### Appendix A – User Survey

The SFMTA requires both its stationless permit programs to conduct a user survey to better understand user profile, mode choice, and travel patterns.<sup>1</sup> As part of the pilot programs, permittees were required to survey a sample size that is representative of active users to allow for statistically significant findings.<sup>2</sup> The SFMTA is including the results of its other permitted stationless shared mobility provider – JUMP – for comparison purposes.<sup>3</sup> All percentages discussed in the text represent the combined responses of all three stationless shared mobility providers unless otherwise noted.



#### Question 1 – What was the purpose of your most recent trip?

The greatest share of survey respondents used shared stationless devices to travel to or from work or school (greater than 40%) on their most recent trip. The fewest number of respondents used shared scooters or e-bikes for fun or recreation, indicating that most trips were taken on these devices for utilitarian purposes.

<sup>&</sup>lt;sup>1</sup> Surveys were distributed from January 7 through February 5, 2019 and were available in English, Spanish, Chinese, and Tagalog.

<sup>&</sup>lt;sup>2</sup> The SFMTA created and hosted the survey, while each permittee administered the survey via email to anyone who used their service from October to December 2018. The required sample sizes allow for a confidence level of 95% and at most a margin of error of 4%.

<sup>&</sup>lt;sup>3</sup> Because this survey was distributed via email on an opt-in basis, data and findings should be interpreted with appropriate caveats compared with random sampling. Since the survey is not a simple random sample, survey results are subject to selection bias. Furthermore, because a survey respondent could use all three services, there is no guarantee that respondents are not double counted between surveys.

# Question 2 – If this service was not available for your most recent trip, what mode of transportation would you have used?



Most respondents (36% overall) indicated they would have taken a ride-hailing vehicle had the stationless device they rode not been available for their most recent trip. 26% of respondents would have walked, with the largest shift from walking reported amongst Skip (31%) and Scoot (29%) respondents, versus 14% of JUMP respondents.

22% of JUMP survey respondents would have taken transit had the service not been available, versus 13% of Skip respondents and 11% of Scoot respondents. However, a crosstabs analysis indicates that 27.5% of scooter survey respondents would not have otherwise taken transit but used the service to connect to transit (induced transit trips). This analysis shows that the availability of shared scooters induced around four times as many transit trips as were replaced by these services, indicating that shared scooters facilitated a net increase in transit trips by serving as a last-mile solution.<sup>4</sup> Additional information on scooters and transit use is found below (Question 4).

<sup>&</sup>lt;sup>4</sup> Nearly 28% of scooter survey respondents reported a new transit trip on their last scooter journey when they would not have otherwise taken transit if scooters weren't available. This indicates that scooters facilitate a first/last mile connection to transit.

Question 3 – For your most recent trip, why did you choose this service over another mode? Select up to three reasons. <sup>5</sup>



The top three reasons that respondents chose to take a shared stationless service over other modes were because they were more convenient (73%), quicker (59%), and/or affordable (43%) than alternatives.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Note: for this question, users were able to select up to three responses.



# Question 4 - For your most recent trip, did you use the service to get to or from public transportation?

36% of Skip respondents, 29% of Scoot respondents, and 19% of JUMP respondents used each respective service to get to or from public transportation on their most recent trip. The analysis discussed under Question 2 shows that the availability of shared scooters induced around four times as many transit trips as were replaced by these services, indicating that shared scooters facilitated a net increase in transit trips by serving as a last-mile solution.



#### Question 5 - In general, how often do you use the service?

Most respondents report using a given service weekly (36%) or monthly (32%). Fewer respondents use that service rarely (23%) or daily (8%).



#### Question 6 - In general, how often do you take public transportation?

Most survey respondents use public transportation weekly (32%) or daily (31%). The highest percentage of Skip and Scoot respondents use public transit daily (38% and 30%, respectively). Only 7% of survey respondents reported never using public transportation.



#### Question 7 - What gender do you identify with?

79% of survey respondents identified as male. 20% of respondents identified as female, while 1% identified as another gender.



# Question 8 - What ethnic groups do you consider yourself a member of? Select all that apply.<sup>6</sup>

The largest group of survey respondents (66%) self-identified as White, with 17% identifying as Asian. 9% of respondents identified as Hispanic/Latino.<sup>6</sup>



#### Question 9 – What is your age?

Most survey respondents were in the 25-34 (48%) or 35-44 (24%) age range.

<sup>&</sup>lt;sup>6</sup> Note: for this question, users were able to select more than one answer.

#### Question 10 – What is your home ZIP code?

Most survey respondents (75%) live in San Francisco, while 16% live in other parts of the Bay Area, and 9% live outside of the Bay Area. The ZIP codes with the greatest number of respondents were 94110 (Mission), 94107 (South of Market (SoMa), Potrero Hill, & Dogpatch), and 94103 (Central & Western SoMa and Mid-Market). The highest density of respondents was in the 94102 (Hayes Valley & Tenderloin), 94109 (Nob Hill & Russian Hill), 94105 (Rincon Hill & South Beach), and 94158 (Mission Bay) ZIP codes.





#### Question 11—How long have you lived in San Francisco?<sup>7</sup>

Most survey respondents have lived in San Francisco 1-5 years (39%), 6-10 years (23%), or 16 years or more (18%). 13% of respondents have lived in San Francisco for less than one year.

#### Question 12—What is your annual household income?



34% of survey respondents had an annual household income greater than \$200,000. 20% reported a household income of \$100,001 to \$150,000, while 15% reported a household income of \$150,001 to \$200,000. 31% of respondents had a household income below \$100,000.

<sup>&</sup>lt;sup>7</sup> This question was only asked of users who entered a San Francisco ZIP code for Question 10.



#### Question 13 - In total, how many people live in your household?

41% of survey respondents lived in a household of two people, while 23% lived alone. 36% of respondents lived in a household of three or more people.



#### Question 14 - What is the primary language spoken in your household?

Most survey respondents (93%) indicated that English was the primary language spoken in their household.



# Question 15 - Do you have a disability or health condition that affects the travel choices you make in San Francisco?

Three percent of survey respondents indicated that they had a disability or health condition that affects the travel choices they make in San Francisco.





For those that indicated in Question 15 that they had a disability or health condition that affects the travel choices they make in San Francisco, 43% cited a mobility disability and 36% cited a disability other than blindness or vision impairment, hearing impairment, or cognitive or mental impairment.<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup> This question was only asked of users who indicated having a disability or health condition in Question 15. Note: for this question, users were able to select more than one answer.

## Appendix B – Proposal Implementation Report Cards

The SFMTA's assessment of each permittee's performance relative to proposals submitted in their application is detailed in the tables below. **Satisfactory** ratings were given to permittees who followed through on most of the proposals submitted in their application in a given topic area. **Incomplete** ratings were given to permittees in areas where continued progress is needed to ensure application proposals are implemented to the SFMTA's satisfaction. For more detailed updates on the implementation of proposals from the permittees' applications, see Appendix C – 3 Month Compliance Reports.

GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Safety	Strategies to educate and train users should result in safe operations of scooters by riders.	<ul> <li>Mandatory instructional videos</li> <li>Free in-person classes</li> <li>Field staff to proactively approach riders with safety reminders</li> </ul>	<ul> <li>Instructional videos available</li> <li>Free in-person classes</li> <li>Field staff proactively approach riders with safety reminders</li> <li>Scoot has reported that six complaints were made to the company about sidewalk riding as of February 2019; 2 were submitted to SFMTA via 311.</li> </ul>	Scoot's in-person and in-app safety training helps promote user behavior that is generally compliant with laws and regulations. Additionally, field staff routinely interact with the public, helping to solve problems and educate individuals about the program.	Satisfactory
	Strategies to promote and distribute helmets should result in helmet use by riders.	<ul> <li>Incorporating lock-box to provide helmet with rental</li> <li>Free helmet giveaways</li> </ul>	<ul> <li>Scoot originally proposed incorporating lock-box to provide helmet with rental, but does not plan to move forward at this time</li> <li>Scoot has distributed 532 free helmets as of March 14 2019</li> </ul>	Providing helmets with rental (as originally proposed) is the surest way to ensure consistent helmet use. However, Scoot has demonstrated a good faith effort to distribute helmets to users. While the SFMTA acknowledges that state law has changed, the agency still believes that helmet use should be encouraged.	Satisfactory

#### SFMTA Performance Evaluation and Rating, Scoot



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Disabled	Strategies to ensure properly parked scooters, including any commitments to locking or tethering, should result in parking that does not block the right of way.	<ul> <li>Tethering/locking mechanism in development with production partner; "would positively invite the opportunity to work with the SFMTA on a tethering/locking pilot."</li> <li>Field staff will educate users who park improperly</li> <li>Will encourage off-street parking in private lots</li> <li>Will require photo for proof of proper parking</li> </ul>	<ul> <li>Integrated lock-to mechanism now deployed on 100% of Scoot's fleet</li> <li>While users are able to park scooters in off-street private lots, they are not necessarily encouraged to do so</li> <li>Field staff correct users who park improperly when they observe it</li> <li>Permittee requires users to take photo for proof of proper parking in order to end ride</li> </ul>	Lock-to mechanism is integrated with vehicle and operated using mobile app. Commitment to implementing locking technology and variety of additional strategies have resulted in significantly improved parking behavior compared to scooter roll out in spring 2018.	Satisfactory
Access	User penalties for poor compliance by users with laws governing scooter operation, including possibility of suspension by the permittee, should support appropriate operation and parking by users.	• Comprehensive documentation of exact penalties for rider non- compliance including fees for parking citations, safety violations, and service suspension for repeat violations	<ul> <li>As of March 18 2019, Scoot has cited 12 riders \$300 each for unsafe riding or parking.</li> <li>Scoot has issued warnings to 80 riders for unsafe riding or parking.</li> <li>Scoot has suspended 2 users for unsafe riding or parking.</li> </ul>	Scoot's leveraging of penalties and incentives creates transparency and demonstrates commitment to holding users accountable for poor behaviors.	Satisfactory



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Equitable Access	Approach to providing service to low-income residents, including diverse payment options and fare discounts, should reduce barriers to participation.	<ul> <li>No deposit required; but otherwise no discount (claim that their rate is already affordable; standard rate is similar to other applicants)</li> <li>Detailed description of mechanism for participation</li> <li>Cash option available</li> </ul>	<ul> <li>Scoot has implemented a 50% discount for low-income plan members</li> <li>The 68 low-income plan participants represent .3% of all Scoot users and took 120 trips as of February 2019</li> <li>O rides facilitated through cash payment to date</li> </ul>	The SFMTA finds Scoot's low- income plan participation to be much lower than expected to ensure equitable access to its system. Insignificant participation in the low-income plan and cash/SMS options indicates that these are not well advertised, despite user survey results showing approximately 9% of respondents having an income that would qualify them for the low-income plan.	Incomplete
	Service Area beyond the downtown core and commitment to rebalancing should ensure availability of scooters in underserved areas.	<ul> <li>Depending on number of scooters, would deploy to Haight, Mission, northern Potrero Hill, Dogpatch, portions of Bayview, Fishermans Wharf</li> <li>Will rebalance if less than 20% in CoCs.</li> <li>24/7 service</li> </ul>	<ul> <li>At least 20% of fleet in Communities of Concern maintained at all time</li> <li>Low number of scooters on streets relative to 625 cap prior to March 1 2019.</li> </ul>	Scoot has met its promise of maintaining 20% of its vehicles in Communities of Concern. However, the low deployment numbers prior to March 1 2019 made it difficult for users to access the system. As of March 2019, Scoot is operating near the 625 scooter cap.	Incomplete



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Community Outreach	Outreach approach should include strategies to ensure that low income residents are aware of service and how to participate.	<ul> <li>Detailed plan to promote use among low income communities through efforts to establish relationships with at-risk youth and youth health clinic groups, public and affordable housing groups</li> <li>Customer service available in English, Chinese, Spanish, (and Catalan)</li> </ul>	<ul> <li>Have promoted use among low income communities through efforts to establish relationships with at-risk youth and youth health clinic groups, public and affordable housing groups through a number of outreach efforts and events; however, this has not yet yielded significant ridership amongst low-income communities and users</li> <li>Customer service available in English, Chinese, Spanish, (and Catalan)</li> </ul>	Scoot has conducted a significant amount of outreach and created partnerships in Communities of Concern, but usage by historically underserved communities remains low. Additional outreach and device availability is needed to ensure a user base that reflects San Francisco.	Incomplete
	Approach to outreach should ensure that members of the public, including those that choose not to use scooter services, have the opportunity to be heard and to stay informed about program.	<ul> <li>Engage with stakeholder groups to understand mobility needs of diverse communities</li> <li>Collaboration with community groups representing non-users who may be impacted by service (e.g. bicyclists, pedestrians, persons with disabilities)</li> </ul>	<ul> <li>Scoot has participated in 48 outreach events from launch through February 2019.</li> <li>Significant outreach and collaboration with community groups representing non-users who may be impacted by service (e.g. bicyclists, pedestrians, persons with disabilities) and with economic development groups.</li> </ul>	Scoot has participated in a number of outreach events through the city. Additionally, the permittee's specific description of goals for this engagement (intent to understand needs of diverse communities including those who choose not to use scooter services) has resulted in meaningful engagement.	Satisfactory
Labor	Should demonstrate understanding of operational needs and resource requirements to ensure service reliability.	<ul> <li>Detailed labor &amp; operations plan; existing Scoot fleet team staff would be augmented commensurate w/# of scooters permitted</li> <li>User incentives for rebalancing</li> <li>Rebalancing synergy with existing Scoot program</li> <li>Detailed maintenance plan</li> </ul>	<ul> <li>No user incentives for rebalancing distributed to date</li> <li>Rebalancing synergy with existing Scoot program</li> <li>Responsive adoption of app- integrated lock-to solution has created a more reliable service over time</li> </ul>	Rebalancing/recharging synergy with existing Scoot program has reduced the Vehicle Miles Traveled associated with these activities. However, low deployment numbers prior to March 1 2019 made it difficult for users to access the system. As of March 2019, Scoot is operating near the 625 scooter cap.	Incomplete



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Labor	Approach to hiring and training employees and/or contractors should ensure that staff have the knowledge and skills to ensure safe operational practices and knowledge of the communities in which they operate.	<ul> <li>Field &amp; recharging staff full- time employees with full benefits and compensation package designed to increase retention</li> <li>Training to support employee advancement opportunities</li> <li>All Field Service Technicians trained through four-tier certification process, which promotes growth and longevity at company</li> <li>Recruitment at tech and vocational schools, as well as through the City College of San Francisco, in order to reach candidates from a range of different demographics and diverse backgrounds.</li> </ul>	<ul> <li>Field &amp; recharging staff full-time employees with full benefits and compensation package designed to increase retention</li> <li>All Field Service Technicians trained through four-tier certification process, which promotes growth and longevity at company</li> <li>Recruitment at tech and vocational schools, as well as through the City College of San Francisco, in order to reach candidates from a range of different demographics and diverse backgrounds.</li> </ul>	Scoot's comprehensive training program for operations staff and commitment to growth and staff retention have resulted in safe operations. Additionally, hiring staff from within San Francisco's diverse communities helps ensure that staff have knowledge of the communities in which they operate.	Satisfactory



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Sustain- ability	Approaches to operations and disposal should demonstrate commitment to environmental sustainability.	<ul> <li>Recharging batteries while parked or by swapping out in field minimizes VMT associated with recharging</li> <li>Swappable battery easier to recycle (does not require wholesale scrapping of scooter)</li> <li>Commit to tracking VMT of recharging/rebalancing/ field operations vehicles</li> <li>Non-vehicle and/or electric vehicle- based recharging</li> </ul>	<ul> <li>Swapping batteries out while vehicles in field minimized VMT associated with recharging; Scoot's newest model does not have battery swapping capabilities, however, but permittee plans for next model to support a swappable battery</li> <li>Swappable battery easier to recycle (does not require wholesale scrapping of scooter); Scoot has not yet disposed of any batteries</li> <li>Have successfully tracked and reported VMT of recharging/rebalancing/field operations vehicles         <ul> <li>27,088 total non-revenue VMT as of February 2019</li> <li>5,998 gas auto</li> <li>1,430 electric auto</li> <li>19,660 electric moped</li> </ul> </li> </ul>	Scoot has demonstrated a commitment to sustainable operations through its moped/electric vehicle-based recharging and its tracking/reporting of VMT associated with charging and rebalancing. While the SFMTA would have preferred that Scoot retained the battery swapping capabilities of its earlier scooter model, Scoot has indicated that it prioritized an integrated locking mechanism over battery swapping capabilities, and hopes to reincorporate this capability into its future model.	Satisfactory
Compliance	Compliance with the terms of the scooter share permit.	• N/A	• N/A	Generally compliant with terms and conditions of permit. For details see Appendix D.	Satisfactory



### SFMTA Performance Evaluation and Rating, Skip

GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Safety	Strategies to educate and train users should result in safe operations of scooters by riders.	<ul> <li>Swipe-through screens and online tutorials</li> <li>Free in-person classes</li> <li>Field staff to proactively approach riders with safety reminders (focus on "high traffic areas during periods of heavy usage")</li> </ul>	<ul> <li>In-app swipe-through screens and online tutorials mention sidewalk riding and applicable rules of the road</li> <li>27 trainings offered to date</li> <li>Currently, Skip Scout routes are in the following 4 zones: Tenderloin, Caltrain, Mission, Pier/Ft. Mason</li> <li>5 Scouts (1 Manager + 4 Scouts) deployed 40 hours each per week, 200 hours total per week</li> <li>1 Scout is deployed in each to the 4 zones noted above 9am - 6PM or 11am-7pm</li> <li>Skip Scouts are being used to correct improperly parked vehicles; no data provided showing Scouts conducting proactive user education about proper parking etiquette and rider safety.</li> <li>Skip reported that 1 complaint was made to the company about sidewalk riding; 22 were submitted to SFMTA via 311.</li> </ul>	The SFMTA finds Skip's user education to be generally resulting in safe operation of scooters by users, including a number of safety trainings held throughout the city. However, the lack of documented proactive user education by Skip Scouts has fallen short of the SFMTA's expectations based on Skip's application proposals.	Satisfactory
	Strategies to promote and distribute helmets should result in helmet use by riders.	<ul> <li>Free helmet giveaways</li> <li>Will have field staff distribute helmets to users on the street</li> <li>Will include carabiners with all helmet giveaways</li> </ul>	<ul> <li>Skip has distributed 1,243 free helmets as of March 8 2019</li> <li>230 helmets have been given out in the field by Skip Scouts</li> </ul>	Skip has demonstrated a commitment effort to distribute helmets to users. While the SFMTA acknowledges that state law has changed, the agency still believes that helmet use should be encouraged.	Satisfactory



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Disabled	Strategies to ensure properly parked scooters, including any commitments to locking or tethering, should result in parking that does not block the right of way.	<ul> <li>Have prototype of tethering/locking mechanism; "preparing to bring it to market"</li> <li>Tip-over detection to identify knocked-over scooters</li> <li>Working to require photo for proof of proper parking</li> <li>Free ride incentive for demonstrated parking compliance</li> </ul>	<ul> <li>Lock-to mechanism (non-integrated) deployed January 2019</li> <li>No tip-over detection implemented</li> <li>Piloting free ride incentive for demonstrated parking compliance for select group of users; delayed roll-out and no data to confirm efficacy</li> </ul>	Commitment to implementing locking technology has resulted in significantly improved parking behavior compared to scooter roll out in spring 2018. While locking mechanism has been deployed, the SFMTA would prefer a lock that is controlled by the app rather than a combination lock. Additionally, no tip-over detection has been implemented to date as promised in Skip's application, and proper parking incentive roll- out has been smaller and taken longer than expected.	Incomplete
Access	User penalties for poor compliance by users with laws governing scooter operation, including possibility of suspension by the permittee, should support appropriate operation and parking by users.	<ul> <li>Approach defines types of incidents in detail and describes escalating penalties including required classes and deactivation, including immediate deactivation for some egregious incidents</li> <li>Plan to provide transparency reports to SFMTA</li> </ul>	<ul> <li>No required classes or deactivations reported to date</li> <li>"Terminations/Suspensions for violation of Rider Code of Conduct in progress" as of 2/11/19</li> <li>No transparency reports provided to date on topic.</li> </ul>	Skip originally proposed a detailed plan for levying escalating penalties, including requiring classes and deactivating accounts for unsafe user behavior, but has not reported any penalties levied, courses required, or account terminations for poor behavior. While Skip does provide some related information in monthly reports to the SFMTA, the Agency has not received any transparency reports on instances of and remedies to poor user behavior to date.	Incomplete



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Equitable Access	Approach to providing service to low-income residents, including diverse payment options and fare discounts, should reduce barriers to participation.	<ul> <li>Two free rides per day</li> <li>Detailed description of mechanism for participation</li> <li>Cash and SMS options available</li> </ul>	<ul> <li>Skip provides a 50% discount on rides for those who qualify based on membership in a number of state- administered programs (compared with two free rides per day proposed in application)</li> <li>Because low-income discount is percentage-based, price for low- income plan participants increased on 1/15/19 when Skip raised per-minute rates from 7.5¢ to 12.5¢ per minute (standard rate increase from 15¢ to 25¢).</li> <li>The 75 low-income plan participants represent .1% of all Skip users and took 671 rides as of February 2019</li> <li>Cash and SMS options available, but no riders have utilized these options to date</li> </ul>	The SFMTA finds Skip's low- income plan participation to be much lower than expected to ensure equitable access to its system. Insignificant participation in the low-income plan and cash/SMS options indicates that these are not well advertised, despite user survey results showing approximately 9% of respondents having an income that would qualify them for the low-income plan. Additionally, Skip made changes to its rates without notifying the SFMTA; this rate change had a direct impact on the amount low-income users pay to access Skip's services.	Incomplete
	Service Area beyond the downtown core and commitment to rebalancing should ensure availability of scooters in underserved areas.	<ul> <li>Service to entire eastern half of SF to Hunters Point for 350 scooters</li> <li>Would maintain 80% in NE and 20% in SE</li> <li>Service hours: 6:30 am to 8:30 pm</li> </ul>	<ul> <li>During the period from 10/15/18 through 3/3/19, Skip had an average of 14.1% of scooters available in the SE areas of the city at 8 AM, below its 20% commitment. During the most recent month of data (February 2019), this average had improved to 21%, but Skip failed to meet its 20% commitment of deployment in southeastern neighborhoods 12 out of the 28 days that month.</li> <li>Service hours 4 am to 8 pm</li> <li>Service turned off when weather.com forecast shows greater than 40% chance of rain</li> </ul>	Skip failed to meet its promise of maintaining 20% of its vehicles in southeastern portions of the city on 83% of days between 10/15/18 and 3/3/19, which indicated poor performance ensuring equitable access in these neighborhoods. Additionally, the decision to not make scooters available during rainy days was communicated to the SFMTA after the pilot began.	Incomplete



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
( ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	Outreach approach should include strategies to ensure that low income residents are aware of service and how to participate.	<ul> <li>Describe plans to host pop-up events in Communities of Concern, and specify that the purpose of these events is to give helmets, educate around service, and register users who don't have credit card or smart phone access</li> </ul>	<ul> <li>15 outreach events have taken place in Communities of Concern as of February 2019</li> <li>0 riders have used cash payment or non-smart phone option to date; very low low-income plan participation</li> </ul>	While Skip has conducted some outreach in Communities of Concern, individuals without access to a bank and/or smart phone have still faced barriers accessing the system. Additional outreach is needed to ensure a user base that better reflects San Francisco's diverse communities.	Incomplete
Community Outreach	Approach to outreach should ensure that members of the public, including those that choose not to use scooter services, have the opportunity to be heard and to stay informed about program.	<ul> <li>Propose an advisory board to address community concerns; would be attended by CEO and members of board of directors</li> <li>Will gather feedback from users and nonusers to learn about service gaps and understand user demographics</li> <li>Transparency reports to document safety incidents and resolution</li> </ul>	<ul> <li>Have participated in 67 outreach events as of February 2019</li> <li>Advisory Board still in formation following internal SFMTA discussions.</li> <li>No monthly survey data (feedback from users and nonusers about scooter availability, demographics, and disparities in usage) has been shared with the SFMTA</li> <li>Total number and nature of safety incidents reported to SFMTA, but no transparency reports documenting incident resolutions received to date</li> </ul>	Skip has participated in a number of outreach activities across the city. Skip has not provided promised monthly survey data regarding demographic disparities, which could greatly inform how to address barriers to access. Skip has also not followed through on promises to provide transparency reports documenting resolutions to safety incidents.	Incomplete



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
	Should demonstrate understanding of operational needs and resource requirements to ensure service reliability.	<ul> <li>Two main rebalancing runs post-AM commute and pre-PM commute hours</li> <li>Detailed operations plan/team breakdown (maintenance: 20 technicians, with 3 leads and 2 managers; 5 roll team (find missing/improperly parked scooters) employees per 100 scooters; chargers are contracted, # not specified)</li> </ul>	<ul> <li>Somewhat uneven device availability throughout service area, with scooters concentrated in downtown areas.</li> <li>As of January 12, 2019: <ul> <li>Lead Technicians: 6</li> <li>Technicians : 16</li> <li>Dispatchers : 4</li> <li>Facilities Manager : 1</li> <li>Fleet Manager : 1</li> <li>Repair Manager: 1</li> <li>General Manager: 1</li> </ul> </li> </ul>	Skip's rebalancing/redistribution operation has generally resulted in fair availability in the neighborhoods it serves, although devices tend to cluster somewhat in the downtown areas of the city.	Satisfactory
Labor	Approach to hiring and training employees and/or contractors should ensure that staff have the knowledge and skills to ensure safe operational practices and knowledge of the communities in which they operate.	<ul> <li>Maintenance staff and ambassadors are company employees</li> <li>85% of chargers will be independent contractors and 15% of chargers will be employees;</li> <li>Will train contractors to create independent businesses to serve both applicant and others in the industry</li> <li>Maintenance staff and field staff are trained and regularly re-trained;</li> </ul>	<ul> <li>As of January 12 2019, 36 out of 180 chargers (20%) are "W-2 employees" while the remainder are independent contractors</li> <li>No businesses created yet by independent contractors to serve charging needs. However, "Skip remains hopeful that its high volume Rangers may move in the direction of creating independent charging businesses, and it has had several conversations with such persons to provide the benefit of its experience as third parties think about how to expand independent operations."</li> </ul>	Skip has exceeded its goal of making 15% of chargers W-2 employees. However, Skip has not yet fostered the creation of an independent businesses pipeline for contractors as proposed.	Incomplete



GUIDING PRINCIPLE	EVALUATION CRITERIA	PROPOSALS SUMMARY	PERFORMANCE SUMMARY	SFMTA ANALYSIS	RATING
Sustain- ability	Approaches to operations and disposal should demonstrate commitment to environmental sustainability.	<ul> <li>Dedication to maintenance and repair</li> <li>Batteries that cannot be recycled to be disposed of at SF Transfer Station (not an acceptable approach)</li> <li>Lack of commitment to tracking VMT associated with rebalancing</li> </ul>	<ul> <li>Have not disposed of any batteries yet but are partnering with SF Environment to determine appropriate disposal location and procedures</li> <li>Have reported VMT associated with charging for W-2 employees         <ul> <li>52,321 VMT as of February 2019</li> </ul> </li> <li>Do not track Vehicle Miles Traveled associated with rebalancing for independent contractors</li> <li>Have expressed privacy concerns for tracking VMT for independent contractors</li> </ul>	Skip's refusal to track Vehicle Miles Traveled associated with independent contractor rebalancing makes it difficult for the SFMTA to evaluate the full environmental and congestion impacts of its service.	Incomplete
Compliance	Compliance with the terms of the scooter share permit.	N/A	• N/A	Generally compliant with terms and conditions of permit. For details see Appendix D.	Satisfactory



## Appendix C – 3 Month Compliance Reports

### Scoot 3 Month Compliance Report

Theme	Scoot Application Proposal(s)	Reporting Metric(s)	3 Month Metric
	"At minimum, riders will be reminded before the start of every ride to: (1) Wear a helmet, (2) Ride in the street, not the sidewalks, and (3) Only park in permitted areas." (Pg. 21)	Copy of in-app reminder	See Images sent to Jason Hyde: every-ride-1-of-3.PNG every-ride-2-of-3.PNG every-ride-3-of-3.PNG
Safety	"Scoot Networks offers free in-person classes on the operation and proper use of our light electric vehicle (hereinafter "LEV") rental fleet. These classes are taught by experienced and skilled riders who are trained to teach riding, road rules, and safety lessons to new riders. Part of the in-person class curriculum will include instructions on how to park electric mini-scoots safely, as well as information on applicable laws particularly related to riding on sidewalks. Classes are optional and riders may attend as many classes as they desire over the lifetime of their membership." (Pg. 21)	Details on how often and when these courses have been offered	Scoot has offered free classes in conjunction with community events: Sunday Streets: 09/09 Urban Air Market 09/16 Bayview Business Bonanza 10/06Riders can also sign up for monthly free Scoot trainings. So far, we have not had anyone sign up for training on a kick through this method.We believe training at public events have been more effective We will continue to train at ten upcoming 2019 Sunday Streets events plus other events not yet scheduled
	"Scoot has also developed a series of training videos that cover the same riding, road rules, and safety lessons directly in our mobile app, which is a mandatory step during the user's onboarding process." (Pg. 22)	Copy and description of training video	See: first-ride-orientation.mov Sent via email to Jason Hyde
	"Scoot Networks will publish an Electric Mini- Scoot Safety Guide on its website similar to the article we published for our electric moped riders" (Pg. 22) (https://scoot.co/stories/ride-kick-scooter/)	Please confirm that this is the proper link	Here are links from our website that address training and Safety: https://scoot.co/stories/ride-kick-scooter/ https://scoot.co/stories/kick-parking-guide/ https://scoot.co/stories/kick-scooter-ga/ https://scoot.co/stories/winter-safety-tips/ https://scoot.co/stories/new-way-secure-scooter/

	"all mini-scoot riders will be offered a free helmet (for-keeps!) during the sign-up process, subject to certain terms and conditions." (Pg. 27)	Status update, including -# of helmets distributed -screenshot of helmet offer	To Date, 405 helmets have been distributed free of charge either through the mail or given away at outreach events There are two places on the app and one on the website where Riders can order a free helmet:
			4:24 Always Wear a Helmet 1 of 6
Safety			Helmets are legally required while riding. If you don't wear one, you may receive a ticket. If you don't have one, Scoot can provide one for free.
			Get a Helmet Back Next
			The free helmet offer is also in our App help center: help-center.PNG (Jason has the actual image) The free hemet link is also on our Winter Safety Tips blog page on our website

	"Safety is our first priority at Scoot Networks, so we are passionate about educating our riders and publishing enticing online articles that frequently make reference to the rules of the road as well as the best practices for promoting safe and courteous riding behavior." (Pg. 28)	Copy of online article(s)	https://scoot.co/stories/kick-parking-guide/ https://scoot.co/stories/winter-safety-tips/ https://scoot.co/stories/ride-kick-scooter/ https://scoot.co/stories/new-way-secure-scooter/
	"develop partnerships with bicycle advocacy and pedestrian safety organizations throughout San Francisco in order to find ways for our riders to safely coexist with cyclists, pedestrians, disabled persons, or any group who may be potentially impacted by our shared mobility services." (Pg. 28)	Status update, including: -list of partnerships -meeting dates -org contact(s)	Status update, including: -list of partnerships -meeting dates -org contact(s) SF Bike Coalition: • 9/18/18 - Met with Brian Wiedenmeier and Janice Li • 01/07/19 - Met with Janice Li • 1/23/19 - SFBC Annual membership Meeting WalkSF: • 10/12/18 - Jodi Medeiros tour of Scoot HQ
	"Like our existing fleet of electric mopeds, Scoot Networks would like to produce mini- scoots with a helmet that is, preferably, secured to the vehicle in a lockable box. While our mini-scoots at launch may not feature these components, it is a feature we're already working with our production partner to incorporate on an expedited basis. In the meantime, all mini-scoot riders will be offered a free helmet (for-keeps!)" (Pp. 29- 30)	Status update on helmet locking box	Free helmets are available to all new riders. they are prompted to order a helmet the first time they use the app to ride a scooter. They can also order a helmet in the help section of the app and on our webpage. We continue to look at options for including a helmet on the vehicle but there is no plan to roll out a scooter with helmet box attached in the near future
Sustainability	"With the introduction of mini-scoots to our fleet of electric vehicles, we will continue to operate in compliance with all laws and regulations pertaining to recycling, disposal, and hazardous waste." (Pg. 46)	The SFMTA would like an update on how and where Scoot is disposing of its hazardous waste (i.e. batteries)	No Scooter or scooter batteries have been disposed of at this time. Our swappable batteries can be reused even if a vehicle is too damaged to redeploy. We also strip parts from all non-operable vehicles to use for repairs

	"implement an automated sign-up and qualification process for users who are eligible through Calfresh, PG&E Care and Muni Lifeline as acceptable income verification proxies for affordability membership." (Pg. 12)	Status of automated sign-up	Scoot has created our 'Community Plan' for Riders who are eligible through Calfresh, PG&E Care and Muni Lifeline. They can sign up for the plan via our website
	"cash payment option for eligible members of the low-income plan." (Pg. 12)	Status of cash payment system	Scoot has created a cash payment system for Riders who are eligible through Calfresh, PG&E Care and Muni Lifeline. Currently qualified riders can pay cash for their rides and do not need to secure their accounts with a credit or debit card. At this time, cash payment must be made in person at Scoot HQ at 1255 Howard Street.
	"considering a monthly Flex Plan, which offers a more affordable option for frequent riders who pay a monthly rate in addition to a single discounted rate for each ride." (Pg. 12)	Status update on flex plan	Scoot has not yet created a frequent rider plan for Kicks. We are still looking at rider retention and user behavior to build an effective plan that adds value to the majority of our riders
Equitable Access	"riders may end their rides in one of our 40+ garages, as available, regardless of whether it is located in the blue zone." (Pg. 14)	Status update on garage parking for kick scooters	Riders may end their rides in any of our garages within our areas of operation. However, due to typical rider usage, parking within a parking structure has not proved practical. having the Scooters locked to infrastructure in the furniture zone on the sidewalk or to a bike rack has proved to be a better experience for our riders. We utilize some of our garages for charging.
	"our service area will include significant areas of census tracts designated as "communities of concern" (hereinafter "CoCs") by the San Francisco Metropolitan Transportation Commission (hereinafter "SFMTC"), and will extend much further into CoCs located in the Bayview Hunter's Point and Tenderloin neighborhoods." (Pg. 14)	CoCs as % of total service area	Approx. 30% of Scoot Service Area includes census tracts designated as Communities of Concern.
	"The vehicles are available 24/7" (Pg. 15)	Status update on 24/7 availability	Scoot kicks are available 24/7. For a period in the beginning of the pilot, we ceased 24/7 operations until we could retrofit a locking system for the scooters. All Scoot kicks now have locks and are available 24/7

	"We will rebalance our fleet, if necessary, to maintain a minimum of 20% overall mini- scoot availability within CoCs." (Pg. 15)	-Total operable hours -Operable hours that 20% ratio was achieved	-Total operable hours: 1944 -Operable hours that 20% ratio was achieved: 1860 percentage 20% ration was achieved: 95%
Equitable Access	" incentives to our riders, in the form of discounted or free rides, to either: (1) bring low-battery vehicles to a nearby garage to recharge, or (2) bring vehicles to any blue zone area that demonstrates a need for increased rebalancing efforts. We are very likely to extend these same types of incentives to our mini-scoot riders, including incentives for our riders to park their vehicles back into communities of concern, as needed. We are also considering a point system incentive program to carry out the same objectives and more (see p.28)." (Pg. 16)	Status update, including: -List of incentives -Total incentives distributed, to date -Description of point system	Incentives were considered to encourage riders to help with re-balancing, plugging in low battery vehicles for charging, and returning vehicles to CoCs. To date, we have not had to implement any incentive programs. Our CoC availability is consistently over the 20% mandate. We have focused on Swapping batteries rather than incentivising users to bring them to charging garages. We will look at implementing these ideas as the fleet grows and we see a need to do so.
	"we can "turn that area off" as a parking zone and riders will simply look for parking in areas that have less Scoot vehicles nearby." (Pp. 16-17)	Number of hours zones were "turned off"	We have not had a need to 'turn off' zones for short periods of time due to over parking or availability. We have adjusted our zones quite a bit based on connectivity issues, loss, vandalism and alternate transportation availability. For example, we have currently pulled out of SoMa, Financial District and portions of the Tenderloin due to connectivity issues, theft and loss. When we relaunch with locks and new telematics, we can begin to re-open those areas for service. At the same time, we expanded our Bayview, Excelsior, and Outer Mission neighborhoods to better serve areas whose overall transportation options are less than other areas of the City

Accountability	"Scoot riders who are caught driving unsafely or who park their mini-scoots improperly will be sent an email reminder of the Scoot Networks parking and safe-driving policies. After their first warning, non-compliant riders are charged a fee for subsequent offenses (see p.34 for fee schedule). In its discretion, Scoot Networks may also discontinue service to flagrant abusers of any Scoot Networks policy." (Pg. 27) "Scoot Networks currently offers incentives to our riders, in the form of discounted or free rides" (Pg. 28) under the following topics: -Low battery -Rebalancing -Communities of Concern -Unlawful parking	Status update, including: -Number of email reminders sent to users caught driving unsafely -Number of email reminders sent to users who have parked their kick scooters unsafely The SFMTA would like a report on the following: -Total incentives distributed, to date -How many users have received incentives -How Scoot is identifying recipients of incentives	<ul> <li>Status update, including: <ul> <li>Number of email reminders sent to users caught driving unsafely: 4</li> <li>Number of email reminders sent to users who have parked their kick scooters unsafely: 39</li> <li>Alarm complaints: 16 (all received in October/Nov. None in December)</li> <li>Lost/Stolen/Vandalized: (Calls from neighbors reporting vehicles in their yards, heavily damaged, etc.) 40 – only 7 in December</li> </ul> </li> <li>We have not offered any incentives yet. This is due to the limited number of vehicles available and there not being a need to ask users to help with rebalancing, low battery or bad parking. We have incentivized Riders \$5.00 (Approx two rides) who participate in MTA's January transit survey. Total respondents are not tallied yet but we anticipate issuing approx. \$1, 250 in ride credits</li> </ul>
Collaboration	"if vehicles are in high demand in a particular area or during peak times of commuter congestion, say, after a ballgame or major conference in the center of town, we can incentivize our riders to park more vehicles in the right place at the right time." (Pg. 17)	Number of times incentives have been employed for these types of events	We have not needed to implement these types of incentives as of yet.

### Skip 3 Month Compliance Report

Theme	Skip Application Proposal(s)	Reporting Metric(s)	3 Month Metric
Safety	"we plan to give away free helmets under our giveaway program so we can start changing user behavior and convince users to carry their helmets with them." (Skip application Pg. 4)	Status update, including: -Date of events -Number of helmets distributed	<ul> <li>1193 helmets distributed.</li> <li>108 helmets distributed by mail via request Bayview Block Party - 6/16 (100 helmets) Sunday Streets (Mission) - 7/15 (150 helmets) Sunday Streets (Western Addition) - 9/9 (150 helmets) Sunday Streets (Tenderloin) – 9/23 (70 helmets) Castro Street Fair – 10/07 (50 helmets) Castro Farmer's Market (Free Speech Area) – 10/10 (50 helmets) Cole Valley Pop-up Parklet – 10/13 (75 helmets) Mission Dolores Park – 10/13 (75 helmets) Sunday Streets (Excelsior) – 10/14 (150 helmets) Skip Scouts / Helmet Popup – 10/15 (80 helmets) Skip Scouts / Helmet Popup – 10/16 (50 helmets) Skip Scouts / Helmet Popup – 10/17 (50 helmets) Skip Scouts / Helmet Popup – 10/18 (50 helmets) First SF Group Ride - 10/20 (60 helmets)</li> </ul>
	We are developing shifts of "Skip Monitors" to rove high traffic areas during periods of heavy usage to warn and remind users that sidewalk riding is strictly prohibits and to carry a supply of helmets to riders who want them. (Pg. 11)	The SFMTA needs documentation of Skip Monotor activities (i.e. route data, number of helmets given away, # of staff and hours, how many and where they are being deployed, what shifts they are on, feedback received, whether W-2 or 1099)	Route data: Currently, Skip Scout route's are in the following 4 zones: Tenderloin, Caltrain, Mission, Pier/Ft. Mason Number of helmets given away : 230. # of staff and hours: Team of 5 (1 Manager + 4 Scouts), 40 hours per week, 200 total How many are deployed and where per shift: 1 Scout is deployed in each to the 4 zones noted above What shifts are they on: 9am - 6PM or 11am-7pm Feedback received: 787 scooters have been moved since launch of program on 17 December 2019. Dfferentiation between W-2 or 1099: As of 11 January 2019, all Skip Scouts are W-2 employees.

Safety	"we are rolling out transparency reports that track the number of safety incidents and our efforts to remedy them." (Pg. 17)	Copy of transparency reports	<ul> <li>58 total incidences reported as a collision regardless of seriousness since Oct 15.</li> <li>Update submitted 2/11/19: Each month we provide a report on the number of safety incidents to the MTA. We are pleased that the MTA makes these reports publicly available, ensuring they are transparent and easily accessible to the public.</li> </ul>
	"Skip can commit to SFMTA that when scooters are tipped over and not resolved in ninety (90) minutes we can dispatch ateam to remedy it." (Pp. 10-11)	Report of the following: -Number of scooters tipped over -Location of tipover event -Response time	In Progress. Currently, Skip utilizes it's [sic] operational capacity via the Scout program to handle tip-overs. <b>Update submitted 2/11/19:</b> While we initially thought software would be the best way to track compliance, we've instead found that combining technology with the human capacity of our Skip Scouts is the best way to ensure our scooters are kept upright and out of the way of pedestrians.
Disabled Access	"Skip already has a hands-on prototype of a "lock to" mechanism that will require our users to physically lock our scooters to physical objects We are happy to bring it to SFMTA offices and share how it could work at any time." (Pg. 11)	Report of the following: -Number of deployed scooters with lock-to device to date	60 Lock-To Scooters scheduled for deployment each night starting 14 January 2019 A larger Lock-To fleet will be rolled out to the public in February 2019.
	SFMTA needs a description of the process for giving away incentives, as well as a monthly total of incentives distributed, related to the following application promise: "We are committing to giving up to \$150,000 in incentives as part of a program to give users the equivalent of two average rides if they demonstrate perfect parking compliance over the prior ten (10) rides."	Report of the following: -Total incentives distributed, to date -How many users have received incentives -How Skip is identifying recipients of incentives	In Progress <b>Update submitted 2/11/19:</b> In a competitive landscape, publicly documenting this program would undermine its success. If there are particular questions about the program, we are happy to handle them on an individual basis and off the record.

Sustainability	"All other qualifications being equal, our selection criteria for Street Team consultants places a premium on electric or hybrid vehicles." (Pg. 6)	SFMTA requires number, %, and total VMT of Street Team members who use an electric or hybrid vehicle to complete their tasks in order to verify this proposal	Although we planned to employ this strategy, it was not feasible to implement. <b>Update submitted 2/11/19:</b> We'll continue to pursue this as more electric vehicles come onto the market that are viable for transporting large numbers of scooters. At this point, taking into account the number of consumers who both have electric vehicles and want to do this job, it's not viable at this time.
	Currently we plan to dispose batteries that cannot be recycled at the San Francisco Transfer Station at 501 Tunnel Ave, San Francisco. (Pg. 14)	The SFMTA requires the total number of batteries recycled and disposed, to date	In Progress <b>Update submitted 2/11/19:</b> We are actively working with Environmental Services to put together a comprehensive environmentally safe battery disposal plan. We're looking forward to sharing more details as the plan is finalized.
Equitable Access	"Skip's low income plan currently involves qualification through one of three (3) accepted programs.1 Qualified users are eligible to receive monthly balances of approximately \$120, with the goal of funding an average of two free rides per day to be used exclusively for Skip scooter rides." (Pg. 3)	Report of the following: -Total number of qualified users -Total credit distributed -Total credit used -Average number of free rides per day	<ul> <li>22 Low Income riders</li> <li>308 rides</li> <li>Skip implemented low income program based on three accepted programs, but changed the program to be a discount off unlock charges and per minute charges.</li> <li>Update submitted 2/11/19: After reviewing our data set, we found that the previously reported numbers were incorrect as they did not include our riders who live outside of SF but use Skip to work and play while in the city. As part of our low-income rider program, we currently have 78 approved low-income riders and 50 active low-income riders, who have taken a total of 450 rides.</li> <li>There has been no impact to our low-income plan as a result of our price change, which was incorporated to increase the sustainability of our business and make sure we can continue serving SF over the long term.</li> </ul>

	"We are partnering with Cashstar, a leading provider of merchant solutions for physical gift card, eCard, and digital cards, to create and offer Skip-branded card solutions." (Pg. 3)	-Status update -Copy of card -Number of recipients -Total \$ value provided to date	In Progress <b>Update submitted 2/11/19:</b> We are still in talks with CashStar about forming this partnership and will be excited to share more details once a timeline has been identified.
	"Similarly, Skip is preparing an application to become an accepted service provider eligible for Clipper Card payments, will support Clipper Card as a functioning payment method for our scooters no later than year-end." (Pg. 3)	Status update	In Progress <b>Update submitted 2/11/19:</b> We're excited to be partnering with Clipper 2.0.
Equitable Access	"dedicated customer care personnel available at our offices and scooter distribution centers to be able to accept cash in exchange for creation of Skip balances." (Pg. 4)	Status update: -# of personnel -hours available -location(s) of care personnel	In Progress <b>Update submitted 2/11/19:</b> This program is currently available. Qualified riders who wish to turn cash into Skip balances are provided with the nearest address upon request during 9am- 5pm business hours. Additionally, anyone can turn cash into a Skip balance at community events.
	"Lastly, our technology supports the use of non-smart phone text messaging technology and 24/7 Customer Support to remotely lock and unlock scooters so that access is not restricted to smart phone users." (Pg. 4)	Status update with total number of trips facilitated	0. There have been no requests of this nature. <b>Update submitted 2/11/19:</b> This feature is currently available and has been advertised via community outreach.
	"we have proposed a measured deployment in the Northwest and Southeast zones in an eighty percent (80%) to twenty percent (20%) ratio." (Pg. 5)	Report of the following: -Total operable hours - Operable hours that ratio was achieved	In Progress <b>Update submitted 2/11/19:</b> We are excited to share that we have met this goal and continue to successfully maintain this ratio.

Equitable Access	"Skip has committed to conducting anonymous monthly surveys of its users to understand the demographic, racial, gender, and ages of our riders, in addition to surveying non-users on the availability of scooters in their communities. Even if the data reflects a lack of diverse usage or gaps in availability, we commit to continually surveying our riders and sharing the data publicly so we can keep getting better." (Pg. 16)	SFMTA needs a copy of the anonymous user survey instrument and results. Additionally, the SFMTA needs information on how non-users are selected, as well as the number of non- users surveyed	In Progress Update submitted 2/11/19: We are preparing to issue a report based on our survey results and are excited to share the findings with the MTA.
	SFMTA would like confirmation of the following: "Skip's driver's license scanning is not simply about verifying licenses, but about verifying that users are over the age of 18." (Pg. 8)	Report of the following: -Number of drivers licenses approved -Number of drivers licenses rejected	Number of drivers licenses approved - 39015 drivers licenses have been approved from 15 October 2018 until 31 December 2018. number of drivers licenses rejected - 4560 drivers licenses have been rejected from 15 October 2018 until 31 December 2018. *Skip to discuss better reporting with contractor for better details into rejection data
Account- ability	"Safety Incidents" [sic] are subject to a three strike policy of escalating warnings, required Skip University classes and eventual deactivation. We will release transparency reports to track and report on the number of safety incidents [sic] and the steps we take to ameliorate them (in addition to the usual data on the number of government requests and subpoenas for user information). Pg. 12 Note: In this sentence, Skip uses "incidents" but SFMTA believes they are referring to infractions instead.	Copy of transparency reports detailing: -number of safety incidents [sic]/infractions -the steps Skip takes to ameliorate them -the number of government requests and subpoenas for user information.	<ul> <li>17 reports received of Safety Infractions. Skip internally reviews behavior against Rider Code of Conduct.</li> <li>Terminations/Suspensions for violation of Rider Code of Conduct in progress.</li> <li>As of 11 January 2018, Skip has received no government request or subpoena for user information.</li> <li>Update submitted 2/11/19: After reviewing our data, we found that the previously reported numbers were incorrect. To date, there have been 9 safety infractions reported - 8 instances of sidewalk riding, and 1 instance of riding without a helmet. We continue to work to educate our riders on proper riding and safety practices.</li> </ul>

	"Skip is committed to a pilot program of hiring 15 percent of Street Team support as a new category of employed worker at not less than minimum wage." (Pg. 6)	Report of the following: -total number of street team hired as W-2 employees -total number of street team employees	Report of the following (as of January 12, 2019): W-2 employees: 36. Total Rangers (f/k/a Street Team): 180.
	"Consultants have separate physical agreements that clearly and unambiguously spell out the contractual rights and responsibilities of both parties, including the compensation terms." (Pg. 6)	SFMTA needs copy of these agreements	Agreement will be provided with copy of report on the 15th.
Labor	"Based upon current guidelines, Skip currently requires a ratio of 1 Shop Manager for every 200 to 500 scooters deployed, 4 Technicians (mechanics) and 1 Lead Technician for every 100 scooters deployed in a given city." (Pg. 13)	SFMTA requires current staff count, by classification, specifically for maintenance staff, to verify this proposal	As of January 12, 2019: Lead Technicians: 6 Technicians : 16 Dispatchers : 4 Facilities Manager : 1 Fleet Manager : 1 Repair Manager: 1 General Manager: 1
	"At current guidelines, we plan to onboard over one hundred (100) active independent contractors for every 100 scooters in our pilot program, with 20 people working each evening on average." (Pg. 15)	The SFMTA needs a count of 1) The number of consultants onboarded for Street Team, and 2) the number of consultants active in the last month, pursuant to the application	As of 12 January 2019: Consultants Onboarded: 144 Consultants active in the last month: 62 <b>Update submitted 2/11/19:</b> To date, 144 consultants have been onboarded, 62 of which were active in the last month. We continue to recruit for additional consultants and look forward to growing our workforce throughout the two-year pilot program.
Collaboration	"We plan to use ongoing consultation with the SFMTA and our Community Advisory Board to identify new approaches and do not foresee obstacles to continued additional measures if the initial approach does not achieve compliance." (Pg. 12)	The SFMTA needs the following: -Board roster - Date and location of meetings held -Meeting minutes	In Progress

	"Accordingly, we have announced a	Same as above	In Progress
	plan to create a 16-member	Same as above	in rogicss
	Community Advisor Board that will		
	represent all communities and		
	constituencies in San Francisco.		
	Under our plan, each District		
	Supervisor will appoint one member		
	to the Board (11 in total) and the		
	Mayor can appoint an additional five		
	(5) citizens at large We expect that		
	the Board will have a role in helping		
	direct the investments we commit to		
	making below, and our CEO and one		
	member of our Board of Directors will		
Collaboration	attend each monthly Board meeting."		
	(Pg. 16)		
	"We are investing heavily in our home	Recipients and amounts of	
	city, because we expect to be here	contributions made thus far	\$20k Bicycle Coalition (Winterfest Sponsorship)
	for a long time, and we care about		\$4k Sunday Streets (Sponsorship)
	making it better. As we stated above,		\$1k Burritto Project SF
	Skip has committed, over the next		\$1k Lava Mae
	two (2) years to invest \$500,000 in		\$1k Lower Polk Alleyways Project
	the creation of calmed shared streets		\$500 People Protected Bike Lanes
	and protected bike and scooter lanes		
	across San Francisco. Our verifiable		pending 2019 Sunday Streets commitment.
	investment will take the form of		
	financial donations to advocacy		
	groups like the SF Bicycle Coalition,		
	direct donations to specific capital		
	projects, support of Vision Zero SF,		
	Livable City/Sunday Streets and other		
	efforts focused on quickly developing		
	safe streets for all road users." (Pg.		
	16)		

	The SFMTA needs proof/documentation of contributions made thus far toward	Recipients and amounts of contributions made thus far	Represention in application was over a 2 year period. Skip is not yet in a position to fund these donations and is hopeful that it will be in such position over the next 18 months.
Collaboration	the following promise: "Similarly, over those same two (2) years, we are donating an additional \$500,000 to organizations such as City College of San Francisco, Tipping Point, and New Door Ventures that are committed to retraining local workers for mechanic and other technical positions." (Pg. 16)		<b>Update submitted 2/11/19:</b> As we learn more about San Francisco's infrastructure and transit needs and the elements of creating a sustainable business, we will determine how and where those funds will go in line with our two-year commitment.
# **Appendix D - Permit Compliance Tables**

## Permit Compliance Table - Scoot

Term and Condition	nce Table - Scoot		Currently in						
Category	Requirement	Source	Compliance?	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19
General Requirements	Maintenance Fund	Permit Terms and Conditions Permit Terms	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes Yes		Yes Yes
		and Conditions							
	exceed device cap	Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Permittee provides compliance reports at 3, 6, and 12 months from permit issuance documenting the permittee's implementation of the plans proposed in their application		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer Service Requirements		Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Permit Terms and Conditions	Yes	No	No	No	Yes	Yes	Yes
		Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Equitable Service	Permitte maintains a multilingual app in	Permit Terms	Yes	No	No	Yes	Yes	Yes
Requirements	Chinese, Spanish, and any other	and Conditions						
	languages specified by the SFMTA or in							
	the permittee's application							
	Permittee maintains low-income	Permit Terms	Yes	Yes	Yes	Yes	Yes	Yes
	customer program to SFMTA standards	and Conditions						
	and consistent with the permittee's							
	application							
	Mobile apps and other customer	Permit Terms	Yes	Yes	Yes	Yes	Yes	Yes
	interface technology fully accessible to	and Conditions						
	persons with disabilities							
	Permittee regularly notifies SFMTA about		Yes	No	Yes	Yes	Yes	Yes
	changes to service area and any proposed	and Conditions						
	changes.							
User Protections	Contact number prominently displayed	Permit Terms	Yes	Yes	Yes	Yes	Yes	Yes
User Frotections	. , , ,	and Conditions						
		Permit Terms	Yes	Yes	Yes	Yes	Yes	Yes
	on all devices	and Conditions						
1		Permit Terms	Yes	Yes	Yes	Yes	Yes	Yes
	-	and Conditions						
	Dormittoo is mosting distribution	Permit Terms	Yes	Yes	Yes	Yes	Yes	Yes
Distribution of	0		res	Tes	res	Tes	Tes	res
Scooters	requirements described in their permit application	and Conditions						
	Permittee is responsive to SFMTA	Permit Terms	Yes	Yes	Yes	Yes	Yes	Yes
		and Conditions	Tes	Tes	res	Tes	Tes	res
	geofencing requests							
	Devices are maintained regularly	Permit Terms	Yes	Yes	Yes	Yes	Yes	Yes
		and Conditions						
		1						

Yes
Yes

Labor		Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes
	Permittee shall provide the SFMTA with an up to date contact name and direct phone number for staff that are responsible for collecting and rebalancing Powered Scooters.		Yes	Yes	Yes	Yes	Yes	Yes
Data Sharing	5	Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes
	U	Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes
		Permit Terms and Conditions	Yes				Yes	Yes
Permittee Specific Requirements from Application		Permittee Application						

Yes
Yes
Yes
Yes
Yes

## Permit Compliance Table - Skip

Term and Condition Category	Requirement	Source	Currently in Compliance?	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	N
General Requirements		Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Insurance maintained to required levels	Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		Permit Terms and Conditions	Yes	No	No	No	Yes	Yes	Yes
	Permittee provides compliance reports at 3, 6, and 12 months from permit issuance documenting the permittee's implementation of the plans proposed in their application		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Customer Service Requirements	Permittee has provided SFMTA with current contact name and direct phone number for staff responsible for collecting and rebalancing powered scooters		Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Permittee consistently removes improperly parked scooters within one hour of notification	Permit Terms and Conditions	Yes	No	No	Yes	Yes	Yes	Yes
	Permittee maintains customer service phone number 24/7 for customers to report safety concerns, complaints, or to ask questions	and Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	· ·	Permit Terms and Conditions	Yes	Yes	Yes	Yes	Yes	Yes	Yes

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Equitable Service		Permit Terms	Yes	No	No	Yes	Yes	Yes	Yes
Requirements	<b>U</b> 11 <i>i</i>	and Conditions							
	Spanish, and any other								
	languages specified by the								
	SFMTA or in the permittee's								
	application								
		Permit Terms	Yes	No	No	No	Yes	Yes	Yes
	1 0	and Conditions							
	SFMTA standards and								
	consistent with the permittee's								
	application								
		Permit Terms	Yes						
	customer interface technology	and Conditions							
	fully accessible to persons with								
	disabilities	D 11 -					N .		
	0 /	Permit Terms	Yes	Yes	Yes	No	Yes	Yes	Yes
	Ũ	and Conditions							
	service area and any proposed								
	changes.								
User Protections	Contact number prominently	Permit Terms	Yes	No	No	Yes	Yes	Yes	Yes
User Protections	,	and Conditions	100						
	Unique identifier prominently	Permit Terms	Yes	No	No	Yes	Yes	Yes	Yes
		and Conditions							
	Permittee provides user	Permit Terms	Yes						
	-	and Conditions							
	application								
Distribution of	Permittee is meeting	Permit Terms	Yes	No	No	No	No	No	Yes
Scooters	distribution requirements	and Conditions							
	described in their permit								
	application								
	'	Permit Terms	Yes						
	SFMTA geofencing requests	and Conditions							
	Devices are maintained	Permit Terms	Yes						
	regularly	and Conditions				103	103	103	
	regularly								



Labor	Permittee has provided Labor Harmony Plan and is compliant with agreements	Permit Terms and Conditions	Yes						
	Permittee shall provide the SFMTA with an up to date contact name and direct phone number for staff that are responsible for collecting and rebalancing Powered Scooters.		Yes						
Data Sharing	Permittee makes good faith effort to provide SFMTA will all required data and any data necessary for purposes of evaluating or enforcing the requirements of this permit	Permit Terms and Conditions	Yes	No	No	Yes	Yes	Yes	Yes
	Permittee works in good faith with SFMTA staff to implement real time APIs	Permit Terms and Conditions	Yes						
	Permittee has administered user surveys to the satisfaction of the SFMTA, including an adequate sample size and for the duration specified by the Agency.	Permit Terms and Conditions					Yes	Yes	Yes
Permittee Specific Requirements from Application	See permittee applications	Permittee Application							



## **APPENDIX E**

## **E-SCOOTER COLLISION AND INJURY ANALYSIS**

SAN FRANCISCO, CALIFORNIA APRIL 2019

Vision Zero SF Injury Prevention Research Collaborative A Collaboration between the San Francisco Department of Public Health's Program on Health, Equity and Sustainability and the Zuckerberg San Francisco General Hospital and Trauma Center

#### Points of Contact:

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## About the Vision Zero SF Injury Prevention Research (VZIPR) Collaborative

The **VZIPR Collaborative** is composed of epidemiologists, physicians, and key staff from the San Francisco Department of Public Health (SFDPH) and Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG). As the city's only Level I Trauma Center, ZSFG treats nearly all patients who sustain traumatic injuries in San Francisco, California. The VZIPR Collaborative thus has a unique opportunity to analyze the full spectrum of severe traffic injuries occurring in our city. VZIPR has been working since 2014 to develop, institutionalize, and utilize comprehensive injury data in support of strategic research and analyses for Vision Zero SF, San Francisco's policy and commitment to eliminate traffic deaths on city streets.

The following current and former VZIPR Collaborative members, listed alphabetically by last name, contributed to the methodology and this report:

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## **Collision and Injury Analysis**

This analysis combines data from several City and County of San Francisco sources to provide available information on the injury impacts of powered scooters in the city. The chart below displays monthly counts of e-scooter injuries treated at Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG, green) and tracked in the trauma registry, alongside counts of San Francisco Police Department (SFPD) reports of collisions involving an e-scooter (blue), and counts of collisions reported by riders and the public to Powered Scooter Pilot Program Companies in orange (which are ultimately provided to the San Francisco Municipal Transportation Agency, SFMTA)<sup>7</sup>. Note that ZSFG traumatic injuries represent a subset of injuries treated at the hospital - the more serious ones - and that powered scooter company collision reports did not all involve injuries.



#### Frequency of Powered Scooter Collisions or Injuries

#### **Key Findings**

Reports of e-scooter related injury collisions peaked in May 2018 according to both SFPD and ZSFG data sources. As detailed below, May was the month estimated to have seen maximum saturation of e-scooters in San Francisco, with approximately 2,000-3,000 on the streets. After being temporarily prohibited starting in June 2018, two agencies reinitiated powered scooter rental on San Francisco streets under new regulations and a pilot program in October 2018, with a cap of 1,250 total devices for the first six months. While SFPD and ZSFG data are not presently available for 2019, injuries from October 15 through December 31, 2018 indicate that injuries related to e-scooter use continue to occur in San Francisco.<sup>8</sup>

Those reporting collisions and sustaining injuries related to powered scooters are predominantly male, adult, and White or Asian according to both SFPD and ZSFG data sources. Of nine people with traumatic injuries treated at ZSFG in 2018, 44% were injured in crashes with motor vehicles, 22% reported wearing a helmet, and one person was struck and

<sup>&</sup>lt;sup>7</sup> Note that only collisions reported to the company can be directly associated with the Pilot. Other sources, including SFPD and ZSFG data, do not generally specify whether or not an individual involved in a collision was riding a Scoot or Skip scooter vs. a private scooter, so data should be interpreted accordingly.

<sup>&</sup>lt;sup>8</sup> Note that these data include both the unpermitted spring 2018 scooter deployment, as well as the first 2.5 months of the pilot program.

injured by an e-scooter while walking. Of 32 e-scooter related injuries reported to SFPD in 2018, 19% were severe, 7% involved wearing a helmet<sup>9</sup>, and 13% were injuries to people walking. Across all data sources, reported or documented rider helmet use is low.

#### History of Deployment and Injury Monitoring in San Francisco

A summary of the timeline of e-scooter availability in San Francisco is helpful to interpret trends. For context, in March 2018 several companies placed hundreds of dockless powered scooters for rent through proprietary apps on San Francisco streets. In April 2018, San Francisco's City Attorney issued cease and desist letters to three dockless electric scooter companies citing endangerment of public health and safety, and the Board of Supervisors passed a new city law which required e-scooter companies to obtain permits to operate in San Francisco beginning in June 2018. May 2018 likely reflected peak e-scooter saturation in San Francisco, and was the final month of unregulated e-scooter sharing services in the City. SFMTA released a pilot permit application in fall 2018, and selected two companies, Skip and Scoot, for permits. Those companies were permitted to deploy up to 625 devices apiece beginning October 15, 2018.

Given the unregulated history of e-scooters prior to October 2018, reliable counts of how many e-scooters were deployed or ridden on San Francisco streets by month are not available. In the chart above, a notable increase in collisions reported to police, as well as injuries requiring trauma team activation at ZSFG is evident in May 2018. At this time, an SFMTA-estimated 2,000-3,000<sup>10</sup> powered scooters were located on San Francisco streets, while one scooter company reckoned that "tens of thousands of San Franciscans" had ridden their devices<sup>11</sup>.

During the period of unregulated deployment, the public voiced concern regarding injuries to people riding scooters as well as to people walking and using assistive devices. In response, the Vision Zero Injury Prevention Research Collaborative (VZIPR) comprised of epidemiologists, physicians, and key staff from the San Francisco Department of Public Health (SFDPH) and ZSFG developed and implemented a methodology to track powered scooter and other injuries via the ZSFG trauma registry<sup>12</sup>. The VZIPR Collaborative worked closely with SFMTA and SFPD to ensure definitions in the methods were as consistent as possible with injury tracking by SFPD and SFMTA recommendations to scooter companies, and that outreach regarding the methods to hospital and emergency medical services staff were aligned with direction given to SFPD officers.

#### Injury Reporting from Zuckerberg San Francisco General Hospital and Trauma Center

Zuckerberg San Francisco General Hospital and Trauma Center (ZSFG) tracks traumatic injuries associated with various non-traditional vehicle types – including e-scooters. As the only Trauma Center in the City and County of San Francisco, ZSFG treats nearly all patients who sustain traumatic injuries in the city.

In 2018, ZSFG treated ten patients with injuries requiring trauma team activation, sustained from a powered scooter (referred to as "e-scooters" in hospital reporting)<sup>13</sup>. One of these patients sustained injuries in Alameda County. The group of nine patients who sustained e-scooter related injuries in San Francisco had the following characteristics:

• 100% male (N=9)

<sup>&</sup>lt;sup>9</sup> This statistic describes 2 out of 28 non-pedestrian injured parties.

<sup>&</sup>lt;sup>10</sup> This is a conservative estimate per SFMTA.

<sup>&</sup>lt;sup>11</sup> <u>https://www.cnet.com/news/san-francisco-scooter-law-means-goodbye-to-electric-scooters-for-now/</u>

<sup>&</sup>lt;sup>12</sup> Methodology available:

https://www.sfdph.org/dph/files/EHSdocs/PHES/VisionZero/Emerging Mobility Injury Monitoring Methodology.pdf

<sup>&</sup>lt;sup>13</sup> Note that these numbers are preliminary, as abstraction efforts for 2018 are ongoing.

- Average age 39 years, including three children (aged 17 and younger) injured and one senior (aged 65 and older) who was critically injured<sup>14</sup>
- 33% Asian (n=3), 67% White (n=6)
- 66% admitted to hospital (n=6) and 22% critically injured<sup>11</sup> (n=2), including one pedestrian struck by an e-scooter
- Peak month of injury was May, with four injuries occurring in that month
- Causes of e-scooter related injury were e-scooter vs. motor vehicle collision (n=4); rider falling from an e-scooter (n=3); collision with a stationary object (n=1); one pedestrian injured by collision with an e-scooter (n=1)
- Six injuries (67%) included involved injury to the head. Injury to the lower body was also prevalent, particularly to knees (n=4, 44%)
- 22% of those injured wore helmets (n=2)

While data available do not fully capture whether e-scooters involved in injuries are privately owned or accessed through membership with a powered scooter company, they do provide a valuable snapshot of traumatic e-scooter associated injury in San Francisco.

E-scooter vs. motor vehicle collision was the leading cause of e-scooter injury sustained in San Francisco treated at ZSFG, representing 44% of all cases. This mirrors reporting from powered scooter companies, discussed later. The next most frequently seen mechanism of injury was a rider falling from an e-scooter (33%). This category and another— collision with a stationary object (11%)— both fall under the umbrella of injuries not involving a second party. ZSFG data additionally include one critical injury to a pedestrian injured by collision with an e-scooter (11%).



#### Mechanism of Injury (N=9)

ZSFG's e-scooter associated injury data reflect injuries sustained in 2018. While the methodology improving injury tracking for e-scooters and other formerly uncommon vehicle types was formalized in October 2018, medical charts were reviewed for all of 2018 with the new approach to data abstraction. Notably, data presented here do not include patients with less acute injuries (e.g. those of a person riding or hit by an e-scooter who presented to the ZSFG emergency department but did not require trauma team activation or hospitalization).

<sup>&</sup>lt;sup>14</sup> Critical injury is a subset of traumatic injury reflecting the most severe injuries. This categorization relies upon assessment of an Injury Severity Score by trained medical professionals.

#### SAN FRANCISCO VZIPR E-SCOOTER COLLISION AND INJURY ANALYSIS - APRIL 2019

San Francisco data reveal a high proportion of e-scooter vs. motor vehicle collisions (44%) in comparison to preliminary injury data from other cities with similarly rapid emergence of shared e-scooters, such as Austin, TX<sup>15</sup>; Portland, OR<sup>16</sup>; and Los Angeles, CA<sup>17</sup>. This is likely in part because the ZSFG data in this report reflect traumatic injuries treated at the trauma center, while the other cities' use of emergency department records tracks patients treated for an e-scooter-related injury irrespective of injury severity. Portland, for example, found that the vast majority (83%, N=176) of e-scooter related Emergency Room (ER) visits followed a fall or other non-collision event.

There are limitations to injury reporting data available from ZSFG. First, these injuries reflect only those requiring a trauma team response, and do not represent the full spectrum of injury associated with e-scooter use in San Francisco. This is one contributing factor to the differences in raw injury numbers reported in different jurisdictions – in addition to other differences in e-scooter deployment and ridership. For example, a recent study of two Los Angeles hospitals reviewing one year of ER records found 249 e-scooter related injuries, with 94% discharged home from the ER. Just 6% (n=14) were admitted or transferred to another hospital for further care – indicating severe injury<sup>7</sup>. To address this gap, VZIPR plans to undertake chart review in order to assess the prevalence of the less severe e-scooter associated injuries not represented in trauma registry data.

Second, efforts to train and educate emergency medical services and hospital staff on this data collection effort are ongoing; as this is a rapidly emerging issue, these data potentially underreport e-scooter injury involvement. E-scooters are an unfamiliar device to many, and injury data rely on accurate reporting in medical charts. Additionally, a person who has sustained a traumatic injury may not be in a position to communicate the circumstances or mode of their injury to their medical team.

#### Collision Reporting from San Francisco Police Department

Another important source of e-scooter data is SFPD's collision reports. Collision reporting uses vehicle type categories developed by the California Highway Patrol, which include the classification of "Go-ped, ZIP Electric scooter, Motorboard." This code is employed by SFPD to reflect powered scooter vehicles in collision reports. For this summary, we also included reports with "Electrically Motorized Board" or "Low Speed Vehicle" vehicle type categories that also identified e-scooter involvement in the narrative.

Thirty-two injured parties were reported in 31 collision reports referencing e-scooters in 2018. As discussed elsewhere, reports of collisions were highest in May 2018, the month corresponding to peak e-scooter concentration in San Francisco. While collision reports dropped after May 2018, there has been a rise in the number of e-scooter related collision reports since the Powered Scooter Pilot Program commenced in mid-October 2018 (compared to the 4.5 months immediately prior).

<sup>&</sup>lt;sup>15</sup> https://www.theverge.com/2019/3/8/18256197/scooter-injury-study-cdc-austin

<sup>&</sup>lt;sup>16</sup> <u>https://www.portlandoregon.gov/transportation/article/709719</u>

<sup>&</sup>lt;sup>17</sup> Trivedi TK, Liu C, Antonio ALM, et al. Injuries Associated With Standing Electric Scooter Use. *JAMA Netw Open.* 2019;2(1):e187381. doi:10.1001/jamanetworkopen.2018.7381



Monthly Frequency of e-Scooter Injury Collision Reports (SFPD Data, N=31)

Looking at individuals with injuries referenced in collision reports (N=32), the data show the following:

- Gender: of 32 injured people in 2018 reporting, 22% were female and 78% were male.
- Age: range from 12-86; 4 children (age 17 and under); 3 seniors (age 65 and up).



Age Distribution of People Injured in e-Scooter

Race/ethnicity: People injured in e-scooter related collisions were predominantly White (66%), and much less . frequently Asian (13%), Hispanic (9%) or Black (3%). Nine percent of injured parties' race/ethnicities were either unknown or in another category.



## Race of e-Scooter Crash Injured Parties (N=32)

• Injured parties and Helmet Use: 4 pedestrians, 28 e-scooter users. Injured pedestrians were older adults (age range 64-86), White or Asian (50% each), and 75% female. A quarter of injuries to pedestrians were described as severe, and 75% as other visible injury. Of injured e-scooter users, two people (7%) reported wearing a helmet.





• **Severity:** Nineteen percent of injuries reported to police were severe, and 37% were described as other visible injury. Under half (44%) of reported injuries from e-scooter crashes were complaints of pain.



Severity of Injuries Sustained from e-Scooter Collisions, SFPD Data (N=32)

#### SAN FRANCISCO VZIPR E-SCOOTER COLLISION AND INJURY ANALYSIS - APRIL 2019

 Location of collisions: Powered scooter collisions reported to SFPD clustered in the northeastern quadrant of the city, particularly in the South of Market, Hayes Valley, and Western Addition neighborhoods. These locations may also reflect higher availability of powered scooter devices. Districts with highest numbers of reported collisions were Districts 5 and 6. A majority (58%) of collisions took place on San Francisco's High Injury Network<sup>18</sup> – the 13% of city streets where 75% of severe and fatal injuries occur.





<sup>&</sup>lt;sup>18</sup> More information at: https://sfgov.maps.arcgis.com/apps/webappviewer/index.html?id=fa37f1274b4446f1bdddd7bdf9e708ff

• **Collision time of day:** While collisions took place in a wide distribution of times, the noon hour and early afternoon through early evening (3p-8p) appear to be particularly common times for e-scooter collision. No collisions were reported to have occurred in the nighttime and early morning hours between midnight and 7a.



#### **Collision Reporting from Pilot Program Companies**

Powered Scooter Share Permit and Pilot Program companies Skip and Scoot submit monthly tracking data to SFMTA, including information on collisions reported by their users.

Scoot has reported zero collisions to date at the time of this report.

Skip reported 34 collisions over a five month period between mid-October 2018 and mid-February 2019, and the following summary reflects those data.

- Gender: of collision-involved users disclosing their gender, 80% were male and 20% were female.
- Severity: While a large minority of reported collisions resulted in no injury to the person reporting (47%), more often collisions sustained while riding e-scooters resulted in complaint of pain (23%), severe injury<sup>19</sup> (9%), or other visible injury (21%). These reporting categories are self-reported by the injured person (who may or may not be a powered scooter user) and mirror those employed in state-wide collision reporting by the California Highway Patrol and local police departments, including the San Francisco Police Department.

<sup>&</sup>lt;sup>19</sup>The SFPD classification of severe injury includes broken or fractured bones, dislocated limbs, severe lacerations and unconsciousness, among other injuries.



Reported Severity of Injury from Collision (N=34)

- **Police reports and hospital visits:** Just under 12% of collisions reported to powered scooter companies were made by users who filed or intended to file a police report. Similarly, users indicated they either made or planned to make a hospital visit following 9% of collisions reported to powered scooter companies.
- Location: Among reported locations, the most common collision location was the roadway (83%), followed by the sidewalk (10%) and bike lane (7%). Per California law, operation of e-scooters on sidewalks is prohibited. While e-scooter collisions on sidewalks may place pedestrians at particular risk, the level of injury of parties besides the collision reporter is not assessable from these data.
- Helmet use: Overall, 12% of users reporting collisions also reported helmet use. Data on helmet use were largely incomplete, with only 21% of reported collision events including this information.
- **Collision type:** The leading collision type reported was motor vehicle vs. powered scooter (44%), followed by powered scooter collisions without a second party (38%) and powered scooter vs. pedestrian collisions (12%).

Colli	ision with	motor v	ehicle, 15					
Sing	le vehicle	crash, 13	3					
Colli	ision with	<mark>ped</mark> estri	an, 4					
Coll	ision with	other ve	hicle type	e, 1				
Unk	nown, 1							
)	2	4	6	8	10	12	14	16

#### Collision Type (N=34)

• **Collision time of day:** Reported collisions were equally likely to take place in morning or afternoon (41% each), while relatively uncommon in evening hours (18%).



Time of Day of Reported Collisions (N=34)

Collision rate: The number of vehicles available for rental on San Francisco streets, as well as the actual miles ridden by users fluctuate month to month. Therefore, standardizing the monthly count of reported collisions by powered scooter vehicle miles traveled (VMT) helps compare like values across time. Standardizing reported collisions per 100,000 VMT reveals a consistently rising trend of collisions, with more than eight times as many collisions per vehicle mile traveled in February as in October. (Please note: Scoot and private vehicle mile data are not included in this calculation. Vehicle miles traveled include only revenue miles traveled by Skip devices, and not those traveled by gasoline powered trucks or vans or e-vehicles to reposition rental devices).



### Rate of Reported Collisions per 100,000 Vehicle Miles Traveled

#### **Collision Reporting via SF311**

A total of two e-scooter collisions were reported via SF311, the publicly accessible portal for complaints and concerns citywide. One of these referenced a crash with a privately-owned scooter, while the other was a March 2019 report of a powered scooter company contractor who sustained an injury while riding a device. This injury is not currently reflected in company injury reporting, which has not yet been submitted beyond February.

#### **Recommendations**

Based on collision and injury data available, several issues deserve further attention. From an injury prevention perspective we offer the following recommendations:

- **Provide additional information on where it is legal to ride:** operation of e-scooters on sidewalks places pedestrian non-users of e-scooters at risk of injury and violates California vehicle code<sup>20</sup>. Promoting awareness of regulations to e-scooter users is necessary to prevent injury. A SFMTA campaign highlights Do's and Don'ts of powered scooter ridership<sup>21</sup> in brief, easy to read format and is a resource for user education.
- Increase access to helmets: Low rates of helmet use across data sources combined with the high prevalence of e-scooter associated head injuries in ZSFG data highlight a prevention opportunity. Recent e-scooter guidance from the American College of Emergency Physicians<sup>22</sup> names helmet use as the "easiest and smartest thing you can do to avoid serious head injury."
- Monitor youth users of e-scooters: ZSFG and SFPD injury data indicate that youth age 17 and younger are a population vulnerable to e-scooter injuries. Ongoing enforcement of pilot program companies' age restrictions is important to ensure that these injuries to youth do not arise on rented devices.
- Conduct additional analysis with more data to assess opportunities for infrastructure improvements: including on the Vision Zero High Injury Network.

Given the relatively recent popularity of e-scooters as a transportation mode, VZIPR also offers one recommendation from a data perspective:

• Improve tracking of e-scooter associated injury: presently, there is a lack of consensus on which International Classifications of Disease, 10<sup>th</sup> revision (ICD-10) codes should reflect e-scooter collision events in medical records. VZIPR will engage in the national dialog on selecting codes to reliably capture e-scooter related modes of injury. Standardizing ICD-10 code use will improve tracking of both critical and less severe injuries, and allow for better comparisons between hospitals and across the country.

<sup>&</sup>lt;sup>20</sup> California Vehicle Code Sec. 21235(g)

<sup>&</sup>lt;sup>21</sup> <u>https://www.sfmta.com/blog/powered-scooters-are-here%C2%A0</u>

<sup>&</sup>lt;sup>22</sup> <u>http://newsroom.acep.org/2019-02-27-Scoot-Safe-New-Public-Service-Announcement-Shares-Emergency-Physicians-Tips-for-</u> Electronic-Scooter-Riders