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Good morning Chair Langerholc and members of the committee. Thank you for the opportunity to share a city perspective on reforms and investments to advance transportation innovations in Pennsylvania.

My name is Karina Ricks and I am the Director of Pittsburgh's Department of Mobility and Infrastructure (DOMI).

The Department was founded on the basic premise that transportation mobility is the single largest factor in economic mobility, as research has demonstrated. We know this to be true for individuals working their way up the social ladder, households striving for better opportunities, and regions like ours reinventing themselves and their economies.

The Department of Mobility and Infrastructure is responsible for the planning, design, operation and management of our infrastructure legacy which includes over 1,000 miles of city streets, 800 sets of public stairs, 600 signalized intersections, 140 bridges and scores of trails. DOMI also plays a central role in anticipating and sensibly integrating ever-evolving 21st century innovations into this 19th century system.

Our work and initiatives are guided by five simple, but fundamental principles:

1. No one should die or be seriously injured traveling on city streets.
2. Every household in Pittsburgh deserves access to fresh fruits and vegetables within 20 minute travel from home, without the requirement of a private vehicle.
3. Walking, rolling or bicycling should be the most enjoyable choice for very short distance trips (less than one mile).
4. No household should have to spend more than 45% of household income to satisfy basic housing, transportation and energy needs; and
5. The design, maintenance and operation of our city streets should reflect the values of our community.

2020 was a transformative year, laying bare three imperatives that underpin these principles:

- Systemic racial disparities. Pittsburgh, like so many sister cities around the nation, drove highways and other heavy infrastructure through the heart of our black community. This wound of generations past continues to hobble our communities of color today and we must work proactively to heal it.
- Global climate change. In 2020, the west burned while the south flooded. Texas froze, Pittsburgh slid and the Great Lakes dried out. We now need to act with speed and urgency to radically reduce climate emissions and move to a more sustainable mobility future.
- Resiliency and adaptability. Of all the technological innovations of recent years, the pandemic was the greatest disruptor of all. The crisis demanded creativity and we innovated on the fly to rapidly redesign streets and mobility systems to keep our economy and community going. We need to retain that flexibility and ability to nimbly iterate in times of both comfort and crisis.

We keep these principles and imperatives in mind in every aspect of work that we do. They are the answer to the question of, "what are we solving for?" and the metric against which we measure any project or initiative.

I want to take my time with you today to talk about three things vital to the City of Pittsburgh in advancing transportation innovation: enhancing safety, embracing pilots and increasing investment - all with a high degree of local control.

ENHANCING SAFETY

While every transportation department asserts safety is the top priority, system operations and project design often belies this intent favoring travel speeds, capacity expansions or cost savings over the preservation of human life. We need to recognize this reality and get deadly serious about traffic deaths.

Speed kills, it is just that simple. The higher the travel speed, the higher the probability of death in a traffic crash. Speed differentials are a related factor - particularly in dense urban areas where we have people walking at 2 to 4 MPH, people on bikes and scooters traveling at 10 to 15, and motorists theoretically limited to 25 MPH but routinely exceeding 40 MPH.

The acceleration of innovation is aided and enhanced by reducing conflict, increasing predictability and lowering overall traffic stress among our street users. Consistent, slower speeds in our complex and conflict-rich urban areas serves innovation. For this reason, Pittsburgh urges the Committee to pursue and advance the following actions:

- **Authorize local reduction of speed limits below 25 MPH.** States around the country have recognized the need for slow speed zones in their dense urban centers as a critical safety measure. This reduces the speed differential between more vulnerable street users and the much heavier (and dangerous!) full sized vehicles on our city streets enabling all to safely operate together in a low-speed environment.
- **Embrace and enable techniques for “self-regulating” or “self-enforcing” street design.** Most people do not drive according to the posted limit but rather travel at the speed that “feels right” for the road. The “feel” is defined by innumerable and detailed design features of an urban street - lane width, parking design, street trees, lighting, medians and the like. We need to be able to innovate not only in mobility technology, but in street design itself to get closer to the uniformity in speed so critical to safety and self-driving systems in a mixed operator fleet.
- **Do away with the “85th Percentile Rule” for urban streets.** The requirement of a speed study is an outdated policy stuck in the 1964 thinking of its origin. This rule takes into account only the speed of vehicles and not the speed of other street users such as pedestrians, bicycles, horse and buggies or whatever form factor might pop up next.
- **Adopt “Susan’s and Emily’s Law” (House Bill 140).** This act allows parking protected bike lanes and adds a valuable tool to lower traffic stress, provide space for protected low-speed travel, and improve overall street safety.
- **Embrace and invest in pedestrian, bicycle and micromobility travel.** 25% of motor vehicle trips made in the City of Pittsburgh are less than one mile in distance. That represents tremendous risk and tremendous waste. We can reduce the literally crushing impact of motor vehicles by enabling a wider array of lighter weight mobility and delivery devices such as escooters, electric skateboards, and e-trike delivery vans. Not only can we save street space, save miles, and save emissions - but we can also save lives in our densest urban areas.

EMBRACING PILOTS

Staying competitive in the innovation economy means that the Commonwealth needs to move swiftly, but sensibly, from technology development to deployment. The intermediary and essential step in this is

demonstration. Pittsburgh applauds the inclusion of a local micromobility pilot as a component service of our larger “Pittsburgh Mobility Collective” in the DRIVE SMART Act and wishes to enable even more demonstrations.

Locally controlled, bottom-up pilots have great value. Innovation will always outpace regulation. As form factors and operating systems iterate, they no longer fit comfortably into the confines of conventional motor vehicle code. We are confronted then with either turning away innovations while we plod through the regulatory reform process or preemptively pass ill-informed initiatives to try to clumsily control the innovation.

Or we pilot and design demonstrations with purpose and intent toward a public good - those Pittsburgh Principles I mentioned at the beginning. Pilots allow us to observe, measure, iterate and report and inform sensible public policies and regulations based on experience and empirical evidence.

Pittsburgh can be a proving ground for transportation innovations, guiding and demonstrating the value to climate preservation, racial justice, and affordable and equitable mobility and access. This is possible in a region like this where government, industry, academia, and community have long worked in partnership and can come together to co-design services, devices, and deployments.

The Committee can establish Pittsburgh and the surrounding region as a transportation innovation proving ground, with the following strategies:

- **Incorporate local control.** Pilots for proof of concept work best when informed by and operated within local context and culture. Collaboration with and guidance from local governing and enforcement entities aid in a successful demonstration and build confidence of others for larger scale deployments. Municipal input into the roadmap for testing driverless Highly Automated Vehicles, as proposed in the DRIVE SMART Act is vitally important to ensure the viable operation of these devices in highly complex urban centers where demand is highest.
- **Provide flexibility.** Many emerging innovations cannot be easily classified within existing code and regulation. To truly be a proving ground of innovation, Pittsburgh must be granted flexibility to locally define devices within adopted code and iterate on street design utilizing best engineering judgement. The proving ground and associated flexibility would be guided by established research principles and practices provided by academic partners.
- **Value empirical learnings.** The principal purpose of a Pittsburgh Proving Ground would be to inform public policy making for the Commonwealth. Data gathering, measurement, evaluation and reporting would be a requirement so that human-centered design demonstrations can provide learnings to the larger Commonwealth for more informed and appropriate policy development.
- **Accelerate electrification.** Building off a strong partnership with our local electric utility, and a shared regional vision for a new energy economy, the test bed can demonstrate models and systems for electric charging as well as propulsion as envisioned in Senator Mensch’s Clean Transportation Infrastructure Act (S.B. 435).

Enabling Pittsburgh as a test bed also enables Pittsburgh as a job growth center. Clustering early-market concepts can catalyze further innovations, enterprises and job growth in both innovation as well as potential manufacturing, programming, operations and maintenance.

INCREASE INVESTMENT

Even while we look forward to innovation, we are falling further behind on basic maintenance and state of good repair. 23% of Pittsburgh’s bridges are in poor condition and 20% of our streets have deferred maintenance in paving. Scores of signals need capital upgrades to take advantage of the latest technologies and dozens of public steps are closed due to structural decay.

The declining condition of these assets is not only degrading the image of the city but also degrading the strength and competitiveness of our local economy. Infrastructure investment is economic development.

Over 1,600 pedestrians have been killed on Pennsylvania roads over the past decade and unfortunately that number is trending up, rather than down, in the state. Each year, on average, 1,300 people riding bicycles are injured on our streets. The vast majority of these crashes, injuries and fatalities occur in urbanized areas and roughly half occur on state routes. If safety is our ultimate priority, we need to put resources toward protecting these most vulnerable street users in the locations of greatest harm.

We call on the General Assembly and Committee to:

- **Fix it first.** We need to prioritize federal and state resources on fixing what we have before expanding and increasing assets to maintain and we must, unequivocally, ensure that any investments made prioritize human safety over any other factor.
- **Invest in active transportation.** We applaud the call in the DRIVE SMART Act to dedicate more multimodal funding for active transportation, but need to ensure this represents a net increase going to non-vehicle investments overall and not just a reallocation among alternative modes.
- **Sub-allocate to cities.** We request the General Assembly sub-allocate a portion of Congestion Mitigation and Air Quality Improvement program (CMAQ), Highway Safety Improvement Program (HISP), and Surface Transportation Block Grant (STGBP) to cities as the implementers of multimodal safety enhancements.

We appreciate the tremendous work of the Committee and the partnership and support with the City of Pittsburgh. Thank you again for the opportunity to testify today.