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City of Pittsburgh

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Improving Digital Equity In the City of Pittsburgh

December 11, 2015



Website

Carnegie Mellon University
Heinz College
Capstone Project

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IMPROVING DIGITAL + EQUITY

In the City of Pittsburgh



ABOUT THIS
PROJECT



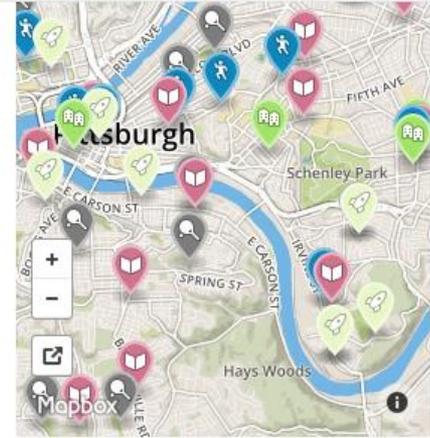
WIFI MAP



CITY CASE
STUDIES



RECOMMENDATIONS



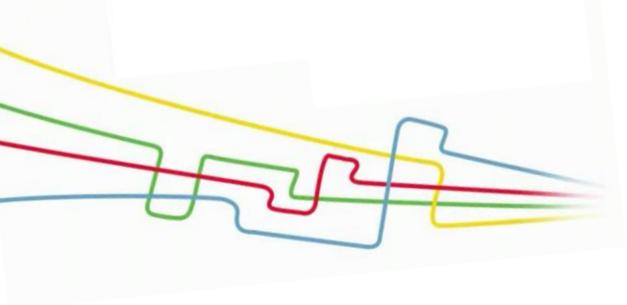
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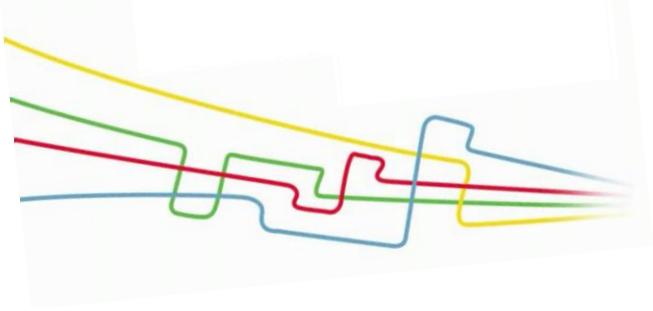
Bridging the Digital Divide





Agenda

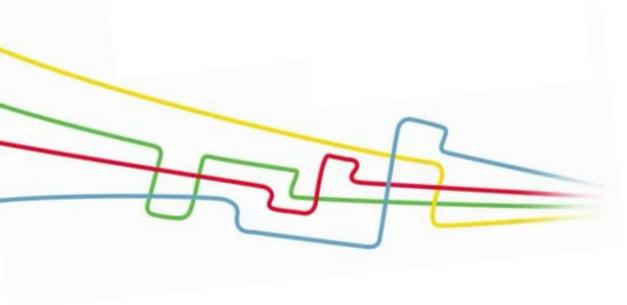
- Introduction
- Guiding Questions
- Device, Access, Literacy (DAL)
- Methodology
- Pittsburgh Internet Access
- Final Recommendations
- Q&A



Introduction

“To be truly successful, Pittsburgh’s technology boom has to be accessible for all...The city will never reach its full potential unless it supports innovation through digital literacy...,”

- City of Pittsburgh Mayor, William Peduto, Sept 2015.

A decorative graphic in the top-left corner consisting of several overlapping, colorful lines (yellow, green, red, blue) that start as straight lines and then curve and loop back on themselves, resembling a stylized signal or data path.

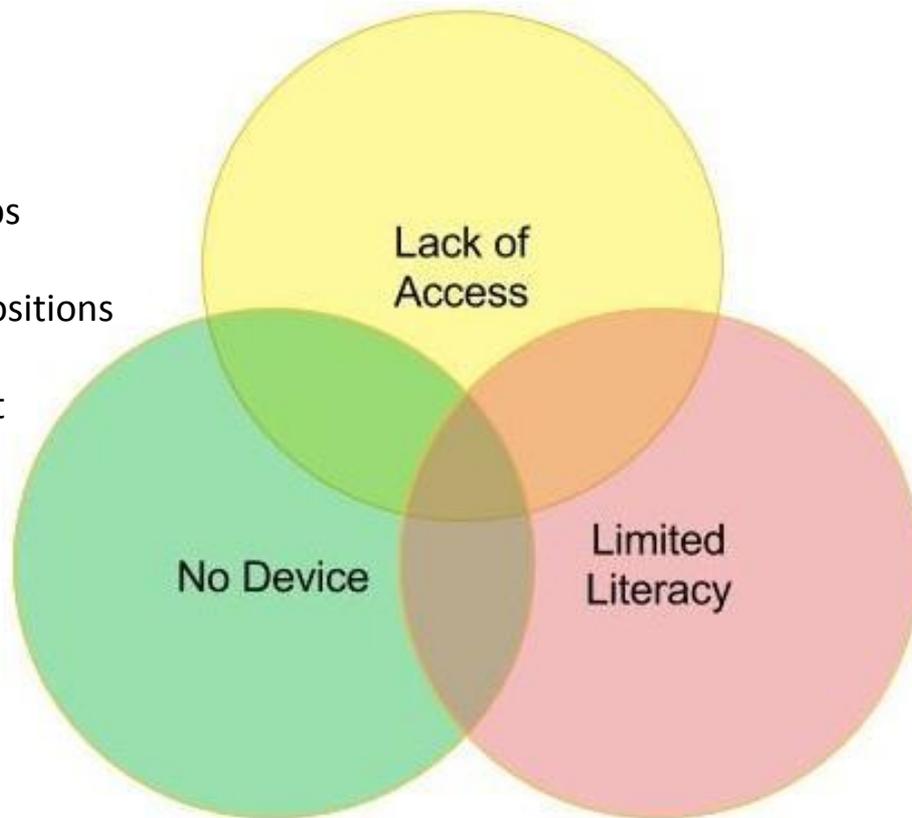
Three Guiding Questions

- **Part 1:** Who has access to the internet?
- **Part 2:** What kind of access is available?
- **Part 3:** How do we bridge the digital divide?

What is the problem?

List of potential issues:

- Residents lack the skills to apply to jobs online
- Employers have trouble filling open positions
- Cannot create resume
- Difficulty downloading unemployment benefit forms
- Reporting 311 issues
- Tweeting at the Mayor





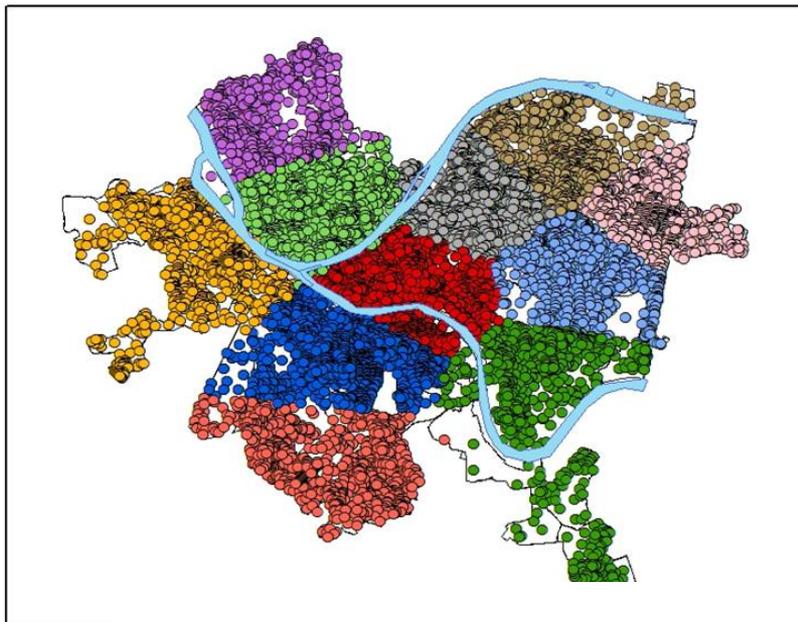
Methodology

Data sources analyzed:	American Community Survey National Broadband Program map Pew Research Center Jackson & Clark Partner Survey Open Technology Institute
Case Study Research:	Cleveland, Ohio Chattanooga, Tennessee Seattle, Washington
Experts Consulted:	Professor Jon Peha, EPP, ECE, Carnegie Mellon University Wes Roberts, Workforce and Economic Development Librarian, Carnegie Library of Pittsburgh Maggie McFalls, Outreach Coordinator, Carnegie Library of Pittsburgh David Keyes, Community Technology Program Manager, Dept of Information Technology, City of Seattle Georgia Bullen, Technology Projects Manager of New America's Open Technology Institute

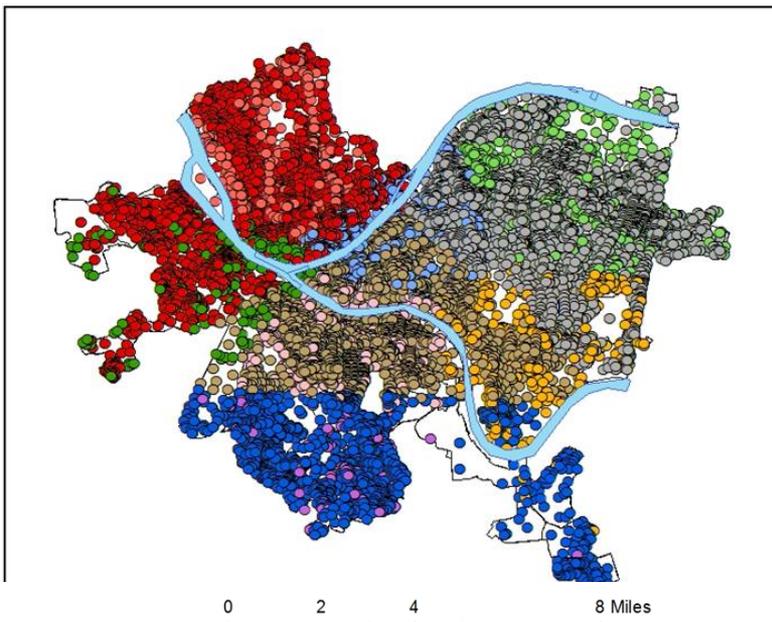


Pittsburgh Internet Access

Clustering by Geographical Locations and Download Speed



Source: National Broadband Map (2014)





Goal:

**Bridging the Digital Divide
In the City of Pittsburgh**

Illustration by Pittsburgh
Artist Amanda Gross

Goal

Bridge the Digital Divide

Recommendations

1 Understand the Digital Divide

Gather Data

Conduct Surveys

Stakeholder Roundtable

Phone Interviews

Analyze Past Reports

Stakeholder Analysis

2 Provide Increased Access to the Internet, Devices and Digital Literacy Training

Apply for Grants

Find Partnerships

3 Promote Digital Equity Initiatives to City Residents and Employees

Inform the public about programs for affordable internet, devices and training programs

Inform city employees about their role in promoting digital equity

Metrics

Create Baselines to Measure Future Success

Internet Speeds

Number of People Online

Number of People with Devices

Internet Usage by Demographic

Results

More Equitable Access

Improved Quality of Life

Recommendations

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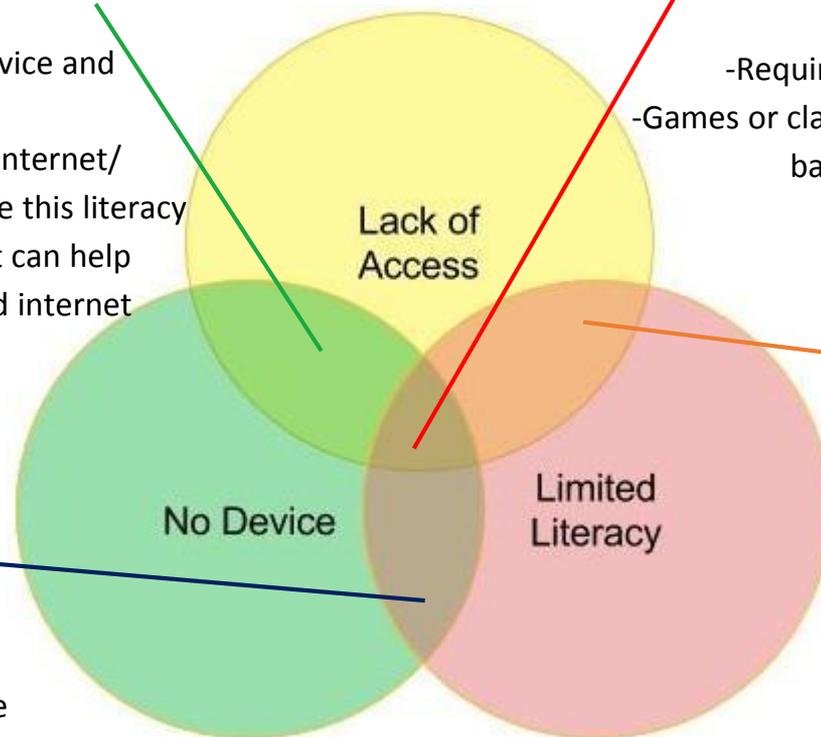
Recommendations for Each Group

No Device/ No Access

- Are digitally literate, but lack a device and internet connection of their own
- connect these users with regular internet/device sessions, so they do not lose this literacy
- Connect them with programs that can help them find an affordable device and internet subscription.

No Literacy/ No Device

- Internet access in public housing
- Device borrowing program
- Programs to highlight ways to use the internet (pay bills, apply for services)



No Access/ No Device/ No Literacy

- Hardest group to bring online
- Require device training from a basic level
- Games or classes that teach other skills, such as banking, to make learning easier/ fun

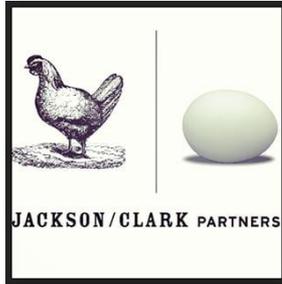
No Access/ No Literacy

- User has inherited a device
- Local programs to build literacy, provide access
- Libraries and community centers should be knowledgeable on a variety of devices

Q & A



Partner Organizations



PITTSBURGH
DOWNTOWN
PARTNERSHIP



Carnegie
Library of
Pittsburgh



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- <https://data.seattle.gov/>

Thank you very much!

Digital Equality Systems Project Team

