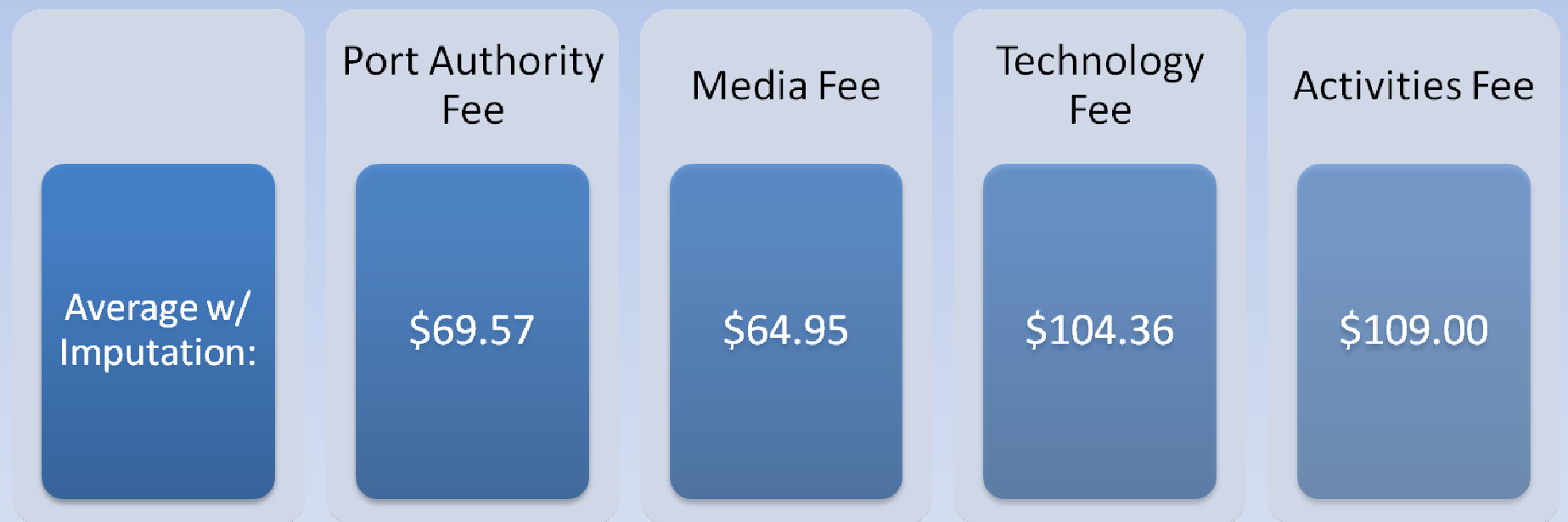


•The Student Activities Fee, unlike the other three fees, is not a quantifiable fee in terms of utilization, but the majority of students think it is fair and the majority of students are involved in student organizations.

Imputation

- Item Non Response

“If you are, how much do you think each fee costs per semester?”



- Unrealistic values were considered as non-response and imputed.

Conclusions

- General Conclusions:

Perception:

- Overestimated actual cost of fees
- Estimated fees to be much higher than they were

Utilization:

- 3 quantitative fees were well utilized
- 2/3 were well utilized by >50%

Awareness

- Aware of all fees except media fees
- Underestimate their need

Lessons Learned:

Post-Stratification

- Hard to find actual population numbers
- Complete demographic information is important

Danger of Voluntary Questions

- Imputation is a rough fix
- Users don't read the questions

Pre-Test Thoroughly

- Issues with our open-ended questions that our test subjects didn't catch with us there
- Phrasing of questions is incredibly important