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To the Pennsylvania State Legislature,

As a professor of data science at Chatham University, where I research air quality disparities through low-cost sensing in environmental justice (EJ) communities like Hazelwood, and lead contamination in aging water infrastructure, I urge you to pass House Bill 109 to address the systemic inequities plaguing Pennsylvania's frontline communities. My work in Pittsburgh—particularly on transit justice and pollution monitoring—has shown me firsthand how decades of industrial harm, disinvestment, and policy neglect have created “sacrifice zones” like those in the Mon Valley and disadvantaged neighborhoods within Pittsburgh.

In collaboration with residents and organizations in Hazelwood, Braddock, and other Mon Valley communities, we have deployed low-cost air sensors that consistently detect PM2.5 levels exceeding EPA safety thresholds. These pollutants correlate with the alarming rates of asthma (nearly double the national average) and COPD hospitalizations in these neighborhoods. Similarly, our water quality studies reveal that lead service line replacements prioritize affluent neighborhoods, disproportionately exposing children living in EJ communities to lifelong cognitive risks.

House Bill 109 is a critical step toward rectifying this imbalance. By mandating cumulative impact assessments for new permits in EJ areas, the bill would finally account for the layered burdens communities already face—from legacy pollution to lead pipes. It would also empower residents with legally enforceable safeguards, ensuring their voices are not sidelined in decisions that affect their health.

In Pittsburgh, our transit research (done with Pittsburghers for Public Transit) highlights how underfunded public transportation forces low-income residents to endure longer waits at stops near high-traffic corridors. HB109 can focus on equitable infrastructure investment and could redirect resources to improve transit service in EJ areas.

As someone who works at the intersection of data and justice, I see HB109 as a lifeline for communities drowning in preventable harm. I urge you to pass this bill and commit to ongoing collaboration with researchers and residents to implement its vision.

Respectfully,
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