

Ohio Broadband & 5G Workforce Asset Map Dashboard User Guide

*Ohio Education Research Center
August 2025*

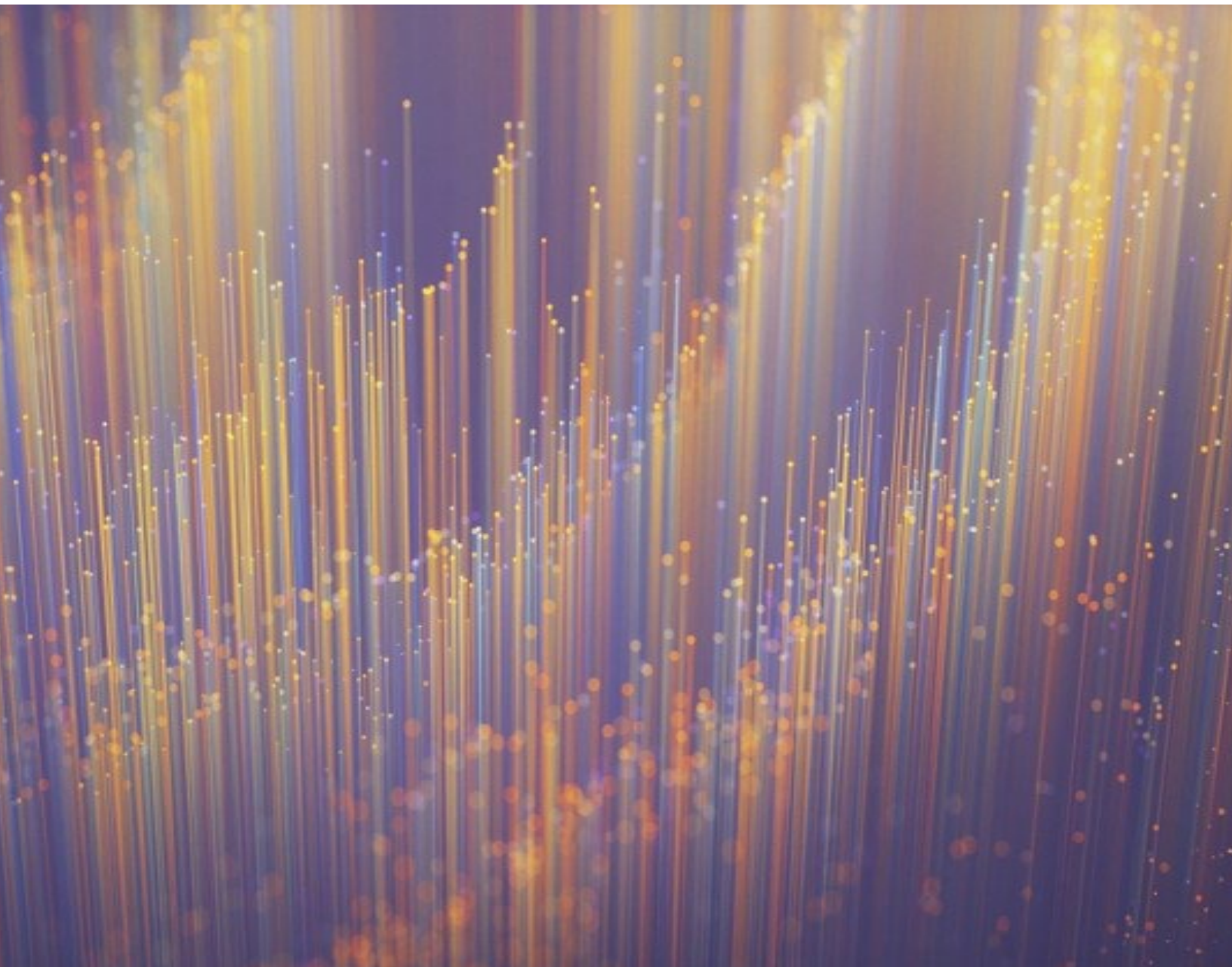


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Overview

The Ohio Broadband & 5G Workforce Asset Map Dashboard helps users explore education, training, and labor market trends in Ohio's Broadband and 5G sector, including:

- Where Broadband & 5G education and training programs are located.
- Which apprenticeship opportunities are available across the state.
- Which post-secondary institutions are preparing students for Broadband & 5G careers.
- What occupations and employers are driving demand in the sector and related positions.
- Which skills are most in demand.
- How graduate trends vary by program type, year, and region.

To answer these questions, the dashboard provides state, regional, and county-level analysis of training programs, job postings, skills, and graduate supply.

Purpose

The dashboard is designed to:

- Identify Broadband & 5G training and career pathway opportunities for individuals.
- Provide employers with insight into hiring trends, skill needs, and workforce availability.
- Help educators and training providers align curriculum with industry demand.
- Support workforce professionals and policymakers in planning and resource allocation.

The dashboard brings together data from multiple sources to highlight workforce supply and demand trends, supporting the implementation of Ohio's Broadband and 5G Workforce Strategy.

Audience

The dashboard is intended for:

- **Students and job seekers** – to locate training programs, apprenticeships, and institutions offering Broadband & 5G-related education.
- **Employers** – to explore hiring trends, identify in-demand skills, and understand regional talent availability.
- **Educators and training providers** – to assess program alignment with industry needs and identify opportunities for new or expanded offerings.
- **Workforce development professionals** – to connect stakeholders, guide program design, and target outreach.
- **Policy and economic development leaders** – to inform investments and monitor workforce trends within the Broadband & 5G sector.

Education and Training

Discover Ohio's training programs, apprenticeships, and post-secondary institutions offering Broadband & 5G focused education and career pathways.

Ohio Broadband & 5G Sector Partnership Programs (Map and Table)

Purpose:

Visualize the distribution and institution program information of Broadband & 5G training programs throughout the state.

Description:

Each telecommunications tower represents an education and training program created by Ohio Broadband & 5G Sector Partnership members. Counties are grouped with distinct colors to represent 6 state regions.

Regions: Select or deselect regions by clicking the "x" next to the region name. Use the search box to add regions back.

County: Filter results by specific county within the selected region.

Institution: Select a specific institution to view only their programs.

Training Program: Filter by program name to narrow the list.

Color-Coded Regions

Region
(All)

County
(All)

Institution
(All)

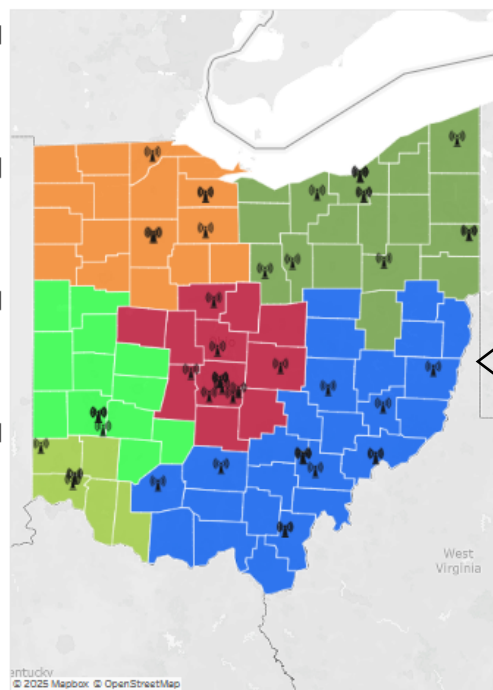
Training Program
(All)

Region

- Central
- Northeast
- Northwest
- Southeast
- Southwest
- West

Map of Programs

Telecommunications Tower: Click on the icon to read more information



Institution	#	Training Program	Email for More Information	Visit this Website to Learn More
Ashland University		5G Readiness	ameeka2@ashland.edu	https://www.ashland.edu/5g-6
Ashtabula Tech		Certified Fiber Optic Technician	lfelestrand@asu.edu	https://www.atech.edu/
Belmont-Harrison Career Center		Certified Fiber Optic Technician	richard.schoene@bhccenters.com	http://bhccenters.com/
Buckeye Hills Career Center		Broadband Infrastructure Training Program	nashj@buckeyehills.net	https://www.buckeyehills.net/
		Utility Construction Installer	nashj@buckeyehills.net	https://www.buckeyehills.net/
C-TEC of Licking County		Broadband Infrastructure Training Program	cete-broadband@osu.edu	https://www.c-tec.edu/c-tec/
Cincinnati State Community College		Broadband Infrastructure Training Program	erika.wick@cincinnati.state.edu	https://www.cincinnati.state.edu/
Columbus City Schools		Broadband Infrastructure Training Program	cete-broadband@osu.edu	https://www.ccooh.us/Page/12
Cuyahoga Community College		Associate's Degree in Electrical Engineering Technology	jason.abbott@tri-c.edu	https://www.tri-c.edu/program
		Certified Fiber Optic Technician	jason.abbott@tri-c.edu	https://www.tri-c.edu/workfor

Table format of map view: Slide the side and bottom bar to read more

Ohio Broadband & 5G Apprenticeship Opportunities (Map and Table)

Purpose:

Visualize the distribution of apprenticeship sponsors and their programs' affiliated occupations.

Description:

Each gear represents an apprenticeship associated with the Ohio Department of Job and Family Service's ApprenticeshipOhio program. Counties are grouped with distinct colors to represent 6 state regions.

Regions: Select or deselect regions by clicking the "x" next to the region name. Use the search box to add regions back.

County: Filter results by specific county within the selected region.

Occupation: Select a specific occupation to view only their programs.

Apprenticeship Sponsor: Select a sponsor to view only their programs.

Color-Coded Regions

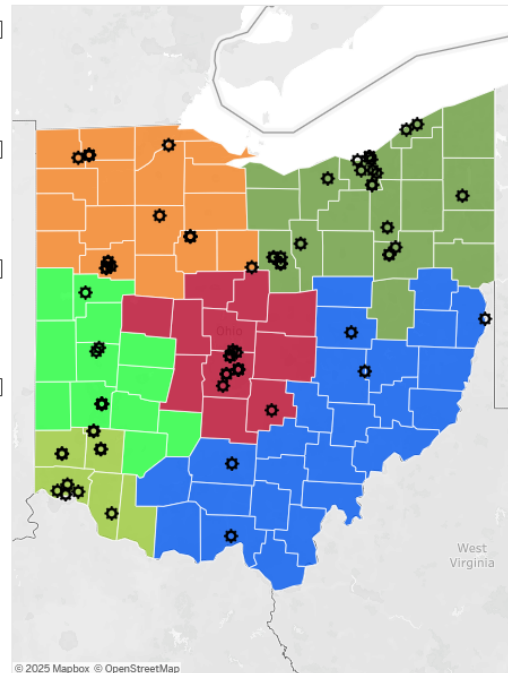
Region
[All]

County
[All]

Occupation
[All]

Apprenticeship Sponsor
[All]

Region
☒ Central
☒ Northeast
☒ Northwest
☒ Southeast
☒ Southwest
☒ West



Map of Apprenticeships

Gear: Click on the icon to read more information

Apprenticeship Sponsor	Occupation	Email for More Information	Address
American Power and Light, LLC	Line Installer Repairer	Julie.Mettler@jfs.ohio.gov	470 Olde Worthington Rd. Ste.
Apollo Career Center	Construction Craft Laborer	Anastasia.Campbell@jfs.ohio.gov	3325 Shawnee Road
	Electrician	Anastasia.Campbell@jfs.ohio.gov	3325 Shawnee Road
Ashland County - West Holmes Career Center	Electrician Maintenance	Traci.Carter@jfs.ohio.gov	1783 State Route 60

Table format of map view: Slide the side and bottom bar to read more

Ohio Post-Secondary Education Institutions Preparing Students for Broadband & 5G Occupations (Map and Table)

Purpose:

Visualize the distribution and institution information of Broadband & 5G post-secondary education programs throughout the state.

Description:

Each graduation cap represents an education and training program in Ohio that offers credentials associated with career opportunities in the Broadband & 5G sector. Each region is represented by a distinct color.

Regions: Select or deselect regions by clicking the "x" next to the region name. Use the search box to add regions back.

County: Filter results by specific county within the selected region.

Control: Filter results by specific institution type

Level: Filter results by level of award

Color-Coded Regions

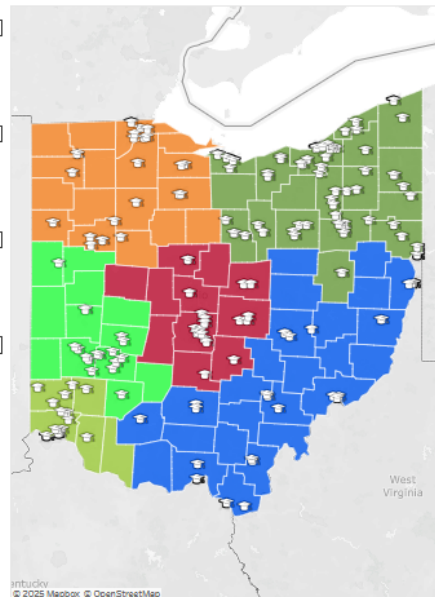
Region
(All)

County
(All)

Control
(All)

Level
(All)

Region
■ Central
■ Northeast
■ Northwest
■ Southeast
■ Southwest
■ West



Map of Programs

Graduation caps:
Click on the icon to read more information

Institution Name	Visit this Website to Learn More	Level	Control
Air Force Institute of Technology-Graduate School of Engineering & Management	https://www.afit.edu/	Four or more years	Public
Antioch University	https://www.antioch.edu/	Four or more years	Private
Apollo Career Center	https://www.apollocareercenter.com/adult-education/	Less than 2 years (below associate)	Public
Ashland County-West Holmes Career Center	https://www.acvchcc.org/	Less than 2 years (below associate)	Public
Ashland University	https://www.ashland.edu/	Four or more years	Private
Ashtabula County Technical and Career Campus	https://www.atech.edu/	Less than 2 years (below associate)	Public
ATA College-Cincinnati	https://www.ata.edu/	Four or more years	Private
Auburn Career Center	https://www.auburncc.org/	Less than 2 years (below associate)	Public
Baldwin Wallace University	https://www.bwu.edu/	Four or more years	Private
Belmont College	https://www.belmontcollege.edu/	At least 2 but less than 4 years	Public
Bluffton University	https://www.bluffton.edu/	Four or more years	Private

Table format of map view: Slide the side and bottom bar to read more

Workforce Analysis

Explore Broadband & 5G job postings by geography, occupation, and employer.

Job Postings by Employer and Occupation (Concentric Bubble Chart)

Purpose:

Visualize the distribution and volume of Broadband & 5G job postings by specific employer and occupation grouping combinations.

Description:

Each bubble represents an employer–occupation pairing. The size of the bubble is relative to the total number of job postings. Occupation groups appear as nested rings, and colors differentiate occupation groups. Below this visual is a table view of the same data for easier viewing or export.

Regions: Select or deselect regions by clicking the "x" next to the region name. Use the search box to add regions back.

Date Range: Adjust the slider to modify the postings date shown



Hover: View employer name, occupation details, and posting counts.

Click Bubble: Access detailed job posting information for each employer–occupation combination.

Occupation Group: Click on legend entries to filter specific groups. Will re-calculate and visualize only postings for that occupation group

- **Posting:** Individual job advertisement identified in TalentNeuron.
- **Date First Seen:** Initial date the posting appeared in the dataset.
- **Occupation Group:** Major occupational classification by SOC.

Workforce Demand Trends within the Broadband & 5G Sector (Line Chart)

Purpose:

Analyze the trends in job postings over time for Broadband & 5G occupations.

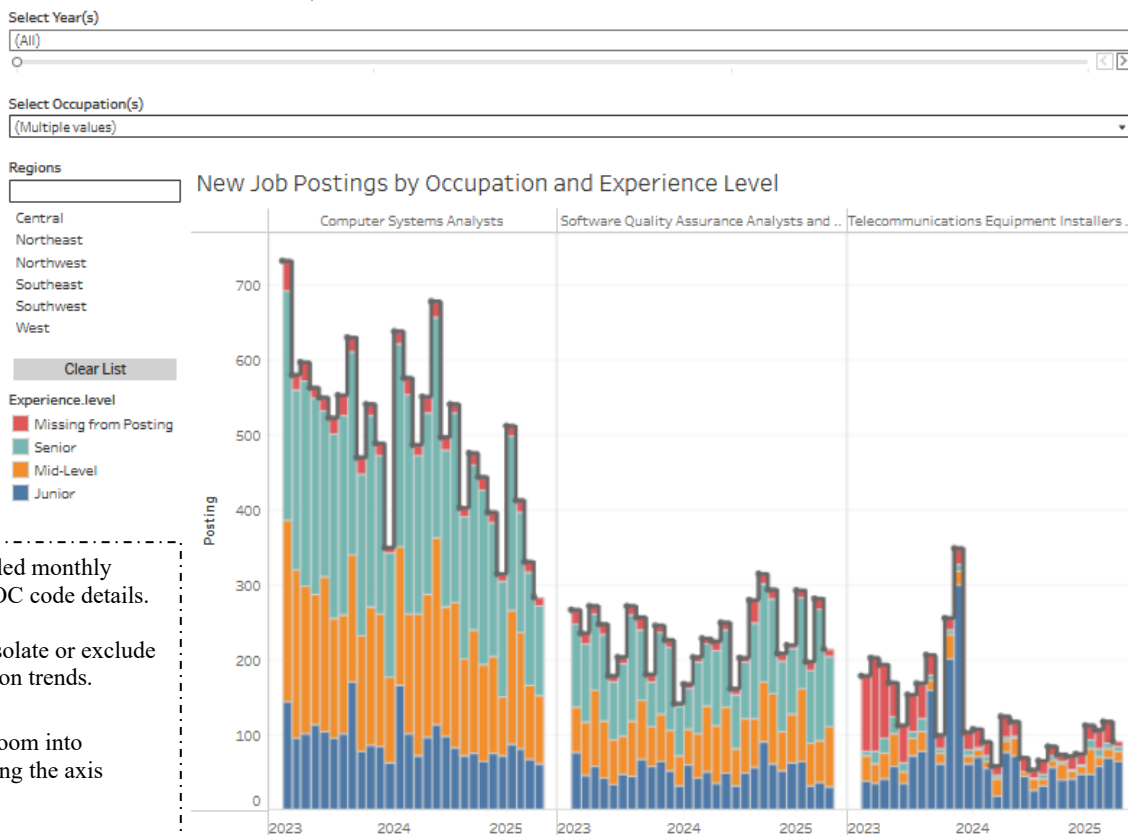
Description:

This bar chart shows job posting volumes over a selected period, segmented by occupation cluster.

SOC Code: Select occupations from the provided checklist.
Select 'All', then unselect 'All' to clear the list

Date Range: Adjust the date year by clicking through the arrows or moving the slider.

Regions:
Select or deselect regions by clicking the "x" next to the region name. Use the search box to add regions back.



Hover: View detailed monthly posting data and SOC code details.

Legend: Click to isolate or exclude individual occupation trends.

Navigation Tip: Zoom into specific periods using the axis zoom functionality.

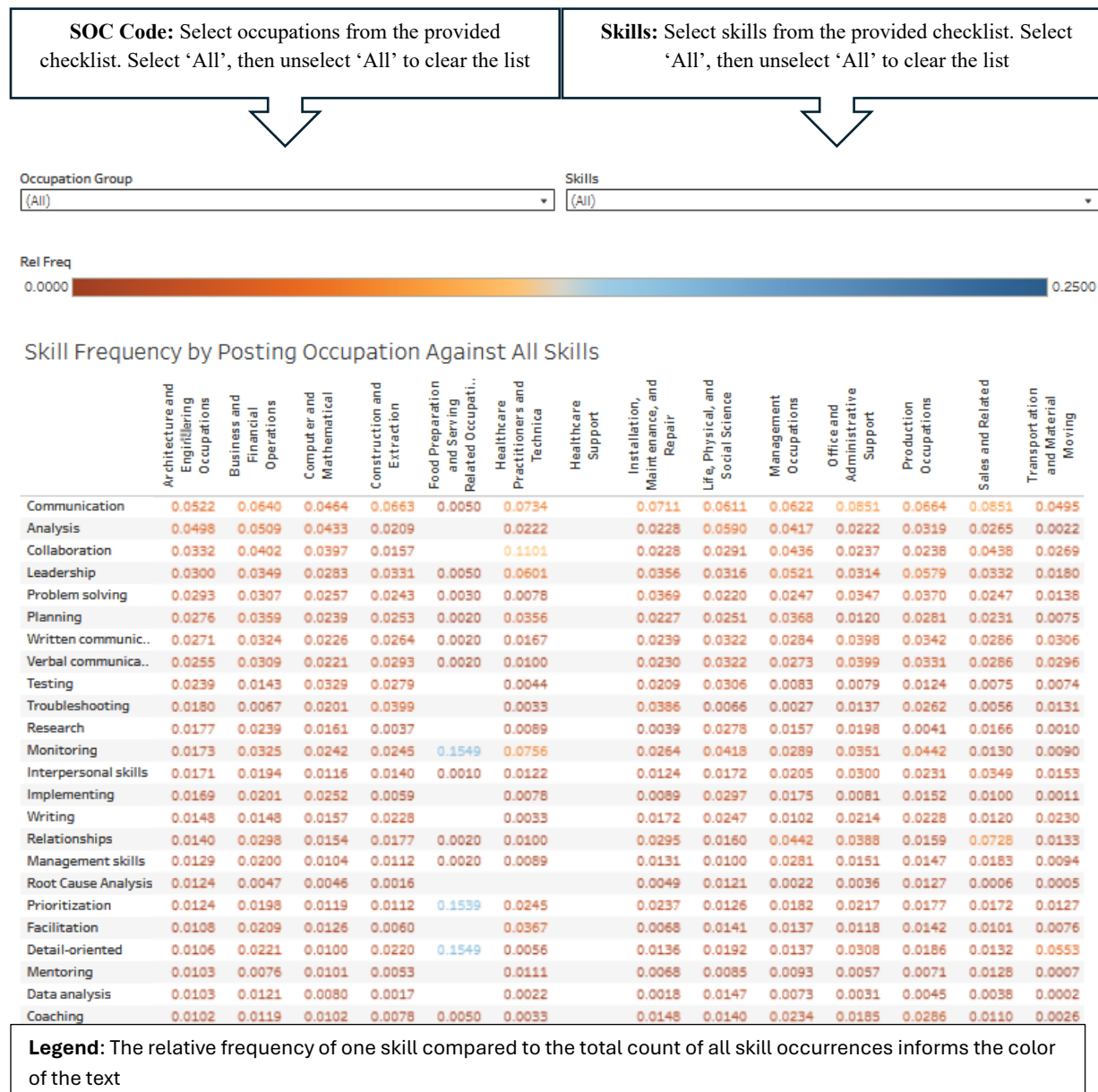
Skills Analysis by Occupation (Table)

Purpose:

Compare the prevalence of specific skills in Ohio job postings within occupation groupings.

Description:

Color-gradient table of skills frequency within occupational groupings to feature relative demand for each skill.



Graduate Trends

Analyze supply of Broadband & 5G-related graduates by program, year, and region.

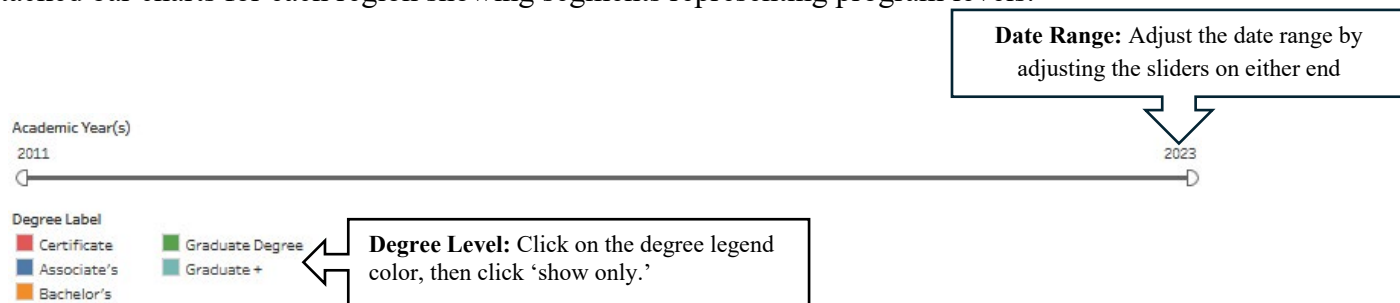
Graduates by Program Type (Stacked Bar Chart)

Purpose:

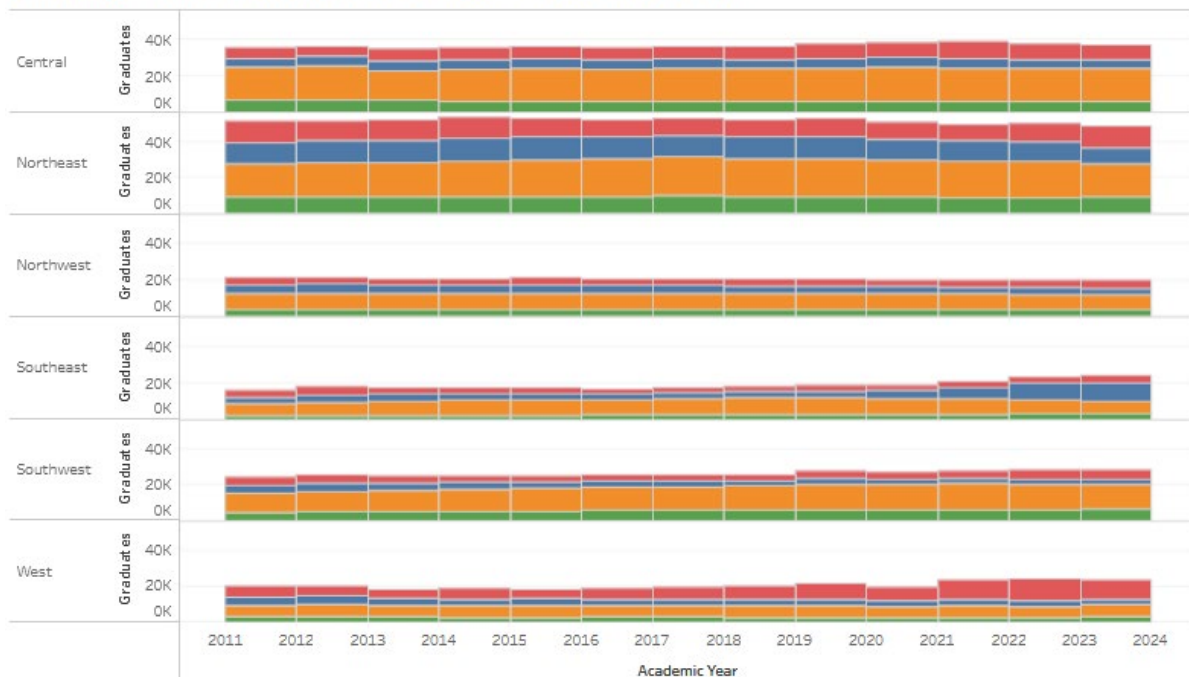
Show distribution of graduates from Broadband & 5G related fields across program categories and degree program levels.

Description:

Stacked bar charts for each region showing segments representing program levels.



Graduates from Broadband and 5G Related Programs by Region



Node Resources Content







Purpose:

The Region Profiles pages provide an overview of each Broadband & 5G “Node” in Ohio, combining regional context, resources, and key links for students, job seekers, employers, and the public. While the screenshot below features the Central Node, the layout and functionality are consistent for all nodes, including Northwest, Northeast, Southeast, West, and Southwest.

Description:

Each Region Profile includes:

- **Welcome Section** – A brief description of the node’s role in expanding broadband access and workforce development, along with the counties included in that region.
- **Latest News** – A map highlighting the counties in the node and a selection of current announcements, events, or featured articles relevant to the region.
- **Resources for Students** – Expandable sections with links to information on earning industry-recognized credentials, financial aid options, career mapping, and support services.
- **Resources for Job Seekers** – Expandable sections detailing career pathways, apprenticeship opportunities, in-demand skills, and where to find local job openings.
- **Resources for Business, Industry, and Employers** – Information on finding, retaining, and developing employees, joining advisory committees, and hosting apprentices.
- **About Broadband & 5G** – Background on why broadband matters and details on connectivity gaps within Ohio.

Central Region	Northeast Region	Northwest Region
		
Southeast Region	Southwest Region	West Region
		

These resources are subject to change under the guidance of each region as we work to include the resources and information which each individual node would like to be displayed within their region profile section.



Welcome to the Central Node!

Education, workforce, and community partners collaborate with employers across the broadband industry to drive innovation, bridge gaps, and connect globally in the Central Node region. This collective effort supports the implementation of Ohio's Broadband and 5G Workforce Strategy by expanding career awareness, delivering quality education and training programs, and leveraging funding to reduce participants' education and training costs. Our 11-county region includes Delaware, Fairfield, Franklin, Knox, Licking, Logan, Madison, Marion, Morrow, Pickaway, and Union counties. [Explore our website to learn more!](#)

Accordion:
Click through
each resource
topic area to
reveal additional
information for
the region

Resources for Students

- + Looking to earn an industry-recognized credential?
- + What financial aid options are available?
- + Looking for support?
- + How do I start mapping my career?

Resources for Job Seekers

- + What are career pathways in Broadband & 5G?
- + Is a Broadband & 5G apprenticeship right for me?
- + What are employers looking for?
- + Where are jobs available near me?

Resources for Business, Industry, and Employers

Latest News



Visit Central Broadband and
5G Website!

Learn more about how Central
Ohio is connecting the world, one
step at a time.

Visit Central Broadband and
5G Website!

[Ohio's Broadband & 5G Workforce
Strategy!](#)

Watch this video to learn more about the

The Region Profiles serve as an entry point for users to understand each node's geographic scope, workforce development focus, and available resources. They connect local context with statewide Broadband & 5G workforce data, enabling users to quickly locate relevant programs, opportunities, and contacts.

Support

Data Details

Selecting the Data Details tab at the top of the home page provides information about the data sources and interpretation of the metrics presented in the dashboard. This page lets you explore the underlying datasets, sources, and processing methods used in the Broadband & 5G Workforce Asset Map Dashboard.

Overview:

Selecting the **Data Details** tab at the top of the home page provides information about the datasets, definitions, and methodology used in the dashboard. This section explains how job postings, education and training providers, graduates, apprenticeships, and industry classification codes (SOC and CIP) are sourced, cleaned, and prepared for analysis. It also outlines the deduplication steps, crosswalk mappings, and classification criteria for identifying Broadband & 5G-related content.

Available Categories:

The Data Details page is organized into expandable sections for:

- **Job Postings Analytics** – Source, scope, and preparation of TalentNeuron job postings data, including deduplication, SOC mapping, and skill frequency methodology.
- **Education, Training, & Graduates** – IPEDS data integration, program level classification, and regional mapping for institutions and completions.
- **Apprenticeships** – Details from ApprenticeshipOhio, including sponsor-level occupations, program locations, and geographic mapping.
- **CIP Codes** – List of industry-relevant Classification of Instructional Programs (CIP) codes identified by the Sector Partnership.
- **SOC Codes** – Standard Occupational Classification (SOC) codes used to identify Broadband & 5G occupations.
- **Disclosures** – Notes on data limitations, coverage, and interpretation.
- **Have a Question?** – Contact information for content and technical support.

Contact Us

If you have any questions about the dashboard, please contact

Role/Name	Contact
Dashboard Content	bb5g@chrr.osu.edu
Technical Assistance	bb5gtechnicalsupport@chrr.osu.edu

Contributions

This dashboard, user guide, and affiliated user materials were made possible by the Ohio Department of Job and Family Services (ODJFS) Quality Jobs, Equity, Strategy, and Training (QUEST) funding from the U.S. Department of Labor.