



The University of Texas at Austin
Financial and Administrative Services

SCOOTER SAFETY MANAGEMENT

Work Group
Recommendation Report
December 2018

SUMMARY

In this day and age, the rapid pace of technology creates an important challenge: How to ensure societal rules to keep up with technology while maintaining the society's core values. For The University of Texas, at this moment, that technological change is commercial dockless vehicles (electric scooters and bicycles) and that core value is the safety of the university community.

In November, the Senior Vice President and Chief Financial Officer asked a campus work group to provide its perspective as the university coordinates its continuing response to address pedestrian safety and safe transportation options for students, faculty and staff regarding electric scooter management. The goal is to provide executive leadership recommendations on policy, enforcement measures and communication to campus stakeholders with initial recommendations due Dec. 12, 2018.

The accelerated timeline of this work requires that the recommendations be iterative. As with many new technologies, there are many unknowns and in the six months that the motorized scooters have been on campus, the landscape is already changing. However, their presence has raised important considerations about safety of motorized scooter riders and others traversing the campus, and the impact to the visual landscape of the campus. The scarcity of parking on campus and in Central Austin suggests that motorized scooters have the potential to have an important role in improving mobility on campus. However, the significant safety concerns must be adequately addressed.

Within this report, we will provide a current and comprehensive look at the work regarding scooter management and provide recommendations for near-term regulation and enforcement. Below is a brief timeline of events and a summary of current state efforts on the parts of various stakeholders on campus, including Parking and Transportation Services (PTS), University of Texas Police Department, Dean of Students office, Student Health Services and the Campus Safety office.

HISTORY

Dockless scooters arrived in Austin in the Spring 2018. With Austin's reputation as a technology hub and sizeable college student population, the city has emerged as a primary market for commercial scooter operators. Ridership to and from campus represents approximately 14 percent of all the rides in Austin. Three operators – Bird, Lime and Lyft – are currently permitted to operate on campus, and two others have contacted the university for negotiations. Below is a brief timeline of scooter operations in Austin and on campus:

APRIL 2018 -- Bird launched 700 scooters on April 5. Lime dropped 200 scooters in Austin. Most scooters were located downtown and some made their way to campus.

After pressure from the city, Lime and Bird voluntarily removed scooters from Austin on April 27.

MAY 2018 -- PTS drafted first rules on scooters in late May. The City of Austin also passed temporary regulations on May 23, allowing the scooters to return.

JUNE 2018 – After an engagement process with UT community stakeholders, official rules were submitted for approval to the Office of the President. These were approved on June 19.

AUGUST 2018 – PTS met with Athletics and other gameday stakeholders to create a scooter plan for football game day. Operators were also informed of the new permitting process.

- a. Plan called for the prohibition of scooters inside the vehicular checkpoints on game day
- b. Worked with Bird and Lime on compliance -- both were cooperative
- c. Impounded 77 scooters over the course of the football season
- d. Bird and Lime placed employees on campus who tracked riders, intercepted scooter riders and had them removed from campus if they were within the no-scooter perimeter.

SEPTEMBER 2018 – University Health Services begins tracking motorized scooter-related accidents. This tracking has since been refined to include locations, types of injuries and nurse visits. These reports do not include emergency room visits, individuals who seek care from off-campus providers, or individuals who have had an accident, but do not seek professional medical care.

OCTOBER AND NOVEMBER 2018 – Bird and Lime submit paperwork and are approved to operate on campus. Commercial operators may operate on campus, but not stage scooters. Jump enters the commercial scooter market on Oct. 25 and begins discussion with UT Austin. Lyft approaches UT Austin on Nov. 13. SVP/CFO appointed a work group on Nov. 19 to examine the university's approach to electric scooter policy and enforcement.

DECEMBER 2018 – Student Government passes a joint resolution asking for additional enforcement of existing rules, continued safety education and designation of Speedway as a “no parking” zone. The resolution asks for designated scooter parking and reduced speed limits for scooters in high pedestrian areas. The university authorized an electric scooter permit for Lyft. As of Dec. 4, there are more than 9,000 motorized scooters licensed to operate in the city, according to the City of Austin [website](#). CDC has

announced that Austin is the site of a scooter safety study in conjunction with the City of Austin.

CURRENT STATE

The motorized scooter policy implemented this summer has several provisions. Scooters may not be staged on campus, meaning that the companies or their contractors may not leave the scooters for use after charging. Scooters are also currently required to be governed or speed limited by companies to 15 mph. Scooters must be parked at bicycle racks and are allowed to travel anywhere a bicycle is allowed to travel.

Campus policies – <https://parking.utexas.edu/electric-scooters-0#rules> – allows PTS to impound scooters that are improperly parked, however, this provision has only been utilized on game days. The sheer number of scooters has made parking problematic and some cyclists have complained that the requirement for scooters to be parked at bike racks has blocked their ability to properly secure their bicycles to some bike racks.

To date, PTS has impounded 77 scooters. Policy allows for scooter impounds with a fee of \$150 and a daily storage fee of \$25; this fee is charged to the company, which presumably passes it along to the users. Most of the fall semester has been spent on rider education, which means impounds have only occurred on game day when the scooters are banned from much of campus around the stadium. The plan is to educate and seek compliance before resorting to impound. PTS intends to begin routine impounds after the winter break.

PTS, UTPD and the AVP of Campus Safety have spent the fall semester working on educating riders. PTS has collaborated with messaging from scooter companies directed specifically toward campus around parking policies, helmet usage and other safety information. AVP of Campus Safety has incorporated scooter safety into its Be Safe campaign and UTPD has tasked its guards with providing on-the-spot information to those attempting to leave scooters in campus walkways.

UTPD has also begun enforcement activities in high visibility areas (i.e., Speedway).

Approximately 30 citations have been issued – most have been warnings unless the citation was a response to a vehicle accident where the scooter operator was clearly at fault. The UTPD Bicycle Unit has been operating locations in which we receive reports of unsafe operation of e-scooters. Their focus has been on Speedway, 24th at Speedway, and 21st at Speedway.

Even so, scooter injuries reported to University Health Services have been trending upward – 31 reported injuries in September; 35 in October; 42 in November (**See Appendix A**).

Comparatively, UHS reported 8 bike injuries in September, 13 in October and 7 in November. In total, about 25 percent of the injuries treated at UHS have been head injuries or fractures, compared to about 60 percent of the bike injuries seen at UHS. The staff at UHS has been refining its questioning for scooter-related injuries and added location data in mid-October (**See**

Appendix B). Using the data that is available, more than 40 percent of UHS treated injuries occur off campus, suggesting that efforts to manage scooter usage on campus will not completely mitigate safety concerns for the campus community.

Scooter Ridership in Austin (Lime and Bird)

Combined	UT	Citywide
September	60,059	415,852
October	96,477	529,563
November	111,375	237,736
	267,911	1,183,151

Ride totals initiated or ending on campus rose steadily in the fall, but seemed to level off in November. Inclement weather may produce a decrease in the winter months, but ridership can be expected to spike again once milder weather returns in spring. An increase in wet weather in November may also explain the increase in injuries, despite the flattened effect on ridership.

Anecdotally, there have been reports of pedestrian injuries to faculty and staff. However, since those individuals typically seek care off campus, those numbers have been harder to calculate.

It should be noted that the City of Austin is working iteratively as well on this issue with a focus on downtown safety. They are collecting data to begin developing a location-specific active transportation ordinance, including dismount zones for a Safe Riding Ordinance that is targeted for early 2019. They are also collaborating with the Centers for Disease Control to conduct a safety study on motorized scooters in urban environments. The results of that study are expected to influence rules and regulations in the future.

UT Austin is clearly not the only university who is facing this challenge. A quick survey (**See Appendix C**) shows a range of responses nationally, ranging from outright bans to more directed restrictions. Michigan State University, for example, does not allow scooters to be driven on the sidewalk, bikelanes or on most of its inner-campus roadways. The University of Georgia requires permits and restrictions, including limited parking and banning charging of scooters on campus. Full prohibitions have been adopted by University of Arizona and Oklahoma State University. University of California at Santa Barbara requires scooter speeds to be governed to 8 mph.

Locally, St. Edwards University has banned motorized scooters from its campus. It's clear that the approaches by the universities have been influenced by their surrounding communities' motorized scooter policies and the porousness of the campus boundaries.

ISSUES

Due to the rapidly changing landscape and the need for more data, the university's approach for scooter management will be iterative. For solutions to be effective, certain areas of challenge need to be taken into account.

- **Not all scooters in Austin are equally equipped.** Even scooters operated by the same company may not have the same technologies, including GPS and speed control. Operators have as many as four generations of scooter technology employed in Austin, and geofencing technology and safety practices are still under development. For example, despite the full cooperation of permitted companies, efforts to keep scooters off campus on game day have not been particularly successful.
- **Not all injuries reported occur on UT-controlled property.** Of the injuries reported by University Health Services, more than 40 percent occurred off campus. Additionally, Dean Keeton is City of Austin jurisdiction, not UT Austin. Although UTPD has authority to enforce state law, there are some limitations to their ability to actively enforce campus specific rules. UTPD's scooter effort relates to enforcement of state laws when applicable for dangerous or injury incidents. UTPD may also use a "University ticket" as a warning and education tool for less egregious violations. The department is currently collaborating with PTS on campus messaging and helping identify track injury incidents for analysis of where pedestrians, scooters, bicycles and vehicles intersect. And, UTPD Bike Officers are sent to areas of concern targeting dangerous scooter operation.
- **The design of scooters require a certain minimum speed be reached in order to be stable.** Much like a bike, scooters wobble until a rider gains enough momentum. For that reason, operators consider speed limits below 5 mph to be unsafe. Operators also have raised concerns about technologies that bring scooters to a halt when they enter banned areas, citing safety concerns and the possibility of a rider to lose control with sudden speed changes.
- **There is no comprehensive data on injuries or violations related to electric scooters that involve faculty and staff, including whether they've been involved in an accident caused by other users or vice versa.** Although there is plenty of anecdotal evidence, we do not have hard data on injuries and violations that have involved faculty and staff, including whether they have been involved in an accident and/or caused an injury and/or have been injured.

- **Resources for enforcement are limited.** UTPD has a limited number of tools to use for enforcement. If state laws are broken, they may ticket violators, which require immediate referral to the criminal justice system. Although these types of actions may help educate the public and possibly deter breaking related laws, there are some concerns related to violations that may not have resulted in injury. Scooter rule enforcement also has the potential to take officer resources away from other security activities; there is a desire to find an appropriate balance.
- **A lack of designated scooter parking may be among the factors contributing to hazardous conditions. Some groups have attempted to designate scooter parking during the fall semester. Although this activity was not authorized and short term, the response by riders suggests that** will generally park in provided spaces if they are clearly marked and designated. Currently, riders continue to abandon scooters in roadways, pathways, sidewalks and other inappropriate areas, which are a general hazard for the community and a serious impediment to ADA accessibility. The haphazard disposal of scooters also pose a danger to building occupants if they should need to evacuate in an emergency situation.

RECOMMENDATIONS

Given the increasing number of injuries and the general sense of campus confusion, it is clear that more aggressive overall scooter safety management measures should be adopted. Any new measures should be evaluated for effectiveness and data should be collected so that more targeted solutions can be implemented if immediate measures prove insufficient.

1. **Require companies to reduce the governed speed to 8 mph on campus – including Dean Keeton, as has been demonstrated in other cities and university campuses.** Given the multiple traffic modalities on campus – pedestrians, bikes, skateboards, scooters, utility carts – current allowable speeds are inherently unsafe. The design of scooters limits a rider’s ability to brake or make sudden turns to avoid collision. Reducing speed is essential to reducing collision and minimizing the severity of injuries when collisions occur. Campus leaders will need to engage the City of Austin on permission to geofence for speed across Dean Keeton, but the location of collisions suggest it would prove most effective. Placing the onus of controlling speed on the companies, also allows enforcement activity to focus on other reckless behaviors (i.e. running stop signs, lights, not yielding to pedestrians.)
2. **PTS should proceed with its planned pilot project in spring semester to designate scooter parking, and then begin impounding with fees attached.** PTS officials have

been reluctant to impound during regular operating hours, because scooter riders have not had great alternatives for parking.

3. **Aggressive impounding of electric scooters should begin in Spring 2019.** The plan for at least 10 areas of campus to be marked for parking should be implemented with an emphasis on impounding scooters along Speedway and other malls, as well as scooters blocking sidewalks, impeding ADA ramps, and strewn in courtyards, doorways and stairwells.
4. **The university should develop a unified education/ communication plan.** Information on scooter policies and safety is currently scattered among the units because of the number of functions this issue touches. A unified plan should be developed and implemented for spring semester and include a mechanism to collect and log complaints and concern by location. Safety education should include information on basic safety behavior, including abiding by signage, visibility at night, operating at safe speeds for environment and awareness of cars and pedestrians.
5. **Provide well-publicized contact and process for reporting improperly parked scooters.** Given the limited resources on PTS, campus should explore ways to incentivize the community to help with scooter management. Several incentive models exist, including asking permitted companies to offer credits to riders who move scooters to appropriate locations and PTS has already created a contact email for inquiries about impounds: UTScooterimpound@austin.utexas.edu
6. **Develop an alternative ticket for students, staff and faculty who violate safety rules.** Allowing UTPD to also issue PTS tickets provides another tool for enforcement that is controlled by the university. They will retain the discretion to give moving violations for egregious, reckless behavior while providing concrete penalties to community members who choose not to behave in a safe manner as laid out by policy.
7. **At a minimum, require staff, faculty and student workers to use helmets, if operating scooters for university business.** Texas does not require helmet use for motorcycles or bikes. However, as an employer, the university may add such a requirement for safe conduct of its employees. The committee, however, defers to the recommendation of Environmental Health and Safety and the Assistant Vice President for Campus Safety as to whether motorized scooters are considered appropriate vehicles for work-related use, given the availability of other options.
8. **Continue to collect health and other data in one location to inform future actions.** Currently, there is not enough information to determine whether disembark zones

should be instituted or other measures. More complete data can help inform future policy discussions.

9. **Consider drafting and enforcement of a university policy that includes specific definitions of transportation devices, such as the following:**

SUMD and UMD Devices

Shared Urban Mobility Device (SUMD) system or “System”: This means a system which provides urban mobility devices for short-term rentals for point-to-point trips. Such a System can be a Lock-to SUMD System or a dockless SUMD system.

Urban Mobility Device (UMD) means bicycles, tricycles, scooters, hoverboards, skateboards, pedal cars, and other similar devices, whether they are powered or non-powered. A UMD does not include devices used as assistive mobility devices by persons with disabilities.

No SUMDs may be charged anywhere on campus: Although personal UMDs may be stored in residence hall rooms, they may not be ridden inside the residence hall buildings. SUMDs, which includes scooters, are prohibited in the residence halls. Students are prohibited from utilizing any common areas within the residence halls to charge SUMDs and UMDs.

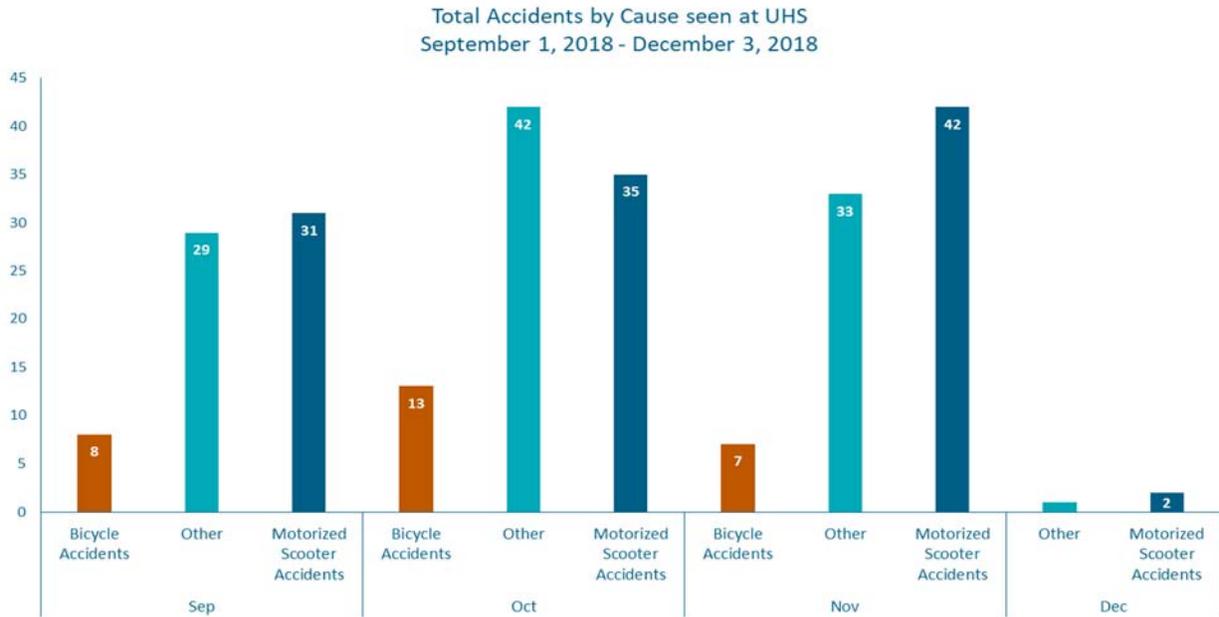
10. **Charge the work group to continue to meet monthly through June 2019.** Although the committee worked to find a student to assist with the work, the tight window during finals made that task difficult. The dynamic nature of the scooter management environment suggests there will continue to be a need to review new data and city policy changes with the ability to add recommendations (as needed) through June 2019. The committee will also work to identify a student representative to serve in spring semester. Although there was a desire to have direct student input for this report, the time frame made it difficult to identify a student in time to attend the meetings used to develop this report.

Workgroup Membership:

Tara A. Doolittle, Chief of Staff to the Senior Vice President and CFO
Marla Martinez, Associate Vice President for Financial and Campus Services
Bobby Stone, Director of Parking and Transportation Services
Blanca Gamez, Assistant Director of Parking and Transportation Services
David Carter, Assistant Vice President for Campus Security and Chief of Police
Jimmy Johnson, Assistant Vice President for Campus Safety
Jeff Graves, Associate Vice President for Legal Affairs

Chris Brownson, Association Vice President for Student Affairs, CMHC Director
 Doug Garrard, Associate Vice President for Campus Life
 Linda Golden, Chair of the C9 Transportation committee and faculty representative
 Recommendation (pending): Add a student representative(s) in Spring 2019 (strictly a voluntary basis)

Appendix A

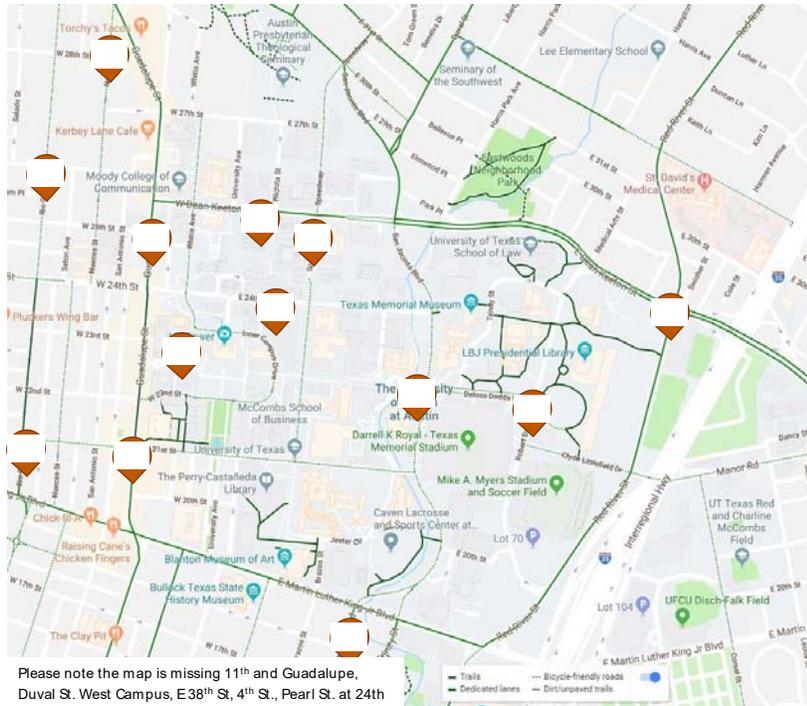


Appendix B

Location of Accident	Patients
Oct	7
On campus	2
Speedway	3
Dean Keeton	1
San Jacinto	1
Nov	18
11th and Guadalupe	1
21st and Rio Grande	1
26th and Rio Grande	1
By Nueces street	1
Dean Keeton	1
Dean Keeton and Red River	1
West Dean Keeton Ave	1
Dedman and Deloss Dodds	1
FAC	1
25th and Guadalupe	1
West campus	1
21st and Guadalupe	1
Rio Grande just west of campus	1
East 38th St	1
Speedway outside University Christian Center	1
4th street	1
Next to NHB	1
Duval St	1
Dec	2
Pearl St. at 24th St	1
21st and Guadalupe	1
Grand Total	27

LOCATION OF INJURIES

Location data began in mid-October and is collected during nurse triage assessment. Additional location fields are being added to the nursing initial assessment when a student is seen by a provider.



Appendix C

- Dismount zones: areas on campus where you may not ride on the scooter, you must walk next to it
- Some campuses have complete dismount zones (cannot ride scooters, bicycles, etc on campus at all)

<u>University</u>	<u>Are they allowed on campus?</u>	<u>Rules</u>
<i>Santa Monica College</i>	No, pathways are too narrow and there are too many people	<ul style="list-style-type: none"> - Campus is a complete dismount zone - \$300 ticket for failure to dismount
<i>Indiana University</i>	Yes	<p><u>Rules for operating motorized scooters on campus:</u></p> <ul style="list-style-type: none"> - Operators must obey all rules of the road, including traffic signs and signals and follow all applicable state and local laws and ordinances - Reckless or negligent operation of personal conveyance vehicles on any part of campus is prohibited - Operators must move at a safe speed and yield to pedestrians at all times - Personal conveyance vehicles must never block pedestrian walkways of ADA access - The operation, parking, and storage of personal conveyance vehicles is prohibited in all interior building spaces - Personal conveyance vehicles that pose a hazard to public health and safety or that are parked or stored on university property in violation of this policy may be removed and impounded by campus officials

		<ul style="list-style-type: none"> - Scooters must be parked upright, in bike racks - Scooters may never be parked in pedestrian pathways, vehicle parking spaces, ADA ramps, stairwells, inside buildings, or locked to signs, light poles, fences, benches, handrails, or other fixtures <p><u>Safety Tips:</u></p> <ul style="list-style-type: none"> - Wear a helmet - Use common sense; scooters are motorized vehicles, not toys - Dress to be seen and do not operate at night - Share the road and never ride against traffic - Maintain a three-foot minimum distance from pedestrians - Watch the road for uneven surfaces and debris - Be wary of puddles and leaves that may hide in potholes - Drive defensively - Keep your eyes up and one ear free so you can see and hear what's happening around you
<i>University of Minnesota</i>	Yes, except for designated dismount zones	<ul style="list-style-type: none"> - Ride in bike lanes and paths - Never ride on campus sidewalks - Obey all traffic signs, signals, and laws - Yield to pedestrians in crosswalks

		<ul style="list-style-type: none"> - Most campus bike lanes are one-way only, you must ride in the direction of traffic - Helmets are recommended - Watch for designated areas of dismount and walk your scooter - Park a motorized scooter adjacent to any campus bike rack - Don't leave motorized scooters next to handrails, trees, fences, bus shelters, or anything other than bike racks
<i>University of Southern California</i>	Yes, but riding is prohibited in some areas	<ul style="list-style-type: none"> - Must be ridden in a safe manner with the riders observing the university speed limit of 15 mph and obeying all vehicular traffic regulations while on campus - Riding motorized scooters is not allowed at any time on the malls, sidewalks, or center of campus - Riders may not take "short cuts" through unauthorized areas nor ride the vehicle in any way that may endanger pedestrians - Motorized scooters may not be parked in such a manner as to prevent automobiles from parking. They may not be parked on the malls, within the center of campus, or on a sidewalk adjacent to any building unless a designated motorized scooter parking area exists there
<i>University of California - Santa Barbara</i>	<p>Personal powered scooters are allowed on campus</p> <p>Powered scooter-share operators are prohibited (Bird, Lime, etc)</p>	<ul style="list-style-type: none"> - Powered scooters are not permitted on campus bike paths or sidewalks/walkways - Powered scooters may not be left unattended on University property

		<ul style="list-style-type: none"> - Powered scooters may not be parked in bike racks or obstruct access to bike racks - Powered scooters may not park in any area that obstructs pedestrian paths of travel or the entry or exit of any campus building - Powered scooters may be carried (but not ridden) into campus buildings so long as the it does not create an obstruction or trip hazard or otherwise damage UC Santa Barbara property - Powered scooters may be ridden on city streets and users must obey all traffic laws pertaining to powered scooter use, including but not limited to the following: users must wear a properly fitted bicycle helmet, have a valid driver's license, and ride only in bike lanes (not bike paths) - Powered scooters may not be charged in or near University buildings unless owned by University departments for use by staff
<i>Arizona State University</i>	No	<ul style="list-style-type: none"> - ASU has banned electric scooters on campus - They have started impounding scooters that have not been removed from campus despite the ban (impound fees start at \$100)
<i>Cornell University</i>	No	<ul style="list-style-type: none"> - It is prohibited at all time to operate a motor scooter on a walkway or the grounds of the university - They may not be parked at any time on the campus in an area not designated for motor vehicle parking

		<ul style="list-style-type: none"> - They may not be parked at any time at campus bicycle racks
<i>Miami University</i>	No	<ul style="list-style-type: none"> - Scooters may not be driven on campus, except in designated bike lanes on public streets - Must be walked when on campus grounds and can only be parked in bike racks - The university imposed a \$35 storage fee for impounded scooters
<i>Michigan State University</i>	No	<ul style="list-style-type: none"> - Scooters may not be operated on sidewalks or bike lanes on campus (a MSU ordinance prohibits the use of motorized vehicles on campus) - It is prohibited to park scooters on bike racks - Scooters parked in areas where it is a violation to park can be impounded by the university (sidewalks, bike racks, and grass) - Students can park the scooters in metered spaces as long as they pay for parking

(Appendix C - Benchmarked by DoS and Campus Safety)