

THE UNIVERSITY OF MARYLAND 2011-2030 FACILITIES MASTER PLAN SURVEY OF TRANSPORTATION AND THE CAMPUS ENVIRONMENT

As part of the University of Maryland's 2011-2030 update to the Facilities Master Plan (FMP), the FMP Subcommittees requested the campus community be surveyed regarding aspects of the campus environment. There were two foci – transportation and the campus landscape. Topic areas were generated in meetings and via email sent to the researcher.

Methodology/Limitations

Random samples of faculty/staff (3,500 or about ¼ the population) and a random sample of students (9,000 or about ¼ the population) were generated. On November 8, 2010 an email was sent from Ann Wylie to each sample, with a link to the survey at the Survey Monkey website. Reminder emails were sent on November 15. A total of 2,244 surveys were completed, 54% by students (37% undergraduate, 18% graduate) and 45% by faculty and staff. The student sample returned surveys at a response rate of 14%, while the faculty and staff response rate was 29%. Students are underrepresented in the results.

This survey attempted to capture the opinions of the campus community regarding transportation (to and on campus), and the campus landscape. Respondents self-selected - the opinions of those who did not choose to take the survey are not represented here. Further, the results discussed below are self-report/opinion, including data that may appear factual. The results should be interpreted with caution.

Responses were both closed and open-ended. Basic statistics for closed-ended responses are reported here, with all percentages rounded to the nearest percent. Most open-ended responses have been categorized into broad topic areas. Individual comments are available for review.

Themes in the Data

Analysis of the data produced some common themes that are present in both closed and open-ended responses. The reader may draw other conclusions.

- **Respondents are concerned, even angry about certain transportation-related behaviors.**

Many respondents cited dangerous and illegal behaviors they think negatively impact travel on campus. Frequently cited examples are pedestrians not paying attention while crossing roads, bicyclists/motorized scooters riding on sidewalks, and scooters breaking traffic laws. These behaviors are often blamed on individuals. Many respondents recommended dedicated bicycle paths or lanes, and some encouraged ticketing of bicycles/scooters on sidewalks. Note though, that some bicyclists said drivers are disrespectful of them when they are traveling on the roads.

Conversely, roads and parking lots, while perceived as dangerous for bicyclists and pedestrians, are not as widely perceived by respondents as a problem of driver behavior, but more often a problem of road congestion and poor design.

- **Many respondents walk on campus. It is perceived as pedestrian-friendly for the most part.**

Walking is the most popular method for getting from one place to another on campus. Two thirds of respondents walk at least some of the time. Factors such as distance between destinations and having heavy items to carry impact the decision to drive vs. walk. Further, more than 60% of respondents sometimes walk on campus simply for pleasure or exercise.

When asked “How pedestrian-friendly is the campus...” 36% responded “very” and “54% “somewhat”. More than one in four thinks the pedestrian experience is “fine the way it is”. More than a third said reducing conflicts between vehicles and pedestrians would improve the pedestrian experience (some say it’s the pedestrian’s fault, some the driver’s). Some think the campus should be closed to vehicles but many disagree (see also Campus Drive Pilot Closure survey report, fall 2010).

- **Personal vehicles are the most-used means of getting to and from campus.**

Many respondents commented on the challenges of getting to campus and suggested various ways to make the commute easier, including adding shuttle routes and stops, and reducing congestion on Route 1. Many commuters cited schedule, cost and other conflicts that make public transportation an unattractive option. More than a third would not consider alternatives to parking on campus, even if the cost increased 50% or more. Those who live close to campus would seem to have viable alternatives to driving, but 57% of respondents who live within two miles say they drive here.

There is no consensus on whether non-UM vehicles should be allowed to cut through campus.

- Julie Kromkowski

Respondent Demographics

What is your role/status at UM?

	Full time	Part time
Undergraduate student	778 (39%)	42 (19%)
Graduate student	307 (15%)	89 (40%)
Faculty	315 (16%)	56 (25%)
Staff	607 (30%)	30 (13%)
Other	8 (<1%)	6 (3%)
Total responses	2,015	223

How close to campus do you live during the academic year?

On campus	333 (15%)
Within a mile of campus	248 (11%)
1-2 miles from campus	220 (10%)
3-4 miles from campus	206 (9%)
5-9 miles from campus	351 (16%)
10 or more miles from campus	882 (39%)

Further analysis

How close do you live to campus?

	On campus	Within a mile	1-2 miles away	3-4 miles away	5-9 miles away	10+ miles away	Total
What is your role on campus?							
Undergraduate student	323 (40%)	185 (23%)	81 (11%)	39 (5%)	40 (5%)	142 (17%)	820
Graduate student	2 (<1%)	43 (11%)	63 (16%)	61 (15%)	97 (24%)	129 (33%)	397
Faculty	1 (<1%)	10 (3%)	27 (7%)	33 (9%)	83 (22%)	218 (59%)	372
Staff	3 (<1%)	10 (2%)	41 (6%)	70 (11%)	130 (20%)	382 (60%)	636
Other	0	0	1 (7%)	3 (21%)	1 (7%)	9 (64%)	14

Comparing student and faculty/staff responses - highlights

All responses were self-reported. The respondent sample included 1,085 students and 922 faculty/staff. More student respondents live close to campus than faculty/staff. Only 23% live 10+ miles from campus, vs. 60% of faculty/staff. Student respondents walk, bicycle and ride Shuttle-UM to campus more, and faculty/staff drive more. Students bicycle more, and more are positive about the bicycle-friendliness of the campus. More students listed incentives that would encourage them to use Shuttle-UM; faculty/staff respondents responded more often that no change would persuade them to use it. Students responded in about equal numbers that reducing conflicts with pedestrians and reducing traffic congestion would most improve the campus driving experience; more faculty/staff are interested in reducing pedestrian conflicts and fewer said "it's fine the way it is". Far fewer students were willing to pay any price for a parking permit (34% vs. 11%). More faculty/staff respondents indicated the campus is vehicle friendly than students. More students responded they would allow "cut through" vehicles on campus roads. Far fewer student respondents had heard about the Arboretum and Botanical Garden. Students were more positive about campus signage. The overall pattern of responses is different between students and faculty/staff, as expected from their position in life and difference in average age. Further analyses can be performed to elaborate on the differences.

Comparing full-time and part-time responses - highlights

All responses were self-reported. The respondent sample included 2,015 full time and 223 part time. More part-time respondents live off campus, and on the whole they live further away from campus. More use public transportation or drive to campus and fewer bicycle, walk on campus for pleasure or use Shuttle-UM. Fewer travel around campus, but more walk (rather than drive) around the campus. In general they are more likely to respond to a question with "do not have enough information to answer." Fewer have a parking permit, but the proportion who would pay for a permit at any cost is about the same as for full-time. Overall they consider the campus about as vehicle-friendly as those who are full-time, but more find it more difficult to get around campus using the existing signage. Further analyses can be performed to elaborate on the differences.

Survey Results

What is your primary role at UM? (choose one)

Undergraduate student	36%
Graduate student	18%
Faculty	17%
Staff	28%

What is your current status in your primary role at UM?

Full time	90%	Part time	10%
-----------	-----	-----------	-----

How close to campus do you live during the academic year?

On campus	15%
Within a mile of campus	11%
1-2 miles from campus	10%
3-4 miles from campus	9%
5-9 miles from campus	16%
10+ miles from campus	39%

How do you usually travel to and from where you live to the UM campus?

Motorized vehicle (individual)	64%
Shuttle-UM	10%
Public transportation (with or w/out Shuttle-UM)	8%
Walk, skate, skateboard, etc.	7%
Bicycle	5%
Motorized vehicle (car/van pool)	4%
Electric vehicle, wheelchair, mobility scooter, other	1%
Motorized scooter	<1%

Further analysis

How do you usually travel to and from campus?

	Walk, skate , etc.	Bicycle	Shuttle- UM	Public transp.	Motor scooter	Motorized vehicle (indiv.)	Motorized vehicle (pool)	Electric vehicle	Wheelchr etc.	Other	Total
How close do you live to campus?											
Within a mile	101 (43%)	28 (11%)	61 (26%)	4 (1%)	7 (3%)	27 (11%)	6 (3%)	1 (<1%)	0	2 (0%)	227
1-2 miles	24 (11%)	29 (14%)	53 (23%)	4 (2%)	2 (1%)	97 (46%)	6 (3%)	0 (<1%)	0	0	208
3-4 miles	1 (<1%)	23 (11%)	24 (12%)	8 (4%)	1 (<1%)	127 (63%)	11 (5%)	0	1 (0%)	5 (0%)	199
5-9 miles	1 (<1%)	10 (3%)	31 (9%)	60 (18%)	1 (<1%)	215 (64%)	14 (4%)	1 (<1%)	0	5 (1%)	331
10+ miles	4 (<1%)	3 (<1%)	14 (2%)	71 (8%)	0	718 (84%)	27 (3%)	1 (<1%)	1 (0%)	16 (2%)	840
Total	131	93	183	147	11	1184	64	3	2	28	1805

How do you usually travel from place to place on campus? (respondents could choose more than one)

Walk, skate, skateboard, etc.	86%
Bicycle	5%
Shuttle-UM	6%
Motorized scooter	1%
Motorized private vehicle	9%
Electric vehicle, paratransit, wheelchair	<1 %

How frequently do you walk on campus for pleasure or exercise, rather than to get to a destination?

Never	36%
A few times a year	31%
A few times a month	17%
Once a week or more	12%
Daily	4%

What change would most improve the overall *pedestrian* experience on campus?

Improve pedestrian safety by reducing conflicts with wheeled vehicles	22%
It's fine the way it is	22%
Improve pedestrian safety when crossing roads/parking lots	13%
Decrease congestion on sidewalks and paths	11%
Improve overall security/safety	11%
Add more sidewalks/paths	8%
Don't have enough information to answer	6%
Improve condition of existing sidewalks/paths	5%
Add accessible paths for people with disabilities	2%

Other (please specify): Comments were categorized into the topic areas below.

Bicycle lanes	20
Bicycles, general	5
Bicycle/scooter/vehicle/pedestrian (unsafe/illegal) behavior	86
Congestion	2
Crosswalks	18
Disability access	2
General comments	17
Landscape/snow removal	13
Lighting	10
Parking	1
Pedestrian paths (location, etc.)	25
Route 1	6
Security	6
Shuttle-UM	4
Signage/maps	8
Vehicle ban (center of campus)	31
Vehicle behavior	9

How pedestrian-friendly is the campus in general?

Very	36%
Somewhat	54%
Not very	7%
Not at all	1%
Don't have enough information to answer	2%

How frequently do you bicycle on campus?

Never	82%
A few times a year	7%
A few times a month	3%
Once a week or more	3%
Daily	5%

What change would most improve the *bicycling* experience on campus?

Add more bicycle paths	51%
Reduce traffic congestion	14%
Add more bicycle parking	11%
Improve traffic safety	7%
Offer more bicycle sharing/rental options	6%
Improve general security/safety	4%
Don't have enough information to answer	4%
It's fine the way it is	3%

Other (please specify): The comments were categorized into broad topic areas below.

Bicycle lanes	15
Bicycle racks	1
Bicycle sharing	1
Challenges of sidewalks, stairs, grass	5
Congestion	3
Helmets	2
Parking	3
Pedestrian/bicyclist/vehicle (unsafe/illegal) behavior	4
Route 1	1
Safety/security	5
Showers	2
Shuttle-UM	1
Vehicle ban (center of campus)	5

How bicycle-friendly is the campus in general?

Very	6%
Somewhat	32%
Not very	20%
Not at all	5%
Don't have enough information to answer	37%

Do you ride Shuttle-UM more than once a week?

Yes 26% No 74%

What change would be most likely to encourage you to use Shuttle-UM more?

No change would encourage me to use Shuttle-UM 52%
 Change buses, routes and/or stops 30%
 Reduce traffic congestion on campus 10%
 Improve quality of Shuttle-UM service 7%
 Improve security/safety on buses and at stops 2%

Other (please specify): Comments were not analyzed for this report.

Do you ever drive a vehicle from place to place on campus?

Yes 45% No 55%

When traveling between destinations on campus, what proportion of the time do you drive a vehicle rather than walk?

Walk more often than drive 57%
 Drive more often than walk 16%
 Walk and drive about the same amount 10%
 Always walk 9%
 Always drive 5%
 Don't travel around campus 3%

When you drive on campus, what are the factors in your choice to drive rather than walk?

	<u>Not a Factor</u>	<u>Sometimes</u>	<u>Often/Always</u>
Destinations too far apart	12%	28%	60%
Carrying heavy/bulky items	13%	37%	50%
Driving is faster	36%	37%	27%
Driving is easier	46%	33%	21%
Walking is too strenuous	76%	18%	6%
Not able to walk	89%	7%	4%
In the habit of driving	77%	17%	6%
Sidewalks are too congested to walk	88%	9%	3%
Don't feel safe walking	70%	22%	8%
Weather is bad	15%	58%	28%

Other (please specify): Comments were not analyzed for this report.

What change would most improve the *driving* experience on campus (for vehicles and scooters)?

Improve traffic safety by reducing conflicts with pedestrians 44%
 Reduce traffic congestion 27%
 It's fine the way it is 11%
 Don't have enough information to answer 7%
 Improve traffic safety by reducing conflicts with other vehicles 6%
 Improve general security/safety 3%
 Add parking for people with disabilities 2%
 Improve condition of roads 2%

Other (please specify): The comments were categorized into broad topic areas below.

Access to campus (gates, etc.)	3
Bicycle/scooter/vehicle/pedestrian (unsafe/illegal) behavior	36
Bicycle lanes	1
Congestion	11
General	5
Lighting	1
Parking	44
Pedestrian paths	3
Roads	11
Scooters	13
Shuttle-UM/public transportation	4
Signage	6
UM vehicles	1
Vehicle ban (center of campus)	4

What change or improvement could help you reduce or eliminate your use of a private vehicle to travel to and from campus? (skip this question if it's not applicable or you have no suggestions)

These open-ended (text) responses were categorized into broad topic areas below. Most involved changes to Shuttle– UM and public transit.

Bicycles	20
Carpool	8
Child care	5
Driving	2
Finances	5
Flexible work	1
General	43
Housing	10
Metro	12
Parking	16
Public transit	28
Purple line	8
Safety	9
Shuttle-UM	120
Walking	7

If the cost of a parking permit increased, at what price point would you seriously consider alternatives to parking on campus?

If the cost increased even a little	20%
If the cost increased 25%	15%
If the cost increased 50%	11%
If the cost doubled	9%
Will pay for a permit at any cost	25%
N/A	20%

How vehicle-friendly is the campus in general?

Very	6%
Somewhat	46%
Not very	30%
Not at all	8%
Don't have enough Information to answer	10%

Many vehicles using campus roads are “cutting through” on their way to destinations other than UM. Please check the statement that most closely reflects your opinion about this.

Vehicles should not be able to “cut through” campus.	35%
Vehicles should be able to “cut through”, but at safer speeds and with more respect for pedestrians/cyclists.	25%
Vehicles should only be allowed to “cut through” at night and on weekends.	24%
All vehicles should be allowed to drive on campus roads.	16%

From a physical environment perspective, how pleasant and inviting does the campus feel to you?

Very	54%
Somewhat	42%
Not very	4%

The campus is now an Arboretum and Botanical Garden (ABG). How familiar are you with the ABG?

Don't know anything about it	71%
Have heard about it but don't know much about it	24%
Have participated in ABG-related activities	5%

If you were designing a UM postcard, what campus place or space would be pictured on it?

The 1,610 text responses were not categorized for this report. By far the most common words appearing in the responses are McKeldin (Library) and/or the Mall (presumably McKeldin Mall), the “M” and the Chapel.

Why would you choose that place or space for a postcard? (choose all that apply)

It is beautiful or well-designed	76%
It shows UM in a positive light	42%
It is important to campus life	37%
It is a popular place to be	32%
It is well-known to people outside UM	29%
Other reason	6%

If you were given the chance, what campus place or space would you replace with something else?

The 840 text responses were not categorized for this report. Respondents cited many different places and spaces they would remove, renovate or replace with something else.

Why would you like to see that place or space removed from the campus? (choose all that apply)

It's ugly or poorly designed	57%
Other reason	32%
It's old	28%
It's poorly maintained or dirty	27%
I feel uncomfortable there	14%
It holds unpleasant memories for me	4%
It's new	1%

If you could add one kind of outdoor space to the campus, what would you add?

Open green space	22%
Large gathering area with seating	19%
Small gathering area with seating	18%
It's fine the way it is	17%
Open plaza	10%
Covered parking for bicycles, motorcycles, scooters	9%
Bus shelter	5%

Other (please specify): The open-ended comments were not categorized for this report.

If you could add more of one feature to the campus landscape, what would you add?

Bicycle paths	19%
Seating	18%
Art	16%
Plants such as flowers and shrubs	15%
Trees	14%
Pedestrian paths	9%
It's fine the way it is	9%

Other (please specify): Open-ended comments were not categorized for this report.

When you are going to a new or unfamiliar location on campus, how easy is it to find your way there?

Easy, because streets and buildings are well marked and signs are clear	14%
Somewhat easy, but signs should be bigger/clearer	20%
Somewhat easy, but there should be more signs on streets and buildings	34%
Difficult because it's not clear what path to take	20%
Difficult because signs are hard to read	7%
I don't visit new locations on campus	4%

Additional comments: The comments entered at the end of the survey were categorized as follows.

Bicycles/bicycle sharing /bicycle lanes	23
Bicycle/scooter/vehicle/pedestrian (unsafe/illegal) behavior	46
Carpools	1
Congestion	7
Crosswalks	5
Cut through traffic	6
Issues for the disabled	4
Facilities Management	2
Funding	4
General	29
Buildings/interiors	6
Landscape	77
Lighting	8
Parking	43
Pedestrian paths	9
Public transportation	6
Purple Line	9
Roads	5
Route 1	4
Safety/security	6
Shuttle-UM	30
Signage	77*
Vehicle ban	18
Vehicles	7

*The survey ended with a question about signage; the “additional comments” field followed immediately after. This may have increased the number of comments related to signage.

Selected Quotations

“On paper, the campus is relatively pedestrian-friendly, and ought to be reasonably bike-friendly. In practice, skaters, skateboarders, bicyclist, and all motor-vehicle operators seem to be in a constant state of turf-warfare trying to utilize and cross each other's paths , and even more so during peak pedestrian periods. Every group is frustrated and angry at the perceived indifference or aggression of the others. “

“Please fix the scooters problem on campus. They don't obey traffic laws and often cut pedestrians and cars off and drive on sidewalks... Also, I never see any police officers on campus. There should be more officers that are visible throughout the day.”

“Private cars and their accommodation are the worst aspect of the campus. The campus should work for alternatives.”

“Pedestrians risk life and limb whenever walking on campus because of aggressive drivers, scooters, and unheeding bicyclists.”

“Allowing pedestrians to have the right of way anywhere on campus congests traffic and makes walking and driving both more dangerous. When pedestrians have the idea they can cross the street wherever they want they walk into roadways without checking for traffic, which increases the chance of them getting hit by a car or scooter. Pedestrians should be restricted to crossing streets only at designated areas with ropes and fences...”

“While I know it comes with challenges, I am in support of a traffic free campus. Encouraging people to walk, bike, and take Shuttle UM increases individual wellness, is better for the environment, and makes campus more safe.”

“This campus could do so much of a better job for cyclists. Bicycles are dangerous in practically every place they go in a way that other vehicles are not. On crowded sidewalks they require too much room from pedestrians, or are forced to come to a complete halt as the crowd ahead is impassable. Only savvy or stubborn riders take the roads, and are a common complaint of drivers. These factors discourage most to use this efficient, quick, and fun mode of transportation. By adding bike paths and signs and limiting traffic through campus, more people would bicycle.”

“This campus is terrible for bicyclists. People get angry at me if I ride on the sidewalk. People get angry at me if I ride on the road. Some drivers seem to be openly hostile to bicyclists (People screaming "Get off the road!" is more common than you might imagine). Others don't pay attention. Near accidents are a part of life as a bicyclist here. All of these problems combine to make bicycling a huge pain. I still think the benefits outweigh the downsides, but there is much work that can be done.”

“Perhaps the congestion (pedestrian and vehicle) around the center of campus (the hill going from the "M" to Cole Field house) could be alleviated by somehow creating roads/paths around the perimeter of campus so that access from one side of campus to the other would be improved. Also, perhaps the shuttles could be better utilized on campus to help pedestrians get from place to place during the day, and at night (for residents).”

“Parking permits are way too high and it is abominable that this is the 'mechanism' to discourage parking on campus.”

“Please don't making the parking spaces about a foot too narrow and about two feet too close to each other. I know it seems like you can pack in more cars that way, but you're just asking for people to damage other people's cars.”

“Put roads on outer ring of campus so people can drive to/around campus easily. Build parking garages on the outer ring. Once this is achieved there's no reason why most of campus cannot become bike/pedestrian only (with the exception of emergency vehicles).”

“The campus is not unattractive. The biggest problem is sprawl. Campus is so big, it's hard to get anywhere other than the exact building you need to be.”

“There is a good bit of effort put into the upkeep of the campus, and I appreciate it.”

“The campus is not very pretty. It is poorly laid out, and hard to navigate. If it was reorganized into "neighborhoods" people could more easily figure out where stuff is. Also, there is no truly beautiful place on the campus, unlike other comparably sized universities. The architecture is inconsistent and bland and indistinct, and new construction does not tie into old construction. .. ”

“The Purple Line will be the best thing to happen to campus in decades. It will link the campus with Metro directly. The administration needs to stop dragging its feet!”

“Campus roads should not be closed to people cutting through. We do not know the reasons why people are cutting through. They could be cutting through to enjoy the beauty of this campus. for 27 years, I have lived about 2 miles from campus. I am also an alum and a former Shuttle-UM driver. As a student, a shuttle driver and a regular commuter, I find this campus is very friendly. I think better signage needs to be posted for pedestrian crossing and lightening in the crossing areas needs to be improved.”

“The campus has achieved a nice balance of landscape, roads, buildings, and parking, let's not lose that.”

“Shuttle bus system is terrific and should be more widely used by UM persons.”

“UMD should establish an "intermodal" station that allows people to park bicycles, take shuttles, and hopefully in the future access the purpleline. There should also be a bicycle path that goes around the perimeter of the campus and links up with other trails off campus.”