



**CITY OF LOS ANGELES**  
**INTER-DEPARTMENTAL CORRESPONDENCE**

Date: February 12, 2020

To: Honorable City Council  
c/o City Clerk, Room 395  
Attention: Honorable Mike Bonin, Chair, Transportation Committee  
Attention: Honorable Bob Blumenfield, Chair, Public Works Committee

From:  Seleta J. Reynolds, General Manager  
Department of Transportation 

Subject: **DOCKLESS BIKE/SCOOTER SHARE PILOT PROGRAM UPDATE (CF #17-1125)**

**SUMMARY**

As directed by the City Council (Council) in Council File 17-1125, this report provides a quarterly update on operations, safety, and enforcement of the One-Year Dockless On-Demand Personal Mobility Pilot Program (Program) and recommended next steps.

**RECOMMENDATIONS**

1. AUTHORIZE LADOT to extend dockless operating permits for six months.
2. DIRECT LADOT to report back with updated rules and guidelines for year two in 120 days.

**BACKGROUND**

On September 4, 2018, City Council authorized the One-Year Dockless On-Demand Personal Mobility Pilot Program. This program enabled operators providing dockless shared bikes and scooters (also known as micro-mobility vehicles) to obtain permits for fleets of up to 10,500 vehicles each. Applicants submitted fees, insurance documentation, and plans for implementation, parking, equity, and community engagement. The City required permitted operators to provide data via API's in accordance with the Mobility Data Specification (MDS), integrate with the City's MyLA311 system, take part in a shared mobility task force, and distribute surveys to riders. LADOT issued permits on March 15, 2019.

This third 90-day report provides an overall update of the pilot and outlines next steps to implement the second year of the program.

## DISCUSSION

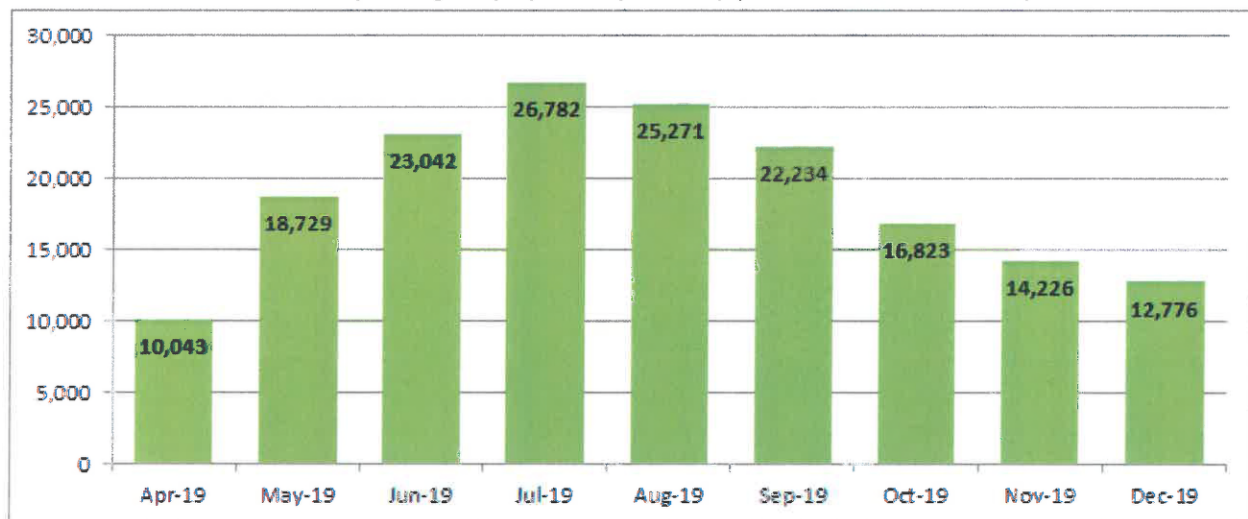
The Dockless On-Demand Personal Mobility Pilot Program launched March 15, 2019. This program authorizes a total of 36,170 dockless vehicles, and LADOT observes approximately 16,000 dockless vehicle trips daily. Existing permits expire on March 15, 2020, and LADOT is preparing for the second year of the program. This report provides updates on operations, safety and enforcement, and next steps. The department continues to use a combination of MDS data and field checks to manage the program, hold operators accountable to abiding regulations, and determine where infrastructure may improve safety.

### Ridership and Usage

From April 1, 2019 through December 31, 2019, LADOT observed 7,139,002 total dockless bike and scooter trips. Trips fluctuate seasonally, peaking at 1,251,972 trips in the month of August and decreasing throughout Fall 2019 (Attachment 1).

Daily deployment showed variation, ranging from an average of 10,043 vehicles deployed daily to 26,782. In December 2019, operators deployed an average 12,766 vehicles daily, or 35% of the 36,170 vehicles permitted. Table 1 shows the total daily average deployment by month throughout the program.

Table 1: Daily Average Deployment by Month (April 2019 - December 2019)



From August 1, 2019 through December 31, 2019, LADOT observed the highest ridership within the City in Downtown, Venice, Adams-Normandie/Exposition Park/University Park, Mid City West, North Westwood, Central Hollywood, and Wilshire Center - Koreatown, as shown in Figure 2.

Figure 2: Total Trips in Highest Activity Neighborhoods (August 1, 2019 - December 31, 2019)

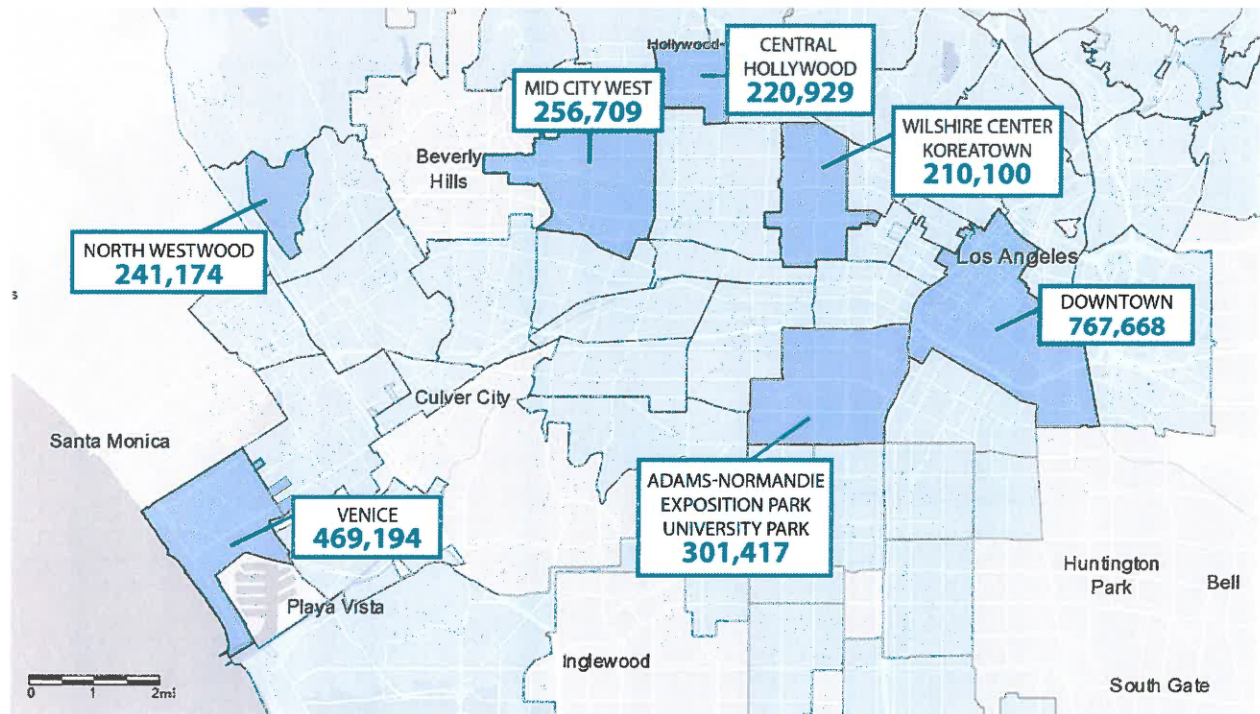
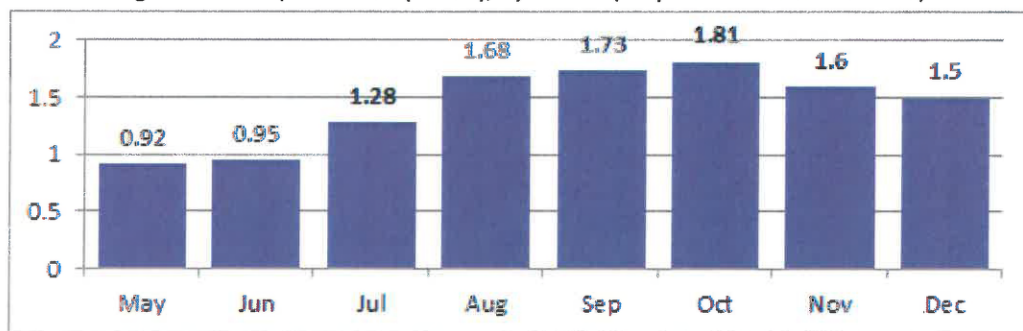


Figure 3 shows that vehicle use citywide, measured as rides per vehicle per day, decreased. Use peaked at 1.81 rides per vehicle per day in October 2019. Average use since May 2019 was 1.44 rides per vehicle per day.

Figure 3: Rides per Vehicle per Day, by Month (May 2019 - December 2019)



### 311 Service Requests

As part of the permit requirements, all operators integrated with the MyLA311 application. From March 1, 2019 through December 31, 2019, MyLA311 users submitted 11,205 dockless mobility service requests. MyLA311 received decreasing numbers of service requests throughout recent months of the pilot program, even as ridership increased in summer months (Figure 4).



Figure 4: MyLA311 Service Requests Received Citywide by Month, (March 2019 - December 2019)

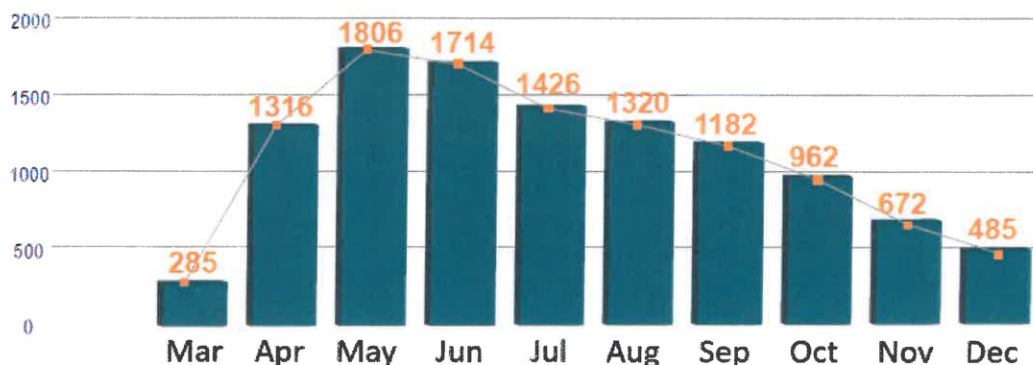


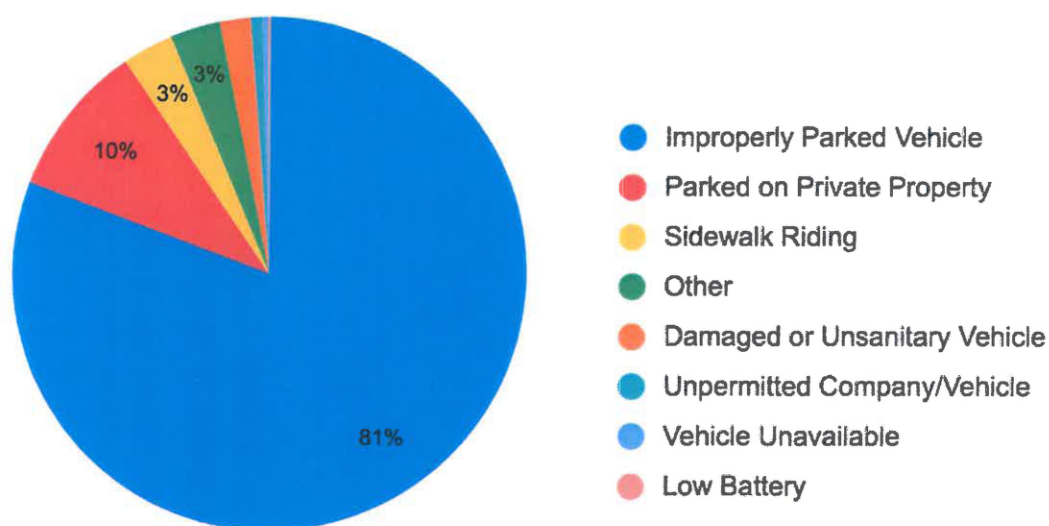
Table 5: MyLA311 Service Requests Received by Council District (March 2019 - December 2019)

Council District	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Service Requests	163	295	19	1,021	1,180	23	8	44	64	376	4,444	30	524	1,887	18

LADOT requires each operator to complete and close out their service requests within two hours. Attachment 2 details monthly average close out times for each operator. LADOT continues to monitor average close out times and observed a decrease in average close out times overall.

Based on feedback from public meetings, LADOT updated MyLA311 on July 21, 2019 to include a drop-down option to report sidewalk riding. Since the update, 3% of the requests received through MyLA 311 reported sidewalk riding (Figure 6). Attachment 3 notes totals for each request type.

Figure 6: MyLA311 Service Requests received by type (July 21, 2019 - December 31, 2019)





Over the course of the pilot, LADOT reviewed MyLA311 data and received general comments regarding right-of-way management. To encourage proper parking behavior, LADOT piloted off-street parking zone vinyl decals for dockless bikes and scooters, installing 72 off-street parking zones in Downtown Los Angeles (DTLA) and Venice in March and June of 2019. LADOT is reviewing the opportunity to scale this tool as well as additional corrals and bicycle racks to other parts of the City.

On November 7, 2019, LADOT approved a Standard Plan for installing on-street and off-street shared mobility parking (Attachment 4). LADOT will pilot this plan with on-street corrals for micro-mobility along Abbot Kinney in Venice at approximately nine locations, tentatively scheduled for installation in Spring 2020 (Figure 7).

Figure 7: Shared Mobility Corral Locations

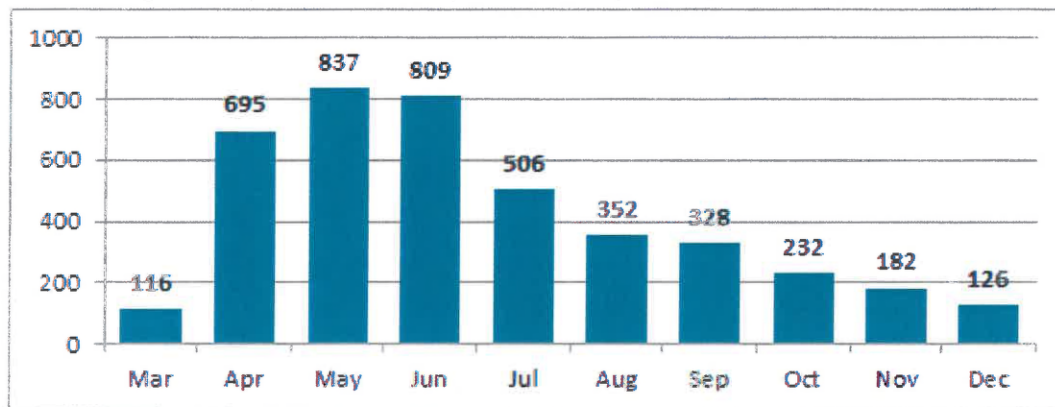


The dockless pilot program authorizes LADOT to determine where vehicle parking is prohibited or to create geofences within certain areas where vehicles shall be parked. In May 2019, LADOT established the Venice Special Operations Zone to address illegal riding on the Venice Boardwalk, bike path, and canals, and to test the use of geofence technology to reduce vehicle speeds down to 0 mph. To address the high number of MyLA311 service requests made in the Venice Special Operations Zone, LADOT installed 22 physical parking zones, marked with a decal in the public right-of-way, and four virtual parking zones, viewable within the app without requiring physical infrastructure. Within the Venice Special Operations Zone, LADOT requires operators to deploy vehicles only in designated physical and virtual parking zones. Other policies guiding operations in the Venice Special Operations Zone include:

- Operators are authorized to begin daily deployment between the hours of 5:00 a.m. to 10:00 a.m. daily.
- Each Operator may deploy up to 150 vehicles, up to a maximum of 5 vehicles per operator within LADOT-identified parking zones only, including digital parking zones, between the hours of 5:00 a.m. to 10:00 a.m. daily.
- Each Operator may rebalance vehicles only into LADOT-identified parking zones, including digital parking zones, after 10:00 a.m. daily.

The Venice Special Operations Zone successfully brought order to a chaotic sidewalk and street condition, indicated by the decrease in MyLA311 Service Requests received. Monthly totals of MyLA311 Service Requests within the Venice Neighborhood Council boundaries peaked in May 2019, then decreased significantly after LADOT implemented the Venice Special Operations Zone (Figure 8). We will continue to analyze the overall impact on mobility from the reduction in vehicles and will use the model as a tool to address oversaturation and related street and sidewalk impacts citywide.

Figure 8: MyLA311 Service Requests in Venice, March 2019 - December 2019

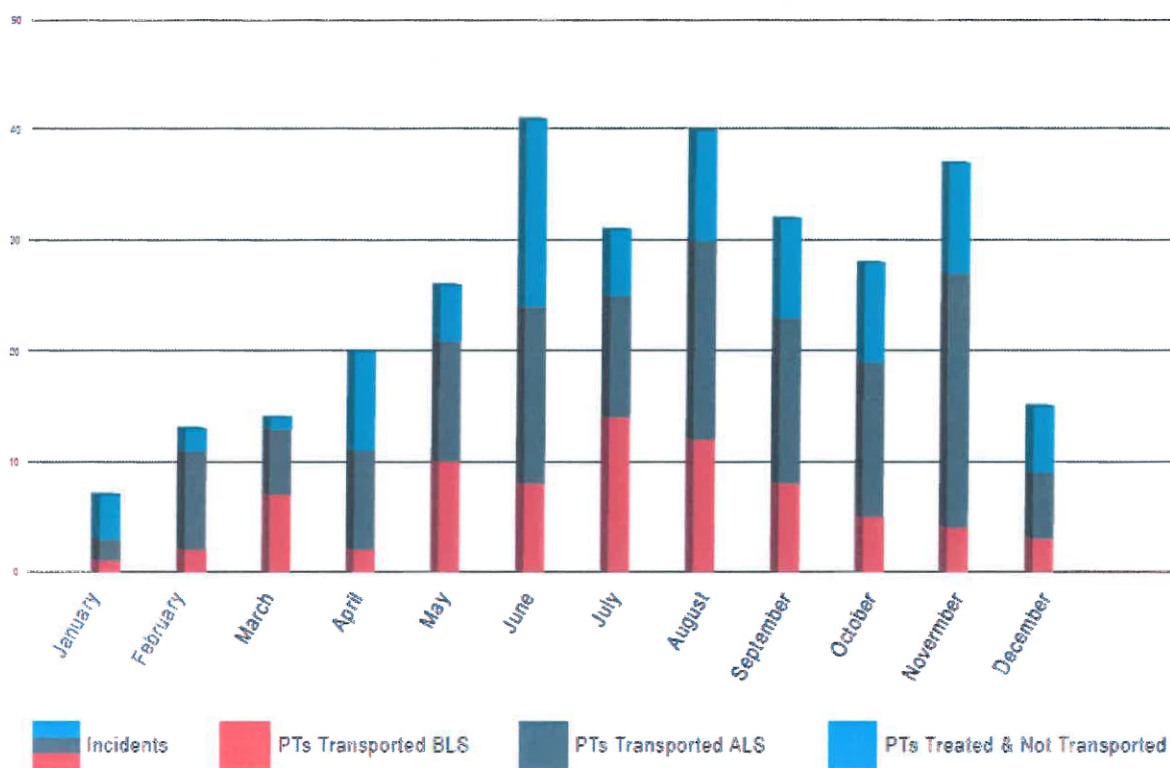


#### Electric Scooter Incidents

The Los Angeles Fire Department Emergency Services Bureau (LAFD EMSB) reported a total of 304 incidents related to electric scooters in 2019, including:

- 140 Patients transported via Advanced Life Support Ambulance ("ALS", staffed by Paramedics)
- 76 Patients transported via Basic Life Support Ambulance ("BLS", staffed by EMTs)
- 88 Patients Treated by Paramedics or EMTs on scene, but not transported to the hospital by LAFD ambulance

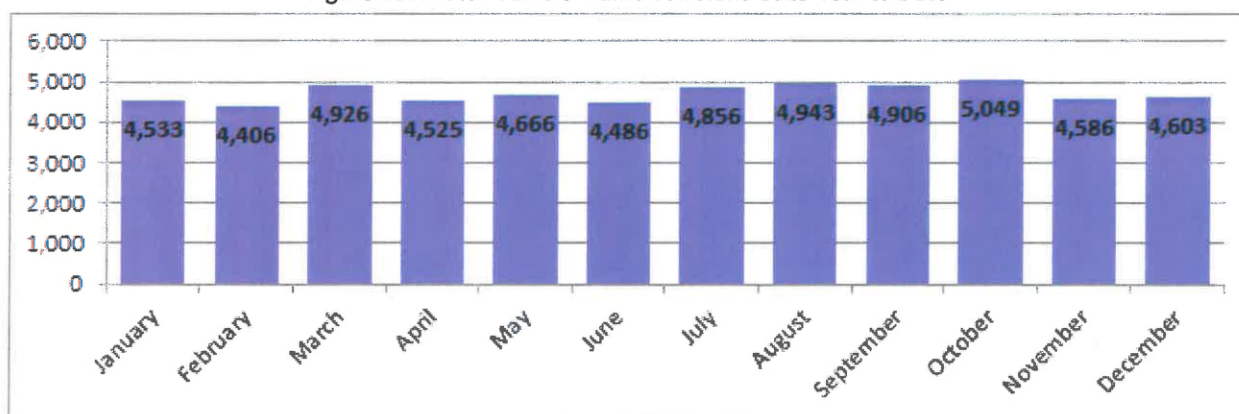
Figure 9: Electric Scooter Incidents (January 1, 2019 - December 28, 2019)



Incidents = Emergency Medical Incidents during which the Paramedic or EMT selected "Scooter (Electric)" as the cause of an injury in the Patient Care Report

The Los Angeles Police Department (LAPD) reported 56,485 total motor vehicle traffic collisions Citywide for the 2019 calendar year, which do not include collisions involving e-scooters as shown in Figure 10.

Figure 10: Motor Vehicle Traffic Collisions 2019 Year to Date



LAPD reports e-scooter involved traffic collision data separately. LAPD reported 348 traffic collisions involving electric devices since December 21, 2019. Of the 348 collisions, 298 involved e-scooters colliding with a vehicle, and 296 collisions (85%) occurred in the West Traffic Division.



The 2018 American Community Survey estimates 2,215,538 vehicles are registered in the City of Los Angeles. The total number of 36,170 dockless vehicles permitted is equal to less than 2% of the total registered vehicles in the city. The total of 348 electric device collisions in 2019 is equivalent to 0.01% of the total of all other reported motor vehicle collisions citywide.

LAPD reported 241 traffic fatalities year to date through December 27, 2019, as part of the Department's regular reporting of Vision Zero statistics regarding traffic fatalities. This total includes 132 pedestrian fatalities, 90 vehicle passenger fatalities, 19 cyclist fatalities, and 0 e-scooter fatalities. LADOT is aware of one fatality in Hollywood involving a pedestrian who was riding a scooter just prior to the collision. LAPD did not classify this as a scooter collision under their current reporting system, but LADOT's Dockless Program managers worked with the Vision Zero Core Team to discuss prevention strategies in the area following the collision and continues to monitor and communicate with both LAPD and LAFD regarding these incidents.

LAPD issued a total of 1,250 citations for e-scooter violations since December 21, 2019. The Central Traffic Division issued the most citations (Table 11). A breakdown of citations by California Vehicle Code (CVC) is detailed in Attachment 5.

Table 11: E-Scooter Traffic Violation Citations Issued by LAPD Traffic Division, (January 2, 2019 - December 21, 2019)

LAPD Traffic Division	Number of Citations
Central	992
West	33
South	9
Valley	216
<b>TOTAL</b>	<b>1,250</b>

### Equitable Access

At the direction of City Council, the department prioritized equitable access to new mobility options, especially in underserved communities with fewer transit options where residents may not have a bank account or access to credit. At the outset of the pilot, the City looked to address equity by 1) discounting permit fees for vehicles deployed in disadvantaged communities to incentivize service, and 2) requiring that each of the operators develop and submit an equity plan providing discounted fares, access to unbanked communities, and options for non-smartphone access. Initial analysis suggests the program is not reaching its goals.

Since March 2019, 11,879 users participated in the equity access options, with 1,335 users participating in January 2020. According to customer surveys submitted to LADOT, only 6% of respondents were enrolled in one of the equitable access programs offered by operators, and 85% were not aware of their availability.

Operators could increase their fleet caps at a discounted rate (\$39 instead of \$130) for vehicles deployed in Disadvantaged Communities (DAC's), with additional fleet expansion options in DAC's in the San Fernando Valley. From October 1, 2019 through December 31, 2019, operators deployed an average of 5,460 vehicles in DAC's (out of 11,000 total permitted) and 286 vehicles in San Fernando Valley DAC's (out of 6,910 permitted).

A key focus of the year two program requirements will tie both permit requirements and program evaluation to meeting clear equity targets.

#### Customer Surveys

LADOT requires operators to distribute surveys to their customers. The goal of the surveys is to better understand rider demographics, travel behavior, habits, and public perception. Operators distribute the surveys to riders, via email or in-app following a ride, and LADOT receives responses quarterly. Over the three quarters, 7,067 riders submitted responses. Detailed survey responses for each quarter are included as Attachment 6.

About two-thirds of respondents identified as male and 40% were between the ages of 25-34. A quarter of riders reported having no access to a car. Riders reported changes in travel behavior since using shared micromobility services, with 49% of respondents using Taxi/Ride hail services less often and 44% driving alone less often. Riders also reported several barriers that discouraged them from riding, with lack of bike lanes and difficulty locating devices ranking as the most common barriers, cited by 47% and 40% of respondents respectively.

Riders also reported using dockless vehicles for various activities, with more than 1 out of 4 (27%) using for Work/Job-Related activities. The survey also asked respondents to think of their most recent trip and indicate which mode of transportation they would have used otherwise. 48% of respondents reported replacing a walking trip with their dockless mobility ride, while 32% replaced a trip in either a personal vehicle or a ride hail service.

#### Next Steps

Overall, an initial analysis of the program shows that it is successfully providing additional mobility options to Angelenos. LADOT recommends continuing dockless mobility in Los Angeles with an annual permit program. However, given the program's poor performance in achieving equitable access and on-going opportunities to fine tune the requirements for orderly deployment in popular neighborhoods, LADOT is requesting a 6-month extension of the pilot in order to complete a full evaluation and develop recommended changes to the rules and guidelines. This approach allows the department to test and scale solutions while avoiding a disruption in service. As part of our Year 2 recommendations, LADOT will outline an ongoing annual evaluation of the dockless mobility program, which will inform management and enforcement in the next year's permits and develop strategies to further advance mobility through the program.

*Program Management*

LADOT will transfer management and enforcement of the program to the For-Hire Policy and Enforcement Division (For-Hire Division). LADOT transferred six full-time staff positions funded by program permit fees (in the FY 2019-20 Budget) to the For-Hire Division to support the program.

*Six Month Permit Extension*

To complete a full year evaluation of the program and fully transfer operation and regulation of the dockless mobility program to the For-Hire Division, LADOT recommends extending current program permits for six-months, from March 15, 2020 through September 15, 2020. During this time, LADOT will refine compliance approaches, develop new equitable access strategies, and analyze impacts of a new fee structure. The For-Hire Division will also hire staff, provide training, and refine workflows to effectively enforce and manage the program.

LADOT will extend all existing permits upon receipt of pro-rated payment for six months of access to the public right-of-way under the existing fee schedule. During the extension period, operators must demonstrate continued compliance with the program guidelines included in the one-year pilot permit. Pro-rated permit fees during the extension period include a \$10,000 permit application fee for each operator and \$65 per vehicle (\$20 per vehicle over the 2,500 vehicle fleet cap deployed in disadvantaged communities, as detailed in Attachment 7). Operators may choose to pay for permits for a different number of vehicles than they did during the past year.

Following the six-month permit extension, LADOT will establish a formal program enabled by an annually renewable permit with new requirements, fee schedule, compliance and enforcement framework, equity zones, fleet allowances, and incentives. The permit year will run from September 2020 to September 2021.

*Pilot Program Evaluation*

In July 2019, LADOT executed an agreement with Nelson\Nygaard to develop an equitable micromobility evaluation methodology, performance monitoring program, data management plan, and a comprehensive framework for evaluating compliance. Nelson\Nygaard's work is ongoing and will include a comprehensive evaluation and summary at the culmination of the one-year pilot.

In the upcoming pilot program evaluation, LADOT will compile lessons learned and areas of opportunity for the next phase of the program, including the need for a new strategy to ensure equitable access to micromobility services, new compliance tools, and permit provisions for new modes and vehicles not currently considered in the program rules and guidelines. Recommendations for the next year of the program will include changes to or expansions of the equitable access options and strategies, permit fees, fleet sizes, options for vehicle types, and compliance enforcement methods.



*Infrastructure Investment*

Using ridership data collected from the pilot program using MDS, LADOT conducted a ridership analysis. Initial findings show 7th Street between Figueroa and Spring in Downtown LA as the highest traveled corridor carrying approximately 6,000 to 7,000 dockless mobility trips per month, with Figueroa (NB) between 11th and 7th second highest, carrying between 5,000 and 6,000 trips per month. In Venice, the highest traveled corridors included Speedway, Main Street, and Windward Ave, averaging between 2,000 and 3,500 trips per month. Initial analysis found most activity was on streets with bike lanes or protected bike lanes. LADOT has set aside \$2 million in permit fees generated from the program and plans to make infrastructure improvements on high ridership corridors.

*Electric Mopeds*

LADOT is developing a permitting path to allow shared moped services within the City. After initial research and conversations with industry stakeholders, LADOT has determined shared moped programs are better suited to the permitting framework provided through the City's free-floating car sharing program. Several vehicle and operations characteristics led to this determination, including that electric mopeds are registered with the Department of Motor Vehicles, the vehicles are required to be parked on-street (not on sidewalks), and LADOT's Traffic Enforcement Division governs enforcement of moped parking. LADOT will suggest amendments to the free-floating car sharing program, including opportunities to merge car sharing, dockless mobility, and the new taxi permitting framework, to streamline permitting for shared mobility options and new modes.

**FISCAL IMPACT**

If the Council directs an extension of the year one dockless pilot program, the City will collect the same permit fees required for the one-year permits, pro-rated for the period of six months. Depending on the number of vehicles permitted, the fees collected per company would range between \$20,000 for minimum deployment in only DAC's up to \$355,000 for the maximum deployment citywide. These funds will support the ongoing management of the dockless mobility pilot program.

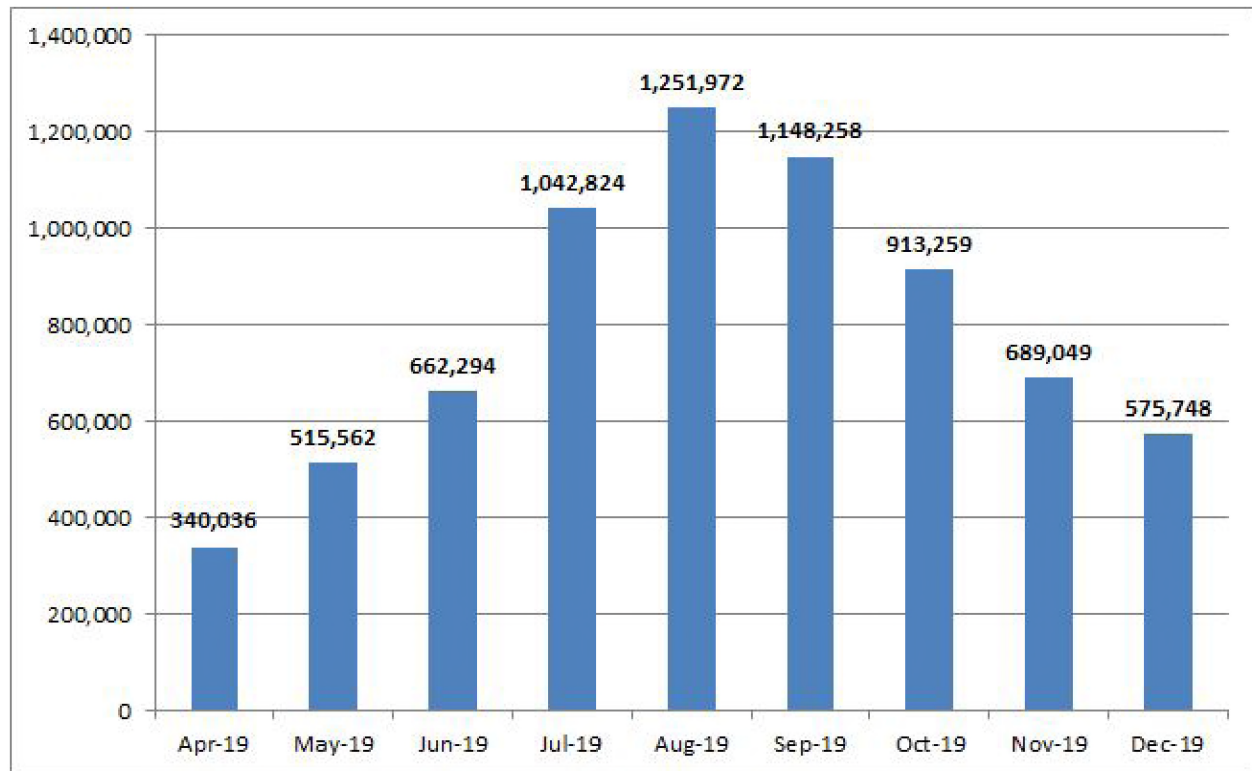
Funds will be deposited into the account entitled "Dockless On-demand Mobility Program" within the Permit Parking Program Revenue Fund 49C, Department 94.

SJR/MP:je

Attachments

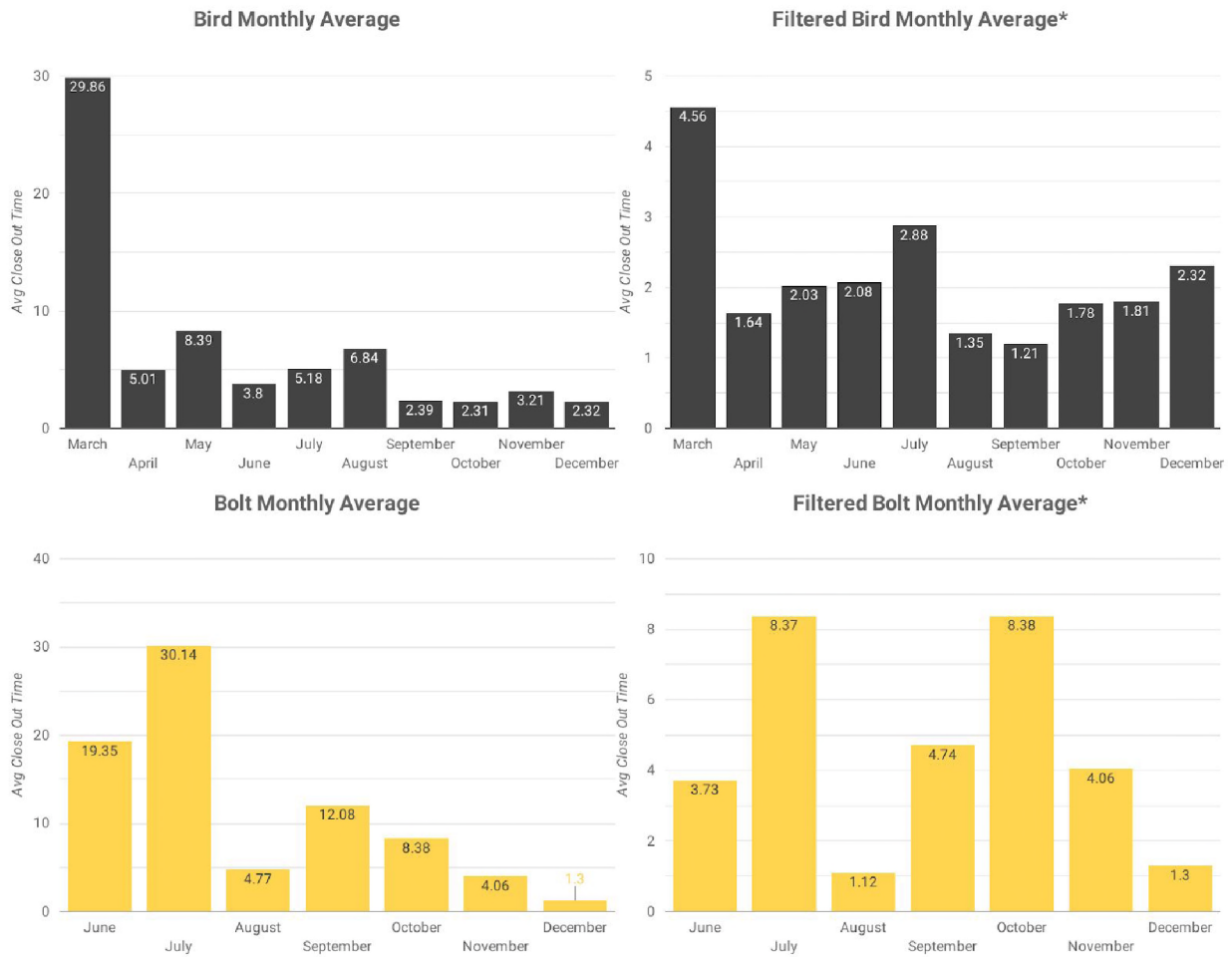
## Attachment 1:

### Total Dockless Micromobility Trips - Pilot Program Permit



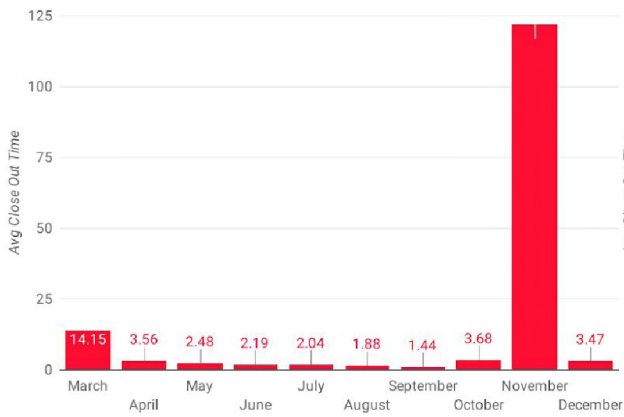
Attachment 2:

Average Monthly Close Out Time by Operator

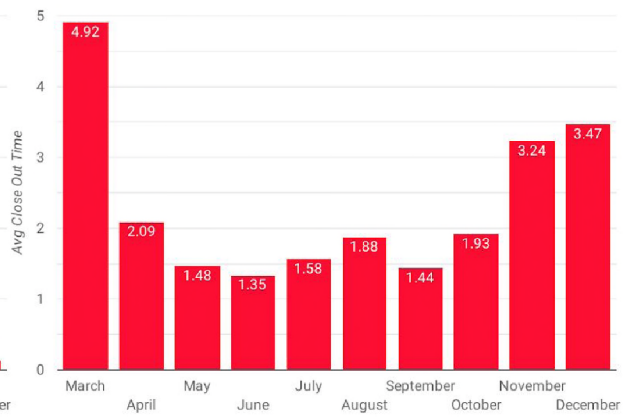




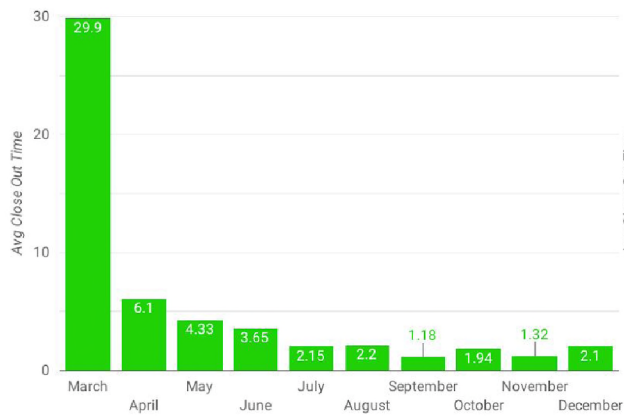
**Jump Monthly Average**



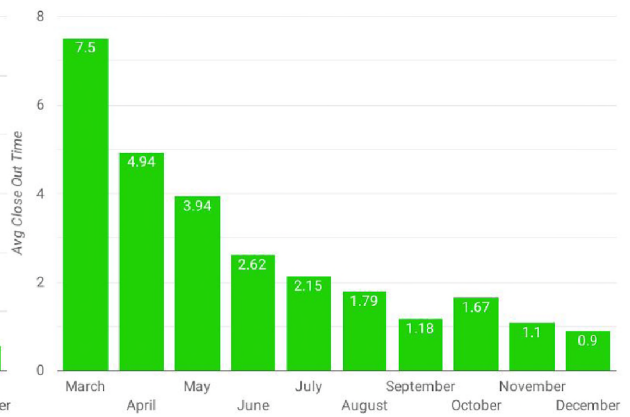
**Filtered Jump Monthly Average\***



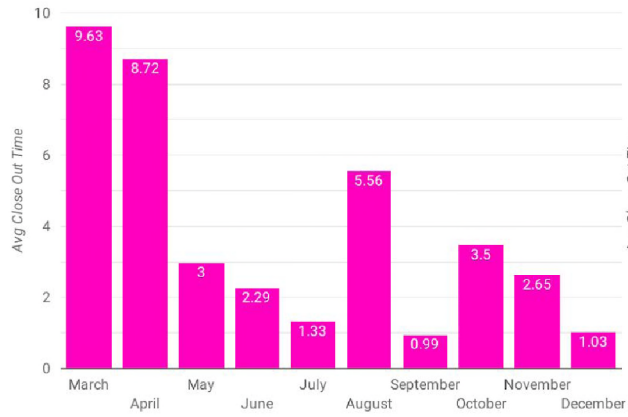
**Lime Monthly Average**



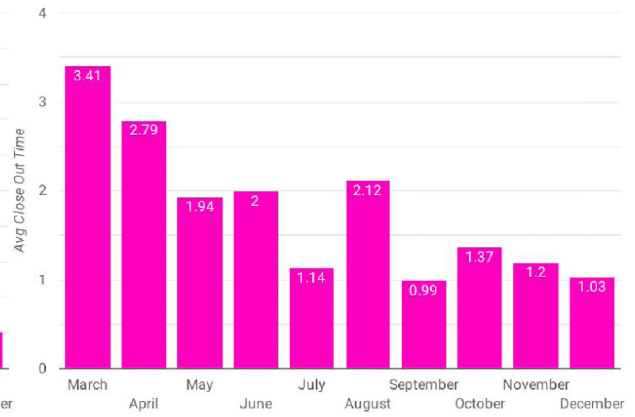
**Filtered Lime Monthly Average\***



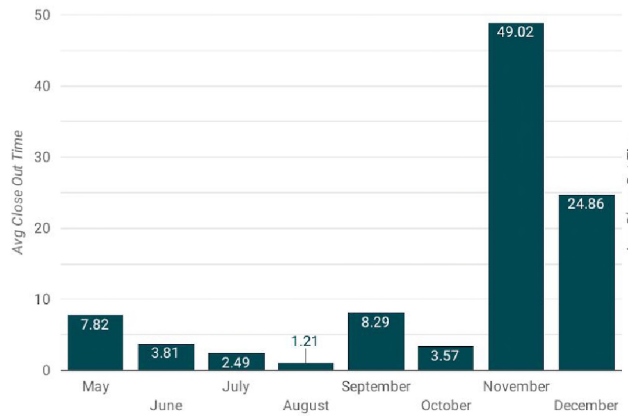
**Lyft Monthly Average**



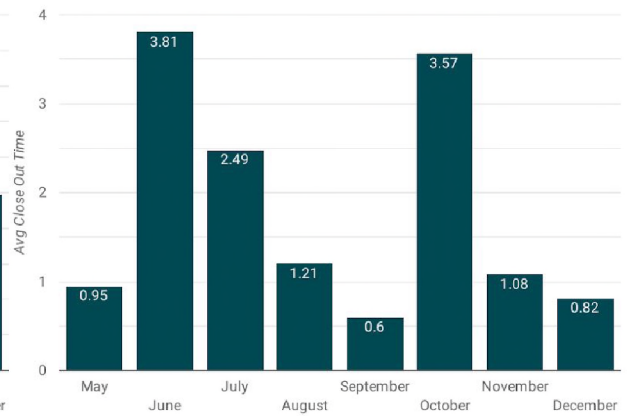
**Filtered Lyft Monthly Average\***



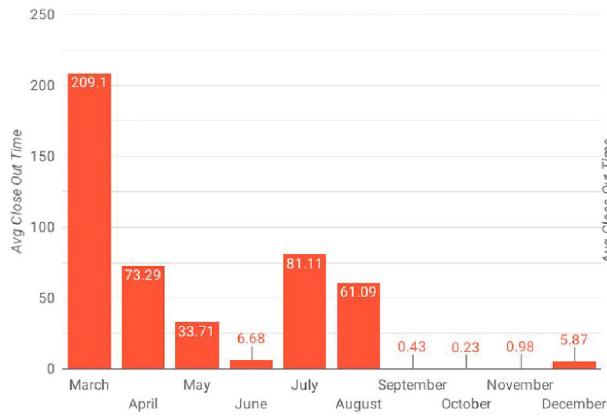
**Sherpa Monthly Average**



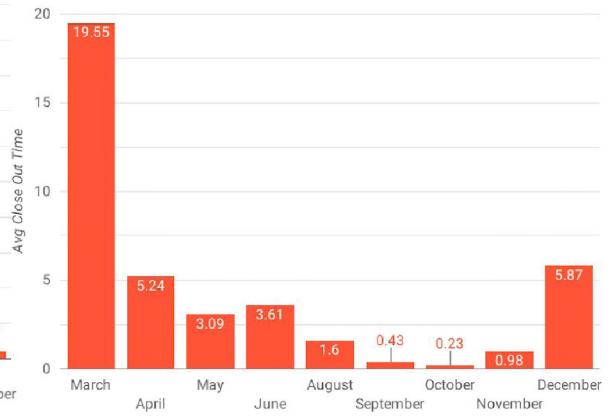
**Filtered Sherpa Monthly Average\***



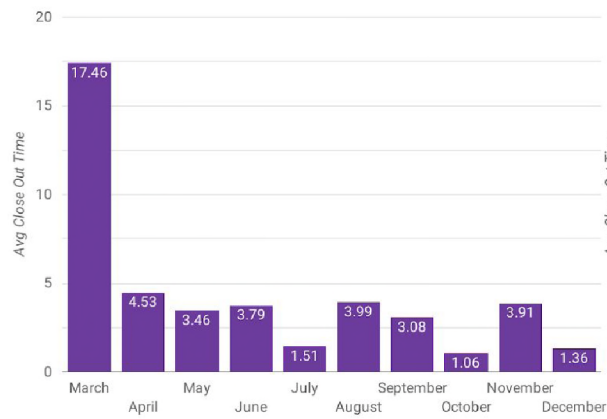
**Spin Monthly Average**



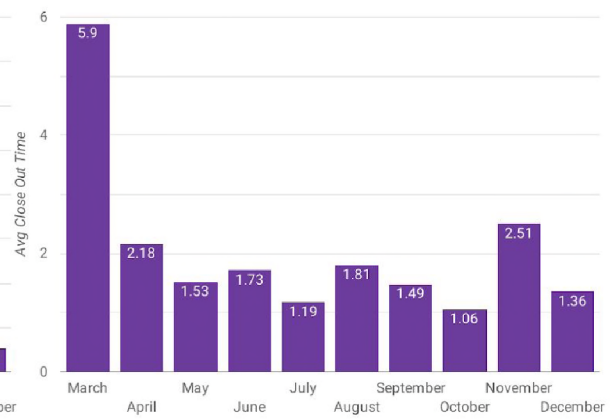
**Filtered Spin Monthly Average\***



**Wheels Monthly Average**



**Filtered Wheels Monthly Average\***



\*Filtered averages do not include service requests over 24 hours when averaging  
 disclaimer about filtering out some requests due to errors or those not held to the 2-hour limit

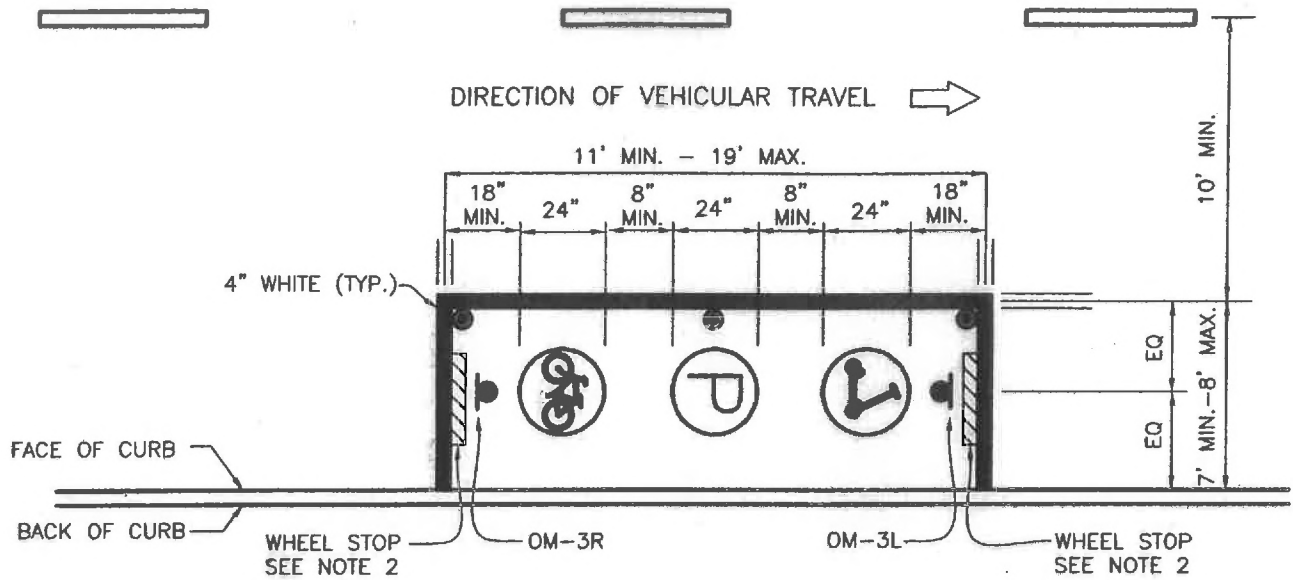


**Attachment 3:**

**MyLA311 Service Requests by Type**

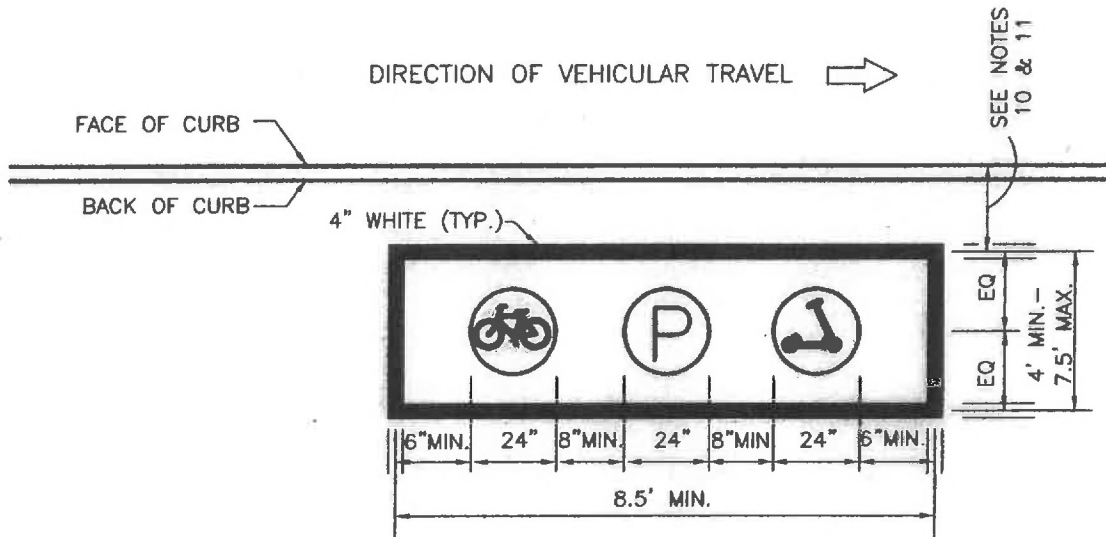
<b>Service Request Type (7/21/19 - 12/31/19)</b>	<b># of Service Requests</b>	<b>Percent of total</b>
Improperly Parked Vehicle	4,090	80.77%
Parked on Private Property	491	9.7%
Sidewalk Riding	161	3.18%
Other *	160	3.16%
Damaged or unsanitary Vehicle	98	1.94%
Unpermitted Company/Vehicle	38	0.75%
Vehicle Unavailable	19	0.38%
Low Battery	7	0.14%
<b>Grand total</b>	<b>5,064</b>	<b>100%</b>

\*includes requests that a constituent may not know how to categorize or do not fall within the other categories (E.g. vehicle in Venice Canal)



**SHARED MOBILITY PARKING: ON-STREET**

DRAWING NOT TO SCALE



**SHARED MOBILITY PARKING: SIDEWALK**


DRAWING NOT TO SCALE

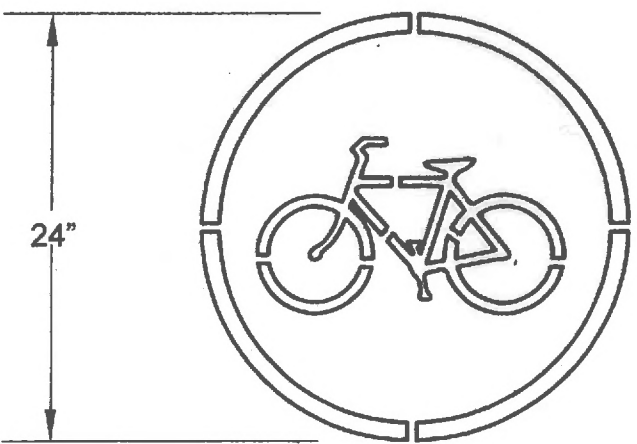
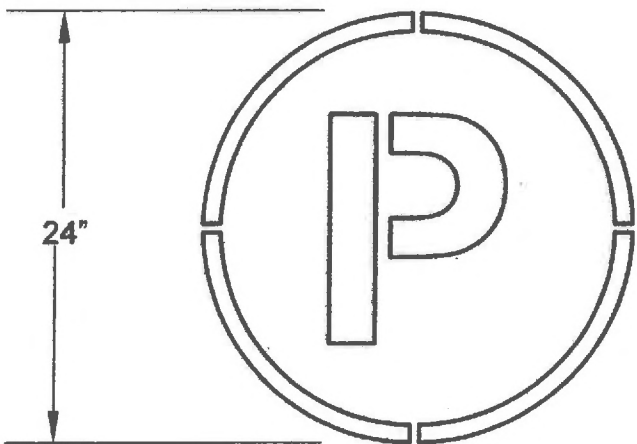
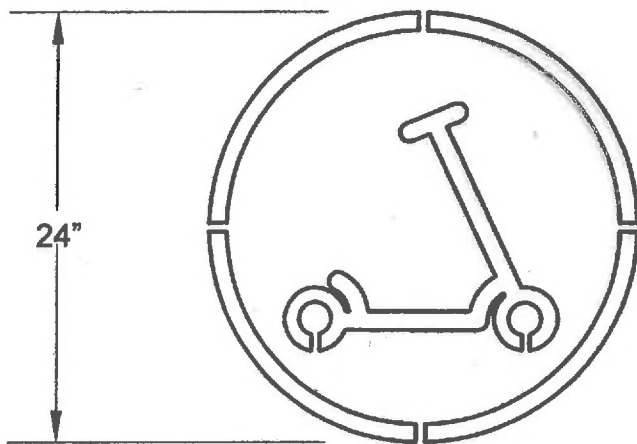
**LEGEND**

● FLEXIBLE BOLLARD SIGN


● SIGN POST

▨ WHEEL STOP, RUBBERIZED (6"Wx48"Lx4"H)

APPROVED		11/07/19
 For SELETIA J. REYNOLDS, General Manager		
CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION		
SHARED MOBILITY PARKING (SMP) ZONES ON-STREET AND SIDEWALK		1 3
CKD.	SR. T.E. JV	PR. T.E. BS
DWN. NO	T.E. MN	S-404.3



NOT TO SCALE

APPROVED		11 /07 /19	
			
SELETA J. REYNOLDS, General Manager			
CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION			
SHARED MOBILITY PARKING (SMP) ZONES ON-STREET AND SIDEWALK			<div style="border: 1px solid black; padding: 2px;"> <div style="display: flex; justify-content: space-between;"> <span>2</span> <span>3</span> </div> </div>
CKD.	SR. T.E. JV	PR. T.E. BS	
DWN. NO	T.E. MN	S-404.3	



## NOTES:

### SHARED MOBILITY PARKING: ON-STREET


1. PARKING METER HEADS, POSTS AND SIGNS SHALL BE REMOVED OR ADJUSTED AS NEEDED IF SHARED MOBILITY PARKING (SMP) IS INSTALLED IN A PARKING METER ZONE.
2. RUBBERIZED WHEEL STOPS SHALL BE USED AT THE ENDS OF THE SMP ZONES IF LOCATED NEXT TO ON-STREET PARKING.
3. MINIMUM CLEARANCE FROM THE TOP OF DRIVEWAY SHALL BE 5'.
4. MINIMUM CLEARANCE FROM A FIRE HYDRANT SHALL BE 15'.
5. SMP ZONES SHALL REMAIN CLEAR OF BUS ZONES.
6. SMP ZONES SHALL NOT BE INSTALLED IN PEAK HOUR LANES, RED CURB ZONES, OR IN PARKING RESTRICTED AREAS (i.e. TOW-AWAY NO STOPPING ANY TIME "T.A.N.S.A.T.", NO PARKING ANY TIME "N.P.A.T.", ETC.)
7. MINIMUM CLEARANCE FROM TWO OR MORE CONSECUTIVE PARKING SPACES SHALL BE 5'.
8. SMP ZONES SHALL NOT BE INSTALLED WITHIN 30' OF A LIMIT LINE AT A TRAFFIC SIGNAL OR WITHIN 25' OF A "STOP" OR "YIELD" SIGN.

### SHARED MOBILITY PARKING: SIDEWALK

9. A MINIMUM OF 5' OF UNOBSTRUCTED SIDEWALK MUST BE MAINTAINED FOR A PEDESTRIAN PATHWAY.
10. WHERE THERE IS NO PARKING ON THE ADJACENT STREET, PROVIDE:
  - A. MINIMUM CLEARANCE OF 1'-6" FROM THE FACE OF CURB TO THE EDGE OF THE SMP ZONE.
11. WHERE THERE IS PARKING ON THE ADJACENT STREET, PROVIDE:
  - A. MINIMUM CLEARANCE OF 3' FROM THE FACE OF CURB TO THE EDGE OF THE SMP ZONE.
  - B. MINIMUM CLEARANCE OF 4' FROM THE FACE OF CURB TO THE EDGE OF THE SMP ZONE IF THE ADJACENT PARKING IS A LOADING ZONE OR DISABLED PARKING SPACE.
  - C. MINIMUM CLEARANCE OF 4' OF UNOBSTRUCTED PATHWAY AT THE ENDS OF THE SMP ZONE.
12. MINIMUM CLEARANCE OF 5' FROM THE MARKED CROSSWALK LINE OR TOP OF CURB RAMP.
13. MINIMUM CLEARANCE OF 5' FROM THE TOP OF DRIVEWAY.
14. MINIMUM CLEARANCE FROM A FIRE HYDRANT SHALL BE 15'.
15. SMP ZONES SHALL REMAIN CLEAR OF BUS LOADING AND UNLOADING ZONES.
16. SMP ZONES SHALL NOT:
  - A. BLOCK ACCESS TO BUILDING ENTRANCES OR EXITS.
  - B. OBSTRUCT UTILITY ACCESSSES SUCH AS MANHOLES, PULLBOXES, STREET LIGHT POLES, POWER POLES, ETC.
  - C. OBSTRUCT THE USE OF SIDEWALK FURNITURE SUCH AS BENCHES, NEWSSTANDS, MAILBOXES, BUS SHELTERS, ETC.

### MISCELLANEOUS

17. ALL PAVEMENT MARKINGS SHALL BE SKID-RESISTANT.

APPROVED		11 / 07 / 19	
			
SELETA J. REYNOLDS, General Manager			
CITY OF LOS ANGELES DEPARTMENT OF TRANSPORTATION			
SHARED MOBILITY PARKING (SMP) ZONES ON-STREET AND SIDEWALK			3 3
CKD.	SR. T.E. JV	PR. T.E. BS	
DWN. NO	T.E. MN	S-404.3	

**Attachment 5:**

**Citations by California Vehicle Code Section, January 2, 2019 - December 21, 2019**

<b>California Vehicle Code (CVC) Section</b>	<b>Definition</b>	<b>Number of Citations</b>
<b>21228 (a)</b>	<p>Any person operating a motorized scooter upon a highway at a speed less than the normal speed of traffic moving in the same direction at that time shall ride as close as practicable to the right-hand curb or right edge of the roadway, except under the following conditions :</p> <p>(a) When overtaking and passing another vehicle proceeding in the same direction.</p> <p>(b) When preparing for a left turn, the operator shall stop and dismount as close as practicable to the right-hand curb or right edge of the roadway and complete the turn by crossing the roadway on foot, subject to the restrictions placed on pedestrians in Chapter 5 (commencing with Section 21950).</p> <p>(c) (1) When reasonably necessary to avoid conditions, including, but not limited to, fixed or moving objects, vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes, which make it unsafe to continue along the right-hand curb or right edge of the roadway, subject to Section 21656.</p> <p>(2) For the purposes of paragraph (1), a “substandard width lane” is a lane that is too narrow for a motorized scooter and another vehicle to travel safely side by side within the lane.</p> <p>(d) Any person operating a motorized scooter upon a highway that carries traffic in one direction only and has two or more marked traffic lanes may operate the motorized scooter as near the left-hand curb or left edge of that roadway as practicable.</p> <p>However, when preparing for a right turn, the operator shall stop and dismount as close as practicable to the left- hand curb or left edge of the highway and complete the turn by crossing the roadway on foot, subject to the restrictions placed on pedestrians in Chapter 5 (commencing with Section 21950).</p>	<b>25</b>
<b>21235 (a)</b>	<p>Operate a motorized scooter unless it is equipped with a brake that will enable the operator to make a braked wheel skid on dry, level, clean pavement.</p>	<b>15</b>

<b>21235 (b)</b>	Operate a motorized scooter on a highway with a speed limit in excess of 25 miles per hour unless the motorized scooter is operated within a Class II or Class IV bikeway, except that a local authority may, by ordinance or resolution, authorize the operation of a motorized scooter outside of a Class II or Class IV bikeway on a highway with a speed limit of up to 35 miles per hour. The 15 mile per hour maximum speed limit for the operation of a motorized scooter specified in Section 22411 applies to the operation of a motorized scooter on all highways, including bikeways, regardless of a higher speed limit applicable to the highway.	<b>13</b>
<b>21235 (c)</b>	Operate a motorized scooter without wearing a properly fitted and fastened bicycle helmet that meets the standards described in Section 21212, if the operator is under 18 years of age.	<b>82</b>
<b>21235 (d)</b>	Operate a motorized scooter without a valid driver's license or instruction permit.	<b>23</b>
<b>21235 (e)</b>	Operate a motorized scooter with any passengers in addition to the operator.	<b>25</b>
<b>21235 (g)</b>	Operate a motorized scooter upon a sidewalk, except as may be necessary to enter or leave adjacent property.	<b>1,067</b>
<b>Total</b>		<b>1,250</b>



# CITY OF LOS ANGELES

CALIFORNIA

**Seleta J. Reynolds**  
GENERAL MANAGER



**ERIC GARCETTI**  
MAYOR

**DEPARTMENT OF TRANSPORTATION**  
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## Attachment 6:



## Dockless Mobility Pilot Program User Survey Results

## Contents

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Who is Riding Shared Mobility in Los Angeles?	4
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Knowledge and Observance of the Rules of the Road	11
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## User Survey Background

In December 2018, the Los Angeles Department of Transportation (LADOT) launched the One Year Dockless On-Demand Personal Mobility Permit (Dockless) program. The Dockless program launched in response to the growing popularity of shared mobility devices. LADOT permitted eight dockless providers (Bird, Bolt, Jump, Lime, Lyft, Sherpa, Spin, and Wheels) for dockless vehicle operation in the City of Los Angeles. The goal of the program is to develop long-term policy solutions and to ensure equitable access to dockless mobility devices.

The City collaborated with the eight permitted providers to survey shared mobility users to gain a comprehensive understanding of the following: 1) who uses dockless mobility devices; 2) where, why, and how often devices are used; 3) whether or not the shared mobility trips replace other modes of transportation; 4) and how familiar the user is with the rules and regulations of riding shared mobility devices in the City.

The City created the user survey and operators distribute surveys quarterly. The survey was conducted from May 15, 2019 to June 11, 2019 (Q1), September 3, 2019 to September 27, 2019 (Q2), and December 14, 2019 to December 17, 2019 (Q3). The City worked with the permitted operators to distribute the survey through electronic resources, typically through mobile applications on personal cell phones upon vehicle use. A total of 7,067 users self-selected to respond to the survey. No incentives were offered for survey completion.

Below is a summary of survey responses, key findings, and survey response data.

## Methodology

The table below shows the number of responses received per quarter. This report analyzes the trends across all quarters from May 2019 to December 2019. All graphs and tables expressed in this report are proportions of the total number of responses received (7,067).

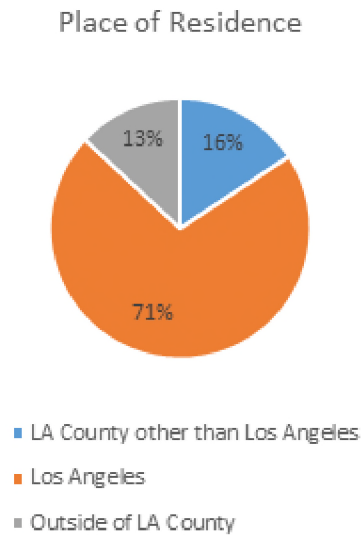
**Table 1: Survey Responses by Quarter**

Quarter (2019)	Responses
Q1	2,030
Q2	3,349
Q3	1,688
TOTAL	7,067

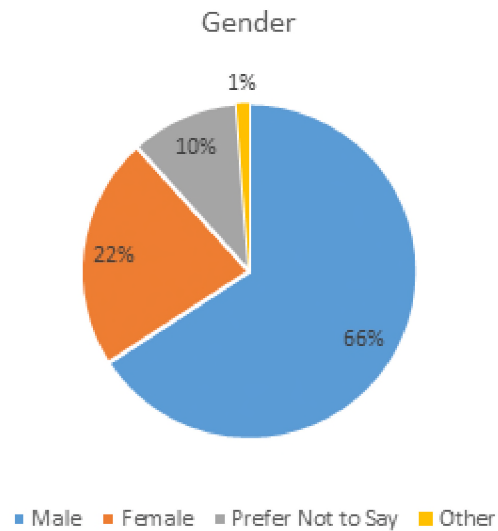
## Who is Riding Shared Mobility in Los Angeles?

Respondents were asked about their home location, age, gender, income, and car ownership.

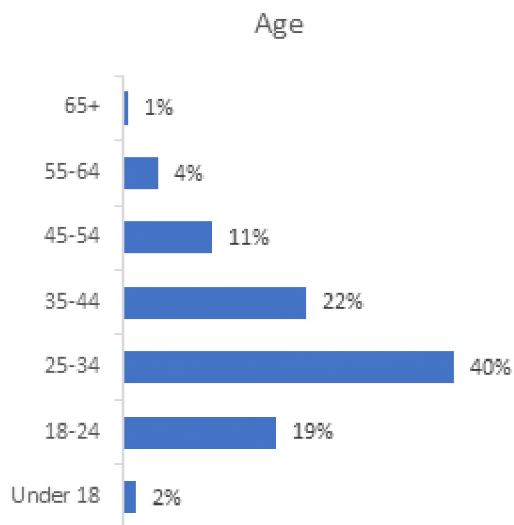
**Figure 1: Respondent Residency**



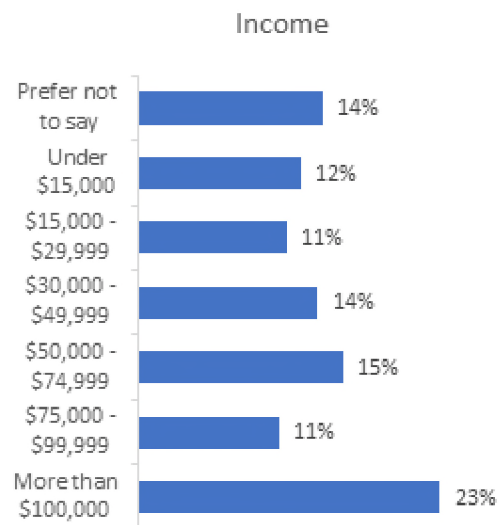
**Figure 2: Respondent Gender**



**Figure 3: Respondent Age**

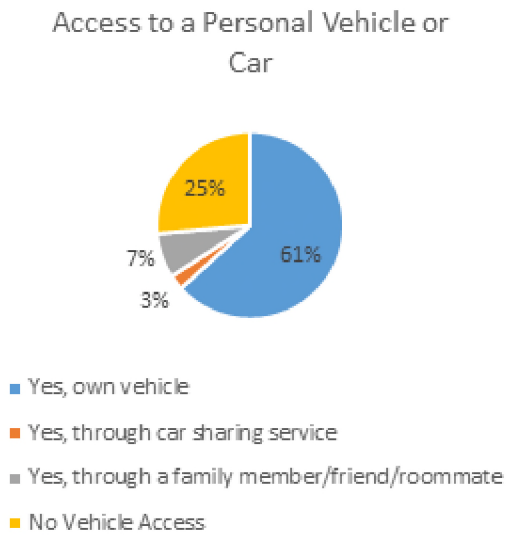


**Figure 4: Respondent Income**





**Figure 5: Respondent Access to a Personal Vehicle or Car**



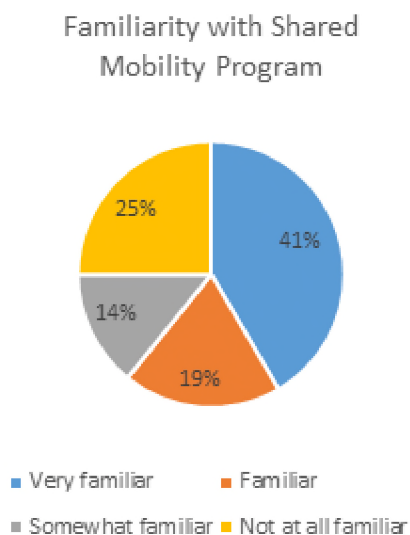
### **Key Findings**

- 30% of riders live outside the City of Los Angeles.
- The most common age groups that ride are **25-34** and **35-44**; **over 60%** of riders are under the age of 44.
- Most riders, 66%, identify as male.
- A majority of riders own a car, however a little more than a quarter of riders have **No Access to a Personal Vehicle**.

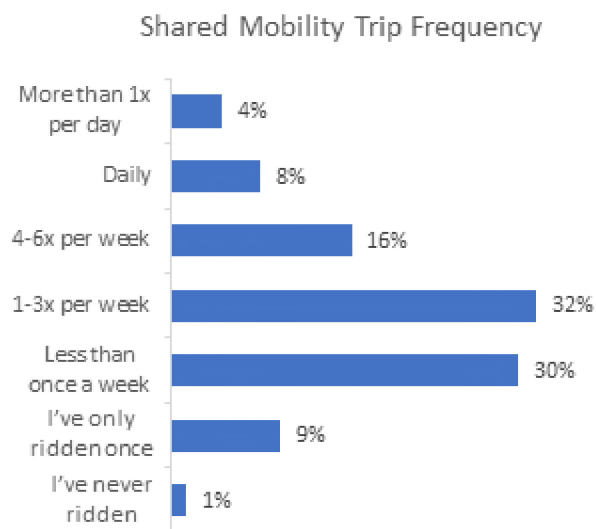
## Travel Habits and Travel Behavior

Survey respondents were asked about their familiarity with the Shared Mobility program. Questions included the purpose of their last trip using shared mobility, what mode would have been used in place of their last trip using shared mobility, and changes in their travel behavior since beginning to use shared mobility devices. Also, LADOT is interested in assessing how shared mobility vehicles interact with the existing transportation network.

**Figure 6: Shared Mobility Familiarity**



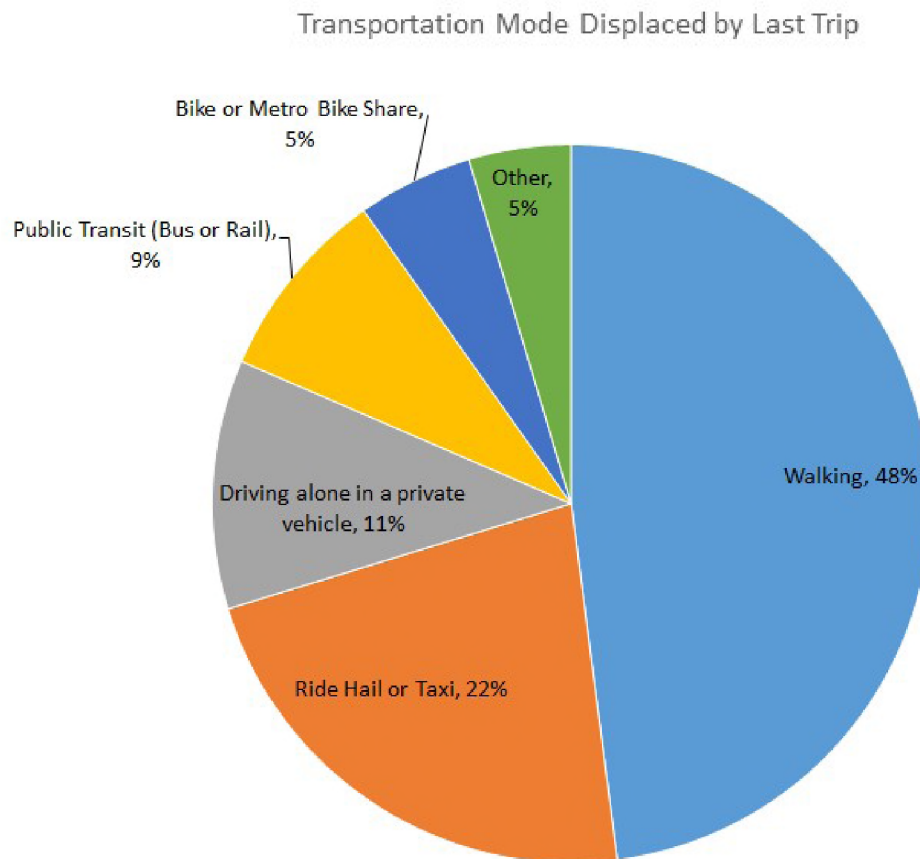
**Figure 7: Shared Mobility Trip Frequency**



### Key Takeaways

- A large percentage of respondents reported that they were **Very Familiar** with shared mobility devices. However, 25% of respondents reported they were **not at familiar** with the Shared Mobility program.
- About 60% of respondents ride at least once a week or more.

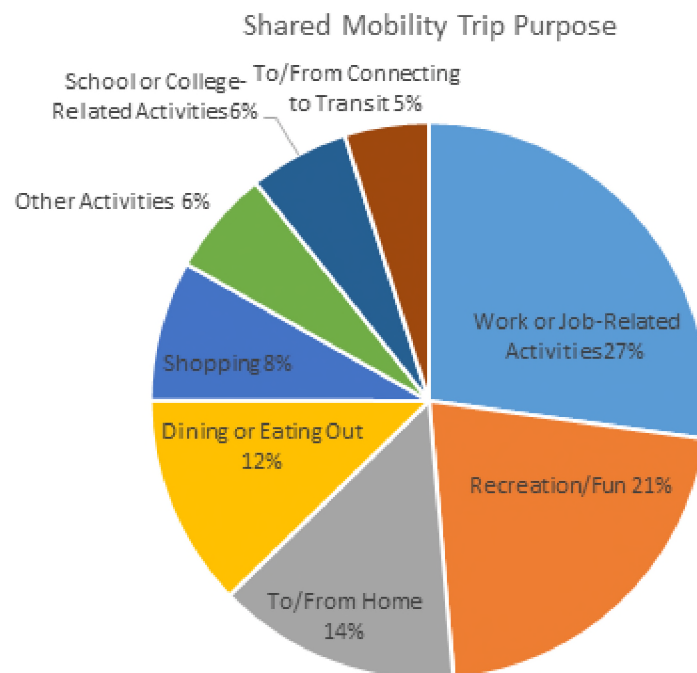
**Figure 8: Transportation Mode Displaced**



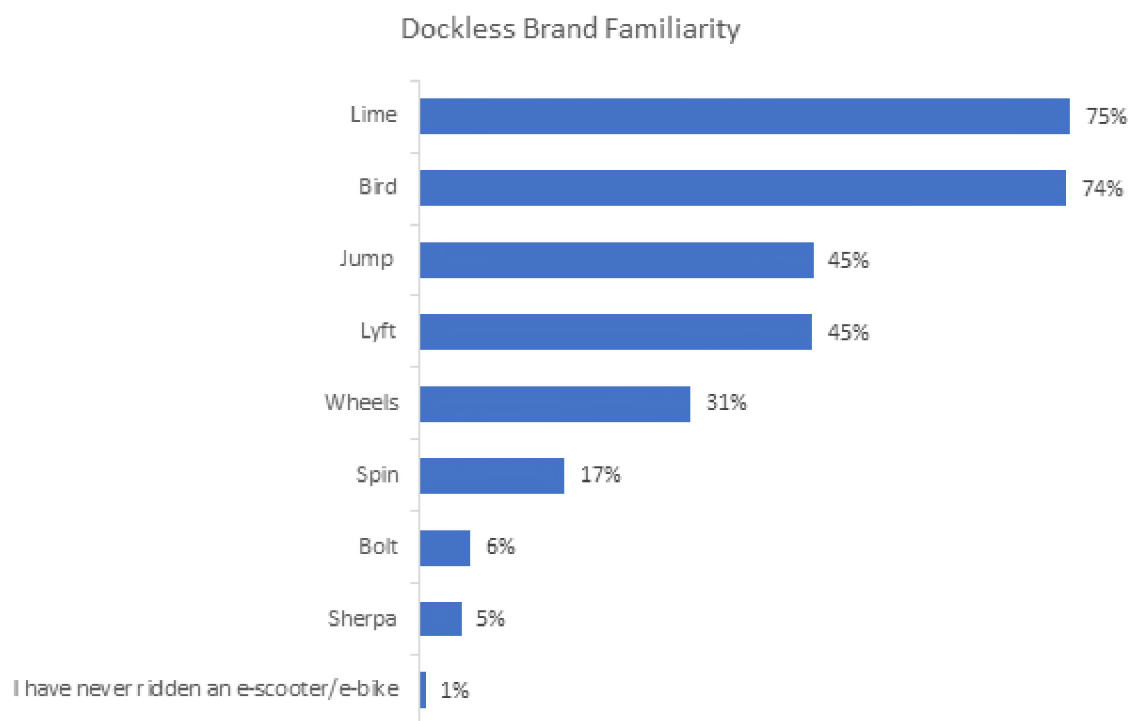
### Key Findings

- E-bike or e-scooter trips are replacing walking trips 48% of the time.
- The program led to some reduction in car trips, with e-bike or e-scooter trips replacing **Ride Hail Service or Taxi/Limo** 22% of the time and **Driving alone in a private vehicle** and 11% of the time.

**Figure 9. Travel Habits and Travel Behavior: Most Recent Trip Purpose**



**Figure 10. Familiarity with Dockless Providers**

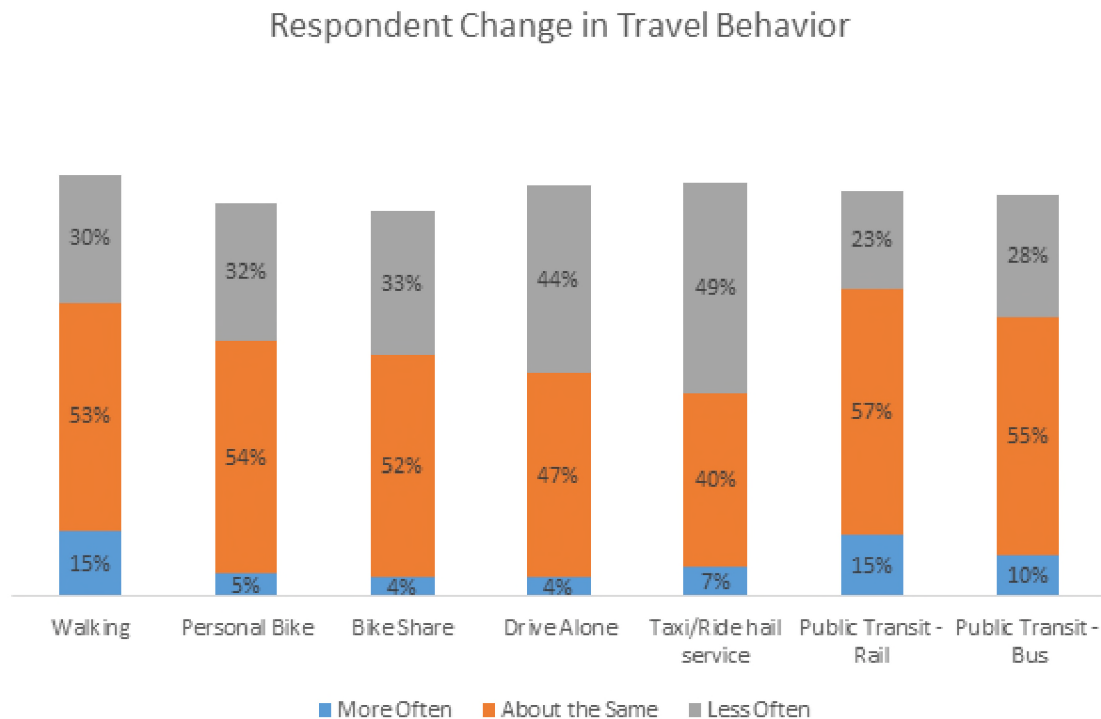




## Key Findings

- Survey respondents reported taking shared mobility trips for various purposes. **Work or Job-Related Activities** and **Recreation/Fun** were the most common trip types, with 27% and 21% respectively.
- The majority of survey respondents are most familiar with Lime and Bird (75% and 74% of respondents are familiar, respectively). The next most well-known dockless providers to users are Jump and Lyft.

**Figure 11: Travel Habits and Travel Behavior: Respondents assessment in changes of other travel modes since the initial use of shared mobility services**



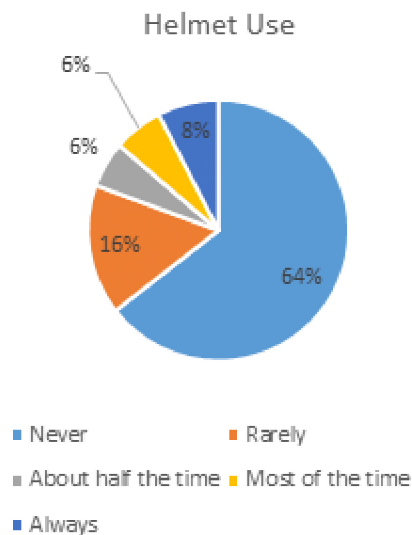
### Key Findings

- Since using shared mobility services, respondents reported using Taxi/ride hail services and driving alone significantly less often.
- Respondents have reported a decrease in use of other transportation options such as biking and bike share, however not as significantly as taxi and driving alone.
- Respondents reported walking and taking public transit more with shared mobility. Shared mobility appears to be supporting active transportation modes of travel.

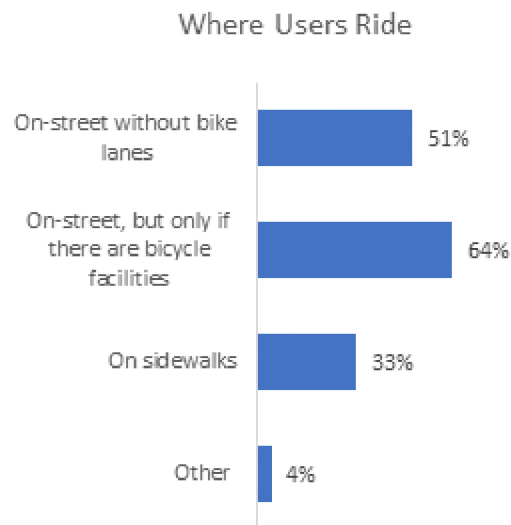
## Knowledge and Observance of the Rules of the Road

Survey respondents were asked about their knowledge of traffic rules, where they tend to ride, and barriers to use.

**Figure 12: Respondent Helmet Use**



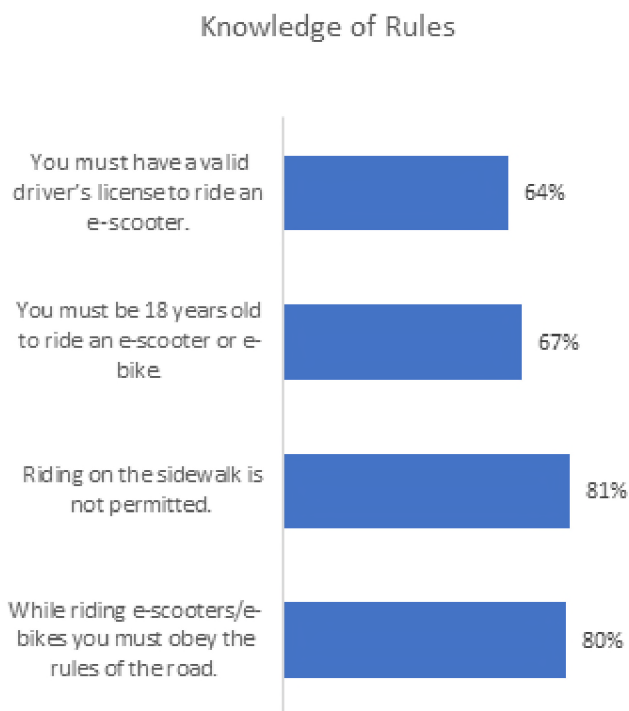
**Figure 13: Respondent Riding Location Preference**



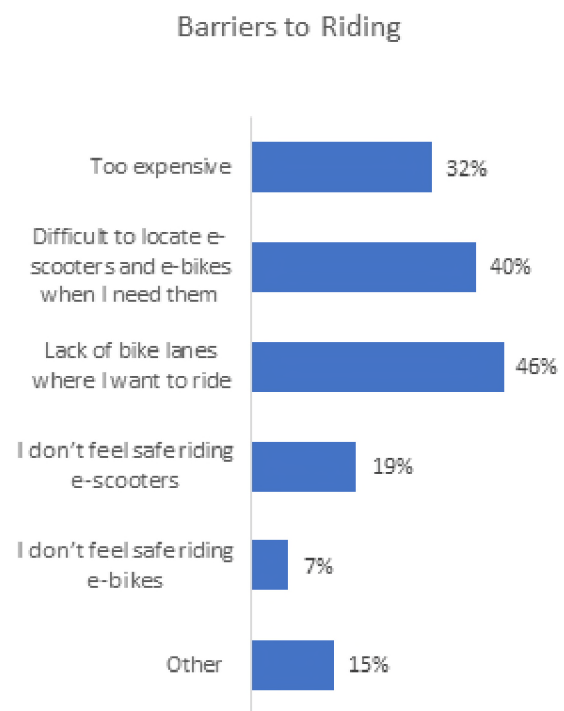
### Key Takeaways

- Most respondents are not using a helmet.
- Riders report they most frequently ride on streets with bicycle lanes and other bicycle facilities.

**Figure 14: Safety, Knowledge of rules, and Rule Following**



**Figure 15: Barriers to Riding**



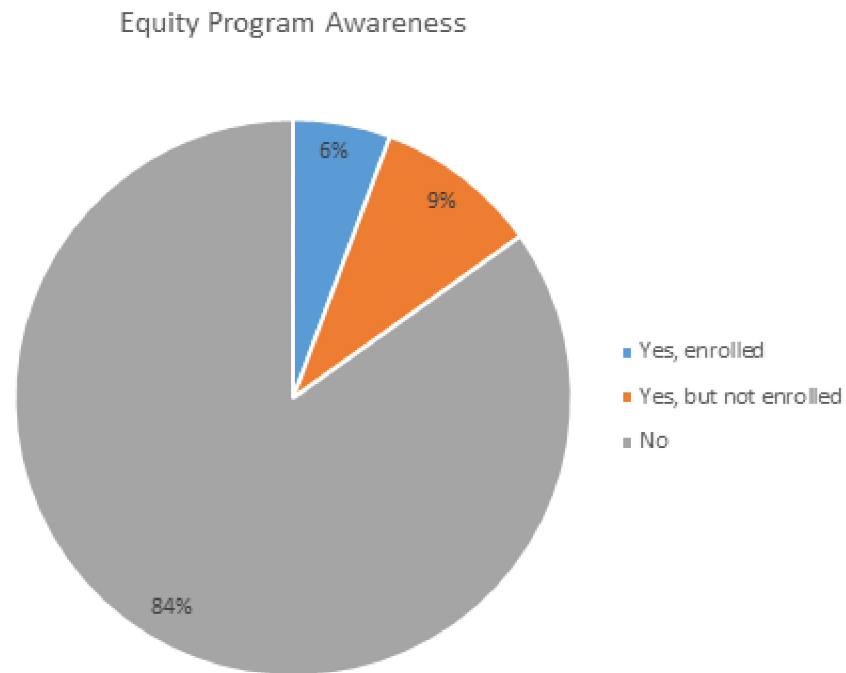
### Key Takeaways

- Nearly 80% of respondents say they are aware that shared mobility users must follow the rules of the road.
- Over 80% of respondents acknowledge riding on the sidewalk is not permitted.
- A considerable number of respondents stated they were aware of rules prohibiting shared mobility devices from the Venice Beach Boardwalk and the Venice Beach Ocean Front.
- There are several barriers to riding. The most common barrier is a lack of bike lanes in areas where respondents ride.
- Riders also reported it is difficult to locate shared mobility devices.
- Almost half of survey respondents reported that helmets are required to ride, despite there being no rule requiring their use.

## Awareness of Equity Programs for Dockless Providers

Survey respondents were asked if they were aware of dockless providers' equity programs that intend to help lower-income communities and individuals without smart phones access shared mobility devices.

**Figure 16: Dockless Equity Program Awareness**



### Key Takeaways

- A majority of survey respondents, 84%, are not aware of providers' equity programs.



## Appendix A. Summary Survey Responses

**Table 1: Number of Responses**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Bird	581	28.6%	423	12.6%	210	12.4%	1214	17.2%
Bolt	0	0.0%	44	1.3%	8	0.5%	52	0.7%
Jump	784	38.6%	445	13.3%	0	0.0%	1229	17.4%
Lime	20	1.0%	820	24.5%	544	32.2%	1384	19.6%
Lyft	162	8.0%	820	24.5%	168	10.0%	1150	16.3%
Sherpa	147	7.2%	64	1.9%	128	7.6%	339	4.8%
Spin	313	15.4%	100	3.0%	238	14.1%	651	9.2%
Wheels	23	1.1%	633	18.9%	392	23.2%	1048	14.8%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 2: Where do you Live?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
LA County other than Los Angeles	319	15.7%	532	15.9%	254	15.0%	1105	15.6%
Los Angeles	1422	70.0%	2387	71.3%	1205	71.4%	5014	70.9%
Outside of LA County	281	13.8%	415	12.4%	224	13.3%	920	13.0%
Blanks	8	0.4%	15	0.4%	5	0.3%	28	0.4%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 3: I identify my gender as...**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Male	1437	70.8%	2118	63.2%	1092	64.7%	4647	65.8%
Female	536	26.4%	704	21.0%	346	20.5%	1586	22.4%
Prefer Not to Say	48	2.4%	474	14.2%	218	12.9%	740	10.5%
Other	0	0.0%	53	1.6%	32	1.9%	85	1.2%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 4: What is your age?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Under 18	32	1.6%	66	2.0%	26	1.5%	124	1.8%
18-24	355	17.5%	627	18.7%	327	19.4%	1309	18.5%
25-34	761	37.5%	1350	40.3%	712	42.2%	2823	39.9%
35-44	459	22.6%	746	22.3%	356	21.1%	1561	22.1%
45-54	252	12.4%	340	10.2%	176	10.4%	768	10.9%
55-64	105	5.2%	138	4.1%	61	3.6%	304	4.3%
65+	23	1.1%	22	0.7%	3	0.2%	48	0.7%
Prefer Not to Say	35	1.7%	51	1.5%	19	1.1%	105	1.5%
Blanks	8	0.4%	9	0.3%	8	0.5%	25	0.4%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 5: What is your income?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
More than \$100,000	501	24.7%	746	22.3%	366	21.7%	1613	22.8%
\$75,000 - \$99,999	221	10.9%	335	10.0%	191	11.3%	747	10.6%
\$50,000 - \$74,999	324	16.0%	528	15.8%	238	14.1%	1090	15.4%
\$30,000 - \$49,999	263	13.0%	462	13.8%	231	13.7%	956	13.5%
\$15,000 - \$29,999	178	8.8%	395	11.8%	218	12.9%	791	11.2%
Under \$15,000	223	11.0%	421	12.6%	222	13.2%	866	12.3%
Prefer not to say	314	15.5%	454	13.6%	216	12.8%	984	13.9%
Blanks	6	0.3%	8	0.2%	6	0.4%	20	0.3%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 6: Do you own or have Access to a motor vehicle?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes, own vehicle	1300	64.0%	1976	59.0%	1037	61.4%	4313	61.0%
Yes, through car sharing service	42	2.1%	87	2.6%	49	2.9%	178	2.5%
Yes, through a family member/friend/roommate	142	7.0%	249	7.4%	136	8.1%	527	7.5%
No Vehicle Access	477	23.5%	901	26.9%	421	24.9%	1799	25.5%
Prefer not to say	64	3.2%	121	3.6%	39	2.3%	224	3.2%
Blanks	5	0.2%	15	0.4%	6	0.4%	26	0.4%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 7: How familiar are you with the Dockless Mobility Program?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Very familiar	826	40.7%	1372	41.0%	731	43.3%	2929	41.4%
Familiar	401	19.8%	643	19.2%	314	18.6%	1358	19.2%
Somewhat familiar	305	15.0%	466	13.9%	227	13.4%	998	14.1%
Not at all familiar	492	24.2%	860	25.7%	409	24.2%	1761	24.9%
Blanks	6	0.3%	8	0.2%	7	0.4%	21	0.3%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 8: Which brand(s) of e-scooter/e-bike have you ridden in Los Angeles? (select all that apply)**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Lime	1291	63.6%	2660	79.4%	1320	78.2%	5271	74.6%
Bird	1568	77.2%	2389	71.3%	1283	76.0%	5240	74.2%
Jump	1192	58.7%	1380	41.2%	622	36.8%	3194	45.2%
Lyft	915	45.1%	1388	41.4%	886	52.5%	3189	45.1%
Wheels	414	20.4%	1182	35.3%	600	35.5%	2196	31.1%
Spin	417	20.5%	389	11.6%	364	21.6%	1170	16.6%
Bolt	33	1.6%	225	6.7%	158	9.4%	416	5.9%
Sherpa	118	5.8%	91	2.7%	133	7.9%	342	4.8%
Not sure	18	0.9%	26	0.8%	11	0.7%	55	0.8%
I have never ridden an e-scooter/e-bike	15	0.7%	21	0.6%	13	0.8%	49	0.7%

**Table 9: In the past month, how often did you ride a shared e-scooter/e-bike?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
More than 1x per day	91	4.5%	158	4.7%	56	3.3%	305	4.3%
Daily	130	6.4%	309	9.2%	102	6.0%	541	7.7%
4-6x per week	303	14.9%	559	16.7%	238	14.1%	1100	15.6%
1-3x per week	654	32.2%	1079	32.2%	497	29.4%	2230	31.6%
Less than once a week	604	29.8%	927	27.7%	589	34.9%	2120	30.0%
I've only ridden once	212	10.4%	274	8.2%	174	10.3%	660	9.3%
I've never ridden	30	1.5%	32	1.0%	27	1.6%	89	1.3%
Blanks	6	0.3%	11	0.3%	5	0.3%	22	0.3%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 10: Since first using shared e-scooters/e-bikes, how has your use of the following transportation options changed? (If your behavior has not changed or if you have never used one of the below options, select “About the same.”)**

	Q1		Q2		Q3		Total	
<b>Walking</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>
More Often	325	16.0%	498	14.9%	264	15.6%	1087	15.4%
About the Same	1116	55.0%	1749	52.2%	882	52.3%	3747	53.0%
Less Often	545	26.8%	1045	31.2%	511	30.3%	2101	29.7%
Skipped	44	2.2%	57	1.7%	31	1.8%	132	1.9%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

	Q1		Q2		Q3		Total	
<b>Personal Bike</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>
More Often	122	6.0%	176	5.3%	77	4.6%	375	5.3%
About the Same	1111	54.7%	1796	53.6%	918	54.4%	3825	54.1%
Less Often	621	30.6%	1082	32.3%	567	33.6%	2270	32.1%
Skipped	176	8.7%	295	8.8%	126	7.5%	597	8.4%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

	Q1		Q2		Q3		Total	
<b>Bike Share</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>
More Often	76	3.7%	160	4.8%	74	4.4%	310	4.4%
About the Same	1061	52.3%	1707	51.0%	888	52.6%	3656	51.7%
Less Often	605	29.8%	1165	34.8%	590	35.0%	2360	33.4%
Skipped	288	14.2%	317	9.5%	136	8.1%	741	10.5%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

	Q1		Q2		Q3		Total	
<b>Drive Alone</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>
More Often	81	4.0%	156	4.7%	79	4.7%	316	4.5%
About the Same	1024	50.4%	1545	46.1%	779	46.1%	3348	47.4%
Less Often	820	40.4%	1510	45.1%	770	45.6%	3100	43.9%
Skipped	105	5.2%	138	4.1%	60	3.6%	303	4.3%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>



	Q1		Q2		Q3		Total	
<b>Taxi/Ride hail service</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>
More Often	149	7.3%	244	7.3%	113	6.7%	506	7.2%
About the Same	901	44.4%	1294	38.6%	635	37.6%	2830	40.0%
Less Often	889	43.8%	1675	50.0%	894	53.0%	3458	48.9%
Skipped	91	4.5%	136	4.1%	46	2.7%	273	3.9%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

	Q1		Q2		Q3		Total	
<b>Public Transit - Rail</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>
More Often	296	14.6%	476	14.2%	253	15.0%	1025	14.5%
About the Same	1185	58.4%	1865	55.7%	988	58.5%	4038	57.1%
Less Often	406	20.0%	804	24.0%	382	22.6%	1592	22.5%
Skipped	143	7.0%	204	6.1%	65	3.9%	412	5.8%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

	Q1		Q2		Q3		Total	
<b>Public Transit - Bus</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>	<b>Count</b>	<b>Percent</b>
More Often	197	9.7%	328	9.8%	173	10.2%	698	9.9%
About the Same	1147	56.5%	1828	54.6%	924	54.7%	3899	55.2%
Less Often	528	26.0%	978	29.2%	504	29.9%	2010	28.4%
Skipped	158	7.8%	215	6.4%	87	5.2%	460	6.5%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 11: Thinking of your most recent trip, how did you get to the e-scooter/e-bike?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Walking	1780	87.7%	2920	87.2%	1465	86.8%	6165	87.2%
Public Transit - Bus	36	1.8%	74	2.2%	35	2.1%	145	2.1%
Driving alone in a private vehicle	43	2.1%	82	2.4%	52	3.1%	177	2.5%
Public Transit - Rail	65	3.2%	119	3.6%	53	3.1%	237	3.4%
Taxi/Ride Hail Service (e.g., Uber, Lyft)	23	1.1%	38	1.1%	27	1.6%	88	1.2%
Carpool/Vanpool	17	0.8%	33	1.0%	16	0.9%	66	0.9%
Metro Bike Share	17	0.8%	18	0.5%	7	0.4%	42	0.6%
Other	25	1.2%	20	0.6%	14	0.8%	59	0.8%
Own personal bike	15	0.7%	23	0.7%	11	0.7%	49	0.7%
Blanks	9	0.4%	22	0.7%	8	0.5%	39	0.6%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 12: Again thinking of your most recent trip, what was your primary trip purpose?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Child Care Activities	17	0.8%	16	0.5%	5	0.3%	38	0.5%
Healthcare Appointment	46	2.3%	68	2.0%	27	1.6%	141	2.0%
Other Activities	79	3.9%	123	3.7%	50	3.0%	252	3.6%
To/From Connecting to Transit	89	4.4%	163	4.9%	93	5.5%	345	4.9%
School or College-Related Activities	118	5.8%	183	5.5%	106	6.3%	407	5.8%
Shopping	169	8.3%	262	7.8%	141	8.4%	572	8.1%
Dining or Eating Out	273	13.4%	386	11.5%	207	12.3%	866	12.3%
To/From Home	286	14.1%	489	14.6%	217	12.9%	992	14.0%
Recreation/Fun	471	23.2%	697	20.8%	338	20.0%	1506	21.3%
Work or Job-Related Activities	477	23.5%	940	28.1%	494	29.3%	1911	27.0%
Blanks	5	0.2%	22	0.7%	10	0.6%	37	0.5%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 13: If an e-scooter/e-bike was not available how would you have commuted instead?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carshare	7	0.3%	11	0.3%	8	0.5%	26	0.4%
Motorcycle / moped	14	0.7%	17	0.5%	14	0.8%	45	0.6%
Taxi/Hired car/Limo	21	1.0%	65	1.9%	39	2.3%	125	1.8%
Public Transit - Rail	31	1.5%	67	2.0%	44	2.6%	142	2.0%
Other	34	1.7%	47	1.4%	19	1.1%	100	1.4%
Carpool/Vanpool	37	1.8%	55	1.6%	24	1.4%	116	1.6%
Metro Bike Share	48	2.4%	47	1.4%	30	1.8%	125	1.8%
Own personal bike	65	3.2%	124	3.7%	52	3.1%	241	3.4%
Public Transit - Bus	131	6.5%	230	6.9%	114	6.8%	475	6.7%
Driving alone in a private vehicle	257	12.7%	338	10.1%	198	11.7%	793	11.2%
Ride Hail Service	404	19.9%	669	20.0%	377	22.3%	1450	20.5%
Walking	976	48.1%	1654	49.4%	756	44.8%	3386	47.9%
Blanks	5	0.2%	25	0.7%	13	0.8%	43	0.6%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 14: In general, how often do you wear a helmet while riding an e-scooter/e-bike?**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Never	1301	64.1%	2130	63.6%	1095	64.9%	4526	64.0%
Rarely	312	15.4%	554	16.5%	267	15.8%	1133	16.0%
About half the time	123	6.1%	189	5.6%	87	5.2%	399	5.6%
Most of the time	112	5.5%	211	6.3%	108	6.4%	431	6.1%
Always	173	8.5%	237	7.1%	122	7.2%	532	7.5%
Blanks	9	0.4%	28	0.8%	9	0.5%	46	0.7%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>

**Table 15: When you ride an e-scooter/e-bike where do you tend to ride? (Select all that apply)**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Other	96	4.7%	159	4.7%	63	3.7%	318	4.5%
On sidewalks	660	32.5%	1057	31.6%	589	34.9%	2306	32.6%
On-street, but only if there are bicycle facilities	1309	64.5%	2151	64.2%	1073	63.6%	4533	64.1%
On-street without bike lanes	991	48.8%	1688	50.4%	918	54.4%	3597	50.9%

**Table 16: To your knowledge which of the following rules apply to e-scooters/e-bikes in Los Angeles? (Select all that apply)**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
You must have a valid driver's license to ride an e-scooter.	1373	67.6%	2051	61.2%	1071	63.4%	4495	63.6%
Helmets are required to ride an e-scooter or e-bike.	995	49.0%	1661	49.6%	763	45.2%	3419	48.4%
You must be 18 years old to ride an e-scooter or e-bike.	1395	68.7%	2240	66.9%	1129	66.9%	4764	67.4%
Riding on the sidewalk is not permitted.	1614	79.5%	2742	81.9%	1368	81.0%	5724	81.0%
Riding on the Venice Ocean Front Walk is prohibited.	842	41.5%	1442	43.1%	723	42.8%	3007	42.5%
Riding on the Venice Beach Boardwalk is prohibited.	902	44.4%	1519	45.4%	777	46.0%	3198	45.3%
While riding e-scooters/e-bikes you must obey the rules of the road.	1617	79.7%	2662	79.5%	1350	80.0%	5629	79.7%
I am not familiar with the rules of riding e-scooters/e-bikes.	206	10.1%	324	9.7%	151	8.9%	681	9.6%

**Table 17: What barriers, if any, prevent you from using e-scooters/e-bikes in Los Angeles as much as you would like? (Select all that apply)**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Too expensive	524	25.8%	1161	34.7%	608	36.0%	2293	32.4%
Difficult to locate e-scooters and e-bikes when I need them	863	42.5%	1271	38.0%	719	42.6%	2853	40.4%
Lack of bike lanes where I want to ride	914	45.0%	1531	45.7%	776	46.0%	3221	45.6%
I don't feel safe riding e-scooters	399	19.7%	630	18.8%	303	18.0%	1332	18.8%
I don't feel safe riding e-bikes	139	6.8%	239	7.1%	95	5.6%	473	6.7%
Other	332	16.4%	482	14.4%	234	13.9%	1048	14.8%

**Table 18: Are you aware of alternative (equity) programs provided? (Across all operators)**

	Q1		Q2		Q3		Total	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Yes, enrolled	94	4.6%	205	6.1%	98	5.8%	397	5.6%
Yes, but not enrolled	167	8.2%	268	8.0%	233	13.8%	668	9.5%
No	1762	86.8%	2855	85.2%	1347	79.8%	5964	84.4%
Blanks	7	0.3%	21	0.6%	10	0.6%	38	0.5%
<b>Total</b>	<b>2030</b>	<b>100%</b>	<b>3349</b>	<b>100%</b>	<b>1688</b>	<b>100%</b>	<b>7067</b>	<b>100.0%</b>



## Appendix B. Survey Questions

Help the City of Los Angeles evaluate the Shared Mobility Pilot Program by taking this short survey to tell about your experience in using shared e-scooter and e-bike services in Los Angeles.

1. Where do you live
  - ☐ Outside of LA County
  - ☐ LA County other than Los Angeles
  - ☐ Los Angeles (Please enter your home Zip Code)
2. I identify my gender as...
  - ☐ Female
  - ☐ Male
  - ☐ Prefer not to say
  - ☐ I identify my gender as (please fill in the blank)...
3. What is your age?
  - ☐ Under 18
  - ☐ 18-24
  - ☐ 25-34
  - ☐ 35-44
  - ☐ 45-54
  - ☐ 55-64
  - ☐ 65+
  - ☐ Prefer not to say
4. What is your income?
  - ☐ Under \$15,000
  - ☐ Between \$15,000 and \$29,999
  - ☐ Between \$30,000 and \$49,999
  - ☐ Between \$50,000 and \$74,999
  - ☐ Between \$75,000 and \$99,999
  - ☐ More than \$100,000
  - ☐ Prefer not to say
5. Do you own or have access to a motor vehicle (like a car, van, truck, or motorcycle) that you can drive?
  - ☐ Yes, my own vehicle
  - ☐ Yes, through a family member/friend/roommate
  - ☐ Yes, through a car sharing service like Car2Go, IONIC, or Zipcar
  - ☐ No, I don't have regular access to a motor vehicle that I can drive
  - ☐ Prefer not to say

6. The City of Los Angeles began a shared mobility pilot with shared e-scooters and e-bikes (Bird, Bolt, Jump, Lime, Lyft, Sherpa, Spin, Wheels). How familiar would you say you are with this program?
- ☐ Very familiar
  - ☐ Familiar
  - ☐ Somewhat familiar
  - ☐ Not at all familiar
7. Which brand(s) of e-scooter/e-bike have you ridden in Los Angeles? (Select all that apply)
- ☐ Bird
  - ☐ Bolt
  - ☐ Jump
  - ☐ Lime
  - ☐ Lyft
  - ☐ Sherpa
  - ☐ Spin
  - ☐ Wheels
  - ☐ I have never ridden an e-scooter/e-bike
  - ☐ Not sure
8. In the past month, how often did you ride a shared e-scooter/e-bike?
- ☐ I've only ridden once
  - ☐ Occasionally, but less than once per week
  - ☐ 1-3x per week
  - ☐ 4-6x per week
  - ☐ Daily
  - ☐ More than 1x per day
  - ☐ I've never ridden an e-scooter/e-bike
9. How would you rate [Insert Provider Name] for device availability (on a scale of 1-5 with 5 being the best and 1 being the worst):  
[Insert 1-5 options]
10. How would you rate [Insert Provider Name] for device maintenance cleanliness (on a scale of 1-5 with 5 being the best and 1 being the worst):  
[Insert 1-5 options]
11. How would you rate [Insert Provider Name] for customer service (on a scale of 1-5 with 5 being the best and 1 being the worst):  
[Insert 1-5 options]

12. Since first using shared e-scooters/e-bikes, how has your use of the following transportation options changed? (If your behavior has not changed or if you have never used one of the below options, select "About the same.")

[Insert options: Less often, About the same, More often]

- ☐ Walking
- ☐ Own personal bike
- ☐ Metro Bike Share
- ☐ Driving alone in a private vehicle
- ☐ Taxi/Ride Hail Service (e.g., Uber, Lyft)
- ☐ Public Transit - Rail
- ☐ Public Transit - Bus

13. Thinking of your most recent trip, how did you get to the e-scooter/e-bike?

- ☐ Walking
- ☐ Own personal bike
- ☐ Metro Bike Share
- ☐ Driving alone in a private vehicle
- ☐ Carpool/Vanpool
- ☐ Taxi/Ride Hail Service (e.g., Uber, Lyft)
- ☐ Public Transit - Rail
- ☐ Public Transit - Bus
- ☐ Other (please specify)

14. Again thinking of your most recent trip, what was your primary trip purpose?

- ☐ Work or job-related activities
- ☐ School or college-related activities
- ☐ Shopping
- ☐ Dining or eating out
- ☐ Healthcare appointment
- ☐ Child care activities
- ☐ Recreation/Fun
- ☐ To/From Home
- ☐ To/from connecting to transit
- ☐ Other activities

15. For your most recent trip, if an e-scooter/e-bike was not available what mode of transportation would you have used instead?

- ☐ Walking
- ☐ Own personal bike
- ☐ Metro Bike Share
- ☐ Driving alone in a private vehicle
- ☐ Carpool/Vanpool
- ☐ Motorcycle/moped
- ☐ Taxi/Hired car/Limo
- ☐ Ride Hail Service (e.g., Uber, Lyft)
- ☐ Carshare (e.g. Zipcar, WaiveCar)

- Public Transit - Rail
- Public Transit - Bus
- Other (please specify)

16. In general, how often do you wear a helmet while riding an e-scooter/e-bike?

- Always
- Most of the time
- About half the time
- Rarely
- Never

17. When you ride an e-scooter/e-bike where do you tend to ride? (Select all that apply)

- On-street without bike lanes
- On-street, but only if there are bicycle facilities (bike lanes, protected bike lanes, greenways etc.)
- On sidewalks
- Other

18. To your knowledge which of the following rules apply to e-scooters/e-bikes in Los Angeles?  
(Select all that apply)

- You must have a valid driver's license to ride an e-scooter.
- Helmets are required to ride an e-scooter or e-bike.
- You must be 18 years old to ride an e-scooter or e-bike.
- Riding on the sidewalk is not permitted.
- Riding on the Venice Ocean Front Walk is prohibited.
- Riding on the Venice Beach Boardwalk is prohibited.
- While riding e-scooters/e-bikes you must obey the rules of the road.
- I am not familiar with the rules of riding e-scooters/e-bikes.

19. What barriers, if any, prevent you from using e-scooters/e-bikes in Los Angeles as much as you would like? (Select all that apply)

- Too expensive
- Difficult to locate e-scooters and e-bikes when I need them
- Lack of bike lanes where I want to ride
- I don't feel safe riding e-scooters
- I don't feel safe riding e-bikes
- Other

20. Are you aware of alternative (equity) programs provided by [Insert Provider Name]?

- Yes, enrolled
- Yes, but not enrolled
- No

Attachment 7:

**PERMIT EXTENSION FEES**

- Six-Month Permit Fee of \$10,000 (non- refundable)
- Six-Month Permit vehicle fee of \$65/vehicle (non-refundable)
- Fleet size: 10,500 Maximum

TOTAL FEES CALCULATION:

**Non-DAC subtotal example:** 3,000 vehicles x \$65 (vehicle fee) = \$195,000

+ \$10,000 (Permit Fee) = \$205,000

# of vehicles \_\_\_\_\_ X \$65 (vehicle fee)= \_\_\_\_\_ + \$10,000.00 (Permit Fee) = \_\_\_\_\_

\* Operators may be allowed to add up to an additional 2,500 vehicles in disadvantaged communities (DAC) that scored at or above the 75<sup>th</sup> percentile as defined by the CalEnviroScreen 3.0. Operators may also be allowed to add an additional 5,000 vehicles in DAC's within the San Fernando Valley. Vehicles deployed in these communities will have a rate of **\$20.00/vehicle**.

**DAC subtotal example:** 7,500 vehicles x \$20.00 = \$150,000

Vehicles in San Fernando Valley (DAC) \_\_\_\_\_ (5,000 Max)

Vehicles in Non-San Fernando Valley (DAC) \_\_\_\_\_ (2,500 Max)

Total # DAC Vehicles \_\_\_\_\_ x \$20.00 = \_\_\_\_\_

**Total Example:** \$195,000 Non-DAC subtotal + \$150,000 DAC + \$10,000 Permit Fee = \$355,000

Non-DAC subtotal + \_\_\_\_\_ + DAC subtotal \_\_\_\_\_ + \$10,000 Permit Fee = \_\_\_\_\_