



**WEST PHILLY
PROMISE
NEIGHBORHOOD**

**Strong Children. Strong Families.
Strong Schools. Strong Communities.**

Development of a COVID-19 Urban Vulnerability Data Dashboard to Inform Neighborhood-level Response in Philadelphia

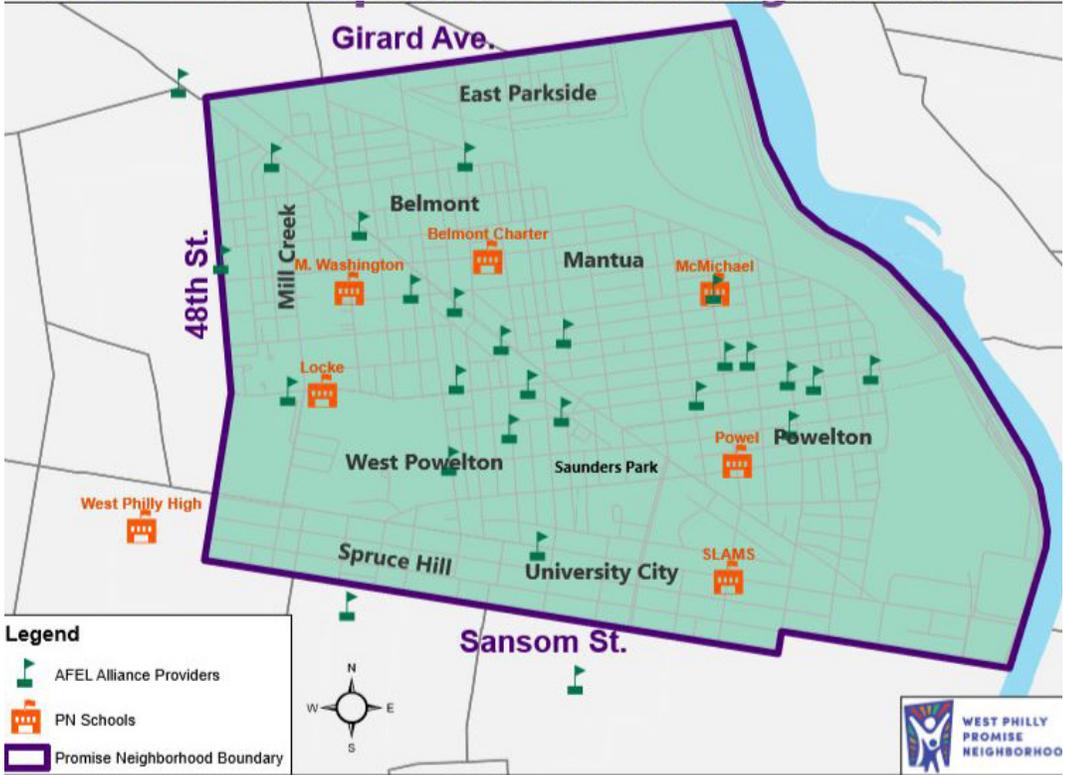
2021 ACS Conference

Samantha Joseph, Daniel Galpern, Felice Le-Scherban, and Amy Carroll-Scott
Drexel University School of Public Health

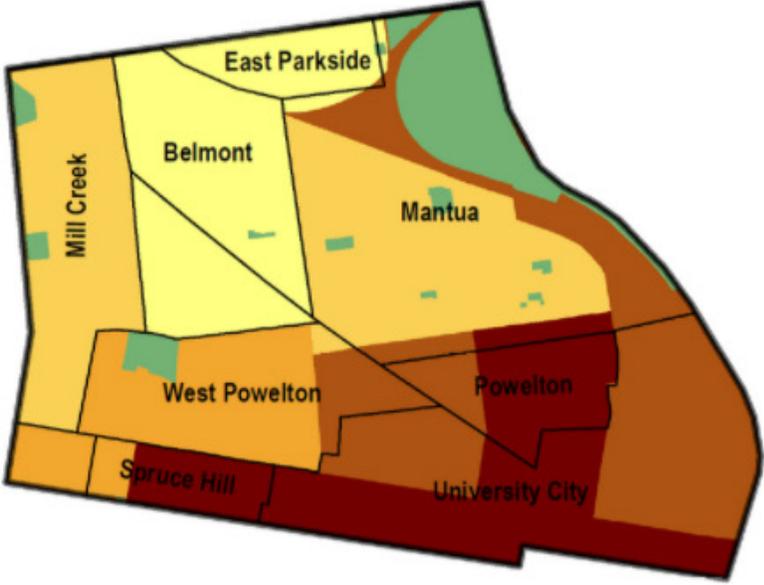
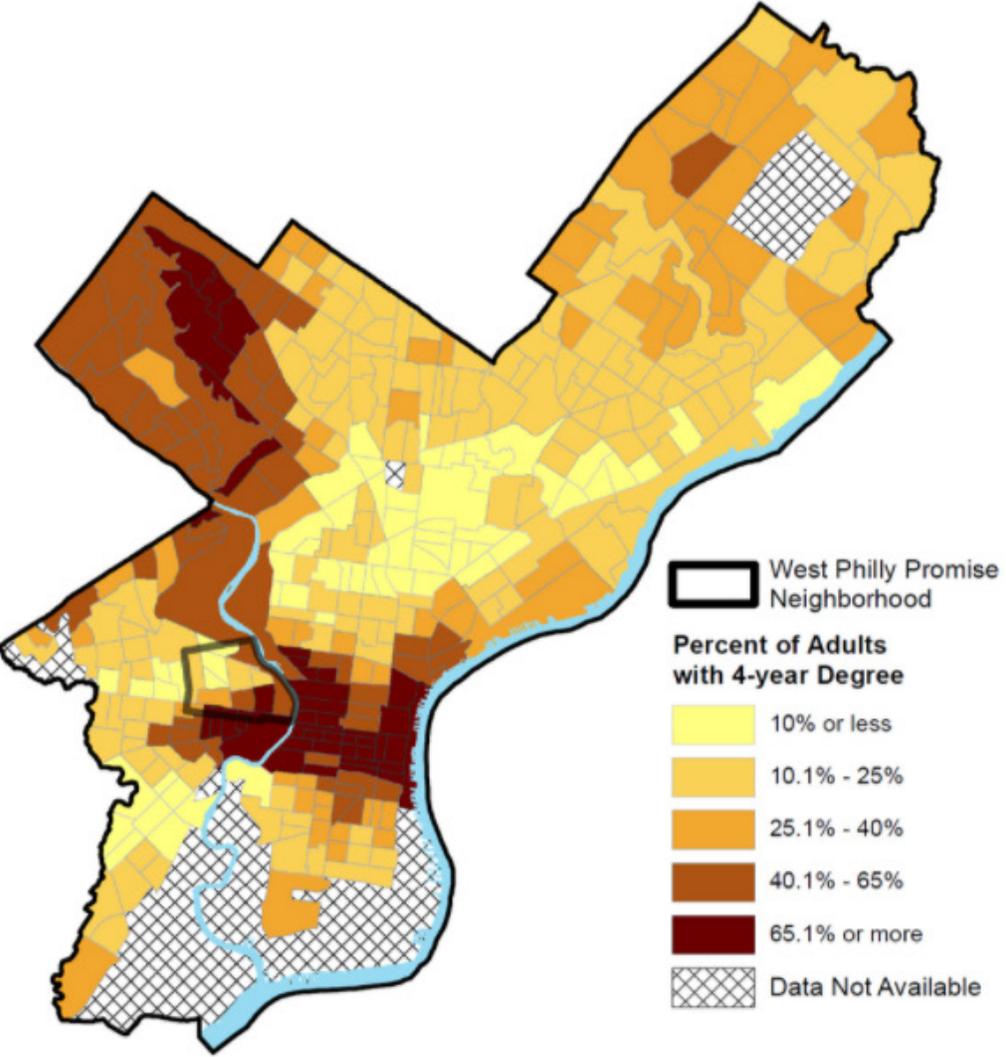
West Philly Promise Neighborhood

The grant goals focus on building a supportive environment for children to live and learn.

| | | | | |
|--|---|--|--|---|
|  <p>Children enter Kindergarten ready to succeed</p> |  <p>Students are proficient in core academic subjects</p> |  <p>High school students graduate with the skills they need to continue their education and achieve career goals</p> |  <p>Children and their families thrive in healthy, safe and stable communities</p> |  <p>Families and communities are actively engaged in student learning</p> |
|--|---|--|--|---|



Neighborhood Indicators



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ISSUE BRIEF: EDUCATION

2020

This cover features a photograph of a classroom with rows of desks and a whiteboard. The text is overlaid on a white circular graphic. The logo is located in the bottom right corner.

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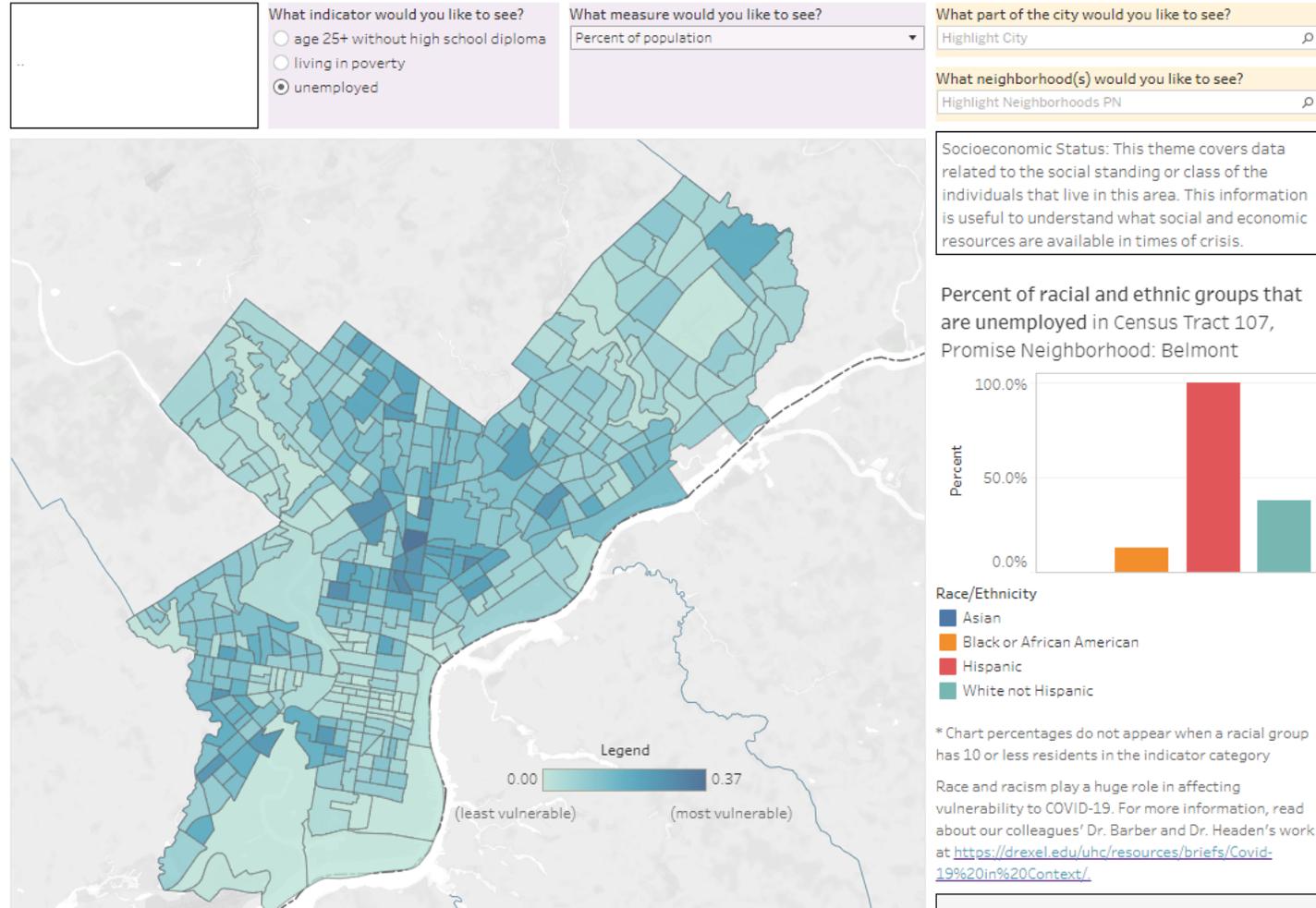
ISSUE BRIEF: HOUSING

2020

This cover features a photograph of a brick building with a prominent bay window. The text is overlaid on a white circular graphic. The logo is located in the bottom right corner.

What is the
COVID-19 Social Vulnerabilities
Data Dashboard?

Philadelphia Vulnerability to COVID-19: Socioeconomic Status



- Funded by a small Drexel Rapid Response Grant
- Interactive online dashboard built using Tableau and GIS software
- Maps areas of Philadelphia that will experience highest burden of COVID-19 and its economic impacts
- Shows pre-COVID-19 vulnerabilities and likely hotspots for impacts of COVID-19



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Why was the tool developed?

- Inform COVID-19 response efforts
 - Identify specific areas and populations for resources allocation
- Provide communities with access to data
 - Contextual data to support funding and advocacy

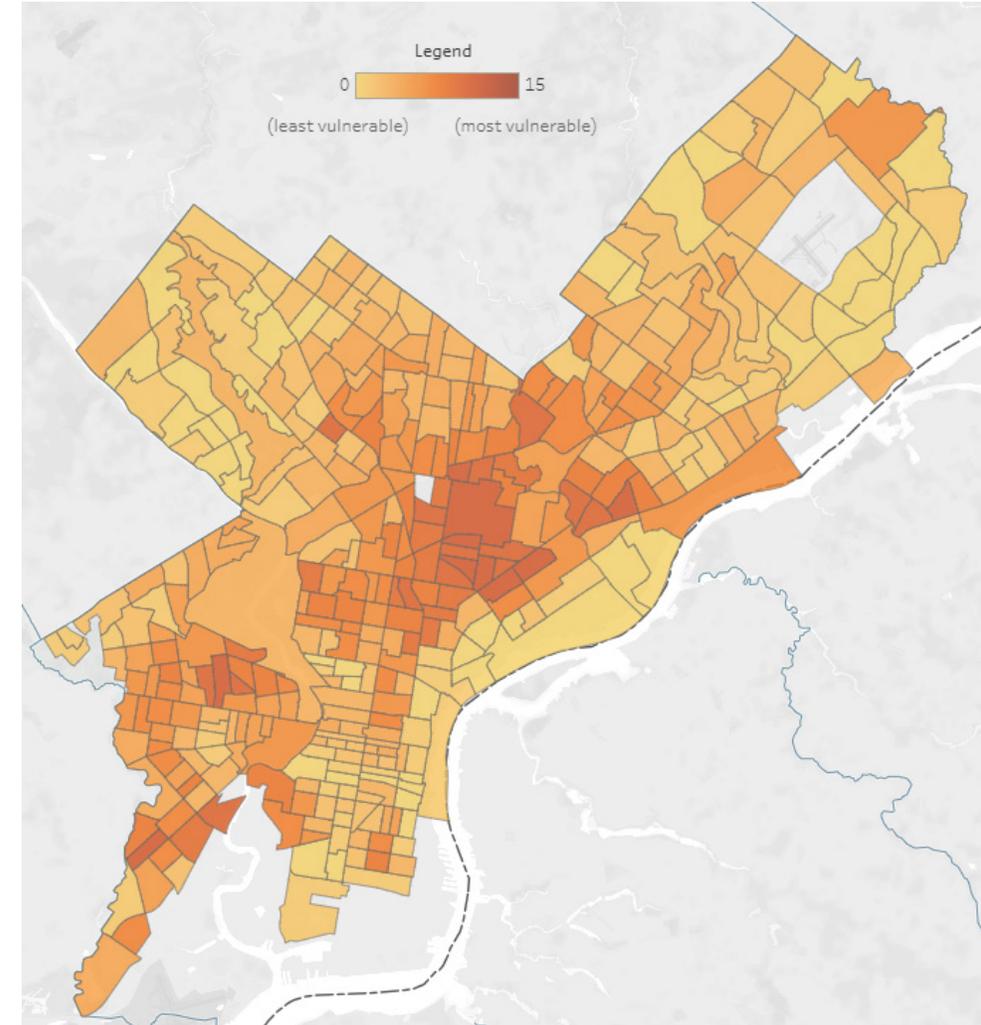
Dashboard 1: CDC Social Vulnerability Index

- Pre COVID-19 vulnerabilities
- CDC indicators

Dashboard 2: Additional COVID-19 Vulnerabilities

- Access to resources, health conditions, housing data

Dashboard 3: Essential Worker Data



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What do we mean by “vulnerable”?

- Vulnerability describes an area’s level of risk for a negative impact
- **More vulnerable**
 - Less access to resources
 - Due to historic and systemic inequities, including racism and classism
 - Potentially more exposure to COVID-19, other co-morbidities, worse outcomes for disease, higher rates of death, higher economic burden
- **Less vulnerable**
 - More access to resources
 - Higher likelihood of recovering from economic and social impact of COVID-19, less exposure, fewer co-morbidities, lower rates of death

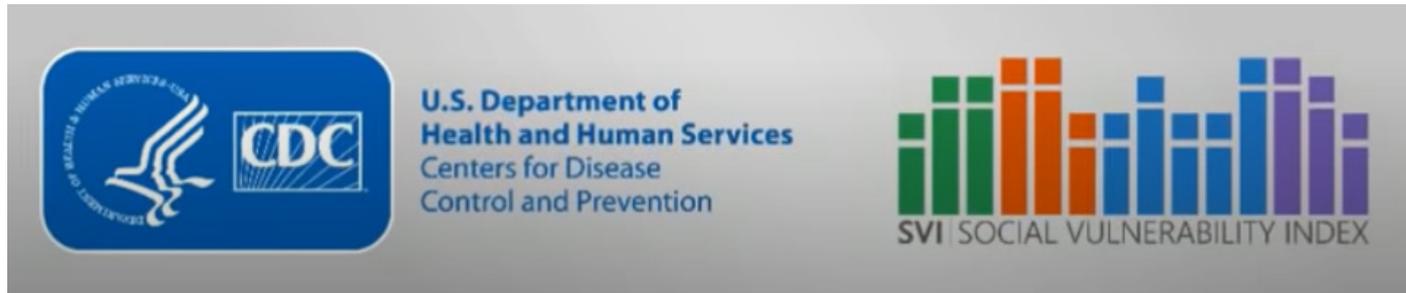


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CDC Social Vulnerability Index

Center for Disease Control's Social Vulnerability Index

- Used by CDC to prepare and recover from natural disasters
- We adapt and use as basis to identify areas and sub-populations that will experience highest burden from COVID-19



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How was the tool developed?

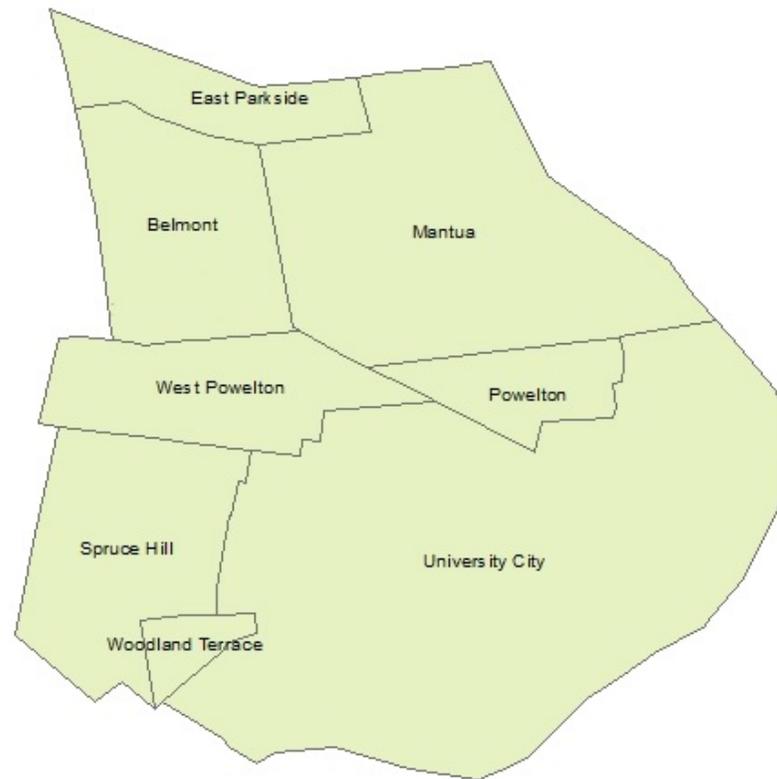
- Identified indicators based on criteria
 - Publicly available
 - Available city-wide
 - Relevant to urban context and COVID
- Data sources
 - Census data from American Community Survey, 2018
 - PUMS data
 - 500 Cities (CDC)
 - US Dept of Housing & Urban Development
 - EvictionLab



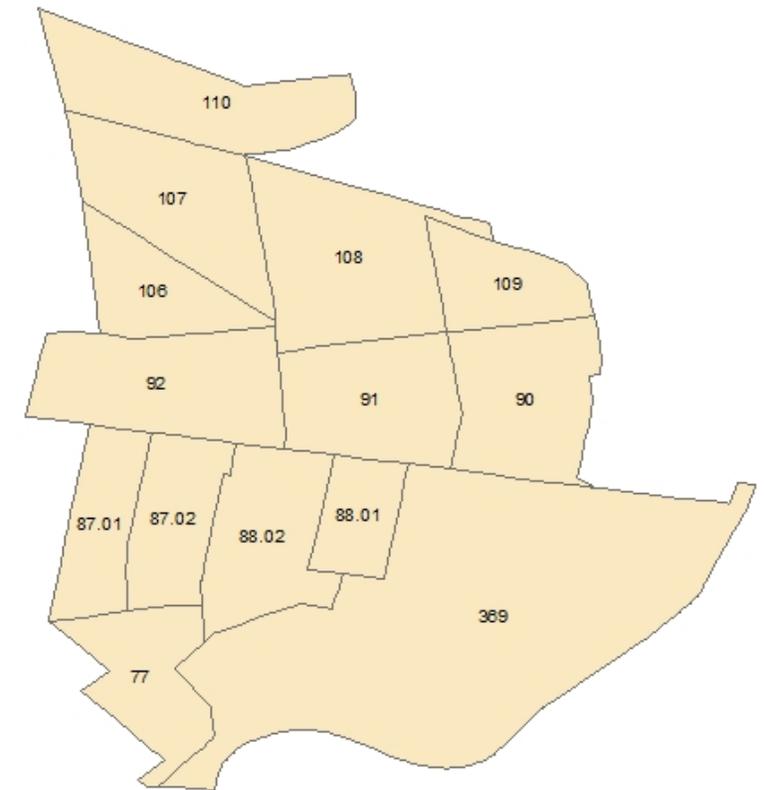
How is the dashboard structured?

- Dashboard structured for usability
- Maps show data by US Census tract
- Can see variations with in neighborhoods
- Possible also to search maps by neighborhood or Phila planning districts

Neighborhoods in 19104



Census Tracts in 19104



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What data are on the
dashboards?

Dashboard 1: CDC Social Vulnerability Index Data

Socioeconomic Status

- Age 25+ without high school diploma
- Living in poverty
- Unemployed

Household Composition and Disability

- Age 17 or younger
- Age 65+, 85+
- Disabled
- Single-parent household

Minority Status and Language

- Minority
- Speaks English “less than well”

Housing and Transportation

- Crowding
- Multi-unit structures
- No vehicle
- Group quarters



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Dashboard 2: Additional COVID-19 Vulnerabilities

Access to Resources

- Households receiving food stamps/SNAP, public assistance
- No internet
- No health insurance

Health Conditions

- High blood pressure
- Obesity
- Diabetes
- Coronary heart disease
- Asthma
- Lung disease

Housing

- Eviction rate
- Housing units with rent or mortgage more than 35% of household income
- Subsidized housing units



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Dashboard 3: Essential Worker Data

Essential Workers

- Industry
- Race/ethnicity
- Pay
- Where essential workers live

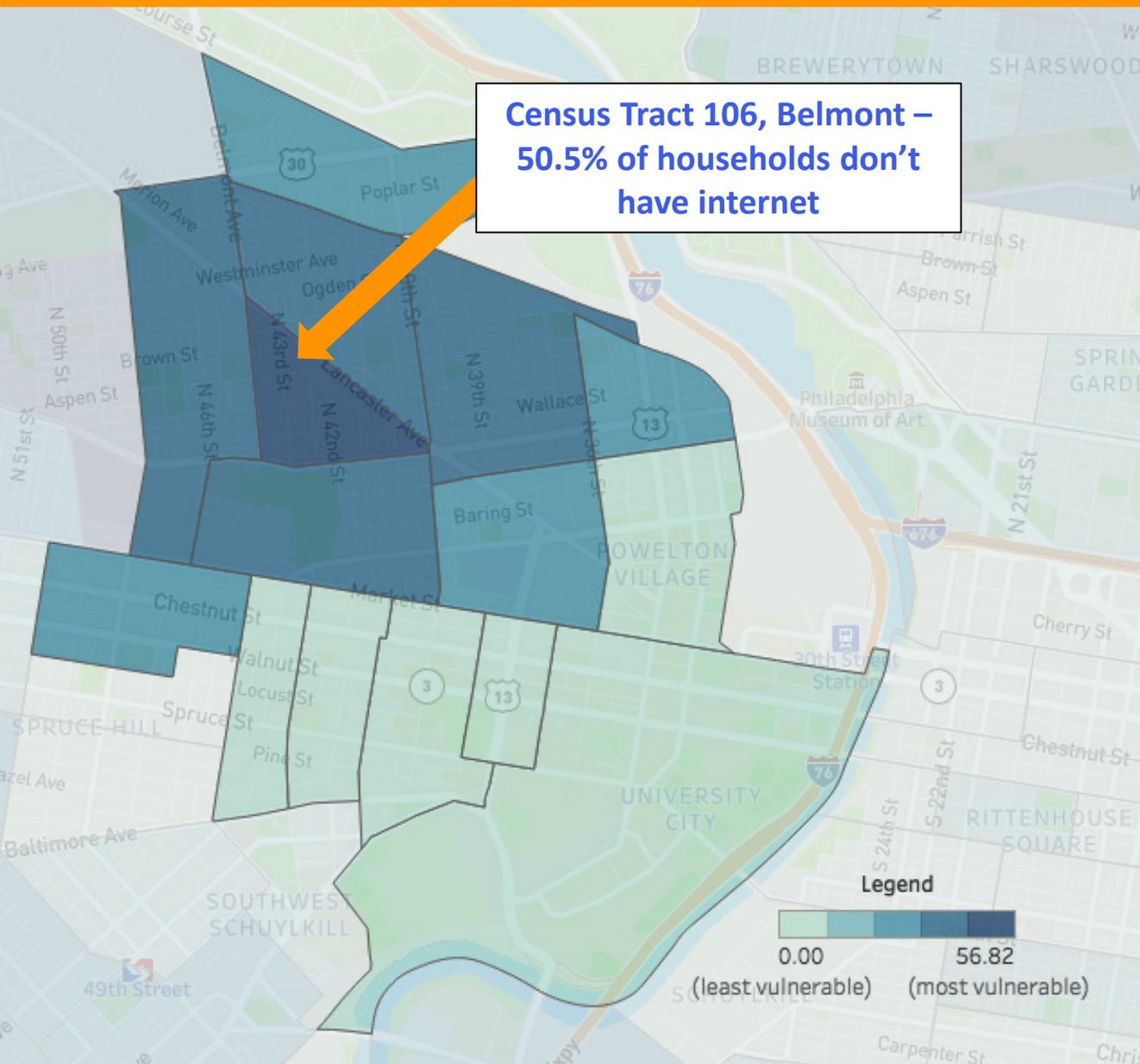


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Issue-based example:

Looking at the potential
impact of remote learning
throughout the West Philly Promise
Neighborhood

Internet access in Promise Neighborhood



- Internet access has been hugely significant during the pandemic
- Many organizations have been working to increase internet access
 - The City
 - School District chromebooks
 - Comcast's Internet Essentials
 - ExCITE Center Digital Navigators

Dissemination

- See this as a tool and a first step in facilitating the use of data for decision-making and advocacy around COVID-19 relief and recovery efforts
- Beta testing with community leaders
- Promote to data users, health care delivery partners, community leaders, city agency staff, and advocates throughout the City
- One-on-one and group demos
- Eventually publish on methodology and impact of the data tool in response to COVID-19

COVID-19 SOCIAL VULNERABILITES DATA DASHBOARD
[Bit.ly/COVIDIndicators](https://bit.ly/COVIDIndicators)

An interactive online dashboard that maps areas of Philadelphia that will experience highest burden of COVID-19 and its economic impacts. The tool utilizes census data to show pre-COVID-19 vulnerabilities and likely hotspots for impacts of COVID-19.

WHAT DO WE MEAN BY VULNERABILITY?

We adapted the CDC's Social Vulnerability Index to identify areas and sub-populations that will experience highest burden from COVID-19. Vulnerability describes an area's level of risk for negative impact.

| | |
|--|---|
| Less vulnerable <ul style="list-style-type: none"> • more access to resources • higher likelihood of recovering from economic and social impact of COVID-19 | More vulnerable <ul style="list-style-type: none"> • less access to resources • result of historic and systemic inequities, including racism and classism • potentially more exposure to COVID-19 |
|--|---|

WHAT DOES THE TOOL SHOW?

- Socioeconomic Status
- Household Composition & Disability
- Minority Status & Language
- Housing & Transportation
- Access to Resources
- Health conditions
- Housing
- Essential Workers
 - Industry
 - Pay
 - Race/Ethnicity



HOW CAN THE TOOL BE USED?

RESOURCE ALLOCATION

Data points can be used to determine which areas of the city have a greater need for COVID-19 relief resources and funding

Students in households without internet will have greater difficulty accessing remote learning

RESOURCE SEEKING

Data points can be used in grant applications, coalition-building efforts, and to advocate for funding.

Access to childcare could be a greater concern for single-parent households

ADVOCACY

Data points can be used to advocate for increased resources, raise awareness of a specific need or support an existing program

Workers making less money are less likely to work remotely, placing them at greater risk for COVID-19

Hourly pay of Employees in Food Retail by Race and Ethnicity

| Race/Ethnicity | Percentage |
|----------------|------------|
| Black | 62% |
| Black Hispanic | 58% |
| Hispanic | 52% |
| White | 45% |
| Asian | 9% |
| Black Hispanic | 19% |
| Hispanic | 13% |
| White | 17% |
| Black | 32% |
| Black Hispanic | 22% |
| Hispanic | 32% |
| White | 34% |

Only 22% of Black workers in food retail earn \$15 or more per hour

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[Bit.ly/COVIDIndicators](https://bit.ly/COVIDIndicators)
 Funded by a Drexel Rapid Response Grant



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How has the dashboard been shared?

- **Stakeholder Presentations**

- Project Management Team
- Promise Neighborhood Community Advisory Committee (CAC)
- Data Partners
- Philadelphia Public Health Department

- **Issue Specific Briefs**

- Remote Learning
- Essential Workers

- **Urban Health Collaborative Webpage**

- [Bit.ly/COVIDIndicators](https://bit.ly/COVIDIndicators)



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Who exactly have we shared the tool with?

- Local

- West Philly Promise Neighborhood
 - Project Management Team
 - Community Advisory Committee
 - Data Partners
- Mantua Civic Association Education Committee
- McMichael School
- Promise Zone Research Connections

- Citywide

- School District of Philadelphia
- Philadelphia Department of Public Health and Dept of Health and Human Services
- Philadelphia Office of the Mayor, Equity and Inclusion
- Philadelphia Office of Community Empowerment & Opportunity
- CHOP Primary Care Network, Karabots team, PolicyLab

- National

- National Neighborhood Indicators Partnership
- American Public Health Association
- Urban Institute
- Streetwyze

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