## Public Health & The Built Environment

#### Josie Bonnette, MPH

She/ Her Community Health Specialist Delaware Public Health District

#### **Christopher Fink, PhD**

He/Him Professor , Co-Director - Public Health Program Department of Health & Human Kinetics Ohio Wesleyan University Active Transportation Committee- Q3 2024

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Ohio Wesleyan University

## Introductions



Josie Bonnette:

- Moved to Delaware County in 2018
- Community Health Specialist at DPHD -Healthy Eating & Active Living (HEAL)



#### Chris Fink:

- Moved to Delaware County in 2007
- Professor, focus on community health, food and culture, food security





#### **Presentation Objectives**

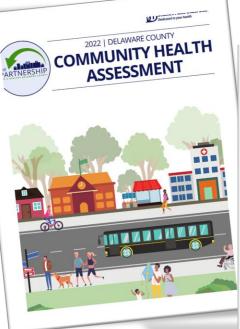
- Describe the connections and implications of transportation and land use policies on public health.
- Discover how to engage diverse perspectives and develop unique partnerships as a part of standard practice.
- Identify avenues and tools to improve outcomes
- Develop an understanding of how MORPC, the Delaware Public Health District, and Ohio Wesleyan University are collaborating to teach public health students as well as gather observational data for transportation, safety, and land-use partners through walking audits.

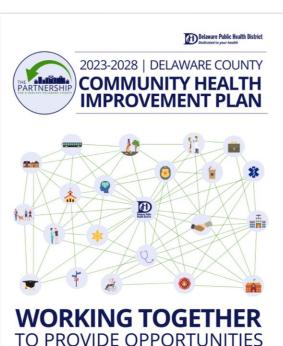
## **The Local Public Health System**

**Social determinants of health (SDOH)** are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. (Healthy People 2030)

#### Examples:

- Housing
- Transportation
- Racism & Discrimination
- Education
- Job opportunities
- Income
- Air & Water Quality
- Language and literacy
- Culture & Heritage
- Laws, Policies, Ordinances
- Healthcare & Health Insurance
- Gender Identity & Sexual Orientation





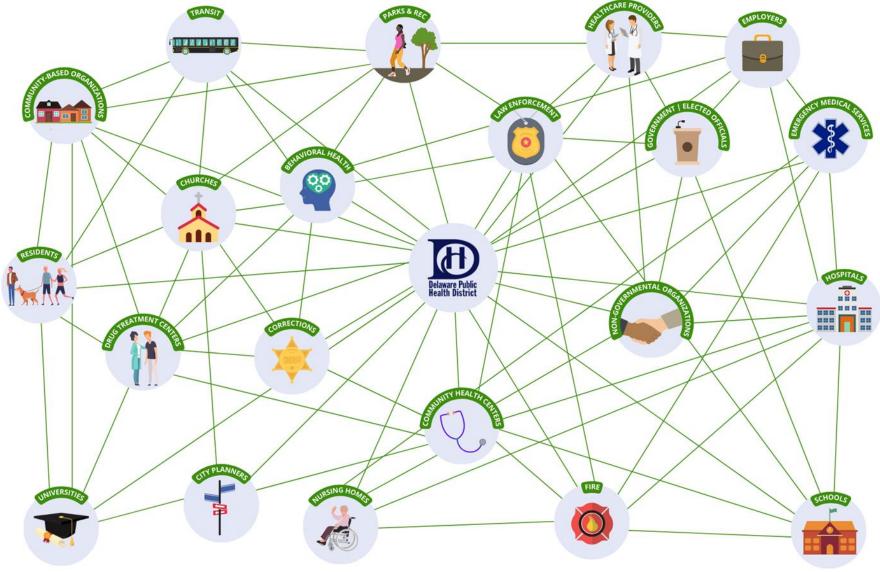
FOR COMPLETE HEALTH AND WELL BEING



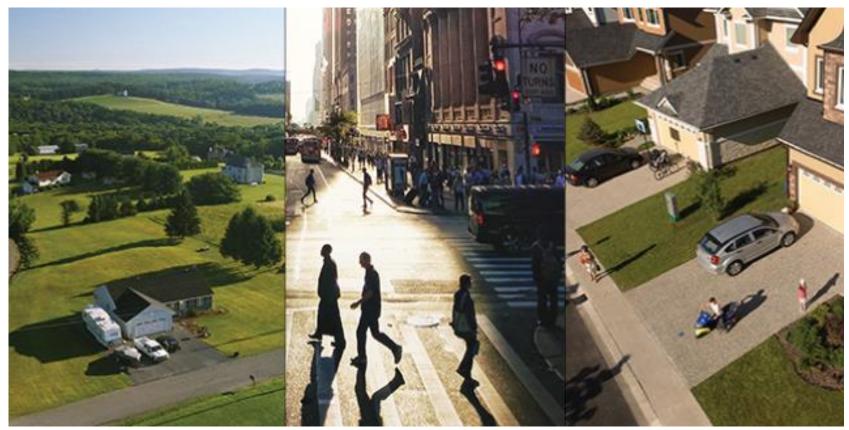


#### DELAWARE COUNTY LOCAL PUBLIC HEALTH SYSTEM





# How would you describe the area where you spent your childhood?



Rural

Urban

#### Suburban

Image Source: <u>Similarities and differences between urban</u>, suburban and rural communities in America | Pew Research <u>Center</u> Accessed August, 2023.





#### **Environments & Public Health**



The places of our lives – our homes, neighborhoods, workplaces, schools, parks, businesses and houses of worship – affect the quality of our health and influence our experience with disease and wellbeing.

## **Health Impacts of the Built Environment**

Access to destinations

Exposure to pollution & toxins

Engagement in Physical Activity

Exposure to infectious disease

Safety & risk of injury

Access to healthy & affordable foods

Mental & Emotional Wellbeing







## **Historical Contexts**

- Policies Encourage Development & Suburbanization > Sprawl
- Redlining

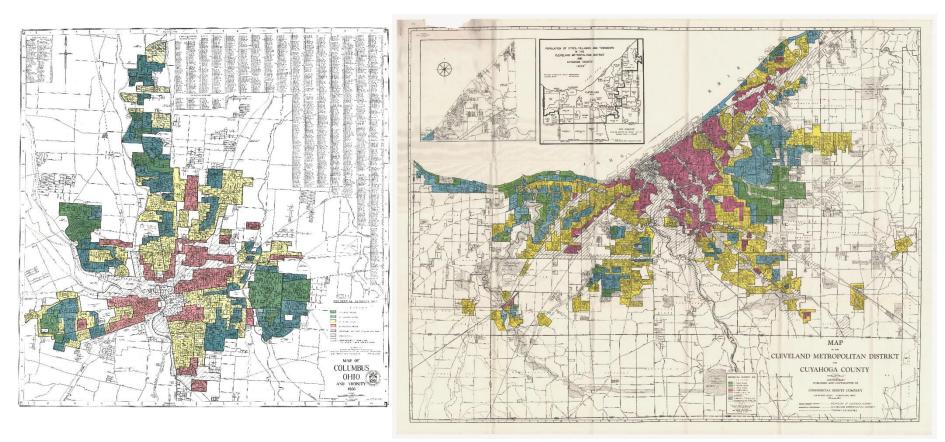
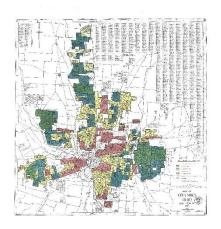


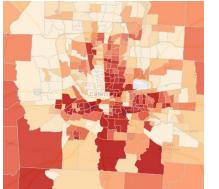
Image Source: Redlining Maps - Maps - Research Guides at Ohio State University (osu.edu)



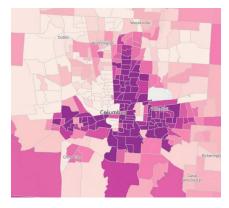


#### Where you live as Predictor of Health









1936 "Residential Security Map" of Columbus

Prevalence of Heart Disease % (2021)

Prevalence of Physical Inactivity % (2021) Prevalence of Adult Diabetes % (2021)

**Source:** Redlining Maps-Research Guides at Ohio State University <u>https://guides.osu.edu/maps/redlining</u> PLACES. Centers for Disease Control and Prevention. <u>https://www.cdc.gov/places</u>



Accessed August 1, 2024.



## **DPHD Background:**

2015-2019: Creating Healthy Communities Grant from Ohio Department of Health

August 2019: Held In-Person "Conducting Walk & Bike Audits" Workshop from ODOT's Active Transportation Academy for CHC Coalition

September 2019: First Walk Audit- Village of Ashley

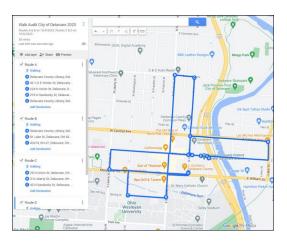
October 2022: City of Delaware- Neighborhood Around Unity Park

October 2023: City of Delaware- Downtown Area, With OWU Intro to Public Health

Feb/March 2024: City of Delaware- Dempsey Middle School Area, With OWU Intro to PH











## Ohio Wesleyan University (OWU) Early Work with Local Public Health System

- Community Health Assessment (CHA) and Community Health Improvement Plan
- Collaboration through Hunger Alliance of Delaware County and Cooking Matters Program
- Partnership for a Healthy Delaware County
- Guest Lectures
- Grant Initiatives



#### Ohio Wesleyan University (OWU) Public Health Program

Program Development Working Group Convened

Collaboration with Consultant on Market Position

Program Proposal to Curricular Committee

OWU Public Health Program Launches & Walk Audit Collaboration Starts

#### **Benefits to OWU**

- Connection to learning objectives for program
- Exposure to public health work opportunities
- Investment and engagement with Delaware community



## Our Approach to Walk Audits/Road Safety Audits









#### Outcomes\*

**12.75** Miles of Study Area **101** Participants **193** Miles Walked

#### **Outcomes**

Partner & Stakeholder Collaboration

Better Understanding of Community Needs & Contexts

Funding for Improvement Projects & Programs:

 Village of Ashley- Systemic Safety Funds

Increased Student/Community Engagement & Education



**VOA Pedestrian Improvement Exhibit** 



#### Feedback

"The walk audit opened my eyes to how public health can impact our everyday lives. It's easy to take accessible walking paths for granted, especially if you're an able-bodied person. Having many different perspectives on the walk audit helped enrich my experience. The walk audit also helped to inspire me to choose public health as a career."

> Aaron Gonzales OWU Student

"The City of Delaware engineering team has gained valuable insights through participating in walk audits organized by Delaware Public Health District and Ohio Wesleyan University. The audits have helped by getting us out in the community to see pedestrian routes firsthand and gaining an understanding of how others (including non-engineers) perceive the quality and problems of walking routes."

> Jonathan R. Owen, P.E. Deputy City Engineer City of Delaware, Ohio





#### Feedback

"The condition of the sidewalks was not an issue that would come to mind very often, and the accessibility of the sidewalks had also never really come to mind. I can remember a specific example from one of the routes was how far away the push button for the crosswalk was from the sidewalk and how difficult it would be for someone with a disability to access it. After doing walk audits, I look for these accessibility elements while on walks and just in my everyday life.

When presenting our findings to stakeholders and other community members, I felt heard because they were also members of the community and had already experienced some of these issues that we came across on our walk audits. I think this opportunity to present with them will definitely give me the confidence to present information in this type of setting in the future."

> Kelsea Cooper OWU Student

"Conducting these walk audits was very eye opening for me. It really changed my perspective and made me think differently when walking in different cities and towns. It has made me see how many places are very inaccessible and unwalkable which is something I had never noticed or had to think about before.

As I was able to travel to more cities this summer, I was able to see the cities in a new way due to the perspective change from the walk audit. The inaccessibility issues for those with physical disabilities and visual impairment is something that really stuck with me and something I have noticed is a big issue in many of the cities and towns I have walked in.

> Alyssa Markell OWU Student

#### **Future Directions**

- Digitize materials to reduce paper and allow for easier tracking and mapping of observation locations
- Work with partners to continue to identify study areas that make sense
- Ensure output reporting is efficient and useful for municipal stakeholders
- Increase community/neighborhood resident participation
- Figure out a way to provide transportation for participants when needed



## **Other Opportunities**

- Student (and faculty) research and conference presentations
- Collaboration with other campus programs (Environmental Studies, GIS/Geography)
- Summer internship programs (MORPC, others)
- Partner agency engagement
- OWU Connection student travel and global research



## **Current Grant Proposal / Program**

- Comparative walk audit work in Pamplona, Spain
- Students who have completed walk audit in intro Public Health course
- Opportunity to connect with city of Pamplona through OWU partnership at University of Navarra
- Expert (YOU!) input?



## **Questions & Contact Info**

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