



City of Pittsburgh

UPISC 2024



City of Pittsburgh

**Infrastructure Sensing – PGH Lab
Participants**

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PGH Lab Participants

Smart Thermostats	Automatically adjusts the temp in rooms and can be monitored via a smartphone app. Deployed on 10th floor of Ross St Building.
Kaarta	Creates 3D maps of real world assets (Cartograph).
FlaminGO	Advanced sensor used in the measurement of water quality (partnered with PWSA).
Cybersecurity Monitor	Implement an ITS Safe™ security product within the City network to determine the actual state of security at any given time.

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Efficiency Report	Collects information on the energy consumption of HVAC units providing findings to the Department of Public Works.
LiDAR Map of Streets and Assets	LiDAR mapping tech that allows the mapping of streets and any assets located on them (light poles, signs, etc.) via mounted units on cars.
3D Map of City Infrastructure	High definition maps and models of city infrastructure for use in a variety of applications. We source data collected from 3D sensors, like those found on autonomous vehicles, and turn it into actionable insights about the continuously changing physical world.



PGH Lab Participants

GIS Data Package	Provides sidewalk and curb ramp data collected with a suite of technology at varying levels of fidelity and speed in order to meet any budget and need. Uses LiDAR, all data is geo-located and integrates with any GIS software.
Bike Dashcam app	A bicyclist dashcam app, currently no good dashcam apps usable by cyclists. Our app fills that niche. The bicyclist can choose to share their data with the city. How often are cars parked on the Penn Ave bike lanes? How many close calls are there on Smallman? Certainly 311 data undercounts this. Having solid data can lead to smarter decisions, whether it's enforcement, infrastructure, or education. Data can feed directly into 311.

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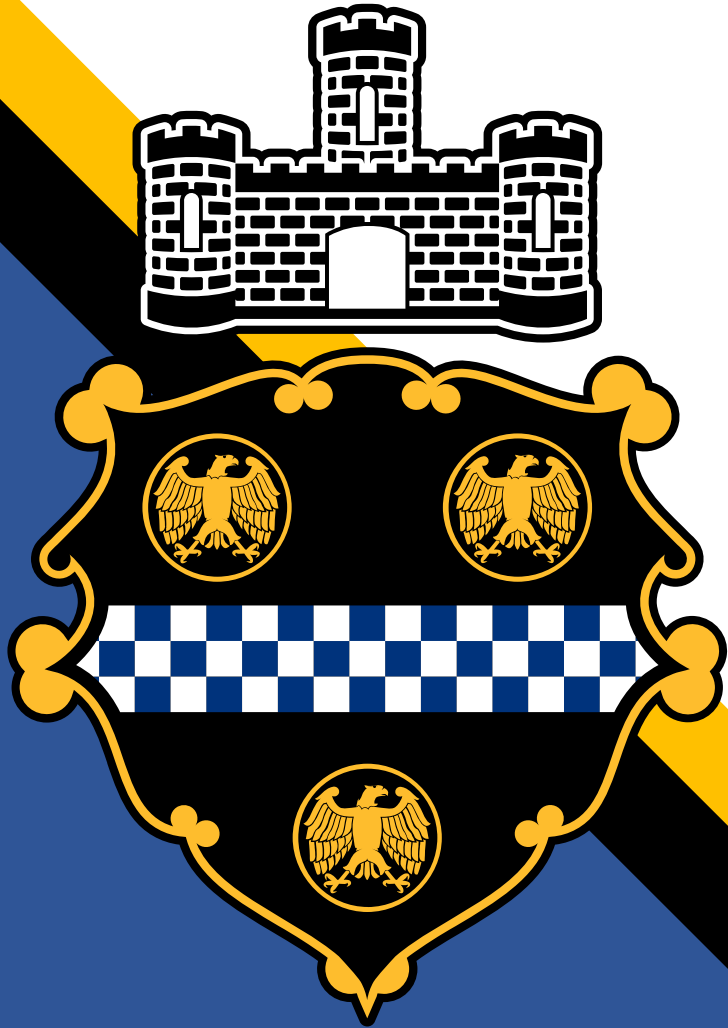
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Air quality monitoring	Airviz is a pioneer in air quality monitoring, using innovative technology to identify and recommend practical solutions to help solve the world's air quality crisis and mitigate climate change (smoke detectors).
Sensor fiber	Pilot the installation of proprietary sensor fiber technology to interconnect existing City network locations for a lower cost than current project installation methods (PWSA)
Bike Mapping and Data	Pilot 20 proprietary digital sensors with the goal of improving the safety of bike transits for city staff in addition to providing transit map data (GPS).





Questions & Discussion



Thank you!

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