

Portland's IoT Projects

A wide-angle photograph of the Portland, Oregon skyline across the Willamette River. The sky is filled with heavy, grey clouds. In the foreground, a curved walkway with a metal railing runs along the riverbank. The water reflects the city buildings and the overcast sky. A bridge is visible on the right side of the frame.

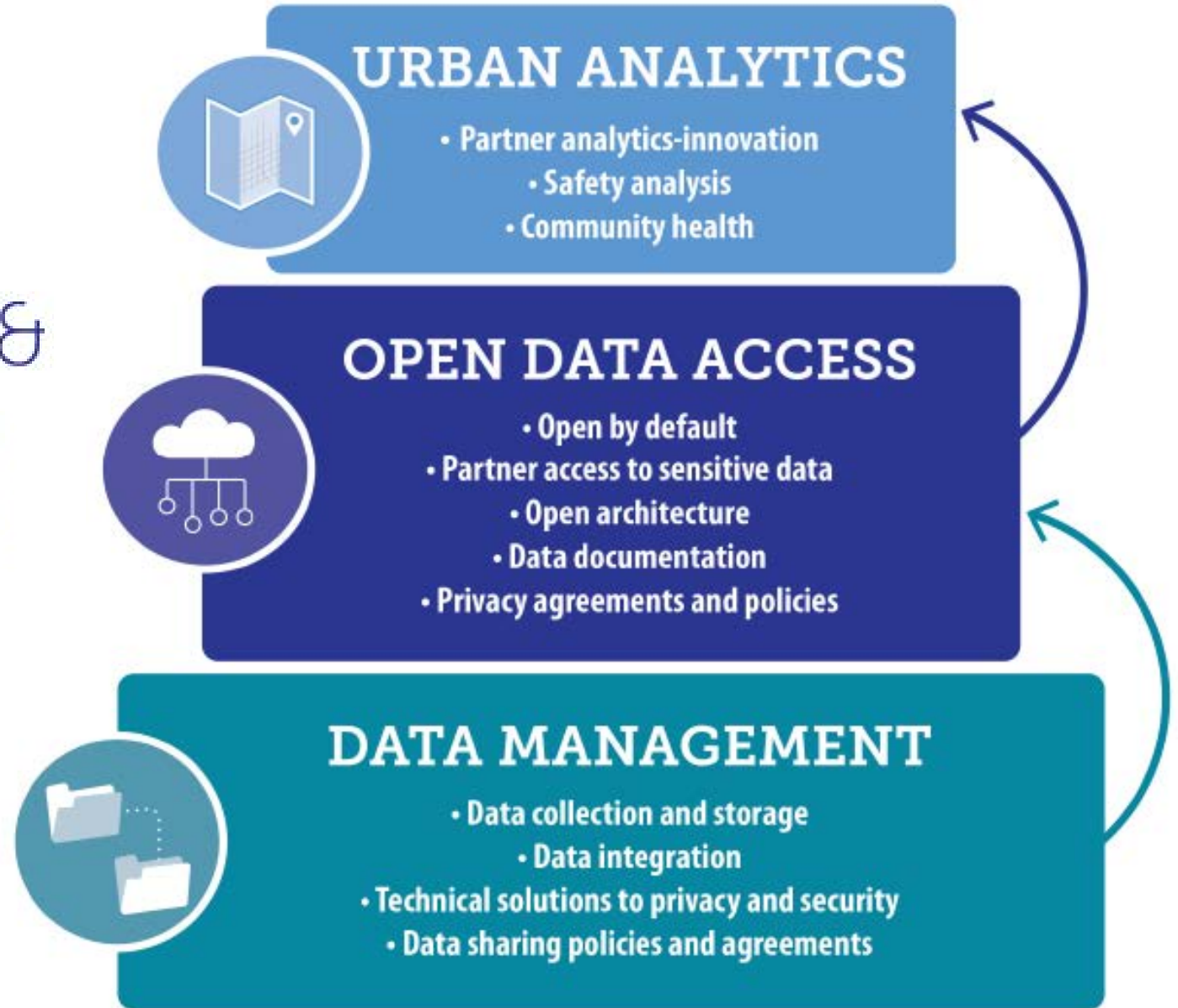
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IoT Week

Portland's IoT Goals

- Improve available data for informed decision making by the City & public
- Use cases focused on:
 - Informing traffic safety
 - Enable assessments of public health & equity
 - Advance Portland's Climate Action Plan goals
 - Create economic and civic engagement opportunities

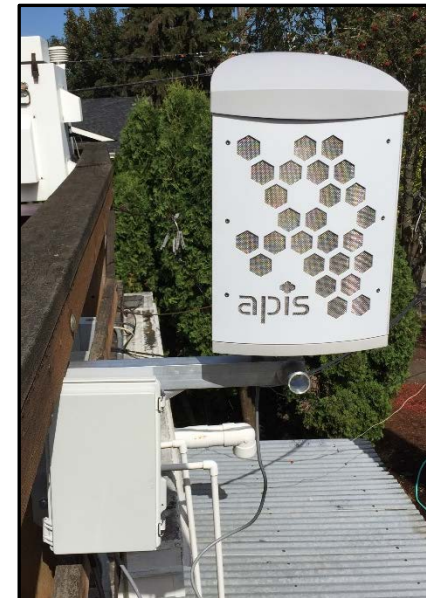
Open Data Cloud & Urban Analytics

for connected communities



First Upcoming Sensor Pilot

- Multi-Vendor Air Quality Sensor Deployment:
 - 3 Argonne National Laboratory/University of Chicago Array of Things
 - 3 SenSevere RAMP units
 - 3 Apis SensorCell units
- 5 minute CO, NO, NO₂, O₃
- 5 minute CO₂-RAMP unit only
- 5 minute PM_{2.5}- Argonne unit only



Co-Located Field Deployments



Second Upcoming Sensor Pilot

- AT&T/GE/intel Spotlight Nodes
- 200 Nodes installed on street light fixtures on 3 high crash corridors
- Pedestrian counts & direction
- Traffic counts, speed, direction, lane use



Key Considerations for Spotlight Pilot

- Collaborate with Portland State University and across City Bureaus on:
 - Node orientation & deployment setups
 - Data validation
 - Data management, integration, and analysis development
 - Further use case exploration:
 - Pedestrian activity models

Sensor Recycling Guidelines

- Drafting guidelines for how to improve recyclability of IoT electronics
- Maximize ability to repurpose electronics



Continued/Future Directions...

- Comprehensive, coordinated policies and projects are key
 - New policies for attachments to city owned infrastructure in the ROW
- Use case and public benefits evaluations
- Two focus areas for future IoT projects:
 - Community engagement
 - Bridging the digital divide

Thanks! Questions?

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