city of CINCINNATI
Interdepartment Correspondence Sheet

December 7, 2021

To: Mayor and Members of City Council

From: Paula Boggs Muething, City Manager **202103258**

Subject: E-SCOOTERS IN DENSE AREAS OF CINCINNATI

Reference Document #202102821

The Council at its session on September 29, 2021, referred the following item for review and report.

> MOTION, submitted by Councilmember Landsman, WE MOVE to formally request accident data on e-scooters in dense areas of Cincinnati and any recommendations the Administration may have in terms of limiting the use of e-scooters in specific areas to improve pedestrian safety, based on that crash data and similar actions taken in other cities. (STATEMENT ATTACHED)

The following report provides e-scooter accident data and includes recommendations by the Department of Transportation and Engineering, (DOTE), to regulate e-scooter use and improve pedestrian safety.

E-Scooter Accident Data Summary

Bird and Lime have been operating on Cincinnati streets for approximately 3-full years. Attached are data chart summaries of the e-scooter accident data provided by both companies, (reference Exhibit-A). Each company tracks and presents their incident data using slightly differing methods. Neither company tracks accidents where no injuries occur as most often these types of incidents go unreported.

Bird's reporting indicates that 94% of all accidents with injuries, (101 out of 107), only involve the scooter rider and do not involve other pedestrians or vehicles. Of the remaining accidents, 3.74% of all accidents involve other pedestrians, (4 out of 107). And further that 1.87% of all accidents involve other vehicles, (2 out of 107). No incidents have resulted in a fatality.

Lime tracks accidents based upon their injury severity. Over the last 3-years Lime reports a total of 54-incidents resulting in minor scrapes and bruises. These types of minor incidents represent 66% of all injuries received, (54 out of 81). Accidents resulting in moderate injuries account for 17% of all accidents, (14 out of 81). Accidents with injuries requiring medical attention represent 15% of all injuries received, (12 out of 81). One incident or 1%+ of all accidents caused an injury requiring an extended hospital stay (1 out of 81). No incidents have resulted in a fatality.

Both reports show that on a yearly basis, the percentage of trips during which incidents occur is 0.02% of all the number of trips taken during a given year. A similar percentage is derived when comparing the total number of incidents to the total number of trip miles traveled per year.

Actions

DOTE has taken multiple actions to limit e-scooter use and improve pedestrian safety.

1. The Cincinnati Municipal Code, (CMC), now regulates e-scooter operation and parking. E-scooters may only be operated on roadways and dedicated bicycle or shared-use paths. E-scooters are prohibited from operating on public sidewalks.
2. Several high use pedestrian areas were identified and both Bird and Lime were then directed to install a geo-fence around these areas for the purpose of further reducing e-scooter and pedestrian conflicts. A geo-fence is a virtual boundary applied to a real-world geographic area that regulates and restricts the operation of e-scooter fleets within the boundary area. As an example, all riverfront, Central Business Districts (CBD) and Over-the-Rhine (OTR) parks have a geo-fence to reduce conflicts.
3. The CMC restricts the maximum speed of e-scooters to 15-MPH. And the maximum speed limit is further reduced to 10-MPH within the DORA District at The Banks.

Recommendations

1. In 2022, Bird will be implementing their new "Smart Sidewalk Protection" technology in Cincinnati. This system restricts their e-scooters from operating along city sidewalks with a much higher degree of precision.
2. New e-scooter vehicles are designed and manufactured with numerous built-in safety improvements that provide riders of varying gender, age, size, fitness, and differing levels of experience and ability, with a more predictable and standardized level of comfort, control, and stability. And improved lighting makes the vehicles more visible.

Summary

DOTE has taken multiple actions to regulate and restrict e-scooter operations. These actions along with new e-scooter vehicle design and system technology will continue to reduce e-scooter and pedestrian conflicts and improve pedestrian safety.

Attachment

cc: John S. Brazina, Director, Transportation and Engineering