



# Water quality and health

**Advisory group meeting**

Feb. 15, 2024

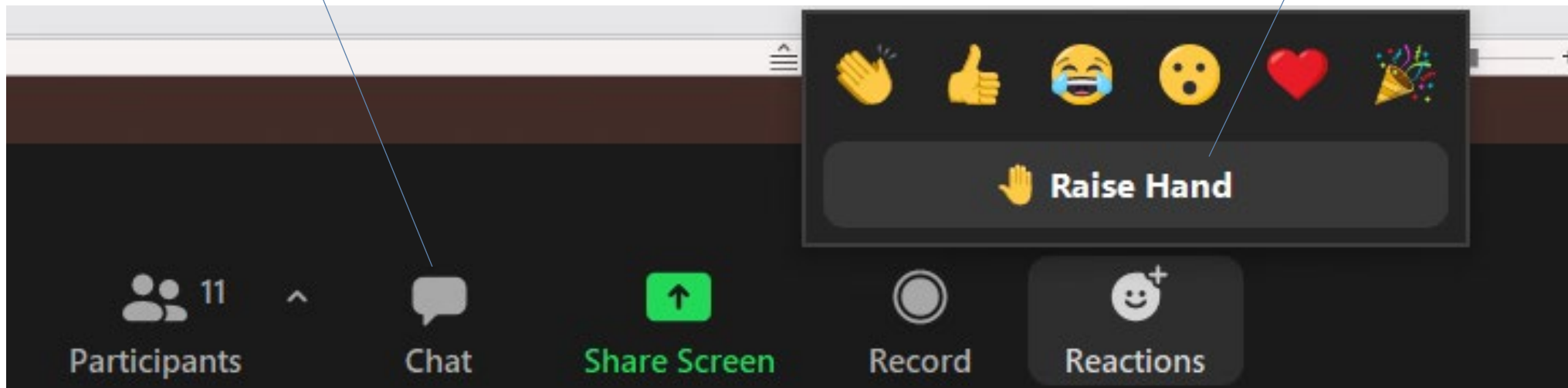
# Participating in Zoom

## Chat

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## Raise hand

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# Water quality and health advisory group page

health policy institute of ohio

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## Translate. Connect. Navigate.

HPIO translates complex data into actionable policy insights, connects diverse perspectives to inform policy decisions and offers expertise to navigate the changing policy environment.

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# VISION

Ohio is a model of health, well-being and economic vitality

# MISSION

To advance evidence-informed policies that improve health, achieve equity, and lead to sustainable healthcare spending in Ohio.

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of ohio

# Core funders

**bi3** Bethesda Inc.'s  
grants initiative to  
transform health

**Bruening**

*CareSource*

  
CLEVELAND  
Foundation

  
THE COLUMBUS  
FOUNDATION

THE  
GEORGE  
GUND  
FOUNDATION

  
harmonyproject

 HEALTHPATH

INTERACT  
FOR HEALTH  
A Catalyst for Health and Wellness

  
M.T. SINAI  
HEALTH FOUNDATION

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 **NCMF**  
NORTH CANTON  
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 OHIO STATE BAR  
FOUNDATION

  
SISTERS of CHARITY  
FOUNDATION  
OF CANTON

  
SISTERS of CHARITY  
FOUNDATION  
OF CLEVELAND

# Today's agenda

- **Project update**
- **Discussion:** key findings and data
- **Discussion:** dissemination
- **Next steps**

# Today's objectives

As a result of this meeting, **HPIO will:**

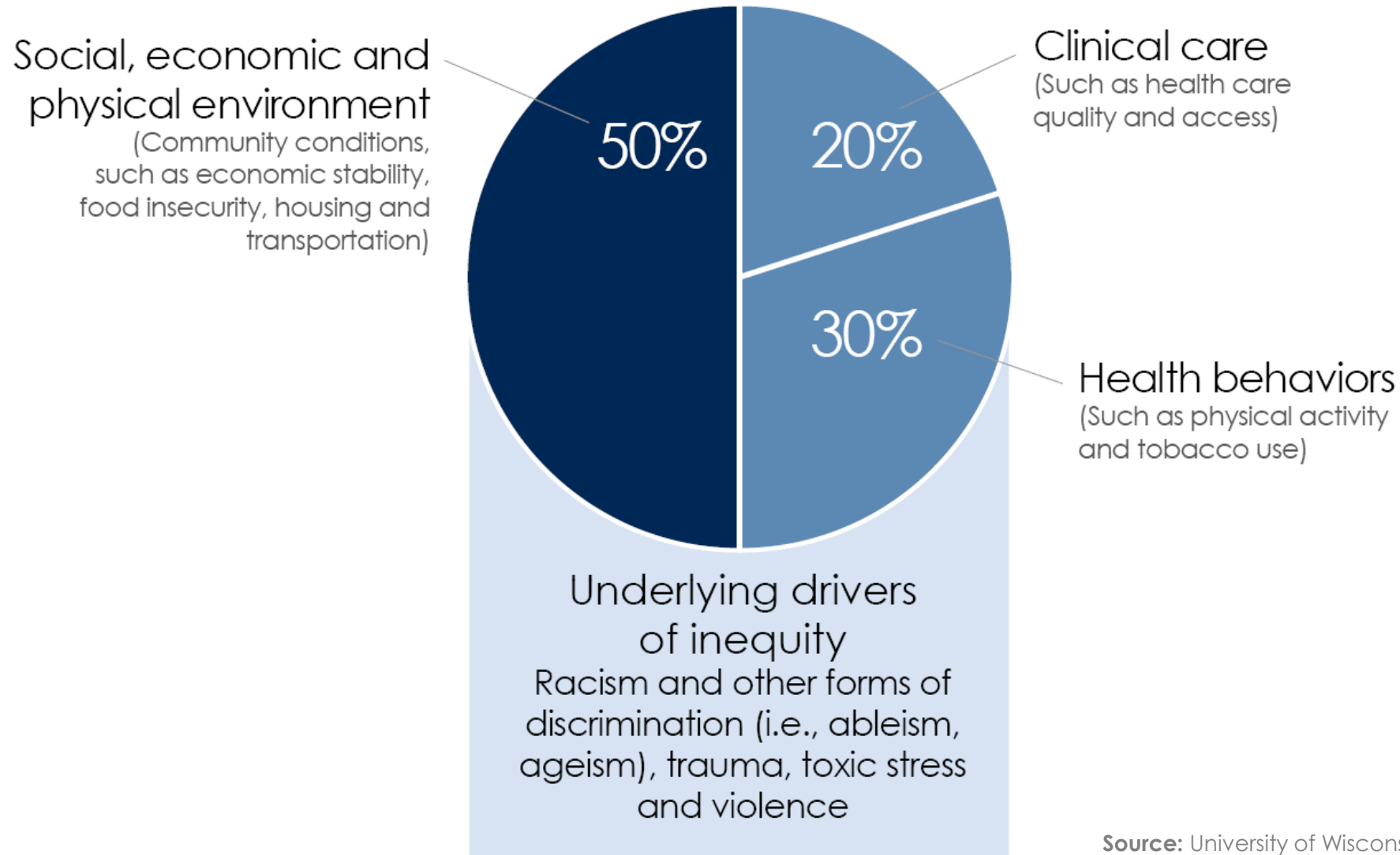
- The key findings of the water quality and health brief

# Introductions



# Project update

# Modifiable factors that influence health



Source: University of Wisconsin Population Health Institute

# HEALTH VALUE DASHBOARD™

## A closer look at outdoor air pollution and health

Clean air and water, safe places to walk outside and access to healthy food are examples of physical environment conditions that affect the health and well-being of Ohioans. This policy brief focuses on the importance of clean air and the many effects that air quality has on health throughout a person's life. State and local leaders in Ohio can do more to improve air quality through policy change.

Outdoor air quality is included in the Health Policy Institute of Ohio's (HPIO) **Health Value Dashboard™**. In the *Dashboard*, Ohio ranked 46<sup>th</sup> on this metric, meaning that most other states have cleaner outdoor air.

This policy brief provides additional information on the outdoor air quality metric in the *Dashboard*, including how:

- Air pollution affects health outcomes
- Recent policy changes may affect air pollution
- Outdoor air quality can be improved in Ohio

### How does outdoor air quality affect health?

Analysis of *Dashboard* data finds that the physical environment, which includes outdoor air quality, has a much stronger correlation with the overall health of a state than access to care or healthcare system performance. Figure 1 shows the strength of the relationship between domains in the *Dashboard* and population health, indicating that the physical environment (including outdoor air quality) is strongly connected to a state's overall health, only surpassed by public health and prevention.

### 3 key findings for policymakers

1. **Improving outdoor air quality** will lead to better maternal and infant health, less chronic disease and other improved outcomes for Ohioans.
2. **Ohio has implemented policies** that both advance and harm efforts to reduce pollution and improve air quality.
3. **Policymakers have opportunities** to improve air quality through policy changes in the transportation, energy and regional planning sectors.

Figure 1. **The effect of the physical environment on population health**

Strength of relationship between state performance on 2021 *Health Value Dashboard* domains and population health



Source: HPIO 2021 *Health Value Dashboard* analysis

# 3 key findings for policymakers

- **Improving outdoor air quality** will lead to better maternal and infant health, less chronic disease and other improved outcomes from Ohioans.
- **Ohio has implemented policies** that both advance and harm efforts to reduce pollution and improve air quality.
- **Policymakers have opportunities** to improve air quality through policy changes in the transportation, energy and regional planning sectors.

# Water quality and health

# Draft key findings

1. **Improving water quality** will lead to improved health for Ohioans.
2. **There is a strong policy foundation** for Ohio policymakers to build on to improve water quality, such as investments in H2Ohio.
3. **State and local policymakers have opportunities to improve** water quality through increased investment in water infrastructure and ecosystem restoration and policy changes that protect Ohioans from pollutants.

Draft key finding #1

**Improving water quality**  
will lead to improved  
health for Ohioans.



**Draft section of brief:**

What is water pollution and how does it impact human health?

**Agricultural runoff**  
Harmful algal blooms

**Poor infrastructure**  
Lead exposure  
Infectious diseases

**Industrial contaminants and pollution**  
PFAs  
Heavy metals

Groups most at risk



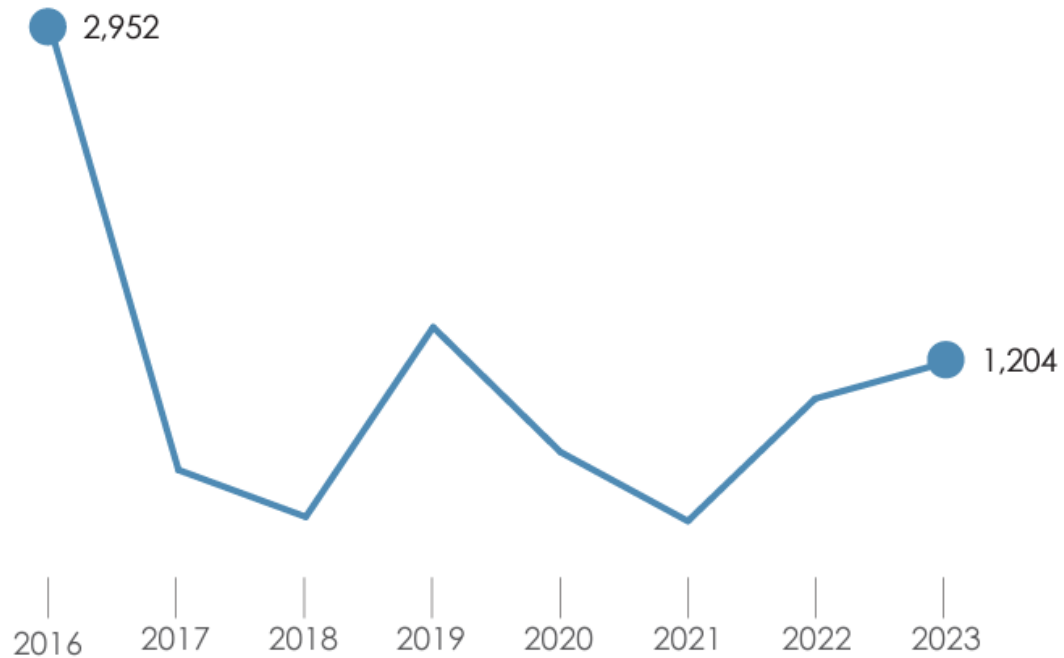
# Discussion questions

1. What about these graphics stands out to you?
2. What, if anything, about these graphics needs additional explanation?

# Harmful algal blooms

Number of harmful algal bloom advisory days, Ohio, 2016-2023

**Draft 2/15/2024**



**Note:** Advisory days are based on thresholds set by the Ohio Departments of Health and Natural Resources and Ohio Environmental Protection Agency for the amount of toxins in water samples. For more information see HAB Response Strategy for Recreational Waters.

**Source:** Ohio Department of Health

# Drinking water violations

Number of counties with a drinking water violation, Ohio, 2023

**Draft 2/15/2024**

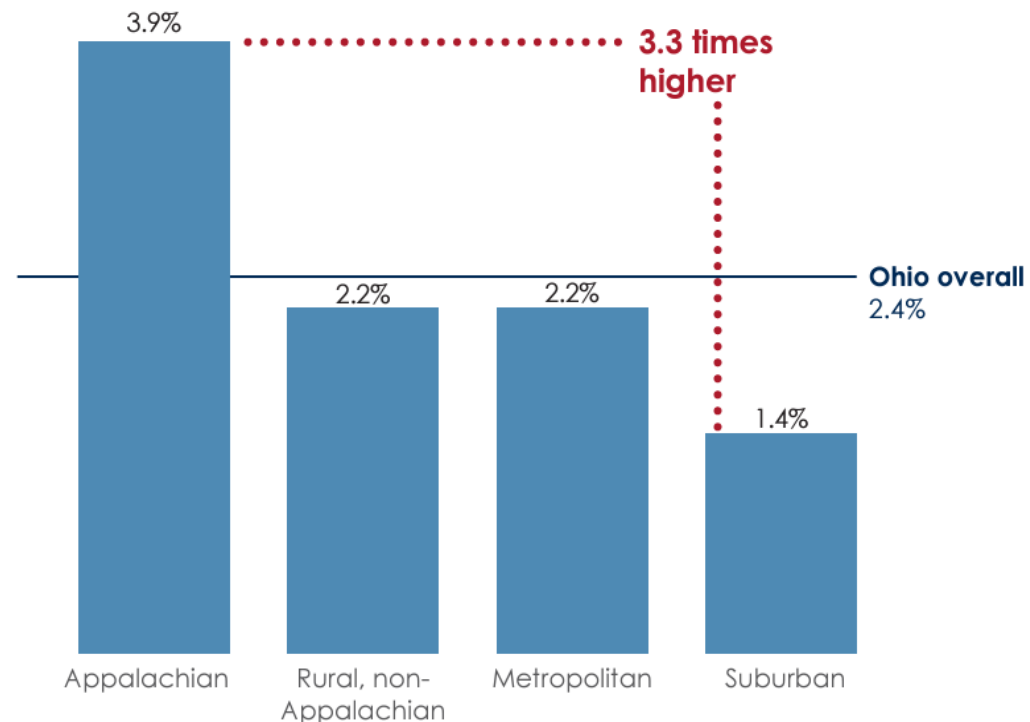


Source: The Safe Drinking Water Information System (SDWIS) via County Health Rankings

# Plumbing access

Percent of households without complete plumbing facilities\*, by county type, Ohio, 2021

**Draft 2/15/2024**



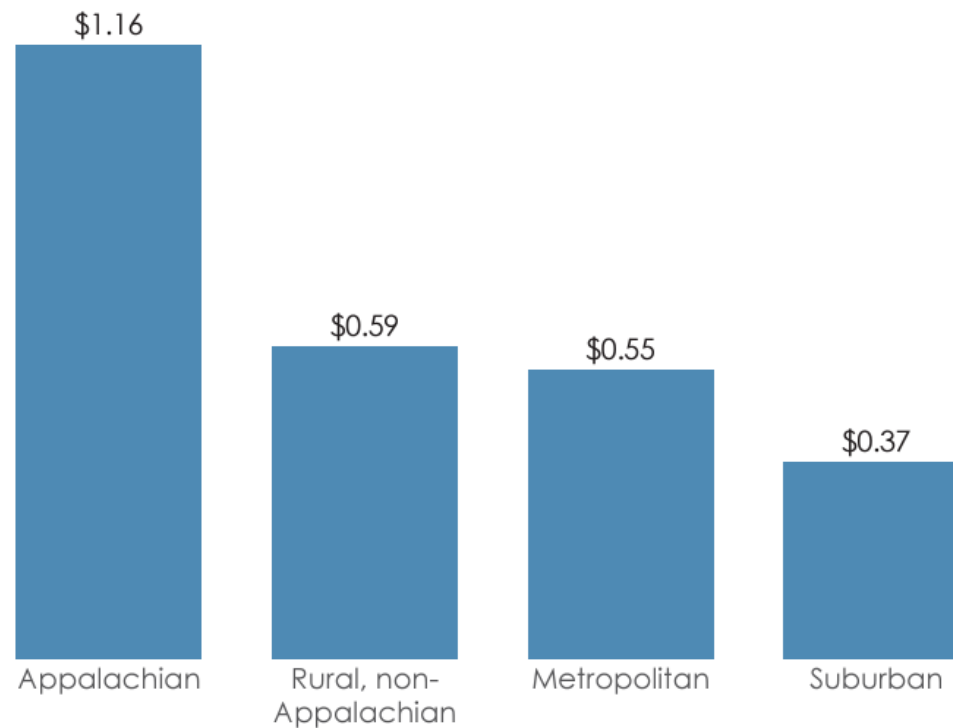
\*Complete plumbing facilities include: (a) hot and cold running water and (b) a bathtub or shower. Both facilities must be located inside the house, apartment, or mobile home, but not necessarily in the same room. Housing units are classified as lacking complete plumbing facilities when either of the two facilities is not present.

**Source:** U.S. Census Bureau, American Community Survey 5-year estimates

# Lead line replacement

Per capita funding for lead service line replacements, inventory and mapping projects, by county type, Ohio, 2024\*

**Draft 2/15/2024**

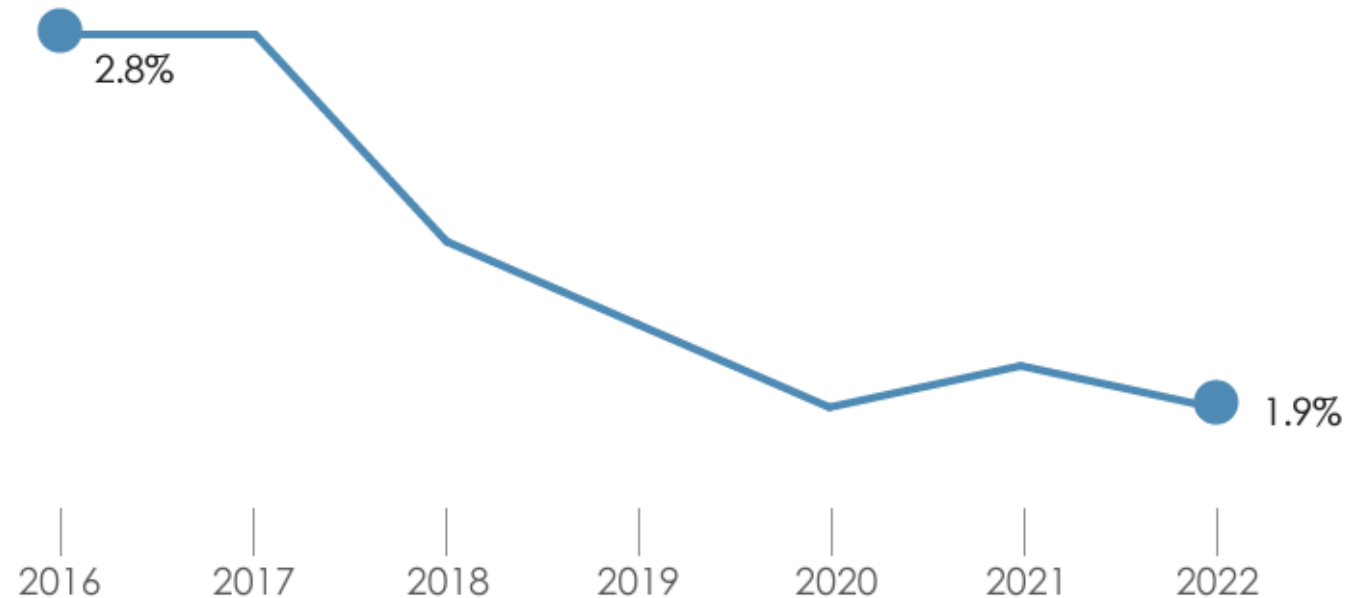


\*Includes projects that have been completed, announced or are active as of Jan. 18, 2024  
Source: H2Ohio Program

# Child lead exposure

Percent of children, under 6 years of age, who received a blood lead test and had elevated blood lead levels ( $\geq 5 \mu\text{g}/\text{dL}$ ), Ohio, 2016-2023

**Draft 2/15/2024**



**Source:** Ohio Department of Health, Ohio Public Health Data Warehouse

# Discussion questions

1. What about these graphics stands out to you?
2. What, if anything, about these graphics needs additional explanation?

## Draft key finding #2

**There is a strong policy foundation** for Ohio policymakers to build on to improve water quality, such as investments in H2Ohio.





**Draft section of brief:**

**What is the current water policy landscape?**

**State agencies  
and executive  
branch  
H2Ohio**

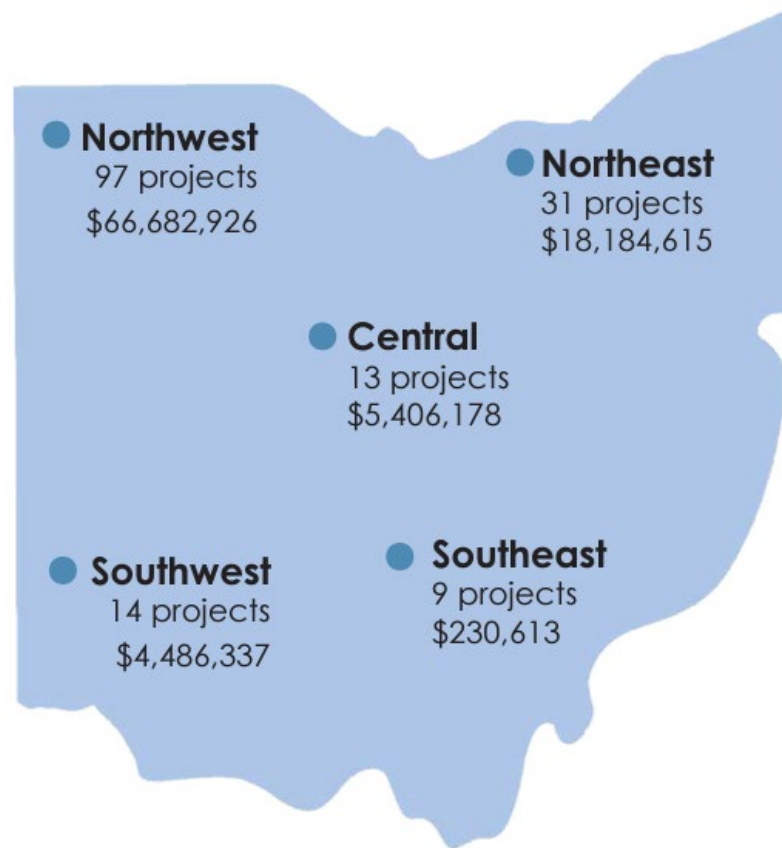
**Ohio General  
Assembly  
2024-2025  
state budget  
House Bill 175  
(134<sup>th</sup>)**

**Federal and  
local  
government  
Bipartisan  
infrastructure bill  
Local examples**

# H2Ohio funding

H2Ohio project funding and total projects by region, 2023

**Draft 2/15/2024**



Source: H2Ohio Program

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# Discussion questions

1. Are these examples the most indicative of the current policy landscape (thinking about both strengths and challenges)?
2. What initiatives are happening in Appalachian communities that could or should be elevated here?

## Draft key finding #3

**State and local policymakers have opportunities to improve** water quality through increased investment in water infrastructure and ecosystem restoration and policy changes that protect Ohioans from pollutants.



**Draft section of brief:**

What can Ohio policymakers do to improve water quality?

**State policy  
options**

**State and  
local policy  
options**

**Local policy  
options**

# Dissemination

# Discussion

What suggestions do you have for disseminating this fact sheet to organizations that will use it?

# Next steps



# Next steps

Draft review: Next week (Feb. 20-26)



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Thank you