Using Geographic Information Systems (GIS) to Support Career-Technical Education
Objectives

- Explain the implications of geographic information systems (GIS) on equity
- Explore how diverse spatial data can potentially support Career-Technical Education
- Navigate the Ohio’s Work-Based Learning GIS application
Why GIS?
Place Matters
Educational Opportunity

(Coleman, 1968)
Geography of Educational Opportunity

(Tate, 2008)
Geography of Educational Opportunity
Focus on Equity

How can we be more precise about addressing structural inequity and differentiating supports for diverse communities?
How does GIS work?
GIS software uses maps as a container for multiple layers of data.

Source: https://www.esri.com/en-us/what-is-gis/overview
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<th>Lines</th>
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GIS attaches data to geographic shapes
For example
Ohio Economic Development Regions
Interstate 70
Columbus City School District
East High School
Open

Take Out
Data guidance document
Ohio Work-Based Learning Planning Map

Tabs

CTE Landscape  Hot Spot Analyses  Bivariate Analyses

Layers

- Advanced Manufacturing
- Aerospace and Aviation
- Automotive
- Energy and Chemicals
- Financial Services
- Food and Agribusiness
- Healthcare
- Information Technology
- Logistics and Distribution

Businesses
Watch Out!
Practice
Practice Set

Click and Select
• High School: % Black, Non-Hispanic

Click and Select a variety of CTE programs

What do you notice about the distribution of CTE programs statewide in relation to schools with a high % of Black students? Are there regions in the state that seem to warrant CTE expansion?
Coming Soon…More Training!

Keep an eye out for future opportunities to learn more about Geographic Information Systems and the Ohio Work-Based Learning Application via:

1. Face to Face Professional Development
2. Virtual Meetings
3. Webinars
4. Videos
Questions?

Brenna Bartlett, Education Program Specialist
(614) 369- 3760 | Brenna.Bartlett@education.ohio.gov

Crystal Dortch, Education Program Specialist
(614) 466-3077 | Crystal.Dortch@education.ohio.gov