


# City of Alexandria, Virginia

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## MEMORANDUM

**DATE:** JULY 23, 2019

**TO:** THE HONORABLE MAYOR AND MEMBERS OF CITY COUNCIL

**THROUGH:** MARK B. JINKS, CITY MANAGER 

**FROM:** HILLARY ORR, DEPUTY DIRECTOR, TRANSPORTATION & ENVIRONMENTAL SERVICES (T&ES)

**SUBJECT:** DOCKLESS MOBILITY PILOT PROGRAM UPDATE

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The purpose of this memo is to update City Council on the current status and trends for the Dockless Mobility Pilot Program.

City Council approved the Dockless Mobility Pilot program in November 2018. The program officially started in January of 2019 with the permitting and launch of the first dockless operator, Lime. Permits have been issued on a rolling basis with most operators obtaining permits and launching in April 2019. Per the MOU and approved pilot program, all permits expire on September 30<sup>th</sup> unless administratively extended by the Director of T&ES while staff evaluates the pilot and develops a recommendation for a path forward.

In upcoming months, staff will be collecting additional data, requesting more community input, researching programs in other cities, and coordinating with regional counterparts in order to compile a Dockless Mobility Pilot Program Report and provide a recommendation to City Council for future management of shared mobility devices (SMDs) in the City.

### **By the Numbers**

As outlined in the MOU, operators are required to submit monthly data reports detailing operations and usage data. The operator reported data presented is through the end of May 2019. The City is also compiling data and information during the pilot to use for an evaluation of the program. A summary of this data is presented below and provided with more detail in Attachment 1.

- **Registered Users: 18,050** across all active apps
- **Trips: 101,515** trips starting or ending in Alexandria
- **Miles Traveled: 91,644** miles
- **Average Trip Duration: 10 - 15 minutes**
- **Average Distance Traveled: ½ to 1 mile**
- **Average Devices Deployed: 50-180 devices** per company (max. 200), per day for a **total of 650-700 devices** per day (half of the total maximum devices allowed by permit)

- **Crashes:** 2 crashes reported (no police reports were filed & no injuries reported)
- **Injuries:** 7 reported **minor injuries** (all involved only the rider)
- **Reported Issues:** 97 parking issues and 324 “other” reported to operators, nearly 800 comments or issues reported to staff
- **Usage:** 65% of trips occurred in **Old Town** (Usage map - Attachment 2)
- **Towing:** 42 reported cases of devices left for 7+ days (all in January & February)
- **Impounding:** T&ES staff impounded 31 devices
- **Citations:** APD has issued 6 citations for riding on the sidewalk and reckless driving
- **Stops:** APD stopped 138 users to warn and educate on behaviors

### **Education and Engagement**

Staff has proactively engaged stakeholder groups throughout the pilot to gather input on SMDs and the program. Among others, staff met with the Alexandria Commission on Persons with Disabilities in April, Alexandria Transportation Commission, Alexandria Families for Safe Streets in April, and the Federation of Civic Association leaders in May. Since the beginning of the pilot staff educated the community and gathered feedback by coordinating outreach events, attending meetings and hosting events. Education and outreach were conducted during Alexandria’s Earth Day, the Metrorail Platform Improvement Project Open House and through public information displays on variable messaging boards and police presence in key high use areas. At some in-person events, staff arranged for SMD operators to be present to speak with residents and attendees to show the devices, educate on how to safely use them and give away free helmets. Staff put variable message boards (VMBs) along King Street in Old Town to educate riders on safety and to discourage sidewalk riding and has provided safety messaging through social media.

### **Community Input**

Through Call.Click.Connect tickets (212), vendor reports (421), letters to the program email address (500+) and meetings with residents and stakeholders, staff has received a great deal of input about this pilot program; across departments, the City continues to hear from residents with both positive and negative viewpoints on the pilot. Aside from issues with improperly parked devices, the most prevalent themes from the input received are below:

- Safety for pedestrians, persons with disabilities, elderly, people driving cars, etc.
- Emphasis on Old Town loss of character and visual clutter
- Questions regarding laws and legislation
- General support for or dislike of the program

For more detailed information on community input, see Attachment 3.

### **Mid-Pilot Adjustments & Actions**

#### ***Safety: Enforcement and Education***

- Variable Message Boards have been used on King Street and near the Waterfront to educate users
- Social media posts have gone out about safety and proper usage of the SMDs
- Safety messaging in apps has continued to be pushed to users showing proper parking, encouraging helmet usage, and safe use tips for riding in the road.

- Quick guides for visitors and tourists are being developed
- APD has targeted enforcement and education efforts on weekends in high use areas, stopping users to educate them on SMD proper use and adherence with the laws.
- Staff is performing site visits and random safety checks on devices from each operator to test them for speeds, functional equipment, required messaging, etc.

#### *Legislative Change (Attachment 4)*

- Effective July 1, 2019 - motorized skateboards or scooters:
  - Are limited to operating at a speed no more than 20 miles per hour
  - Must not be parked in a manner that impedes normal movement of pedestrian or other traffic
  - Must weigh less than 100 lbs
  - Should ride to the right as is safely practicable
  - Must give hand signals and have lights
  - Provides localities with the power to regulate the use of SMDs for hire.
- Effective January 1, 2020
  - *Unless otherwise prohibited through local ordinance*, motorized skateboards and scooters are allowed under state law, effective on January 1, 2020, to operate on the sidewalk and in crosswalks.

#### *Parking Management*

- Corrals that will not impact vehicle parking will be installed this month
- Staff is working with the vendors to geofence no parking or no ride zones
- T&ES crews have been straightening errantly parked SMDs, reporting and impounding them.
  - 230 have been straightened, 3 have been reported, and 31 have been impounded

#### *MOU updates*

- Staff is working on revisions to the MOUs to reflect suggestions or requests made to companies as requirements. The MOUs and the pilot, which both expire in early fall, would be given a short-term extension so there is no gap between expiration of the MOUs and the pilot, and the adoption of regulating ordinance by Council.

#### **Next Steps**

Beginning this month and continuing throughout the summer, staff will conduct outreach to obtain feedback on the pilot program through various methods. An online survey form will help get input from the SMD rider community, targeted group interviews will be used to gather feedback from specific groups and intercept surveys will provide staff with a better understanding of how and why people are using these devices. Staff will also continue to work with operators on public education efforts such as pop-up events, flyers, listening sessions and other opportunities to provide safety messaging to the community. Additionally, staff will provide updates and get feedback from the numerous boards and commissions and the business community later this summer.

The community input, together with the data collected from the vendors, City data and research from other jurisdictions, will be used to evaluate the program and develop a recommendation for a path forward. The evaluation report and draft recommendations will be published this fall and open for additional community feedback. Both will be presented at a public hearing before the Transportation Commission before providing final recommendations to City Council in

November for consideration and adoption. One option staff is considering would be a Phase II Pilot that would start in January (with an ordinance) and then re-evaluated after an established time period.

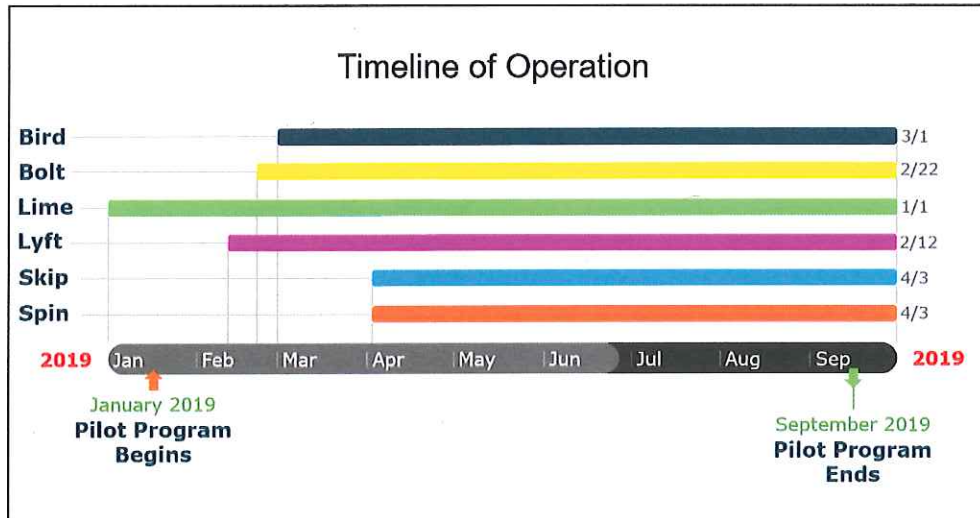
cc: Emily A. Baker, Deputy City Manager  
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Attachment 1 – Detailed Data and Findings Report  
Attachment 2 – Usage Maps  
Attachment 3 – Community Input  
Attachment 4 – Summary of New Legislation  
Attachment 5 – Staff Activities

## Attachment 1: Detailed Data and Findings Report

### PROGRAM STATUS AND OVERVIEW

Currently seven operators are permitted in Alexandria and six (6) operators are active in the City: Lime, Lyft, Bird, Bolt, Skip, and Spin. Jump is the seventh company that has been permitted but has not officially launched in the City. Below is a graphic showing when each operator was permitted in the City.



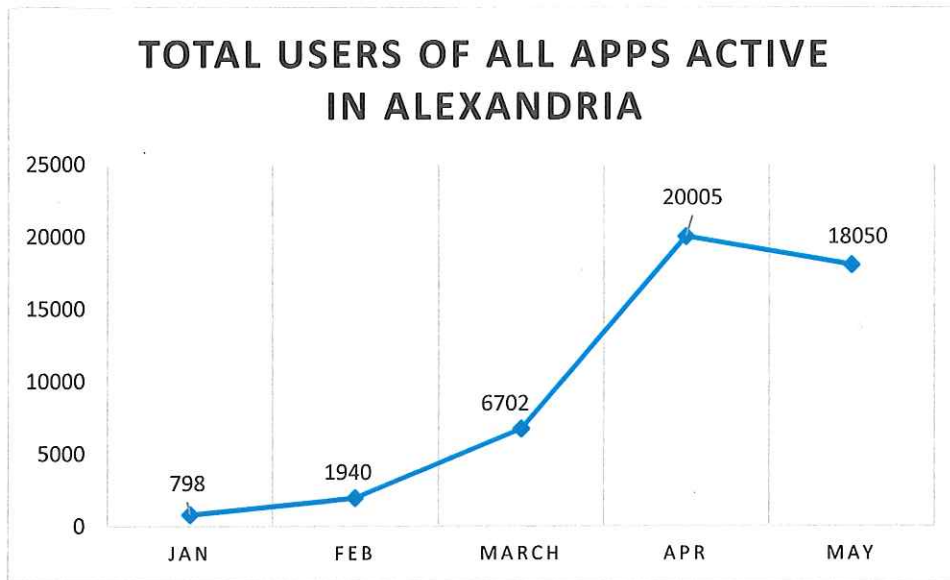
Since last fall, most providers have ceased providing dockless bicycles, and provide almost exclusively electric scooters (e-scooters). Each operator is allowed 200 devices in the City, meaning that 1400 vehicles are allowed on City ROW at any one time.

### DATA AND ANALYSIS FROM OPERATORS

Similar in character to bikeshare, usage of these dockless devices is highly dependent on weather, deployment areas, and the number of devices available. The cumulative results of these data points are listed below from January through May (June data will be available July 15).

#### Total active customers

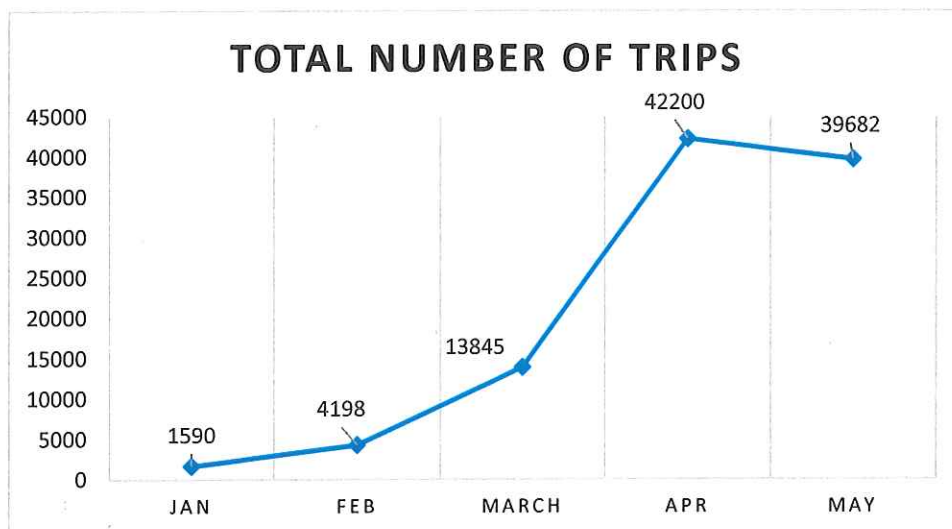
Between all 6 active apps, there is an estimated average of 3000 users per operator app are active in Alexandria. However, an address is not required upon signup for most apps and license scanners do not pick up or store address information, making it difficult to calculate exactly how many users reside in Alexandria because the data cannot distinguish them from other regional users or from users visiting from other areas of the country.



Staff estimate that the drop in users corresponds to the motor coach season starting and ending, with out of town visitors using the SMDs in the City, then deleting the app when they leave or after a few weeks.

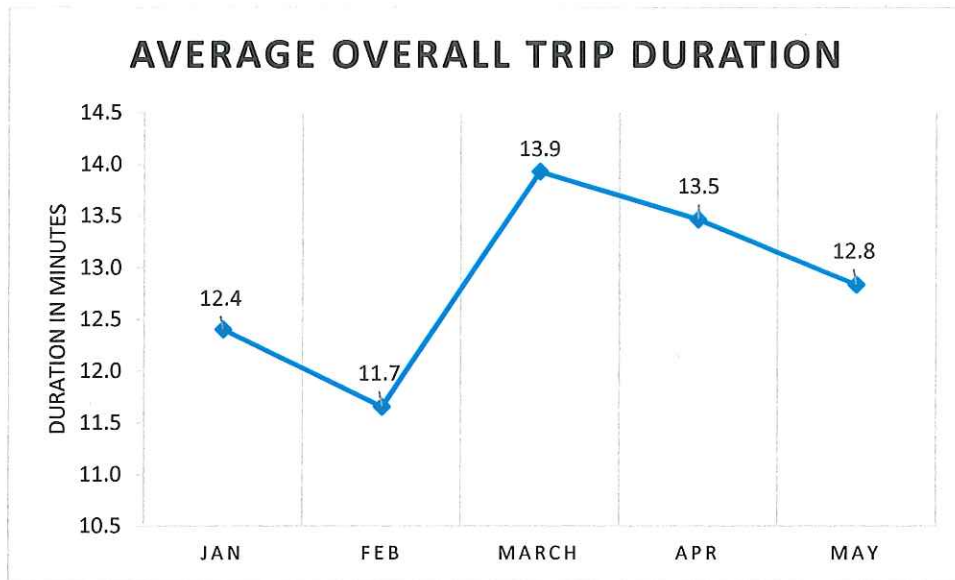
#### **Trips starting and trips ending in the City during the month**

There have been 101,515 trips starting or ending in Alexandria in the last 5 months, since the first operator launched. 80% of those trips (~81,000) have occurred in April and May. Given the nature of the devices, ridership is often weather-dependent. Fewer trips in May compared to April can most likely be attributed to rain events. Often these rain events fell around commuting time.



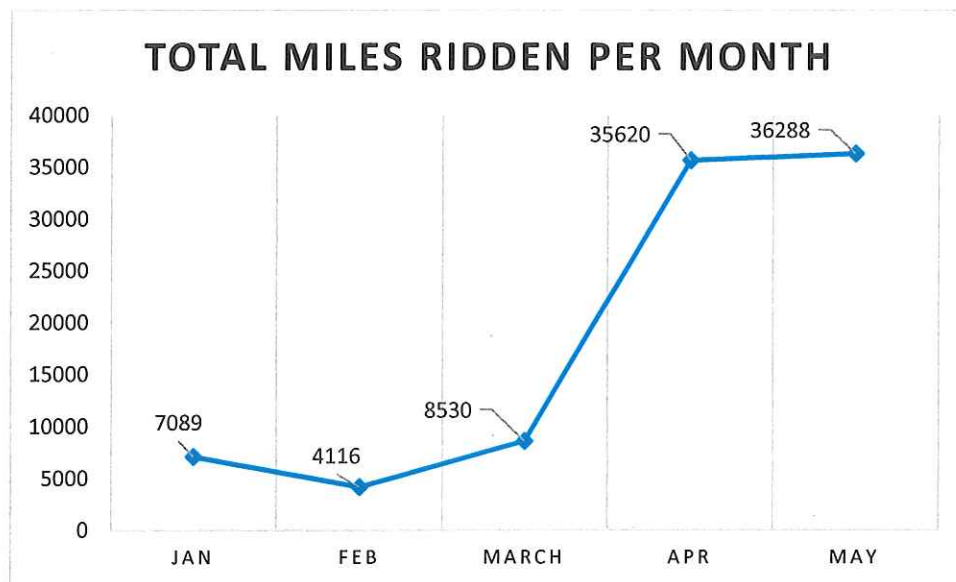
#### **Average trip duration in minutes**

The average trip duration varies and is highly dependent on weather but is generally between 10 and 15 minutes.

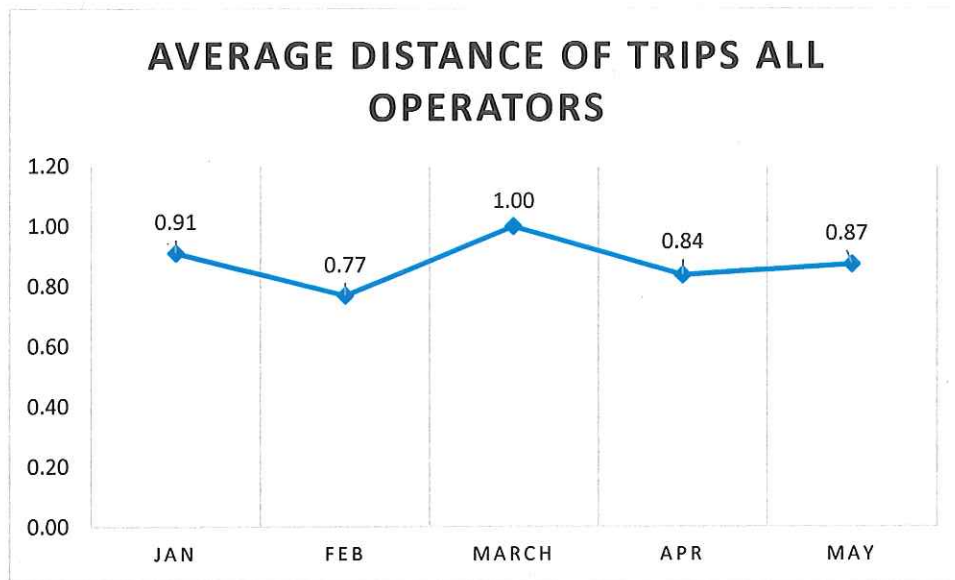


#### Average and total distance of trips

Average trip distances generally vary between .5 and 1 mile, but this often depends on weather. In March, the average trip distance was one (1) mile. In May, the average distance was 0.87 miles. Total mileage ridden per month is steadily increasing as more operators launch in the City and the weather warms. Nearly half of all miles ridden have occurred in May.

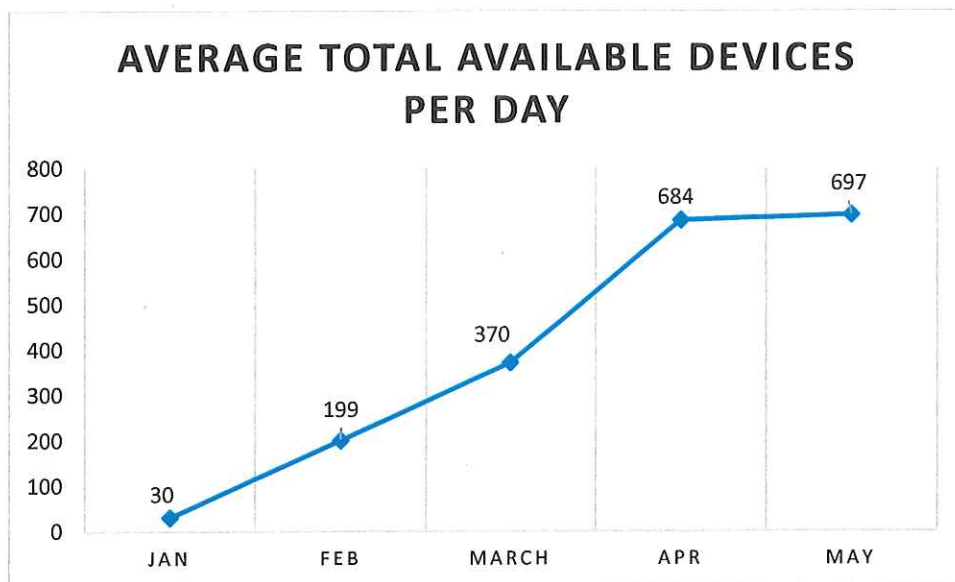






#### Daily SMDs in service in the City

As previously mentioned, operators are allowed to have up to two-hundred (200) devices in Alexandria at one time (the maximum total allowed devices is 1400 between all 7 permitted operators). Most companies choose to operate between 50-180 devices on any given day. The chart below shows the change in average daily total for devices (scooters) in service in Alexandria. The trend line has stayed steady with no new companies launching or permitted since April.



#### Known Crashes and Injuries

##### *Crash Details:*

Operators have reported two crashes in Alexandria since the beginning of the pilot, in both cases, the involved parties did not file a police report. The first was reported in April, with a rider reporting that they were hit by a car, resulting in minor scrapes. The second occurred in May and



involved the rider and property damage near N West and Princess Streets. Previously an operator had reported another crash in Alexandria, but upon further investigation, the operator found it occurred in Arlington.

*SMD-related Injuries:*

There have been 6 operator-reported minor injuries on the devices between January and May 2019. All involved only the rider and an issue with either the SMD, user error, or an environmental issue like a pothole. No police reports were filed in these cases.

It is acknowledged that known crashes and injuries are likely less than the actual total due to non-reporting.

**SMDs Towed after 7 days**

There have been 42 total reported cases of devices being left in the same place for over 7 days. Most occurred in January and February most likely due to operators being new to the City and due to the cold weather and consequent low ridership. As operators have learned where to most effectively deploy SMDs, towing instances have disappeared (zero reported towings since March).

## Attachment 2: Usage Data and Maps

The Figure 1 and 2 below show an aggregated view of the availability of SMDs around the City. As expected, areas with high densities of commercial activities and mixed-use amenities tend to see more SMD availability and usage. These areas also have trails, dedicated or shared bicycle facilities, and direct routes to regional transit.

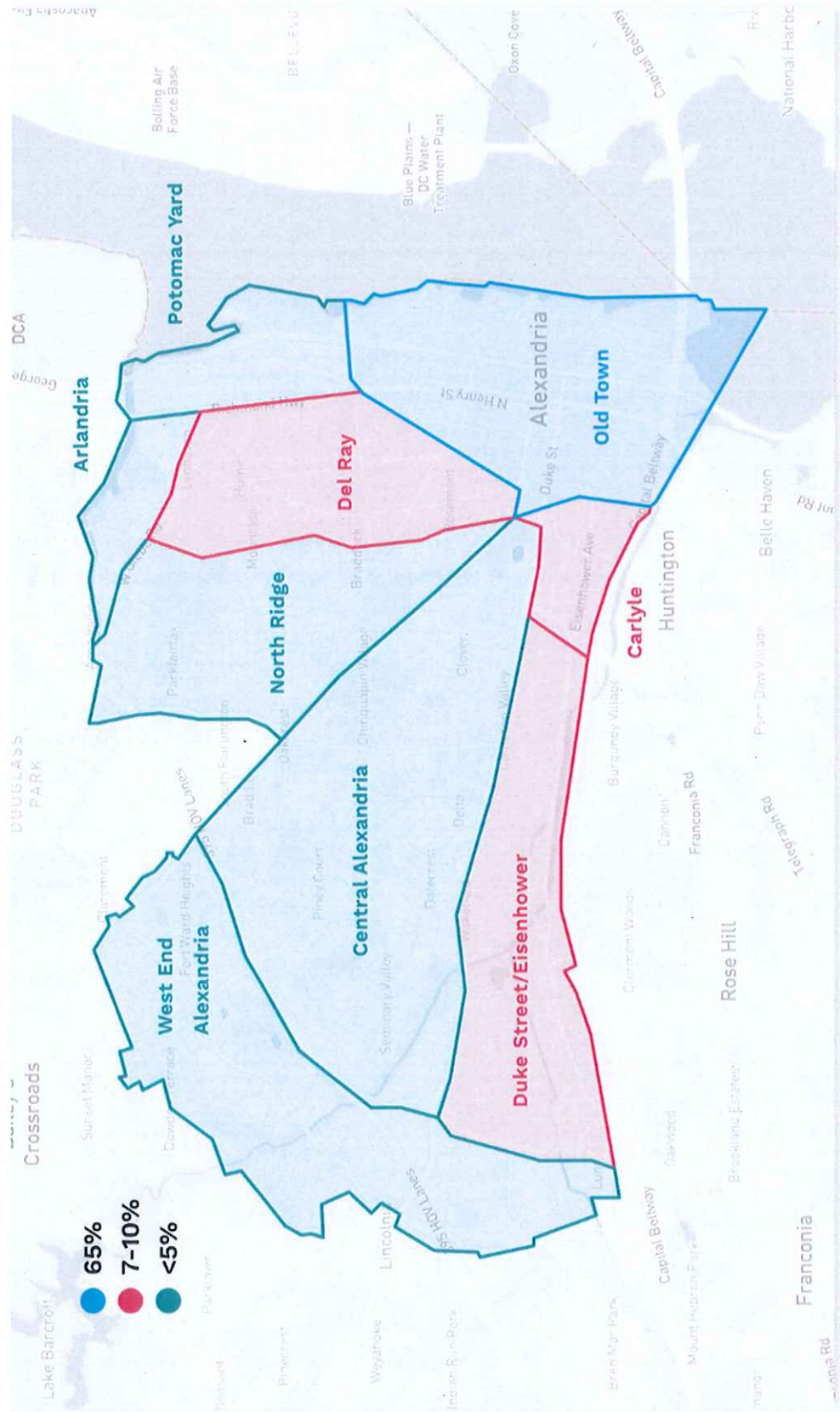


Figure 1 Areas of Alexandria and SMD availability

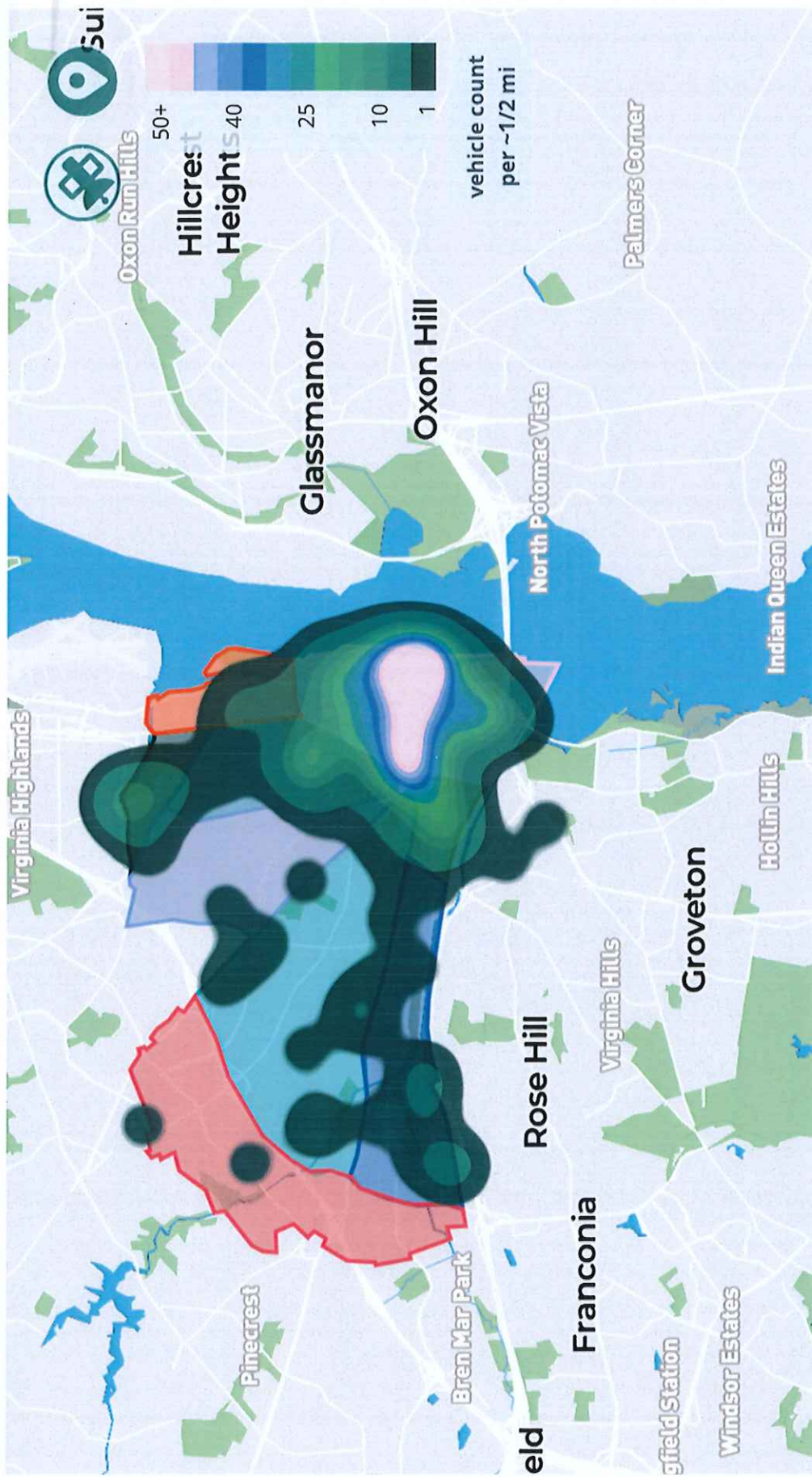
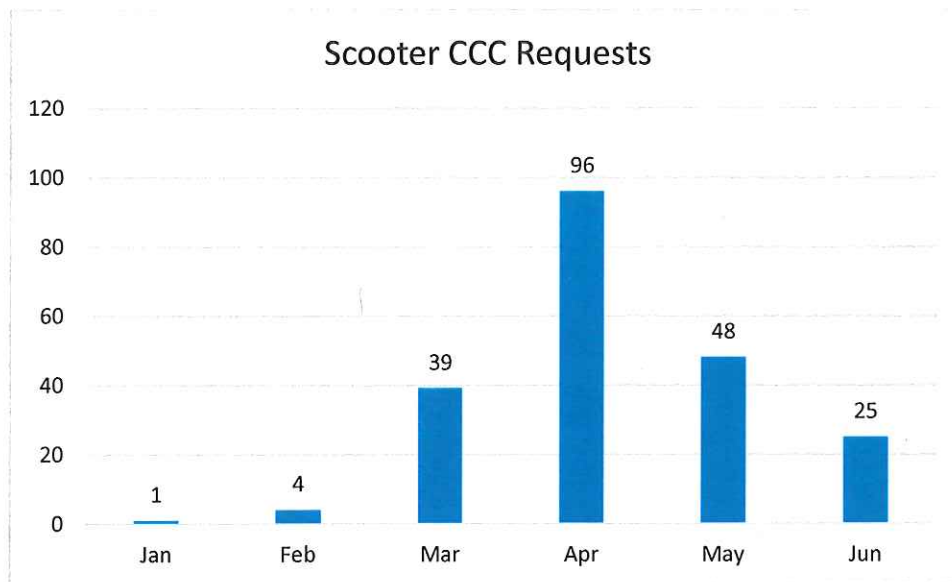


Figure 2 A heat map of SMD availability



### Attachment 3: Community Input

Public feedback from emails, Call Click Connects (“CCC’s”), and phone calls vary widely. Staff received 213 requests from January 25, 2019 – June 24, 2019; many residents submitted multiple requests.



Below are the general themes of comments received through all these sources:

- **Support** – We are hearing from people that support the program and use the devices.
  - *General Support* – People love the option of mobility to get to and from the metro and their destinations around town
  - *Mobility Enhancement* – People are happy to see them readily available nearby to grab one and go for their short trips around town and for recreational use
  - Tourists also use them to get around town and for recreational use rather than moving their cars and taking up parking spaces
  - Support for scooters as an alternate mode, reducing congestion, fun, great for visitors
- **Complaints**
  - *General Opposition* – We are hearing from many people that oppose the program and have complaints, concerns, and questions regarding scooters and the scooter program.
  - *Misunderstanding of Proper Parking* – Scooters can be parked appropriately in the public right of way by their agreement and permit. This means they can be parked on sidewalks, but may not block entrances, ramps, walkways, or other street furniture. Article II, Section 5 of the MOU outlines these appropriate parking places.
  - *Number of Scooters* – Scooters are so widespread, and numbers are increasing with weather. Some people see them as litter or a nuisance, some even put them in trash cans or threaten to throw them in the river.

- *City Responsiveness* – Due to staff capacity and overwhelming response and comments, T&ES is working on responding where possible and as appropriate to complaints and questions. As such, staff asks that residents report issues regarding scooters to the operators and comments regarding support or opposition to the program via our Dockless Mobility email address - [dockless.mobility@alexandriava.gov](mailto:dockless.mobility@alexandriava.gov). Staff is working to better manage the program and gaining additional assistance on its operation.
- *User issues*
  - Parking – leaving SMDs in walkways, ramps, and on private property, leaning against houses, and on public property in front of residences and businesses. Requests to remove misappropriate parking or “abandoned” scooters, and parking on or near private property.<sup>1</sup> APD has gotten 6 improper parking complaints. Operators report nearly 100 improper parking complaints over the last six months. Operators are responsible for proper parking of the devices per the MOU signed with the City. Issues with SMD parking is directed at the operators to address, but the City is taking action as well through the use of existing T&ES field teams.
  - Underage usage – many younger users have been witnessed in the City with or without parental or guardians present. Scooter rules in each operator’s terms of service or rental agreements state users must be 18 or older, often with a valid driver’s license. However, Virginia law currently states anyone 14 or younger, when accompanied by an adult 18 years or older, may use the scooters. ([VA Code 46.2-908.1](#)).
  - Following signs and signals – users have been observed running stop signs and signals.
  - Sidewalk riding and yielding to pedestrians – users have been reported operating on sidewalks and not yielding to pedestrians, leading to concerns for pedestrian safety.
  - Perceived safety issues – Not wearing a helmet (not required by VA laws for anyone over 14), taking up the lane in the street (allowed by VA laws)
- *Operator Issues*
  - Responsiveness to Residents- most are responding in time, but their times need to improve, and they need to respond to every parking complaint within the two hours. As it stands, most vendors are quick to respond to parking issues, but some take longer or have not provided data on their response times.
    - T&ES is looking at ways to address response times in the MOU and through enforcement actions with companies that are taking longer than the 2-hour window.

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<sup>1</sup> Scooters simply left somewhere by a user is not considered to be abandoned, it is simply the function of the dockless format that it is waiting for another user or possibly the same one, to pick it up and take it to its next destination. A scooter would only be considered as abandoned if SMD or scooter had been left in the same location for more than seven consecutive days and the battery has depleted all of its charge where no other user could activate it for a ride.

- Incorrectly/Impractical Staging – staging or improperly parking scooters in inappropriate locations like narrow sidewalks or close to ramps. Some fall over with inclement weather or vandalism

- **Concerns**

- Liability when someone trips or is hurt on a scooter.
  - Answer – Operators are required to have liability insurance. The city is indemnified under the MOU Article V.
- Concern that someone might be seriously injured as a rider or as a pedestrian being hit due to improper use or when mixing with traffic in the roadway or on sidewalks.
- Enforcement of the rules by the City and by operators
  - Residents do not see enforcement of the rules taking place by the operators or by the City (both T&ES and APD) to fine users or move the devices.
- Residents are unclear about where the scooters can be used and parked
  - The purpose of the MOU is to ensure that SMDs are used and parked appropriately without impeding pedestrian access, and/or obstructing access to fire hydrants and valves, street furniture, bus stops, driveways, crosswalks, intersections, traffic operations, outside dining or retail, building access, or any other public use of right-of-way in City of Alexandria;
  - Concern about their operation in Market Square and in Parks or on the Waterfront
    - Market Square -- Section 6-1-4 lists the types of vehicles that may be prohibited. Ultimately, if the City considers banning scooters, City Council would need to adopt an ordinance adding scooters to this list. In the interim, under 6-1-4 (b), the City Manager can promulgate rules regarding use of Market Square. So long as the rule change was advertised around the Square with signage, the City Manager could likely make a rule regarding scooter use.
    - Parks – 6-1-8 lists activities that may be prohibited in City parks where advertised on an official sign. There are several vehicles listed here, but not scooters. This section does not include a general grant of power to the City Manager to make rules, which would require an ordinance.



#### **Attachment 4: Summary of New State Legislation - EFFECTIVE JULY 1, 2019**

The full text of this is can be found here ([Chapter 780](#)).

**§ 46.2-800/904.** Every person riding a bicycle, electric personal assistive mobility device, electric power-assisted bicycle, moped, motorized skateboard or scooter on a highway has all the rights and duties applicable to the driver of a vehicle, unless indicated otherwise; On a sidewalk, shared-use path or crosswalk, has all the rights and duties of a pedestrian unless indicated otherwise.

**§ 46.2-849.** Signals to be given with hand and arm or by some mechanical/electrical device approved by the Superintendent of the Department of State Police, to the left side of the vehicle indicating left turn, pull to the left, right turn, pull to the right, slowing, and stopping.

1. For posted speeds >35 MPH, signal continuously for at least 100 ft; <35 MPH at least 50 ft, before slowing, stopping, turning; If both hands needed for control, constant signaling not necessary.
2. Right turn/pull to the right/slow down - right hand and arm acceptable.

**§ 46.2-903/904.** Summary – motorized scooters and skateboards (as well as e-bikes and e-delivery devices) are allowed on sidewalks unless otherwise prohibited by an ordinance. The following restrictions apply:

1. Yield the right of way to pedestrians and give audible signal when passing
2. No parking in a manner that impedes pedestrian or other traffic or where parking is prohibited
3. A violation of above provisions is punishable by a civil penalty of not more than \$50.

The provision of Section 46.2-903, which explicitly permits motorized scooters and skateboards to operate on the sidewalk and in crosswalks, unless otherwise prohibited by local ordinance, goes into effect until January 1, 2020.

**§ 46.2-905.** Devices operated on a roadway riding slower than the normal speed of traffic shall ride as close as safely practicable to the right curb or edge of the roadway, *except*:

1. When overtaking/passing another vehicle proceeding in the same direction;
2. When preparing for a left turn at an intersection or into a private road or driveway;
3. When reasonably necessary to avoid things such as fixed or moving objects, surface hazards, or substandard width lanes that would make it unsafe to ride on the right;
4. When avoiding riding in a lane that must turn or diverge to the right;
5. On a one-way road or highway, may also ride as near the left-hand curb or edge as safely practicable.

Mobility devices on a highway shall:

1. Not ride more than two abreast
2. When riding two abreast:
  - a. Not impede the normal movement of traffic. Move into a single file formation as quickly as possible when being passed by a faster vehicle, and



c. on a laned roadway, ride in a single lane

Department of Conservation and Recreation permits operation of electric assistive mobility devices on any bicycle path or trail designated by the Department for such use, regardless of any provision of law to the contrary.

**§ 46.2-908.1. ALWAYS prohibited:**

1. driving an e-assist mobility device or bicycle faster than 25 MPH
2. operating a motorized skateboard or scooter faster than 20 MPH
3. operating an electric personal delivery device faster than 10 MPH
4. use of mobility device from persons less than 14 years old without supervision of someone at least 18 years old

An e-assist mobility device (i.e., Segway) may operate on any highway with a max speed limit of 25 MPH or less, but only if no available sidewalk, or if sidewalk riding is prohibited by ordinance.

Devices prohibited on Interstate Highway System w/o Commonwealth Transportation Board authorization.

**§ 46.2-1015.** Lights and reflectors required on front and rear, respectively; types to be approved by the Superintendent of the Department of State Police

**§ 46.2-1315** gives power to localities to regulate the use of SMDs for hire, including the power to license the operators. Regulations must be consistent with the provisions of Title 46.2 of the state code. In the absence of local regulation, SMDs may be offered for hire without restriction starting on January 1, 2020.

**§ 46.2-1315** shall not be construed to impact any existing regulations, ordinances, or pilot projects currently being implemented.

## Attachment 5: Staff Activities

After the April oral update to Council, staff have made and initiated some of the adjustments to the program:

### Program Management:

- Timely Data Reporting – Obtaining timely data from operators is tedious from all operators. They must be reminded repeatedly each month to get the data and staff time is needed to enforce the MOU provisions and send reminders to operators if data points are missing. Staff is investigating easier ways to obtain these reports.
- Cap Violations – A minority of the operators have exceeded the cap allowed in the MOU. Some operators may have misinterpreted the MOU, i.e. 200 active scooters vs. 200 total devices (which the MOU clearly states), whether active or inactive. This was more of an issue in the Spring, but with regular reminders and enforcement, has become less of a problem after April.
- MOU Updates- Staff is evaluating necessary changes to the MOU. These will be implemented when permits expire at the end of September as a condition of continuing service in the City. These changes staff are investigating include the following:
  - Requiring the MDS feed to be linked to City contracted app platforms
  - Requiring drivers' licenses to operate SMDs or hold an account
  - Requiring safety messaging to be pushed to users more frequently
  - Requiring more detailed reporting of issue response so we can tell how long it is taking companies to address issues.
  - Require the use of geofenced areas in all apps per City direction

### Safety: Enforcement and Education

- Variable message boards were used on King Street and near the Waterfront to educate users and will be deployed again this summer. They were out on the street for about one week to reach SMD users and can be seen below:



- Social media posts had been used in the beginning of the pilot to message about safety and proper usage of the SMDs
  - Staff started with education and it became clear early on in the pilot that information people were most looking for on social was how to get scooters moved. Once residents became familiar with the process for removal of scooters, we transitioned to monitoring for any major issues related to scooters.
- Safety messaging in apps have continued to be pushed to users showing proper parking, encouraging helmet usage, and safe use tips for riding in the road. Examples are shown below from Bird:



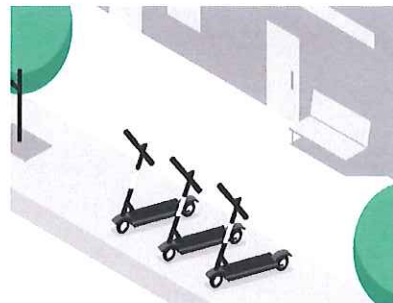
#### Where to ride

- **Care for pedestrians.** No riding on sidewalks unless local law requires or permits — it endangers members of our community who want to walk freely. We're all in this together, so let's be good neighbors and look out for one another.
- Ride in bike lanes or close to the right curb unless local or state law requires or permits.

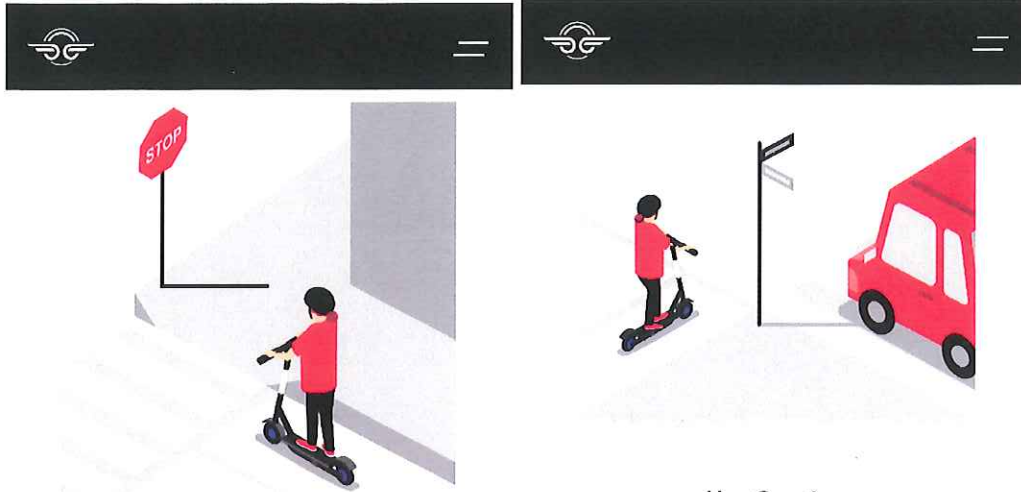


#### Where to Park

- Park Birds out of the public right of way — keeping walkways, driveways, access ramps, and fire hydrants clear.
- Park Birds close to the curb, facing the street near designated bike or scooter parking areas, trees, or street signs.
- Make sure your kickstand is securely in the down position so that the Bird stays upright.
- Avoid uneven surfaces like grass, gravel, rocks, or inclines.







### Rules of the Road

- You must be 18+ years old to Bird.
- Only one rider per vehicle.
- Follow all traffic rules including street signs and stop signs.
- Use caution at crosswalks

### Use Caution

Be aware of surrounding traffic, especially at intersections.

- Always be aware of surrounding traffic, especially at intersections – cars are your biggest risk.
- Start off slowly while you get used to the accelerator and brakes.
- No one-handed rides. Put down the phone

- Quick guides for visitors and tourists have been drafted and will be deployed in the coming weeks on the SMDs.
- More educational content has been developed and will be distributed in the coming weeks

### Police Response

- 138 scooter users stopped (stop sign violations, riding on sidewalks, underage operators)
- 32 calls for service for disorderly conduct/aggressive driving with a scooter involved
- 6 parking complaints
- 1 van stopping in the roadway retrieving scooters (Potomac Avenue)
- 6 citations (failure to yield to pedestrians on a sidewalk and reckless driving)<sup>1</sup>

### Parking Management

- Corrals that will not impact vehicle parking are being identified and are undergoing implementation
  - 10 locations in high use areas, like King Street in Old Town, are being identified and will be implemented in the coming weeks
- Staff have identified no parking zones with geofencing and will be sending this to operators to implement

<sup>1</sup> Virginia Uniform Summons (VUS) data is difficult to confirm as confirming this number requires review of each VUS by hand.

- Market Square, Waterfront Park, and the Marina are all places that prohibit other use of bicycles and skateboards; therefore, these have been geofenced to avoid staging, trip starts, and trip ends in these areas.
- T&ES crews have been straightening SMDs, reporting them, and impounding if the timetables set in the MOU are not met
  - 230 have been straightened, 3 have been reported, and 31 have been impounded

### **Vandalism**

Instances of vandalism have been seen and documented by City Staff as with other places that have conducted scooter pilots. These acts are considered vandalism and may be subject to akin to keying a privately-owned car and are discouraged. These include:

- Putting devices in trash
- Pushing them into the roadway
- Kicking or pushing the staged devices so that they fall and block sidewalks or ramps
- Throwing them in water