

Baltimore City Dockless Vehicle Program

Annual Evaluation Report: Permit Year One



Appendix 2: 2020 Dockless Vehicle User Survey

Methodology & Full Results

Overview

The Baltimore City Department of Transportation (BCDOT) Dockless User Survey is part of the Dockless Vehicle Program evaluation. The user survey aimed to assess the demographics, use, and areas of improvement for the annual permit. It was open for responses from February 28 to March 28, 2020. The survey was released online (on the DOT website) and on social media, and it was also included as a clickable link in permit holder (JUMP, Lime, Spin) smartphone apps. For more information about the Dockless Vehicle Program, please visit:

<https://transportation.baltimorecity.gov/bike-baltimore/dockless-vehicles>

Survey Design

The survey was designed to answer specific questions about the Baltimore City Dockless Permit Program. Questions covered frequency of ridership, purpose, effect on use of other modes, preference, crash history, ideas for improvement, and demographics. Questions were based on similar surveys nationwide and on discussions at Dockless Vehicles Committee (DVC) meetings. For more information about the DVC, please visit:

<https://transportation.baltimorecity.gov/dockless-vehicle-committee>

Results

The following results are presented with the same instructions as the survey. For each question, the total number of responses to each provided answer is listed along with the percentage of total responses. For some questions, respondents could select multiple answers. For open-ended questions, the most common phrases or words were selected to be counted, and sample answers are listed. On the survey, respondents who responded “Never” to “How often do you ride a dockless bike or scooter” were advanced to demographic questions without the option to answer other questions, which were aimed at users of dockless vehicles.

Total Responses: 706

Dockless Vehicle User Responses: 571

How often do you ride a dockless bike or scooter?		
Answer	#	%
Every day	82	11.6%
A few times per week	156	22.1%
About once per week	56	7.9%
A few times per month	129	18.3%
About once per month	88	12.5%
At least once per year	60	8.5%
Never	135	19.1%
TOTAL	706	

Which dockless bike and scooter brand(s) have you used in the past 6 months? Select all that apply.		
Answer	#	%
Lime	503	88.7%
JUMP	289	51.0%
Spin	258	45.5%
Bolt	79	13.9%
TOTAL RESPONDENTS	567	

How do you decide which brand to ride? Select all that apply.		
Answer	#	%
Availability of dockless bikes and scooters near me	453	79.5%
Pricing	209	36.7%
Maintenance condition of the available dockless bikes and scooters at the time I am renting	164	28.8%
Quality of app	120	21.1%
I have a weekly subscription or alternative sign-up plan (such as a low-income plan)	19	3.3%
Other	52	9.1%
TOTAL RESPONDENTS	570	
Other Response Sample		
Common words/phrases/themes	#	
App	11	
Sample Answers		
<ul style="list-style-type: none"> - Already got the app - I just use whatever app I have downloaded - Whichever brand I have money in the app for at the time I need a scooter 		
Company Preference	16	
Sample answers:		
<ul style="list-style-type: none"> - They are safer and maintenance better than the other brands - They do the best going uphill - I trust Uber with my information - Only if the speeds were reduced, keep them off the sidewalks, and enforced age restriction 		

How else do you get around Baltimore? Select all that apply.		
Answer	#	%
Walking	532	93.2%
Taxi, Uber, Lyft, or informal taxi (hack)	509	89.1%
Riding as a passenger with a friend or family member in their car	453	79.3%
Driving in my own car	392	68.7%
MTA bus, Charm City Circulator, Light rail, Metro Subway, or other train	387	67.8%
Riding my own bike	256	44.8%
Water Taxi or other boat	179	31.3%
Driving in a rental car or Zipcar	136	23.8%
Using my personal scooter or other small vehicle (such as a moped or motorized skateboard)	85	14.9%
Other	5	0.9%
TOTAL RESPONDENTS	571	
Other Response Sample		
Common words/ phrases/ themes	#	
Shuttle/Bus	5	
Sample Answers		
<ul style="list-style-type: none"> - I take a free shuttle provided by my company to work everyday - I always take the bus 		

Do you have any of the following plans? Select all that apply.		
Answer	#	%
None of these	435	79.0%
Low income	68	12.3%
Cash payment	41	7.4%
Weekly subscription	26	4.7%
Non-smartphone/text to unlock	15	2.7%
TOTAL RESPONDENTS	551	

How has your use of other transportation changed as a direct result of dockless bikes or scooters?				
Total respondents: 560				
Answer	Use Less Often	No Change	Use More Often	Do Not Use
Taxi, Uber/Lyft, or informal taxi (hack)	51.1%	35.0%	5.5%	8.4%
Driving in my own car	36.9%	30.0%	4.9%	28.2%
Walking	32.8%	49.4%	13.6%	4.2%
Riding as a passenger with a friend or family member in their car	26.4%	53.0%	5.4%	15.3%
MTA bus, Charm City Circulator, Light rail, Metro Subway, or other train	20.8%	39.8%	7.2%	32.2%
Riding my own bike	16.6%	32.4%	4.3%	46.8%
Water Taxi or other boat	9.6%	25.6%	3.0%	61.9%
Using my personal scooter or other small vehicle (such as a moped or motorized skateboard)	7.3%	14.7%	3.2%	74.9%
Other – 4 Responses				
Other Response Sample				
Common words/phrases/themes	#			
Shuttle/Bus	2			
Sample Answers				
<ul style="list-style-type: none"> - I use public transportation and ride shares less. However, I walk and bike more. - It fills a gap not available with other forms of transport 				

Has your household car, bike, or scooter ownership changed as a direct result of dockless bikes or scooters?				
Total respondents: 553				
	Reduce Number Owned	No Change	Increased Number Owned	Have Not Owned This Vehicle
Car	9.6%	66.7%	1.5%	22.2%
Bike	3.5%	59.5%	4.2%	32.8%
Scooter	2.9%	41.0%	4.4%	51.7%

Rank the top 3 most common purposes of your dockless bike or scooter trips.			
Total respondents: 330			
Answer	Most common purpose	2nd most common	3rd most common
Entertainment/socializing	22.4%	14.5%	13.0%
Commute to/from work or school	37.9%	6.7%	3.9%
Shopping or errands	12.4%	13.9%	11.8%
For trips during my work day	13.6%	11.2%	12.1%
Connections to transit	5.2%	7.9%	8.8%
Recreation or exercise	7.3%	6.4%	6.7%
Other – 8 Responses			
Other Responses Sample			
Common words/phrases/themes			#
Connect/Bridge/To/From			5
Sample Answers			
<ul style="list-style-type: none"> - Connection to MARC at Camden Station - Bridge transportation where other public transportation is not available 			

Which transit routes, stations, or stops do you access by riding a dockless bike or scooter, if any?	
Responses to this question (free response): 125	
Common words/phrases/themes	#
Bus/Circulator/Purple	19
Light Rail/Station	17
Penn	14
Subway/Metro	9
Camden	6
MARC	6

Choose the top 3 reasons that you ride dockless bikes or scooters.		
Answer	#	%
It can be the fastest way to get where I need to go	248	73.6%
It's easy	163	48.4%
Avoid parking	155	46.0%
It's fun	139	41.3%
Save money on transportation	124	36.8%
It's environmentally friendly	80	23.7%
It's healthy	14	4.2%
Other	11	3.3%
TOTAL RESPONDENTS	331	
Other Responses Sample		
Common words/phrases/themes	#	
Park/Bike/Safe	3	
Sample Answers		
- It's flexible - I can go somewhere without worrying about where to park my bike or car		
Traffic/Cheaper	2	
Sample Answers		
- Avoid downtown traffic		
- It's the same as or cheaper than a taxi over the same distance		

Rank the top 3 issues that stop you from riding dockless bikes and scooters more frequently.			
Total respondents: 332			
Answer	Most Common	2nd Most Common	3rd Most Common
The lack of availability of vehicles near me	37.3%	17.5%	14.5%
Weather	20.2%	24.4%	14.2%
Availability of safe places to ride	10.2%	16.6%	15.7%
Traffic safety concerns	10.2%	15.1%	16.6%
Cost	6.6%	6.6%	11.7%
The lack of availability of non-scooter vehicles (bikes or adaptive vehicles)	6.9%	5.4%	7.8%
Bike or scooter vehicle safety concerns	4.8%	4.5%	7.5%
Other - 10 Responses			
Other Responses Sample			
Common words/phrases/themes	#		
Damage/Uncomfortable	4		
Sample Answers			
- Damage Scooter			
- They have no suspension and are just uncomfortable to ride in a city filled with potholes.			
Reduce Speed Areas	2		
Sample Answers			
- Poor apps, reduced speed zones			

Has the Baltimore City Dockless Vehicle Program improved over the last year?		
Answer	#	%
Yes	221	70.4%
No	93	29.6%
Total	314	100%

How could Baltimore City DOT improve the Dockless Vehicle Program?			
Total respondents: 308			
Answer	Best Option	2nd Best Option	3rd Best Option
Build more connected, safe, and comfortable bike lanes	39.0%	15.9%	11.0%
Improve maintenance and enforcement of existing bike lanes	9.4%	13.6%	17.5%
Allow companies to provide more dockless scooters	15.6%	8.1%	16.2%
Make existing bike lanes safer/more comfortable	6.8%	17.9%	14.3%
Change street design and/or increase enforcement to slow down cars	9.7%	13.0%	6.2%
Build designated parking for dockless bikes and scooters	5.5%	7.1%	7.1%
Require companies to provide more dockless bikes	5.8%	6.2%	6.2%
Create more PSAs and messaging directed to drivers about safety	1.0%	5.2%	3.9%
Require companies to provide more adaptive vehicles (vehicles for people with disabilities)	1.9%	2.3%	2.9%
Create more safety tips for riders	1.9%	1.3%	2.6%
Other – 9 Responses			
Other Responses Sample			
Common words/phrases/themes	#		
Repave/Fix Roads	2		
Sample Answers			
- Fix the roads and sidewalks			
Reduce Scooters/Safety	2		
Sample Answers			
- Reduce scooters and enforce safety rules on riders			
Increase Scooters	2		
Sample Answers			
- Make them available more in places bus lines run less or have long walks to the bus stop			

How could the Permit Holders (Lime, Jump, Spin) improve the Dockless Vehicle Program?			
Total respondents: 303			
Answer	Best Option	2nd Best Option	3rd Best Option
Provide more vehicles for rent	36.6%	11.9%	12.5%
Make vehicles available in more neighborhoods	10.9%	15.5%	26.1%
Better vehicle maintenance	20.1%	20.8%	8.9%
Reduce rental cost	13.9%	18.5%	8.9%
Improve vehicle design to make them safer	5.3%	5.9%	6.9%
Provide more dockless bikes, specifically	4.3%	4.3%	8.6%
Fix app issues	2.3%	3.6%	4.0%
Make rental easier without a credit card	1.3%	2.0%	3.0%
Provide new vehicles which fit my size or physical needs	1.0%	3.0%	2.0%
Make rental easier without a smartphone	0.7%	2.0%	1.7%
More responsive customer service	0.7%	1.0%	1.7%
Have more instructions in the app about learning to ride safely	1.0%	1.0%	0.7%
Have more safety events	0.0%	1.3%	0.7%
Other – 8 Responses			
Other Responses Sample			
Common words/phrases/themes	#		
Improve Infrastructure	2		
Sample Answers			
- Encourage city leaders to build more bike/scooter lanes			
- Ask city to improve safe places to ride			
Scooter Improvement	3		
Sample Answers			
- Make scooters with suspension that softens the bumpy Baltimore streets.			

Have you ever experienced a crash while riding a dockless bike or scooter?		
Answer	#	%
Yes, more than twice	13	4.2%
Yes, twice	15	4.8%
Yes, once	59	18.9%
No	225	72.1%
TOTAL	312	100%

How often do you have a close call where you almost crash?		
Answer	#	%
Every trip	4	1.3%
On more than half of my trips	11	3.5%
On less than half of my trips	29	9.3%
On less than 10% of my trips	160	51.5%
Never	107	34.4%
TOTAL	311	100%

The following questions are only asked to respondents who experienced a crash while riding a dockless bike or scooter.

In your most recent crash, what would you say was the main cause?		
Answer	#	%
Road or sidewalk quality	36	40.9%
My own error	18	20.5%
Dockless bike or scooter malfunction	15	17.1%
Someone else was at fault	10	11.4%
Visibility issue	3	3.4%
Other	6	6.8%
TOTAL	88	100%

In your most recent crash, who else was involved?		
Answer	#	%
No one	62	73.8%
Person in a car	9	10.7%
Person scooting	8	9.5%
Person walking	2	2.4%
Person biking	2	2.4%
Person in a wheelchair or similar device	1	1.2%
TOTAL	84	100%

To whom did you report your most recent crash? Select all that apply.		
Answer	#	%
I did not report the crash	64	74.4%
To the dockless bike and scooter company	15	17.4%
To an urgent care	7	8.1%
To the police	4	4.7%
To one of my own doctors	4	4.7%
To a hospital	3	3.5%
Other	2	2.3%
TOTAL RESPONDENTS	86	
Other Responses Sample		
Common words/phrases/themes	#	
Not Reported to Authority	2	
Sample Answers		
- My husband		
- It wasn't serious, no damage		

Did you have any injuries from your most recent crash? Select all that apply.		
Answer	#	%
It was a minor scratch or bruise	43	50.0%
No injuries	23	26.7%
Leg injured	13	15.1%
Arm or shoulder injured	12	14.0%
Head or neck injured	6	7.0%
Other	5	5.81%
TOTAL RESPONDENTS	86	
Other Responses Sample		
Common words/phrases/themes	#	
Hand/Wrist	4	
Sample Answers		
- Hand, wrist, shoulder, knee		
- Concussion and broken hand		
Stitches/Cut	4	
Sample Answers		
- Busted my chin and cheek open pretty good but didn't feel I needed stitches		
- Cut my thumb		

This ends the series of questions only asked to respondents who experienced a crash while riding a dockless bike or scooter.

Do you usually ride on the sidewalk or the street?		
Answer	#	%
Always Sidewalk	21	6.8%
Mostly sidewalk	78	25.3%
Mostly Street	179	58.1%
Always Street	30	9.7%
TOTAL	308	100%

How do you decide whether to ride on the sidewalk or on the road? Choose all that apply.		
Answer	#	%
If there is a bike lane, I ride in the road	231	75.5%
If traffic is moving fast, I ride on the sidewalk	169	55.2%
If there are a lot of people on the sidewalk, I ride on the road	154	50.3%
If there are a lot of cars on the road, I ride on the sidewalk	146	47.7%
If the road is too bumpy, I ride on the sidewalk	146	47.7%
If I am at the block of my destination, I ride on the sidewalk	119	38.9%
If the sidewalk is too bumpy, I ride on the road	111	36.3%
If I need to go the wrong way on a one-way street, I ride on the sidewalk	90	29.4%
None of these are true for me	13	4.3%
TOTAL RESPONDENTS	306	

To your knowledge, which of the following laws are true for dockless bikes and scooters in Baltimore City?		
Total respondents: 303		
	This is a law	This is not a law
Riders under 16 must wear a helmet	75.6%	24.4%
Riders should not ride on the sidewalk, except when on high speed roads (speed limit 30 mph or higher)	62.7%	37.3%
Dockless bikes and scooters should be parked in a way that leaves 4 feet of sidewalk clear for pedestrians	70.6%	29.4%
Dockless bikes and scooters may not be parked in parking spaces for cars	69.6%	30.4%
When riding a dockless bike or scooter, all traffic signs and signals should be obeyed	91.4%	8.6%
Dockless bikes and scooters may be ridden in bike lanes	83.2%	16.8%
<i>NOTE: All of these laws are true</i>		

Which of these describes you? Select all that apply.		
Answer	#	%
White	207	69.5
Black/African American	47	15.8
Asian	14	4.7
Hispanic or Latinx	11	3.7
Middle Eastern or North African	4	1.3
Native American/Alaska Native	3	1.0
Native Hawaiian/Pacific Islander	3	1.0
Prefer to self-describe	3	1.0
I prefer not to say	28	9.4
TOTAL RESPONDENTS	298	

Gender		
Answer	#	%
Man	192	64.4
Woman	79	26.5
Non-Binary/Genderqueer	9	3.0
I prefer not to say	18	6.0
TOTAL	298	100%

Age		
Answer	#	%
Under 16	3	1.0
17-24	37	12.4
25-39	174	58.4
40-55	59	19.8
55-65	13	4.4
Over 65	3	1.0
Prefer not to say	9	3.0
TOTAL	298	100%

Do you personally identify as having or living with a disability?		
Answer	#	%
No	267	89.6
Yes	18	6.0
Prefer not to say	13	4.4
TOTAL	298	100%

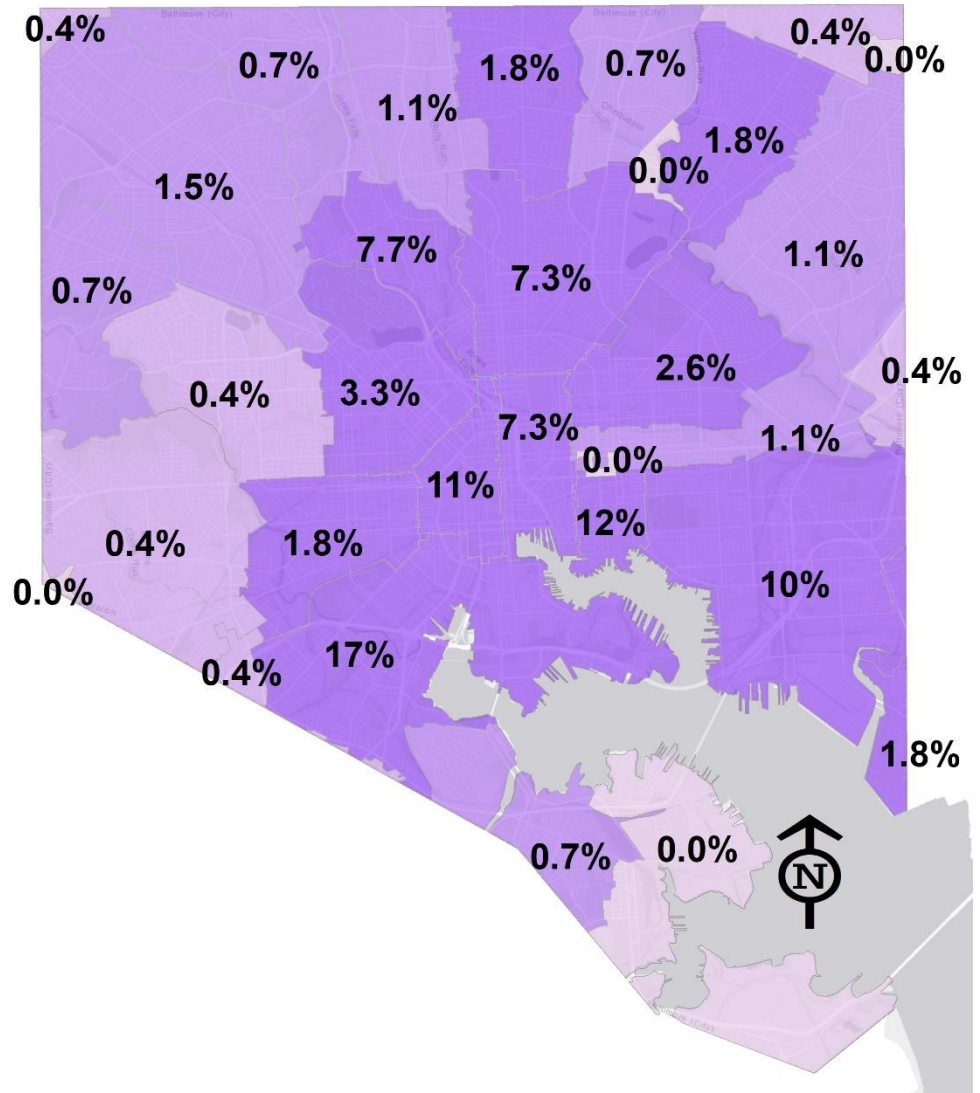
Do you have a smartphone with a data plan?		
Answer	#	%
Yes	288	96.6%
No	10	3.4%
TOTAL	298	100%

Do you have a debit or credit card?		
Answer	#	%
Yes	289	98.6%
No	4	1.4%
TOTAL	293	100%

Is there anything else you would like to tell us about your experience with dockless bikes or scooters in Baltimore City?	
Responses to this question (free response): 168	
Common words/phrases/themes	#
Good Program/Keep/Expand	31
Sample answers:	
<ul style="list-style-type: none"> - They are good. Please keep them - I love the dockless scooter program and appreciate how it has changed "last-mile" transportation for me. Continuing to expand access to all communities and investment in complete streets infrastructure will continue to improve quality of life for Baltimore residents - The dockless scooters have allowed me more mobility and getting around that I normally wouldn't 	
Parking/Inconsiderate Driving	8
Sample answers:	
<ul style="list-style-type: none"> - Would be a great service if people parked the scooters properly, wore helmets, and avoided speed near pedestrians - I do wish more people were considerate with their parking of the scooters and not riding them on the sidewalks - Make designated parking spots in car parking spots like Nashville has done 	
Brand/Preference	31
Sample answers:	
<ul style="list-style-type: none"> - Keep Lime in Baltimore!!! Great service being provided - I love Lime The city needs more bike/scooter lanes and other places to ride to work - Bolt has been useless with terrible customer service. Please find alternative companies to license to. 	
Bike Lane/Safe Place to Ride	14
Sample answers:	
<ul style="list-style-type: none"> - I like the scooters, but wish there were more safe, sectioned off bike lanes - Build more designated bike lanes - It is a good program and we should continue it. We need safer roads and more bike lanes - The city needs more bike/scooter lanes and other places to ride to work. Vehicle traffic in the roads is already bad, and the city should encourage and adapt its infrastructure to encourage people to ride to work instead of drive 	

Work/Commute	9
Sample answers:	
<ul style="list-style-type: none"> - The city needs more bike/scooter lanes and other places to ride to work - They have immensely improved my work commute in terms of cost, time, and ease 	
More Scooters/Availability	7
Sample Answer:	
<ul style="list-style-type: none"> - I can never find them in my neighborhood in a reasonable distance - I really enjoy the convenience of riding a scooter to the Marc train in the morning, however recently there has been a lack of charged available scooters. - Availability of scooters is virtually non existent in East Baltimore Midway. The closest is usually Greenmount West and I've tried to contact the companies and even purposely rising from Penn to my neighborhood and leaving multiple scooters in my block and by the next day their "chargers" pick them up and I've never seen one returned back to my block 	
Price/Fee	6
Sample Answer:	
<ul style="list-style-type: none"> - Get rid of the unlock fees charged and limit the companies allowed to dock - To many scooters be damaged & still will charge a unlocking fee, that needs 2 change - Monthly ride pass is ideal to provide a cheaper alternative for frequent scooter riders - Make them cheaper. Expand promos for folks who make a lower income. Clean the bike lanes. Add more options in the black butterfly 	
Helmets/Enforcement	5
Sample answers:	
<ul style="list-style-type: none"> - I'd love to see a low-cost helmet supply program - Scooter drivers don't obey traffic rules, don't wear helmets, speed by on the sidewalk, and often leave the scooter in the middle of the sidewalk - Helmet laws should be enforced scooters are not as safe as bikes because a small bump can dump you on the pavement 	

What zip code do you live in?		
Answer	#	%
21230	47	17.2%
21231	33	12.0%
21201	29	10.6%
21224	28	10.2%
21211	21	7.7%
21202	20	7.3%
21218	20	7.3%
21217	9	3.3%
21213	7	2.6%
21212	5	1.8%
21214	5	1.8%
21222	5	1.8%
21223	5	1.8%
21215	4	1.5%
21205	3	1.1%
21206	3	1.1%
21210	3	1.1%
21207	2	0.7%
21209	2	0.7%
21225	2	0.7%
21239	2	0.7%
21208	1	0.4%
21216	1	0.4%
21227	1	0.4%
21229	1	0.4%
21234	1	0.4%
21237	1	0.4%
Non-Baltimore City Zip Codes	13	4.7%
Total	274	100



Map 1: Home zip codes reported by respondents

Categorized Results

The following results analyze individual responses to multiple questions. Interesting findings are shaded in light green and noted below each table.

Have you ever experienced a crash while riding a dockless bike or scooter?	How often do you ride a dockless bike or scooter?					
	At least once per year	About once per month	A few times per month	About once per week	A few times per week	Every day
No	86%	80%	78%	74%	69%	50%
Yes, once	14%	16%	18%	19%	20%	24%
Yes, twice	0%	0%	1%	6%	5%	17%
Yes, more than twice	0%	4%	3%	0%	5%	10%
Total	100%	100%	100%	100%	100%	100%

Not surprisingly, the more frequently a user rides, the more likely they are to have been involved in a crash: 50% of daily riders have been involved in a crash.

How often do you have a close call where you almost crash?	How often do you ride a dockless bike or scooter?					
	At least once per year	About once per month	A few times per month	About once per week	A few times per week	Every day
Never	38%	31%	42%	33%	41%	27%
On less than 10% of my trips	44%	60%	52%	47%	34%	61%
On less than half of my trips	14%	3%	3%	13%	17%	10%
On more than half of my trips	3%	4%	3%	7%	3%	0%
Every trip	1%	1%	0%	0%	3%	2%
Total	100%	100%	100%	100%	100%	100%

There is not a clear relationship between frequency of ridership and frequency of close calls.

Has your household car ownership changed as a direct result of dockless bikes or scooters?	How often do you ride a dockless bike or scooter?					
	At least once per year	About once per month	A few times per month	About once per week	A few times per week	Every day
Reduced Number Owned	0%	6%	11%	12%	10%	17%
No Change	89%	79%	65%	69%	59%	53%
Increased Number Owned	0%	1%	1%	2%	1%	4%
I have not owned this type of vehicle	11%	14%	23%	17%	30%	26%
Total	100%	100%	100%	100%	100%	100%

In general, respondents who ride dockless vehicles more often are more likely to reduce the number of cars owned or not own a car in the first place. 40% of respondents who ride a few times per week and 43% who ride every day do not own cars or have reduced their car ownership. For comparison, 32% of all survey respondents do not own cars or have reduced the number that they own.

Has your household bike ownership changed as a direct result of dockless bikes or scooters?	How often do you ride a dockless bike or scooter?					
	At least once per year	About once per month	A few times per month	About once per week	A few times per week	Every day
Reduced Number Owned	0%	4%	3%	4%	3%	7%
No Change	76%	66%	58%	67%	56%	45%
Increased Number Owned	0%	6%	3%	2%	6%	5%
I have not owned this type of vehicle	24%	25%	36%	27%	35%	43%
Total	100%	100%	100%	100%	100%	100%

Generally, respondents who are more frequent scooter users are less likely to own bikes.

Has your household scooter ownership changed as a direct result of dockless bikes or scooters?	How often do you ride a dockless bike or scooter?					
	At least once per year	About once per month	A few times per month	About once per week	A few times per week	Every day
Reduced Number Owned	0%	4%	2%	4%	3%	7%
No Change	56%	51%	44%	35%	34%	33%
Increased Number Owned	2%	1%	2%	6%	5%	11%
I have not owned this type of vehicle	43%	45%	52%	56%	58%	50%
Total	100%	100%	100%	100%	100%	100%

A lower proportion of respondents own personal scooters, compared to other modes. Respondents who ride more frequently are more likely to purchase a scooter of their own.

Do you usually ride on the sidewalk or the street?	How often do you ride a dockless bike or scooter?					
	At least once per year	About once per month	A few times per month	About once per week	A few times per week	Every day
Always street	7%	9%	1%	17%	10%	22%
Mostly street	48%	56%	74%	43%	55%	59%
<i>Total mostly or always street</i>	55%	64%	76%	60%	65%	80%
Mostly sidewalk	31%	29%	21%	37%	30%	5%
Always sidewalk	14%	7%	3%	3%	5%	15%
<i>Total mostly or always sidewalk</i>	45%	36%	24%	40%	35%	20%
Total	100%	100%	100%	100%	100%	100%

Respondents who are daily riders are most likely to ride in the street, and those who ride less than once per month are most likely to ride on the sidewalk; a trend is not clear for those who ride with a frequency between those two extremes.

Which dockless bike and scooter brand(s) have you used in the past 6 months?	How do you decide which brand to ride?					
	Availability of dockless bikes and scooters near me	Pricing	Maintenance condition	Quality of app	Specific features (such as wheel size or handlebar height)	I have a weekly subscription/ alternative sign-up plan
Bolt	7%	8%	9%	8%	9%	8%
Jump	26%	27%	28%	25%	26%	25%
Lime	43%	41%	40%	48%	40%	47%
Spin	24%	24%	23%	20%	26%	19%
Total	100%	100%	100%	100%	100%	100%

The use of dockless vehicles of different brands varied minimally across respondents with different preferences and priorities.

How often do you ride a dockless bike or scooter?	Gender	
	Man	Woman
At least once per year	8%	13%
About once per month	9%	28%
A few times per month	25%	19%
About once per week	11%	10%
A few times per week	31%	24%
Every day	15%	6%
Total	100%	100%

Men reported being more frequent riders; they are more likely than women to ride every day or a few times per week.

How could Baltimore City DOT improve the Dockless Vehicle Program?*	Has the Baltimore City Dockless Vehicle Program improved over the last year?		
	Yes	No	Total
Create more PSAs and messaging directed to drivers about safety	83.9%	16.1%	100%
Build more connected, safe, and comfortable bike lanes	74.9%	25.1%	100%
Allow companies to provide more dockless scooters	72.4%	27.6%	100%
Create more safety tips for riders	72.2%	27.8%	100%
Build designated parking for dockless bikes and scooters	72.1%	27.9%	100%
Require companies to provide more dockless bikes	71.4%	28.6%	100%
Make existing bike lanes safer/more comfortable	70.8%	29.2%	100%
Change street design and/or increase enforcement to slow down cars	69.7%	30.3%	100%
Improve maintenance and enforcement of existing bike lanes	68.8%	31.2%	100%
Require companies to provide more adaptive vehicles	59.1%	40.9%	100%
<p>Respondents with a range of different priorities had similar approval rates of the program's improvements over the past year. Outlier responses were, "Create more PSAs and messaging directed to drivers about safety," (83.9% of respondents who chose this as one of their top 3 priorities approve) and, "Require companies to provide more adaptive vehicles" (59.1% of respondents who chose this as one of their top 3 priorities approve).</p> <p><i>*Respondents could select up to 3 ranked choices. All three choices from each respondent are weighted equally in this analysis.</i></p>			

How could the Permit Holders improve the Dockless Vehicle Program?*	Has the Baltimore City Dockless Vehicle Program improved over the last year?		
	Yes	No	Total
Provide more dockless bikes, specifically	75.0%	25.0%	100%
Make vehicles available in more neighborhoods	74.8%	25.2%	100%
Better vehicle maintenance	74.8%	25.2%	100%
Provide more vehicles for rent	73.0%	27.0%	100%
Reduce rental cost	72.8%	27.2%	100%
Improve vehicle design to make them safer	72.7%	27.3%	100%
Make rental easier without a credit card	69.2%	30.8%	100%
Make rental easier without a smartphone	69.2%	30.8%	100%
Have more instructions in the app about learning to ride safely	62.5%	37.5%	100%
Provide new vehicles which fit my size or physical needs	61.1%	38.9%	100%
More responsive customer service	60.0%	40.0%	100%
Have more safety events	50.0%	50.0%	100%
Fix app issues	46.7%	53.3%	100%
<p>Among riders who selected "more safety events" and "fix app issues" as priorities, 50% or less responded that the Program has improved over the past year. Choices corresponding to less than 70% approval rates relate to equity, safety, and customer service.</p> <p><i>*Respondents could select up to 3 ranked choices. All three choices from each respondent are weighted equally in this analysis.</i></p>			

How could Baltimore City DOT improve the Dockless Vehicle Program?*	Has low-income, text to unlock, or cash payment plan	
	No	Yes
Build more connected, safe, and comfortable bike lanes	25.2%	12.8%
Improve maintenance and enforcement of existing bike lanes	14.4%	17.4%
Make existing bike lanes safer/more comfortable	14.3%	12.8%
Allow companies to provide more dockless scooters	14.2%	17.4%
Change street design and/or increase enforcement to slow down cars	11.2%	4.7%
Build designated parking for dockless bikes and scooters	7.0%	9.3%
Require companies to provide more dockless bikes	6.3%	9.3%
Create more PSAs and messaging directed to drivers about safety	3.5%	4.7%
Require companies to provide more adaptive vehicles (vehicles for people with disabilities)	2.0%	8.1%
Create more safety tips for riders	2.0%	3.5%
Total	100%	100%
<p>Priorities for DOT improvements to the program are similar between those with and without alternative equity sign-up plans. Substantially higher proportions of those without equity plans list building new bike lanes and slowing down cars as priorities. A substantially higher proportion of those with equity plans list adaptive vehicle as a priority.</p> <p><i>*Respondents could select up to 3 ranked choices. All three choices from each respondent are weighted equally in this analysis.</i></p>		

How could the Permit Holders improve the Dockless Vehicle Program?*	Has low-income, text to unlock, or cash payment plan	
	No	Yes
Provide more vehicles for rent	22.9%	17.9%
Make vehicles available in more neighborhoods	19.3%	19.0%
Better vehicle maintenance	18.8%	14.3%
Reduce rental cost	15.4%	13.1%
Improve vehicle design to make them safer	6.6%	7.1%
Provide more dockless bikes, specifically	6.3%	6.0%
Fix app issues	3.1%	8.3%
Provide new vehicles which fit my size or physical needs	1.9%	4.8%
Make rental easier without a smartphone	1.5%	2.4%
Make rental easier without a credit card	1.5%	2.4%
More responsive customer service	1.2%	1.2%
Have more instructions in the app about learning to ride safely	0.8%	2.4%
Have more safety events	0.7%	1.2%
Total	100%	100%
<p>Priorities for Permit Holder improvements to the program are also similar between those with and without alternative equity sign-up plans. A higher proportion of those without equity plans want more vehicles for rent than those with equity plans, though both groups list the availability of vehicles “in more neighborhoods” at roughly equal rates. Lowering rental cost is selected by a smaller proportion of those with equity plans than those without, suggesting that these plans are of acceptable cost to those enrolled. Finally, only 2.4% of respondents with equity plans want rental to be easier/without a smartphone or credit card, suggesting that text to unlock and cash payment plans are easy to use.</p> <p><i>*Respondents could select up to 3 ranked choices. All three choices from each respondent are weighted equally in this analysis.</i></p>		

Have you ever experienced a crash while riding a dockless bike or scooter?	Do you usually ride on the sidewalk or the street?			
	Always street	Mostly street	Mostly sidewalk	Always sidewalk
No	73%	73%	76%	48%
Yes, once	13%	22%	17%	14%
Yes, twice	7%	3%	5%	14%
Yes, more than twice	7%	2%	3%	24%
Total	100%	100%	100%	100%

Respondents who always ride on the sidewalk have a substantially higher rate of crashes.

Have you ever experienced a crash while riding a dockless bike or scooter?	Do you usually ride on the sidewalk or the street?			
	Always street	Mostly street	Mostly sidewalk	Always sidewalk
Never	43%	31%	37%	38%
On less than 10% of my trips	50%	54%	50%	29%
On less than half of my trips	3%	9%	9%	19%
On more than half of my trips	3%	4%	4%	0%
Every trip	0%	1%	0%	10%
Total	100%	100%	100%	100%

Respondents who always ride on the sidewalk have a substantially higher rate of close calls.

How often do you ride?	How old are you?*				
	17 to 24	25 to 39	40 to 54	55 to 64	65 and older
Every day	13.5%	14.9%	11.9%	0.0%	0.0%
A few times per week	35.1%	31.6%	25.4%	30.8%	33.3%
About once per week	13.5%	8.6%	13.6%	7.7%	0.0%
A few times per month	18.9%	23.6%	22.0%	23.1%	33.3%
About once per month	13.5%	11.5%	20.3%	30.8%	0.0%
At least once per year	5.4%	9.8%	6.8%	7.7%	33.3%
Total	100%	100%	100%	100%	100%

Young age groups are more likely to be frequent riders of dockless vehicles.

**Age groups with fewer than 10 responses were excluded.*

	Race/Ethnicity*				
How often do you ride scooters?	White	Asian	Black/African American	Hispanic/Latinx	I prefer not to say
Every day	10.6%	14.3%	21.3%	27.3%	25.0%
A few times per week	29.5%	35.8%	34.0%	27.3%	28.5%
About once per week	10.6%	21.4%	8.5%	18.2%	0.0%
A few times per month	22.7%	14.3%	19.2%	18.2%	17.9%
About once per month	15.5%	7.1%	10.6%	9.1%	25.0%
At least once per year	11.1%	7.1%	6.4%	0.0%	3.6%
Total	100%	100%	100%	100%	100%

People who identify as Asian, Black/African American, or Hispanic/Latinx report being more frequent riders (riding a few times per week or more) than those who identify as white.

**Race/Ethnicities with fewer than 10 responses were excluded.*

How often do you ride scooters?	To your knowledge, which of the following laws are true for dockless bikes and scooters in Baltimore City?					
	Correct Response Rates					
	Riders under 16 must wear a helmet	Riders should not ride on the sidewalk, except when on high speed roads (speed limit 30 mph or higher)	Dockless bikes and scooters should be parked in a way that leaves 4 feet of sidewalk clear for pedestrians	Dockless bikes and scooters may not be parked in parking spaces for cars	When riding a dockless bike or scooter, all traffic signs and signals should be obeyed	Dockless bikes and scooters may be ridden in bike lanes
Every day	72.5%	57.5%	57.5%	52.5%	80.0%	75.0%
A few times per week	74.7%	60.4%	69.2%	71.4%	90.1%	83.5%
About once per week	70.0%	63.3%	76.7%	73.3%	90.0%	80.0%
A few times per month	76.8%	65.2%	73.9%	71.0%	97.1%	85.5%
About once per month	86.7%	60.0%	71.1%	66.7%	95.6%	84.4%
At least once per year	67.9%	75.0%	78.6%	85.7%	92.9%	89.3%

There is no clear pattern or relationship between frequency of riding and knowledge of local laws.