

Temple University Transportation Survey Sustainability Audit Report

May 27, 2013

**Heidi E. Grunwald, Ph.D.
Managing Director**

**Institute for Survey Research
Temple University
1509 Cecil B. Moore Suite 401
Philadelphia, PA 19122**



Table of Contents

Executive Summary	iii
Section 1. Survey Administration and Survey Outcomes.....	1
Table 1.1 Comparison of 2007, 2009 and 2013 Un-weighted Survey Response Rates	1
Table 1.2 Unweighted 2013 Response Rates for Complete Surveys	2
Table 1.3 Map of the Geographic Distribution of Total Survey Responders	3
Table 1.4 Respondent Totals Weighted up to the Temple University Community	4
Table 1.5 Weighted Survey Respondent Totals and Percentages For Commuters Not Including Students Who Live on Campus.....	4
Table 1.6 Weighted Survey Respondent Totals and Percentages for Commuters Not Including Students Who Live on or Walk to Campus.....	4
Section 2. Commuting Mode for Students, Faculty and Staff at the University	5
Table 2.1a Modes of Transportation Used for Instances of Commuting (Total Trips) in a Typical Week by University Students, Faculty and Staff for Commuters Only	5
Table 2.1b Modes of Transportation Used for Instances of Commuting (Total Trips) in a Typical Week by University Students, Faculty and Staff for Commuters Only	6
Table 2.2a Commuting Habits for Students	7
Table 2.2b Commuting Habits for Faculty.....	7
Table 2.2c Commuting Habits for Staff	7
Table 2.3 Percent of All University Students, Faculty and Staff Who Use a Particular Mode as Their Primary Means of Transportation in a Typical Week.....	8
Table 2.4 Percent of University Students, Faculty and Staff Who Use a Particular Mode as Their Primary Means of Transportation in a Typical Week for Commuters Only.....	9
Table 2.5 Percent of University Students, Faculty and Staff Who Use More Sustainable Commuting Option for Commuters Only	9
Section 3. Personal Vehicle Drivers Who Commute	10
Table 3.1 Average Miles Per Gallon (MPG) for Drivers	10
Table 3.2 Number of People in Car for Commuters Who Drive a Personal Vehicle	10
Table 3.3 Reasons Why People Do Not Carpool	11
Table 3.4 Where Do Drivers Park Most Often on Campus.....	11
Section 4. Bikers.....	12
Table 4.1 Bike Rack Availability	12
Table 4.2 Scenarios That Would Encourage Bike Commutes or Bike Commutes More Often.....	12
Section 5. Carshare Services.....	14
Table 5.1 Zimride Awareness	14
Table 5.2 Careshare (Zipcar and PhillyCarShare) Awareness.....	14
Section 6. Public Transit.....	15
Table 6.1 Likelihood that Students Would Use Public Transit More	15
Table 6.2 Likelihood that Faculty Would Use Public Transit More	16
Table 6.3 Likelihood that Staff Would Use Public Transit More	17
Section 7. Selected Campus Comparisons	18
Table 7.1 Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation By Campus.....	18
Table 7.2 Percent of All University Students, Faculty and Staff Who Use a Particular Mode as	

Their Primary Means of Transportation in a Typical Week by Campus	19
Table 7.3 Percent of All University Students, Faculty and Staff Who Use a Particular Mode as Their Primary Means of Transportation in a Typical Week by Campus for Commuters Only	20
Table 7.4 Reasons Why People Do Not Carpool for Ambler Campus Only	21
Section 8. Weighting	22
Table 8.1 Report Category Post-Stratification Weights	22
Section 9. Past Years Comparisons	23
Table 9.1 Comparison of 2007 Through 2013 Estimates Where Available	23
Appendix 1	24
Supplemental Tables	24
Table A1.1 Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation	24
Table A1.2 Student Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation	25
Table A1.3 Faculty Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation	25
Table A1.4 Staff Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation	26
Table A1.5: Survey Question 4 Results	26
Appendix 2	27
Informed Consent for the Temple Transportation Survey	27
Appendix 3	28
Sustainability Audit – Temple Transportation Survey	28

Executive Summary

The 2013 Temple University Transportation Survey was launched on March 25, 2013 and was completed on April 19, 2013, approximately four weeks. Of the 7,702 Temple University students, faculty, and staff randomly sampled with a stratified design, 1,413 submitted a survey. Of the 1,413 submitted, 1,336 (95%) were sufficiently completed to include in this report. An additional 77 surveys were partially completed and excluded from the results. Excluding the partially completed surveys yielded an 18.9% overall response rate, down slightly from a 20.2% overall response rate in 2010 which was fielded for five weeks and 34.1% in 2007 which was fielded for three weeks in December of 2007. Post-stratification weights were calculated to adjust for non-response bias. Weighted results reflect the universe estimates of Temple students, faculty and staff proportionally.

Overall, driving a single occupancy vehicle (31.5%) and riding a subway or trolley (22.6%) were the most frequently used modes of transportation by Temple students, faculty, and staff as part of their commute to campus. Temple students, faculty, and staff carpool as part of their commute an estimated 7.0% of the time they come to campus during a typical week.

The longest commute is by passengers using regional rail (31.9 miles) followed by single occupancy vehicles (25.1 miles) followed by subway/trolley riders (12.4 miles).

Reported fuel efficiency, using average miles per gallon (MPG) for students, faculty and staff has not improved all that much from 2010 to 2013. In 2010 students reported an average MPG of 23.4 up to 24.0. In 2010 faculty reported an average MPG of 24.2 and in 2013 reported an average of 25.4. In 2010 staff reported an average MPG of 22.5 up only to 22.8 in 2013. Only faculty reported more than a one MPG average increase fuel efficiency for personal drivers who commute. The average MPG reported for the total sample was 24.0 MPG. Students carpool with larger numbers of riders followed by staff and then faculty. Table 3.3 indicates that overall, the majority of all students, faculty and staff park in a Temple lot when they commute to campus. Students, however, park on neighborhood streets more often (50.9%) than any other option followed by a Temple lot.

Overall, the Temple community reports having access to enough campus bike racks (70%). The data reveal that the trends for reasons that might cause students, faculty or staff to commute by bike more are very consistent across the groups. The top reason for all groups is *“More Direct Bike Lanes”* followed by *“Increased Bike Storage/Parking”*. *“Education and Outreach Programs”* were less likely to affect respondents’ decision to commute by bike. Themes from the *“Other”* category which overall was 26% of the respondents reveal 1) having a bike, 2) locker rooms/showers, 3) safer bike parking, 4) safer routes, 5) ability to take a bike on regional rail during peak times, 6) unsafe neighborhoods along commute, 7) greater motorist sensitivity to cyclists, 8) live too far away, 9) health problems and 10) not interested.

Only 1,156 estimated students, faculty and staff report driving with more than one person in the vehicle while they commute. Students carpool with larger numbers of riders followed by staff and

then faculty. The main reason students do not carpool is because they don't know anyone to carpool with (32%) followed by it being hard to coordinate times to come and go from campus. For faculty the number one reason they do not carpool is because it is hard to coordinate times to come and go and for staff the number one reason is because they wouldn't be able to leave campus if a child got sick or another emergency arose. A quarter of each group listed "Other" as the main reason they do not carpool. The majority of these written answers reveal themes of 1) public transportation is more convenient and efficient 2) the unhealthy nature of cars 3) coming and going to campus at early and late hours 4) difficulty of parking and 5) job obligations.

The majority of the Temple community is not aware of Zimride (84.2%). Staff are most aware at 20%. Over half of the University community is aware of the car sharing services available at Temple. Faculty are most aware at 68% followed by staff (54%) and students (51%)

Consistent across faculty, students and staff is the concern about efficiency and convenience when it comes to using public transit more. None of the three groups responded by majority that the economic concerns of gas, parking or cost of transit would affect their decision to use public transit more. Closer to home, reliable and fast were the most popular responses that would affect decisions to use public transit more.

Campus comparison indicate that people who commute to Main, HSC and TUCC travel farther by regional rail than they do by single occupancy vehicle. Those commuting to Ambler travel farthest by single occupancy vehicle per trip, in fact 83% of commuters to Ambler come by single occupancy driver. The predominant mode for HSC is also single occupancy driver at 46% followed by subway (35%). For TUCC, most people commute by regional rail (48%) followed by single occupancy driver (26%) and subway (20%).

In summary, faculty, students and staff are most concerned about efficiency and convenience when it comes to public transportation. Faculty and staff drive to campus alone the most and students walk the most. Driving to campus alone is decreasing for all three groups. Biking is still a small percentage of commuters because of distance from campus, safety along routes, safe bike parking, and showers. In addition regional rail does not allow bikes at peak times. Finding available bike racks does not seem to be a particular concern. Very few respondents were aware of Zimride but almost half of all faculty, students and staff were aware of the car sharing services.

Temple University Transportation Survey Sustainability Audit Report

Section 1. Survey Administration and Survey Outcomes

Data collection began on March 25, 2013 and was completed on April 19, 2013. During that period, three e-mail reminders were sent to non-respondents. A total of 7,702 Temple University students, faculty, and staff were sampled, yielding 1,413 submitted surveys. Among the 1,413 submitted surveys, 1,336 (or 95%) were sufficiently complete to include in this report. The other 77 surveys were classified as partially complete and excluded from the results that follow.

The overall response rate for the 2013 survey was 18.9% counting only completed surveys. As indicated in Table 1.1, there has been a continuous drop in the overall response rate for the Transportation survey from 2007 to 2013. The overall drop was from 34.1% in 2007 to 20.2% in 2010 to 18.9% in 2013. Note the 2007 survey was fielded in December and the 2010 and 2013 surveys were fielded in the spring semester (March, April, May). In addition, the 2013 survey was fielded for a week less than the 2010 survey. Response rates to all surveys have been declining in recent years, as the demand to respond to online surveys increases response rates decrease. It should be noted that the response rates for graduate students and faculty were up slightly from the 2010 survey. We also know that the university fielded the NSSE survey just before the Transportation survey was fielded this spring. All of these factors may have contributed to the lower response rate for undergraduate students.

The 2013 incentive for responders was the raffle of 1 grand prize, an iPad (\$399 value) and 30, \$10.00 diamond dollar gifts. The 2010 incentive for responding was a grand prize of a Fuji bike (\$300 value) and 100 winners of \$10.00 diamond dollars. Three reminders were sent in 2013 and 2010, compared to four reminders in 2007. Note that only 7% of the completed 2007 surveys were submitted after the 4th reminder.

In 2010, as well as in 2013, Support Personnel were given the option of completing the survey by mail or online, 10 out of 16 (62.5%) were completed by mail so it is important to continue this option.

Table 1.1 Comparison of 2007, 2009 and 2013 Un-weighted Survey Response Rates

Group	Response Rates		
	2007	2010	2013
Graduate Students	31.2%	20.6%	20.7%
Undergraduates	28.7%	15.0%	14.0%
Faculty	49.7%	28.6%	29.9%
Administration and Staff	62.3%	50.1%	42.0%
Support Personnel	22.3%	15.0%	14.7%
Total	34.1%	20.2%	18.9%

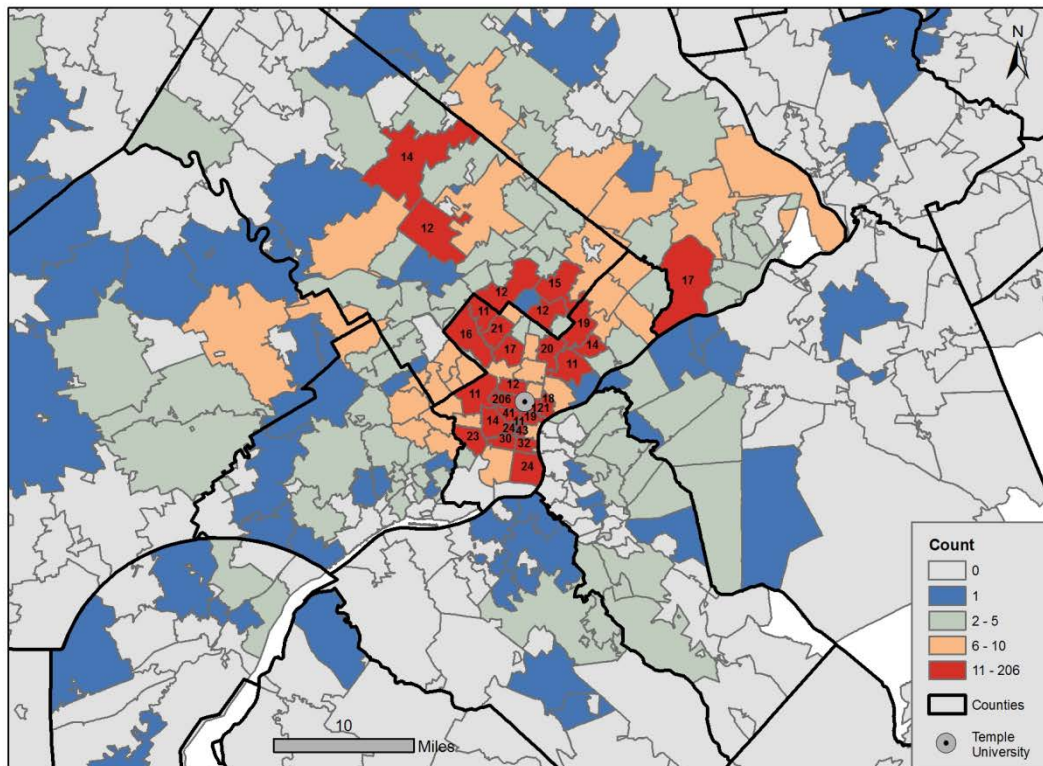
Table 1.2 reports the response rate details for the 2013 survey. Within the strata, administrative personnel and staff were the most likely to respond (42% of those sampled) followed by faculty (29.9%). Non degree seeking students and undergraduates were the least likely to respond (13.2% and 14.1% respectively of those sampled in each group).

Table 1.2 Unweighted 2013 Response Rates for Complete Surveys

Strata	Eligible		Sampled		Completed Surveys		Response Rates	
	Total	Subclass	Sample	Subclass	Total	Subclass	Total %	Subclass %
Graduate Students	7739		1286		233		17.6	
Professional		3184		531		77		14.5
All other graduate students		4555		755		156		20.7
Undergraduates	25480		4249		601		14.1	
Seniors+ (> 120 credit hours)		2365		395		65		16.5
Seniors		6299		1050		153		14.6
Juniors		6659		1110		162		14.6
Sophomores		5708		952		137		14.4
Freshmen		4449		742		84		11.3
Non-degree seeking			152		20		13.2	
Undergraduate/Graduate	937			152		20		
		937						
Faculty	3479		581		174		29.9	
Full time		1953		326		127		39.0
Part time		1526		255		47		18.4
Administration and Staff							40.2	
Administrative professional	4166		695		292			
Administrative/managerial				209		116		55.5
Professionals				346		137		39.6
Administrative nonprofessional								
Technical/paraprofessional				50		14		28.0
Clerical, secretarial				90		25		27.8
Support Personnel	649		109		16		14.7	
				109		16		
Total	42,450		7,072		1397		18.9	

Table 1.3 shows a map of zipcodes where survey respondents live and begin their commute to campus. We were unable to look at the geographic distribution of the total sample to compare because we were not given home addresses in the sampling frame. The zipcode data presented below were collected in the survey.

Table 1.3 Map of the Geographic Distribution of Total Survey Responders



Post-stratification weights were constructed to adjust for nonresponse bias in each of the sample groups of students, faculty and staff. Weighted data represent respondents proportionately to the totals at the university. The weights and calculation of the weights for the comparison of students, faculty, and staff used in this report are provided in Section 12, Table 12.1.

The weighted survey totals for each of the three strata (students, faculty, and staff) are presented in Table 1.4. These estimates include both commuters and non-commuting students who live on campus. Table 1.5 presents the weighted survey totals for commuters only. We define commuters as all respondents except those who answered “Yes, I live on campus” to question #2. Thus Table 1.5 omits 5,439 students who live on campus (that is the estimated weighted number of students). Overall, an estimated 87.2% (37,010/42,450) of the Temple University community commutes to campus, including 84.1% (28,716/34,156) of all students.

Table 1.4 Respondent Totals Weighted up to the Temple University Community

Estimate	Students	Faculty	Staff	Total
Weighted count	34,156	3,479	4,815	42,450
Weighted %	80.0	8.2	11.3	100.0*

*Note Rounding of %ages. Actual % Students=80.4617, Faculty=8.1955, Staff=11.3428

Table 1.5 Weighted Survey Respondent Totals and Percentages For Commuters Not Including Students Who Live on Campus

Estimate	Students	Faculty	Staff	Total
Weighted count	28716	3479	4815	37010
Weighted %	77.6	9.4	13.0	100.0

*This definition of commuter includes everyone except students who answered Yes to “I live on campus”.

Table 1.6 Weighted Survey Respondent Totals and Percentages for Commuters Not Including Students Who Live on or Walk to Campus*

Estimate	Students	Faculty	Staff	Total
Weighted count	20157	3479	4815	28451
Weighted %	70.8	12.2	16.9	100.0

*This definition of commuter includes everyone except students who answered Yes to “I live on campus” or “Yes, I typically walk to campus”. This was done because both of these groups were skipped to Question 14 assuming they never use other modes of transport to campus. Note the numbers for faculty and staff are identical to Table 1.5

The weighted totals presented in Table 1.4, 1.5, and 1.6 are used as the denominators for computing percentages included in this report. In each Table, the sample represented in the table is defined. There are an estimated 5,439 students who reported living on campus and another 8,560 who reported that they typically walk to campus so they live very near campus. The remaining 20,157 are commuters by some other mode.

Section 2. Commuting Mode for Students, Faculty and Staff at the University

Table 2.1 reports each of the different modes of transportation used by Temple students, faculty, and staff as part of their commute to campus during an average week, regardless of whether any particular mode of transportation is used alone or in combination with one or more other modes. As a result, the transportation categories in Table 2.1 are not mutually exclusive, and the sum of individuals using one or more modes of transportation (column sum) is greater than the total number of Temple commuters. For example, consider a student who commutes to campus on Monday, Wednesday, and Friday. In a typical week, this student takes the bus on Monday and Wednesday, but on Fridays she drives so that she can pick up her little brother at daycare. In Table 2.1a, the totals represent instances of commuting (or total trips per mode) in a typical week. So this student described above would be counted twice: once in the bus total and again in the single vehicle occupancy driver total.

Table 2.1a uses the total instances (trips by mode) of commuting in a typical week reported as the denominators to calculate the percentages. These totals are shown in the bottom row of Table 2.1

Table 2.1a Modes of Transportation Used for Instances of Commuting (Total Trips) in a Typical Week by University Students, Faculty and Staff for Commuters Only

Mode Used for Commuting	Students	Faculty	Staff	Total
Walk	9159 24.0%	140 3.1%	188 2.8%	9487 19.2%
Bike	1920 5.0%	280 6.1%	297 4.5%	2497 5.1%
Single occupancy vehicle driver	8159 21.4%	2199 48.2%	2751 41.7%	13109 26.6%
Carpool driver or passenger	2360 6.2%	160 3.5%	391 5.9%	2911 5.9%
Bus	3760 9.8%	220 4.8%	688 10.4%	4668 9.5%
Subway/trolley	7519 19.7%	640 14.0%	1251 19.0%	9410 19.1%
Regional rail	5319 13.9%	920 20.2%	1032 15.6%	7271 14.7%
Totals Used to Compute Percentages (instances of commuting)	38196	4559	6598	49353
Sum Percents	100.0%	100.0%	100.0%	100.0%*

*Sums of row percentages will be slightly off from 100% due to rounding. This Table does not include students who answered Yes to "I live on campus".

Overall, Table 2.1 indicates that the most frequently used mode of transportation to campus in a typical week is driving a single occupancy vehicle (26.6%), followed by subway or trolley (19.1%). Students walk to campus at much higher rates than faculty and staff, and their second and third highest modes of transportation are driving a single occupancy vehicle and subway or trolley.

Table 2.1b uses the weighted population count as the denominators to calculate the percentages. These totals are shown in the bottom row of Table 2.1b.

Table 2.1b Modes of Transportation Used for Instances of Commuting (Total Trips) in a Typical Week by University Students, Faculty and Staff for Commuters Only

Mode Used for Commuting	Students	Faculty	Staff	Total
Walk	9159 26.8%	140 4.0%	188 3.9%	9487 22.3%
Bike	1920 5.6%	280 8.0%	297 6.2%	2497 5.9%
Single occupancy vehicle driver	8159 23.9%	2199 63.2%	2751 57.1%	13109 30.9%
Carpool driver or passenger	2360 6.9%	160 4.6%	391 8.1%	2911 6.9%
Bus	3760 11.0%	220 6.3%	688 14.3%	4668 9.5%
Subway/trolley	7519 22.0%	640 18.4%	1251 26.0%	9410 11.0%
Regional rail	5319 15.6%	920 26.4%	1032 21.4%	7271 17.1%
Totals Used to Compute Percentages (<i>weighted population count</i>)	34156	3479	4815	42450

*Sums of row percentages will be greater than 100%. This chart allows for scaling of population counts from year to year for CarbonMAP. This Table does not include students who answered Yes to "I live on campus".

Table 2.2a Commuting Habits for Students

Mode	Average Trips/Week	Average Miles/Trip	Average Weeks/Year
Walk	5.0	0.4	30
Bike	6.4	3.4	30
Single occupancy vehicle driver	6.2	13.4	30
Carpool driver or passenger	4.7	13.4	30
Bus	6.7	5.0	30
Subway/trolley	7.1	5.0	30
Regional rail	6.6	20.0	30

** Use This Table for CarbonMAP inputs. A trip is defined as one-way.*

Table 2.2b Commuting Habits for Faculty

Mode	Average Trips/Week	Average Miles/Trip	Average Weeks/Year
Walk	5.1	1.4	35
Bike	6.0	6.4	35
Single occupancy vehicle driver	6.5	13.3	35
Carpool driver or passenger	3.6	13.3	35
Bus	4.4	4.0	35
Subway/trolley	5.7	6.0	35
Regional rail	6.9	14.0	35

** Use This Table for CarbonMAP inputs. A trip is defined as one-way.*

Table 2.2c Commuting Habits for Staff

Mode	Average Trips/Week	Average Miles/Trip	Average Weeks/Year
Walk	5.2	0.2	44
Bike	4.8	2.5	44
Single occupancy vehicle driver	8.3	12.5	44
Carpool driver or passenger	5.0	12.5	44
Bus	7.2	5.5	44
Subway/trolley	7.2	6.0	44
Regional rail	7.7	12.2	44

** Use This Table for CarbonMAP inputs. A trip is defined as one-way.*

Table 2.3 represents the primary mode of transportation used by students, faculty and staff at the university. As requested by the STARS reporting this table includes all students, including those who live on campus. Overall, the primary mode of transportation to campus is walking at 34.9% followed by single occupancy vehicle driver (24.2%) and subway or trolley (14.9%). A very small percentage of the university community commutes by bus (2.7%). Of all bike commuters, faculty are the most likely to commute by bike followed by staff and then students.

Table 2.3 Percent of All University Students, Faculty and Staff Who Use a Particular Mode as Their Primary Means of Transportation in a Typical Week

Mode	Students	Faculty	Staff	Total
Walk	14599 42.7%	80 2.3%	141 2.9%	14820 34.9%
Bike	1320 3.9%	180 5.2%	203 4.2%	1703 4.0%
Single occupancy vehicle driver	6039 17.7%	1899 54.6%	2329 48.4%	10267 24.2%
Carpool driver or passenger	2040 6.0%	160 5.0%	407 8.5%	2607 6.1%
Bus	880 2.6%	60 1.7%	219 4.5%	1159 2.7%
Subway/trolley	5239 15.3%	360 10.3%	719 14.9%	6318 14.9%
Regional rail	4039 11.8%	740 21.3%	797 16.6%	5576 13.2%
Total used for percents in column* Sum Percents	34156 100%	3479 100%	4815 100%	42450 100%

** Use This Table to respond to STARS Reporting Questions 3 for students and employees*

Table 2.4 represents the primary mode of transportation for commuters only. This table does not include students who reported that they live on campus. For commuters only, overall the primary mode of transportation to campus is by single occupancy vehicle driver (27.7%) followed by walking (25.3%) and subway and trolley (17.1%).

Table 2.4 Percent of University Students, Faculty and Staff Who Use a Particular Mode as Their Primary Means of Transportation in a Typical Week for Commuters Only

Mode	Students	Faculty	Staff	Total
Walk	9159 31.9%	80 2.3%	141 2.9%	9380 25.3%
Bike	1320 4.6%	180 5.2%	203 4.2%	1703 4.6%
Single occupancy vehicle driver	6039 21.0%	1899 54.6%	2329 48.4%	10267 27.7%
Carpool driver or passenger	2040 7.1%	160 5.0%	407 8.5%	2607 7.0%
Bus	880 3.1%	60 1.7%	219 4.5%	1159 3.1%
Subway/trolley	5239 18.2%	360 10.3%	719 14.9%	6318 17.1%
Regional rail	4039 14.1%	740 21.3%	797 16.6%	5576 15.1%
Total used for percents in column*	28716	3479	4815	37010
Sum Percents	100%	100%	100%	100%

** Use This Table to respond to STARS Reporting Questions 2,4, and 5 for students and employees. This table does not include students who answered "Yes" to "I live on campus".*

Table 2.5 represents the total number of commuters who commute by a more sustainable option than single occupancy vehicle driver. Temple University does well with 72.3% of the commuters choosing a more sustainable option. Of the community staff do better than faculty in choosing more sustainable options.

Table 2.5 Percent of University Students, Faculty and Staff Who Use More Sustainable Commuting Option for Commuters Only

Mode	Students	Faculty	Staff	Total
More Sustainable Options	22677 79.0%	1580 45.4%	2486 51.6%	26743 72.3%
Single occupancy vehicle driver	6039 21.0%	1899 54.6%	2329 48.4%	10267 27.7%
Total used for percents in column*	28716	3479	4815	37010
Sum Percents	100%	100%	100%	100%

** Use This Table to respond to STARS Reporting Questions 1 for students and employees. This table does not include students who answered "Yes" to "I live on campus".*

Section 3. Personal Vehicle Drivers Who Commute

Table 3.1 Average Miles Per Gallon (MPG) for Drivers

Measure	Students	Faculty	Staff	Total
Reported average car fuel efficiency (MPG)	24.0 (n=6839)	25.4 (n=1919)	22.8 (n=2,204)	24.0 n=10,963

Reported fuel efficiency for students, faculty and staff (average MPG) have not improved all that much from 2010 to 2013. In 2010 students reported an average MPG of 23.4 up only slightly to 24.0. In 2010 faculty reported an average MPG of 24.2 and in 2013 reported an average of 25.4. In 2010 staff reported an average MPG of 22.5 up only to 22.8 in 2013. Only faculty have more than a 1 MPG average increase for personal drivers who commute. Overall the average miles per gallon reported by the estimated 10,963 drivers was 24.0 MPG. These data have been trimmed, assuming that any MPG reported below 10 MPG was an error. The range of answers reported was from 11 MPG to 60 MPG.

Table 3.2 Number of People in Car for Commuters Who Drive a Personal Vehicle

Measure	Students	Faculty	Staff	Total
Number of People in Car for Commuters Who Drive				
1	8159	2199	2751	13109
2	920	80	156	1156
3+	80	0	16	96
Total	9159	2279	2923	14361

Table 3.2 indicates that for people who drive a personal vehicle to campus, only 1,156 have more than one passenger. Students carpool with larger numbers of riders followed by staff and then faculty. Note that the first row in this table reflects drivers who do not carpool.

Table 3.3 indicates that for students, the main reason they do not carpool is because they don't know anyone to carpool with (32%) followed by it being hard to coordinate times to come and go from campus. For faculty the number one reason they do not carpool is because it is hard to coordinate times to come and go and for staff the number one reason is because they wouldn't be able to leave campus if a child got sick or another emergency arose. A quarter of each group listed "Other" as the main reason they do not carpool. The majority of these written answers reveal themes of 1) public transportation is more convenient and efficient, 2) the unhealthy nature of cars, 3) coming and going to campus at early and late hours, 4) difficulty of parking, and 5) job obligations.

*Table 3.3 Reasons Why People **Do Not** Carpool (Check Main Reason)*

Reasons People Do Not Carpool	Students	Faculty	Staff	Total
Not Convenient Locations	1880 9.9%	140 4.3%	281 6.1%	2301 8.6%
Hard to Coordinate Times to Come and Go	4159 21.9%	1140 34.8%	1329 29.0%	6628 24.7%
Prefer To Drive Privately	1200 6.3%	240 7.3%	516 11.3%	1956 7.3%
Sharing Costs is Too Complicated	200 1.1%	0 0%	0 0%	200 0.7%
Don't Know Anyone to Carpool With	6079 32.0%	480 14.6%	829 18.1%	7388 27.5%
Have Other Errands To Do On Way To or From Campus	880 4.6%	200 6.1%	250 5.5%	1330 5.0%
Wouldn't Be Able to Leave Campus if Child Gets Sick	520 2.7%	120 3.7%	281 30.5%	921 3.4%
Other	4079 21.5%	960 29.3%	1094 23.9%	6133 22.8%
Total	18997 100%	1960 100%	4580 100%	26857 100%

Table 3.4 Where Do Drivers Park Most Often on Campus

Measure	Students	Faculty	Staff	Total
In a Temple Lot	3400 37.3%	1799 79.6%	1751 61.5%	6950 48.9%
In Another Lot	360 3.9%	80 3.5%	125 4.4%	565 4.0%
On Neighborhood Streets Near Campus	4639 50.9%	320 14.2%	844 29.7%	5803 40.8%
Other	720 7.9%	60 2.7%	125 4.4%	905 6.4%
Total	9119 100%	2259 100%	2845 100%	14223 100%

Table 3.3 indicates that overall, the majority of all faculty, students and staff park in a Temple lot when they commute to campus. Students, however, park on neighborhood streets more often (50.9%) than any other option followed by a Temple lot.

Section 4. Bikers

Table 4.1 Bike Rack Availability

If you use a rack (or want to use a rack) can you find one?	Students	Faculty	Staff	Total
Yes	1480 77.1%	120 42.9%	172 52.4%	1772 70.1%
No	240 12.5%	40 14.3%	78 23.8%	358 14.2%
I typically do not use a campus bike rack	200 10.4%	120 42.9%	78 23.8%	398 15.7%
Total	1920 100%	280 100%	328 100%	2528 100%

Table 4.1 shows that the majority of the Temple community who use racks can generally find one (70.1% overall). Faculty report that they typically do not use a campus bike rack more often than other groups most likely because they bring them to their offices. Overall, only 15.7% of the Temple community who commutes by bike cannot find a rack when they are looking for one.

Table 4.2 Scenarios That Would Encourage Bike Commutes or Bike Commutes More Often (Check All That Apply)

Scenarios That Would Encourage More Biking	Students	Faculty	Staff	Total
More Direct Bike Lanes	9159 40.1%	860 43.9%	1094 40.9%	11113 40.9%
More Bikeway Destination / Route Signage	5239 23.0%	340 17.3%	328 21.8%	5907 21.8%
Increased Education and Outreach Programs	2600 11.4%	240 12.2%	266 11.4%	3106 11.4%
Increased Bike Storage / Parking	5799 25.4%	520 26.5%	703 25.9%	7022 25.9%
Total	22797 100%	1960 100%	2391 100%	27148 100%

Table 4.2 reveals that the trends for reasons that might cause students, faculty or staff to commute by bike more are very consistent. The top reason for all groups is *More Direct Bike Lanes* followed by *Increased Bike Storage/Parking*. There is least interest in *Education and Outreach Programs* for all groups. Themes from the "Other" category which overall was 26% of the

respondents reveal 1) having a bike, 2) locker rooms/showers, 3) safer bike parking, 4) safer routes, 5) ability to take a bike on regional rail during peak times, 6) unsafe neighborhoods along commute, 7) greater motorist sensitivity to cyclists, 8) live too far away, 9) health problems, and 10) not interested.

Section 5. Carshare Services

Table 5.1 Zimride Awareness

Are you Aware of Zimride	Students	Faculty	Staff	Total
Yes	5159 15.2%	540 15.8%	938 19.9%	6637 15.8%
No	28716 84.8%	2879 84.2%	3783 80.1%	35378 84.2%
Total	33875 100%	3429 100%	328 100%	42015 100%

Table 5.1 shows overwhelmingly the Temple community is not aware of Zimride (84.2%) of the overall community. Staff are most aware at 20%.

Table 5.2 Careshare (Zipcar and PhillyCarShare) Awareness

Are you Aware of Zipcar or PhillyCarShare	Students	Faculty	Staff	Total
Yes	17238 50.9%	2339 68.4%	2564 53.9%	22141 52.7%
No	16638 49.1%	1080 31.6%	2189 46.1%	19907 47.3%
Total	33876 100%	3419 100%	4753 100%	42048 100%

Table 5.2 shows that over half of the University community is aware of the car sharing services available at Temple. Faculty are most aware at 68% followed by staff (54%) and students (51%).

Section 6. Public Transit

Table 6.1 Likelihood that **Students** Would Use Public Transit More

Students Likelihood of Using Public Transit	A Little	Some	A Lot	Total
Fares Were Cheaper	2520 37.5%	2320 34.5%	1880 28.0%	6720 100%
Parking Costs Were Higher	3720 56.4%	1840 27.9%	1040 15.8%	6600 100%
Transit System Safer	2520 38.2%	2000 30.3%	2080 31.5%	6600 100%
Transit Stops Closer to Home	2080 31.1%	1920 28.7%	2680 40.1%	6680 100%
Didn't Have to Transfer	2600 38.9%	1680 25.1%	2400 35.9%	6680 100%
Service Was Faster	1840 27.5%	1560 23.4%	3280 49.1%	6680 100%
Service Was More Reliable	2160 32.7%	1320 20%	3120 47.3%	6600 100%
Gas Prices Went Above \$4 Again	3000 46.0%	2000 30.7%	1520 23.3%	6520 100%
Other	1680 43.8%	680 17.7%	1480 38.5%	3840 100%

Table 6.1 reflects the time and efficiency reaction of students. Only “*Service Was Faster*” and “*Service Was More Reliable*” distinguish reasons they might use public transit more often. All of the other reasons are either evenly split for students or would have no effect for the majority of students who responded. In particular, a majority of students did not react strongly to the economic costs of parking or gas.

Table 6.2 Likelihood that **Faculty** Would Use Public Transit More

Faculty Likelihood of Using Public Transit	A Little	Some	A Lot	Total
Fares Were Cheaper	840 48.3%	600 34.5%	300 17.2%	1740 100%
Parking Costs Were Higher	1220 70.9%	320 18.6%	180 10.5%	1720 100%
Transit System Safer	1080 61.4%	340 19.3%	340 19.3%	1760 100%
Transit Stops Closer to Home	800 48.2%	280 16.9%	580 34.9%	1660 100%
Didn't Have to Transfer	860 50.6%	280 16.5%	560 32.9%	1700 100%
Service Was Faster	760 43.2%	420 23.9%	580 33.0%	1760 100%
Service Was More Reliable	820 46.6%	360 20.5%	580 33.0%	1760 100%
Gas Prices Went Above \$4 Again	1240 71.3%	400 23.0%	100 5.7%	1700 100%
Other	480 43.6%	100 9.1%	520 47.3%	1100 100%

Table 6.2 shows that faculty did not react to the economic factors of commuting either. The highest percentage for “matters a lot” was “*Transit Stops Closer to Home*”, “*Didn't Have to Transfer*” and “*Faster and More Reliable*”. So like students, scenarios that would increase likelihood of commuting by public transit reflect convenience and efficiency.

Table 6.3 Likelihood that **Staff** Would Use Public Transit More

Staff Likelihood of Using Public Transit	A Little	Some	A Lot	Total
Fares Were Cheaper	1032 43.1%	766 32.0%	594 24.8%	2392 100%
Parking Costs Were Higher	1329 57.8%	766 33.3%	203 8.8%	2298 100%
Transit System Safer	829 36.3%	688 30.1%	766 33.6%	2283 100%
Transit Stops Closer to Home	782 33.6%	578 24.8%	969 41.6%	2329 100%
Didn't Have to Transfer	1047 45.3%	453 19.6%	813 35.1%	2313 100%
Service Was Faster	625 27.0%	797 34.5%	891 38.5%	2313 100%
Service Was More Reliable	750 32.2%	766 32.9%	813 34.9%	2329 100%
Gas Prices Went Above \$4 Again	1157 51.7%	719 32.2%	360 16.1%	2236 100%
Other	657 54.6%	156 13.0%	391 32.5%	1204 100%

Table 6.3 shows that staff are also more responsive to reasons of efficiency and convenience. The most likely reasons that staff might use public transit more often are “*Transit Stops Closer To Home*”, “*Didn't Have to Transfer*”, “*Faster*” and “*More Reliable*”. Staff did not respond to parking, transit or gas costs.

Section 7. Selected Campus Comparisons

Table 7.1 Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation By Campus

Mode Used for Commuting	Estimated Total Passenger Miles Per Trip By Campus				
	Main	HSC	Ambler	TUCC	Across All Campuses*
Walk	.609	.58	1.19	N/A	.67
Bike	4.0	10.2	4.7	N/A	4.78
Single occupancy vehicle driver	22.6	19.4	32.5	15.6	25.13
Carpool driver or passenger	18.0	8.2	17.1	N/A	11.60
Bus	4.2	.94	N/A	2.26	3.69
Subway/trolley	13.7	8.2	N/A	11.4	12.4
Regional rail	33.8	23.3	11.8	31.3	31.85

*These data include students on Main who walk to campus. These estimates are based on respondents with no missing data for campus, miles commuted or primary mode of transportation. In addition, these totals do not necessarily represent the “typical” campus experience as these data are not weighted to represent campus totals but are weighted to represent total numbers of students, faculty and staff over all campuses. NOTE that the column labeled Across All Campuses was computed from data that did not include the campus variable so the denominators may be slightly different depending on missing data. In places where you see N/A there were no trips or no miles reported by a respondent from that campus in the dataset, that does not mean people do not walk or bike to TUCC.

Table 7.1 represents the estimated passenger miles per trip by primary mode of transportation by campus. Although these numbers are estimates, people who commute to Main, HSC and TUCC travel farther by regional rail than they do by single occupancy vehicle. Those commuting to Ambler travel farthest by single occupancy vehicle per trip. There are a lot of commuting miles reported by bike from HSC with roundtrip rides recorded as high as 16, 20 and 30 miles.

*Table 7.2 Percent of All University Students, Faculty and Staff Who Use a Particular Mode as Their **Primary Means of Transportation** in a Typical Week by Campus**

Mode	Main	HSC	Ambler	TUCC	Total
Walk	14693 41.5%	51 1.4%	60 3.7%	0 0%	14804 35.8%
Bike	1527 4.3%	136 3.7%	40 2.5%	0 0%	1703 4.1%
Single occupancy vehicle driver	7494 21.2%	1713 46.4%	1338 82.7%	156 25.9%	10701 25.9%
Carpool driver or passenger	876 2.5%	171 4.6%	80 4.9%	0 0%	1127 2.7%
Bus	1056 3.0%	47 1.3%	0 0%	40 6.6%	1143 2.8%
Subway/trolley	4904 13.8%	1279 34.6%	0 0%	120 19.9%	6303 15.3%
Regional rail	4860 13.7%	298 8.1%	100 6.2%	287 47.6%	5545 13.4%
Total used for percents in column Sum Percents	35410 100%	3695 100%	1618 100%	603 100%	41326 100%

*Includes students on Main who live on campus and who walk to campus. These percentages are based on respondents with data reported for campus. In addition, these totals do not necessarily represent the “typical” campus experience as these data are not weighted to represent campus totals but are weighted to represent total numbers of students, faculty and staff overall across campuses. The percentages in this table are based on weighted respondents.

Table 7.2 represents the primary mode of transportation across campuses for weighted respondents. Of note are that 83% of commuters to Ambler come by single occupancy driver followed by regional rail. The predominant mode for HSC is also single occupancy driver at 46% followed by subway (35%). For TUCC, most people commute by regional rail (48%) followed by single occupancy driver (26%) and subway (20%).

*Table 7.3 Percent of All University Students, Faculty and Staff Who Use a Particular Mode as Their **Primary Means of Transportation** in a Typical Week by Campus for Commuters Only**

Mode	Main	HSC	Ambler	TUCC	Total
Walk	9254 30.9%	51 1.4%	60 3.7%	0 0%	9365 26.1%
Bike	1527 5.1%	136 3.7%	40 2.5%	0 0%	1703 4.7%
Single occupancy vehicle driver	7494 25.0%	1713 46.4%	1338 82.7%	156 25.9%	10701 29.8%
Carpool driver or passenger	876 2.9%	171 4.6%	80 4.9%	0 0%	1127 3.1%
Bus	1056 3.5%	47 1.3%	0 0%	40 6.6%	1143 3.2%
Subway/trolley	4904 16.4%	1279 34.6%	0 0%	120 19.9%	6303 17.6%
Regional rail	4860 16.2%	298 8.1%	100 6.2%	287 47.6%	5545 15.5%
Total used for percents in column Sum Percents	29971 100%	3695 100%	1618 100%	603 100%	35887 100%

*Includes students on Main who report walking to campus but not students who reported living on campus. These percentages are based on respondents with data reported for campus. In addition, these totals do not necessarily represent the “typical” campus experience as these data are not weighted to represent campus totals but are weighted to represent total numbers of students, faculty and staff overall across campuses.

Table 7.3 represents the primary mode of transportation for commuters only. This table does not include students who reported that they live on campus. These numbers are not different from the table above for HSC, Ambler and TUCC because all students who report living on campus are at Main campus.

*Table 7.4 Reasons Why People **Do Not** Carpool for Ambler Campus Only*

Reasons People Do Not Carpool	Ambler Campus
Not Convenient Locations	256 14.7%
Hard to Coordinate Times to Come and Go	436 25.1%
Prefer To Drive Privately	140 8.1%
Sharing Costs is Too Complicated	0 0%
Don't Know Anyone to Carpool With	336 19.3%
Have Other Errands To Do On Way To or From Campus	176 10.1%
Wouldn't Be Able to Leave Campus if Child Gets Sick	136 7.8%
Other	100 5.8%
Total	1738* 100%

*This table does not necessarily represent the typical Ambler commuter's experience as these data are not weighted to Ambler campus totals, but are representative of those who responded from Ambler. There are also 160 persons who failed to respond to this question who reported they were from Ambler campus.

Table 7.4 indicates that for students faculty and staff community to Ambler, the number one reason they do not carpool is because it's too hard to coordinate times to come and go (25%) followed by don't know anyone (19%) and no convenient locations (15%). Of those who reported 'Other', insurance purposes, doctoral research hours and family members dropping off at campus were cited as reasons respondents do not carpool.

Section 8. Weighting

Table 8.1 Report Category Post-Stratification Weights

Report Strata	Eligible N	Eligible Proportion*	Completed n	Completed Proportion*	Post-Stratify (N=1,336) WGHT2	Post-Stratify (N=42,450) WGHT3
Students	34,156	0.80	854	0.639	1.252	39.995
Faculty	3,479	0.08	174	0.130	0.629	19.994
Staff	4,815	0.11	308	0.231	0.492	15.633
Totals	42,450	1.000	1,336	1.000		

*Note rounded eligible proportions do not sum to 1.0. Actual proportions are Students=.80, Faculty=.08196, and Staff=.11343; similarly for completed proportions. Students = .6392, Faculty=.1302 and Staff=.2305. Weights are simply calculated by dividing the Eligible N by the completed n.

Section 9. Past Years Comparisons

Table 9.1 Comparison of 2007 Through 2013 Estimates Where Available

Estimate	2008	2010	2013
% of TU commuters driving alone only	40	27.3	24.2
% of TU faculty and staff driving alone only	54	45.6	50.9
% of commuting TU students driving alone only	34	22.2	17.7
% of TU commuters who carpool	9	10.8	5.9
% of commuting TU drivers who park in Temple lots	53	48.2	48.9
% of commuting TU drivers who park on the street	37	38.2	40.8
% of TU commuters who ride a bicycle as part of their commute	6	8.8	8.9
% of TU commuters who walk as part of their commute	< 5%	18.2	19.2

Appendix 1

Supplemental Tables

Table A1.1 Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation.

Mode Used for Commuting	All Students Faculty and Staff Total Passenger Miles / # Trips
Walk	6328/9487 = .67
Bike	11937/2497 = 4.78
Single occupancy vehicle driver	329489/13109 = 25.13
Carpool driver or passenger	33762/2911 = 11.60
Bus	17225/4668 = 3.69
Subway/trolley	117036/9410 = 12.4
Regional rail	231617 / 7271 = 31.85

This Table does not include students who answered Yes to "I live on campus".

Table A1.1 represents the passenger miles per trip by primary mode of transportation. The total trips taken by all commuters is 49,353 in a typical week and the total passenger miles for Temple commuters in a typical week is 747,397. The longest commute is by passengers on regional rail at 31.85 miles per trip followed by single occupancy vehicles (25.13 miles) and subway/trolley riders (12.4 miles).

Table A1.2 **Student** Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation.

Mode Used for Commuting	Students Total Passenger Miles / # Trips
Walk	547/960 = .57
Bike	7683/1920 = 4.00
Single occupancy vehicle driver	204891/9199 = 22.27
Carpool driver or passenger	29604/1800 = 16.4
Bus	13670/3760 = 3.63
Subway/trolley	96243/7519 = 12.8
Regional rail	175429 / 5319 = 32.98

This Table does not include students who answered Yes to "I live on campus".

Table A1.3 **Faculty** Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation.

Mode Used for Commuting	Faculty Total Passenger Miles / # Trips
Walk	161/140 = 1.15
Bike	2879/280 = 10.28
Single occupancy vehicle driver	57778/2279 = 25.35
Carpool driver or passenger	1719/100 = 17.19
Bus	460/220 = 2.09
Subway/trolley	3241/640 = 5.06
Regional rail	25272/920 = 27.47

Table A1.4 **Staff** Passenger Miles per Trip for Commuters in a Typical Week For Primary Mode of Transportation.

Mode Used for Commuting	Staff Total Passenger Miles / # Trips
Walk	190/188 = 1.01
Bike	1375/297 = 4.62
Single occupancy vehicle driver	66818/2939 = 22.73
Carpool driver or passenger	2439/250 = 9.76
Bus	3095/688 = 4.50
Subway/trolley	11572/1251 = 9.25
Regional rail	30916/1032 = 29.96

Table A1.5: Survey Question 4 Results.

# Days per week you come to campus * indicator for stud fac staff Crosstabulation									
			indicator for stud fac staff			Total	Average Commuting Days		
			Student	Faculty	Staff		Student	Faculty	Staff
# Days per week you come to campus	0	Count	400	0	188	588	0.00	0.00	0.00
		% within indicator for stud fac staff	2.0%	0.0%	3.9%	2.1%			
	1	Count	1080	300	47	1427	0.05	0.09	0.01
		% within indicator for stud fac staff	5.4%	8.8%	1.0%	5.1%			
	2	Count	2320	560	31	2911	0.23	0.33	0.01
		% within indicator for stud fac staff	11.7%	16.4%	.6%	10.4%			
	3	Count	2960	500	141	3601	0.45	0.44	0.09
		% within indicator for stud fac staff	14.9%	14.6%	2.9%	12.8%			
	4	Count	3360	680	203	4243	0.68	0.80	0.17
		% within indicator for stud fac staff	16.9%	19.9%	4.2%	15.1%			
	5	Count	8479	1280	3940	13699	2.13	1.87	4.12
		% within indicator for stud fac staff	42.7%	37.4%	82.3%	48.8%			
	6	Count	1040	100	204	1344	0.31	0.18	0.26
		% within indicator for stud fac staff	5.2%	2.9%	4.3%	4.8%			
7	Count	240	0	31	271	0.08	0.00	0.05	
	% within indicator for stud fac staff	1.2%	0.0%	.6%	1.0%				
Total	Count	19879	3420	4785	28084	3.94	3.70	4.70	
	% within indicator for stud fac staff	100.0%	100.0%	100.0%	100.0%				

Appendix 2

Informed Consent for the Temple Transportation Survey

IRB Protocol # 13079

Temple University is receiving no compensation for conducting this study.

This study is sponsored by the Office of Sustainability.

This survey of Temple personnel is an important step in the University's effort to create a more energy sustainable community. It is part of a large energy audit that will help to determine energy and transportation habits of all Temple personnel.

Everyone at the University's primary campuses are eligible to participate in the survey. However, only one in six people were selected randomly (by a computer) to participate. This is why your answers are important to obtaining valid results.

The online survey is very short. The time required to complete it will vary according to your answers. Many people will be finished in under a minute. Virtually everyone will be able to complete it in less than ten minutes.

Your answers will be held in strict confidence. No one will be able to associate your name with your answers in the analysis. All the data will be kept confidential.

Your participation in this study is entirely voluntary. If you chose not to participate, there will be no penalty or loss of benefits to you. You may also discontinue your participation at any time without penalty or loss of any kind of benefits.

There is no cost and no compensation to you for participating in this survey. However, some prizes will be raffled. If half the people invited to complete the survey do complete it, you have about a 1 in 100 chance of receiving a prize. If you win a raffle prize, you will be notified via e-mail no later than May 31, 2013 with information about how to collect your prize.

If you have any questions about your rights as a research subject, contact the Institutional Review Board Coordinator, Naomi Starkey (215.707.7175). You may also contact the principal investigator for the study, Keisha Miles (215.204.8355).

=====

I understand that by checking "I agree" below, I acknowledge that I have read this consent form, and I agree to participate under the terms set forth above (*please check the appropriate box below*).

I agree. Please continue to the survey. [*go to Question 1*]

I do not agree. [*end; no need to complete the survey, but please return it in the enclosed envelope anyway*]

Appendix 3

Sustainability Audit – Temple Transportation Survey

Please read and answer each question below. Please be as accurate and truthful as possible. All your answers will be confidential.

Follow the instructions in italics, brackets, or as the arrows indicate, depending on your answers.

1. Please enter the postal ZIP code where you live this semester: _____.

2. On which Temple campus do you spend *most* of your time this semester? [*check one*]
 - ₁ Main (Broad & Montgomery)
 - ₂ Health Sciences Center (HSC)
 - ₃ Ambler
 - ₄ Center City (TUCC)
 - ₅ Temple Administrative Services Building (TASB)
 - ₆ Harrisburg
 - ₇ Fort Washington
 - ₈ Other [*you are ineligible; no need to complete this survey*]

3. Do you either live on campus or *typically* walk to campus this semester? ******Students Only******
 - ₁ Yes, I live on campus [*skip to Question #14*]
 - ₂ Yes, I typically walk to campus [*skip to Question #3a*]
 - ₅ No, I neither live on campus nor typically walk to campus [*continue with Question #4*]
 3. About how far do you walk one way as part of your typical commute to campus?
_____ miles walking one way [*skip to Question #14*]
 - ₀ I walk less than a mile one way [*skip to Question #14*]

4. During this academic semester, how many days per week do you *typically* come to campus? (Do not count the intercampus bus shuttle, if you take it.)
_____ days per week

5. When you come to campus, about how many *miles* is your typical *one-way* commute? (If you use more than one mode of transportation, enter your best estimate of *all the one-way miles*.)

_____ mile(s) commuting one way

Q5: pop-up if answer is >50 miles:

If [fill] miles is the correct *one-way* commute you intended to enter, click "Continue" below, or click "Return" to correct your entry.

6. In a typical week, do you take a bus as part of your commute to campus (Do not count the intercampus bus shuttle, if you take it)? [*check No or Yes*]

No
[go to Question 7]

Yes
↓

- 6a. If you take a bus to campus, about how many days in a *typical* week do you take a bus in your commute to campus?

_____ days per week

- 6b. How many buses do you typically take to arrive at campus?

- one
 two
 three or more

7. In a typical week, are you the driver (not passenger) of a car as part of your commute to campus? [*check No or Yes*]

No
[go to Question 8]

Yes
↓

- 7a. If you are the *driver* of a car to campus, in a *typical* week, about how many days do you drive to campus? (Do not include times as a carpool *passenger*, if you carpool.)

_____ days per week

- 7b. About how many miles do you drive *one way* as part of your *typical* commute to campus?

_____ miles driven one way

- 7c. How many people are *usually* in the vehicle when you drive to campus?

- one [skip to 7e]
 two [go to 7d]
 three or more [go to 7d]

Q7b: pop-up if answer is >50 miles:

If [fill] miles is the correct one-way driving commute you intended to enter, click "Continue" below, or click "Return to correct your entry.

7d. If you carpool to campus, do all the people in the car come to the campus, or are some dropped off at other locations?

- ₁ all come to the campus
- ₂ some go to other locations

7e. What is the average “city” miles per gallon your vehicle gets (your best estimate is fine)?

_____ mpg ₇ Don't know

7f. If you drive to campus, where do you *most often* park your vehicle on campus? [*check one*]

- ₁ in a Temple parking lot with decal access
- ₂ in another lot
- ₃ on neighborhood streets near campus
- ₄ other

8. In a typical week, do you take a subway (“orange”), subway/surface (“trolley”), or the EI (“blue”) as part of your commute to campus? (Do not include a regional rail line, if you use one.) [*check No or Yes*]

₅ No
[*go to Question 9*]

₁ Yes



8a. If you take a subway, trolley, or “EI” to campus, about how many days in a *typical* week do you take a subway, trolley, or “EI” in your commute to campus?

_____ days per week

9. In a typical week, do you take any *regional rail* line (see list below) as part of your commute to campus? [*check No or Yes*]

₅ No
[*go to Question 10*]

₁ Yes



9a. If you take regional rail(s), about how many days in a *typical* week do you take regional rail in your commute to campus?

_____ days per week

Q9 and Q9a: On the web, a side box labeled “Regional Rails” will appear on the screen with the list shown below.
Airport Line, Chestnut Hill East Line, Chestnut Hill West Line, Cynwyd Line, Fox Chase Line, Glenside Combined, Landsdale/Doylestown Line, Center City to University City, Manayunk/Norristown Line, Media/Elwyn Line, Paoli/Thorndale Line, Trenton Line, Warminster Line, West Trenton Line, Wilmington/Newark Line, Fern Rock to Center City, Norristown High Speed Line, PATCO/NJ Transit/Light Rail

10. In a typical week, do you bicycle as part of your commute to campus? [check No or Yes]

₅ No
[skip to Question 10d]

₁ Yes
↓

10a. If you bike to campus, about how many days in a *typical* week do you bike in your commute to campus?

_____ days per week

Q10b: pop-up if answer is >20 miles:

If [fill] miles is the correct *one-way* bike commute, click "Continue" below, or click "Return" to correct your entry.

10b. About how many miles do you bike *one way* as part of your *typical* commute to campus?

_____ miles biking one way

10c. If you use (or want to use) a campus bicycle rack, can you *typically* find a spot? [check one]

- ₅ No
₁ Yes [skip to Question 11]
₂ I typically do not use a campus bicycle rack

10d. Please check any of the following scenarios that would encourage you to bike as part of your commute or bike more often. [check all that apply]

- ₁ More dedicated bike lanes
₂ More bikeway destination/route signage
₃ Increased education and outreach programs
₄ Increased bike storage/parking
₅ Other (SPECIFY)

11. In a typical week, do you walk as *the main* part of your commute to campus? That is, if you walk more than half of the distance to campus (but perhaps take another form of transportation the rest of the way), you would answer "yes." [check No or Yes]

₅ No
[go to Question 12]

₁ Yes
↓

11a. If you walk to campus, about how many days in a *typical* week do you walk as *the main* part of your commute to campus?

_____ days per week

Q11b: pop-up if answer is >5 miles:

If [fill] miles is the correct *one-way* walking commute, click "Continue" below, or click "Return" to correct your entry.

11b. About how far do you walk *one way* as part of your *typical* commute to campus?

_____ mile(s) walking one way

₀ I walk less than a mile one way

12. In a typical week, are you a passenger (not driver) in a carpool as part of your commute to campus? (Carpooling may include family members or others.) [check No or Yes]

₅ No

[go to Question 13]

₁ Yes



12a. If you carpool to campus, about how many days in a typical week do you carpool in your commute to campus?

_____ days per week

12b. How many people are usually in the vehicle when you carpool to campus?

₂ two [skip to Q15 only if Q12a=Q4; otherwise, go to Q13]

₃ three or more [skip to Q15 only if Q12a=Q4; otherwise, go to Q13]

13. Below are common reasons why people *do not* carpool (or do not carpool more often). Please check what you consider the *main reason* why you do not carpool or carpool more often [check one]:

₁ not convenient locations (would have to drive out of my/their way for pick up)

₂ hard to coordinate times to come and go – need more flexibility

₃ prefer driving privately

₄ sharing the costs is too complicated

₅ don't know anyone I could carpool with

₆ have other errands to do on the way to and from campus

₇ wouldn't be able to leave campus if my child gets sick, or in another such emergency

₈ other main reason (PLEASE SPECIFY) _____

Question 14 from 2010 survey has been eliminated – question 14 below was 15

[Q14 asked only if Q3 = 1 or 2 (i.e., students only, who either live on campus or typically walk to campus)]

14. Do you have a personal vehicle (car or motorcycle) for your *own* use this semester?

[Check No or Yes]

₅ No

[skip to CLOSE]

₁ Yes



14a. Where do you *most often* park on campus? [check one]

₁ In a Temple parking lot with decal access

₂ In another lot

₃ On neighborhood streets near campus/residence

₄ Other (SPECIFY)

14b. About *how often* do you use your vehicle for *any purpose* this semester? [check one]

₁ Every day or almost every day

₂ A few days a week

₃ About one day a week

₄ Less than once a week

15. Zimride offers a private ridesharing network for Temple University. Do you know *anything* about how such ridesharing services work? [check No or Yes]

- ₅ No
₁ Yes
 [go to Question 16]

Pop-up window: Zimride is a private website that helps Temple’s students, staff, and faculty share a carpool in the Greater Philadelphia area. The Zimride website is easy to use and interfaces with you Facebook account. Learn more here: <http://zimride.temple.edu/>

16. Carsharing services (Zipcar and PhillyCarShare) have Temple campuses as “stations” for their cars. Do you know *anything* about how such carsharing services work? [check No or Yes]

- ₅ No
₁ Yes
 [go to Question 17 only if Q6 AND Q8 AND Q9 = 5, ELSE skip to CLOSE]

Pop-up window: Carsharing is a subscription to use a car by reserving one only for the hours you need it. You can find out more at either www.zipcar.com or www.phillycarshare.org

[Q17 appears only if Q6 AND Q8 AND Q9 = 5]

17. There are many reasons people decide not to use public transit. According to the answers you’ve provided in this survey, you typically do not use public transit in your daily commute. Please indicate below *how much more likely* you would use public transit for your commute if each of the factors shown were true.

	<u>how much more likely to use public transit?</u>		
	a lot	some	no effect on my decision
a. fares were cheaper	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁
b. parking costs were higher	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁
c. the transit system was safer	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁
d. transit stops were closer to my home	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁
e. I didn’t have to transfer between routes	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁
f. the service was faster	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁
g. the service was more reliable	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁
h. gas prices went above \$4 again	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁
i. other reason (PLEASE SPECIFY) _____	<input type="radio"/> ₃	<input type="radio"/> ₂	<input type="radio"/> ₁

===== **END** =====

Thank you for taking the time to participate in Temple's Transportation Survey!

If you want to be eligible for the raffle prizes, please check "yes" below. If not, check "no."

- Yes, please enter my name in the raffle.
- No thank you, I do not want to be entered in the raffle.

If you enter and win the raffle, you will be notified in the next few weeks
via e-mail with information to claim your prize.

Please return your completed survey in the enclosed postage-paid envelope.

Thank you again for contributing to Temple's Sustainability Audit!