

Testimony of

Mark C. Kopko, Director of Transformational Technology Pennsylvania Department of Transportation Public Hearing on SB 1199 House Transportation Committee July 21, 2020

Good afternoon and thank you for the opportunity to speak to you today about Senate Bill 1199.

Ensuring public safety has always been a core function of PennDOT. However, with the arrival of a global pandemic, PennDOT, like many organizations, has expanded the way we look at safety. Reducing direct human contact and supplementing the strained supply chain has become critical to stopping the spread of COVID-19. Emerging technologies, such as personal delivery devices (PDD), offer numerous benefits to overcome the challenges of these unprecedented times.

PDDs can be utilized by restaurants and grocers to deliver food to the doors of customers. PDDs can be utilized by logistics companies to support last-mile deliveries. In some states, officials are looking at automated vehicles to deliver medical supplies between facilities. In addition to helping combat the spread of COVID-19, PDDs offer other potential safety, mobility, and environmental benefits. These traditionally zero emission devices can help reduce the congestion and pollution created through trips by standard delivery vehicles. PDDs are currently

operating in over a dozen states and jurisdictions including Arizona, California, Ohio, Texas, Virginia, and Washington, D.C.

Although these devices offer great potential, especially during the current health crisis,

PennDOT feels that the proposed legislation, as currently drafted, raises some safety concerns,
allows for unintended operations, and overly restricts the ability of local authorities to control
operations in pedestrian areas.

PennDOT's core concerns:

PDDs should be regulated like a pedestrian. To ensure PDDs operate in a manner that complies with the provisions of Title 75, Chapter 35, PDDs should be added to the definition of a pedestrian.

PDDs should predominately be operated on sidewalks and within marked and unmarked crosswalks at an intersection. If a sidewalk is not present or if operating a PDD would constitute a hazard, only then should the PDD be permitted to operate on the shoulder or berm of a trafficway.

Local authorities should have the ability to opt-out of PDDs operating within their jurisdiction. PennDOT recognizes the need to avoid a patchwork at the local level. Since PDDs traditionally operate within a radius of 3 miles or are tied to a predetermined delivery route, it should not be difficult to account for variations between jurisdictions.

PennDOT and local authorities should have the ability to temporarily restrict operations due to operational or safety reasons, including, but not limited to, emergency conditions. For example, a PDD may be temporarily restricted during winter weather to allow for snow removal operations.

Business entities should submit an operations plan to PennDOT for review. This oversight authority will allow PennDOT to ensure every effort is made to address any public safety and operational concerns, while being flexible enough to adjust for changes and advancements in the technology. The plan should include, but not be limited to:

- Information on the business entity and its registered agent within Pennsylvania, including the registered agent's name, address, and driver's license number, and any other information the department may require;
- A description of training the agent received;
- A list of the jurisdiction(s) in which the PDD will be operated in;
- A description of the identifiable marker and a list of each device identified by a unique identification number that the eligible entity intends to operate in the state during the year;
- Proof of adequate insurance;
- A list of accidents resulting in personal injury or property damage that meet the accident reporting threshold in Section 3746;
- A description of the PDDs operational domain design;

- A description of how an emergency service responder may stop and/or disable the PDD;
- A description of the type(s) of cargo or goods the PDD will be transporting; and,
- Details on the PDD including weight, dimensions, engine type, and intended speed of travel.

Business entities should be required to report incidents resulting in personal injury or property damage. Reports should be made to PennDOT and the law enforcement agency of the local jurisdiction governing the right-of-way containing the sidewalk, crosswalk, or roadway where the incident occurred, within six (6) hours of the incident.

Agents should always possess a valid driver license and be required to monitor the PDD at all times and take over control if intervention is required. However, being required to be within 30 feet of the PDD may be overly restrictive. PennDOT and local authorities should have the ability to allow for remote operations prior to 2022 if the business entity can demonstrate ability to safely operate. However, PennDOT and local authorities should have the authority to reinstate the 30-foot requirement if a safety concern arises.

Finally, PDDs should be able to safely operate within their operational domain design. For example, if a business entity plans for their PDD to operate on the shoulder of roadways in Pittsburgh at speeds of 25 mph, the braking system should be able to bring the PDD to a controlled stop on an incline.

PDDs come in all shapes and sizes from Starship's six-wheeled, 55 pounds, short-range local delivery robot to Refraction AI's three-wheeled, 80 pounds, last-mile logistics vehicle, to FedEx's Roxo, which is built upon the power base of the iBot – a FDA-approved mobility device. Some PDDs travel speed comparable to a leisurely walk, while others can travel at speeds over 25 mph. With such diversity in PDDs, PennDOT encourages the committee and the general assembly to provide PennDOT and local authorities with as much flexibility and oversight as possible. This will allow for the safe deployment of PDDs while allowing for the commonwealth to continue to be a hub for innovation and automation.

Thank you for the opportunity to discuss SB 1199. We at PennDOT appreciate the legislature's proactive approach in ensuring that public safety is a top priority. I am happy to answer any questions.