

UNIVERSITY OF KENTUCKY CAMPUS BICYCLE PLAN SURVEY METHODS AND RESULTS SUMMARY

Executive Summary

Input from the University of Kentucky community is critical to the success of the campus bicycle master plan. A key element of Task 3, Stakeholder Involvement, includes a survey of students, faculty and staff who commute to campus. A web-based survey was developed to gain input from two target audiences at the University of Kentucky; 1) people who commute to campus by automobile, bus or foot and 2) people who commute to campus by bicycle. The goal of the survey was to measure attitudes, habits and opinions regarding transportation to and from campus, and to identify issues specific to bicycle and car commuters.

A link to the survey was posted on the University of Kentucky website and emails and flyers were used to promote the survey to a wide audience. The survey was accessible online for two and a half weeks and over five thousand responses were received, representing over ten percent of the University of Kentucky campus community (including Lexington Community College). Almost half of the respondents were students, over 40% were employees, and the remainder was faculty. The survey revealed that more than 7 out of 10 respondents travel to campus most often by car, and less than 1 out of 10 by bicycle.

Employees account for a very small percentage of bicycle commuters (16%) and make up the largest share of car commuters. As to be expected, individuals commuting to campus by car have longer commutes than those commuting by bicycle. However, distance does not explain all of the variation in travel time. More than a third of car commuter respondents (1,364) live less than five miles from campus. Car commuters living the same distance from campus as bicycle commuters still tend to have longer commute times than those riding bikes to campus. Car commuters also are not likely to take other modes, traveling by car only to campus five or more times a week.

Car and bike commuters agreed that dedicated bike lanes on campus or city streets, and trails and pathways separated from the road are the critical amenities to encourage them to ride, or ride more often, to campus. Both audiences also perceive riding on city and campus streets to be dangerous. Bicycle commuters reported that they bike to campus for convenience and time savings, cost savings and because of lack of parking. Car commuters reported most frequently that they do not bike because of distance, not owning a bike, safety and traffic, weather and a need for trip chaining.

Survey Design and Administration

The survey was designed to be administered online. A web-based survey was chosen because of the time and cost efficiency of programming, ease of posting the survey on the University of Kentucky Parking and Transportation website, and readily available access to data as compared to a postcard survey that requires printing, distribution, mailing, and tabulation. Given that college students were a critical target of the survey, higher response rates were anticipated with an online survey compared to a postcard that would need to be returned through the mail.

Two sets of questions were written for the two target audiences; bicycle commuters and automobile, bus or foot commuters. Both sets contain six core questions with phrasing modified for the appropriate audience. Core questions include:

1. How do you get to campus most often?
2. How many times a week do you commute to campus by bike/car/car then bike/bike/bus/bus then bike/on foot?
3. Roughly, how far do you live from campus (in miles)?

4. How many minutes (on average) does it take you to get to your classes (or to your office) on campus... by car? by bus? on foot? by bike?
5. What are the top two reasons why you do (or do not) ride a bike to campus?
6. What would encourage you to ride a bike (or ride more often) to campus? Please choose your top three choices.
 - a. Dedicated bike lanes on campus or city streets
 - b. Trails and pathways separated from the road
 - c. Financial incentive to bike instead of drive
 - d. Greater enforcement of traffic laws to protect bicyclists on the road
 - e. A campus map showing bicycle routes
 - f. More convenient bike parking
 - g. More secure or covered bike parking
 - h. Better lighting around campus for traveling safely at night
 - i. More police patrolling to ensure safety
 - j. Fewer restrictions to bikes on campus
 - k. A convenient place to shower/change clothes
 - l. A bicycle station on campus providing repairs, supplies, etc..
 - m. Living closer to campus
 - n. Other _____

The response to question 1, "How do you get to campus most often" directed each respondent to either the questions for bicyclists or the questions for auto/bus/foot commuters. One additional question was posed to bicyclists to determine how many ride on the sidewalk, how many ride in the street, and how many wear helmets. Both surveys also included two demographic questions (gender and Undergraduate/Graduate/Faculty or Employee), and finally an opportunity to list any other comments/suggestions.

A link to the survey was posted on University of Kentucky's Parking and Transportation home page and was accessible online for twenty days from October 26th through November 14th 2004. The survey was promoted through various channels. A global email was sent to all University of Kentucky student, faculty and staff email addresses (it is unknown how many accounts are active); an electronic newsletter was sent by Parking and Transportation Services to about 2500 subscribers; 1,500 flyers were printed with the survey link and distributed around campus to the student center, dormitories, classroom buildings and bike racks; and several campus student groups were asked to forward the link to their membership.

Survey Results

A total of 5,213 responses were received, exceeding the goal of 600 postcard surveys. The University of Kentucky population of students, faculty and staff totals 37,253, and the Lexington Community College population totals 8,939. Consequently, the survey responses represent over ten percent of the total UK campus community. Students, faculty and employees were all well represented in the pool of respondents. Predictably, employees and faculty were overrepresented accounting for only 25% of the campus community but over 50% of respondents (Table 1).

Table 1 - Total Population

	Survey Responses		Total Population	
Student	2,227	46%	34,932	75%
Faculty	650	13%	2058	5%
Employee	2,005	41%	9,202	20%
Total Respondents	4,882		46,192	

The survey results indicate that the UK campus is dominated by car commuters; more than 7 out of 10 respondents travel to campus most often by car. Other modes have significantly smaller shares of commuters; 14% of respondents commute most often on foot, 7% by bike, and 4% by bus (Table 2).

Table 2 - Total Survey Respondents

How do you get to campus MOST often?		
	Response Total	%
by car	3819	73.3%
by bike	367	7.0%
by bus	213	4.1%
on foot (walking)	740	14.2%
Other (please specify)	73	1.4%
Total Respondents	5212	

As much of the research for the *Campus Bicycle Plan* focuses on strategies for converting car trips into bicycle trips, responses from car and bike commuters are of great interest. Comparing the biking and driving respondents, it is clear that employees typically commute by car and are disinclined to commute by bike; more than half of car commuters are employees and only one sixth of bicycle commuters are employees (Table 10). On the other hand, almost two-thirds of bicycle commuters are students, and students show much higher percentages of biking, walking and taking the bus (Table 3). This suggests that bicycling is a mode of travel that is currently more attractive for students than other population groups, and that there is great potential for increasing cycling among the captive audience of 35,000 students.

Table 3 - Student Respondents

How do you get to campus MOST often?		
	Response Total	
by car	1215	55%
by bike	216	10%
by bus	166	7%
on foot (walking)	589	27%
Other (please specify)	36	2%
Total Respondents	2222	

Bicycle commuters are more likely to bike to campus 4 or 5 days a week and walk or drive once or twice a week, while car commuters tend to only drive and to rarely commute by other modes. Eighty percent of female respondents are driving to campus.

As expected, car commuters tend to have longer commutes and to live at greater distances than bike commuters. Examining only car and bike commuters who live less than 5 miles from campus provides an interesting perspective on commutes of similar distances (Table 17). Of car and bike commuters who live less than 5 miles from campus, 40% of car commuters spend more than 20 minutes commuting, while only 12% of bicyclists spend more than 20 minutes traveling to campus. This indicates that commuting by bike is a more efficient means of travel for these short trips. In fact, one in ten of these short (less than 5 miles) automobile trips takes longer than 30 minutes.

Car and bike commuters agreed that dedicated bike lanes on campus or city streets, and trails and pathways separated from the road would encourage them to ride, or ride more often, to campus.

Bicycle commuters added that fewer restrictions to bikes, greater law enforcement to protect bicyclists, and more secure or covered parking would encourage them to ride more often to campus. A large number of car commuters did report that nothing would encourage them to ride a bike to campus. However, more than 70% of these respondents live more than 5 miles from campus and over 60% are employees, suggesting that factors such as distance and perhaps health or trip chaining (i.e. dropping off children before work) present considerable barriers to biking. This fact is reinforced by the large number of car commuters reporting that living closer to campus would encourage them to bike to campus.

From both car and bike commuters, there is a perceived lack of safety in riding on city and campus streets. This is reflected in the open ended responses as to why commuters don't bike more often and in the desire for dedicated bike lanes or separate paths and greater law enforcement to protect bicyclists.

Profile of Car Commuters

Respondents who commute to campus most often by car:

- Are more likely to be employees. 51% of car commuters are employees, 34% are students (Table 4)
- Are more likely to be female; 65% of car commuters are female (Table 5)
- 37% (1,364) of car commuters live less than 5 miles from campus (Table 6)
- Are more likely to commute to campus 5 or 6 days a week; few car commuters take other modes (Table 7)
- 28% of respondents take 10 to 20 minutes to get to class/office, 27% take 20 to 30 minutes and 27% take more than 30 minutes (Table 8)
- Cite distance/living too far, don't own a bike, lack of bike lanes, safety/danger, traffic, weather, poor health, need for trip chaining (dropping off kids) as top reasons for not biking to campus
- Cite nothing/nothing else, living closer to campus, dedicated bike lanes, separated trails would encourage them to ride a bike to campus (Table 9)

Table 4 - Car Commuters

Undergraduate	796	22%
Graduate	419	12%
Faculty	519	15%
Employee	1841	51%
Total Respondents	3575	

Table 5 - Car Commuters

Male	1260	35%
Female	2310	65%
Total Respondents	3570	

Table 6 - Car Commuters

Roughly how far do you live from campus (in miles)?			
	Response Total		
I live on campus	43		1%
Less than 1 mile	63		2%
1 to 5 miles	1258		34%
5 to 10 miles	1279		35%
10 or more miles	1019		28%

Total Respondents	3662
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Table 7 - Car Commuters

How many times a week do you commute to campus...										
	0	1	2	3	4	5	6	7	more than 7	Response Total
by car?	1%	3%	3%	6%	7%	60%	9%	4%	7%	3776
by car then bike?	97%	1%	0%	0%	0%	1%	0%	0%	0%	3775
by bike?	97%	2%	1%	0%	0%	0%	0%	0%	0%	3777
by bus?	95%	1%	1%	1%	0%	2%	0%	0%	0%	3777
by bus then bike?	100%	0%	0%	0%	0%	0%	0%	0%	0%	3781
by walking?	91%	3%	2%	1%	0%	2%	0%	0%	1%	3782
Total Respondents	3775									

Table 8 - Car Commuters

How many minutes (on average) does it take you to get to your classes (or to your office) on campus...		
by car? Please include the amount of time it takes you to WALK from the parking lot to class (office).		
Less than 10 minutes	576	15.7%
10 to 20 minutes	1024	27.9%
20 to 30 minutes	958	26.1%
30 to 45 minutes	633	17.3%
45 minutes or more	370	10.1%
N/A	106	2.9%
Response Total	3667	

Table 9 - Car Commuters

What would encourage you to ride a bike (or ride more often) to campus? Please choose your top THREE choices from the drop down menus below.			
	1	2	3
Dedicated bike lanes on campus or city street	17.1%	10.4%	5.4%
Trails and pathways separated from the road	14.6%	13.1%	5.6%
Financial incentive to bike instead of drive	8.0%	7.7%	7.4%
Greater enforcement of traffic laws to protect bicyclists on the road	2.2%	6.3%	5.8%
A campus map showing bicycle routes	0.3%	1.4%	1.9%
More convenient bike parking	0.8%	2.4%	4.0%
More secure or covered bike parking	1.6%	6.1%	6.8%
Better lighting around campus for traveling safely at night	1.1%	3.1%	3.9%
More police patrolling to ensure safety	1.1%	2.1%	2.8%
Fewer restrictions to bikes on campus	1.0%	2.3%	2.9%
A convenient place to shower/change clothes	1.7%	3.8%	3.8%
A bicycle station on campus providing repairs supplies etc..	0.2%	0.6%	1.2%
Living closer to campus	22.6%	8.1%	7.2%
Other	1.3%	2.2%	3.2%
Nothing/Nothing Else	26.4%	30.4%	37.8%
Response Total	3599	3602	3602

Profile of Bicycle Commuters

Respondents who commute to campus most often by bicycle:

- Are most likely to be students (62% of bike commuters are students), and are least likely to be employees (Table 10)
- Are more likely to be male; 70% of bike commuters are male (Table 11)
- 93% of bike commuters live less than 5 miles from campus, with the majority living 1 to 5 miles (Table 12)
- Tend to bike to campus 4 or 5 times a week, replacing a bike trip most frequently with a car trip or a walking trip (Table 13)
- 84% of bike commuters spend 20 minutes or less getting to classes/work; only 3% spend 30 or more minutes (Table 14)
- Are more likely to ride on the sidewalk than not; 64% of bicyclists ride on the sidewalk
- Are less likely to wear a helmet; 54% of bicyclists do not wear a helmet (Table 15)
- Cite convenience/time saving, not enough parking, cost savings (parking), exercise/health, environmentally friendly as top reasons for biking to campus
- Cite dedicated bike lanes, separated trails, fewer restrictions to bikes on campus, greater enforcement of traffic laws, and more secure bike parking as encouragement to bike to campus more often (Table 16)

Table 10 - Bicycle Commuters

Undergraduate	143	41%
Graduate	75	21%
Faculty	78	22%
Employee	57	16%
Total Respondents	353	

Table 11 - Bicycle Commuters

Male	248	70%
Female	105	30%
Total Respondents	353	

Table 12- Bicycle Commuters

I live on campus	26	7%
Less than 1 mile	106	30%
1 to 5 miles	197	55%
5 to 10 miles	22	6%
10 or more miles	4	1%
Total Respondents	355	

Table 13 - Bicycle Commuters

How many times a week do you commute to campus...										
	0	1	2	3	4	5	6	7	more than 7	Response Total
by car?	60%	25%	7%	4%	2%	1%	0%	0%	0%	363
by car then bike?	91%	2%	2%	2%	0%	2%	0%	0%	0%	362
by bike?	5%	2%	4%	10%	20%	28%	8%	7%	17%	363
by bus?	90%	4%	2%	1%	1%	0%	1%	0%	0%	363
by bus then bike?	96%	2%	1%	1%	0%	0%	0%	0%	0%	361
by walking?	53%	21%	12%	8%	2%	1%	0%	1%	1%	361
Total Respondents	364									

Table 14 - Bicycle Commuters

How many minutes (on average) does it take you to get to your classes (or to your office) on campus by bike?		
Please include the amount of time it takes you to WALK from where you park your bike to class (or your office).		
Less than 10 minutes	128	36%
10 to 20 minutes	170	48%
20 to 30 minutes	47	13%
30 to 45 minutes	8	2%
45 minutes or more	2	1%
Total Respondents	355	

Table 15 - Bicycle Commuters

When riding your bike do you...		
	Yes	No
ride on the sidewalk?	64%	36%
ride in the street?	90%	10%
wear a helmet?	46%	54%
Total Respondents	355	

Table 16 - Bicycle Commuters

What would encourage you to bike to campus more often? Please choose your top THREE choices from the drop down menus below.			
	1	2	3
Dedicated bike lanes on campus or city street	50%	21%	6%
Trails and pathways separated from the road	14%	18%	8%
Financial incentive to bike instead of drive	11%	9%	11%
Greater enforcement of traffic laws to protect bicyclists on the road	5%	10%	14%
A campus map showing bicycle routes	1%	1%	3%
More convenient bike parking	3%	4%	7%
More secure or covered bike parking	4%	11%	12%
Better lighting around campus for traveling safely at night	1%	3%	6%
More police patrolling to ensure safety	0%	1%	2%
Fewer restrictions to bikes on campus	7%	11%	15%
A convenient place to shower/change clothes	1%	2%	3%
A bicycle station on campus providing repairs supplies etc..	1%	5%	6%
Living closer to campus	1%	1%	1%
Other	1%	0%	1%
Nothing/Nothing Else	2%	3%	6%
Response Total	354	354	354

Table 17 - Car and bike commuters that live 5 miles or less from campus

How many minutes (on average) does it take you to get to your classes (or to your office) on campus...							
	Less than 10 minutes	10 to 20 minutes	20 to 30 minutes	30 to 45 minutes	45 minutes or more	N/A	Response Total
by car? Please include the amount of time it takes you to WALK from the parking lot to class (office).	18%	42%	27%	8%	2%	3%	1367
by bike?	38%	50%	10%	1%	0%		326
by bus? Please include the amount of	5%	4%	3%	3%	2%	83%	1367

time it takes you to WALK from the bus stop to class (office).							
on foot?	5%	6%	7%	6%	6%	70%	1367