

Thank you, Council Members for the opportunity to speak to you today about Safe Transportation Infrastructure in Philadelphia.

I am Professor Megan Smirti Ryerson, the UPS Chair of Transportation at the University of Pennsylvania and a Professor of Transportation Engineering and Urban Planning. I am the Founder of the Center for Safe Mobility, where I conduct research on urban transportation infrastructure safety using eye-tracking technology. Layered on top of the math and theory through which I study transportation is my deep personal experience with the system: I'm a regular SEPTA rider, a bike commuter (frequently with my kids on the back of my cargo bike), an urban runner, a pedestrian (often walking my kids to their vibrant Philadelphia public school) and I've taken my share of taxis and ridehails.

What will the introduction of a new mode of transportation into our already diverse transportation system look like? There are three proven classic transportation concepts that will tell us the answer: Mode Shifting, Safety in Numbers, and Induced Demand. Scooters offer a new mobility option, one which has significantly reduced demand for rideshare and driving in peer cities. New scooter riders increase drivers' awareness of everything moving on the road that isn't a car. The safety in numbers phenomenon encourages more people to get out and bike, scoot, or walk. Demand for separated, protected, multi-purpose bike/scooter lane infrastructure will become impossible to ignore; once built it will induce new demand: with better infrastructure, more and more people will be comfortable using bikes and scooters. We have seen induced demand at work in Philadelphia already: our new bike lanes have propelled us to first place among big cities for our share of bicycle commuters (over 7 percent of all commuters in Center City), and our pedestrian and bike-friendly paths and river trails are packed people with of all ages year-round. It is clear that when we give Philadelphians access to safe and enjoyable transportation alternatives to driving they will use them.

But what about scooter safety? Let's consider the safety of Philadelphia's current transportation system, the system that scooters would be joining. Today, among peer cities, Philadelphia has the dubious distinction of having the highest rate of traffic deaths per capita. Nearly half are pedestrians and cyclists; 10% are children. Counting crashes and fatalities obscures an even more treacherous

reality. These numbers reflect reported crashes and do not account for near misses and dangerous interactions, nor do they account for losses to the economy and quality of life when people limit their mobility for fear of being struck. **Let me pause to make this point: the number of traffic deaths -- as staggeringly high as it is -- nowhere near covers the unmeasured safety hazards that force people to limit their mobility.** What is an unmeasured safety hazard? Consider crossing at an intersection with a stop sign, with a rideshare vehicle stopped in the crosswalk or cars parked -- legally or illegally -- up to the stop line. You step into the street past the car, scan and make eye contact with a driver, and hope they will stop (given the acceptability of the "Philly Slide," or, rolling through stop signs). The elderly and the mobility impaired can't manage this nuanced crossing, so they don't walk outside alone.

The only way we will achieve Vision Zero (zero traffic deaths) and mitigate hard to measure safety hazards is through infrastructure **design**; infrastructure design that slows down traffic, design that makes pedestrians and cyclists more visible, and design that physically separates vehicles, bikes and scooters, and pedestrians. OTIS understands this. Their CONNECT plan is centered on holistic design improvement of all modes. The residents of Philadelphia understand this: 28 Philadelphia neighborhoods filed Slow Zone applications last month, showing us that there is broad support for slowing down traffic and creating safe infrastructure. We know how to do this. OTIS's own Chestnut Street Transportation Project -- which re-purposed a lane of Chestnut St for a parking protected bike lane -- counterintuitively did not impede traffic flow but rather improved efficiency for all users through the integration of dedicated turn lanes and loading zones. It also drastically improved safety for pedestrians, as parked cars and bollards create refuge areas, putting pedestrians directly in drivers' sightlines and reducing pedestrian crossing distance. The shorter and safer crossings have brought those with mobility limitations back out to walk around, participate in the economy, and do the things that we love to do in Philly.

Yet proposals for safe transportation infrastructure projects still struggle to generate the political buy-in needed for implementation. That is why, to me, scooters are an ally in safe mobility. They bring awareness and visibility to non-motorized options. They incite demand for safer, separated facilities, accelerating development beyond what we could achieve with biking alone. They are an ally in transportation equity, taking IndeGo's model to the next level by accommodating those physically unable or uncomfortable biking and mitigating issues of station placement. To leverage this alliance, upon launching a pilot with scooters, we must do two things. First, we must put protections in place to ensure that scooters themselves are safe and well maintained, while also recognizing the inequity in banning scooters on the grounds of safety when other forms of automotive mobility are not held to the

same standard. Second, we must prepare accordingly to recognize scooters as part of our transportation system. We can lead by design by proactively building safe, separated infrastructure. “A place for everything, everything in its place,” said Ben Franklin, UPenn’s founder. Fundamentally, complete streets -- with protected spaces for vehicles, bikes and scooters, and pedestrians -- make movement safer, more efficient, more reliable, and more enjoyable for all.

Note: These comments reflect the views and expertise of Megan Ryerson, and not those of the University of Pennsylvania