Toolkit for
Ohio CTE Expansion of Effective Access
2025

Ohio Department of Education & Workforce

Contents

Department of Education & Workforce

Executive Summary

Audience

K-12 Superintendents, Career-Technical Planning Districts (CTPDs), Joint Vocational School Districts (JVSDs), Career-Technical Education (CTE) Administrators in Ohio, Ohio Career Pathway Support Networks Centers, JobsOhio Network partners, and local area workforce development boards.

What is "effective access?"

While difficult to quantitatively define what a lack of effective access is in general terms, the Ohio Department of Education and Workforce (DEW or "the Department") uses 10% or less CTE enrollment in a district as an indicator of a gap in effective access. The idea of "effective access" aims to describe this gap. By law, every K-12 student in Ohio has "paper access" to CTE, meaning every student has an opportunity to apply to a CTE Pathway. However, what students really need are the programming, resources, faculty, and facilities — all the things that make access to CTE real on-the-ground — that provide meaningful opportunities.

Purpose of this Document

This document was created by the Office of Career-Technical Education at the Department. This resource is intended to provide insight into the status of effective access to CTE in each JobsOhio region and provide targeted strategies for expanding effective access. This toolkit is a companion to the 2022 whitepaper "Expanding Career-Technical Education in Ohio," authored by the Department and several partners across the state helping students and educators expand CTE. **Using the Strategy framework set forth in the whitepaper, this toolkit:**

1. Outlines **the status of CTE access** in each JobsOhio region
2. Provides practical steps and resources for expanding effective access by:
   - **Building new** CTE programming where none currently exists
   - **Growing existing** CTE programming to further increase effective access to CTE

Reading this toolkit is only the first step. Sustained regional collaboration and partnership-building is the key to success. Educators should foster new and expand existing relationships with the industry to identify, assess, and address talent demand needs in the region to expand valuable CTE programs.

Introduction | Effective Access

Over the past four years, **Ohio has seen a 10% growth in the number of students participating in career tech** — that's over 13,000 more students than in 2021.[1] The momentum won't stop there. The demand for CTE programs continues to rise, and many programs across the state have waitlists, limiting the number of students who can participate. In the 2023-2024 school year, there were **91,015 Ohio students in a career-technical education workforce development pathway**, and this number is included in the total **of 141,503 Ohio students participating in at least one CTE course.**[2] Between Ohio's Career Tech Equipment Grant and Career Tech Construction Grant, **the state has awarded $300 million in funding to help 116 schools establish or expand their CTE programs** by building new or enhanced facilities and purchasing state-of-the-art equipment. These two programs alone have allowed an additional 20,000 students across the state to participate in CTE courses, reducing program waitlists.[1]

Although every student in Ohio has "paper access" to CTE, as the law requires that every district offer the opportunity to enroll, what students really need is "effective access" to CTE programming. **Expanding effective access means any child interested in pursuing CTE has access to ample programming, facilities, and faculty to do so.** Ohio is accelerating progress, but even still, the state ranks 42nd among U.S. states in secondary-level CTE enrollment as a percent of the ages 10-19 population.[3] 62 out of 608 of Ohio's districts have less than 10% CTE enrollment at the high school level.[5]

In 2022, the Department convened a cross-agency working group to examine the key components, benefits, and strategies of the current CTE system, identify potential barriers to CTE expansion, and propose policy considerations. This toolkit expands on this work by incorporating geographic analysis of CTE participation, specifically addressing gaps in effective access, and providing a runway of resources and practical guidance to expand. **We hope you'll join us in understanding, building, and growing effective CTE access in Ohio and in your region.**

Outcomes for Ohio CTE Students[4]

96.5%
Of CTE secondary concentrators graduate high school

94.7%
Of CTE secondary concentrators go on to college

Image Courtesy: Transfer Credit Ohio

(1) May 2025 Ohio Press Release, Lt. Governor Tressel Hosts Career and Technical Education Roundtable at Medina County Career Center. (2) Expanding Career-Technical Education in Ohio (2022); (3) 2018-2019 Perkins Secondary CTE Participant Enrollment data, US Census Bureau 2019 ACS 1-Year Estimates Subject Tables, Total Population Age 10 to 14 years and age 15 to 19 years. (4) Advance CTE Ohio Profile. (5) DEW, program data (2025).

Department of Education & Workforce

Quick-Start for Effective CTE Access
In your region, district, or programs

Ready to Jump Right In?
Each district is starting their effective access journey from a different place – each district has their own unique set of opportunities and barriers to expansion. Below is a quick-start guide to expanding effective access in your region, district, or school.

How to Expand Effective CTE Access

01

Understand your region's effective access status

Review the state of effective access in your region, district, or programs. What is the utilization rate of your CTE programs today?
➢ *Find your region here: pages 11-26*

02

Building new CTE programming where none currently exists

Understand what steps to take next in building a new CTE program from scratch. What needs to be done?
➢ *Find practical next steps here: pages 27-36*

03

Growing existing CTE programming to further increase effective access to CTE.

Explore ways to update or expand existing programs to grow effective access. What are some ways to grow enrollment, graduations, and program capacity?
➢ *Find strategies to grow here: pages 37-48*

Ohio Department of Education & Workforce

Ohio's CTE Landscape

The **following figure presents a breakdown of the percentage of students in Ohio who participated in a CTE program in the 2024 school year**. This data reveals encouraging progress and clear opportunities for strategic expansion. At the **high school level, access to CTE is broadly established across the state**, with very few areas of low effective access to CTE, suggesting strong infrastructure and program availability are in place at the high school level.

Middle school CTE shows promising momentum in several regions, reflecting a growing recognition of the importance of early career exploration. However, this data also highlights **several areas where middle school participation remains low or nonexistent**. These areas represent key opportunities for targeted outreach, resource investment, and program development. Across both levels, there are still many areas of the state with relatively low participation, indicating a need for additional CTE programs and more avenues for districts to provide effective access.

Percent of Students Participating in CTE by District, School Year 2024

Middle School Participation by JobsOhio Region

High School Participation by JobsOhio Region
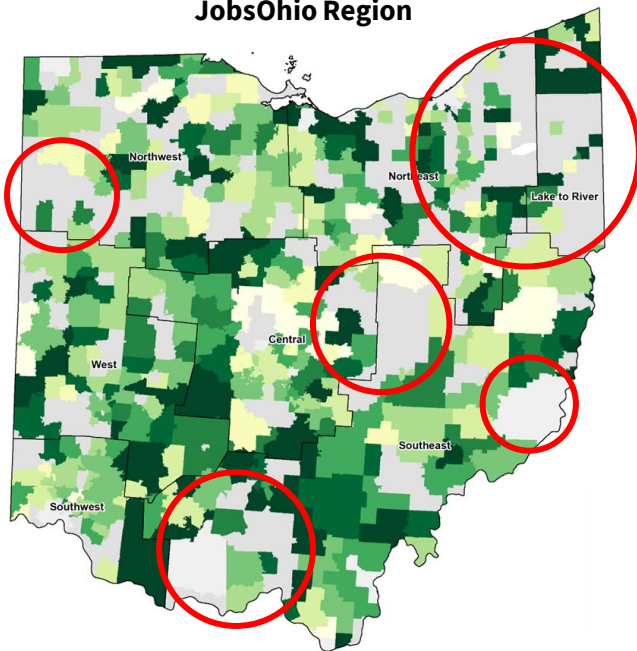
As of 2024, there are pockets of no participation in middle school CTE. These areas should be priority for expansion efforts.
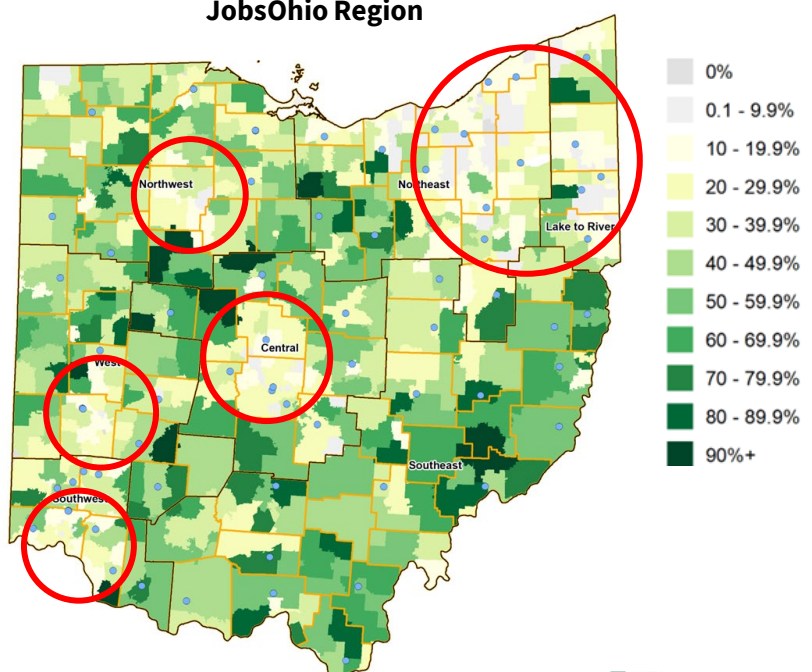
As of 2024, there are minimal areas of no participation for high school CTE. There are, however, large areas with lower participation rates. These areas should be priority for expansion efforts.

See appendix A for larger views of these maps and others

*Please note: This CTE completions data focuses specifically on traditional public districts, including Joint Vocational School District (JVSD) satellite programs and does not include ICO, CCP, or OTC+ completions.

Department of Education & Workforce

Where CTE Fits into Career Exploration

CTE plays a vital yet distinct role at both the middle school and high school levels, preparing students for future success by connecting learning with real-world skills and career exploration. At both the middle and high school levels, CTE supports student engagement, helps build a sense of purpose, and strengthens pathways to postsecondary opportunities. While its goals remain consistent across grade levels, **the way CTE is implemented evolves to meet the developmental needs of students at each stage.**
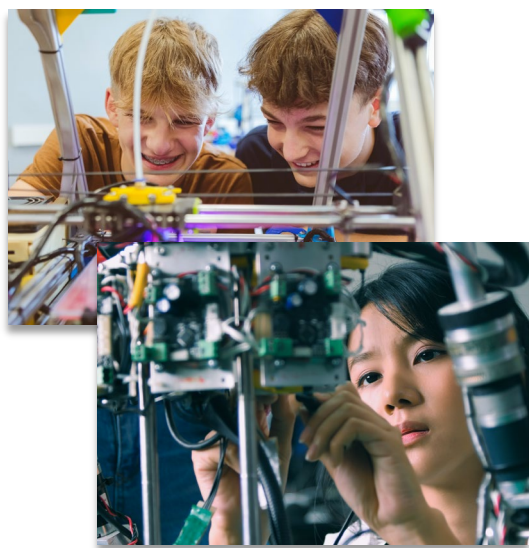
Middle School CTE

Career exploration through CTE at the middle school level is **focused on building awareness and sparking curiosity about a wide range of career options**. Students begin to explore their interests and connect what they're learning in class to the real world. Early exposure to career pathways can spark curiosity and motivation.

Value in Middle School

Middle school CTE programs introduce real-world applications of classroom subjects, **helping students connect learning with tangible career paths**. Early exposure helps build confidence, encourages goal setting, and promotes informed decision-making about future education and career plans.

High School CTE

Students start **identifying specific career areas of interest and exploring postsecondary options**. They begin building technical knowledge and skills through classroom and experiential learning.

Students can also begin to earn college credit, further building the pathway into higher education. Dual enrollment via College Credit Plus (CCP) and concurrent enrollment via Ohio's CTE Assurance Guide (CTAG) courses, which are advanced standing courses like Advanced Placement (AP) and International Baccalaureate (IB) classes, help students prepare themselves for college later in their journey.

Value in High School

High School CTE programs allow students to **explore different career fields, earn industry-recognized credentials, and build a career plan** — with work-based learning experiences that solidify their direction and motivation.

(1) DEW, Expanding Career Technical Education in Ohio (2) ACTE FAQs on Career and Technical Education (3) Ohio's Career-Technical Education Landscape: An overview of CTE at the high school level

Ohio **Department of Education & Workforce**

CTE Trends in Urban, Rural, and Suburban Areas

CTE participation and offerings across urban, suburban, and rural geographic areas of the state vary. Based on high school CTE completions data for the 2024 school year, participation was highest in rural areas when adjusted for population density. This points to emerging trends in how students engage with CTE across different community types — trends that reflect the unique role CTE plays within each.
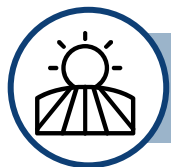
Urban Area Trends

- **Participation:** Compared to rural and suburban areas, urban areas often have lower levels of participation in CTE programs, but larger student populations. They might consolidate CTE programs into one or two buildings for the district.
- **Program Focus:** Program offerings are often the most diverse in urban areas, emphasizing technology, healthcare, and public service career pathways. Additionally, urban programs often have access to industry partnerships and internship opportunities to accompany CTE instruction.
- **Challenges:** Due to student demand in these areas, urban districts often struggle with long program waitlists, equity gaps, and transportation issues.

Suburban Area Trends

- **Participation:** Student participation in suburban areas is moderate compared to rates of participation in urban and rural areas. Many suburban students are more likely to enroll in dual-credit CTE courses.
- **Program Focus:** Focuses are often centered on pathways such as engineering, computer science, and information technology.
- **Challenges:** Suburban areas struggle with gaps in effective access.

Rural Area Trends

- **Participation:** Students in rural areas are more likely to participate in CTE programs offered in their district compared to urban and suburban areas.
- **Program Focus:** Programs often focus on agriculture, manufacturing, and health sciences, reflecting local industry needs. Programs offered in rural areas tend to be less diverse than in urban and suburban areas.
- **Challenges:** These include rural struggles with limited resources and staffing (such as limited access to employer partnerships, equipment, and so on).

(1) NCES, Career and Technical Education Programs in Rural High Schools (2) NCES, Career and Technical Education in the United States (3) ACTE, Career and Technical Education's Role in rural Education (4) Advance CTE, Expanding Access to Opportunity (5) National Rural Education Association, How Career Technical Education Can Help Close the Rural/Urban Education Gap

Department of Education & Workforce

How CTE Accelerates Regional Economic Development

Offering CTE programs generates significant economic benefits for regions and states. Through their operations and capital investments, Career Centers and Ohio Technical Centers (OTCs) stimulate local economic activity, support job creation, and contribute to state and local tax revenues. Additionally, by equipping learners with industry-recognized credentials, CTE programs boost individual earning potential, which in turn drives further economic and fiscal gains for communities. Below are a few of the key benefits of CTE that support regional economic development.[1]
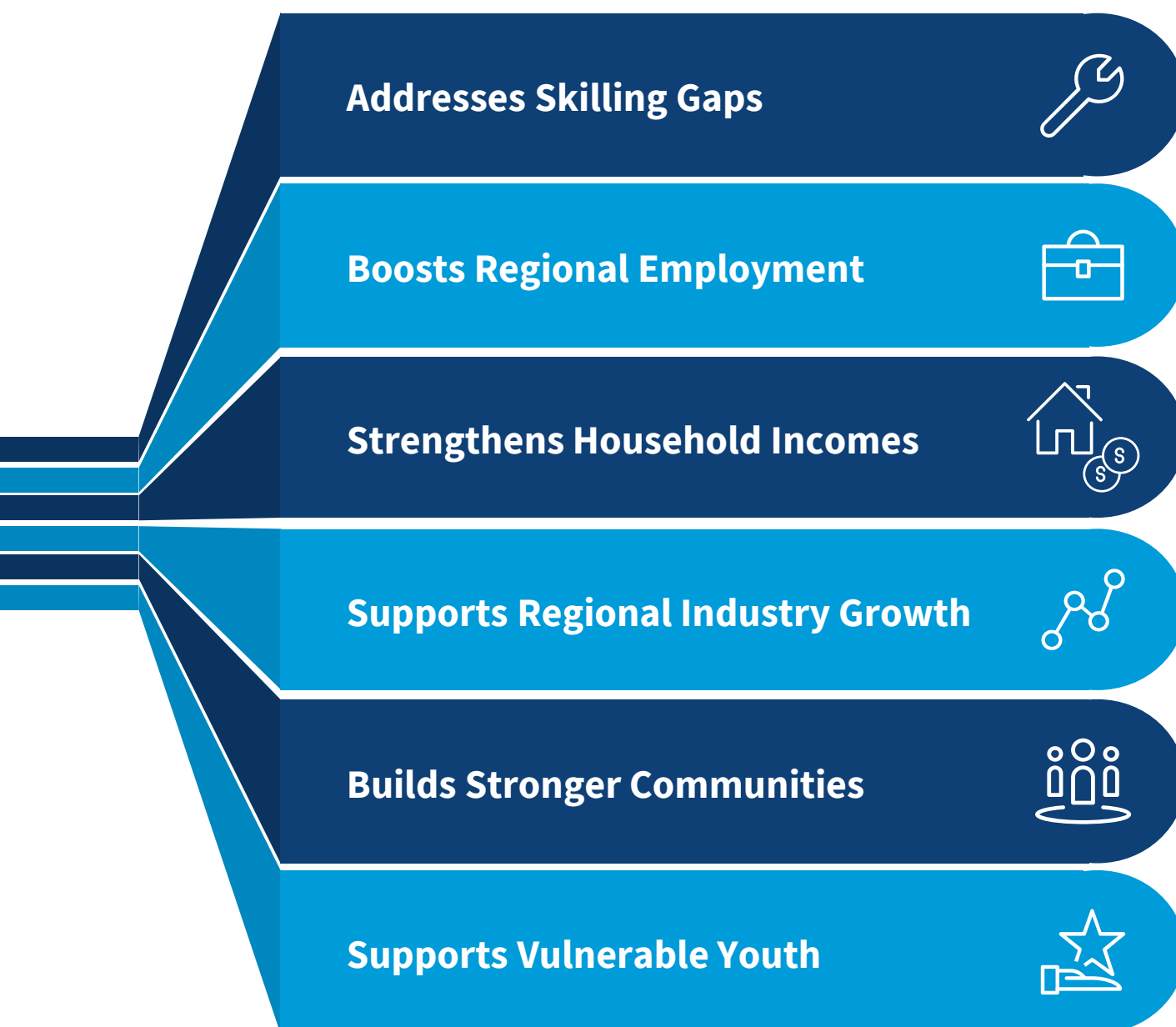
Addresses Skilling Gaps

Boosts Regional Employment

Strengthens Household Incomes

Supports Regional Industry Growth

Builds Stronger Communities

Supports Vulnerable Youth

(1) Ohio Association of Career-Technical Superintendents, The Economic Benefits of Career Technical Education on The State of Ohio (2) Advance CTE How to Promote Career Technical Education as Vital to Economic Recovery (3) iCEV, 4 Ways CTE Transforms the Economy (4) South Dakota Governor's Office of Economic Development, CTE and Economic Development – a Strong Correlation (5) Advance CTE, CTE on the Frontier

Department of Education & Workforce

Levers to Expand Effective Access to CTE Programs

To support a district's journey of CTE program expansion, there are levers to provide a tactical approach to expanding effective access to CTE programs, some of which are outlined by the Department's Expanding Career-Technical Education in Ohio whitepaper.

Levers to expand CTE programs across the state include:

➢ **Using Innovative Program Design Methods**

➢ **Providing Flexible Program Schedules**

➢ **Offering Industry Recognized Credentials**

➢ **Expansion of Meaningful Work-Based Learning Opportunities**

➢ **Targeted Participant Outreach Strategies**

The following pages describe these strategies, in-depth, including key activities to consider for implementation.

(1) DEW, Expanding Career-Technical Education in Ohio
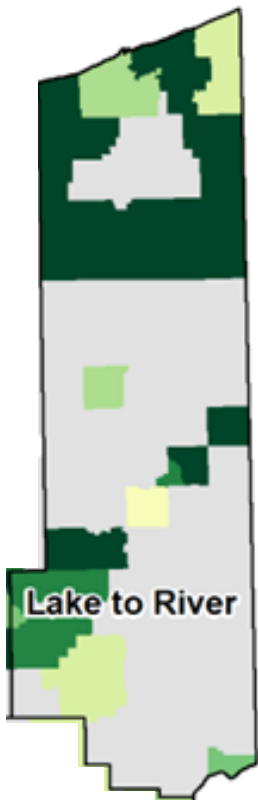
Department of Education & Workforce

01

Understand your region's effective access status

Review the state of effective access in your region, district, or programs. What is the utilization rate of your CTE programs today?

Department of Education & Workforce

Middle School CTE in Lake to River Ohio

Lake to River

Room to Grow:
The Lake to River region of the state has opportunity for growth in middle school CTE participation. Some counties, such as Ashtabula, have strong engagement levels, indicating a high level of effective access to middle school CTE programs and ability to reach students.

In contrast, other counties like Trumbull have lower levels of participation. This uneven distribution within a single region highlights potential disparities in access, program availability, or district-level prioritization of early CTE exposure. The variation underscores the importance of targeted support and resource sharing to ensure student access to foundational career education across all districts in the region.

Lake to River Ohio Middle School CTE by the Numbers

2,476
Middle School CTE Participants in 2024

15
LEAs With Active Middle School CTE Program Participation in 2024 *(non-zero participants)*

20.7%
Overall percent of total Ohio public Middle School student body enrolled in CTE

Top LEAs by Percent of MS Student Participation

96.6%
Geneva Area City

95.2%
Grand Valley Local

94.9%
Pymatuning Valley Local

93.4%
Brookfield Local

LEAs with Room to Grow by Percent of MS Student Participation *(non-zero entries)*

42.6% Champion Local	**39.3%** United Local
38.6% Conneaut Area City	**23.1%** Austintown Local Schools

*Please note this CTE completions data is a headcount of students in grades 7-8 who generated CTE FTE in and completed a CTE course with a curriculum code of VM in the 2024 school year, excluding JVSDs, Community and STEM schools.

Department of Education & Workforce

High School CTE in Lake to River Ohio

Lake to River

Room to Grow:

High School CTE Participation rates within Lake to River (LTR) shows that much of the region is providing effective access to CTE programs. Some counties, such Mahoning, have engagement levels on the higher end, indicating that these districts have a high level of effective access to high school CTE programs and are reaching students.

While all the counties within the region have more widespread effective access to high school CTE programs than at the middle school level, there is still room for further expansion of the level of effective access to these programs. Despite high levels of effective access through the region, the need stands for strategic support and collaboration to ensure all districts can offer meaningful career-technical education opportunities at the high school level.

Lake to River Ohio High School CTE by the Numbers

4,411   High School CTE Participants in LTR, 2024
52   LEAs with Active High School CTE Program Participation in LTR, 2024
19.8%   Overall Percent of Total LTR Ohio Public High School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of HS Student Participation

84.6%   Grand Valley Local
80.8%   Western Reserve Local
54.2%   West Branch Local
49.7%   Pymatuning Valley Local School District

LEAs with Room to Grow by Percent of HS Student Participation *(non-zero entries)*

6.7% South Range Local	**6.2%** Canfield Local
6.2% Campbell City	**4.8%** Salem City

*Please note this CTE completions data is a headcount of students in grades 9-12 who generated CTE FTE in and completed a CTE course with a curriculum code of VT or PS aligned to a WFD program in the 2024 school year, excluding Community and STEM schools.

Department of Education & Workforce

Regional Talent Needs in Lake to River

Labor Force Overview

Advanced manufacturing is considered the cornerstone of Lake to River's economy, with companies specializing in automotive, aerospace, and metal fabrication. The region is also a hub for logistics and transportation, with the deep-water ports on Lake Erie and the Ohio River, as well as healthcare, hosting several healthcare facilities and research institutions.[1]

Non-Institutionalized, Non-Military, Age 16+ Population:[2]
497K

Total Regional Employment[2]
243K

Top Specialized, In-Demand Skills[2]

The skills below are featured in the most job postings in the Lake to River Region. Lake to River districts could target effective access expansion on career fields that prepare students to excel at these skills.

Top Specialized Skills (2024)

Example CTE Career Field Pathways & Courses

Nursing
8,380 Unique Postings

Allied Health & Nursing
- Patient-Centered Care
- Medical Intervention

Medical Bioscience
- Biochemistry of Health
- Human Pathophysiology

Merchandising
7,051 Unique Postings

Logistics & Supply Chain Management
- Operations Management
- Professional & Technical Sales
- Merchandising and Buying
- Business Foundations

Medical Records
3,560 Unique Postings

Health Info. Management
- Medical Terminology
- Billing & Coding

Allied Health & Nursing
- Health IT
- Office Technology

Largest 3 Non-Government Sectors by Gross Regional Product

Sector	2024 GRP	Top Employers By 2024 Unique Job Postings[3*]	
Manufacturing	**$4.9B**	Trivium Packaging	72
		Howmet Aerospace	64
		Aptiv	52
Health Care & Social Assistance	**$3.0B**	Mercy Health	2,094
		Ashtabula County Medical Center	310
		East Liverpool City Hospital	278
Retail Trade	**$2.9B**	Walmart	377
		Dollar General	302
		Giant Eagle	275

Department of Education & Workforce

Middle School CTE in Central Ohio
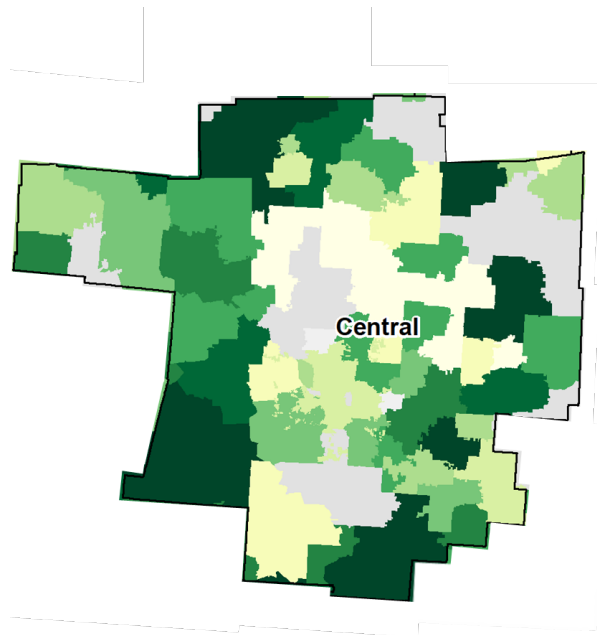
Room to Grow:

The Central region of the state has many dense areas of effective access with CTE participation at the middle school level. Counties such as Madison and Marion have very strong engagement levels, indicating that these districts have well-established middle school CTE programs and are effectively reaching students.

In contrast, other suburban counties like Delaware have lower levels of participation. This uneven distribution within a single region highlights potential disparities in access, program availability, or district-level prioritization of early CTE exposure. The variation underscores the importance of targeted support and resource sharing to ensure student access to foundational career education across all districts in the region.

Central Ohio Middle School CTE by the Numbers

18,622
Middle School CTE Participants in Central Ohio, 2024

56
LEAs with Active Middle School CTE Program Participation in Central Ohio, 2024

37.5%
Overall Percent of Total Central Ohio Public Middle School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of MS Student Participation

97.8%
Logan Elm Local

97.4%
Ridgedale Local

96.9%
London City

96.0%
Fredericktown Local

LEAs with Room to Grow by Percent of MS Student Participation *(non-zero entries)*

12% Northridge Local	**11%** Big Walnut Local
9.7% Reynoldsburg City	**5.2%** Worthington City

Please note this CTE completions data is a headcount of students in grades 7-8 who generated CTE FTE in and completed a CTE course with a curriculum code of VM in the 2024 school year, excluding JVSDs, Community and STEM schools.

Department of Education & Workforce

High School CTE in Central Ohio

Room to Grow:

The Central area of the state has a consistent mid-level effective access to high school CTE programs across the region. Counties such as Marion and Logan are leading the charge in providing high school CTE effective access. Programs in these counties should be models for expanding effective access across the state.

Counties such as Delaware and Franklin show comparatively lower levels of participation, pointing to possible challenges in program access or prioritization. This variation within a concentrated geographic area emphasizes the need for strategic support and collaboration to ensure all districts can offer meaningful career and technical education opportunities at the high school level.
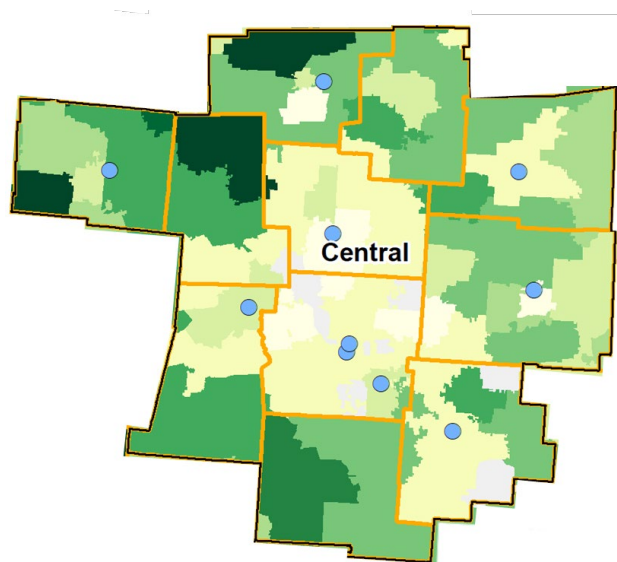
Central Ohio High School CTE by the Numbers

24,664
High School CTE Participants in Central Ohio, 2024

67
LEAs with Active High School CTE Program Participation in Central Ohio, 2024

25.5%
Overall Percent of Total Central Ohio Public High School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of HS Student Participation

92.7%
North Union Local School District

74.5%
Westfall Local

67.3%
Benjamin Logan Local

66.7%
Madison-Plains Local

LEAs with Room to Grow by Percent of HS Student Participation *(non-zero entries)*

5.5% New Albany-Plain Local	**5.1%** Upper Arlington City
2.1% Bexley City	**0.6%** Grandview Heights Schools

*Please note this CTE completions data is a headcount of students in grades 9-12 who generated CTE FTE in and completed a CTE course with a curriculum code of VT or PS aligned to a WFD program in the 2024 school year, excluding Community and STEM schools.

Department of Education & Workforce

Middle School CTE in Northeast Ohio
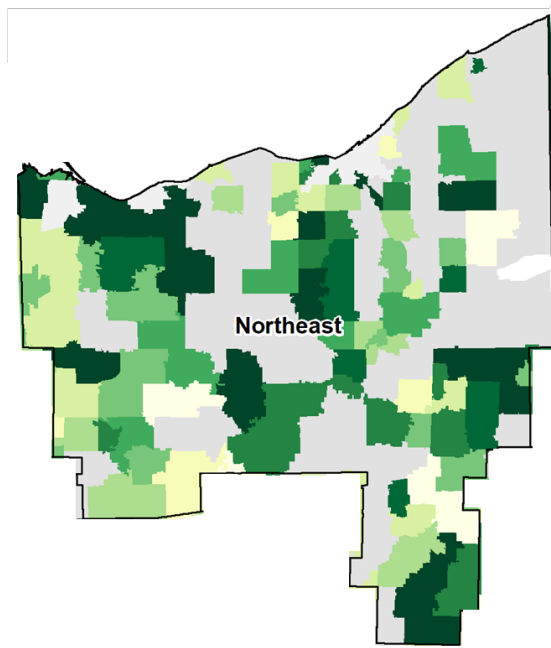
Room to Grow:

The Northeast region of the state has much room to grow the effective access of CTE participation at the middle school level. Counties such as Tuscarawas have engagement levels on the stronger side, indicating that these districts have well-established middle school CTE programs and are effectively reaching students.

In contrast, other counties, like Portage, have lower levels of participation. This uneven distribution within a single region highlights potential disparities in access, program availability, or district-level prioritization of early CTE exposure. The variation underscores the importance of targeted support and resource sharing to ensure student access to foundational career education across all districts in the region.

Northeast Ohio Middle School CTE by the Numbers

24,752
Middle School CTE Participants in Northeast Ohio, 2024

92
LEAs with Active Middle School CTE Program Participation in Northeast Ohio, 2024

36.2%
Overall Percent of Total Northeast Ohio Public Middle School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of MS Student Participation

99.1%
Edison Local

98.3%
Cuyahoga Heights Local

97.4%
Lake Local

96.6%
Medina City SD

LEAs with Room to Grow by Percent of MS Student Participation *(non-zero entries)*

11.2% Crestwood Local	**9.5%** Perkins Local
2.7% Vermilion Local	**1.9%** Cleveland Municipal

*Please note this CTE completions data is a headcount of students in grades 7-8 who generated CTE FTE in and completed a CTE course with a curriculum code of VM in the 2024 school year, excluding JVSDs, Community and STEM schools.

Department of Education & Workforce

High School CTE in Northeast Ohio
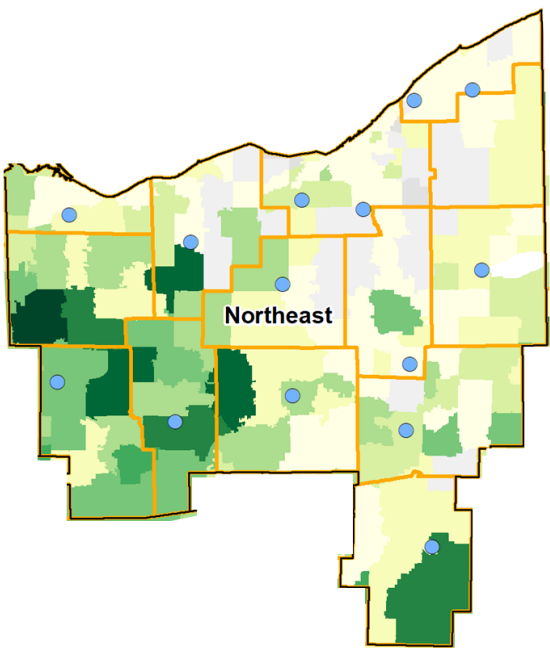
Room to Grow:

The Northeast area of the state has considerable space for growth of effective access to high school CTE programs across the region. Counties such as Richland and Huron have the stronger levels of high school CTE effective access in the region. Programs in these counties should be models for expanding effective access across the state.

Suburban counties, such as Lake and Geauga, show comparatively lower levels of participation, pointing to possible challenges in program access or prioritization. This variation within a concentrated geographic area emphasizes the need for strategic support and collaboration to ensure all districts can offer meaningful career-technical education opportunities at the high school level.

Northeast Ohio High School CTE by the Numbers

32,109
High School CTE Participants in Northeast Ohio, 2024

148
LEAs with Active High School CTE Program Participation in Northeast Ohio, 2024

22.5%
Overall Percent of Total Northeast Ohio Public High School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of HS Student Participation

92.3%
Willard City

88.5%
Wellington Exempted Village

85.2%
Northwestern Local

82.4%
Crestview Local

LEAs with Room to Grow by Percent of HS Student Participation *(non-zero entries)*

2.0% Avon Local	**1.4%** West Geauga Local
1.3% Wickliffe City	**0.1%** Westlake City

*Please note this CTE completions data is a headcount of students in grades 9-12 who generated CTE FTE in and completed a CTE course with a curriculum code of VT or PS aligned to a WFD program in the 2024 school year, excluding Community and STEM schools.

Department of Education & Workforce

Middle School CTE in Northwest Ohio
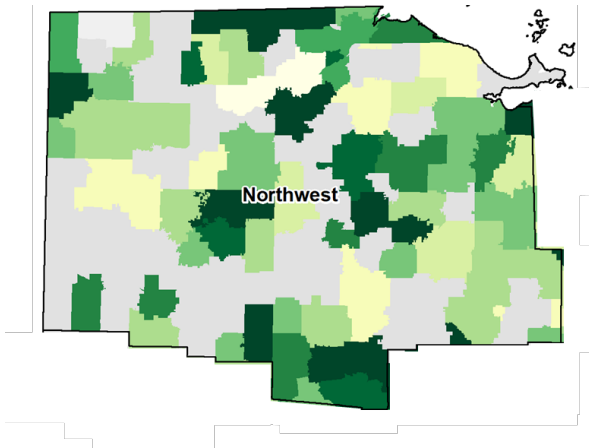
Room to Grow:

The Northwest region of the state has many high effective access areas of CTE participation at the middle school level. Counties like Hardin have engagement levels on the stronger side, indicating that these districts have well-established middle school CTE programs and are effectively reaching students.

In contrast, other counties, like Van Wert, have lower levels of participation. This uneven distribution within a single region highlights potential disparities in access, program availability, or district-level prioritization of early CTE exposure. The variation underscores the importance of targeted support and resource sharing to ensure access to foundational career education across all districts in the region.

Northwest Ohio Middle School CTE by the Numbers

10,864
Middle School CTE Participants in Northwest Ohio, 2024

92
LEAs with Active Middle School CTE Program Participation in Northwest Ohio, 2024

43.4%
Overall Percent of Total Northwest Ohio Public Middle School Student Body Enrolled in CTE

## Top Local Education Agencies (LEAs) by Percent of MS Student Participation

100%
Miller City-New Cleveland Local

98.4%
New Riegel Local

98.2%
Allen East Local

97.2%
Leipsic Local

LEAs with Room to Grow by Percent of MS Student Participation *(non-zero entries)*

20.2% Eastwood Local	**14.2%** Liberty Center Local
13.4% Anthony Wayne Local	**5.0%** North Central Local

Please note this CTE completions data is a headcount of students in grades 7-8 who generated CTE FTE in and completed a CTE course with a curriculum code of VM in the 2024 school year, excluding JVSDs, Community and STEM schools.

Department of Education & Workforce

High School CTE in Northwest Ohio
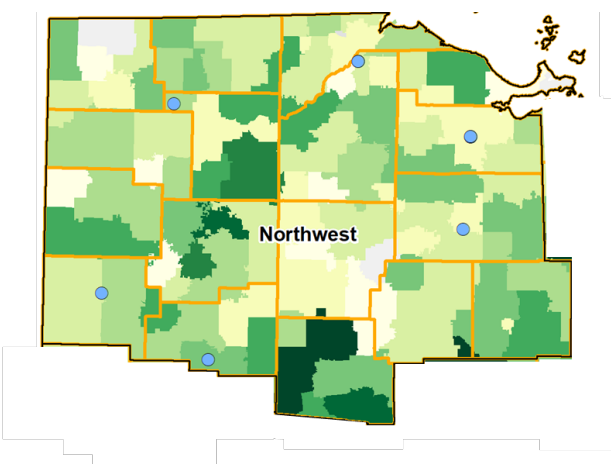
Room to Grow:

High School CTE participation rates within Northwest Ohio shows that much of the region is providing some level of effective access to CTE programs. Some counties, like Hardin, have engagement levels on the higher end, indicating that these districts have a high level of effective access to high school CTE programs and are reaching students.

Much of the region's effective access level is low and there is considerable room for further expansion of effective access to these programs. Despite high levels of effective access through the region, the need for strategic support and collaboration to ensure all districts can offer meaningful career and technical education opportunities at the high school level stands.

Northwest Ohio High School CTE by the Numbers

|	
18,622	High School CTE Participants in Northwest Ohio, 2024
56	LEAs with Active High School CTE Program Participation in Northwest Ohio, 2024
37.5%	Overall Percent of Total Northwest Ohio Public High School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of HS Student Participation

96.2%
Upper Scioto Valley Local

93.3%
Hardin Northern Local

83.4%
Miller City-New Cleveland Local

81.8%
Ridgemont Local

LEAs with Room to Grow by Percent of HS Student Participation *(non-zero entries)*

9.1% Put-In-Bay Local	**6.8%** Danbury Local
5.3% North Central Local	**3.0%** Vanlue Local

Please note this CTE completions data is a headcount of students in grades 9-12 who generated CTE FTE in and completed a CTE course with a curriculum code of VT or PS aligned to a WFD program in the 2024 school year, excluding Community and STEM schools.

Department of Education & Workforce

Middle School CTE in Southeast Ohio
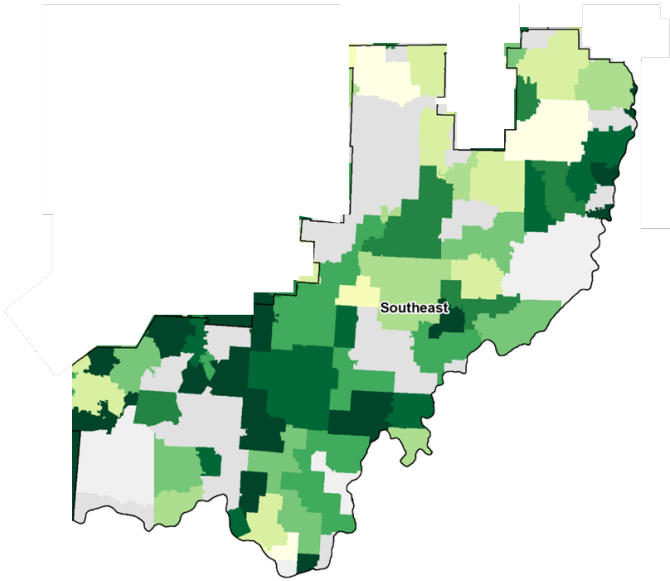
Room to Grow:

The Southeast region of the state has a strong foundation of effective access of CTE participation at the middle school level. Counties such as Vinton have engagement levels on the stronger side, indicating that these districts have well-established middle school CTE programs and are effectively reaching students.

While there is a good foundational level of effective access across the region, there is still many larger areas with low to no effective access. These counties, like Holmes and Coshocton, should be priority for increasing the level of effective access for middle school students.

Top Local Education Agencies (LEAs) by Percent of MS Student Participation

100%
Fairfield Local

100%
Bright Local

97.9%
Meigs Local

97.3%
Adena Local

Southeast Ohio Middle School CTE by the Numbers

9,568
Middle School CTE Participants in Southeast Ohio, 2024

68
LEAs with Active Middle School CTE Program Participation in Southeast Ohio, 2024

45%
Overall Percent of Total Southeast Ohio Public Middle School Student Body Enrolled in CTE

LEAs with Room to Grow by Percent of MS Student Participation *(non-zero entries)*

8.6% South Point Local	**8.3%** Switzerland of Ohio Local
8.0% Gallipolis City	**6.9%** Adams County Ohio Valley Local

Please note this CTE completions data is a headcount of students in grades 7-8 who generated CTE FTE in and completed a CTE course with a curriculum code of VM in the 2024 school year, excluding JVSDs, Community and STEM schools.

Department of Education & Workforce

High School CTE in Southeast Ohio
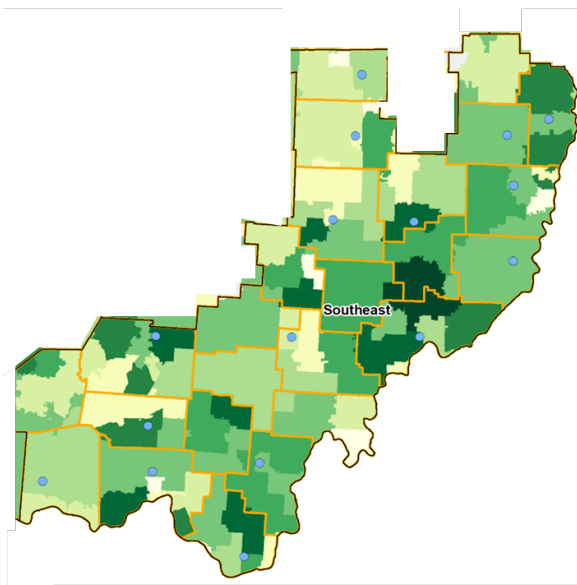
Room to Grow:

The Southeast area of the state offers a strong level of effective access to high school CTE programs across the region. Counties such as Noble and Washington have the stronger levels of high school CTE effective access in the region. Programs in these counties should be models for expanding effective access across the state.

Counties such as Adams show comparatively lower levels of participation, pointing to possible challenges in program access or prioritization. This variation within a concentrated geographic area emphasizes the need for strategic support and collaboration to ensure all districts can offer meaningful career-technical education opportunities at the high school level.

Southeast Ohio High School CTE by the Numbers

18,622
High School CTE Participants in Southeast Ohio, 2024

56
LEAs with Active High School CTE Program Participation in Southeast Ohio, 2024

37.5%
Overall Percent of Total Southeast Ohio Public High School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of HS Student Participation

93.5%
Fort Frye Local

92.3%
Caldwell Exempted Village

88.1%
Warren Local

85.2%
Rolling Hills Local

LEAs with Room to Grow by Percent of HS Student Participation *(non-zero entries)*

19.7% Ironton City School District	**15.4%** Crooksville Exempted Village
14.9% Bellaire Local	**13.9%** Clay Local

*Please note this CTE completions data is a headcount of students in grades 9-12 who generated CTE FTE in and completed a CTE course with a curriculum code of VT or PS aligned to a WFD program in the 2024 school year, excluding Community and STEM schools.

Department of Education & Workforce

Middle School CTE in Southwest Ohio
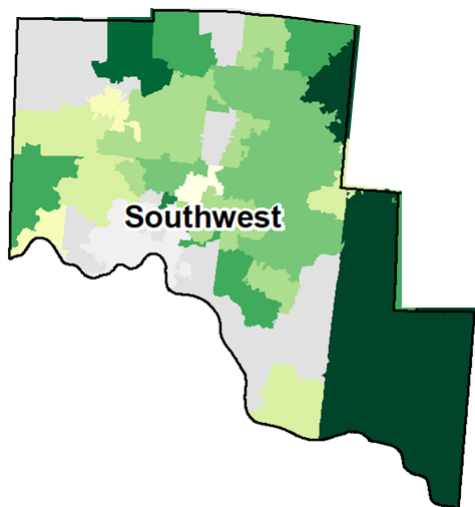
Room to Grow:

The Southwest region of the state has diverse level of effective access of CTE participation at the Middle School level. Brown County specifically has some of the highest participation levels in region, indicating that these districts have well-established middle school CTE programs and providing strong effective access to their students.

While there is a good foundational level of effective access across many counties in the region, there is a handful of suburban and urban areas showing low participation indicating low to no effective access. Counties such as Butler should be priority for increasing the level of effective access for middle school students.

Southwest Ohio Middle School CTE by the Numbers

12,739
Middle School CTE Participants in Southwest Ohio, 2024

40
LEAs with Active Middle School CTE Program Participation in Southwest Ohio, 2024

34.7%
Overall Percent of Total Southwest Ohio Public Middle School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of MS Student Participation

99.2%
Fayetteville-Perry Local

98.8%
Western Brown Local

97.3%
Eastern Local School District

93.8%
Ripley-Union-Lewis-Huntington Local

LEAs with Room to Grow by Percent of MS Student Participation *(non-zero entries)*

|	
27.2% Hamilton City	**17.4%** Sycamore Community City
9.7% Cincinnati Public Schools	**0.4%** North College Hill City

*Please note this CTE completions data is a headcount of students in grades 7-8 who generated CTE FTE in and completed a CTE course with a curriculum code of VM in the 2024 school year, excluding JVSDs, Community and STEM schools.

Department of Education & Workforce

High School CTE in Southwest Ohio
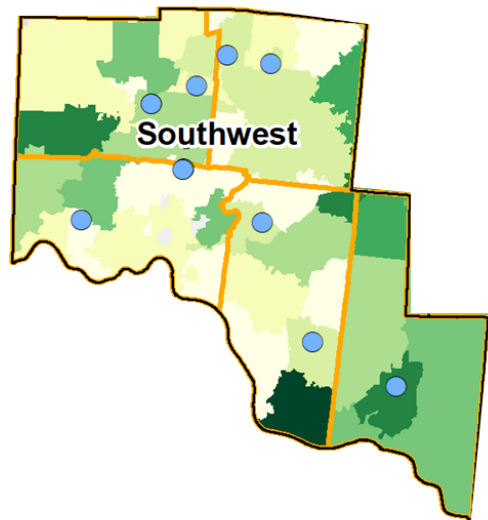
Room to Grow:

The Southwest area of the state offers a consistent low level of effective access to high school CTE programs across the region. Brown County specifically has a strong levels of high school CTE participation, leading to increased effective access in the county. Programs such as these should be models for expanding effective access across the state.

Counties like Warren show comparatively lower levels of participation, pointing to possible challenges in program access or prioritization. This variation within a concentrated geographic area emphasizes the need for strategic support and collaboration to ensure all districts can offer meaningful career and technical education opportunities at the high school level.

Southwest Ohio High School CTE by the Numbers

20,427   High School CTE Participants in Southwest Ohio, 2024
53   LEAs with Active High School CTE Program Participation in Southwest Ohio, 2024
28.8%   Overall Percent of Total Southwest Ohio Public High School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of HS Student Participation

96.1%   Felicity-Franklin Local
78.3%   Georgetown Exempted Village
72.3%   Ross Local
63.2%   Fayetteville-Perry Local

LEAs with Room to Grow by Percent of HS Student Participation *(non-zero entries)*

12.3% Loveland City	**8.8%** Norwood City
5.3% Lockland Local	**2.4%** Madeira City

Please note this CTE completions data is a headcount of students in grades 9-12 who generated CTE FTE in and completed a CTE course with a curriculum code of VT or PS aligned to a WFD program in the 2024 school year, excluding Community and STEM schools.

Department of Education & Workforce

Middle School CTE in Western Ohio

Room to Grow:

The Western region of the state has a strong level of middle school CTE participation, indicating a level of effective access on the higher end. Counties such as Fayette and Clinton have very strong levels of student participation, indicating that these districts have well-established middle school CTE programs and are effectively reaching students.

In contrast, other counties such as Mercer and Montgomery have lower levels of participation. This uneven distribution within a single region highlights potential disparities in access, program availability, or district-level prioritization of early CTE exposure. The variation underscores the importance of targeted support and resource sharing to ensure student access to foundational career education across all districts in the region.

Western Ohio Middle School CTE by the Numbers

13,140
Middle School CTE Participants in Western Ohio, 2024

61
LEAs with Active Middle School CTE Program Participation in Western Ohio, 2024

48.1%
Overall Percent of Total Western Ohio Public Middle School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of MS Student Participation

100%
Minster Local

99.2%
New Bremen Local

98.3%
Greenon Local

96.7%
Clinton-Massie Local

LEAs with Room to Grow by Percent of MS Student Participation *(non-zero entries)*

33.5% Troy City	**29.5%** Brookville Local
14.5% Tri-Village Local	**14.1%** Mississinawa Valley Local

Please note this CTE completions data is a headcount of students in grades 7-8 who generated CTE FTE in and completed a CTE course with a curriculum code of VM in the 2024 school year, excluding JVSDs, Community and STEM schools.

Department of Education & Workforce

High School CTE in Western Ohio
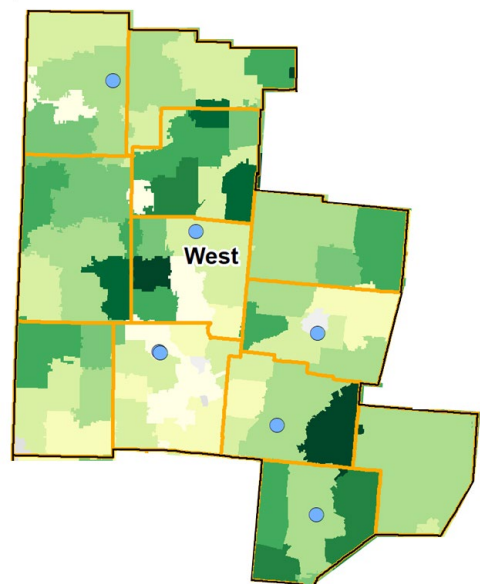
Room to Grow:

High school CTE participation rates within Western Ohio indicate that almost the entirety of the region has high school students participating in CTE. Some counties, such Clinton, have engagement levels on the higher end, indicating that these districts have a high level of effective access to high school CTE programs and are reaching students.

Much of the region's effective access level is on the low-mid side and there is still room for further expansion of effective access to these programs. Despite high levels of effective access through the region, the need for strategic support and collaboration to ensure all districts can offer meaningful career-technical education opportunities at the high school level stands.

Western Ohio High School CTE by the Numbers

17,461
High School CTE Participants in Western Ohio, 2024

81
LEAs with Active High School CTE Program Participation in Western Ohio, 2024

33.3%
Overall Percent of Total Western Ohio Public High School Student Body Enrolled in CTE

Top Local Education Agencies (LEAs) by Percent of HS Student Participation

96.2%
Greeneview Local

87.0%
Franklin Monroe Local

84.0%
Botkins Local

83.5%
Fairlawn Local

LEAs with Room to Grow by Percent of HS Student Participation *(non-zero entries)*

15.1% Russia Local	**13.9%** Jefferson Township Local
9.5% Northridge Local	**7.5%** Springfield City School District

*Please note this CTE completions data is a headcount of students in grades 9-12 who generated CTE FTE in and completed a CTE course with a curriculum code of VT or PS aligned to a WFD program in the 2024 school year, excluding Community and STEM schools.

Department of Education & Workforce

02

Building new CTE programming where none currently exists

Understand what steps to take in building a new CTE program from scratch. What needs to be done?

Department of Education & Workforce

Ready to Build a CTE Program?

Complete these next steps to prepare with your partners

This checklist can serve as a starting point for institutions and school districts to stand up a quality career-technical education program. These steps are to be used as a guide for preparing for stand up and they provide an abundance of related resources for each step.

Pinpoint Regional Program Needs

❑ Meet with your local Career-Technical Planning District Lead to establish interest in setting up a program and getting guidance on the process.

❑ Identify the job task for in-demand occupations and identify the best career field courses to prepare students for success in those tasks. Review the Top Jobs List to pinpoint in-demand occupations that would be the potential for focus through CTE programming, and determine your region's occupation needs through OhioMeansJobs and conversations with local Career-Technical Planning District lead.

❑ Review Ohio's Career-Technical Education Career Fields and CTE Your Future Your Way resource to evaluate potential programs to offer that are aligned with discussed regional need.

❑ Ensure programming aligns with student interest & aptitude.

Ohio's Career-Technical Education Career Fields

Ohio Top Jobs List

Career-Technical Planning Districts

Align Funding & Resources

❑ Review DEW's Career-Technical Education Perkins Planning and Funding page for CTE funding guidance and procedures.

❑ Explore partnerships with local nonprofits to secure equipment resources and mentorship.

❑ Fill out a CTE Provider Application to secure funding and offerings.

❑ Meet with a regional Career Pathway Support Networks point of contact to align efforts with regional program needs.

❑ Identify staff certified to teach CTE courses.

(1) DEW Start a Career Tech Program

Department of Education & Workforce

Ready to Build a CTE Program?

Complete these next steps to prepare with your partners

This checklist can serve as a starting point for institutions and school districts to stand up a quality career-technical education program. These steps are to be used as a guide for preparing for stand up and they provide an abundance of related resources for each step.
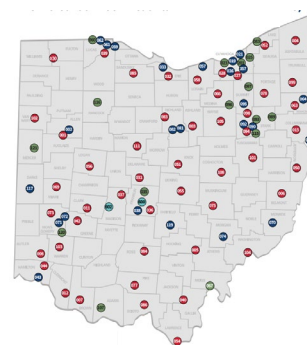
Design Program
☐ Review DEW's CTE FAQ to inventory relevant design considerations.
☐ Illustrate a career pathway obtained through CTE courses and review specific design criteria using the Size, Scope and Quality of Career-Technical Education Delivery guidance from DEW.
☐ Reference OhioLINK for potential course content to include for the chosen career field.
☐ Develop both classroom and hands-on learning materials to accompany CTE instruction using Ohio's Career-Technical Education Career Fields Content Standards.
☐ Ensure course is in compliance with DEW's Quality Program Standards for CTE, necessary for program approval.

The Department's CTE FAQ
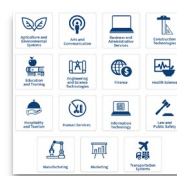
Ohio's Career-Technical Education Career Fields

Evaluate Course Content & Make Updates
☐ Evaluate CTE course materials against DEW's Quality Program Standards for Career-Technical Education Programs.
☐ Perform a Quality Program Review as outlined in the Quality Program Review Guidebook.
☐ Based on results of the standards assessment and quality assessment, create an action plan to update CTE course to comply with content & quality standards, the Action Plan Goal Template can be used for reference.
☐ Make updates to curriculum and re-evaluate using the same process as outlined above.

Quality Program Standards for Career-Technical Education Programs

Quality Program Review Guidebook

Recruit Program Participants
☐ Create promotional materials to encourage CTE participation for both students and parents.
☐ Host informational sessions on the value of CTE and encourage both student and parent attendance.

(1) DEW Start a Career Tech Program

Department of Education & Workforce

Model Pathways Aligned to Jobs | Health

These examples are aligned to just a few of the in-demand health jobs in Ohio, by grade level.

7th Grade
JM Allied Health Pathway: Career Connections
Course #: 990364
Aligned Occupation: Medical and Health Service Managers
Career Pathway: Entry Level: HS diploma/GED, some CTE, and/or post-secondary degree

8th Grade
JM Allied Health Pathway: (VM) Principles of Allied Health
Course #: 72035
Aligned Occupation: Medical Assistants
Career Pathway: Entry Level: HS diploma and CTE program of study

9th Grade
JM Allied Health Pathway: (VT) Principles of Allied Health
Course #: 72035
Aligned Occupation: Certified Nursing Assistants
Career Pathway: Entry Level: HS diploma and CTE program of study

10th Grade
JM Allied Health Pathway: (VT) Medical Terminology
Course #: 72150
Aligned Occupation: Phlebotomists
Career Pathway: Entry to Mid Level: HS diploma and CTE program of study

11th Grade
JM Allied Health Pathway: (VT) Health Information Technology
Course #: 72135
Aligned Occupation: Registered Nurse
Career Pathway: Mid Level: Two-year post-secondary degree

12th Grade
JM Allied Health Pathway: (VT) Patient Centered Care and Diagnostics
Course #: 72055
Aligned Occupation: Registered Nurse/BSN
Career Pathway: Senior Level: Four-year post-secondary degree required

Department of Education & Workforce

Model Pathways Aligned to Jobs | Manufacturing

Below are some example that are aligned to just a few in-demand manufacturing jobs in Ohio, by grade level.

7th Grade
R7 Manufacturing Pathway
Career Connections
Course #: 990364
Aligned Occupation:
Helpers -- Production Workers
Career Pathway:
Entry-level, HS diploma
Degree Track:
N/A

8th Grade
R7 Manufacturing Pathway
(VM) Pre-Engineering Technologies
Course #: 17015
Aligned Occupation:
CNC Tool Operators
Career Pathway:
Entry-level, some CTE education/training
Degree Track:
FASTech Mastercam, Haas, or FANUC CNC Credentials

9th Grade
R7 Manufacturing Pathway
(VM/VT) Manufacturing Operations
Course #: 175003
Aligned Occupation:
CNC Tool Programmers
Career Pathway:
Mid-level, CTE program of study/concentrator

Degree Track:
FASTech Mastercam, Haas, or FANUC CNC Credentials

10th Grade
R7 Manufacturing Pathway
(VT) Machine Tools
Course #: 176004
Aligned Occupation:
Industrial Engineering Technologists & Technicians
Career Pathway:
Mid-level, CTE program of study + experience, or community college/adult training
Degree Track:
Associate of Applied Science - Mechanical Engineering Technology

11th Grade
R7 Manufacturing Pathway
(VT) Machining with Industrial Lathes
Course #: 176005
Aligned Occupation:
Industrial Engineering Technologists & Technicians
Career Pathway:
Mid-level, CTE program of study + experience, or community college/adult training
Degree Track:
Associate of Applied Science - Mechanical Engineering Technology

11th Grade
R7 Manufacturing Pathway
(VT) Machining with Industrial Milling Machines
Course #: 176006
Aligned Occupation:
Industrial Engineers
Career Pathway:
Senior-level, college degree
Degree Track:
Bachelor of Science in Engineering Technology

12th Grade
R7 Manufacturing Pathway
(VP) CNC

Course #: 176007

Aligned Occupation:
Industrial Engineers

Career Pathway:
Senior-level, college degree

Degree Track:
Bachelor of Science in Engineering Technology
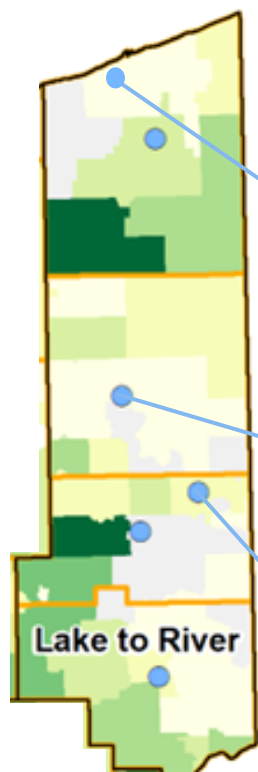
Department of Education & Workforce

New Program Standup | Lake to River Example

The example below shows the thought process for establishing new CTE programming in an area.

Pinpoint Regional Program Needs

Lake to River Major Job Creation Announcements (2024)[1]

Review economic trends in your region. The top three job creation announcements for the Lake to River Region in 2024 were from manufacturers producing plastics, transportation equipment, and packaging supplies and equipment.

➢ Plastpro 2000, Inc. – *Ashtabula, 145 jobs*
➢ Transglobal, Inc. – *Trumbull, 40 new jobs*
➢ Millwood, Inc. – *Trumbull, 40 new jobs*

Top Occupation Needing Filled

Have a conversation with local employers to understand what occupations most need to be filled. For example, across manufacturing in Lake to River, **maintenance technicians** are the most common post on job board websites.[2]

…d to Succeed – Maintenance Technicians (Illustrative)

Review resources from industry associations and sit down with employers in your area to understand, for each in-demand occupation, what knowledge, skills, and abilities (KSAs) are needed to succeed. Below are some examples of highly-critical KSAs that maintenance technicians may need and potential CTE courses that could upskill students in these competencies.[3]

Example knowledge required: Knowledge of maintenance documentation practices, including work orders, standard operating procedures (SOPs), equipment manuals, bill of materials, and documentation requirements for regulatory compliance.

Example CTE course: Industrial Maintenance (176020) – *Manufacturing Operations R7*
Students will apply the knowledge and skills necessary for installing, maintaining and safely troubleshooting modern industrial machinery…They will learn to solve practical maintenance problems, read and interpret drawings and maintenance manuals and understand manufacturing process quality practices… *Read more here.*

Department of Education & Workforce

CTE & Regional Economic Development

Career-technical education is a key driver of regional economic development, strengthening talent pipelines, supporting local industries, and enhancing economic resilience. By aligning education with employer needs, CTE helps communities adapt to labor market shifts, attract businesses, and create pathways to well-paying careers. It also builds long-term capacity by investing in human capital and strengthening ties between education, industry, and community. **Expanding access to high-quality CTE is essential for sustainable and competitive regional growth.**

Addresses Skilling Gaps
CTE programs are **closely aligned with needs from employers and industry**. Those that enter the workforce with CTE backgrounds have the knowledge and skills employers need.[2,3]

Boosts Regional Employment
Offering a strong CTE program within your region helps keep talent local. **CTE creates a local talent pipeline of qualified professionals** in part because CTE programs are developed in partnership and with input from local business leaders.[2]

Strengthens Household Incomes
Completers of CTE programs in Ohio on average earn $12,000 more than high school graduates after five years, promoting an increase of regional economic activity and resilience.[1]

Supports Regional Industry Growth
Many **CTE career pathways directly contribute to the hiring of talent into in-demand occupations**. Offering a CTE program supports bridging the talent gap and bolstering industry growth.[1,2,3]

Builds Stronger Communities
CTE supports community resilience by **equipping students with real-world skills and fostering strong connections between schools and local businesses**, helping communities adapt to workforce needs and economic change.[3,4]

Supports Vulnerable Youth
CTE programs **offer an accessible pathway to connect the vulnerable youth population with quality, well-paying careers** in areas that may not otherwise have access to traditional education institutions.[5]

(1) Ohio Association of Career-Technical Superintendents, The Economic Benefits of Career Technical Education on The State of Ohio (2) Advance CTE How to Promote Career Technical Education as Vital to Economic Recovery (3) iCEV, 4 Ways CTE Transforms the Economy (4) South Dakota Governor's Office of Economic Development, CTE and Economic Development – a Strong Correlation (5) Advance CTE, CTE on the Frontier

Department of Education & Workforce

Building in Urban, Suburban, Rural

Across the three main types of geographic areas — urban, suburban, and rural — there are diverse factors and considerations that shape how CTE programs are developed, accessed, and sustained. These differences can influence everything from student participation rates to industry partnerships and program offerings.

To ensure the success of CTE program design and implementation in your unique geographic area, here are some key components to consider by area type:

Urban	Suburban	Rural
• Explore **satellite campuses or mobile labs** to host CTE programs to combat lack of instruction space. • Explore ways to **provide wraparound supports** for participants. • Collaborate with **urban innovation hubs and tech incubators** for mentorship and exposure. • Provide **language-accessible materials** and bilingual instructors.	• Explore ways to **offer dual credit** for CTE participation. • Establish **targeted outreach strategies and supports** for underserved populations. • Explore **sharing facilities and instructors** across the district.	• Use **creative instructor recruitment tactics** (such as grow-your-own teacher training programs or adjunct instructors from the industry). • Apply for **USDA rural education grants** to close funding gaps. • **Partner with districts and regional CTE centers** to share instructors and facilities. • Explore offering **instruction remotely.** • **Provide transportation** services.
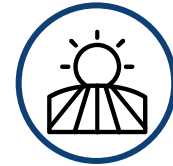
(1) NCES, Career and Technical Education Programs in Rural High Schools (2) NCES, Career and Technical Education in the United States (3) ACTE, Career and Technical Education's Role in rural Education (4) Advance CTE, Expanding Access to Opportunity (5) National Rural Education Association, How Career Technical Education Can Help Close the Rural/Urban Education Gap

Ohio Department of Education & Workforce

Career Connections Framework

Career Connections is a joint initiative among the Ohio Governor's Office of Workforce Transformation, Ohio Department of Higher Education, OhioMeansJobs, and Ohio Department of Education and Workforce. The **Career Connections Framework is a planning tool for districts to provide students with opportunities to develop a vision and realistic plan for their futures**. This framework aligns the many efforts around college and career readiness to support students in becoming productive and engaged citizens.

The framework is designed to make an impact at each stage of a student's learning journey, divided across three key phases for each K-12 grade block as shown below.

| K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |

Career Awareness
Elementary Grades (K-5)

Career Exploration
Middle Grades (6-8)

Career Planning
High School (9-12)

Career Awareness

At this stage, students explore careers by **connecting classroom learning to future work**, using strategies that build awareness and spark interest.

Key activities include but are not limited to:
- *Workplace visits, career classroom speakers, and an introduction to Ohio's career fields and pathways*

Career Exploration

At this stage, students explore career interests through activities that reveal workplace environments and help them understand their strengths. They **begin planning their futures using career and education information** to guide course selection and goal setting.

Key activities include but are not limited to:
- *Participation in career-technical student organizations, career connections learning strategies, and advanced academic and technical education*

Career Planning

At this stage, students deepen career exploration through **hands-on experiences and begin focused planning, linking career options to education choices** while building skills to adapt their plans over time.

Key activities include but are not limited to:
- *College credit plus, CTAG enrollment or concurrent enrollment, work-based learning, industry-recognized credentials, and OhioMeansJobs K-12*

To learn more, email DEW's Career Connections Framework Program Specialist at kayla.mickens@education.ohio.gov.

(1) DEW, Career Connections Framework

Department of Education & Workforce

Ohio's Quality CTE Program Checklist

To ensure all new CTE programs established in the State of Ohio, each program has to be in compliance with the Department's 10 Quality Program Standards for Career Technical Programs. At a high-level below are the quality standards that should be consulted when creating new CTE programs.

☐ **Well-Equipped Facilities**
The program has the right spaces, tools, and equipment to help students learn and practice career-related skills.

☐ **Strong Community Partnerships**
Schools work closely with local businesses and the community to support and improve the program.

☐ **Ongoing Program Review**
The program is regularly reviewed and updated based on data, student needs, and job market trends.

☐ **Educator Professional Development**
Teachers keep learning and growing in their field and help support other educators.

☐ **Clear Program Design**
The program includes both general and specialized courses that help students succeed in their chosen career path.

☐ **High-Quality Instruction**
Instruction focuses on both academic success and hands-on skill development for all students.

☐ **Meaningful Skill Assessments**
The program uses real-world tasks and performance-based assessments to measure what students have learned.

☐ **Hands-On Learning**
Every student takes part in learning experiences that connect what they learn in class to real work environments.

☐ **Leadership Opportunities**
Students are involved in student organizations that help them build leadership and career skills.

☐ **Student Access**
The program is open to all students, reflects the population of the school, and allows students to choose their preferred career path.

(1) DEW's Quality Program Standards for Career-Technical Education Programs

Ohio | **Department of Education & Workforce**

03

Growing existing CTE programming to increase effective access

Explore ways to update or expand existing programs to grow effective access. What are some ways to grow enrollment, graduations, and program capacity?

Department of Education & Workforce

Levers to Expand Effective Access to CTE Programs

To support a district's journey of CTE program expansion, there are key themes, or levers, to provide a tactical approach to expanding effective access to CTE programs, some of which are outlined by the Department's Expanding Career-Technical Education in Ohio whitepaper.

Levers to expand CTE programs across the state include:

Using Innovative Program Design Methods
This strategy emphasizes reimagining CTE delivery through flexible structures, early access, industry-aligned staffing, and strong partnerships to expand access and relevance for students.

Providing Flexible Program Schedules
By offering CTE courses during evenings, weekends, summers, or through condensed formats, districts can increase access by accommodating diverse student & industry scheduling needs.

Offering Industry Recognized Credentials
Embedding credentials into CTE programs enhances value by validating student skills, supporting graduation requirements, and improving workforce readiness.

Expansion of Meaningful Work-Based Learning Opportunities
Increasing the connection between classroom learning to real-world experiences like internships and apprenticeships.

Targeted Participant Outreach Strategies
Tailored outreach to students and parents — through events, ambassador programs, and sharing of success stories — boosts awareness and addresses misconceptions, driving participation.

The following pages describe these strategies in-depth, including key activities to consider for implementation.

(1) DEW, Expanding Career-Technical Education in Ohio

Department of Education & Workforce

Innovative Program Design (1/2)

Innovative CTE program design involves **rethinking how career-technical education is delivered in a district** to expand access, improve relevance, and maintain high quality. Innovative program designs often rely on strong partnerships with industry and education stakeholders and are structured to meet state requirements while providing students with earlier, more flexible, and more engaging opportunities to explore and prepare for high-demand careers. **When taking the steps to make a CTE program more innovative, consider the following design components.**

Design Components to Consider

Accelerated Credit Opportunities
Providing a program that **allows for students to gain college credit and necessary competencies at an accelerated rate**.

Sample Activities:
- Explore options for **offering college credit**
- Establish **credit for prior learning articulation agreements** with higher education institutions

Transfer Credit Ohio

College Credit Plus

Resources to Scale:
- Ohio's Credit Flexibility
- Ohio College Credit Plus
- Ohio Industry Recognized Credential Transfer Assurance Guides (ITAGs)
- Ohio Career-Technical Assurance Guides (CTAGs)
- Ohio Technical Center Plus

Broaden CTE Access Points
Introduce earlier, more flexible, and more accessible entry points to CTE programs, allowing districts to reach a broader range of students and spark interest in career pathways sooner.

Sample Activities:
- Explore **offering satellite programming** to serve students across multiple campuses
- Establish **career academies or "Wall-to-Wall" models** that embed CTE in entire schools
- Promote early exposure by **expanding pathways into grades 9–10**

tolles

Great Oaks
CAREER CAMPUSES
Diamond Laurel Live Scarlet

Resources to Scale:
- Tolles Career & Technical Center Early Career-Tech Satellites
- Great Oaks Career Campuses Satellite Programs

(1) DEW, Expanding Career-Technical Education in Ohio

Department of Education & Workforce

Innovative Program Design (2/2)

Innovative Staffing Models
Innovative staffing **models help fill the CTE instructor shortage by expanding the pipeline of qualified educators beyond the traditional pool.**

Avenues to Explore:
- Adjunct/part-time instructors from relevant **industries**
- **Teacher externships** to gain real-world experience
- Promotion of **alternative teacher certifications**
- **Pairing industry professionals with licensed instructors**
- **Faculty sharing** across districts

Resources to Scale:
- Advance CTE, The State of Career Technical Education, Increasing Access to Industry Experts in High Schools
- ACTE, Staffing Outside the Box
- ACTE, Teach CTE Recruitment Toolkit

Partnership-Driven Program Implementation
Strategic collaboration with key stakeholders across industry, education, and community sectors enable schools to broaden program reach, ensure alignment with workforce demands, and enrich student learning with practical, career-connected experiences.

Sample Activities:
- Collaborate with **employers to shape programs, train teachers, and share resources**
- Collaborate with education, workforce development, and industry partners to **create a "College & Career" academy**
- **Embed PACE curriculum into programs**, offering collaboration with local business and organizations to engage in career exploration
- Partner with local community colleges to **enhance offerings and credential-earning potential**

Resources & Partnerships to Scale:
- College and Career Academies of Akron
- Greater Cleveland Career Consortium and Cleveland Metro School District PACE Programs
- Local Workforce Boards
- Ohio Association of Community Colleges

(1) DEW, Expanding Career-Technical Education in Ohio (2) National Association of State Directors of Career Technical Education Consortium, Teacher Shortage Undermines CTE (3) Cleveland Metropolitan School District PACE (4) University of Toledo, Meeting the Needs of New CTE Teachers

Department of Education & Workforce

Flexible Program Schedules (1/2)

Offering CTE programs outside the traditional school day or calendar — such as during evenings, weekends, or summer months — creates new opportunities to engage students and partners. This flexibility allows schools to extend access, tailor learning experiences to student and industry needs, and strengthen connections with employers and training providers.

Current programs in Ohio following nontraditional scheduling:
- Butler Tech 5th Day Experience
- Tri-County Career Center Nontraditional Schedule Carpentry and Early Childhood Programs
- Penta Career Center OTC+

Non-Traditional Programs Schedules to Explore:

Semester-Based Experiences

Students take a **full CTE course over one semester** instead of a full year.

*Format: Classes **meet daily for longer blocks (such as 90–120 minutes).***

Benefits:
- Immerses students in **hands-on learning with fewer interruptions**
- **Eases scheduling conflicts** for students in multiple programs

Second Shift

CTE courses are **offered outside of standard school hours.**

Format: These may be held at the high school, OTC, or other partner location.

Benefits:
- **Increases access for students** with daytime conflicts or responsibilities
- **Enables industry professionals to teach** part-time

Four-Day School Week, Fifth Day Experience

Students **attend academic and CTE instruction four days a week**. The fifth day is used for work-based learning, job shadowing, industry tours, dual enrollment, or skill reinforcement activities.

Benefits:
- Frees up time **for real-world experiences**
- Supports student wellness and **reduces absenteeism**
- Provides time for **teacher planning and industry engagement**

(1) Greene County Career Center, Flex Periods in CTE (2) Teachers Institute, The Semester System in Education: A Closer Look at Its Impacts (3) International Institute for Educational Planning, Double-Shift Schooling

Department of Education & Workforce

Flexible Program Schedules (2/2)

Non-Traditional Programs Schedules to Explore:

Summer Programming

Offered **during summer break, typically in 3- to 6-week sessions**. These can be full- or part-day and may focus on specific credentials or exploratory content.

Benefits:
- Helps students **accelerate credential attainment** and **explore interests earlier**
- Makes **use of underutilized facilities**
- **Enables cross-district partnerships** to reach more students

Ohio Technical Center Partnerships

High school students are enrolled in courses provided by a local Ohio Technical Center during evenings, weekends, or summers. Scheduling is aligned to OTC timelines rather than traditional school calendars.

Benefits:
- **Expands offerings** without duplicating facilities or staffing
- **Aligns with adult workforce needs**
- **Supports credential attainment** in high-demand sectors

Ohio Credit Flex

Credit Flexibility **allows students to earn course credit by demonstrating what they know and learning in ways that go beyond traditional classroom time** and structure.

Benefits:
- Emphasizes outcomes of what students can demonstrate
- Encourages integrated and personalized learning experiences
- Adapts pacing to individual learning capacity, and style

(1) Butler Tech, 5th Day Experience (2) Learning Policy Institute, How States Are Supporting Summer Learning (3) DEW, Expanding Career-Technical Education in Ohio (4) DEW, Credit Flexibility

Department of Education & Workforce

Industry Recognized Credentials

Offering industry-recognized credentials through CTE boosts program appeal by connecting classroom learning to real-world skills. **These credentials help students meet graduation requirements while gaining a competitive edge for employment or further education**. For schools, embedding credentials supports graduation rates, demonstrates program quality, and strengthens ties to workforce outcomes.

How to Incorporate Industry-Recognized Credentials into CTE Programs:

❑ Review DEW's **guidance on Integrating Industry-Recognized Credentials**.

❑ Explore DEW's approved list of **Industry-Recognized Credentials** by career field and **pinpoint which would be directly applicable to the program.**

❑ **Explore the list of Innovative Workforce Incentive Program (WIP) Qualifying Industry-Recognized Credentials,** a subset of IRCs that are identified as aligning to a high-growth industry with in-demand jobs and are the most incentivized for offering.

❑ **Connect with local employer and industry partners to gain insights** into which Industry-Recognized Credentials are prioritized in their workforce.

❑ **Evaluate the credentials against the following quality criteria**:
   ❑ *Relevant* — credentials that help students develop critical and in-demand work and life skills
   ❑ *Flexible* — credentials that can be earned in a variety of settings (during or after school, or on the job) and modalities (remote, in-person, hybrid)
   ❑ *Personalized* — credentials that are linked to student interests, skills, and future aspirations
   ❑ *Sustainable* — credentials that have low or reasonable start-up and continuation costs

❑ **Determine if credentialing program** of interest **offers credit** (such as through an ITAG).

❑ **Evaluate which delivery mode would be most effective** for the program (such as sprint classes/modules, senior only programs, and so on).

❑ **Explore using TechCred to upskill instructors** for facilitating IRC education.

(1) Expanding Career-Technical Education in Ohio (2) DEW Industry-Recognized Credentials by Career Field (3) OSLN, Implement industry credentials at your school with new LaunchPad series (4) ACCEL Schools, Empowering Career Tech Students: Microlearning for Enhanced Industry Credential Attainment, (5) DEW, Industry Recognized Credentials Guide (6) DEW, Industry Recognized Credential Seal

Ohio | **Department of Education & Workforce**

Examples of Incorporating Credentials into CTE Programming

Multiple programs of study prepare students to earn industry recognized credentials that prepare students with in-demand skills.

Engineering and Manufacturing

Credentialing Entity: American Welding Society (AWS) **Occupation:** Welder

CTE Program of Study (Courses)	Credentials
Welding Technologies Welding Fabrication Gas Metal Arc Welding Flux Cored Arc Welding Shielded Metal Arc Welding Gas Tungsten Arc Welding Plan Reading	AWS Certified Welder (FCAW) (CP69) AWS Certified Welder (GMAW) (CP70) AWS Certified Welder (GTAW) (CP71) AWS Certified Welder (SMAW) (CP72) OSHA 10 & 30 (CJ01, CJ01)

Transportation Systems

Credentialing Entity: Automotive Service Excellence (ASE) **Occupation:** Automotive Technician

CTE Program of Study (Courses)	Credentials
Ground Transportation Maintenance	ASE – Maintenance & Light Repair (CH97)
Ground Transportation Engine & Power Train	ASE – Engine Repair (CH33)
Automotive Engine Performance	ASE – Engine Performance (CH40)
Automotive Braking Systems	ASE Brakes (CH37)
Automotive Steering and Suspension Systems	ASE Suspension and Steering (CH36)
Ground Transportation Electrical/Electronics	ASE – Electrical/Electronic Systems (CH38)
Ground Transportation HVAC	ASE – Heating and Air Conditioning (CH39)

Construction

Credentialing Entity: National Center for Construction Education & Research
Occupation: Electrician

CTE Program of Study (Courses)	Credentials
Construction Technology – Core and Sustainable Construction Construction Electrical Systems Commercial and Industrial Construction Electrical Systems Residential Electrical Systems Plan Reading and Estimating	NCCER Core (CH91) NCCER Level 1 – Electrical (CH14) OSHA 10 & 30 (CJ01, CJ01)

Department of Education & Workforce

Work-Based Learning Opportunities (1/2)

By connecting classroom instruction to real-world experiences, work-based learning makes education more relevant and engaging for students — especially those unsure about traditional academic paths. These opportunities help students discover career interests, build confidence, and see clear value in enrolling in CTE programs that lead to high-demand careers. **Offering flexible entry points like internships or job shadowing can also attract more learners and serve as a powerful recruitment tool for schools.** Below are a few starting points and strategies for expanding work-based learning opportunities in CTE programs.

Strategies to Expand Work-Based Learning Opportunities:

Strengthen Industry and Community Partnerships
Sample activities could include:
- **Provide training to employers** offering work-based learning opportunities **to ensure the employer and CTE coordinator are aligned on expectations.**
- **Develop relationships with local employers to establish training connectors** for students to receive work-based learning opportunities.
- **Convene local workforce development boards regularly** to talk about potential employer partnerships and work-based learning opportunities.
- **Establish a new or consulting an existing Business Advisory Council** to **identify potential work-based learning opportunities.**
- Check for **local industry workforce partnerships** — for example, the manufacturing industry, specifically the Ohio Manufacturers' Association, has established Industry Sector Partnerships.
- **Explore** SuccessBound for resources on building business-education consortia.

Benefits of Work-Based Learning

➢ **Improved graduation rates**

➢ **Develops problem solving skills**

➢ **Higher grades**

➢ **Makes school relevant**

➢ **Real-world connection between work and school**

➢ **Provides resume-worthy job experience**

Ohio | Department of Education & Workforce

Work-Based Learning Opportunities (2/2)

Explore Internship Opportunities for Program Participants

Sample activities could include:

- Working with local employers to **develop a "micro-internship"** tied to CTE program offerings
- **Incorporating a [state-supported high school internship](#)** program into the program structure

K-12 Educator Toolkit for
State Recognized Pre-Apprenticeship
2025

Explore Partnerships with Apprenticeship Programs and Pre-Apprenticeship

Collaborate with local pre-apprenticeship programs to provide work-based learning opportunities. Learn more about utilizing tactics to standup and expand pre-apprenticeship programs in the Pre-Apprenticeship Toolkit.

Leverage a Tax Incentive

Work with local employers to organize a work-based learning program to accompany CTE programming using the [Tax Credit Certificate Program for Work-Based Learning Experiences](#) incentive.

(1) [Expanding Career Technical Education in Ohio](#) (2) [Ohio Tax Credit Certificate Program for Work-Based Learning Experiences](#) (3) [Ohio State Supported Internships](#). (4) [DEW, "Work-Based Learning for Students and Families"](#).

**Department of Education & Workforce**

Participant Outreach Strategies (1/2)

Crafting targeted outreach strategies is essential to increasing awareness, interest, and enrollment in CTE programs. **When recruiting participants, it is important to cater promotional efforts to both students and parents, with targeted messaging for each audience.**

Strategies for Recruiting Students into CTE Programs

Host CTE Exploration Days
Host interactive events where students engage in hands-on activities, meet instructors, and tour facilities to build interest in CTE programs.
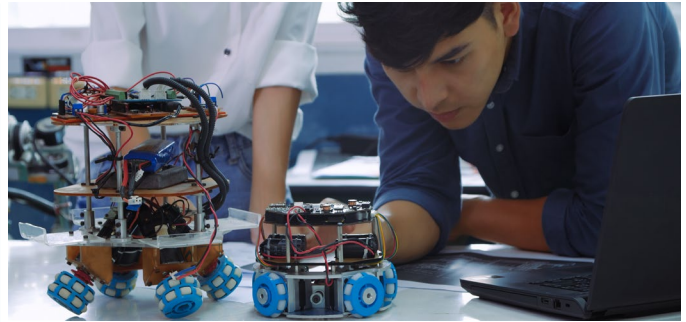
Invite Employers to Speak About CTE
Invite local employers to share how CTE programs connect to real career paths, including success stories of current employees.

Partner with Counselors to Identify Candidates
Collaborate with guidance counselors to spot students who are a good fit for CTE and guide them toward enrollment.

Launch CTE Student Ambassador Programs
Empower current CTE students to promote programs by sharing their experiences, leading tours, and engaging peers.

Create a CTE Participant Success Fact Pack
Establish a resource to be used to recruit CTE participants through the sharing of CTE participant results, such as average pay, college credit gained, time-to-career, types of jobs obtained, and so forth.

(1) DEW, CTE Your Future Your Way (2) DEW, Recruiting Special Populations into Career-Technical Education (3) DEW, 2023-2024 CTE Outcomes and Insights (4) ACTE, Communicating the Value and Promise of CTE with Parents and Students (5) Advance CTE, Communicating Career Technical Education: Learner-centered Messages for Effective Program Recruitment

Ohio | **Department of Education & Workforce**

Participant Outreach Strategies (2/2)

Navigating Barriers of CTE Programs for Parents & Guardians

Often, parents/guardians may think that their student's participation is taking them off the track of graduation and entry into college. **Many parents may not be familiar with a CTE program or how it fits into their student's learning and career exploration journey**. It is important to **communicate how CTE programs will support students' long-term career goals and accelerate their education journey**, not hinder it.

Sample Strategies for Gaining Parent & Guardian Support of CTE Participation

Host Informational Sessions

These parents-only sessions **should focus on communicating the value of CTE participation in their student's learning and career journey.** It is important to ensure facilitators keep the session collaborative and encourage discussion amongst the group to ease any parental concern.

Sample Agenda for a Parents & CTE Informational Session:
- *What is CTE?*
- *What are the benefits of CTE?*
- *Common Misconceptions about CTE*
- *How CTE leads to in-demand, well-paying careers*
- *How CTE fits into a traditional four-year college pathway*
- *Student Success Stories*

Create a Parent-Focused CTE Fact Pack

Fact pack resources provide an easy and low-commitment. Collect CTE participation data from your region to create a fact sheet resource for parents to review to learn more about what CTE is and its many benefits for their children.

Content/data that could be included in a CTE Fact Pack for parents:
- *Graduation rates of CTE participants in four-year degree programs*
- *Job placement rates of CTE participants*
- *Average earnings of CTE participants*

Resources: DEW example, fact sheets available through Advance CTE.

Host a Program Showcase

Invite families to a "CTE Night" where they **can tour the facilities, meet instructors, and talk with employers who promote CTE participation**. This is a great opportunity to reassurance parents about safety measures taken in hands-on learning environments and reinforce the value of career-technical education.
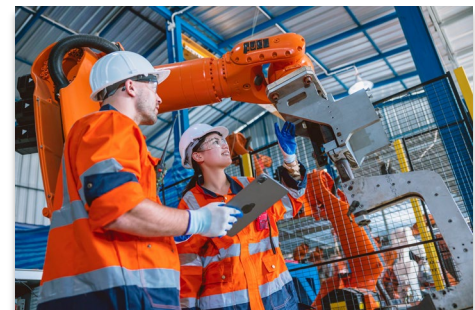
(1) Ohio's Career-Technical Education Landscape: An overview of CTE at the high school level (2) DEW, Recruiting Special Populations into Career-Technical Education (3) DEW, 2023-2024 CTE Outcomes and Insights, (4) ACTE, Communicating the Value and Promise of CTE with Parents and Students (5) Advance CTE, Communicating Career Technical Education: Learner-centered Messages for Effective Program Recruitment

Department of Education & Workforce

Thank You From the Authors

Our gratitude and appreciation for all who made this Toolkit possible.

We extend our sincere gratitude to the administrators, superintendents, and districts who enrich the lives of their students with meaningful CTE opportunities across Ohio every day. Your dedication to guiding these learners in developing practical skills, academic rigor, and real-world opportunities — where they can get excited about learning — is the foundation of Ohio's leadership in career-technical education nationwide.

As Ohio's educators look forward to a new surge in effective CTE access, the Department is grateful for and inspired by your leadership. Thank you for leading the charge to transform lives and communities.

Learn more and discuss further with the experts:

- The Ohio Department of Education and Workforce | Office of Career Tech | contact.center@education.ohio.gov

Department of Education & Workforce

Appendix A: Middle School CTE Participation Maps

Figure 1: Percent of Middle School Students Participating in Exploratory CTE by District, School Year 2024
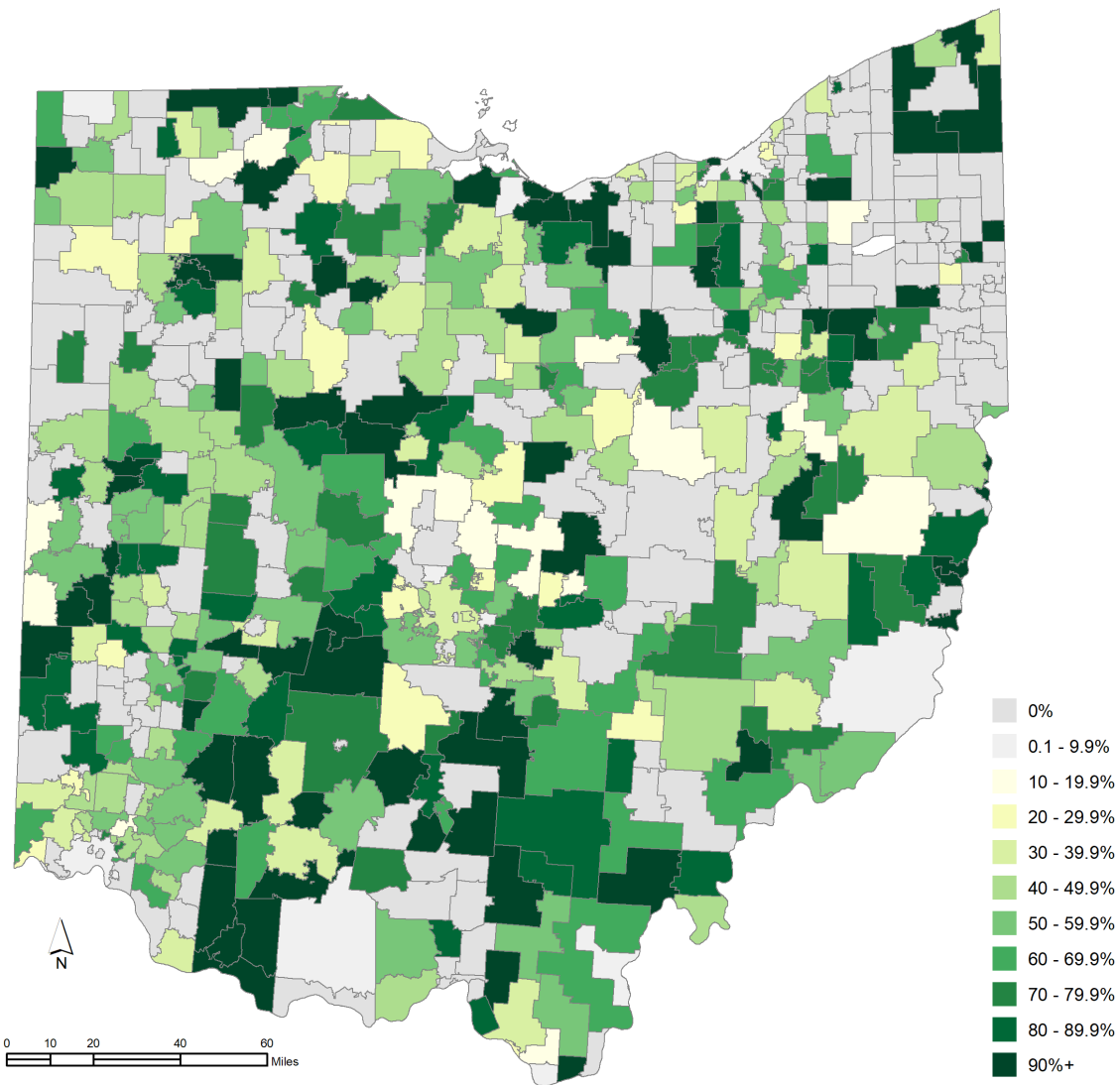

Figure 1 illustrates the percentage of students in grades 7-8 who generated CTE FTE and completed a CTE course located at a traditional public district (inclusive of JVSD satellite courses) with a curriculum code of VM in school year 2024.

Appendix A: Middle School CTE Participation Maps

Figure 2: Percent of Middle School Students Participating in Exploratory CTE by District within JobsOhio Region, School Year 2024
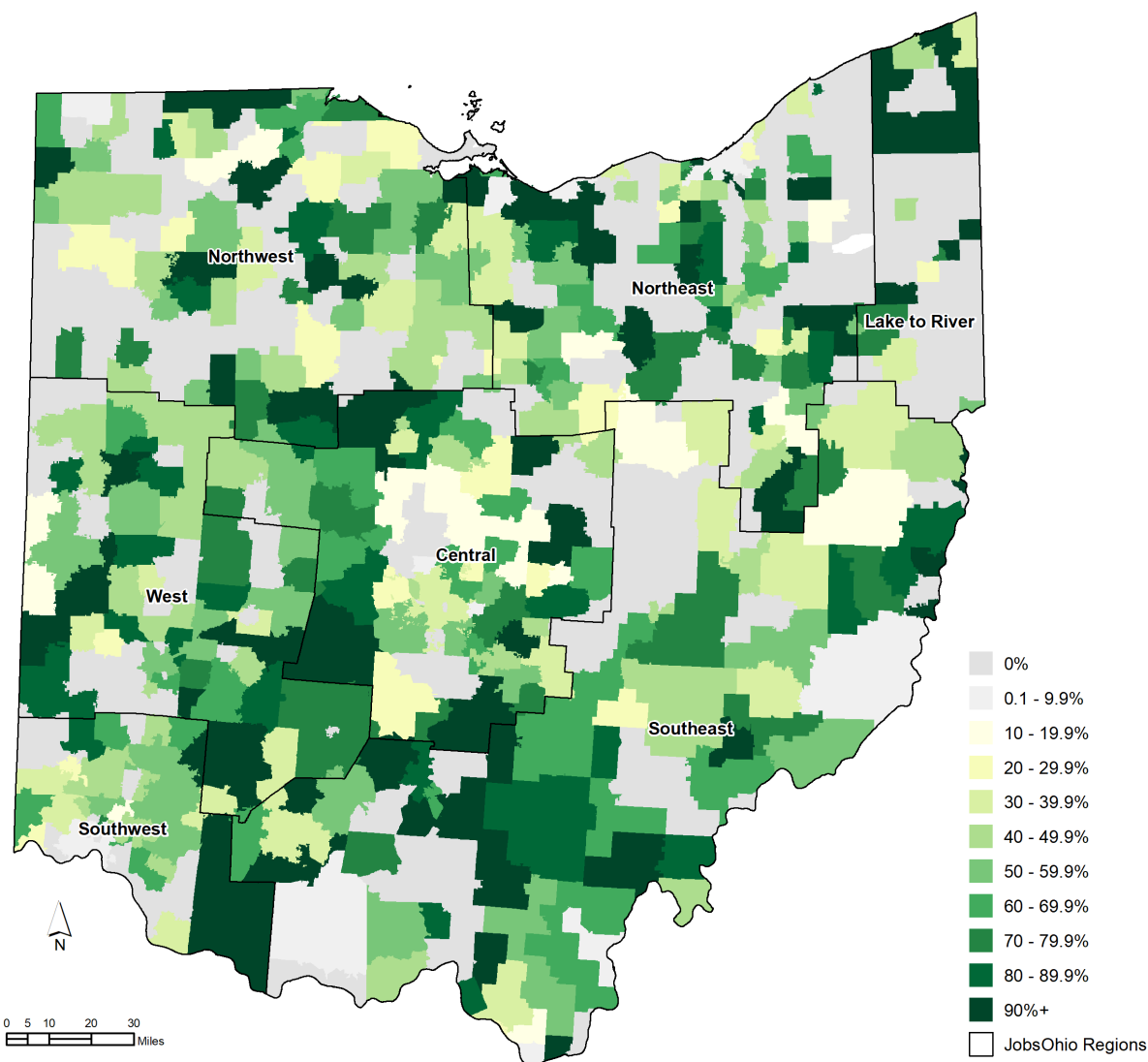

Figure 2 illustrates the percentage of students in grades 7-8 who generated CTE FTE and completed a CTE course located at a traditional public district (inclusive of JVSD satellite courses) with a curriculum code of VM in school year 2024 within the JobsOhio Regions.

Appendix A: Middle School CTE Participation Maps

Figure 3: Percent of Middle School Students Participating in Exploratory CTE by District within Career-Technical Planning District (CTPD) Area, School Year 2024
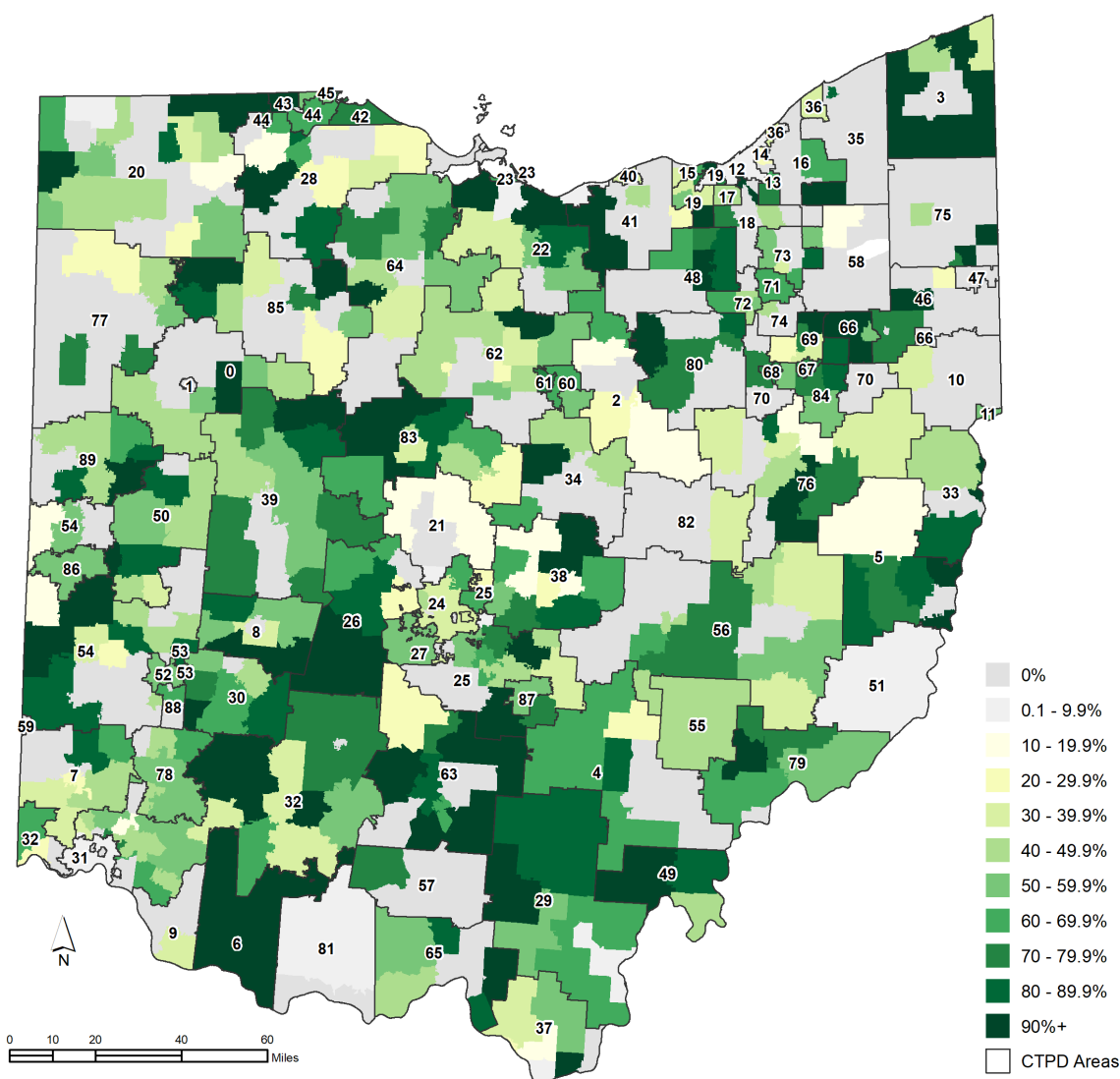

Figure 3 illustrates the percentage of students in grades 7-8 who generated CTE FTE and completed a CTE course located at a traditional public district (inclusive of JVSD satellite courses) with a curriculum code of VM in school year 2024 within Career-Technical Planning Districts (CTPD).

Appendix B: High School CTE Participation Maps

Figure 1: Percent of High School Students Participating in CTE by District, School Year 2024

Legend:
- Vocational Schools
- Counties
- District Lines
- 0%
- 0.1 - 9.9%
- 10 - 19.9%
- 20 - 20.9%
- 30 - 39.9%
- 40 - 49.9%
- 50 - 59.9%
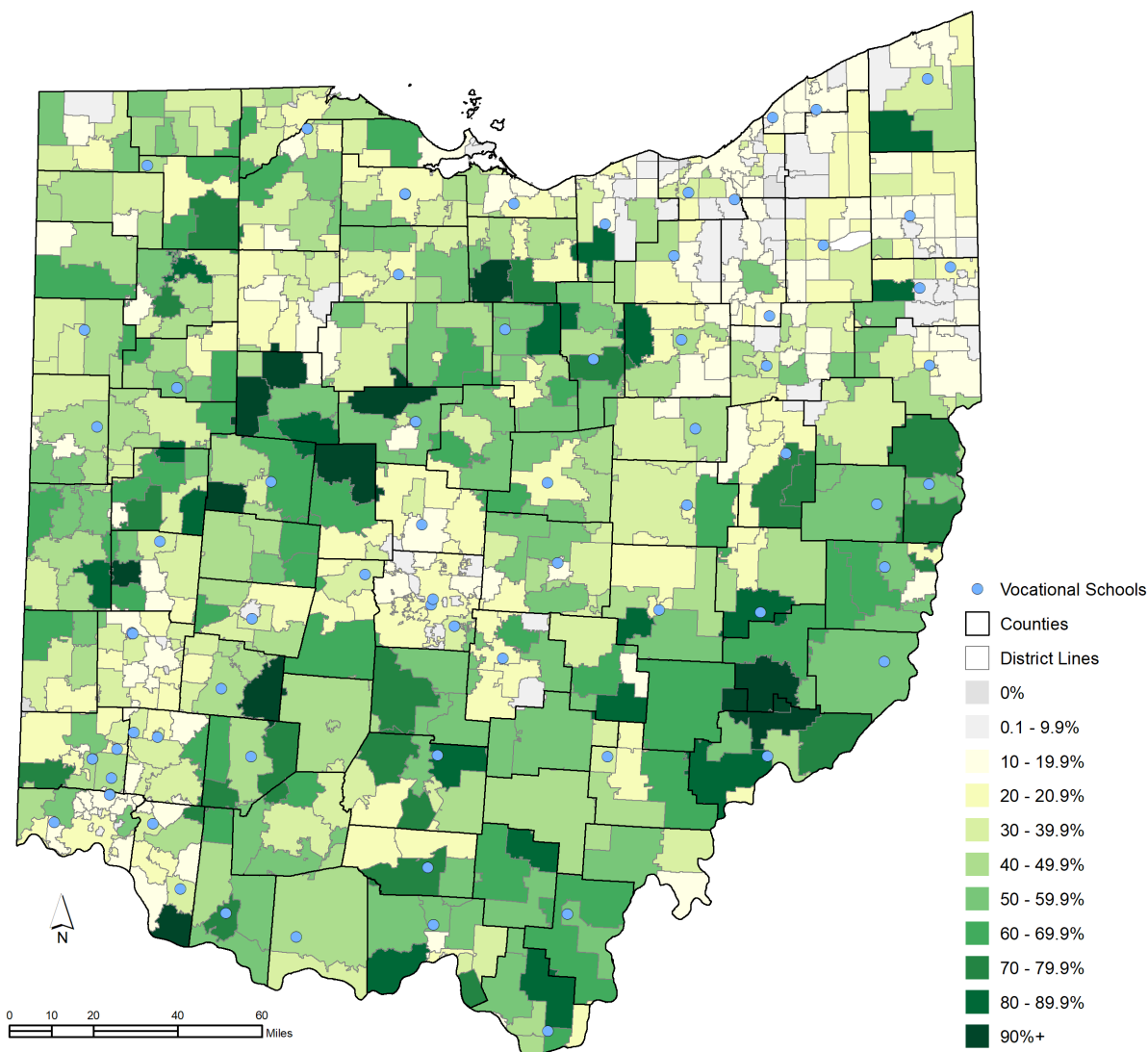- 60 - 69.9%
- 70 - 79.9%
- 80 - 89.9%
- 90%+

Figure 1 depicts the percentage of students participating in grades 9-12 who generated CTE FTE and completed a CTE course with a curriculum code of VT or PS aligned to a workforce development program in school year 2024. Students taking CTE coursework at a vocational school count in the sending district.

Department of Education & Workforce

Appendix B: High School CTE Participation Maps

Figure 2: Percent of High School Students Participating in CTE by District Within JobsOhio Region, School Year 2024
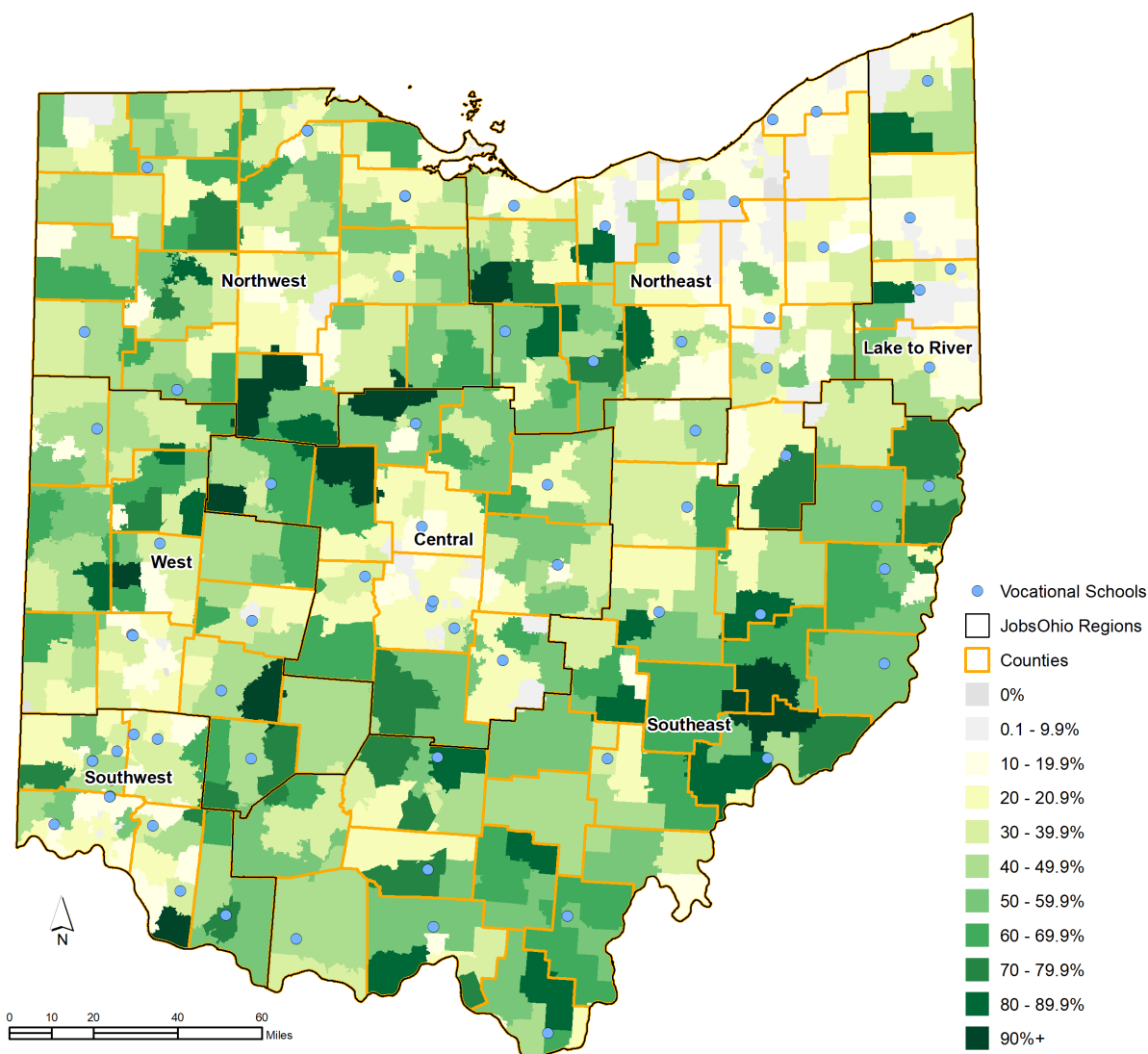

Figure 2 depicts the percentage of students participating in grades 9-12 who generated CTE FTE and completed a CTE course with a curriculum code of VT or PS aligned to a workforce development program in school year 2024 within the JobsOhio Regions. Students taking CTE coursework at a vocational school count in the sending district.

Appendix B: High School CTE Participation Maps

Figure 3: Percent of High School Students Participating in CTE by District within Career-Technical Planning District (CTPD) Area, School Year 2024
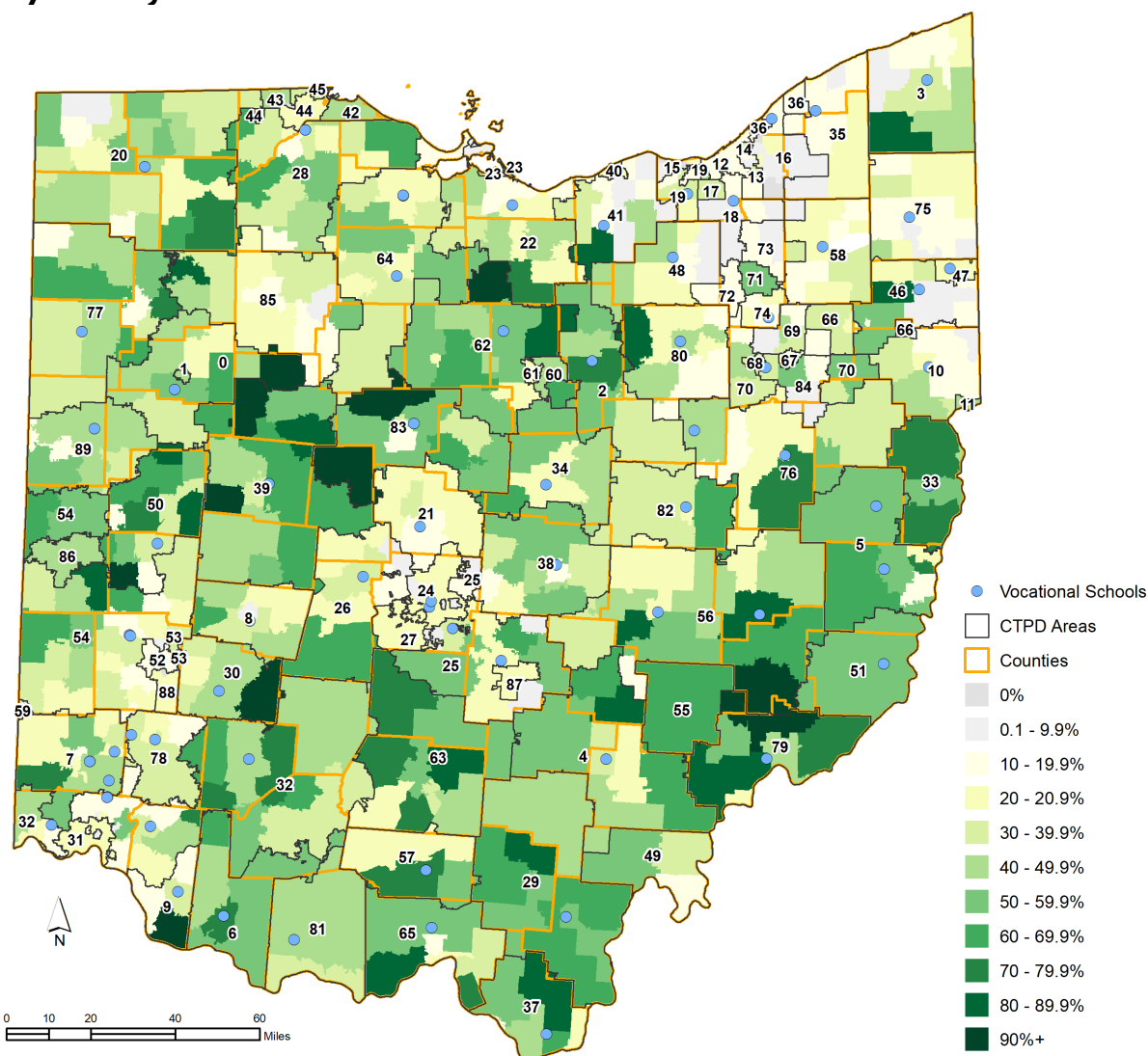

Figure 3 depicts the percentage of students participating in grades 9-12 who generated CTE FTE and completed a CTE course with a curriculum code of VT or PS aligned to a workforce development program in school year 2024 within the Career-Technical Planning Districts (CTPD) . Students taking CTE coursework at a vocational school count in the sending district.

Department of Education & Workforce

Appendix B: High School CTE Participation Maps

Figure 4: Percent of High School Students Participating in CTE at a Joint Vocational School by Sending District, School Year 2024

Legend:
- 0%
- 0.1 - 9.9%
- 10 - 19.9%
- 20 - 29.9%
- 30 - 39.9%
- 40 - 49.9%
- 50 - 59.9%

Figure 4 illustrates the percentage of students in grades 9-12 who generated CTE FTE and completed a CTE course at a vocational school (excluding JVSD satellite courses) with a curriculum code of VT or PS aligned to a workforce development program in school year 2024.

Department of Education & Workforce

Appendix B: High School CTE Participation Maps

Figure 5: Percent of High School Students Participating in CTE at a Joint Vocational School by Sending District, within JobsOhio Region, School Year 2024
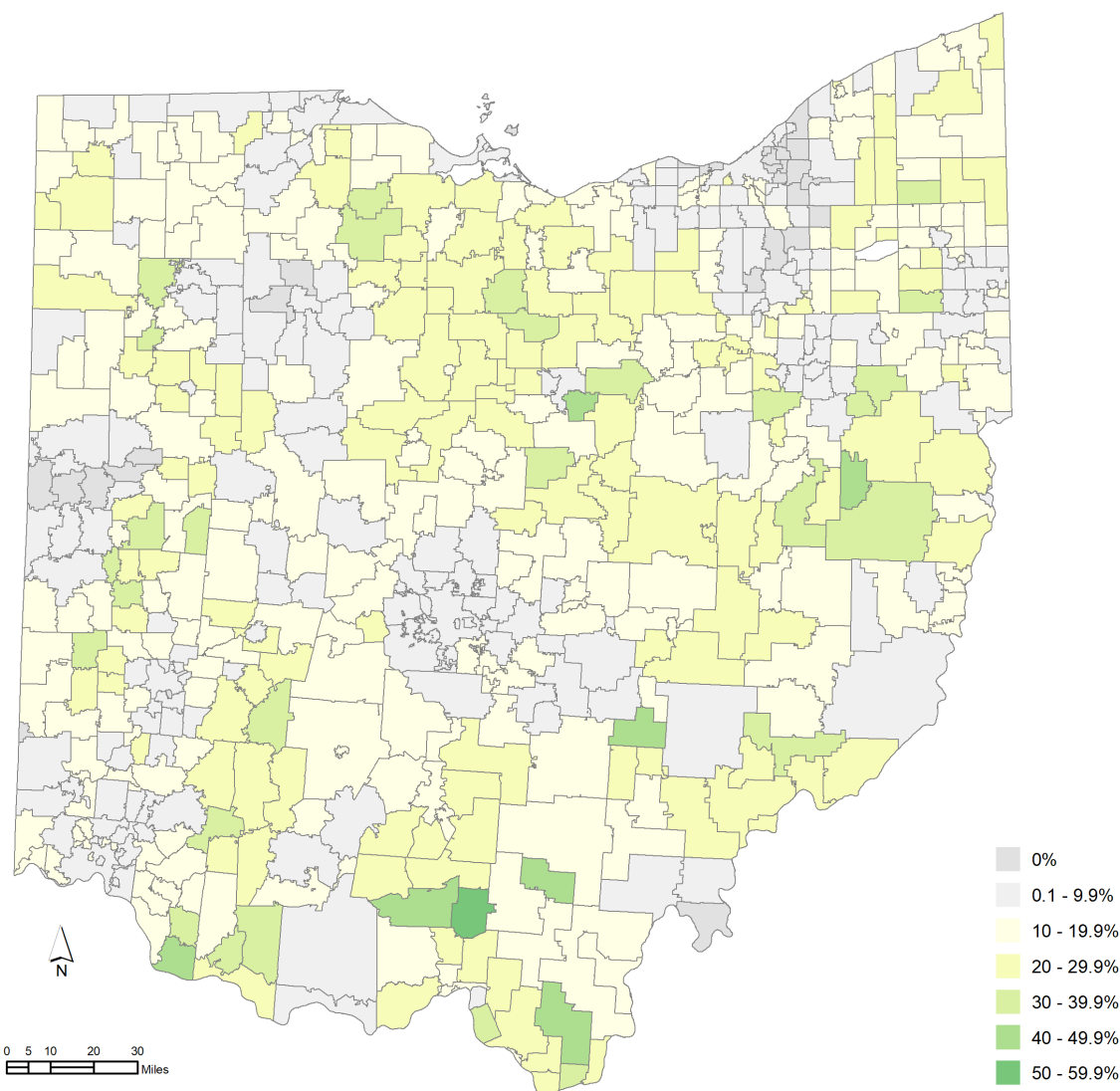

Figure 5 illustrates the percentage of students in grades 9-12 who generated CTE FTE and completed a CTE course at a vocational school (excluding JVSD satellite courses) with a curriculum code of VT or PS aligned to a workforce development program in school year 2024 within the JobsOhio Regions.

Department of Education & Workforce

Appendix B: High School CTE Participation Maps

Figure 6: Percent of High School Students Participating in CTE at a Joint Vocational School by Sending District, within Career-Technical Planning District (CTPD) Area, School Year 2024
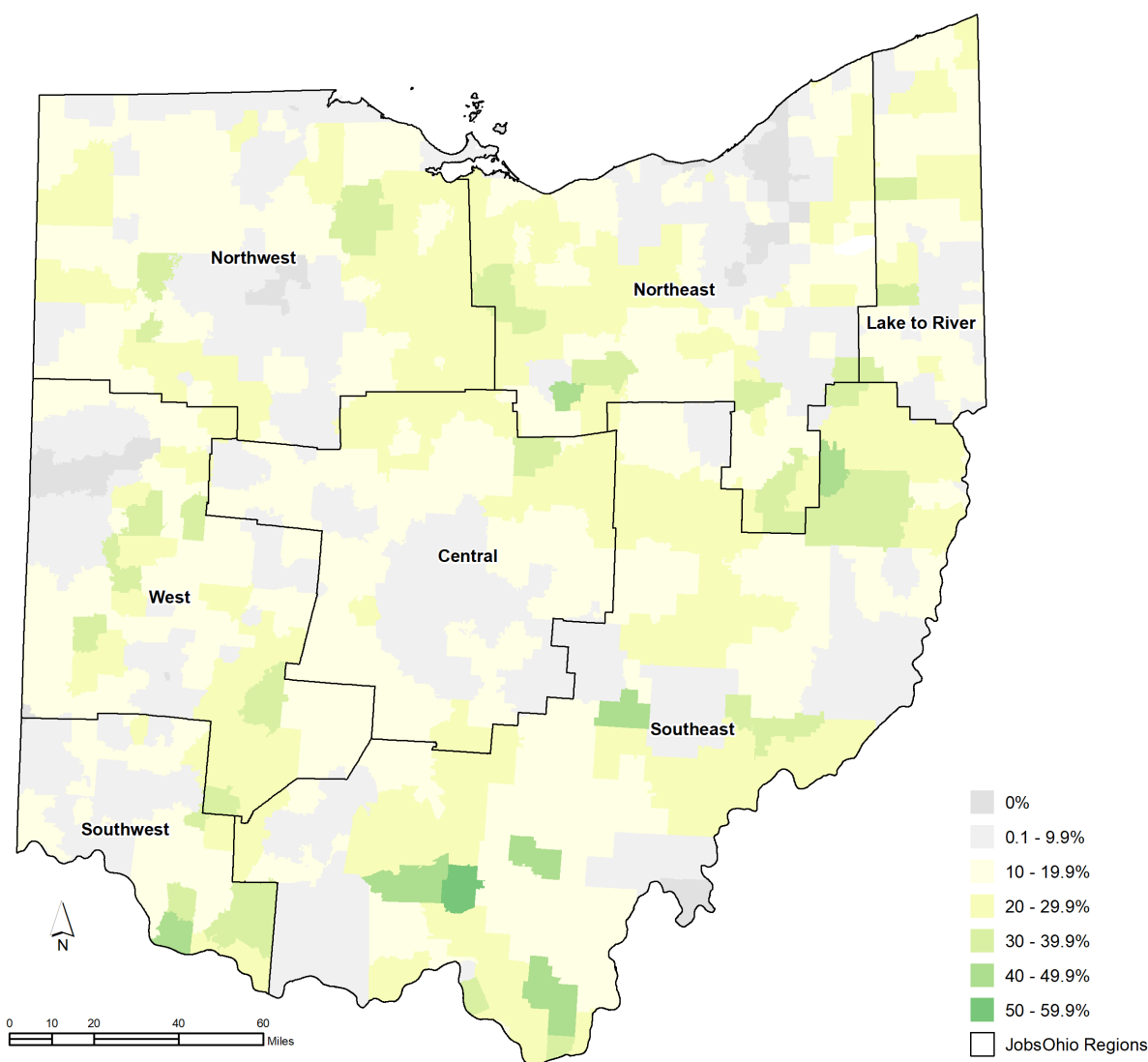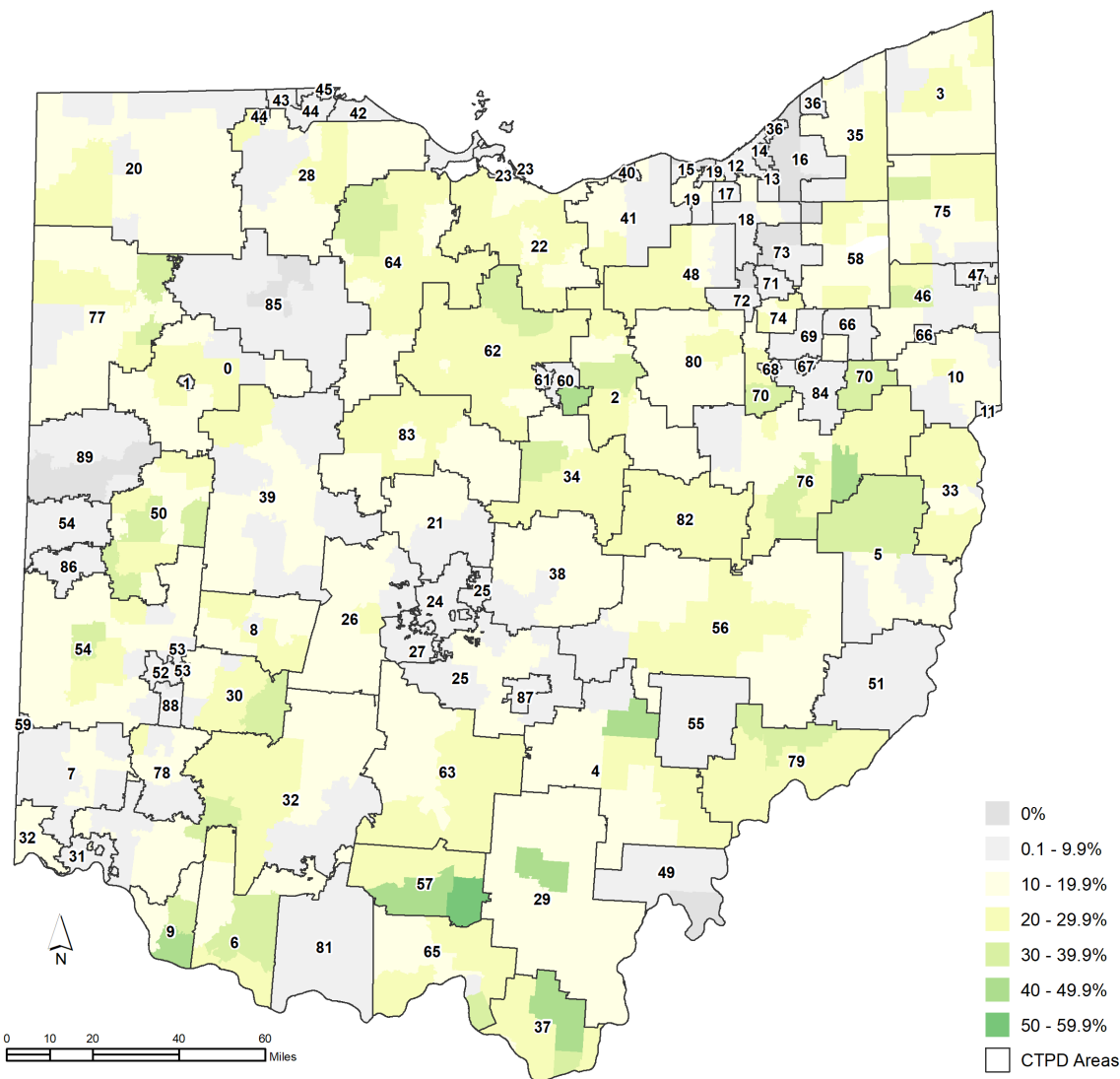

Figure 6 illustrates the percentage of students in grades 9-12 who generated CTE FTE and completed a CTE course at a vocational school (excluding JVSD satellite courses) with a curriculum code of VT or PS aligned to a workforce development program in school year 2024 within the Career-Technical Planning Districts (CTPD).

Appendix B: High School CTE Participation Maps

Figure 7: Percent of High School Students Participating in CTE by District, School Year 2024

Legend:
- 0%
- 0.1 - 9.9%
- 10 - 19.9%
- 20 - 29.9%
- 30 - 39.9%
- 40 - 49.9%
- 50 - 59.9%
- 60 - 69.9%
- 70 - 79.9%
- 80 - 89.9%
- 90%+

Figure 7 displays the percentage of students in grades 9-12 who generated CTE FTE and completed a CTE course located at a traditional public district (inclusive of JVSD satellite courses) with a curriculum code of VT or PS aligned to a workforce development program in school year 2024.

Department of
Education &
Workforce

Appendix B: High School CTE Participation Maps

Figure 8: Percent of High School Students Participating in CTE by District, within JobsOhio Region, School Year 2024
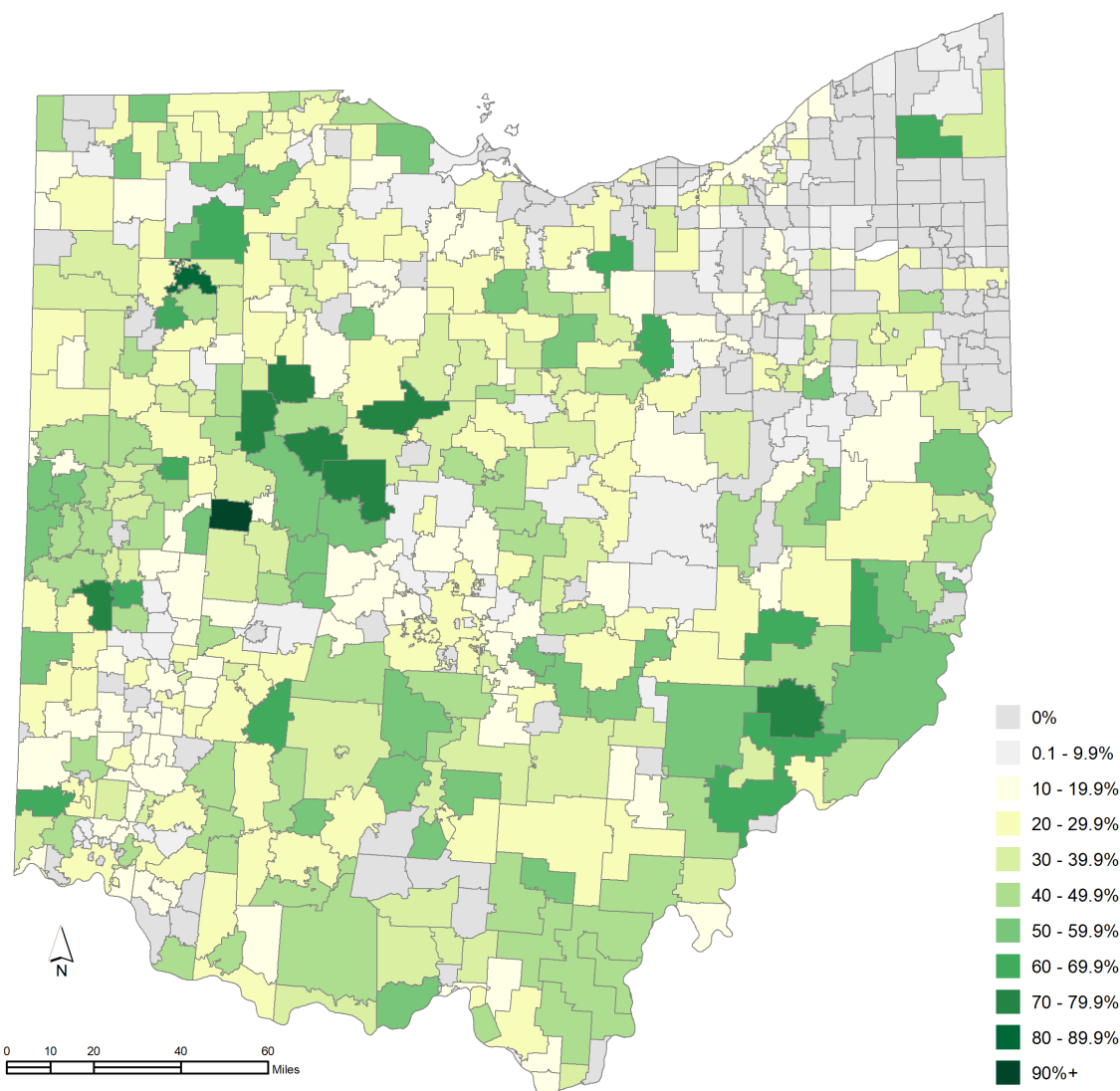

Figure 8 displays the percentage of students in grades 9-12 who generated CTE FTE and completed a CTE course located at a traditional public district (inclusive of JVSD satellite courses) with a curriculum code of VT or PS aligned to a workforce development program in school year 2024 within the JobsOhio Regions.

Appendix B: High School CTE Participation Maps

Figure 9: Percent of High School Students Participating in CTE by District, within Career-Technical Planning District (CTPD) Area, School Year 2024
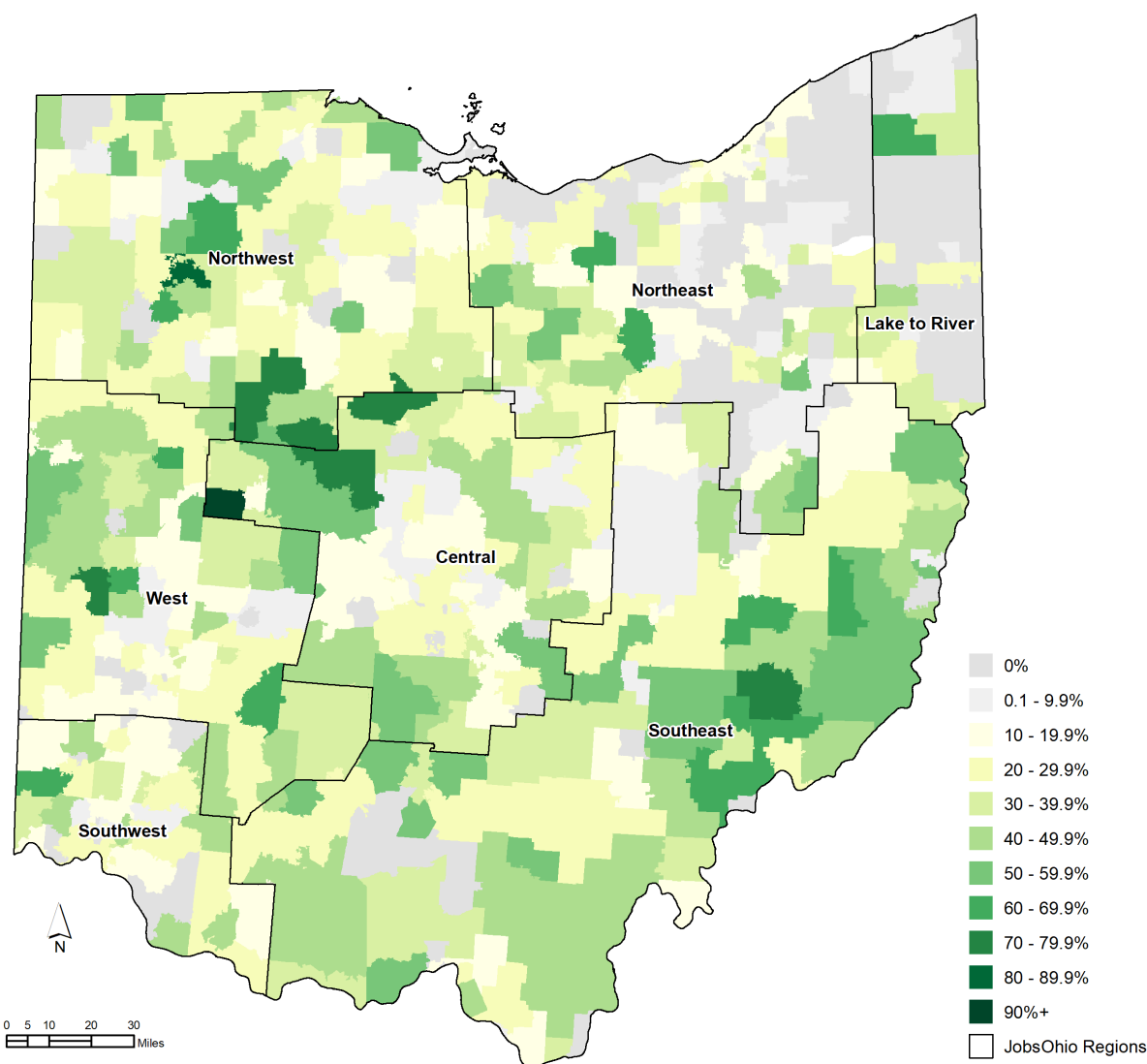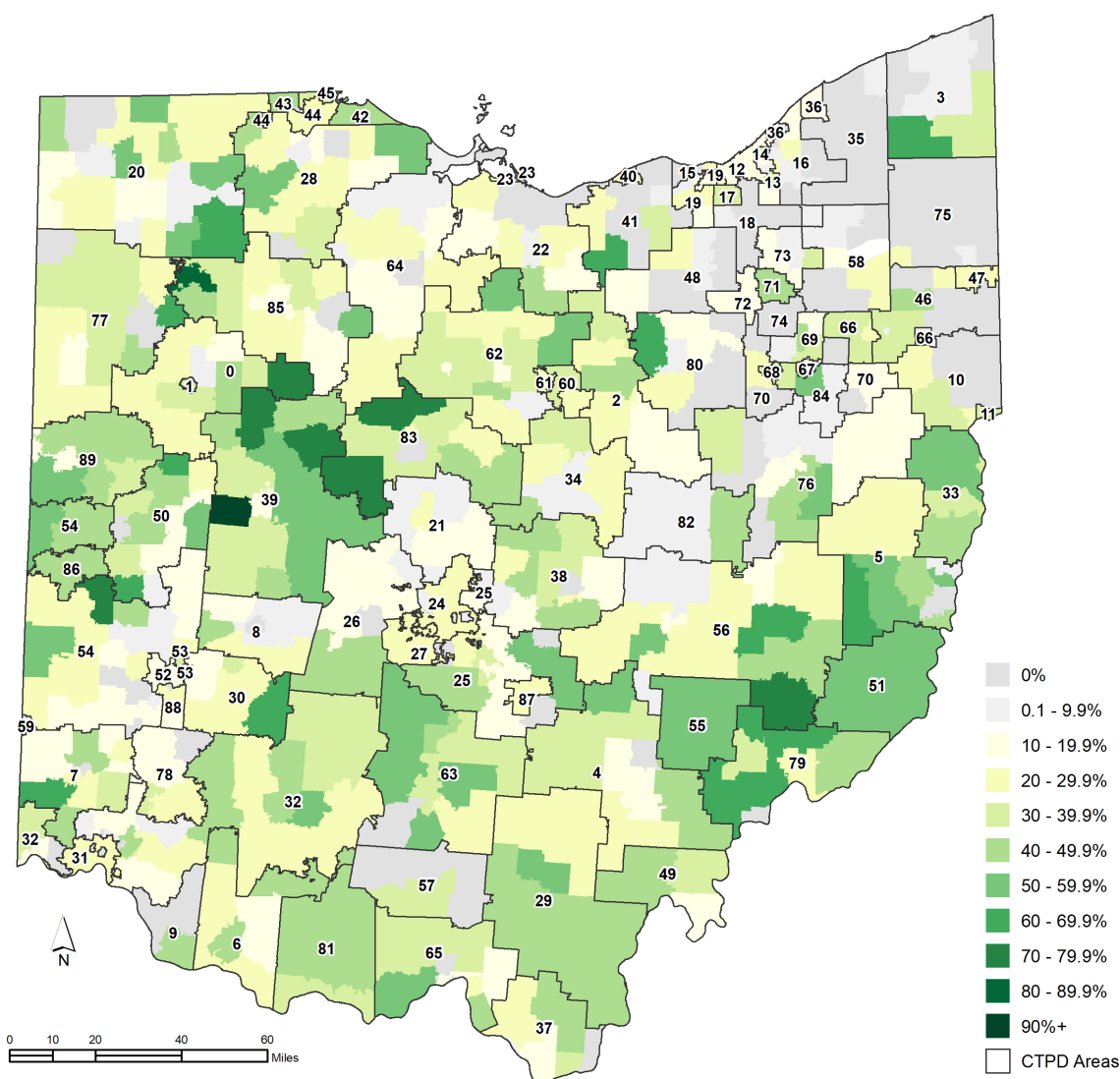

Figure 8 displays the percentage of students in grades 9-12 who generated CTE FTE and completed a CTE course located at a traditional public district (inclusive of JVSD satellite courses) with a curriculum code of VT or PS aligned to a workforce development program in school year 2024 within the Career-Technical Planning Districts (CTPD).

MAP ID	CTPD IRN	CTPD
0	200001	Apollo JVSD
1	200002	Lima City CTPD
2	200003	Ashland Co/West Holmes JVSD
3	200004	Ashtabula County Technical and Career Center JVSD
4	200005	Tri-County JVSD
5	200006	Belmont-Harrison Area JVSD
6	200007	Southern Hills JVSD
7	200008	Butler County JVSD
8	200011	Springfield-Clark County JVSD
9	200012	U S Grant JVSD
10	200015	Columbiana County JVSD
11	200016	East Liverpool City CTPD
12	200019	Cleveland Municipal CTPD
13	200020	Tri-Heights Career Prep Consortium CTPD
14	200021	East Cleveland City CTPD
15	200023	Lakewood City CTPD
16	200025	Mayfield Excel T.E.C.C. CTPD
17	200026	Parma City CTPD
18	200027	Cuyahoga Valley JVSD
19	200028	Polaris JVSD
20	200030	Four County JVSD
21	200031	Delaware County JVSD
22	200032	EHOVE JVSD
23	200033	Sandusky City CTPD
24	200035	Columbus City CTPD
25	200036	Eastland JVSD
26	200037	Tolles Career & Technical Center JVSD
27	200038	South-Western City CTPD
28	200039	Penta County JVSD
29	200040	Gallia-Jackson-Vinton JVSD
30	200042	Greene County JVSD
31	200043	Cincinnati City CTPD
32	200044	Great Oaks Career Campuses JVSD
33	200050	Jefferson County JVSD
34	200051	Knox County JVSD
35	200052	Auburn JVSD
36	200053	Lake Shore Compact CTPD
37	200054	Lawrence County JVSD
38	200055	Licking County JVSD
39	200056	Ohio Hi-Point JVSD
40	200057	Lorain City CTPD
41	200058	Lorain County JVSD
42	200059	Oregon City CTPD
43	200060	Sylvania City CTPD
44	200061	Toledo City CTPD
45	200062	Washington Local CTPD
46	200063	Mahoning County JVSD

Department of Education & Workforce

Appendix C: CTPD Directory (2/2)

MAP ID	CTPD IRN	CTPD
47	200064	Youngstown City CTPD
48	200066	Medina County JVSD
49	200067	Meigs Local CTPD
50	200069	Upper Valley JVSD
51	200070	Switzerland of Ohio Local CTPD
52	200071	Dayton City CTPD
53	200072	Mad River Local CTPD
54	200073	Miami Valley Career Technology JVSD
55	200074	Morgan Local CTPD
56	200075	Mid-East Ohio JVSD
57	200077	Pike County Career Technology Center JVSD
58	200078	Maplewood Area JVSD
59	200079	College Corner Local CTPD
60	200081	Madison Local CTPD
61	200082	Mansfield City CTPD
62	200083	Pioneer CTC JVSD
63	200084	Pickaway-Ross County JVSD
64	200085	Vanguard-Sentinel JVSD
65	200086	Scioto County JVSD
66	200089	Alliance City CTPD
67	200090	Canton City CTPD
68	200092	Massillon City CTPD
69	200093	Stark County Career Compact CTPD
70	200094	Stark County Area JVSD
71	200095	Akron City CTPD
72	200096	Four City Compact CTPD
73	200097	Six District Voc Ed Compact CTPD
74	200098	Portage Lakes JVSD
75	200099	Trumbull County JVSD
76	200101	Buckeye JVSD
77	200102	Vantage JVSD
78	200103	Warren County JVSD
79	200104	Washington County JVSD
80	200105	Wayne County JVSD
81	200107	Ohio Valley Local CTPD
82	200108	Coshocton County JVSD
83	200111	Tri-Rivers JVSD
84	200115	Canton Local CTPD
85	200116	Millstream Career Cooperative CTPD
86	200117	Greenville City CTPD
87	200119	Lancaster City CTPD
88	200120	Centerville-Kettering-Oakwood CTPD
89	200121	Tri Star CTPD

Department of
Education &
Workforce

Appendix D: Acronyms & Definitions

Acronyms

Term	Acronym
Career Technical Assurance Guide	CTAG
Career Technical Education	CTE
Career Technical Planning District	CTPD
Joint Vocational School District	JVSD
Ohio Department of Education and Workforce	DEW
The curriculum code CTE courses offered to post secondary students, grades 9-12	PS
The curriculum code for 30–120-hour, exploratory, introductory level CTE courses offered to students grades 7-10.[1]	VM
The curriculum code programs that are delivering the core of a CTE workforce development pathway, delivered at rigor level of high school credit	VT
Workforce Development	WFD

1. Expanding Career-Technical Education in Ohio, DEW et al., 2022.

Department of Education & Workforce