



Date: September 28, 2022

To: Thomas B. Modica, City Manager 

From: Eric Lopez, Director of Public Works 

For: Mayor and Members of the City Council

Subject: **E-Scooter Program Update**

From July 2018 to April 2020, City of Long Beach (City) staff initiated an electric scooter (e-scooter) pilot program (Pilot) to provide additional mobility options for people living and working in, and visiting Long Beach. The Pilot included the development of an e-scooter program guidebook, outlining requirements for vendors seeking to operate in the City, and launching a Customer Service Center where residents could seek information or express concerns about e-scooters in Long Beach. City staff utilized information and lessons learned from the Pilot to develop a more permanent permit program.

The Shared Micro-Mobility Program (Program) launched in August 2020, with three permits issued to vendors Lime, Razor, and Bird. Each vendor was allowed a maximum of 500 e-scooters for the first six months of operations, with the ability to increase to 1,000 e-scooters each after City staff review and approval. The fourth and final permit was issued to VeoRide in February 2020. On September 7, 2021, the City Council requested an update on e-scooter operations. This memorandum includes information on the Program's status, operations, concerns, and permit violations.

**E-Scooter Program Updates**

*Micro-Mobility Permits*

The Program allows for issuing up to four permits to e-scooter vendors. The current vendors have permits to operate a total of 3,500 e-scooter vehicles citywide through August 7, 2022 (See Table 1 below).

**Table 1: Maximum Vehicles Permitted**

<b>E-scooter Vendor</b>	<b>Maximum Vehicles Permitted August 2020-August 2021</b>	<b>Maximum Vehicles Permitted September 2021-August 2022</b>
Bird	500	1,000
Lime	500	1,000
Razor	500	500*
VeoRide	500	1,000
<b>Total</b>	<b>2,000</b>	<b>3,500</b>

\*Razor opted out of a e-scooter vehicle increase.

### *Operations*

Under the Program, vendors are responsible for their devices' maintenance and operations, including ensuring each device's operational safety before deployment. Operations vary between the vendors. Lime, Razor, and VeoRide use a traditional operations model by leasing local warehouse space and hiring a division manager, fleet manager, and field technicians to manage the day-to-day operations and maintenance. Bird uses a franchise-style model, allowing local entrepreneurs to invest in the company and become fleet managers under the company name. Bird fleet managers oversee a set number of devices approved by the company, and there are currently multiple fleet managers operating on behalf of Bird in Long Beach. Under the Bird franchise model, City staff communicate only with Bird's corporate headquarters and do not engage directly with fleet managers.

E-scooter users can ride the devices in most areas within Long Beach boundaries. Prohibited areas, including Long Beach Airport, college campuses (California State University Long Beach and Long Beach City College), and portions of the beach path, are geofenced, altering a device's operational ability based on the Global Positioning System (GPS). Vendors must upload each geofence in their user application (App), and riders receive alerts through the App when they have entered a geofenced area.

To ensure geographic distribution, the City is divided into three operational zones, and vendors must deploy a minimum of 20 percent of their fleet in each operational zone (Attachment A). Vendors deploy e-scooters to approximately 500 total drop zone locations. Drop zones are located on sidewalks near trip generators, such as Long Beach Transit bus stops, Metro A Line stations, parks and open space, school campuses, shopping and dining destinations, and bikeways citywide. Each drop zone location is approved by City staff, then marked on the sidewalk by each vendor. Prior to City approval, each drop zone location is visited and inspected by City staff to ensure locations comply with the following requirements:

- Must allow for a minimum four-foot pedestrian clearance on the sidewalk
- Must be placed three feet away from light standards and in-ground utilities
- Must provide sufficient distance from on-street parking spaces
- Must be placed a minimum of 10 feet away from Long Beach Transit bus stops

### *Permit Fees*

Each vendor participating in the Program is required to pay an annual micro-mobility permit fee of \$25,000 to the City. In addition to the permit fee, the City collects an annual \$100 per device fee from each vendor. The total per device amount is based on the maximum number of e-scooters a vendor is authorized to deploy citywide.

**Table 2: Year 1 (August 2020 - July 2021) Permit and Device Revenue Paid to City**

<b>Vendor</b>	<b>Quarter 1 (Aug - Oct)</b>	<b>Quarter 2 (Nov - Jan)</b>	<b>Quarter 3 (Feb - Apr)</b>	<b>Quarter 4 (May - July)</b>	<b>Annual Total</b>
Bird	\$25,000 + \$12,500	\$12,500	\$12,500	\$12,500 + \$12,500	\$87,500
VeoRide	N/A	N/A	\$25,000 + \$12,500	\$12,500 + \$12,500	\$62,500
Lime	\$25,000 + \$12,500	\$12,500	\$12,500	\$12,500 + \$12,500	\$87,500
Razor	\$25,000 + \$12,500	\$12,500	\$12,500	\$12,500	\$75,000
<b>Total Revenue</b>	<b>\$112,500</b>	<b>\$37,500</b>	<b>\$75,000</b>	<b>\$87,500</b>	<b>\$312,500</b>

*Vendor Compliance*

The City’s micro-mobility regulations are the framework for managing a safe and efficient Program. Vendors agree to adhere to the Program regulations and associated violation penalties upon applying for a permit. City staff conduct regular field audits and use mobility manager software Populus to track device deployments and compliance. Additionally, City staff send parking complaints and violations received by residents to vendors. Vendors typically resolve these issues within two hours of notification, which is a requirement per the City’s regulations; however, City staff can impound e-scooters that are not removed and rebalanced. The type of violations that have been documented for each vendor since August 2020 are noted in Table 3 below.

**Table 3: Vendor Compliance Summary**

<b>Violation Type</b>	<b>VeoRide</b>	<b>Razor</b>	<b>Bird</b>	<b>Lime</b>
Maximum Vehicle Cap Violation				
Unauthorized Drop Zone Deployment	X		X	
Geofence Violations	X	X	X	X
Vendor Temporary Suspension				
System Area Violation (user App)		X		
Vehicle Impounds		X	X	X

*Reporting Issues*

In October 2021 the Go Long Beach app launched an option to report e-scooter issues, creating a more direct line between the City and the Long Beach community and improving the City’s ability to enforce Program rules. There have been 2,464 issues reported through the Go Long

Beach app between its launch in October 2021 through May 2022. As users learn about this option, the number of reported issues has continued to increase daily.

The Go Long Beach App is available for download on the City's [website](#). It can be used to report the following e-scooter violations and notify the appropriate vendors and City staff:

- E-scooters blocking roadways
- E-scooters blocking sidewalks
- Damaged e-scooters
- Idle/abandoned e-scooters
- Other e-scooter violations

The public can also contact City staff directly by emailing [E-ScooterShare@longbeach.gov](mailto:E-ScooterShare@longbeach.gov) to report e-scooter violations or ask questions.

### *Public Right-of-Way Issues*

E-scooters parked in the public right-of-way for extended periods remain an issue in waterfront and tourist areas, neighborhoods, and business corridors. City staff are taking the following measures to address the issues:

- Staff recently included a section within the Shared Micro-Mobility Regulations on suspensions for operators exceeding the maximum allowable violations per month.
- Staff worked to include the option for reporting e-scooter Parking Violations to the Go Long Beach app.
- The City has a contract with a third-party vendor, Sweep, an e-scooter sidewalk management company. Their scope includes violation reporting via the Go Long Beach app, e-scooter rebalancing to deployment zones, standing up tipped over e-scooters, tracking vendor violations, and maintaining right-of-way access. By supporting the City in keeping e-scooters orderly citywide, Sweep staff can immediately address any safety or ADA compliance issues and monitor e-scooter vendors to address potential violations.

In addition to the recent enhancements, City staff have been working with operators to implement virtual parking corrals that will require riders to end their trip at designated locations displayed in each Vendor app. A 30-day test pilot for virtual parking began in mid-March 2022. Lessons learned from the test pilot were used for implementation of incentivized virtual parking citywide on June 1, 2022. On July 11, 2022, staff implemented forced virtual parking citywide. Virtual parking combined with the previously described enhancements should effectively address many of the current e-scooters parking issues and violations, increasing Vendor compliance and accountability.

*Trip Data Analysis*

The following tables summarize e-scooter ridership trends and distribution across Long Beach from January to December 2021. Table 4 summarizes ridership by vendor within the 12-month review period.

**Table 4: E-Scooter Trips January-December 2021**

<b>Operator</b>	<b>Total Trips</b>	<b>Avg. Monthly Trips</b>	<b>Number of Vehicles</b>
Bird	314,989	26,249	859
Lime	327,734	27,311	858
Razor	113,891	9,491	323
VeoRide	133,551	11,129	542

Tables 5 and 6 summarize total trips, daily trips, and trip averages by Council District. The information presented in this memorandum is based on the current Council District boundaries.

Origin marks the location at the beginning of a trip and destination marks the end of trip for one complete trip. The origin and destination data in Table 5 show that 67.7 percent of trips started in District 1 and 66.2 percent of trips ended in District 1.

**Table 5: Trips by Council District**

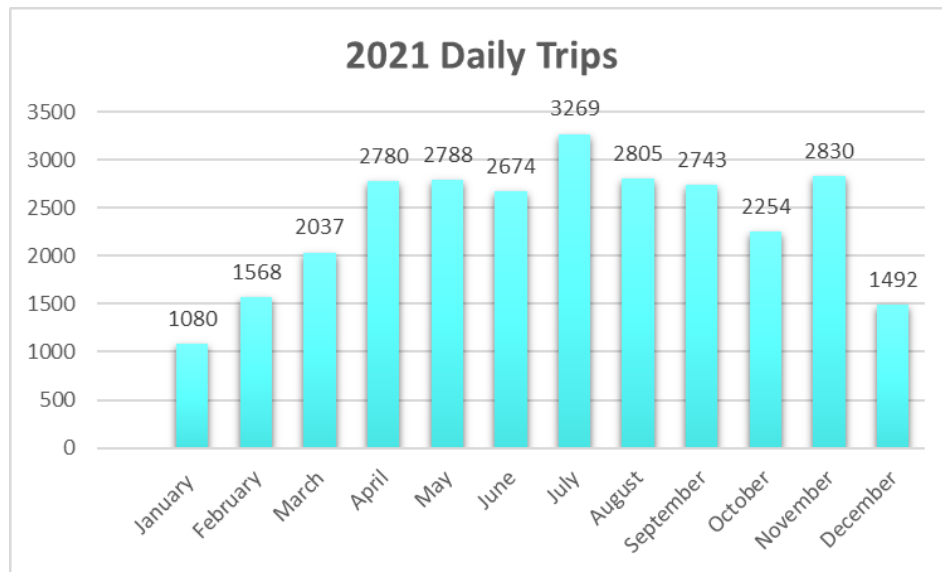
<b>Council District</b>	<b>Origin</b>		<b>Destination</b>	
	<i>Total Trips</i>	<i>Percentage of Total Trips</i>	<i>Total Trips</i>	<i>Percentage of Total Trips</i>
1	584,728	67.7	570,867	66.2
2	147,409	17.1	151,865	17.6
3	84,886	9.8	87,824	10.2
4	11,719	1.4	11,510	1.3
5	3,002	0.3	3,237	0.4
6	25,729	3	29,854	3.5
7	5,701	0.7	6,648	0.8
8	688	0.1	924	0.1
9	147	0.01	241	0.01
<b>Total</b>	<b>864,009</b>		<b>862,970</b>	

**Table 6: Average Distance by Council District**

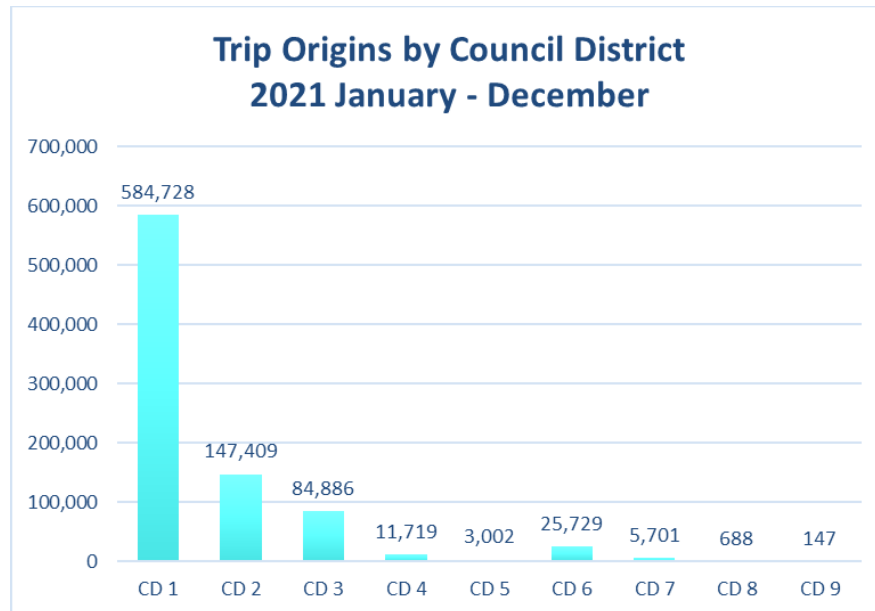
Council District	Origin	Destination
	Average Distance (mi)	Average Distance (mi)
1	1.15	1.12
2	1.07	1.08
3	1.35	1.39
4	1.32	1.37
5	1.48	1.70
6	1.11	1.22
7	1.22	1.47
8	1.42	1.63
9	1.52	2.24

*Ridership - Key Findings*

- Trip Information
  - Daily trips in 2021 peaked between April and September. Above average temperatures in November may explain the increase in ridership in the fall of 2021.



- Council Districts
  - The Council Districts with highest ridership were Districts 1, 2, and 3, accounting for 95 percent of trips during the 12-month period.



- Parking
  - Forced virtual parking locations were recently implemented to assist in keeping the sidewalks and streets safe and free of scooters obstructing the right-of-way.
  - The average scooter is typically parked about 15 hours between rides.
  - 86 percent of parking events occurred south of 7th Street.
  
- Peak Periods
  - E-scooter ridership in 2021 peaked in the afternoon between 3 PM – 7 PM, accounting for 34 percent of daily rides.
  - The second highest peak period occurred in the evening between 7 PM – 10 PM, accounting for 31 percent of all rides.
  - 2021 ridership has tripled since January 2021, when rising cases of COVID-19 led to strict stay at home orders and reduced economic activity.
  
- Users
  - There are a similar number of residents using e-scooters as there are tourists.
  - Most trips are being taken by residents; from the beginning of the program in August 2018 to October 2021 over one million trips were taken by residents, representing 86 percent of trips (see Table 7).

**Table 7: Residents and Tourist Users**

<b>E-scooter Operator</b>	<b>One-time user accounts created (Tourists)</b>	<b>One-time user trips</b>	<b>Repeat user Accounts Created (Residents)</b>	<b>Repeat user trips</b>
Bird	55,619	55,619	56,714	291,255
Lime	81,468	81,468	55,043	347,744
Razor	38,678	38,678	54,362	383,276
VeoRide	7,721	7,721	10,544	74,187
<b>Total</b>	<b>183,486</b>	<b>183,486</b>	<b>176,663</b>	<b>1,096,462</b>

- Popular Routes
  - The coastal areas of Long Beach continue to be popular with e-scooter users.
  - Ten street segments comprise 45 percent of the rides in the city (see Table 8).

**Table 8: Top 10 Street Segments**

<b>Street</b>	<b>Trip Count</b>	<b>Daily Trip Count Average</b>
East Broadway	378,065	2,055
East Ocean Boulevard	377,399	2,051
Bicycle Route 17	306,220	1,664
South Pine Avenue	246,730	1,341
Shoreline Drive	239,661	1,303
Shoreline Bike Path	200,556	1,090
Ocean Boulevard	180,905	983
Long Beach Boulevard	176,551	960
Aquarium Way	168,776	917
East 3 <sup>rd</sup> Street	166,417	904

*The Program Moving Forward*

City staff are working to move the program forward by keeping vendors accountable to program rules and improving the experience of residents and visitors to Long Beach. After piloting incentivized virtual parking, City staff implemented forced virtual parking on July 11, 2022, requiring riders to end their trip at designated locations. The next step is to monitor the impacts from virtual parking and make program adjustments as necessary.

The e-scooter industry is constantly changing, and new technology is continually developed to improve its operation in Long Beach, including innovations like virtual parking. Some technology still in development includes detecting tipped vehicles, sidewalk riding, and wrong-way riding. City staff hope this technology will be available and ready to use in Long Beach soon.



The most recent version of the program regulations includes better-defined violations and penalties for operators who fail to follow the program rules. City staff are also exploring how other programs have used fees and fines to hold operators more accountable.

### **BikeShare Comparison**

The BikeShare Program (BikeShare) continues to be a great option for residents, workers, and visitors to travel around the city. The data show that BikeShare riders travel twice as far per trip than e-scooter riders, even though the average travel time of an e-scooter trip is almost twice as long. Table 9 highlights a few additional key metrics that distinguish the BikeShare and e-scooter programs between October 2020 and September 2021.

**Table 9: BikeShare and E-Scooter Comparison**

<b>Metrics</b>	<b>BikeShare</b>	<b>E-Scooters</b>
Total Vehicles Deployed	1,021	3,500
Trips Taken	47,900	818,000
Miles Traveled	147,244	930,800
Trip Length (miles)	3.07	1.16
Average Trip Time (minutes)	8:33	15:00
Parking	Over 90 docking stations	Approximately 500 dockless drop zones

### **Summary**

The Program is vital in providing transportation options and provides numerous benefits for Long Beach residents, visitors, and employees, including:

- Affordable and convenient means of transportation
- Employment opportunities created by e-scooter vendors
- Reduced noise pollution compared to motor vehicles
- Environmentally friendly form of transportation
- Reduces car dependence and need for personal vehicle ownership
- Provides additional transportation options for special events

With over 800,000 e-scooter trips taken in 2021, it is apparent that Long Beach community members have come to rely on this convenient and affordable mode of transportation. Overall, e-scooter vendors are meeting the expectations of the Program. However, some minor infractions remain persistent, including e-scooter deployment issues, correcting violations within the two-hour time limit, and unenforced geofenced areas.

City staff are working on correcting compliance issues with support from vendors and their fleet managers. Additionally, City staff complete routine field audits to check for compliance and

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enforce possible penalties, including e-scooter impounding and impound fees. Furthermore, the City's third-party vendor, Sweep, is supplementing City staff's field work related to e-scooter violations and public right-of-way concerns.

In addition to vendor collaboration, City staff utilize technology platforms, including the mobility manager platform Populus, to analyze data and ensure program success. City staff will continue to fine-tune and improve the processes in place for vendor compliance to keep violation rates minimal.

Should you have any questions, please contact me at (562) 570-6383.

ATTACHMENT – OPERATIONAL ZONE MAP

CC: CHARLES PARKIN, CITY ATTORNEY  
DOUGLAS P. HAUBERT, CITY PROSECUTOR  
LAURA L. DOUD, CITY AUDITOR  
LINDA F. TATUM, ASSISTANT CITY MANAGER  
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KATY NOMURA, DEPUTY CITY MANAGER  
APRIL WALKER, ADMINISTRATIVE DEPUTY CITY MANAGER  
MONIQUE DE LA GARZA, CITY CLERK (REF. FILE #[21-0916](#))  
DEPARTMENT HEADS

### Operational Zone Map

