PEDESTRIAN SAFETY
IN THE ERA OF ELECTRIC MOBILITY DEVICES
California state law requires that all 58 counties impanel a Grand Jury to serve during each fiscal year. California Penal Code Section 905; California Constitution, Article I, Section 23

The Civil Grand Jury investigates and reports on one or more aspects of the County’s departments, operations, or functions. California Penal Code Sections 925, 933(a)

Reports of the Civil Grand Jury do not identify individuals interviewed by name. California Penal Code Section 929

The Civil Grand Jury issues reports with findings and recommendations resulting from its investigations to the Presiding Judge of the Superior Court. California Penal Code Section 933(a)

Each published report includes a list of those elected officials or departments that are required to respond to the Presiding Judge of the Superior Court within 60 or 90 days as specified. California Penal Code Section 933

California Penal Code Section 933.05 is very specific with respect to the content of the required responses. Under Section 933.05(a), for each finding, the response must:

1) Agree with the finding, or
2) Disagree with it, wholly or partially, and explain why.

Similarly, under Penal Code Section 933.05(b), for each recommendation, the responding party must report that:

1) The recommendation has been implemented, with a summary of the implemented action; or
2) The recommendation has not been implemented but will be within a set timeframe; or
3) The recommendation requires further analysis, with an explanation of what additional study is needed, and the timeframe for conducting that additional study and the preparation of suitable material for discussion. This timeframe may not exceed six months from the date of publication of the Civil Grand Jury’s report; or
4) The recommendation will not be implemented because it is not warranted or reasonable, with an explanation.

Any San Francisco resident who is a US citizen and is interested in volunteering to serve on the Civil Grand Jury for the City and County of San Francisco is urged to apply. Additional information about the San Francisco Civil Grand Jury, including past reports, can be found online at http://civilgrandjury.sfgov.org/index.html.
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EXECUTIVE SUMMARY

All trips within San Francisco begin and end with walking. For 17% of the population, walking is the primary mode of all trips.\(^1\) San Francisco pedestrians are the most vulnerable road users – accounting for half of all San Francisco traffic fatalities. On May 11, 2019, the death of another pedestrian marked the eighth death so far in 2019 – four times the number that occurred by the same time in 2018. \(^2\)

The arrival in 2017 of shared motorized personal mobility devices – primarily electric scooters (e-scooters), but also electric bicycles and various types of motorized skateboards – quickly generated conflicts with pedestrians, as some under-informed users of these devices used sidewalks as their preferred travel lanes to minimize their own risk of collisions with cars.

The expectation of pedestrian safety is eroded when pedestrian rights-of-way are ignored on sidewalks as well as in intersections.

In addition to the conflicts generated by active use of the new devices, e-scooters were being left in the middle of sidewalks, and walkers complained the scooters were tripping hazards. Starting in April 2018, complaints regarding electric scooters surged into the City’s primary customer service center (SF311), by telephone and through the SF311 smartphone app.\(^3\) For example, on April 13, 2018, there were 32 requests to remove motorized, dockless scooters.

The San Francisco Municipal Transportation Agency (SFMTA) responded quickly to the need for structure, cooperation, and data-driven actions. It first banned shared-ride e-scooters from City streets and confiscated the devices left on sidewalks. During this ban, it developed and then launched a twelve-month Powered Scooter Share Permit and Pilot program (the “Pilot”) that officially began in October 2018. The San Francisco Civil Grand Jury (SFCGJ) commends SFMTA and other involved organizations for their actions and planning.

This SFCGJ investigation reviewed the status and progress of San Francisco’s efforts with regard to pedestrian safety and emerging mobility options. These efforts improve pedestrian safety and support policies and procedures suitable for the personal mobility advancements yet to arrive on San Francisco’s sidewalks, bike lanes, and streets.

The key Findings and Recommendations presented in this report focus on ways to improve:

- Education and outreach for pedestrians and motorized device users;
- Enforcement of existing ordinances and laws to help reduce injuries;
- Injury data capture to better identify root causes; and

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• Contractual terms regarding liability and responsibility for injuries, device maintenance, and repair.

Specific Findings and Recommendations are presented in separate sections of this report and in a summary table as Appendix A.

San Francisco has always been, and will likely remain, a forward-looking City and an incubator for innovation. Future social and technical innovations will challenge existing conditions upon arrival. Personal mobility devices are expected to evolve rapidly and to test the City’s commitment to “. . . create a transportation system that is among the best in the world.”

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BACKGROUND AND PROBLEM STATEMENT

Background

The preamble to the San Francisco City Charter Section 8.A, Transportation, states that:

An effective, efficient, and safe transportation system is vital for San Francisco to achieve its goals for quality of life, environmental sustainability, public health, social justice, and economic growth. The Municipal Transportation Agency must manage San Francisco's transportation system that includes automobile, freight, transit, bicycle, and pedestrian networks to help the City meet those goals... in order to create a transportation system that is among the best in the world.

In 2018, 23 people lost their lives while traveling on City streets. Historically, over 200 people are seriously injured each year in San Francisco. These deaths and injuries are unacceptable and preventable, and over the past several years, San Francisco has worked towards stopping further loss of life as highlighted below.

In 2003, the Pedestrian Safety Advisory Committee (PSAC) was established to provide insight into issues concerning pedestrian safety, convenience, ambiance, and planning. PSAC prepared and submitted its reports to the Board of Supervisors (BOS) in 2009, 2010, and 2011.

In late 2013, San Francisco launched a community outreach program called WalkFirst, a first-of-its-kind initiative in the United States to improve pedestrian safety in San Francisco. WalkFirst was a joint project of the San Francisco Municipal Transportation Agency (SFMTA), the San Francisco Planning Department, the Department of Public Health (SFDPH), and the Controller’s Office. Their objectives focused on actionable recommendations to reduce serious or fatal pedestrian injuries by 25 percent by 2016 and by 50 percent by 2021.

In 2014, the City adopted Vision Zero, a policy with a goal to create safer, more livable streets as City departments work to eliminate traffic fatalities. SFMTA, in implementation of Vision Zero objectives, advocates for pedestrian safety and for reductions in single-occupancy automobile use – fewer motor vehicles on the roads means less congestion and fewer injuries.

In 2016, to increase awareness of this goal, Vision Zero began a campaign with radio spots, bus shelter ads, and on-bus ads.

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5 San Francisco Charter Article VIIIA, The Municipal Transportation Agency, Section 8.A.100 Preamble


In July 2017, the San Francisco County Transportation Authority (SFCTA) and the SFMTA adopted ten Guiding Principles to evaluate the impact and benefits of emerging mobility services and technologies. The ten principles are listed in Figure 1. The Guiding Principles are a tool used by the SFMTA to evaluate how powered e-scooter share services can support City goals. Six of the Guiding Principles were particularly relevant to the SFCGJ investigation process.

In 2018, San Francisco witnessed the introduction of shared-ride electric e-scooters. Soon after that, sidewalks became lanes for riding and dropping e-scooters, endangering both pedestrians and riders.

Significant 2018 events included:

In February, Bird, Lime, and Spin flooded San Francisco streets with 60 e-scooters over Saint Patrick’s weekend. These companies did not approach SFMTA about e-scooters and how to incorporate them into the City’s transportation plan.

In March, the BOS crafted legislation amending the transportation code to establish a violation for e-scooters left unattended on public rights-of-way.

In April, there was a high volume of complaints to the SF 311 service about e-scooters. In response, a Cease and Desist Order was issued by the SF City Attorney to temporarily stop e-scooter usage in the City.

By late April, the BOS passed legislation providing that any company operating a shared, powered scooter service in the City must have a permit from SFMTA. In alignment with this legislation, SFMTA created the Powered Scooter Share Permit and Pilot program (the “Pilot”), with an application process for interested companies. As part of the permit application process,

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11 Ibid., Safety, Disabled Access, Equitable Access, Collaboration, Labor, Sustainability


13 Ibid.


each company was required to demonstrate how it would minimize its powered e-scooters’ impact on the sidewalks of San Francisco. The application process required the companies to:

- offer user education;
- be insured;
- share trip data with the City;
- have a privacy policy to protect user information;
- provide a plan for low-income users;
- propose a service area.

Applications were due in June. In late August, SFMTA announced that shared-ride companies Scoot and Skip (also called Transportation Network Companies, or TNCs) were found to have the capacity to meet all permit requirements and to operate in the public interest.

The Pilot began in mid-October 2018 for a 12-month period.\(^\text{17}\)

The Pilot allows for a maximum of 1,250 e-scooters on the streets in the first six months of the program. Depending on compliance with the conditions of the Pilot, up to an additional 1,250 scooters may become available for months seven through twelve. As of May 24, 2019, the SFMTA is reviewing and verifying information provided by the permittees to decide if additional scooters can be added to a maximum of 800 for each TNC.

During the first half of the Pilot (mid-October 2018 to April 2019), SFMTA and the permittees addressed an initial complaint about e-scooters left on sidewalks, in front of ADA access ramps, and in front of doorways. In response, they incorporated a locking device on the e-scooters that users activate to both begin and end their shared rides. While these “lock-to” methods differ by model, the use of the locking mechanism eliminated the casual drop of e-scooters, reduced theft, and improved sidewalk safety.

SFMTA completed a Mid-Pilot Evaluation\(^\text{18}\) of Scoot and Skip, and their key findings were:

- Complaints about sidewalk riding and improper parking were significantly reduced under the Pilot;
- With the lock-to design in place, issues with pedestrian safety and sidewalk blockage have declined;
- While California law doesn’t require scooter riders over the age of 18 to wear helmets, SFMTA will continue to encourage TNC commitment to helmet distribution and rider education as beneficial actions towards injury prevention;
- Greater attention to equity considerations is needed to ensure powered e-scooter programs serve disadvantaged areas and low-income individuals;

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• The demand for powered shared e-scooters is strong, and may have an impact in reducing private auto use;
• When properly regulated, powered e-scooter share systems can serve the public interest.

SFMTA recommendations included:

• Continue monitoring the Pilot;
• Promote safety as a top priority. Based on collision and injury data, the SFMTA recommends continued education and rider accountability, increased helmet access and usage, and permittees improving communication to riders on the steps to take when a collision occurs;
• Ensure progress in the areas that need improvement, particularly equity;
• Continue monitoring permittee compliance and to complete the Pilot evaluation in the fall of 2019. The full evaluation of the 12-month Pilot will include:
  – understanding the safety impact of scooters and opportunities for infrastructure and non-infrastructure improvements by reviewing collision reports, specifically those involving injury;
  – assessing the impact of scooter share on the public right of way; and
  – eliminating sidewalk riding.

At the time of this report, Pilot implementation continues and is being monitored by SFMTA and other involved agencies.

**Problem Statement**

The advent of new forms of motorized transportation has created an unprecedented situation affecting all modes of transportation in San Francisco, requiring adaptations in the design and regulation of all modes.

Of all the concerns raised by the new situation, the safety of pedestrians is the most urgent. That has been our particular focus in this report; however, addressing that has required a broader examination of the systems involved.

Some of the questions raised are: Where do these motorized devices belong? In bike lanes? Protected bike lanes? What infrastructure is needed to keep residents and tourists safe? Do these new transportation modes add value to the City’s transportation system? These are some of the questions our investigation reviewed.
METHODOLOGY

The SFCGJ concentrated its investigation on the following six topics:

- Education, for safe e-scooter riding and behavior;
- Engineering, providing supportive infrastructure (such as bike racks) and safe (protected) lanes;
- Enforcement, for adherence to City and State codes;
- Injury Data Review, on the impact on pedestrian safety from electric mobility devices;
- E-scooter user agreements between the permittees and their customers, determining the effects of the agreements and their terms on the goals of the Pilot; and
- The San Francisco Pedestrian Safety Advisory Committee (PSAC): evaluating its effectiveness.

The topics of Education, Engineering, and Enforcement are key criteria of Vision Zero and the shared e-scooter Pilot. Vision Zero reviews Injury Data collected by the San Francisco Department of Health, the San Francisco Police Department (SFPD), Zuckerberg San Francisco General Hospital (ZSFG), and self-reporting by the two TNCs, to assess progress towards Vision Zero goals. The various Agreements reviewed as part of this SFCGJ investigation are discussed in later sections of this report. The sixth topic reviewed by the SFCGJ regards the PSAC Committee established in 2003 – years ahead of the advent of shared-ride services – and its relevance given the current involvement and leadership within Vision Zero and SFMTA.

The SFCGJ reviewed documents; literature; agency websites; newspaper articles; public television reporting; and internet sites for local, national, and international data. We conducted confidential interviews with representatives from the listed agencies below. We researched how cities are handling regulation, infrastructure, injuries, and liability issues to incorporate these new modes of transportation into city life. Jurors also reviewed the user agreements and their terms and conditions.

Jurors interviewed representatives from the following organizations:

- San Francisco Metropolitan Transportation Agency;
- San Francisco Department of Public Health;
- San Francisco Police Department;
- 311 Customer Service Center;
- San Francisco Pedestrian Safety Advisory Committee;
- Walk SF;
- SF Bicycle Coalition; and
- A TNC representative.

Jurors also attended meetings of the San Francisco County Transportation Authority, the San Francisco County Transportation Citizens Advisory Board, the San Francisco Pedestrian Safety Advisory Committee, and the San Francisco Metropolitan Transportation Agency community meeting on the powered e-scooter Sharing program.
Jurors further attended administrative hearings on the appeals by the Jump and Lime e-scooter companies, who were denied permits for the Pilot.
DISCUSSION

This section of the report summarizes the results of SFCGJ research within the six topics of focus related to pedestrian safety:

- Education;
- Engineering;
- Enforcement;
- Injury/Death Data and e-scooters;
- E-scooter User agreements between the TNCs and their customers; and
- Relationship of, and effectiveness of, the San Francisco Pedestrian Safety Advisory Committee (PSAC).

Education

One of the San Francisco Transportation Authority’s “Guiding Principles” for emerging technology is Safety: “Emerging Mobility Services and Technologies must be consistent with the City and County of San Francisco’s goal for achieving Vision Zero, reducing conflicts, and ensuring public safety and security.” Vision Zero is guided by safety, stating “…[p]reservation of human life is our highest priority”. Safe human behaviors through education are essential components of reaching Vision Zero.

Education works only if it engages the student (i.e., the pedestrian, transit rider, e-scooter rider, et al.). Vision Zero launched a public-awareness campaign in 2016 with radio spots, bus-shelter ads, and on-bus ads. In 2017, the City also engaged in 40 outreach events, speaking with more than 10,000 people. Based on survey data, these efforts increased public awareness of Vision Zero from 16% in 2015 to 28% in 2017.

Signage can help. Figure 2 shows a sidewalk sign in the West Portal area that highlights the prohibition of device riders on the sidewalk. An SFMTA representative stated that SFMTA installs such signs upon request in business districts.

![Figure 2](image)

Sidewalk sign in West Portal

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Encouraging e-scooter users and users of all motorized personal mobility devices to use bike lanes is another important aspect of education. Use of bike lanes by these devices, however, is not stressed as the appropriate lane in the same way education stresses that sidewalks are not the appropriate lane for travel. Bike lanes throughout San Francisco are mapped by SFMTA\textsuperscript{22} and the San Francisco Bicycle Coalition.\textsuperscript{23} Google Maps provides improved route directions and mapping for bicyclists as well as pedestrians. Figure 3 presents the web links to these mapping resources.

The two e-scooter companies, Scoot and Skip, also suggested that education is vital to user and pedestrian safety.\textsuperscript{24} Both companies provide mandatory instructional videos, free in-person classes, and field staff to proactively approach riders with safety reminders (the focus is on high-traffic areas during periods of heavy usage).

Accountability comes from educating users on the laws that apply to e-scooters and encouraging respectful riding on the streets of San Francisco. Bad behavior can be corrected through education and enforcement of the law.

Bad behavior by users is handled differently by the two companies:\textsuperscript{25}

- Scoot levies penalties for poor rider behavior including fees for parking citations and safety violations and service suspension for repeat violations. As of March 18, 2019, 80 riders have been given warnings for unsafe riding or parking, 12 have been fined $300 each, and two were suspended;
- Skip has a user suspension policy in place, triggered only by a high degree of proof. Skip has not deactivated any user accounts (through March 2019) for Rider Code of Conduct violations.

User behavior is difficult to track and modify. User age minimums are challenging to enforce.

Injuries incurred by users of all ages are being documented in many cities across the United States where TNCs operate. An injury study at UCLA in 2018\textsuperscript{26} indicated that only 4% of people injured in e-scooter accidents were wearing helmets at the time.

\begin{itemize}
  \item \textsuperscript{22} https://www.sfmta.com/maps/san-francisco-bike-network-map, accessed May 1, 2019.
  \item \textsuperscript{23} https://sfbike.org/resources/maps-routes/, accessed May 1, 2019
  \item \textsuperscript{25} Ibid, Appendix B.
\end{itemize}
Helmets are essential components of injury prevention. Both TNCs advocate use of helmets, and both provide free helmets to users when requested. The Mid-Pilot Evaluation reported that 1,243 free helmets were distributed by Skip and 532 helmets by Scoot as of March 15, 2019.27

**Engineering**

In support of San Francisco’s Charter-based goal “…to create a transportation system that is among the best in the world….”28, several major and separate City departments are tasked with planning, building, operating, and maintaining critical facilities:

- Department of Public Works (DPW) ([https://www.sfpublicworks.org/](https://www.sfpublicworks.org/)) is responsible for
  - governance and oversight for cleaning and maintaining sidewalks, tree permits, placement, plant list, planting, and the 311 service center;
  - maintenance and repair of pipelines under City streets, street maintenance, resurfacing and pothole repair, and street cleaning;
  - oversight of public toilets on or near pedestrian plazas and sidewalks, recycling and refuse collection, sidewalk bike racks, and newsstands;
- SFMTA ([https://www.sfmta.com/](https://www.sfmta.com/)) oversees MUNI bus and streetcar routes, bus stops and shelters, bus lanes, bike routes, and protected/unprotected bike lanes;
- The Recreation and Parks Department ([https://sfrecpark.org/](https://sfrecpark.org/)) oversees usage of park roads for cars, bikes, and personal mobility devices;

In addition to these public service departments and agencies, private home and commercial building owners are responsible for sidewalk maintenance and repair in front of their properties.

Acknowledging these multiple departments in the context of delivering safe streets and sidewalks, the City Charter29 states that:

> Responsibility for transportation has been diffused throughout City government. Accordingly, this Article places within the Municipal Transportation Agency the powers and duties relating to transit now vested in other departments, boards, and commissions of the City and County. This Article further requires that, to the extent other City and County agencies provide services to the Municipal

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29 San Francisco Charter Article VIIIA, Section 8A.100- Preamble.
Transportation Agency, those departments must give the highest priority to the delivery of such services.

With the emergence of personal mobility devices, and in particular the shared-ride TNC services in certain zones of the City, multi-modal lanes for the increasing variety of mobility devices have become important infrastructure components for pedestrian and device rider safety. SFMTA looks at groupings of streets to designate safe lanes that emphasize somewhat separated flows for public transit; private automobiles; bicycles, e-scooters, and other wheeled mobility devices; and pedestrians. The photograph in Figure 4 illustrates how separated lanes can improve safety and flow for everyone. This image also implies how the various City departments must work together to implement such flow lanes:

- traffic control during construction and traffic flow changes post-construction;
- sidewalk tree plantings;
- changes in vehicle parking areas;
- private property owner sidewalk repairs (if needed) and private plantings;
- coordination to provide safe access to community resources such as schools and churches.

On May 8, 2019, “Bike to Work Day,” Mayor London Breed announced that 20 new miles of protected bike lanes would be created over the next two years. In 2017-2018, the SFMTA built protected bike lanes at a pace of a little more than five miles per year. The pace would be doubled under the Mayor’s plan.30

In this same announcement, Brian Wiedenmeier, Executive Director of the San Francisco Bicycle Coalition, urged the City to speed up construction of protected bike lanes, which have barriers between where cars park and bikers ride. The barriers can be made of concrete or other suitable materials, including planters. “What we’re focused on is physically protected and separated bike lanes throughout our City”. “Paint and posts don’t cut it anymore. If somebody can park somewhere, they will.”

In May 2019, SFMTA released an evaluation of street safety improvements31 that showed the beneficial effects of improved infrastructure programs in the City. Of the bicyclists and pedestrians surveyed about the new arrangements on Folsom Street, 83% of bicyclists and 54%


of pedestrians reported increased comfort after the completion of the projects. A 287% increase in bike counts on Turk Street occurred after a bike lane was installed.\textsuperscript{32}

These projects have helped to reduce traffic speeds, and reduced speeds reduce accidents and serious injuries. Following the installation of new bike lanes and speed bumps on Vicente Street, an 18% decrease in vehicle speeds was observed.

SFMTA has, and can marshal, the resources necessary to implement high-priority infrastructure improvements. For example, according to a San Francisco Bicycle Coalition website news article, “[i]n just six weeks, the SF Municipal Transportation Agency (SFMTA) built a brand new protected bike lane on Howard from Third to Sixth, including the blocks in front of Moscone Center.”\textsuperscript{33}

As stated by a representative of WalkSF\textsuperscript{34}:

\begin{quote}
We can and should remind bike and scooter riders that they shouldn’t be on the sidewalk, and until we create safe spaces for these to use, we’re asking people on bikes and scooters to be as vulnerable as people walking and crossing the street.
\end{quote}

While transportation modes will evolve, the overall widths of street and sidewalk combinations are fixed by private properties on either side of the combined lanes and cannot be widened without narrowing other lanes. Concerning transportation planning, any changes in lane widths represent a zero-sum game where, for example, adding a protected bike lane may remove a vehicle lane or parking spaces. Other traffic flow changes may be designed to shift lanes to parallel streets a block or more away.

As an example of shifting traffic lanes, \textbf{Figure 5} (next page) shows the SFMTA plan for modifying the Polk Street corridor to better accommodate pedestrian and bike traffic, while utilizing Van Ness Avenue for improved flow of transit buses and commercial and private vehicles.\textsuperscript{35}

More and more-varied personal mobility devices are becoming available, and are expected to shift near-future transportation choices away from private automobiles. San Francisco’s transportation infrastructure must be maintained not only to ensure safety (e.g., pothole and sidewalk repairs), but also to accommodate shifting demands for increased lane width.

The City Charter makes SFMTA responsible for the management of all ground transportation in the City, including oversight of the Municipal Railway, other public transit, paratransit, taxis, traffic, parking, bicycling, and walking, in addition to use of the new personal mobility devices. SFMTA holds responsibility for many of the required steps for lane-width modification and lane

\textsuperscript{32} The actual number of bicyclists and pedestrians surveyed was not identified in the SFMTA summary report.


\textsuperscript{34} Email correspondence with WalkSF representative, May 21, 2019.

maintenance; however, the other departments listed at the beginning of this section must also participate and “give the highest priority to the delivery of such services.”

As stated by SFMTA in their report titled “Pedaling Forward – a Glance at the SFMTA’s Bike Program for 2017-2021”:

Making streets safer for bicycling means making them safer for everyone. By configuring our streets to make people on bikes more visible, and everyone’s behavior more predictable, better bikeways also reduce conflicts for people walking and driving.

SFMTA, however, does not explicitly direct e-scooters to use bike lanes where available. The current infrastructure, initially designed with only bikes in mind, can support the e-scooter arrivals.

A project underway in San Francisco, Better Market Street (BMS), is an example of innovative/integrative planning for the future of transit, streets and sidewalks in San Francisco. Through this project, 2.2 miles of Market Street between Octavia Boulevard and the Embarcadero will become safer and easier for people to walk, bicycle, and ride public transit.

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Multiple City agencies are working together on this project with the goal to “revitalize and improve San Francisco’s busiest pedestrian street, busiest bicycle thoroughfare, and busiest transit corridor.”

Some of the planning and engineering objectives include:

- **Pedestrian-related** improvements – shortening intersection crossing distances and creating a minimum 15’ wide pedestrian through-way everywhere;
- **Bicycling-related** improvements – improving bike lanes and clearly marking pedestrian crossings; and
- **Transit-related** improvements – upgrading the bus fleet with more low-floor buses and creating red transit-only lanes along the center of Market Street.

BMS may become a blueprint for future transportation projects in San Francisco.

**Enforcement**

Enforcement is a complex issue dependent upon laws and ordinances, resident and visitor awareness of them, and the availability and discretion of individuals certified to implement them.

The most recent set of regulations affecting SF sidewalk safety, California Assembly Bill AB-2989, went into effect January 1, 2019. It includes requirements that motorized e-scooter operators:

- not operate a motorized scooter with any passengers in addition to the operator;
- not operate a motorized scooter carrying any package, bundle, or article that prevents the operator from keeping at least one hand on the handlebars;
- not operate a motorized scooter upon a sidewalk, except as may be necessary to enter or leave adjacent property;
- not leave a motorized scooter lying on its side on any sidewalk, or park a motorized scooter on a sidewalk in any other position, so that there is not an adequate path for pedestrian traffic.

Strict enforcement of this motorized e-scooter code could require additional police officers, especially in high-use corridors. Unfortunately, as stated at a July 25, 2018 hearing, San Francisco is understaffed in its traffic enforcement operations.

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The Traffic Company was at a low of 37 officers in 2018. At a press conference in April 2019, Supervisor Fewer offered that reaching 80 officers in the Traffic Company could be possible in "two to three years". This number is needed to adequately patrol the City. Support from the Board of Supervisors will be needed to increase the number of officers in the Traffic Company.

In March 2019, using a grant funded by the California Office of Traffic Safety through the National Highway Traffic Safety Administration, the SFPD deployed additional officers to areas identified as having significant numbers of vehicle collisions involving bicycle riders and pedestrians. These operations concentrated on the five moving violations associated with the greatest number of injuries: speeding, making illegal turns, failing to stop for stop signs and red lights, and failing to yield to pedestrians in crosswalks.

The “Focus on Five” does extend to enforcing moving violations by bicycles, e-scooters, or other personal mobility devices that occur on streets. As for violations occurring on sidewalks, a memo dated May 18, 2017, from the SFMTA Sustainable Streets Department to the SFMTA Board of Directors stated that “[s]idewalk riding is not one of these top violations, however we pass along specific complaints as they are received.”

Vision Zero’s SF 2019 Action Strategy acknowledges that excessive vehicle speed is the most critical factor in predicting a traffic fatality. Although not legal in California, Automated Speed-limit Enforcement is favored as an additional, effective tool to reduce excessive vehicle speeding. SFMTA details data and facts in support of Automated Speed Enforcement on its website.

A five-year pilot program for automated speed enforcement in San Francisco and San Jose was proposed to the California legislature (AB 342) in 2017 but died in committee. Such a

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41 https://www.sfexaminer.com/the-city/sfpd-adds-more-traffic-cops-to-their-ranks/


43 Memorandum from SFMTA Sustainable Streets Department to SFMTA Board of Directors, May 18, 2017.


proposal, even if passed, would be difficult to impossible to extend to monitoring sidewalk infractions. The Mayor’s Executive Directive in 2019 to Expedite Traffic Safety Projects and Improvements commits to continued advocacy to implement Automated Speed Enforcement.47

**Injury/Death Data and e-scooters**

Data collected on injuries and deaths of users and pedestrians from e-scooters or other electric mobility devices are just starting to become available.

Surgeons in the Emergency Department at ZSFG are also concerned about other alternative forms of transportation including electric bikes, mopeds, scooters, skateboards, hover boards, Segways, and even electric unicycles.

Nationally, between August 2018 and February 2019, four riders have been killed in e-scooter accidents.48, 49

Medical professionals reported that helmets were rarely used. Part of the reason suggested for low helmet use is that riding a scooter is a decision “made in a flash”. The American Medical Association (AMA) “encourages all Americans to adopt preventive measures to stay safe and healthy”. For riders, such preventative measures include full protective gear such as certified helmets, elbow and kneepads and closed-toe shoes.50

Researchers at UCLA examined data from two emergency departments UCLA Medical Center, Santa Monica and Ronald Reagan UCLA Medical Center from September 1, 2017 to August 31, 2018. The data indicated 249 people required medical care from scooter accidents, one-third arrived at the hospital in an ambulance, 40% had head injuries, and only 4% wore helmets.51 This research was published in JAMA Network Open on January 25, 2019 and is the first published study on injuries caused by e-scooters.

Approximately 80% of the injuries were caused by falls, 10% were caused by collisions with objects, and 9% were the result of being hit by a moving vehicle such as a car, bicycle, or another scooter.

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Other findings included:

- 92% (228) of injured people were riders;
- 8% (21) were pedestrians who were struck by a scooter or stumbled over a discarded one;
- 4% (10) wore a protective helmet while riding;
- 5% had a blood alcohol level over .05% or were perceived by physicians to be intoxicated;

Patient injuries were assigned into one of three categories:

- head injuries 40%;
- fractures 32%;
- cuts, sprains or bruises without a fracture or head injury 28%.

Fifteen people were admitted to the hospital, two of whom were treated in an intensive care unit.

The researchers observed e-scooter riders at various intersections in Los Angeles for a total of seven hours during September 2018. They documented 94% of the 193 people riding scooters were not wearing helmets.

In the Powered Scooter Share Mid-Pilot Evaluation prepared by SFMTA, injury and collision data were analyzed for the second half of 2018. The data included the unpermitted period from June 2018 through mid-October 2018 and the first 2.5 months of the Pilot (mid-October through December 2018). Injury data from the SFPD and ZSFG are not currently available for 2019.

The SFMTA Mid-Pilot Evaluation presented the following key findings:

- ZSFG treated nine people for traumatic injuries; four were injured in crashes with motor vehicles; only two reported wearing a helmet at the time of the injury; and one person was struck and injured by an e-scooter while walking;
- Of the nine people injured, six were admitted to the hospital with head injuries and three of the six were critically injured. Four of the nine injuries occurred in May 2018 – prior to the Pilot program activation;
- SFPD reported 32 injuries involving e-scooters in which 4 involved injured pedestrians and 6 resulted in serious trauma;
- All data sources documented low helmet use by e-scooter riders.

ZSFG tracks traumatic injuries that are associated with various non-traditional vehicle types – including e-scooters. ZSFG is the only Trauma Center in the City and County of San Francisco, and as such treats most patients who sustain traumatic injuries in San Francisco.

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The causes of e-scooter injuries:

- four from e-scooter collision with a motor vehicle (44% of all cases);
- three from a fall from the e-scooter (33% of all cases);
- one from an e-scooter collision with a stationary object (11% of all cases);
- one pedestrian injured in collision with an e-scooter (11% of all cases).

SFPD data encompass 31 collision reports during 2018. Among the 32 injured parties:

- six severe injuries (19%);
- 12 Other visible injuries (37%);
- 14 complaint of pain (44%).

Permittees Scoot and Skip submit monthly tracking data to the SFMTA and include information on collisions reported by users to the SFMTA. Scoot reported zero collisions. Skip reported 34 collisions over a five-month period between mid-October 2018 and mid-February 2019. Of those collisions, 18 resulted in injury of which 3 were serious.

SFMTA and SFDPH reviewed the injury date from the study and made the following recommendations:

- increase access to helmets to reduce serious head injury;
- provide additional information to e-scooter users on where it is legal to ride;
- monitor youth riders of e-scooters;
- continue with data analysis to assess opportunities for infrastructure improvements.

Even with the change in California law regarding helmet usage by e-scooter riders as of January 1, 2019, the SFDPH and SFMTA continue to encourage the use of helmets for powered scooter riders. Helmets provide critical protection that, when worn, can help reduce the severe injuries noted above. Due to the number of severe “life changing” injuries that have already occurred, wearing protective helmets is imperative.

**Liability Issues and e-scooter-Related Agreements**

There are four key parties actively involved in the Pilot program:

1. The City (SFMTA) as Permittor;
2. The User of the device and related services (i.e., the App);
3. TNCs Scoot and Skip, respectively, as Permittees; and
4. The Contractors that inspect, maintain, recharge, and re-distribute the devices on behalf of the TNC.

Legal agreements bind respective parties to assigned liabilities and indemnifications of liabilities. **Figure 6** (next page) illustrates how the individual agreements bind parties. This report section

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53 Assembly Bill No. 2989 Chapter 552, amendment to CA Vehicle Code Section 21235,
discusses the key terms of the various agreements. **APPENDIX F** presents specific Agreement terms to support this discussion.

The purpose of these document reviews was to determine who was responsible for the following important obligations:

1. Care and Safety of the e-scooter;
2. Safety of the User;
3. Care and Use of City/County property;
4. Safety of pedestrians and/or other vehicle users;
5. Care of the TNC worker as an Independent Contractor.

### 1. Care and Safety of the e-scooter

As with other shared devices such as rental cars, sports equipment (e.g., snow skis and boots), and hotel rooms, the responsibility for care of the device during use falls to the User. In addition, it is typically the responsibility of the User to conduct a minimal inspection of the shared device prior to its first use by the User. For example, the Renter visually inspects the rental car; the sports equipment is visually inspected for any apparent damage; the hotel room is inspected for cleanliness. At the same time, however, unseen conditions may affect the safety of the rented device such as functioning brakes on the rental car and the condition of bindings on skis.

These examples of rental devices differ from the TNC scooter rentals in one significant way: The device is inspected (or has the opportunity to be inspected) by the rental company prior to the next User rental.
Due to the inherent design of the service, shared e-scooters are not inspected by the TNC between uses. The TNC User Agreements address this condition by placing all responsibility for determining “fitness for a particular purpose” on the User. The User, by use of the TNC App and the TNC e-scooter, agrees the e-scooters “…are provided on an ‘as is’ basis…” without representations or warranties of any kind… The User is “…responsible for inspecting a Scooter and any related materials … such as helmets, locks, etc. to ensure that they are in good working condition prior to using them.”

So when are e-scooters inspected by – or for – the TNCs?

Skip utilizes independent contractors, called “Rangers”, to retrieve e-scooters each evening and prepare the e-scooters for re-deployment the following morning. Such preparations include recharging e-scooter batteries and conducting a visual inspection. The Ranger is required to

“…perform a visual inspection (and other agreed upon services) of the Scooter prior to returning it to an authorized Scooter location or to Skip and notify Skip immediately if the Scooter requires maintenance or repairs.”

Note that the primary functions of the Rangers are to retrieve, recharge, and re-distribute the e-scooters. No evidence of Ranger technical or inspection experience is required within the Skip Charger Agreement.

Scoot utilizes company employees to conduct their recharging, maintenance and inspection services.

2. Safety of the User

User behavior is difficult at best to track and modify. User age minimums are challenging to enforce, and injuries incurred by users of all ages are being documented in many cities across the U.S. where TNCs operate.

The TNCs participating in the Pilot (Skip and Scoot) provide free helmets when requested by users.

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According to the SFMTA Mid-Point Pilot Evaluation report, 1,243 free helmets were distributed by Skip and 532 helmets were distributed by Scoot as of March 15, 2019. Skip indicated they distributed helmets by mail and at in-person events including Sunday Streets, block parties, street fairs, farmer’s markets, and “pop-up” booths staffed by Skip “Scouts”. These Scouts “… rove high traffic areas during periods of heavy usage to warn and remind users that sidewalk riding is strictly prohibited and to carry a supply of helmets to riders who want them.” Scoot also distributes free helmets by mail and at in-person events. Scoot provides two places on their app and one on their website where users can order a free helmet.  

3. Care and Use of City/County property

Modifying e-scooters to include lock cables has reduced the number of casually dropped e-scooter along sidewalks, as well as the City’s installation of more bike racks that have been used by e-scooter users as well as by bicyclists.

Skip has committed, “… over the next two (2) years to invest $500,000 in the creation of calmed shared streets and protected bike and e-scooter lanes across San Francisco.” 60 These “verifiable donations” will be made to local advocacy groups as well as to specific capital projects. (The SFCGJ has not been able to verify a similar funding commitment on behalf of Scoot.)

Both Pilot program agreements between the TNCs and SFMTA include a non-committal section regarding Possessory Interests and possible means for the TNCs to more formally contribute to the City’s operational and infrastructure expenses. 61 The specific language is presented below:

7. Possessory Interest.

Permittee acknowledges that this Permit may create a “possessory interest” for property tax purposes. Generally, a possessory interest is created if the Permit entitles the Permittee to possession, occupancy, or use of City property for private gain or benefit. If such a possessory interest is created, then:

… D. Permittee further agrees to provide such other information as may be requested by the City to enable the City to comply with any reporting requirements for possessory interests that are imposed by applicable law.

While this permit condition currently includes no mandatory funding obligation, it appears to leave open the opportunity for SFMTA to require specific financial compensation for the TNCs’ ongoing use of public facilities such as bike lanes, bicycle lock racks, and sidewalks.


60 Skip Application Proposal, page 16.

4. Safety of Pedestrians and/or other Vehicle Users

Other than providing helmets to users and providing e-scooters that comply with California Vehicle Code requirements for device lighting and operation restrictions, the TNCs understandably have little to no control over the behavior of a User when operating the e-scooter. As with other motorized or non-motorized devices (i.e., bicycles, cars, motorcycles, skateboards), individuals involved in an accident are expected to have their own insurance coverage for liability and third party damage.

If, for example, a User is injured in an accident while operating a TNC e-scooter and injures or damages another person or property, the User Agreement (accepted by the User upon activation of the shared e-scooter App) requires the User to indemnify the TNC from all third party claims for such damage or injury. 62

The User Agreements continue, with language that explicitly limits the TNC’s liability in any accident, injury, or damage. The Skip Terms of Service with the User include an affirmation stating:

“You acknowledge and agree that, to the maximum extent permitted by law, the entire risk arising out of your access to and use of the Skip services or anything that relates to or concerns your use of a scooter or the Skip services, remains with you.” 63

Scoot limits its liability by stating:

“In no event shall Scoot Networks or its licensors or suppliers be liable in the aggregate for any damages incurred by you [the User] that exceed the greater of (A) One Hundred Dollars or (B) The amount of fees you have paid Scoot Networks in the 12 months prior to the Action giving rise to the liability.” 64

Therefore, if a person is injured in an accident involving a TNC e-scooter User, the injured party can seek compensatory damages from the actual User, subject to the User’s own liability insurance coverages. The TNCs are attempting to limit their liability through the above Agreement clauses and place the liability for damages on the User.

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The injured party could pursue compensatory damages from the City, however the permit terms between SFMTA (the City) and the TNCs require the TNCs to indemnify the City (and the Port of San Francisco) against

“… any and all … claims thereof for injury to or death of a person… arising directly or indirectly from … claims brought by customers [Users] of Permittee, regardless of the negligence of, and regardless of whether liability without fault is imposed…. “65

5. Care of the TNC worker as an Independent Contractor

Skip encourages individuals to work for Skip as independent contractors, called “Rangers”, to retrieve and recharge e-scooters (See “Care and Safety of the e-scooter” discussion above.) This work is a critical component of the overall shared device service that relies on appropriate residential electrical charging capability, adequate carrying capacity in a private van or other vehicle, and reliable availability to conduct the work. Similar to how Lyft and Uber ride services rely on private vehicles (with hopefully appropriate insurance coverages for such use), these “Rangers” are to use their own vehicle (with hopefully appropriate insurance coverages for such use).

The TNC, by outsourcing this critical recharging service, avoids capital expenditures to install and provide electric power and pushes the responsibility for safe charging to the contractor. Specifically, the Skip Charger Agreement requires the Ranger to:

“… remain responsible for (or assume the risk of not) having a certified expert review and approve your location for safely charging Skip Scooters prior to charging a Scooter, not overloading any electrical equipment while charging a Scooter, providing reasonable spacing and ventilation of Scooters while charging to prevent overheating of the Scooters and Bricks, and for procuring at your sole expense any insurance required under applicable law or private agreements…. “66

The City permit with the TNCs requires the TNCs to have any and all independent contractors (subcontractors) provide “all necessary insurance and to name the City and County of San Francisco, the Port of San Francisco… as additional insureds.” 67 As of this writing, the Jury has seen no evidence that the TNCs have complied with this requirement regarding naming the City as an additional insured on subcontractor agreements. A TNC representative interviewed by the SFCGJ acknowledged that subcontractor insurance coverages are not checked and therefore the TNC is out of compliance with this specific Permit requirement.68


67 TNC Permit with San Francisco, Section 1.6 Insurance Requirements.

68 Interview with TNC representative April 17, 2019.
SF Pedestrian Safety Advisory Committee (PSAC)

The Pedestrian Safety Advisory Committee (PSAC) has a potentially important role to play regarding pedestrian safety, but has failed to properly discharge its responsibilities and is of questionable viability. Established by San Francisco Charter, Administrative Code, Chapter 5, Article IV, the Pedestrian Safety Advisory Committee (PSAC) was formed and given an ambitious agenda touching on policy and planning issues related to pedestrian safety. PSAC consists of a 17-member committee, and at its request, an additional eight non-voting representatives from City departments. PSAC is composed of informed residents who are responsible for issues concerning pedestrian safety, convenience, ambiance, and planning.

PSAC’s stated mission is to:

- Serve as a liaison between the public, the Board of Supervisors, and agencies working on pedestrian-related projects;
- Make recommendations about projects or policies that directly or indirectly impact pedestrian safety to the Board of Supervisors and relevant agencies;
- Keep public safety as the top priority;
- Make recommendations to improve the ambiance of the environment and convenience to enhance walking as part of the transportation system.

In addition, they are required to report to the Board of Supervisors on an annual basis, with quarterly appearances before the Board, as needed. Their annual reports are to include pedestrian injury and fatality statistics and an analysis of the causes that would lead to recommendations for changes in policies, funding, and enforcement.

However, the most recent annual report to the Board of Supervisors was submitted in 2011.

SFCGJ members attended three monthly PSAC meetings, reviewed past meeting minutes from 2017 and 2018 posted on their website, and the one annual report from 2011, and noted the following:

- As of June 7, 2019, 3 of the 17 seats are vacant;
- In 2018, only 4 meetings had a verified quorum, 5 meetings did not, 1 was cancelled, and 2 had no minutes to verify if any meeting had taken place;

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70 Pedestrian Safety Advisory Committee. SFMTA web site

• In 2017, only 8 meetings were scheduled and 7 of the 8 had no minutes to verify if meetings had a quorum in attendance or even met.

The SFCGJ questions the viability of the PSAC to support the mission and objectives set forth when this committee was first created. We are particularly concerned that annual reports have not been prepared since 2011, along with the chronic vacancies and absences.
FINDINGS

F1. The Pilot permittees advocate for safe behavior education for riders through community events and their web sites. However, SFMTA has not provided its own concurrent, updated safety awareness campaign.

F2. The successful expansion of marked and protected bike lanes represents an opportunity to include signage indicating bike lanes are also for use by e-scooter riders. There is no signage currently indicating where e-scooters should ride, and insufficient signage to discourage riding on sidewalks.

F3. SF Traffic Company enforcement efforts are currently limited to street vehicular traffic and do not include enforcement of moving violations occurring on sidewalks.

F4. Injury data collected to-date by Zuckerberg San Francisco General Hospital (ZSFG), SF Department of Public Health (SFDPH), SF Police Department (SFPD), and Pilot permittees categorize types of injuries but not root causes such as damaged infrastructure (potholes or poorly marked lanes), education (inadequate safety and device training), or reckless use (speeding, distracted driving, and/or using sidewalks).

F5. The Pilot terms between the City and permittees require them to indemnify the City from injury and damage claims. However, Scoot and Skip Terms of Service put responsibility for injury, damage, and equipment inspection on the User.

F6. Current terms and conditions in the Skip agreement expose a contractual gap that delegates initial responsibility for scooter inspection and maintenance to their independent contractors, Skip Rangers, who receive no specific training from Skip. Scoot, however, hires and trains its employees to provide the inspection and maintenance services.

F7. A key obligation of the Pedestrian Safety Advisory Committee (PSAC) is to prepare and submit annual reports to the Board of Supervisors (BOS). These reports are to include pedestrian injury and fatality statistics and root cause analysis, to recommend changes in policies, funding and enforcement. PSAC has not prepared or submitted an annual report since 2011.
RECOMMENDATIONS

R1. SFMTA in coordination with Vision Zero SF should design a public safety campaign regarding e-scooter use, laws, safety and helmet use. This campaign should include TNC participation and utilize various means of outreach including ads on MUNI trains, buses, shelters, social media, and TNC apps no later than June 30, 2020.

R2. Signage, stencils, visual symbols illustrating e-scooters, and/or other messaging should be provided to remind mobility device riders that these lanes are available for them to use. Further, additional visual symbols should be added on sidewalks and High-Injury Networks to discourage sidewalk use by e-scooters. The visual design(s) should be developed and implemented by SFMTA no later than June 30, 2020.

R3. SFPD Traffic Company should implement one or more “Focus on Five” enforcement campaigns that target moving violations by motor vehicles as well as bicycles and powered mobility devices in all traffic lanes, with documented results no later than June 30, 2020.

R4. ZSFG, SFDPH, SFPD, and TNCs should collectively improve injury data reporting to better support root cause analyses. SFMTA and the SFDPH should develop and oversee the revised data collection efforts and prepare a data acquisition plan for review by the above referenced organizations no later than June 30, 2020.

R5. SFMTA, City Attorney, and TNCs should review and if necessary modify the City-Permittee agreement, the TNC-User agreement, and any other related agreements to assure that responsibility for risk management is allocated to the party/parties best able to manage such risks. This review and potential modification of terms across all agreements should be initiated prior to the end of the existing Pilot. Any necessary revisions should be incorporated and implemented in all agreements for the replacement program to follow at the conclusion of the Pilot.

R6. The Board of Supervisors should allow the Public Safety Advisory Committee to terminate on October 1, 2019 as designated in the San Francisco Municipal Code.
REQUIRED RESPONSES

Pursuant to Penal Code sections 933 and 933.05, the Civil Grand Jury requests responses as follows:

From the following City and County agencies and departments within 60 days:

- Office of the Mayor
  - Findings 1,2,3,4,5,6
  - Recommendations 1,2,3,4,5

- Office of the City Attorney
  - Findings 5,6
  - Recommendations 5

- Chief of Police, San Francisco Police Department
  - Findings 3,4
  - Recommendations 3,4

- Director of Transportation, San Francisco Municipal Transportation Agency
  - Findings 1,2,4,5,6
  - Recommendations 1,2,4,5

- Director of Health, San Francisco Department of Public Health
  - Findings 4
  - Recommendations 4

From the Board of Supervisors and other governing bodies within 90 days:

  - Findings 7
  - Recommendations 6
Glossary

<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tbody>
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<td>DPW</td>
<td>Department of Public Works</td>
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<tr>
<td>e-scooters</td>
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<tr>
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<td>SFCGJ</td>
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<td>UCLA</td>
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## APPENDIX A

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</table>
| F6. Current terms and conditions in the Skip agreement expose a contractual gap that delegates initial responsibility for scooter inspection and maintenance to their independent contractors, Skip Rangers, who receive no specific training from Skip. Scoot, however, hires and trains its employees to provide the inspection and maintenance services. | • Office of the Mayor  
• Office of the City Attorney  
• Director of Transportation, SFMTA |
| F7. A key obligation of the Pedestrian Safety Advisory Committee (PSAC) is to prepare and submit annual reports to the Board of Supervisors (BOS). These reports are to include pedestrian injury and fatality statistics and root cause analysis, to recommend changes in policies, funding and enforcement. PSAC has not prepared or submitted an annual report since 2011. | • Board of Supervisors |
### APPENDIX C

**TABLE OF RECOMMENDATIONS WITH REQUIRED RESPONSES**

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Required Responses</th>
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| **R1.** SFMTA in coordination with Vision Zero SF should design a public safety campaign regarding e-scooter use, laws, safety and helmet use. This campaign should include TNC participation and utilize various means of outreach including ads on MUNI trains, buses, shelters, social media, and TNC apps no later than June 30, 2020.                                                                 | • Office of the Mayor  
• Director of Transportation, SFMTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| **R2.** Signage, stencils, visual symbols illustrating e-scooters, and/or other messaging should be provided to remind mobility device riders that these lanes are available for them to use. Further, additional visual symbols should be added on sidewalks and High-Injury Networks to discourage sidewalk use by e-scooters. The visual design(s) should be developed and implemented by SFMTA no later than June 30, 2020.                                                                 | • Office of the Mayor  
• Director of Transportation, SFMTA                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| **R3.** SFPD Traffic Company should implement one or more “Focus on Five” enforcement campaigns that target moving violations by motor vehicles as well as bicycles and powered mobility devices in all traffic lanes, with documented results no later than June 30, 2020.                                                                 | • Office of the Mayor  
• Chief of Police, SF Police Department                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| **R4.** ZSFG, SFDPH, SFPD, and TNCs should collectively improve injury data reporting to better support root cause analyses. SFMTA and the SFDPH should develop and oversee the revised data collection efforts and prepare a data acquisition plan for review by the above referenced organizations no later than June 30, 2020.                                                                 | • Office of the Mayor  
• Chief of Police, SF Police Department  
• Director of Transportation, SFMTA  
• Director of Health, SF Department of Public Health                                                                                                                                                                                                                                                                                                                                                                                                                         |
APPENDIX C

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| R5. SFMTA, City Attorney, and TNCs should review all related agreements to assure responsibility for risk management is allocated to the party/parties best able to manage such risks. This review and modification of terms across all agreements should be initiated prior to the end of the existing Pilot. These revisions should be incorporated and implemented in all agreements for the replacement program to follow at the conclusion of the Pilot. | • Office of the Mayor  
• Office of the City Attorney  
• Director of Transportation, SFMTA |
| R6. The Board of Supervisors should allow the Public Safety Advisory Committee to terminate on October 1, 2019 as designated in the San Francisco Municipal Code. | • Board of Supervisors |
APPENDIX D

Assembly Bill AB2989: Motorized scooter: Use of helmet: maximum speed.

Chapter 552
An act to amend Section 21235 of the Vehicle Code, relating to vehicles.

[ Approved by Governor September 19, 2018. Filed with Secretary of State September 19, 2018. ]

LEGISLATIVE COUNSEL’S DIGEST

Existing law generally prescribes the operation of a motorized scooter, defined as 2-wheeled device that has handlebars, has a floorboard that is designed to be stood upon when riding, and is powered by an electric motor or by a source other than electric power. Existing law requires a driver’s license or permit to operate a motorized scooter. Existing law prohibits the operation of a motorized scooter on a highway with a speed limit in excess of 25 miles per hour unless the motorized scooter is operated within a Class II bike lane. Existing law prohibits an operator of a motorized scooter from operating the motorized scooter without wearing a properly fitted and fastened helmet meeting specified standards. Existing law prohibits a person from operating a motorized scooter at a speed in excess of 15 miles per hour. A violation of prescriptions or prohibitions regarding motorized scooters is a crime.

This bill would permit a local authority to authorize the operation of a motorized scooter on a highway with a speed limit of up to 35 miles per hour and would additionally allow for operation of a motorized scooter on a highway with a higher speed limit if the motorized scooter is operated within a Class IV bikeway. The bill would specify that the existing maximum 15 mile per hour speed limit for the operation of a motorized scooter applies regardless of a higher speed limit applicable to the highway. The bill would require the operator of a motorized scooter to wear a helmet only if the operator is under 18 years of age.

Digest Key
Vote: MAJORITY  Appropriation: NO  Fiscal Committee: NO  Local Program: NO

Bill Text

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLOWS:

SECTION 1.
Section 21235 of the Vehicle Code is amended to read:

21235.
The operator of a motorized scooter shall not do any of the following:

(a) Operate a motorized scooter unless it is equipped with a brake that will enable the operator to make a braked wheel skid on dry, level, clean pavement.
(b) Operate a motorized scooter on a highway with a speed limit in excess of 25 miles per hour unless the motorized scooter is operated within a Class II or Class IV bikeway, except that a local authority may, by ordinance or resolution, authorize the operation of a motorized scooter outside of a Class II or Class IV bikeway on a highway with a speed limit of up to 35 miles per hour. The 15 mile per hour maximum speed limit for the operation of a motorized scooter specified in Section 22411 applies to the operation of a motorized scooter on all highways, including bikeways, regardless of a higher speed limit applicable to the highway.

(c) Operate a motorized scooter without wearing a properly fitted and fastened bicycle helmet that meets the standards described in Section 21212, if the operator is under 18 years of age.

(d) Operate a motorized scooter without a valid driver’s license or instruction permit.

(e) Operate a motorized scooter with any passengers in addition to the operator.

(f) Operate a motorized scooter carrying any package, bundle, or article that prevents the operator from keeping at least one hand upon the handlebars.

(g) Operate a motorized scooter upon a sidewalk, except as may be necessary to enter or leave adjacent property.

(h) Operate a motorized scooter on the highway with the handlebars raised so that the operator must elevate his or her hands above the level of his or her shoulders in order to grasp the normal steering grip area.

(i) Leave a motorized scooter lying on its side on any sidewalk, or park a motorized scooter on a sidewalk in any other position, so that there is not an adequate path for pedestrian traffic.

(j) Attach the motorized scooter to him or herself while on the roadway, by any means, to any other vehicle on the roadway.
APPENDIX E

E-scooter-Related Injury Data

Injury Data from States outside of California

Consumer Reports (CR) found in an investigation that 1,500 people across the United States was injured in an e-scooter-related crash since late 2017. In their investigation, CR contacted 110 hospitals and five agencies in 47 cities where at least one or two of the largest scooter companies, Bird or Lime operate.\(^{72}\)

CR wanted to determine:
- how many patients were treated for scooter-related injuries;
- the capability of the hospital to track injuries.

A sample of their findings:
- The Emergency Department Chief at Grady Memorial Hospital in Atlanta estimated that the Emergency room had treated 360 people with injuries;
- The Medical Director of the Trauma Intensive Care Unit at Vanderbilt Hospital in Nashville has seen 250 people with injuries;
- “We’ve had multiple concussions, nasal fractures, bilateral forearm fractures and some people have required surgery”, said Beth Rupp, M.D., Indiana University Heath Center in Bloomington, Indiana.

CR received a response from 60 medical facilities and other entities as of January 31, 2019. Of those responses:
- 23 including one police department, a City transportation department, a City emergency medical services provider, and a smaller medical clinic reported 1545 patients for scooter-involved injures over the past year;
- the other 37 or 62% said they do not track scooter injuries, lack the capability entirely, or had no reports of injuries on file.

Many of the medical professionals that CR spoke to mentioned that the total number of injuries is “unquestionably higher” than reported because so many hospitals don’t have the medical record capability needed to accurately track specific scooter-related injuries.

Dr. Christopher Ziebell, ER Department at Dell Seton Medical Center at the University of Texas, Austin, said “all of our datasets are incomplete”. His staff has counted 53 injuries from e-scooters since they arrived in Austin last May. 16 were head injuries equaling 30% of the total. “If you hit the ground at 20 mph (on a scooter) or a baseball bat hit your head at 20 mph, that’s about the same thing”, stated Dr. Christopher Ziebell.\(^{73}\)

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APPENDIX F

Liability Issues and e-scooter-Related Agreements

There are four key parties actively involved in the shared personal mobility device Pilot program:
1. the City as Permittor;
2. The User of the device and related services (i.e., the App User);
3. The Transportation Network Companies (TNCs Scoot and Skip, respectively) as Permittees; and
4. The Workers that inspect, maintain, recharge, and re-distribute the devices on behalf of the permittee.

Legal agreements bind respective parties to assigned liabilities and indemnifications of liabilities. The Figure below illustrates how the individual agreements bind parties. This Appendix presents specific text and sections that highlight key terms of the various agreements.

**Indemnification**

The permit terms between San Francisco and the two permittees require the permittees to indemnify the City and Port against “…any and all … claims thereof for injury to or death of a person… arising directly or indirectly from the activity authorized by the Permit, including but
not limited to… claims brought by customers of Permittee, regardless of the negligence of, and regardless of whether liability without fault is imposed…

The Terms of Service between the permittees and Users of the shared device services state (with no option to modify by User other than decline the Service) require the User to:

[Skip]…indemnify and hold Skip, its predecessors, successors, subsidiaries, affiliates, and each of its directors, shareholders, investors, employees and authorized agents harmless from and against all third party claims arising out of or in any way relating to any injury, illness, death or loss of or damage to property allegedly suffered as a result of your use of the Skip Services including the e-scooters or anything that relates to or concerns your use of Skip Services, including the Scooters.”

[Scoot] “…indemnify, defend, and hold Scoot Networks harmless from all losses, liabilities, damages, injuries, claims, demands, costs, attorneys’ fees, and other expenses incurred by Scoot Networks arising from or related to User’s use of a Scoot Networks LEV [Light Electric Vehicle] or any person permitted by User to use a Scoot Networks LEV.”

For those permittee Maintenance Services outsourced to workers that are not “W-2 employees”, such as the “Skip Rangers”, the Skip Charger Agreement between the Ranger and the permittee requires the Ranger to

“…indemnify, protect and hold harmless Skip from any and all claims, demands, damages, suits, losses and liabilities and causes of action arising directly or indirectly from, as a result of or in connection with, your actions (or omissions) arising from the performance of services under this Agreement, including personal injury or death to any person or liability for civil and/or criminal conduct (e.g., assault, battery, fraud), or any liability arising from your failure to comply with the terms of this Agreement.”

**Limitations of Liability**

The Permit Terms between San Francisco and the two permittees place limited liability for infractions by Users on the permittee: “If the SFMTA determines in its sole discretion that the Permittee’s users’ failure to comply with applicable laws … has created a threat to public health

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and safety, such determination shall be grounds for permit suspension or revocation at the discretion of the Director.”[78]

The Terms of Service between the permittees and Users limit the liability of the permittee for damages or injuries:

[Skip] “You acknowledge and agree that, to the maximum extent permitted by law, the entire risk arising out of your access to and use of the skip services or anything that relates to or concerns your use of a scooter OR THE SKIP SERVICES, remains with you.”[79]

[Scoot Section 12] “In no event shall Scoot Networks or its licensors or suppliers be liable in the aggregate for any damages incurred by you that exceed the greater of (A) One Hundred Dollars or (B) The amount of fees you have paid Scoot Networks in the 12 months prior to the Action giving rise to the liability.”[80]

[Scoot Section 13] LIMITATIONS; BASIS OF THE BARGAIN

APPLICABLE LAW MAY NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY OR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

IN SUCH CASES, YOU AGREE THAT BECAUSE SUCH WARRANTY DISCLAIMERS AND LIMITATIONS OF LIABILITY REFLECT A REASONABLE AND FAIR ALLOCATION OF RISK BETWEEN YOU AND SCOOT NETWORKS, AND ARE FUNDAMENTAL ELEMENTS OF THE BASIS OF THE BARGAIN BETWEEN YOU AND SCOOT NETWORKS, SCOOT NETWORKS’ LIABILITY WILL BE LIMITED TO THE MAXIMUM EXTENT PERMITTED BY LAW. YOU UNDERSTAND AND AGREE THAT SCOOT NETWORKS WOULD NOT BE ABLE TO OFFER THE SERVICES TO YOU ON AN ECONOMICALLY FEASIBLE BASIS WITHOUT THESE LIMITATIONS.”

Inspection and Maintenance: Independent Contractors and User Obligations

The Permit Terms between San Francisco and the two permittees require the permittees [Permittees] to “…keep a record of maintenance activities, including but not limited to Powered

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Scooter identification number and maintenance performed. These records shall be sent to the SFMTA on a monthly basis.”

Section 4 of the Skip Charger Agreement requires the Ranger to:
“…remain responsible for (or assume the risk of not) having a certified expert review and approve your location for safely charging Skip Scooters prior to charging a Scooter, not overloading any electrical equipment while charging a Scooter, providing reasonable spacing and ventilation of Scooters while charging to prevent overheating of the Scooters and Bricks, and for procuring at your sole expense any insurance required under applicable law or private agreements (e.g. leases, condo association rules and similar) relating to the conduct of your independent business.”

Section 3 of the Skip Charger Agreement requires inspection of devices to be the responsibility of the Ranger:
“…[Y]ou agree to perform the following services:
Perform a visual inspection (and other agreed upon services) of the Scooter prior to returning it to an authorized Scooter location or to Skip and notify Skip immediately if the Scooter requires maintenance or repairs.”

**Insurance Requirements: User**

The Skip Terms of Service between Skip and User place responsibility for safe operation of the Scooter on the User:
“By choosing to operate a Scooter, you assume all responsibility and risk for all medical conditions that may interfere with your safe operation of a Scooter and and/or all risk of injuries to yourself or others.”

Scoot provides liability coverage:
“2.1. Scoot Networks provides liability coverage for damages arising from a User’s use of Scoot Networks LEVs if the User complies with all rules and requirements of the Terms. The User agrees to use [sic] their own motor vehicle insurance as the primary insurance if available.”
Scoot Networks and our insurance provider offer coverage to the User for up to $2,000,000 of third party liability for Kick-Scooters and up to $1,000,000 of third party liability for all other types of LEVs.”

Disclaimers Regarding Fitness for a Particular Purpose
The Terms of Service between the permittees and Users require the User to agree that:

[Skip] “By accessing or using the Skip Services, including our scooters, you agree that: Scooters and Related Equipment are provided “As-Is.” Scooters are provided on an “as-is” basis. You are responsible for inspecting a Scooter and any related materials that Skip provides to you, such as helmets, locks, etc. to ensure that they are in good working condition prior to using them.”

[Scoot] The Services… made available … are provided on an “As Is”, “As Available”, “With all faults” basis without representations or warranties of any kind, either expressed or implied, including, but not limited to, in terms of correctness, accuracy, reliability or otherwise. … Scoot Networks and its affiliates, partners, licensors, and suppliers hereby disclaim all express, implied and statutory warranties of any kind, including, but not limited to, the implied warranties of merchantability [and] fitness for a particular purpose.”

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