

Climate Resilience Projects

Climate Risks Visualization Tool



Portland State University (PSU)

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Summary

ClimateCope is an online mapping tool that was established through a collaboration between PSU and Portland city partners. The Climate Resilience in Urban Campuses and Communities (CRUX) project expanded ClimateCope to cover the full Portland Metro area. ClimateCope provides detailed distribution of heat, traffic-related air quality, and social vulnerability data. The interactive tool shows where climate impacts are hitting the community hardest, and where those being affected have the least capacity to respond to and withstand these changes. Decision makers can now spatially view where these interactions between climate-related hazards and social vulnerability occur in order to better prioritize climate adaptation strategies in Portland.

Leveraging Existing Resources

This initiative leveraged established connections to expand an existing tool, rather than develop an entirely new resource. Through this project, the neighboring city of Gresham was enveloped into Portland's ongoing resilience work. PSU utilized its research capacity and local partnerships to connect with and provide climate-related information to those outside the Portland city limits. Because much of the data had already been collected, the process of expanding ClimateCope had few obstacles.

Looking forward, the PSU and CRUX team hopes to further expand ClimateCope. However, this may be a challenge as the quality and granularity of the data used only extends to the Portland Metro boundary.



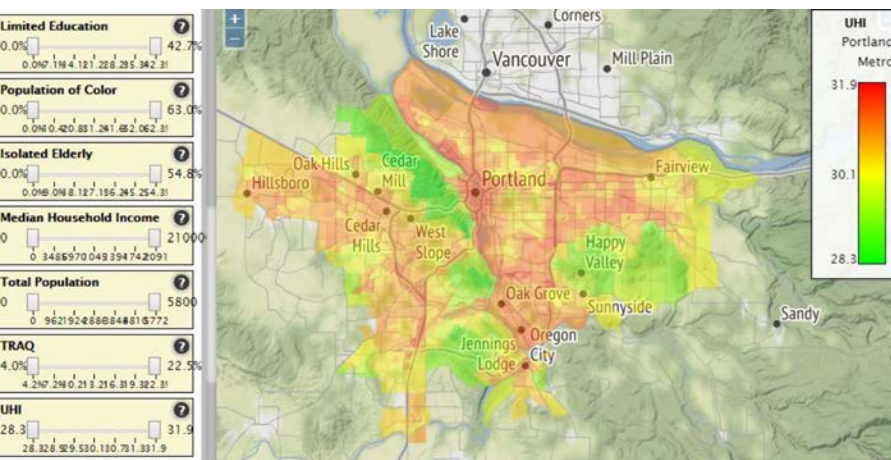
PSU researcher Vivek Shandas demonstrating how ClimateCope can be used.

Implementation Partners & Funding

Portland State University worked with PSU researchers Vivek Shandas and Jackson Voelkel, who had previously amalgamated local data based on conversations with a broad contingent of community representatives. The tool development was funded through an external grant focusing on climate resilience.

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The ClimateCope tool has an interactive interface to map social vulnerability and climate hazards in the Portland Metro area

Resilience Assessment Outcomes

The initial resilience assessment began by identifying what information and tools are needed to complete the resilience planning process, one of which was a clear and accessible visualization of risks. The development of this tool thus came directly out of needs identified by the assessment task forces, and built upon one of PSU's strongest assets - PSU's research community and existing networks and partnerships.

Vulnerabilities Addressed by this Tool

- Urban Heat
- Air Quality
- Social Isolation/ vulnerability

Strengths Reinforced by this Tool

- Resource sharing
- Information distribution and access
- Understanding the spatial distribution of risks and vulnerabilities to inform planning decisions



For more information email:
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