



North Central Texas Pathways

NORTH CENTRAL TEXAS PATHWAYS



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**Tri-Agency Regional Convener
Grantee for North Central Texas**

Table of Contents

ACKNOWLEDGEMENTS	4
NORTH CENTRAL TEXAS PATHWAYS EXECUTIVE LEADERSHIP TEAM	6
INTRODUCTION AND EXECUTIVE SUMMARY	8
PURPOSE	10
PROCESS	11
EXECUTIVE SUMMARY	15
THE NORTH CENTRAL TEXAS REGION	18
NORTH CENTRAL TEXAS COUNTIES	20
COMPONENTS OF HIGH-QUALITY PATHWAYS	23
CROSS SECTOR PARTNERSHIPS	23
<i>Existing High-Quality Regional Partnerships in NCTX</i>	23
<i>Job Education for Texas (JET) Grant Awards</i>	23
<i>Texas Regional Pathways Network Grant Awards</i>	25
<i>Equitable Funding</i>	25
<i>Stakeholder Survey Responses – Cross-Sector Partnerships</i>	26
ALIGNMENT WITH LABOR-MARKET DEMAND	27
<i>Areas Needing Further Exploration</i>	30
LINKS BETWEEN SECONDARY AND POST-SECONDARY EDUCATION	31
<i>Areas Needing Further Exploration</i>	32
CREDENTIALS WITH VALUE IN THE LABOR MARKET	33
<i>Student Outcomes – TEA Approved Industry Based Certifications</i>	34
<i>Top 10 Highest Earned Industry Based Certifications – Class of 2021</i>	34
<i>Stakeholder Survey Responses – Credentials of Value in the Labor Market</i>	34
<i>Areas Needing Further Exploration</i>	36
INTEGRATION OF RIGOROUS CORE ACADEMICS AND CAREER-FOCUSED LEARNING	39
<i>Texas College and Career Ready School Models</i>	40
COLLEGE AND CAREER INFORMATION AND ADVISING	41
<i>Effective Advising Framework</i>	42
<i>Areas Needing Further Exploration</i>	43
CONTINUUM OF WORK-BASED LEARNING EXPERIENCES	45
<i>Apprenticeships</i>	47
<i>Summer Opportunities</i>	47
<i>Evaluating High Quality Work-Based Learning</i>	47
<i>Stakeholder Survey Responses – Continuum of Work-Based Learning</i>	49
<i>Areas Needing Further Exploration</i>	50
REFERENCES	51



North Central Texas workforce demands are clear — employers increasingly rely on educated workers, employees need credentials of value, and innovation remakes the economic landscape daily. Creating an asset map and conducting a gap analysis for North Central Texas Pathways is a foundational step toward understanding and enhancing the region's resources, infrastructure, and services to better meet the needs of its communities. This initiative aims to meticulously catalog the existing career pathway assets, such as educational institutions, healthcare facilities, transportation networks, and economic development programs, that contribute to the region's growth and wellbeing. By juxtaposing these assets against the needs and challenges identified through comprehensive labor market, education outcomes, and data analysis, the gap analysis will pinpoint areas requiring attention, investment, or innovation. The goal is to create a strategic roadmap aligning resources with opportunities, fostering a more connected, resilient, and prosperous North Central Texas. This endeavor not only promises to strengthen the fabric of local communities but also sets a precedent for collaborative regional planning, funding, and development.

FACT Education Inc., Tri-Agency Regional Convener Grantee for the North Central Texas Region, recognizes the vital support of organizations whose leadership and commitment to community engagement have been pivotal in navigating the complexities of this project. Your dedication to fostering collaboration among diverse stakeholders has enriched the process and outcomes of this work.

Thank you for your invaluable contributions to this important endeavor.

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Greenville Independent School District
Hill College

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Jobs for the Future (JFF)
Navarro College
North Central Texas College
North Central Texas Council on Governments
North Central Texas InterLink
Paris Junior College
PHCC (Associated Plumbing, Heating, and Cooling Contractors) Texas
Princeton Independent School District
Radius HDD Tools
Ranger College
Region 10 Education Service Center
Region 11 Education Service Center
Region 12 Education Service Center
Richland Hills Fire Department
Rockwall Police Department
Tarleton State University
Texas A&M University Commerce
Texas Department of Health and human Services
Texas Education Agency
Texas Health Resources
Texas Higher Education Coordinating Board
Texas Instruments
Texas State Technical College
Trinity Valley Community College
Texas Women's University
Texas Workforce Commission
University of North Texas
Weatherford College
Wylie Independent School District
Wylie Police Department
Wylie Fire Department
Workforce Solutions of North Central Texas

NORTH CENTRAL TEXAS PATHWAYS EXECUTIVE LEADERSHIP TEAM



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INTRODUCTION AND EXECUTIVE SUMMARY

The Texas Regional Pathways Network (TRPN) builds regional career and technical education programs that expand the occupational talent pool, spur economic growth across the state, and ensure that all TEXANS have the skills and credentials to secure high-wage employment.

Launched in 2019, the TRPN supports Governor Abbott's Tri-Agency Workforce Initiative, through which the Texas Education Agency, Texas Higher Education Coordinating Board, and Texas Workforce Commission are working collaboratively to increase economic development in Texas by ensuring a strong link between education and industry.

The Texas Regional Pathways Network currently includes two initiatives: Tri-Agency Regional Convener grantees funded by funds through House Bill 1525 and Regional Pathway Teams funded by federal Perkins CTE (Career Technical Education) Reserve funds. Tri-Agency

Regional Convener grantees are focused on developing regional pathways infrastructure and have goals to create systems that support scalable and sustainable pathways aligned with industry demand. These organizations are working towards being designated the Regional Convener for their workforce development area.



This alliance is led by an executive leadership team of high-level, strategic state leaders representing business, K–12, postsecondary education, and workforce development. This alliance oversees the progress of regional initiatives that support our state's economic growth. The team is supported by Jobs for the Future (JFF),

a national nonprofit organization dedicated to transforming the American workforce and education systems to ensure access to economic advancement for all (JFF, 2024). JFF drives change in the American workforce and education systems to promote economic advancement for everyone. Founded with a focus on addressing workforce and educational needs, JFF works at the intersection of policy, practice, and research, designing and scaling innovative workforce development and education initiatives. Their work involves collaborating with educators, employers, and policymakers to build a more skilled, productive, and equitable workforce. JFF's approach is characterized by a commitment to creating pathways to economic success for underserved populations and adapting to the rapidly changing demands of the global economy. Together, the plan is to advance the work of the Tri-Agency Workforce Initiative through the following three high-priority focus areas:

- Efficient and flexible **PATHWAYS** to earning degrees, certificates, and other credentials linked to high-wage, in-demand jobs.
- Ensure students receive the **SUPPORT** necessary to succeed at all stages of their education and in their transitions to the workforce.
- Create a robust **INFRASTRUCTURE** for interagency collaboration around common goals, data, and processes to ensure improved student outcomes and meet employers' needs.

Critical aspects of the North Central Texas Regional Pathways Network include:

- **Partnership Development:** Building solid partnerships among high schools, higher education institutions, and industry partners to ensure program alignment and effectiveness.
- **Curriculum Alignment:** Ensuring that the curriculum at the secondary and postsecondary levels aligns with regional workforce needs and industry standards.
- **Leading Career Pathways:** Implementing leading career pathways that provide clear, structured routes for students through their educational journey, reducing the time and cost to earn a credential that prepares a student for entry-level positions in a high-need career. A leading career pathway refers to a structured and well-defined sequence of education, training, and career-oriented experiences that guide individuals from the beginning of their educational journey to a specific professional destination. These pathways are designed to align with the needs of employers and the labor market, ensuring that participants acquire relevant skills and knowledge that prepare them for successful careers in high-demand fields. A leading career pathway is a comprehensive approach to career development, providing a structured and practical route for individuals to gain the education, skills, and experience needed to succeed in their chosen careers. Key characteristics of a leading career pathway include:
 - **Clear Progression:** It outlines a clear sequence of educational stages or milestones, often beginning in secondary education and extending through post-secondary education or training. This progression is designed to build upon each stage, leading to higher levels of expertise and qualifications.
 - **Industry Alignment:** The pathway is closely aligned with the needs and requirements of specific industries or sectors. This ensures that the skills and knowledge gained are relevant and in demand by employers, enhancing employability.
 - **Integrated Education and Training:** It combines academic instruction with practical, hands-on training and real-world work experience. This integration can include internships, apprenticeships, or practicum programs.
 - **Credentials and Certifications:** Participants can earn industry-recognized credentials, certificates, or degrees that validate their skills and knowledge, making them more attractive to potential employers.
 - **Career Guidance and Support Services:** Providing support services to help students navigate their educational journey, including academic advising, career counseling,

mentoring, financial aid assistance, and job placement assistance to help participants navigate the pathway and transition into the workforce successfully.

- Accessibility and Flexibility: The pathway is designed to be accessible to a diverse range of participants, including traditional students, adult learners, and those seeking career changes. Flexibility in terms of part-time options, online learning, and credit for prior learning can be features.
- Continuous Improvement: Leading career pathways are regularly reviewed and updated to remain aligned with evolving industry trends and labor market demands.
- Work-Based Learning Opportunities: Offering students opportunities for internships, apprenticeships, and other forms of work-based learning to gain practical, hands-on, paid experience.
- Data Sharing and Analysis: Utilizing data to track student progress and outcomes, enabling continuous improvement of programs and pathways.
- Regional Focus: Tailoring programs to meet the specific economic and workforce needs of different regions within Texas, recognizing that these needs can vary significantly across the state.

The TRPN is part of a broader effort to strengthen the connection between education and workforce development in Texas, ensuring that students are well-prepared for the demands of the modern economy and that employers have access to a skilled and qualified workforce. Members of the TRPN actively advocate and champion the regional efforts, serving as public representatives and supporters. They are prepared to formulate, endorse, and implement policies that empower state systems to facilitate career pathways for both high school and postsecondary students.

PURPOSE

“You can’t manage what you can’t measure” (Drucker, 1967).



The NCTX (North Central Texas) Pathways Asset Map and Gap Analysis intends to lay the groundwork for the Region to enhance leading career pathways, strengthen the collaboration between educators and industry, and bolster public education redesign initiatives. This preliminary report sheds light on the region's array of resources for leading career pathway development, culminating in insights that mark the starting points for the next stage of this endeavor. The objectives of the asset map and gap analysis include:

- Compiling essential demographic and labor market information about the region to establish a solid, factual foundation for designing career pathways.
- Evaluating the region's strengths and deficiencies in the context of JFF's Pathways to Prosperity model (JFF, 2024), along with our pivotal implementation strategies.
- Offering a valuable perspective from a national standpoint within the constraints of a brief visit, providing an external viewpoint on the region.

- Laying the groundwork for a detailed action plan.
- Aiding in the identification of regional leaders who possess the drive and dedication to develop and execute these plans, with support from JFF as well as regional and state leaders.

The report initially delves into the demographic and economic attributes of North Central Texas and its surrounding labor market. Subsequently, it examines the seven components of high-quality pathways in relation to the resources and opportunities available in North Central Texas. The North Central Pathways Asset Map and Gap Analysis seeks to provide guidance to Regional K-12 Schools, Institutions of Higher Education, and other education stakeholders intent on leading ALL students toward a high-wage, high-need career within North Central Texas. For Industry Partners and Employers focused on strengthening their competitive position in the global economy, asset mapping is an integral step in understanding the resources that communities may leverage to support integrated workforce and economic development initiatives.

PROCESS

The North Central Texas Pathways Executive Leadership Team carried out asset mapping work in North Central Texas in the Fall of 2023. The process involved analyzing the economic, educational, and workforce landscape across all 14 counties, K-12 school districts, higher education organizations, and other career training programs in North Central Texas. Members of the NCTX Pathways Executive Leadership Council attended Workforce Solutions of North Central Texas Accelerator Sessions delineated by Counties. Attendance at these sessions connected team members with industry leaders and community stakeholders who truly have their finger on the pulse of each location. The team then scheduled and led discussions with education and employer leaders through individual industry-focused group sessions. Months of gathering and analyzing information resulted in the 2024 North Central Texas Leading Career Pathways Landscape Map (table 1). This report defines six high-need regional industries and leading occupations within each. The landscape map provides data pertaining to the total demand, 2022 jobs, and median annual, weekly, and hourly wages. The NCTX 2024 Leading Career Pathways listed on the chart below were developed through research conducted by the Executive Leadership Team. Several different reliable sources were used including the Workforce Solutions of North Central Texas (WFSNCT) 2024 Targeted Occupations List (WFSNCT, 2024), The University of Texas (UT) Labor Market Dashboard (UT, 2024) the US Bureau of Labor Statistics (USBLS) (USBLS, 2024) and North Central Texas InterLink's Targeted Occupation List (NCTX InterLink, 2023). Leading industries and occupations were selected when evidence exists of inclusion in all sources utilized. While useful and helpful, the 2024 NCTX Leading Career Pathways Landscape Map should not be considered an all-inclusive list of high-need, high-wage careers within the region.



NCTX 2024 Leading Career Pathways Landscape Map



2024 NCTX LEADING CAREER PATHWAY INDUSTRIES	SOC CODE	OCCUPATION	Total Demand	2022 Jobs	Median Annual Wage	Median Weekly Wage (50 Weeks)	Median Hourly Wage
Architecture and Engineering	17-3011	Architectural & Civil Drafters	747	948	58178	\$1,163.56	\$29.089
Architecture and Engineering	17-3022	Civil Engineering Technologists and Technicians	324	465	46632	\$932.64	\$23.316
Architecture and Engineering	17-3023	Electrical and Electronic Engineering Technologists and Technicians	613	878	60067	\$1,201.34	\$30.0335
Computer and Mathematical	15-1211	Computer Systems Analysts	4104	6572	99453	\$1,989.06	\$49.7265
Computer and Mathematical	15-1232	Computer User Support Specialists	5434	8609	47193	\$943.86	\$23.5965
Computer and Mathematical	15-1252	Software Developers	11091	15631	120174	\$2,403.48	\$60.087
Construction and Extraction	47-2111	Electricians	3497	4996	47214	\$944.28	\$23.607
Construction and Extraction	47-2152	Plumbers, Pipefitters, and Steamfitters	2726	3898	45580	\$911.6	\$22.79
Educational Instruction and Library	25-2021	Elementary Teachers, Except Special Education	7947	15531	59736	\$1,194.72	\$29.868
Educational Instruction and Library	25-2031	Secondary School Teachers, Except Special and Career/Technical Education	5799	11888	60237	\$1,204.74	\$30.1185
Healthcare Practitioners and Technical	29-1141	Registered Nurses	6745	14859	74774	\$1,495.48	\$37.387
Healthcare Practitioners and Technical	29-2034	Radiologic Technologists and Technicians	511	1031	58026	\$1,160.52	\$29.013
Healthcare Practitioners and Technical	29-2061	Licensed Practical and Licensed Vocational Nurses	2533	4475	48842	\$976.84	\$24.421
Installation, Maintenance and Repair	49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	2330	3392	47012	\$940.24	\$23.506
Management	11-9031	Education and Childcare Administrators, Preschool and Daycare	283	503	43530	\$870.6	\$21.765
Personal Care and Service	39-9011	Childcare Workers	8741	8555	21703	\$434.06	\$10.8515
Protective Service	33-2011	Firefighters	1360	2495	55749	\$1,114.98	\$27.8745
Protective Service	33-3012	Correctional Officers and Jailers	910	1701	46908	\$938.16	\$23.454
Protective Service	33-3051	Police and Sheriffs Patrol Officers	2723	5029	71101	\$1,422.02	\$35.5505

Table 1 – 2024 NCTX Leading Career Pathways

[PDF 2024 NCTX Leading Career Pathways Landscape Map](#)

Each industry and occupation were aligned with the training opportunities in each region. Our team gathered and mapped data on availability of lead career pathway training, county accessibility, secondary and post-secondary training programs. Through this process, the team was looking for connections between the career training offered and the lead careers identified on the landscape map. At the next level, the team researched funding streams available for training programs, and if budgets were allocated for career training programs leading to living wage employment within the regional area. Simply, is North Central Texas maximizing available funding to provide career training for jobs that exist in the NCTX region?

Due to the size of the NCTX region (see North Central Texas by the Numbers, pg. 18) the considerable number of K-12 school districts, and the number of post-secondary training providers, asset mapping proved to be the most challenging part of this project. Additionally, data sets in which one might traditionally find career training completion and awarded credential data are not typically live data. In K-12 education, college, career, and military readiness data is a lagging indicator. The most recent official student outcomes for this group include students who graduated high school in 2021. To allow our team to use the most recent data sources, the process involved manually pulling data about NCTX high schools with CTE program of study concentrators and completers from the Texas Education Agency (TEA) CTE Program of Study Mapping Tool (TEA, 2024), and charting NCTX full-time equivalent CTE teachers as reported in the Texas Public Information Education Report (TPIER) (TEA, 2024). Next, the team aligned K-12 CTE Programs of Study to Post-

Secondary Training Opportunities attempting to identify strong, exemplary career pathway training, and high-quality work-based learning experiences.

Overall, North Central Texas is well positioned for success in building lead career pathways linked to local labor market needs. Some key building blocks for pathways are already in place including exemplary regional network teams, strong intermediaries that understand K-12 and post-secondary education while remaining mindful of the concerns and constraints of potential employers, and growing collaboration to devise and define high-quality work-based learning opportunities. Employers, school, and community leaders are enthusiastic about partnering within a regional focus to plan and implement major system-level changes required to meet the needs of the future workforce in North Central Texas. More details on exemplary career pathway training programs, as well as the need for more research and refinement are discussed in this report through alignment to the seven components of high-quality pathways.

At the conclusion of the pathways landscape mapping project, our team began organizing focus group teams with subject matter experts from industry and educational sectors to participate in a comprehensive gap analysis process. Each group was presented with a brief overview of the Tri-Agency Initiative, Texas Pathways. The group was then invited to provide responses to a stakeholder survey exhibited below and participate in round table discussions encouraging open dialogue to explore complex workforce and education issues from multiple viewpoints.



North Central Texas 2024 Lead Career Pathways Gap Analysis Stakeholder Survey

1. What value do you see in regional pathways?
2. Is your company currently engaged in any other regional education or workforce development initiatives?
 - a. Economic development?
 - b. If so, what have the successes and challenges been?
3. How are you working with the K12 and postsecondary systems (i.e., work-based learning, internships, externships, etc.)?
 - a. What are the successes and challenges you have had in working with Educators?
4. Has your company provided work-based learning opportunities for high school and/or college students in the past?
 - a. How was that structured and managed?
 - b. What has gone well?
 - c. Are there areas in which your company could use additional support to make sure that this is good use of your time and resources?
5. Do you serve on an employer advisory board at the K12 or postsecondary level?
 - a. What is your role as an advisory board member?
 - b. Are there ways in which educational institutions could make more effective use of their advisory boards?
6. In your industry, where is there the most demand for qualified workers?
 - a. What occupations are the most difficult to fill?
 - b. Where do you think there are the most opportunities for young workers?
 - c. What are the key education, certification, and skills demands in those occupations?
 - d. What limits youth from being able to enter those careers?
 - e. What is the career advancement path for people in those careers?
7. What system-level changes would you most like to see implemented to support you in addressing your talent needs?

Table 2 – 2024 NCTX Stakeholder Survey

The team gathered more insight through a series of three-click surveys distributed to regional educators and administrators. Each survey promised to take less than 60 seconds in which the participant would be prompted to make three-clicks in response to a single question or prompt pertaining to career education in their school or organization.



NCTX Pathways 3 - Click Survey Series

1. What is the greatest influence on your school or district's decision to offer specific CTE programs of study?
2. What percentage of your organization's career training programs are aligned to high-wage, high-need careers within the North Central Texas region?
3. Do you have programming across all three elements of the Tri-Agency Work-Based Learning Framework (i.e., Learning About Work, Learning Through Work, Learning at Work)?
4. How do students receive information on college and careers?
5. Is your district currently engaged in any pathways-related education or workforce development programs or models?
6. What percentage of your organization's career training programs offer opportunities for students to participate in a hands-on work-based learning experience in which employers define the knowledge gained through the experience?
7. Do students develop individualized 4- or 6-year college and career plans? If yes, tell us about the process. How are they used in advising meetings? How often are they updated?
8. What industry-recognized credentials do students in your district currently have opportunities to earn? How were these selected? What are the challenges you face in offering the credentials?
9. How many students are completing the credentials? Does your organization know if students are using earned credentials to enter the workforce?
10. What strategies is your organization currently using for college, career, and military readiness? Does your district track post-secondary outcomes of graduates? Does your district have the ability to track student employment outcomes?

Table 3 – NCTX Pathways 3 – Click Survey Series

Finally, team members attended the Region 11 Education Service Center Expert to Expert session on January 30, 2024. Information about the Tri-Agency Initiative, NCTX Pathways, and possible upcoming grant opportunities were presented to a small group of educational stakeholders. They were invited to complete the 3 click survey in its entirety.

The NCTX Lead Regional Convener received 76 qualified respondents to the Stakeholder Survey (Table 2) from a number of industry partners, educators, leaders, and potential employers in high-wage, high-need career areas. The 3-Click Survey Series received 110 qualified respondents (Table 3). Respondents identified as:

- 6 - Superintendent (Assistant Superintendent; Deputy Superintendent)
- 22 - CTE Administrator (Director, Coordinator, Specialist, Facilitator, Other)
- 24 - Grade 5-12 Principal (Associate, Assistant, Other)
- 2 - Grade PK-4 Principal (Associate, Assistant, Other)
- 34 - CTE Teacher (Grade 9-12)
- 14 - Non-CTE Teacher (Grade 9-12)
- 4 - CTE Teacher (Grade 5-8)
- 3 - Non-CTE Teacher (Grade 5-8)
- 1 - Teacher (Grade PK-4)

Survey responses are shared in each section of this report as aligned to the seven components of high-quality pathways. Clear definitions and descriptions of each component open each section.

Finally, the large amount of data gathered is difficult to visualize and display in a written report. Throughout this report, you will find tables and visual representations where appropriate. Readers and stakeholders are encouraged to explore the North Central Texas Regional Pathways Data Dashboard at <https://www.facted.org/nctrp>. All data sourced and gathered for this report has been published in corresponding sections of the dashboard in interactive reports allowing the reader to filter and summarize according to their location, programs, or other needs.

EXECUTIVE SUMMARY

North Central Texas K-12 Schools and Post-Secondary Educational Institutions use career pathways in numerous ways, in various settings, and under vastly different circumstances, to give young people access to meaningful careers and stable lives. Through research and interviews with education stakeholders, meaningful insight was gathered into how legislators, policymakers, and program operators build high-quality programs and address systemic barriers. A comprehensive analysis of the policies and systems woven throughout implementation, or the desire to implement career pathways in North Central Texas has surfaced themes about the factors that may hinder implementation. While themes may vary slightly across the 14 counties in North Central Texas, for good or for ill, those highlighted below have the greatest impact on effective facilitation of career pathways, and more specifically, high-quality work-based learning programs in North Central Texas:

- Stigma or lack of understanding about career pathway programs. Stakeholders agree that a decision about career direction should happen first or simultaneously with post-secondary plans.
- Presence or absence of quality partnerships. The challenges effecting sustainment or implementation of high-quality partnerships are multi-faceted. Industry partners explain that often they reach out to educational organizations and having issue figuring out the right contact at the right time, or interest is there, but follow through is slow or doesn't happen at all. Industry partners also expressed mild frustration in receiving the same requests repeatedly after explaining their view of the opportunity. Example: mock interviews. In the current workforce climate, applicant resumes and interviews must be tailored to the job skills needed for the position. Mock interviews of large groups of students without any through to the type of career field a student is pursuing is not useful for a potential applicant or industry. Recommendations included recent experiences such as reverse interviews or career fairs in which students browse industry partners and ask questions about career opportunities.
- When applying partnerships to a work-based learning scenario, there are several themes that consistently arise: liability (insurance) concerns around students in the workplace, missing basic soft skills such as communication, professionalism, problem solving.
 - It appears there is a widespread communication gap concerning what a secondary student can contribute to a work site, and how liability issues can be addressed through school district insurance. Texas HB 639 (2017) was signed into law to reduce this type of barrier. This law authorizes the purchase of certain insurance coverage by public schools for the benefit of businesses and students participating in career and

technology education programs and providing immunity from liability of certain public-school students participating in career and technology education programs. As a result of this new law, Texas Education Code was modified. Specifically, see TEC §29.191 and TEC §29.192.

- Access to quality teachers and administrators. When secondary school district administrators respond to questions about the decision-making process on which CTE programs of study to offer for students, they explained that programs of study are driven by the CTE teachers currently on staff, or student interest. If an organization wants to add a high-wage, high-need program of study, and has the funding to do so, they may not be able to find a qualified teacher. Another administrator shared CTE programs of student with little to no labor market demand that led by a long-term teacher are difficult to change. If student interest is there, unless a teacher leaves, they may not have the head count to add the program.
- Lack of data on work-based learning student participation and program quality at any level. Students enrolled in Career Preparation or a CTE practicum course are required to have a TEA approved paid or unpaid training plan on file. However, this information is maintained locally. Other than enrollment in a course, TEA does not gather any further details. Knowing if students enrolled in a CTE practicum were monitored through a paid training program would provide valuable information about high school students connected to the workforce aligned with the program of study.
- Ensure employer identified credentials of value are utilized to render a positive impact in the North Central Texas Workforce. Texas K-12 school district leaders who are knowledgeable about the A-F accountability manual know graduating a high percentage of students who are meet the requirements for college, career, and military readiness is critical to the overall district rating. Our team considers connecting students to career fields that align with regional labor market data to be of even greater importance.
- Alignment of state and federal education and workforce funds supporting high-quality training programs to high-wage, high-need career fields in North Central Texas. Recommendations include a CTE funding model that incentives CTE programs of study that are aligned with high-need regional industries and occupations. The high percentage of students enrolled in CTE programs within career clusters that do not provide occupations with a living wage, or a minimal number of regional openings is alarming.
- Data shared in the body of this report will demonstrate during the 2022-2023 school year, approximately 24 (approximately 21%) NCTX School Districts offered a CTE practicum course. 32 NCTX teachers were assigned to teach a CTE practicum course, and 880 students were enrolled in these sections (TEA, 2023). This is certainly a positive step in the right direction. The career clusters aligned to the practicums were not well aligned with high-wage, high-need careers. Future recommendations include an incentives funding model for CTE practicum plans aligned to leading career pathways.

In conclusion, the commitment to developing career pathways in North Central Texas reflects a strong regional dedication to fostering economic growth and improving the lives of young people. Our extensive research and interviews have revealed a landscape rich with potential but also marked by significant challenges that require strategic attention. The themes that have emerged

point to a need for greater collaboration between educational institutions, industry partners, and policymakers to streamline program implementation and expand access to these vital opportunities.

When career pathway programs are well-constructed and effectively delivered, they provide substantial benefits to students, employers, and the community at large. To optimize these outcomes, it is imperative that the highlighted systemic barriers are addressed with innovative solutions, adequate funding, and policy support. The insights gathered from stakeholders in the 14 counties of North Central Texas not only shed light on existing impediments but also on the collective resolve to overcome them.

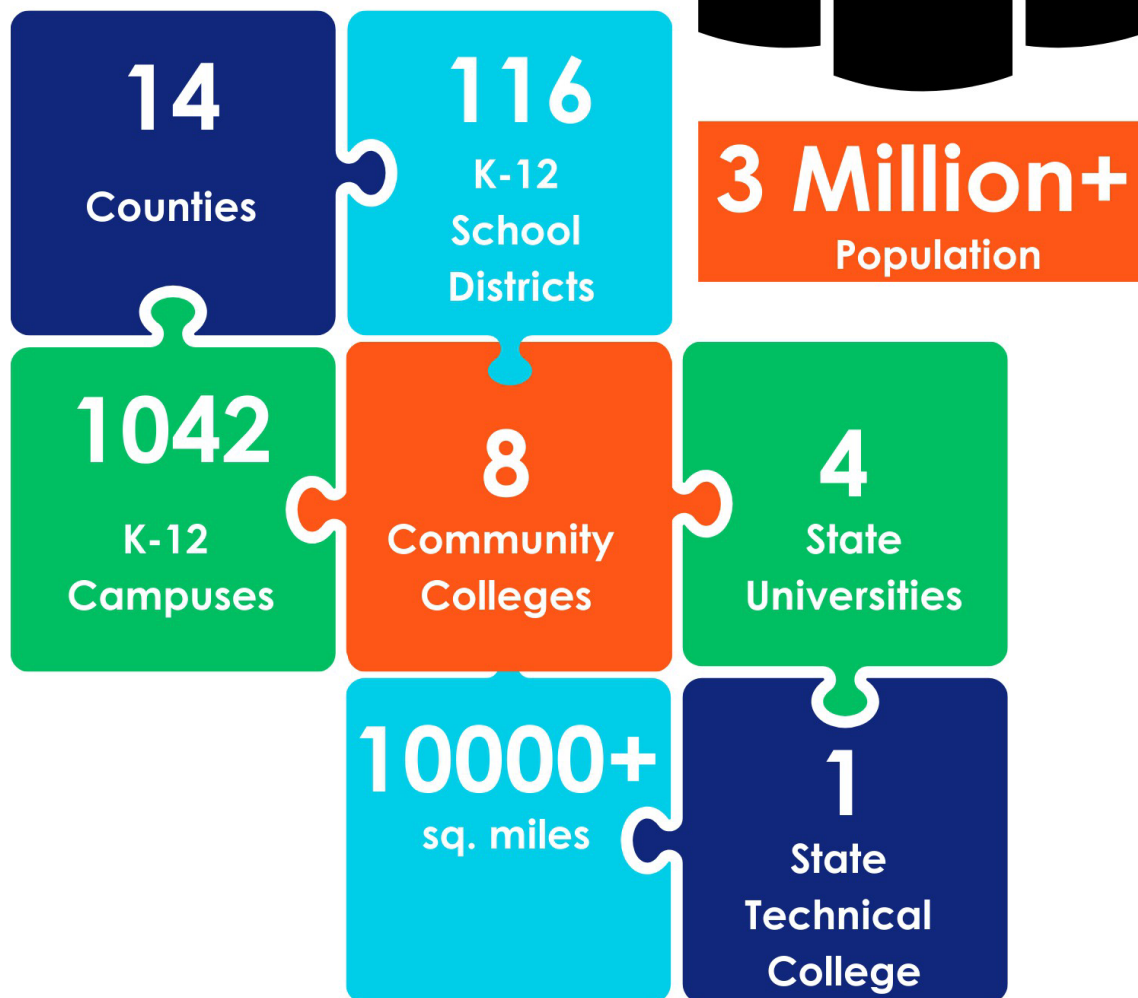
The way forward involves leveraging the shared learnings to build high-quality programs that are adaptable and responsive to the evolving economic landscape. By prioritizing the facilitation of career pathways and high-quality work-based learning programs, North Central Texas can ensure that it is equipping young individuals not just for jobs, but for meaningful careers that contribute to their lives and the stability of the region. This report serves as a call to action for all stakeholders to double down on their efforts, ensuring that every young person can engage with work-based learning that is as diverse and dynamic as North Central Texas itself.

THE NORTH CENTRAL TEXAS REGION

View NCTX Data Dashboard – Demographics & Statistics at <https://facted.org/demographics-statistics>



North Central Texas By the Numbers



The North Central Texas (NCTX) Region, Texas Workforce Development Area 4 (WDA4), includes a diverse population of over 3 million individuals (about the population of Arkansas in 2023!) who live and work in 14 counties. Collin, Denton, Ellis, Erath, Johnson, Kaufman, Hood, Hunt, Johnson, Navarro, Palo Pinto, Parker, Rockwall, Somervell, and Wise Counties create a circle surrounding Tarrant and Dallas Counties. The circle around two large suburban areas provokes some to describe WDA4 as the *donut* region. North Central Texas Counties along with Dallas and Tarrant County form the Dallas Fort Worth-Arlington Metropolitan Statistical Area (MSA). According to the United States Office on Management and Budgets, the general concept of a metropolitan or micropolitan statistical area (MSA) is a core area with a significant population nucleus is joined together with outlying counties having a high degree of economic and social integration with that core (U.S. OMB, 2020). Individuals residing within a MSA frequently commute between counties to live, work, and play. The bureau explains that MSA's should not be used to classify a county or school district, such as rural or suburban, but for statistical purposes only. Collectively, this MSA is the fourth largest metro area in the U.S. Understanding the relationships, overlapping geographical areas, along with the opportunities and challenges existing due to immutable data sources defined by locale, are vital to this project. Frequently, geographical, and statistical overlaps between the North Central, Tarrant, and Greater Dallas Workforce Regions occur requiring filtering or further defining. In simple terms, North Texans live, work, and play throughout all three regions.

As displayed in table 4, the 2023 population of North Central Texas Region (NCTX), Workforce Development Area 4 (WDA4), is 3, 384, 437 (U.S. Census Bureau, ACS, 2022).

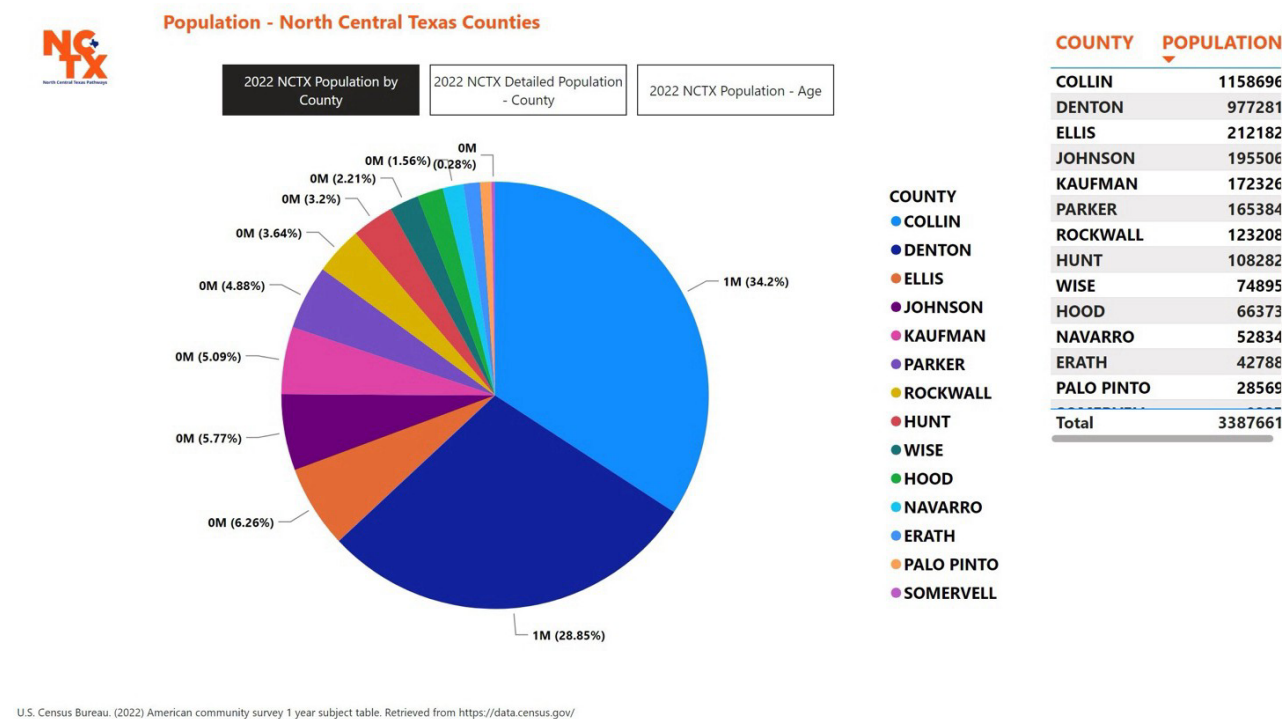


Table 4 – Population North Central Texas Counties

NORTH CENTRAL TEXAS COUNTIES

NCTX is a dynamic and varied region comprised of counties with unique characteristics and qualities, weaving together a rich tapestry of cultural, economic, and social diversity.

Collin County located in the heart of North Texas, is a vibrant and rapidly growing area known for its unique blend of urban sophistication and suburban charm. It boasts a diverse and thriving economy, excellent educational institutions, and a high quality of life. Known for its affluence and a strong job market, Collin County is home to numerous corporate headquarters, bustling retail centers, and picturesque residential communities. Collin College has campuses sprinkled all throughout the county which has grown the area into a hub for technology and business. Home to thriving cities like Plano, Frisco, and McKinney, and smaller, more rural communities like Farmersville and Nevada, Collin's booming, rich cultural scene, extensive recreational facilities, and high quality of life attract families and professionals alike.

Denton County is in the northern part of the region and stands as a vibrant and rapidly growing area, blending rich history with modern development. The county seat, the city of Denton, is known for its lively music scene and educational institutions, including the University of North Texas, Texas Woman's University, and North Central Texas College, infusing the area with a youthful and dynamic atmosphere. The county's growth has been fueled by its proximity to the Dallas-Fort Worth metroplex, attracting businesses and residents alike who seek a balance between urban opportunities and the charm of smaller communities. Denton blends academic vibrancy with a creative spirit, fostering a community that values innovation and cultural richness.

Ellis County boasts a rich heritage that is deeply rooted in its agricultural and industrial past. Waxahachie, the picturesque county seat, is renowned for its charming historic architecture and serves as the cultural heart of the county. Ellis is distinguished by its vibrant economy, propelled by a mix of manufacturing, distribution, and agricultural sectors. The region's scenic landscapes, coupled with its proximity to the Dallas-Fort Worth metropolitan area, make it a desirable location for families and businesses seeking a balance between rural charm and urban convenience. With its array of community festivals, historical sites, and natural beauty, Ellis County epitomizes the spirit of Texas.

Erath County is steeped in history and tradition, with a vibrant blend of agricultural heritage and modern living. The county seat, Stephenville, is famously known as the 'Cowboy Capital of the World', reflecting the area's deep connection to rodeo culture and cowboy heritage. This dynamic county is also home to Tarleton State University, adding a youthful energy and educational dimension to the community. With its rolling hills, lush farmlands, and a friendly, close-knit community, Erath County offers a unique blend of rural tranquility and a progressive, active lifestyle, making it an appealing destination for residents and visitors seeking a taste of authentic Texas culture.

Johnson County is home to communities like Cleburne, Burleson, Joshua, and Godley, one finds a balance between suburban development and open, natural spaces. Johnson County's proximity to the Dallas-Fort Worth metroplex enhances its appeal, providing residents with easy access to urban resources while maintaining a distinct, small-town feel. The county's diverse economy, scenic natural surroundings, and keen sense of community pride make it an ideal place for families and individuals seeking a balance of rural tranquility and suburban convenience in the Texan landscape.

Kaufman County has evolved from its early agricultural roots to become a thriving area that balances rural charm with suburban development. Its county seat, the city of Kaufman, serves as a

central hub for the county's diverse activities and communities. With its proximity to Dallas, Kaufman County offers residents and visitors a blend of small-town hospitality and access to urban amenities. Trinity Valley Community College provides many exciting career training programs for dual credit and adult learners. The county's landscape is characterized by its picturesque plains, making it an attractive location for families, businesses, and outdoor enthusiasts alike.

Hood County is situated southwest of the Dallas-Fort Worth Metroplex and is famous for its well-preserved 19th-century architecture and the iconic Lake Granbury, a popular destination for boating, fishing, and leisure activities. This charming county melds its historical roots, evident in its historic courthouse and town square, with modern living, making it a desirable location for those seeking a blend of tranquility and convenience. Hood County's inviting small-town atmosphere, coupled with its proximity to larger cities, offers residents and visitors a unique experience of living in Texas, where community ties are strong, and the natural landscape is a central part of everyday life.

Hunt County, Texas, located in the northeastern part of the region, is a region rich in history and characterized by its blend of rural charm and evolving urban development. Greenville, the county seat, is known for its historical significance and as a center for commerce and culture within the county. Hunt County's economy historically revolved around agriculture, but it has diversified over the years, now encompassing manufacturing, retail, and other industries. Paris Junior College – Greenville Campus provides dual credit and career training programs aligned to many high-wage, high-need careers. This blend of economic activities contributes to the county's growth and attractiveness. Its proximity to the Dallas-Fort Worth metropolitan area adds to its appeal, offering residents and visitors the benefits of rural living with convenient access to urban amenities.

Navarro County is a region defined by its rich history, cultural heritage, and scenic landscapes. Corsicana, the county seat, is not only the economic and cultural hub of the county but also known for its historic significance, including being the site of the first commercially significant oil discovery in Texas. Navarro's history is deeply intertwined with the oil, cotton, and railroad industries, which have shaped its development over the years. Today, Navarro College, as a proud member of the community, blends its historical roots with modern growth, offering a diverse economy and a quality of life that appeals to families and businesses alike.

Palo Pinto County, situated in the rugged and picturesque terrain of North Central Texas, is an area steeped in history and natural beauty. The county seat, Palo Pinto, reflects the rustic charm and historical richness of the region. This county is renowned for its stunning landscapes, including the striking Palo Pinto Mountains and the serene waters of Possum Kingdom Lake, a popular destination for outdoor enthusiasts. Palo Pinto County's history is deeply rooted in ranching and agriculture, which continue to play a significant role in its economy and culture. The blend of its historical heritage, natural wonders, and a close-knit community atmosphere makes Palo Pinto County a unique and captivating part of Texas, offering a tranquil escape and a glimpse into the state's storied past.

Parker County is a dynamic region that harmoniously blends its rich historical heritage with modern growth and development. Weatherford, the county seat, is known for its charming historic districts and as a hub of activity in the county. Weatherford College is poised to connect Parker County students to high-wage, high-need careers through its training programs. Famous for its peaches, Parker County celebrates its agricultural roots, while also evolving into a vibrant suburban area. Its

proximity to the Dallas-Fort Worth metroplex makes it an attractive location for those seeking a balance between the tranquility of rural life and the convenience of urban amenities.

Rockwall County, the smallest county in Texas by land area, is known for its unique blend of small-town charm and suburban growth. The county seat, Rockwall, mirrors the county's overall character—a vibrant community that combines historical allure with modern development. Nestled East from Dallas, Rockwall County offers easy access to urban amenities while maintaining a distinct, close-knit community feel. The county is characterized by its scenic lake views, particularly from Lake Ray Hubbard, a popular destination for boating, fishing, and leisure activities. Rockwall County boasts a thriving economy and excellent schools.

Somervell County is a small but vibrant area known for its natural beauty and rich history. Glen Rose, the county seat, is famously known as the "Dinosaur Capital of Texas," due to the remarkable dinosaur tracks found in the Paluxy Riverbed, drawing visitors from all over for a glimpse into prehistoric times. The county's economy is bolstered by tourism, agriculture, and energy production, contributing to its growth and development. The combination of its natural wonders, such as Dinosaur Valley State Park and Fossil Rim Wildlife Center, along with a keen sense of community, makes Somervell County a unique and enchanting part of Texas.

Wise County balances its rustic attractiveness with major contributions to the region's economic prosperity. Decatur, the county seat, embodies the historical and cultural essence of the area, with its well-preserved architecture and welcoming atmosphere. Historically, the county's economy was rooted in agriculture, but it has since diversified, encompassing various industries that contribute to its growth and vitality. With its abundance of natural resources, Wise County is a leader in energy production, particularly natural gas. Wise County's landscape is a mix of rolling hills, lush farmlands, and scenic natural features, providing a picturesque backdrop for its towns and communities.

Together, these 14 counties create a region that is more than just a business area; it is a thriving community with a common goal of development and prosperity. Texas is a state rich in diversity, as evidenced by the North Central Texas Workforce Development Area, which spans the creative hotspots of Collin and Denton to the serene landscapes of Palo Pinto and Somervell.

As one can see, the North Central Texas Region is an exceptional, noteworthy part of Texas.

COMPONENTS OF HIGH-QUALITY PATHWAYS

Cross Sector Partnerships

View NCTX Data Dashboard – Cross-Sector Partnerships at facted.org/cross-sector-partnerships

Existing High-Quality Regional Partnerships in NCTX

Cross-sector partnerships include state and regional collaboration across sectors to build relevant and effective career pathways propelling students into high-wage, high-need careers within their area. These partnerships are an effective strategy in bridging K-12, higher education, and the labor market. State and regional collaboration across sectors is critical to building effective pathways that incorporate all key components and propel students to success. Cross-sector partners may include secondary and postsecondary education, employers, and workforce development. They may also include local government, economic development, Chambers of Commerce, industry associations, and community-based organizations. Regional partners from all sectors should be engaged in the design and implementation of local pathways to ensure that they successfully bridge K-12, higher education, and the labor market. The size and geography of the North Central Texas Region led to many opportunities and challenges for all stakeholders who are committed to implementing and funding high-quality career pathways. Frequently, rural locations, recruiting qualified teachers, and funding are conveyed as key barriers to planning and implementing lead career pathway training programs in North Central Texas secondary and post-secondary training programs. Over the last couple of years, there have been several exemplary regional partnerships established through economic and workforce development initiatives.

Job Education for Texas (JET) Grant Awards



The Job Education and Training (JET) Grant Program represents a pivotal initiative aimed at enhancing workforce skills and job opportunities in various sectors. Established to address the growing need for skilled labor in diverse industries, JET grants play a crucial role in bridging the gap between education and employment. These grants are awarded to educational institutions and training providers to develop and expand career and technical education programs that align with local and regional workforce needs. In the NCTX region, JET

grant applications must focus on an occupation as listed on the current years Texas Workforce Development Area Targeted Occupations List.

Texas Workforce Development Area 4 recently published the 2023-24 Targeted Occupation List (WFSNCT, 2023). If a new opportunity for educational organizations to apply for a JET grant is published, this occupation list will be the focus of new applications. The 2024 NCTX Leading Career Pathways are all a part of the WDA4 Targeted Occupations List for 2023-2024.

In 2020, Community Independent School District (ISD) (Collin County) was awarded a \$300,000 grant to implement an automotive mechanical technical program. In its first year, this dual credit program, offered in partnership with Trinity Valley Community College, served 125 students and yielded an economic impact of \$2,158,625. The innovative, award-winning Community ISD program offers students the opportunity to earn a Level I Certificate from TVCC while simultaneously earning

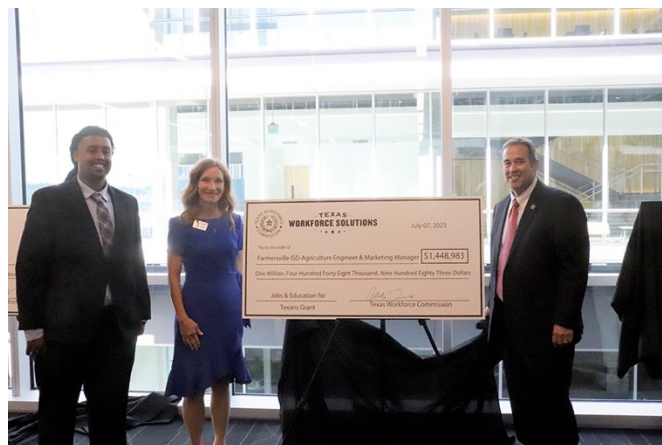
their high school diploma, and students sit for 12 different professional certifications through the National Institute for Automotive Service Excellence. Students are connected to potential employers through hands-on experiences such as the North Teas Automobile Dealers AutoTech Competition. In the same fiscal year, three other North Central Texas School districts received JET Grant Awards. Rockwall, Cleburne, and Boles ISD were awarded \$288,397 combined to build or expand CTE programs in Healthcare, Heavy Diesel Mechanics, and Welding.



In 2020, Farmersville ISD received \$332,236 in JET Grant funds to implement an Electronics Engineering Program of Study in Collaboration with Texas Instruments and Collin College. On the other side of North Central Texas, Weatherford College (WC) was awarded a \$296,263 JET Grant award for the first line supervisors of construction trades and extraction workers program. WC Industry partner,

Riff Wright, founder, and general manager for Radius HDD Tools said the opportunity was paramount for “connecting people that have skills, talents, gifts, and abilities with the people that need them” (Wright, 2022).

Likewise, Collin College received a JET grant for \$332,365 to expand on the Heating, Ventilation, and Air Conditioning program the stellar Allen Technical Campus location. This is an innovative program designed to reach students that are kinesthetic learners by actively engaging instructors who love their job and inspire a love for the HVAC profession. Real world management skills like payroll, scheduling, and equipment acquisition that are often overlooked in most HVAC schools are incorporated seamlessly in College Colleges program (Collin, 2019).



2023 was a banner year for JET Awards in the North Central Texas Region, with over 5 million dollars awarded in 17 grants to K-12 school districts and colleges (table 2). In 2022, Farmersville ISD was awarded an additional \$746,743 to expand and enhance programs of study leading to high-need, high-wage occupations in the Architecture and Engineering Industries.

Awardee	County	JET Grant Award	Occupation Group
Farmersville ISD	Collin	\$746,743	Architecture & Engineering
Farmersville ISD	Collin	\$702,240	Management
Maypearl ISD	Ellis	\$696,605	Installation, Maintenance, Repair

Weatherford ISD	Wise	\$489,167	Installation, Maintenance, Repair
North Central Texas College	Denton	\$331,827	Healthcare
North Central Texas College	Denton	\$300,177	Installation, Maintenance, Repair
Navarro College	Navarro	\$349,999	Installation, Maintenance, Repair
Weatherford ISD	Wise	\$129,341	Management
Lovejoy ISD	Collin	\$446,763	Architecture & Engineering
Venus ISD	Johnson	\$398,125	Architecture & Engineering
Collin College	Collin	\$332,365	Installation, Maintenance, Repair
Commerce ISD	Hunt	\$301,554	Installation, Maintenance, Repair
Kemp ISD	Kaufman	\$208,145	Production
Forney ISD	Kaufman	\$136,036	Healthcare
Kaufman ISD	Kaufman	\$98,457	Architecture & Engineering
Rice ISD	Navarro	\$45,785	Installation, Maintenance, Repair
Rice ISD	Navarro	\$40,030	Healthcare

Table 5 – 2022 JET Grant Awards

Texas Regional Pathways Network Grant Awards

The Texas Education Agency published the first grant opportunity related to the Texas Regional Pathways Network in 2019. The 2019-2020 Perkins Reserve Grant Opportunity funded planning and implementation for the North Central Texas Aerial Robotics Network. North Central Texas InterLink serves as the Grant Intermediary, and the University of North Texas and Tarrant County College serve as Higher Education Partners. While programs funded through the Texas Regional Pathways Network Grants are required to include a minimum of three K-12 school districts, this exemplary network has grown to 10 school districts including North Central School Districts Azle, Cleburne, Mineral Wells, and Strawn ISD (North Central Texas Aerial Robotics, 2024). The growing network continues to expand upon its regional partnerships with companies such as Bell Helicopter, Halff Associates, V# Consulting Engineers, DPR Construction, Texas Instruments, and the North Central Texas Emergency Communications District, to name a few. Both the North Central Texas and Tarrant County Workforce Board are active members of the steering committee connecting students to high-quality work-based learning opportunities integrated into 10 different industries. Students are provided with an opportunity to earn a Remote Pilot Certificate from the Federal Aviation Administration (FAA, 2024), opening doors for careers in industries such as Aerospace Engineering, Agriculture, Construction, Cybersecurity, Geographical Information Systems, and Law Enforcement.

See also CTE Summer Grants in Continuum of Work Based Learning

Equitable Funding

Examining equitable school funding in Texas at the secondary and post-secondary level, is not only a matter of educational policy but also a reflection of broader societal values and priorities. In a state as large and diverse as Texas, ensuring that every student has access to high-quality career pathway education, irrespective of their geographic location or socioeconomic status, is a complex challenge. Exploring how career pathway (CTE) funds are allocated, the impact of these financial decisions on various districts and demographics, and the ongoing debates surrounding the quest for fairness and adequacy in funding exposes the intricate nature of school finance in Texas. This analysis seeks to understand whether the current system effectively bridges the career pathways

educational gaps or perpetuates existing disparities, and what changes might be necessary to achieve a more equitable distribution of resources.

The state of Texas is one of twenty-three states that invest more funds in CTE than they receive from federal allocations (Advance CTE, 2023). Texas secondary career and technical education programs are funded through a student-based approach. Funding is distributed based on the number of students enrolled based on the full-time equivalent or average daily membership within a district and weighted student funding, which provides additional funding for CTE learners in state basic aid formulas.

For brevity, and to maintain focus on funding to support pathways within the NCTX region, this analysis concluded that the distribution of formula and discretionary funds are allocated equitably throughout the region. In the next section, this report will explore alignment between the allocation of funding to the labor market demand within the region. There is anticipation in NCTX about new opportunities for various state and federal funding streams to encourage stakeholders across North Central Texas to expand on the impressive work within the Region.

*More on pathways funding at facted.org/pathways-funding.

Stakeholder Survey Responses – Cross-Sector Partnerships

- What value do you see in regional pathways?
 - *“It is very valuable. It will help us build relationships with kids who will be entering our workforce.”*
 - *“There is a lot of value in regional pathways. Lots of CTE programs that are already in place directly connected with colleges. There has been a struggle to get paramedics into school due to academic requirements. Lots of paramedic students are using the career as a stepping stone to another career such as an RN, Surgeon, etc.”*
 - *“Another big challenge is maturity and the ability to hold a face-to-face conversation. Gen Z is truly experienced based. They change their minds quickly. We lost two employees to nursing in the last 48 months. Instant gratification is big with this generation. Starting salaries have gone up 30% in the last three years to try and keep employees from salary chasing.”*
 - *“Opportunity to partner is so helpful. This helps districts that do not have the money to build labs and such. Being able to be connected it beneficial to everyone.”*
- Is your company currently engaged in any other regional education or workforce development initiatives? Economic development? If so, what have the successes and challenges been?
 - *“We are not really working with the regional education workforce.”*
 - *“Our law enforcement program has a relationship with the local police department. The relationships are very important, and the internships really lead to real world experiences.”*

- *“There is a huge shortfall of available employees. All employers are looking for people to hire. CEF (Construction Education Foundation) has had fewer students for training this last fall because employers could not find people to hire. The more promotion of the industry the better.”*
- *“How do we get connected with teachers? I wish I could tell you that so many teachers contact me that I must turn them down. More often, I am reaching out and asking to come speak with students. More than 50% of the time, I do not receive a response.”*

Alignment with Labor-Market Demand

View NCTX Data Dashboard for Alignment with Labor-Market Data at facted.org/alignment-lmd

Aligning leading career pathways with labor market demand is critical for the economic future of the North Central Texas region. During this process, pathways are reverse-mapped from industry to post-secondary to K-12 to ensure that students develop the skill and competencies they need to succeed in a career. Employers benefit because reverse-mapped pathways build a skilled talent pipeline for employers by equipping students for jobs in high-wage, in-demand industries with career advancement opportunities.

As demonstrated in the [NCTX 2023-2024 Pathways Landscape Map](#), students have many options within the region for enrollment in career pathway training programs aligned to high-wage, high-need career fields. One recommendation for future exploration is a better way to determine student outcomes at the secondary level. While data is available concerning districts concentrators and completers within a particular CTE program of study, this data is a lagging indicator, and little data is available about the post-secondary projection of concentrators or completers within a specific program of study.

Projections for 2024 (Table 6) and 2030 (Table 7) that occupational trends will continue in the same direction with professional industries, education, construction, and health occupations will continue to lead the labor market in terms of demand and wage.

2 Year Change in Employment by Industry Title

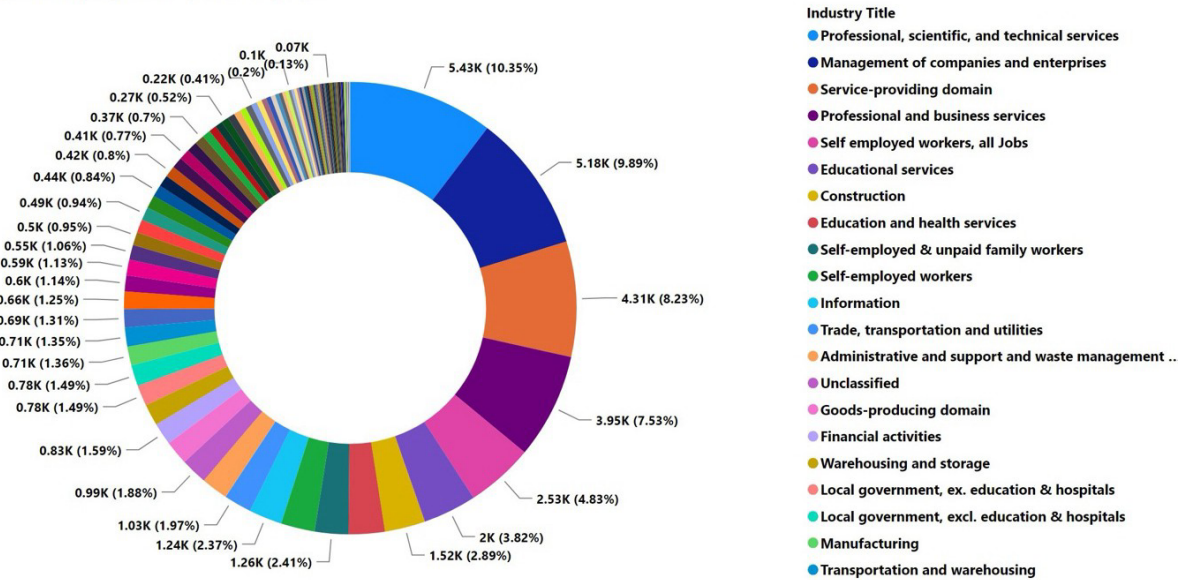


Table 6 – 2024 – 2 Year Change in Employment by Industry Title

10 Year Projected Change in Employment by Industry Title

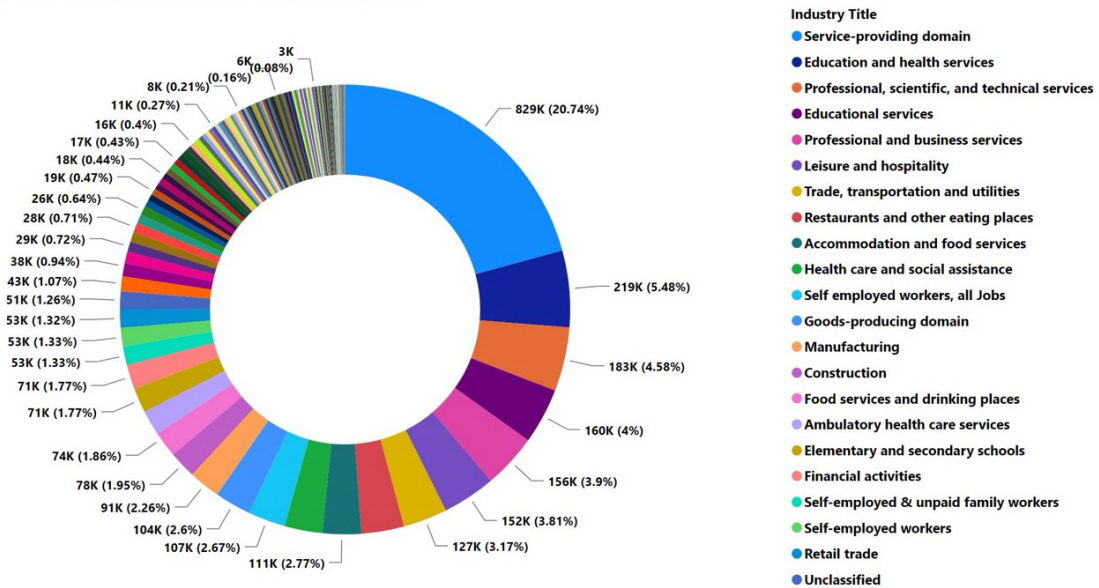


Table 7 – 2030 – 10 Year Change in Employment by Industry Title

Research points to specific data areas that need further probing. As discussed in the previous section, NCTX Local Education Agencies (LEAs) receive funding in an equitable manner. At question are the factors impacting decisions about which career training programs a LEA offers for enrollment. As shown in Table 6 - 2022-2023 NCTX CTE Teachers – Distribution by Career Cluster (TPIER, 2024), the largest percentage of CTE Teachers are serving in career clusters with little to no occupational demand. Example, Agriculture, Food, and Natural Resources Teachers were 13.79%, and Arts, Audio/Video Technology, and Communications were 12.46% of the full-time CTE teachers

in the 22-23 school year. One-quarter of CTE teachers in North Central Texas during this time were preparing students for career fields that show a negligible existence within the Region. High-need areas such as Protective Service at 5.46%, Education and Training at 2.92%, and Architecture and Construction at 2.68% of NCTX CTE Teachers may lead to small numbers of future employees entering these career fields. The gap analysis suggests that this misalignment could be a root cause of some areas of skills gap across areas of critically high need in NCTX. Recommendations for future exploration include a method of aligning the weighted formula funding to the labor market's needs as an alternative to the current method of weighted funding aligned to the secondary course level. More insight into the decision-making process on implementing, expanding, or closing career training programs is provided in survey responses to questions aligned in this area:

ALMD1: What is the greatest influence on your school or district's decision to offer specific CTE programs of study?	
Labor market data: high-wage, high-need	27
CTE Industry Partners – Advisory Committee	0
Student Interest	34
Existing CTE Teachers	24
I don't know	25
ALMD2: What percentage of your organization's career training programs are aligned to high-wage, high-need careers within the North Central Texas region?	
All	0
Approximately 75%	12
Approximately 50%	39
Approximately 25% or less	15
I don't know	44

In further discussions, administrators explain that a LEA may strongly desire to offer a career training program defined as high-wage, high-need, but recruiting and retaining qualified teachers is a paramount challenge. It is important to note that secondary CTE programs are offering many leading career pathway training programs aligned to the labor market needs within the region. Health occupations are in high demand in NCTX. In the 22-23 school year, 12% of NCTX CTE Teachers were teaching courses aligned to this area.

2022-2023 NCTX CTE Teachers by CAREER CLUSTER

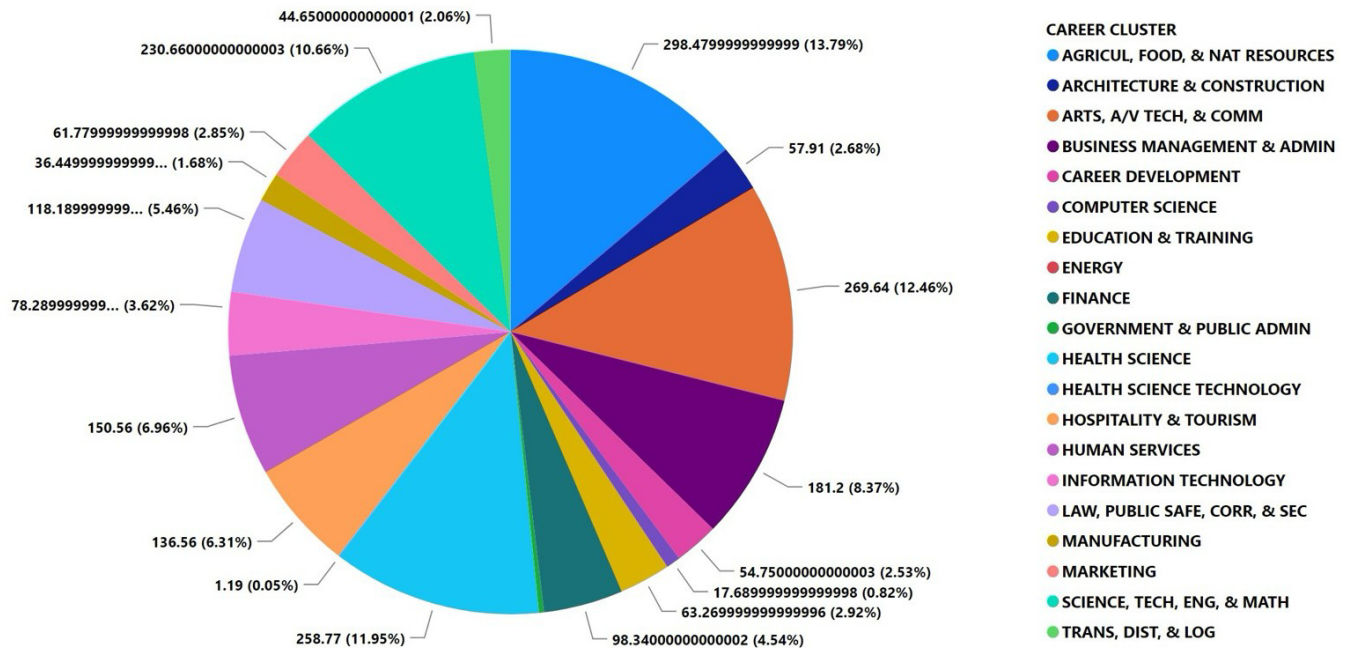


Table 8 – 2022-2023 NCTX CTE Teachers – Distribution by Career Cluster (TPIER, 2024)

Areas Needing Further Exploration

★ Firefighters SOC Code 33-2011

Current data shows that in NCTX, there are only 2 secondary programs (Denton and Weatherford ISD) offering the Disaster Services (In 2024-25 will become Fire Science POS) CTE Program of Study. During the Protective Service Focus group, an industry leader shared the following helpful information:

To gain certification in Basic Fire Suppression, one must complete an approved Fire Suppression Training program, pass 4 sections of an exam, and document completion of medical training equal to EMR, ECA, EMT, or Paramedic. He shared that in the past, enrollment in the mentioned medical training programs provided a strong recruiting pool for future firefighters. However, over the last 5 years, this has changed. Students interested in enrolling in training programs for nursing, another high-need occupation, have faced highly competitive entrance requirements. In the event a student is not admitted to a nursing school, as an alternative, they may enroll in paramedic or EMT training to continue learning, and rate higher on nursing school entrance rubrics during the next employment cycle. This practice keeps individuals who want to become a paramedic or firefighter from gaining entrance into the correct program. Recommendations are for further exploration into this barrier, and alternative post-secondary training paths to serve as a relevant bridge into high-need occupations like nursing or firefighting.

* Plumbers, Pipefitters, and Steamfitters SOC Code 47-2152

Research shows that only Scurry-Rosser ISD and Weatherford ISD offer the Secondary Plumbing and Pipefitting Program of Study in NCTX. Plumbing education in Texas is a multi-level licensure program. The Texas State Board of Plumbing Examiners is the state agency responsible for licensing plumbers in Texas and has the authority to issues licenses, endorsements, and registrations. (TSBPE, 2024).

Leading Questions

- Are there current incentives for secondary schools to implement a Firefighting or Plumbing program of study?
- Are NCTX schools offering programs of study in Law and Public Safety, or Architecture and Construction that could be adapted to change to Fire Science or Plumbing?
- How can industry assist NCTX schools with recruiting and retaining teachers for these high-need areas?

Links Between Secondary and Post-Secondary Education

View NCTX Data Dashboard – Secondary and Post-Secondary Education at facted.org/links-secondary-postsecondary

Students often find the transitions from secondary to postsecondary education challenging or unclear, leading to low postsecondary enrollment and completion rates—even though many jobs in Texas require postsecondary degrees or certificates. Data confirms that formal post-secondary training is required for over 50% of 2024 NCTX career opportunities posted. Of the occupations advertised at the time of this report (Table 7), 39% required a high school diploma or equivalent, 33% required a bachelor's degree, others require an associate degree, or other form of post-secondary training.

2024 Occupations with Educational Requirements

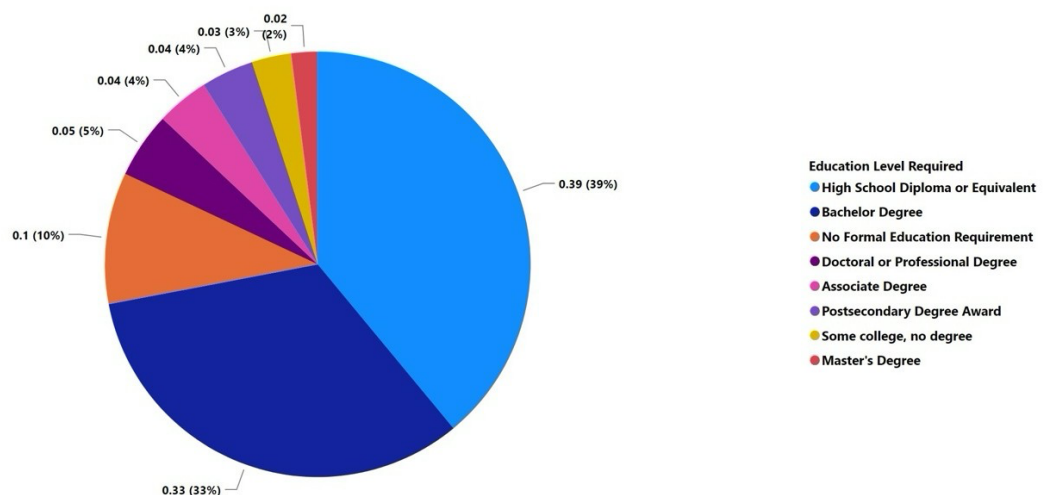


Table 9– 2024 Occupations Including Education Requirements in Posting (University of Texas, 2024).

Pathways expand and focus on postsecondary alignment by highlighting opportunities to earn postsecondary credit and credentials while still in high school. This ideal scenario allows students to progress through seamlessly connected secondary and postsecondary programs of study and degree plans.

Dual Credit Career and Technical Education (CTE) programs represent a dynamic and forward-thinking approach to secondary education, blending academic rigor with practical skill development. These programs are designed to provide high school students with the unique opportunity to enroll in college-level courses that not only count towards their high school diploma but also earn them college credits. Grubb et al. (2017) found that more than 30% of students who participated in a dual-enrollment program graduated with a 2-year college degree within two years of high school graduation compared to 15% of those who did not take part in such programs. During the 2022-2023 school year, 40,540 NCTX CTE students earned college credit hours totaling 187,709 college semester credit hours (Table 8). Furthermore, approximately 95% of NCTX Schools offer more than 3 courses for college credit.



Table 10– 2022-2023 NCTX Dual Credit Outcomes

The high percentage of NCTX K-12 schools who partner with regional higher education partners to offer dual credit opportunities for students is a strong indicator of high-quality links between secondary and post-secondary education.

Areas Needing Further Exploration

✧ Underserved Populations and Expanding CTE Dual Credit Opportunities

More research is needed to connect traditionally underserved student populations to dual credit opportunities.

Expanding the number of dual credit CTE programs offered at NCTX K-12 districts by assessing credentials of currently employed K-12 staff will connect more students to the opportunity.

Credentials with Value in the Labor Market

View NCTX Data Dashboard – Credentials of Value at facted.org/credentials-of-value

A student's journey into a high-wage, high-need career starts long before an individual possesses the knowledge and skills to earn a credential of value. To effectively compete in the job market, students require qualifications that employers value. Bridging the skills requires meeting the needs of employers for a workforce with a higher level of credentials. The availability of credential-earning opportunities along their educational and professional journey enables students to join, leave, and rejoin the pathway in alignment with their evolving educational and career objectives. Industry-based certifications, higher education certificates and degree programs are valuable when job openings require one of those specific credentials.

Involving regional industry partners to discuss and determine credentials of value is a critical piece of building high-quality career pathways. While there are many different lists of industry certifications and post-secondary credentials available on the internet, and through counseling and advising offices, when a potential employer details specific knowledge and skills needed in a future employee, including a certificate or credential, this information should be highlighted for importance. The approval process for official list is complicated and extensive. Despite legislative efforts to devise one list of Texas credentials of value, as this report is finalized, how the adopted list will be used by educational agencies needs further clarification.

To provide further details, in December of 2023, the Texas Workforce Commission adopted the Industry-Based Certification (IBC) Advisory Council's Inventory of [2023 Industry-Recognized Credentials](#) to comply with Texas Labor Code Chapter 312 (TWC, 2023). State law requires the TWC to provide a copy of the Industry-Recognized Credential Inventory to each school district and public institution of higher education that offers a career and technical education (CTE) program to public high school students. Districts received this communication from TWC the week of December 18, 2023. On January 11, 2024, school districts administrators received a notice from TEA that stated,

“While the TWC’s list of industry-recognized credentials may be used to provide additional opportunities to meet the educational and career goals of students, only the Texas Education Agency’s Industry-Based Certification List for Public School Accountability with aligned certifying entities may be reported through the Texas Student Data System (TSDS) Public Education Information Management System (PEIMS) and count toward the College, Career, and Military Readiness (CCMR) calculations for accountability and for reimbursement requests. In the future, all certifications included on TWC’s inventory will be evaluated against criteria in 19 TAC §74.1003 for possible inclusion on the TEA’s list for public school accountability” (TEA, 2024).

Review of the 2023 TWC list, and the TEA Industry Based Certification List for accountability for NCTX K-12 districts does have some noticeable differences. For example, TEA’s list includes several certificates offered by NOCTI (National Leader in CTE Credentialing Solutions and Resources) that were added to the K-12 approved list in 2022. During focus group sessions, stakeholders expressed concerns about specifically NOCTI certifications for Early Childhood Education and Engineering

Technology. After reviewing the blueprints for each assessment ([Education](#), [Engineering](#)), stakeholders offered that the assessments are “more or less a test you take at the end of a course but not known to be a certificate that will get you a job. That should be the measurement for a credential of value”.

According to TEA (2024), “the purpose of the IBC (Industry Based Certification List for School Accountability) list is to identify certifications that prepare students for success in the workforce, military, or postsecondary education” (TEA, 2024). NCTX Schools, industry partners, and higher education partners should consider the TEA list useful for district A-F accountability purposes. This does not mean that a student who earns an industry-based certification on this list has earned a credential of value.

Student Outcomes –TEA Approved Industry Based Certifications

Top 10 Highest Earned Industry Based Certifications – Class of 2021

Members attending industry focus group sessions were asked to assess a shorter list of TEA approved industry-based certifications. Data provided by TEA (2024) shares the number of students in the class of 2019, 2020, and 2021 who earned an industry-based certifications from the TEA list for accountability. The list of top 10 certifications earned by graduates in the class of 2021 was provided during the focus group. Participants were asked to identify any certifications that may align with one of the 2024 Leading Career Pathway Occupations. Three of the ten IBCs were selected.

Legend

Sunsetting 8.31.2024
Considered Aligned to 2024 Leading Career

Industry Based Certification	# of 2019 Graduates Earned	# of 2020 Graduates Earned	# of 2021 Graduates Earned
MICROSOFT OFFICE SPECIALIST WORD	5969	10438	12824
TEXAS STATE FLORAL ASSOCIATION FLORAL SKILLS KNOWLEDGE BASED	838	2217	4764
GOOGLE ANALYTICS INDIVIDUAL QUALIFICATION	71	822	4545
NCCER CORE LEVEL ONE	3368	4114	4431
OSHA 30 HOUR GENERAL	166	1445	3824
NON-COMMISSIONED SECURITY OFFICER LEVEL II	1252	2491	3461
MICROSOFT OFFICE SPECIALIST EXCEL	2324	3133	3342
AWS D1.1 STRUCTURAL STEEL	2208	2449	3131
ADOBE CERTIFIED ASSOCIATE PHOTOSHOP	2039	2699	2966
AWS D9.1 SHEET METAL WELDING	1205	1827	2622

Table 11 - Top 10 IBCs earned by graduates – Class of 2021

Stakeholder Survey Responses – Credentials of Value in the Labor Market

- In your industry, where is there the most demand for qualified workers? What occupations are the most difficult to fill?
 - Architecture and Engineering Industry – Electrical Engineering Technicians

- Construction and Extraction – High demand in all occupations
- Protective Service – Dispatch (across the board), Correctional and Patrol Officers, Firefighters
- Healthcare Professions and Support – Nursing and Patient Care Roles
- Computer and Mathematical – Software Developers and Support Personnel in multiple areas
- Education - high demand in all occupations
 - “Entry level childcare roles are a critical need for education as an industry and for all industries who have many openings. These positions are difficult to fill because of the low wage. To increase the wage, childcare rates need to increase, and parents are already struggling to cover the costs. It is a vicious cycle.”
- What are the key education, certification, and skills demands in those occupations?
 - Architecture and Engineering Industry – Electrical Engineering Technicians - “High schools continue to focus on students falling into the engineering category. Students in this group are normally math strong students who may be on an advanced track. To be honest, students that graduate from Texas A&M University with a 4-year degree in Engineering do not have the qualifications we need for technician positions. We have worked with colleges and Region 11 ESC to apply for approval for a regional program of study to hopefully clear up the confusion. We need students who are willing to learn who may not be in the top 10% of the graduating class. These are very high-need, high entry-level wage positions.”
 - *“We are alarmed at the number of applicants who are almost 18 or older and do not have a driver’s license.”*
 - *“Why are schools no longer requiring a typing class? Must be able to type for dispatch. This means actual typing the correct way. Just because someone can text 60 words per minute does not mean they can type accurately. A typing class should be a required entry course in all law and public safety high school programs.”*
 - *“A typing course should be a required entry course in all high school programs.”*
 - *“The required education to become a classroom teacher has been the same for many years. The need for teachers in specialized roles has expanded the opportunities.”*
 - *“We (law enforcement) participated in a review of law enforcement certifications for high school programs recently (as listed on TEA programs of study). I asked about adding the FAA 107 certification for law enforcement and was told that it might be looked at during the next review which would be a couple of years away. Almost all areas of law enforcement use drones for different tasks like searching on a silver or*

amber (missing person) alert, traffic accidents. This should be added. Why does it take so long to have a widely used skill added to a training program officially?"

- What limits youth from being able to enter those careers? What is the career advancement path for people in those careers?
 - *"(Criminal) record or decisions made when they are younger."*
 - *"Lack of communication skills and this is very important as they are usually dealing with people on their worst day. Struggle with dealing with on-the-job corrections or confrontation."*
 - *"Pre-employment screenings such as drug tests."*

Areas Needing Further Exploration

* Industry Based Certifications – Credentials of Value

Tri-Agency collaboration to produce a single list of credentials of value to remove opportunities for confusion or wasted funds expended on certificates without merit. Students, the future workforce, must be able to trust that a credential earned as listed by any state agency has value in the workplace.

* Regional Higher Education Graduation Rates & Equitable Access

More on NCTX Higher Education Credentials here facted.org/higher-ed-cred

According to a Texas Higher Education Coordinating Board (2023) report on an 11-year study in which the 2012 8th grade cohort was tracked through 2022, amongst NCTX non-economically disadvantaged students, 35% earned a post-secondary credential. During the same period, only 13% of economically disadvantaged students earned a higher education credential. Current funding models at many IHEs within NCTX provide college enrollment at little to no cost for economically disadvantaged students.

NCTX
North Central Texas Pathways

NCTX 11 Year Study
8th Grade Student in 2013
Earned Higher Ed Credential 11 Years Later

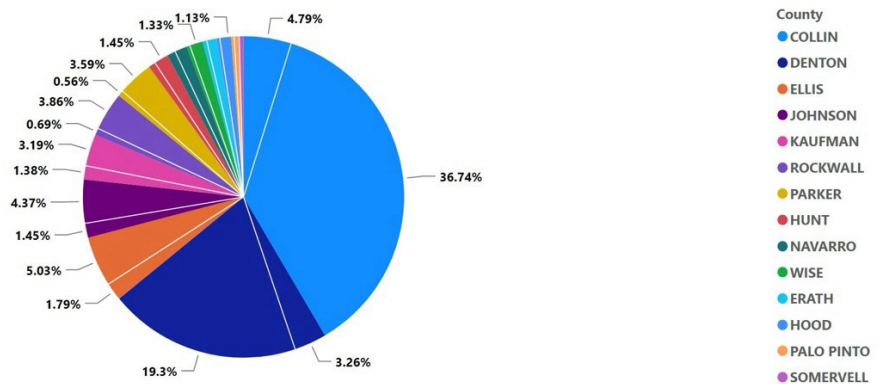


Table 12 – 2022 NCTX Credential of Value Attainment – 11 Yr. Study



North Central Texas Higher Education Outcomes 2013 Cohort through 2022
By Gender and County

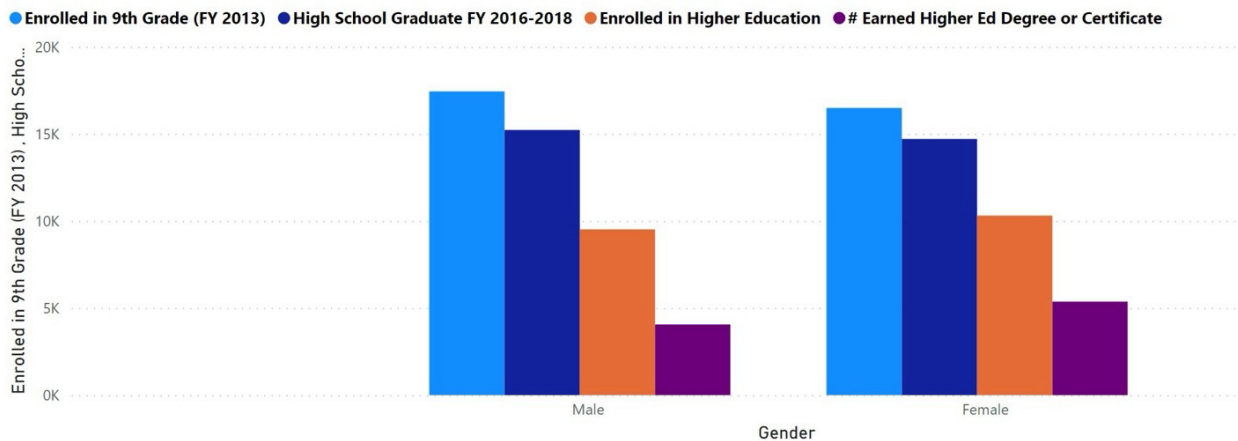


Table 13 – 2022 NCTX Higher Ed Outcomes by Gender

Exemplary Post-Secondary Training Programs

Last year, the Texas Success Center honored the exemplary work of eight Texas community colleges for their success in the implementation and scaling of the state’s research-based guided pathways strategy, Talent Strong Texas Pathways (TACC, 2023). Awardees were celebrated in Houston, Texas at the November Talent Strong Texas Pathways Institute: Mapping Pathways to Student Post-Completion Goals, with 500 attendees representing 48 colleges statewide.



North Central Texas College (NCTC) received the Scaling Excellence (ROSE) award. North Central Texas College was selected as a recipient of the 2023 ROSE award in Recognition of Scaling Excellence in Pillar 1, Mapping Pathways to Student End Goals. In 2021 and 2023, the Texas Success Center administered a Scale of Adoption Assessment (SOAA) process to better understand how

Texas colleges are scaling reform efforts to serve a broader group of students. As such, the SOAA provides a snapshot of systems change activities that have occurred at the institutional level over the past two years. Since 2021, North Central Texas College demonstrates the highest growth rate among Texas community colleges for the essential practices relating to Pillar 1, Mapping Pathways to Student End Goals.

North Central Texas College took a team approach to program mapping to make significant progress, developing clear and informative maps that guide students to and through their goals to further education or to enter the workforce. As a result, all students at North Central Texas College can select a program pathway and make progress in courses in the first year that apply to all the programs in that pathway.

Paris Junior College was selected as the recipient of the 2023 “Exemplar” ROSE award in Recognition of Scaling Excellence.

Paris Junior College is the first community college in the state to have achieved the goal of reaching scale in the essential practices across all four pillars of the Texas Pathways strategy.

The student experience at Paris Junior College has been dramatically altered through the implementation and scaling of Guided Pathways at the institution. Today, learners access well-designed programs that align with their transfer or workforce goals. Learners also can actively explore and experience supportive onboarding for a strong start within their program. The college provides proactive advising throughout the student’s time at the college and ensures that students engage in active and applied learning throughout their program progression.



The comprehensive, whole-college reform efforts conducted by Paris Junior College are expansive. In scaling the essential practices of across the four pillars of the Talent Strong Texas Pathways strategy, Paris Junior College has fundamentally transformed into a student-ready institution.

Recommendations for further exploration include research on underlying barriers preventing underserved students from enrolling or persisting in opportunities for a post-secondary degree. Possible needs may include recruiting strategies and academic or other supports students need to experience success.

*** Emerging Industry Credentials**

Recommendation to develop a process for annual review of emerging industry credentials for addition to TEA CTE Programs of Study, new CTE course approval, and approval of regional CTE programs of study simultaneously. At such time that a credential is approved, it should be included on lists such as Industry Based Certifications for Accountability, and the Tri-Agency Credentials of Value in the Workplace list. Currently, TEA provides an annual period in which an organization can apply for approval of an innovative CTE course. However, this process does not include placing an innovative course on an approved or regional CTE program of study. TEA also provides an annual period in which an organization can apply for approval of a Regional CTE Program of study. This process allows districts to develop career pathway training programs to address regional labor market needs that may not be fully addressed through existing programs of study. Typically, regional program of study applications must utilize CTE courses or innovative courses that have already been approved. In the case of law enforcement, this creates a barrier for implementation when both an innovative course and a regional program of study may be needed.

✱ Driver's License

More research is needed to determine why students are graduating high school without acquiring a Texas driver's license. Why are most NCTX school districts no longer offering driver's education as a course option? Could school districts partner with an outside provider to bridge this gap?

Integration of Rigorous Core Academics and Career-Focused Learning

View NCTX Data Dashboard – Integration of Rigorous Core Academics and Career Focused Learning at facted.org/credentials-of-value

Integration of rigorous core academics and career focused learning happens simultaneously in the best circumstances. In high-quality, leading career pathways students earn a high school diploma while preparing for college or career focused on a high-wage, high-need career field.

Dual Credit Career and Technical Education (CTE) programs represent a dynamic and forward-thinking approach to secondary education, blending academic rigor with practical skill development. These programs are designed to provide high school students with the unique opportunity to enroll in college-level courses that not only count towards their high school diploma but also earn them college credits (Grubb et al., (2017) found students who enroll in a dual-enrollment program are 8% more likely to complete a degree than students who did not participate in dual-enrollment and more than 30% of students who participated in a dual-enrollment program graduated with a 2-year college degree within two years of high school graduation compared to 15% of those who did not take part in such programs. Participation in dual-enrollment courses has also proved more beneficial to postsecondary outcomes than enrollment in Advanced Placement courses, and those who have participated in dual enrollment are less likely to require remediation work upon entering college (Grubb et al., 2017). While the present study does not question the benefits of dual-enrollment programs, its findings suggest some modes of instruction may have greater effects on the level of college persistence than others.

During the 2022-2023 school year, 3028 NCTX CTE students earned college credit hours totaling 12,983 college semester credit hours (Table 10) (THECB, 2024).

See more at facted.org/22-23-dual-credit-outcomes

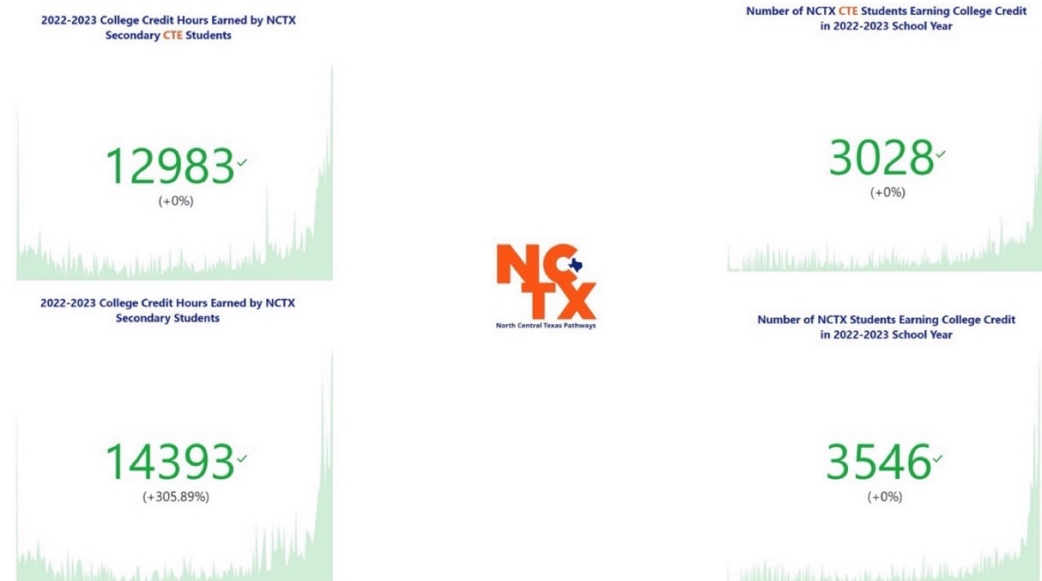


Table 14 – 2022-2023 NCTX Dual Credit Achievement

Texas College and Career Ready School Models

In North Central Texas, a region characterized by its dynamic economy and diverse population, the educational landscape is being transformed by the introduction of pioneering school models aimed at preparing students for the evolving demands of the 21st-century workplace. College and Career Ready School Models such as Pathways in Technology Early College High School (P-TECH), and Early College High School (ECHS) are at the vanguard of this transformation. These models offer innovative approaches to education by blending rigorous academic curriculum with practical, career-oriented training. P-TECH schools provide pathways that lead students from high school to post-secondary education and into meaningful careers, particularly in technical fields. ECHS models allow students to earn high school diplomas while simultaneously gaining college credits, often achieving an associate degree upon graduation.

In the North Central Texas Region, there are currently 8 designated or provisional college and career ready school model campuses found in the table below. These schools receive additional funding for each student enrolled in the CCRS program and were provided with programming support during planning and implementation years.

CCRS Model	High School Name	District	CCRS Designation Status
ECHS	Burleson Collegiate High School	Burleson ISD	Designated
P-TECH	Community High School	Community ISD	Provisional
P-TECH	Ferris High School	Ferris ISD	Provisional
P-TECH	Garner ISD	Garner ISD	Provisional
P-TECH	Greenville High School	Greenville ISD	Provisional
ECHS	James M Steele High School	Northwest ISD	Provisional
P-TECH	Royse City High School	Royse City ISD	Provisional
ECHS	Waxahachie Global High School	Waxahachie ISD	Designated

Table 15 – 2022-2023 Designated or Provisional CCRS Model Schools in Texas

College and Career Information and Advising

View NCTX Data Dashboard – College and Career Information and Advising at facted.org/collegecareeradvising

Effective college and career information and advising ensures that students are meeting the requirements to graduate from high school under the Texas Foundation Plan while maximizing their opportunities to prepare for life after high school. While we often speak of college and career advising in the same breath, the two should be researched and discussed separately with the important career discussion taking place first. This prevents students from graduating high school without a plan and allows post-secondary education to serve an explicit purpose: preparing students to enter the workforce in a specific high-wage, high-need career.

Focus and survey groups were asked explicitly what methods they used for college and career readiness, and if they track post-secondary outcomes. Just over 50% of district-level respondents indicated that the district could track the postsecondary outcomes of graduates, and only 6.2% reported being able to track students' employment outcomes. Post-survey discussion revealed that most district administrators only used the Texas Student Data System to evaluate student outcomes and were not aware of other data sources readily available.

There are many useful resources available for educational organizations and students of all ages allowing one to make an educated decision about the future. Some of the most frequently recommended resources include:



Texas Reality Check

Texas Reality Check is an online application tool designed to educate middle and high school students about career and lifestyle options.



Jobs Y'all

Jobs Y'all allows students to explore good-paying and meaningful careers in growing industries. Here, you'll discover rewarding and satisfying jobs right in their hometown or elsewhere in Texas. Find a career that matches your interests and goals.

Effective Advising Framework

The Texas Effective Advising Model outlines a process for a comprehensive school counseling program that meets the unique needs of campuses. School counselor, school staff, students, parents, and the community collaborate to plan, implement, and evaluate each of the five key levers of the model: Strong Program Leadership and Planning, Effective School Counselors and Advisors, Internal School Culture of Advising, Effective External Partnerships, and High-Quality Advising Materials and Assessments. Each lever is outlined with specific commitments and essential actions required at district and campus levels. This framework is designed to support schools in implementing effective advising programs, contributing to the overall success of students in their academic and postsecondary pursuits.



The North Central Texas Districts listed in this report (Table 15) were awarded implementations grants. As such, districts received technical support to provide students with tools promoting college and career readiness.

Grant	District
22-23 EAF Implementation Grant	Community ISD
22-23 EAF Implementation Grant	Cleburne ISD
22-23 EAF Implementation Grant	Farmersville ISD
32-24 EAR Implementation Grant	Krum ISD
22-23 EAF Implementation Grant	Weatherford ISD

Table 16 - 2022-2024 NCTX EAF Implementation Grant Awardees

Exemplary Advising Models

Collin College provides College and Career Counselors to many of its partnering high schools as an onsite resource for college bound students and those weighing college and career options. In addition to assisting with the dual credit process, they provide career counseling resources for high school students and create a bridge for the transition between high school and first time in college. They also serve as liaisons to Collin College student services, including admissions, testing, advising, ACCESS, and financial aid. Within North Central Texas, Collin College has counselors in place at approximately 37 different high schools.



Areas Needing Further Exploration

* Individual Career and Academic Planning

An Individual Career and Academic Plan (ICAP) is a personalized roadmap designed to guide students through their education and into their professional lives. This plan is typically developed by students, often with the guidance of educators, counselors, and parents, to help them identify their career interests, set academic and career goals, and outline the steps needed to achieve these goals. Texas students entering high school are required to develop a Personal Graduation Plan (PGP), a process that requires selecting a graduation endorsement. Some students are selecting a CTE program of study within their graduation endorsement, although defining a career choice is not a requirement in the process.

While both a PGP and a CTE program of study may be included in an individual career and academic plan (ICAP), Texas students are not currently required to complete an ICAP (TEA, 2024b). Numerous states have adopted strategies requiring high school students, and in certain instances, elementary and middle school students, to create and uphold an Individual Career and Academic Plan (ICAP) to assist in setting tailored academic and career objectives. To date, 38 states have put ICAPs into practice, with 21 states enacting mandatory ICAP policies. Some states have even linked ICAP completion to graduation criteria (Advance CTE, 2018). For instance, starting in the 2019-2020 academic year, Oklahoma mandated that students entering ninth grade must fulfill an ICAP requirement to graduate from public high schools (ODOE, 2024). Starting with the class of 2021-2022, Colorado has introduced Graduation Guidelines that require students to show Postsecondary and Workforce Readiness (PWR) in key areas such as Reading, Writing and Communicating, and Mathematics to graduate (CDOE, nd).

Further consideration is needed to determine how the requirements for high school graduation in Texas can consolidate graduation endorsements, CTE programs of study, college, and career readiness, completing the FAFSA (Free Application for Federal Student Aid), and Interaction with a

Peace Officer, etc. Into a single document incorporating all requirements. The Texas ICAP would provide a better focus on post-secondary decision-making processes and readiness. Furthermore, the confusion between mismatched items such as 12 hours in college credit to earn a Performance Acknowledgement on a high school diploma versus 9 hours of college credit to earn CCMR designation could be aligned to eliminate confusion.

More free resources are available at facted.org/collegcareeradvising.

Continuum of Work-Based Learning Experiences

View NCTX Data Dashboard – Continuum of Work-Based Learning Experiences at facted.org/wbl

Work-based learning offers students the chance to use the academic and technical knowledge and skills acquired in the classroom in practical environments. It enables interaction with business and industry experts, exploration of career paths, and the development and honing of vital job-readiness skills.

The Texas Tri-Agency (2022) developed a work-based learning continuum defining three levels: learning about work (career exploration), learning through work (career preparation), and learning at work (career training). Furthermore, the Tri-Agency collaborates to develop and oversee these programs, ensuring they meet the needs of both students and the state's labor market. The Tri-Agency (2022) report clearly defines the three levels and types of WBL activities within each. High-quality programs help bridge the gap between education and the workforce, providing students with valuable skills and experiences that can lead to successful careers.

Students enrolled in K-12 career training programs are provided with the opportunity to enroll in a practicum course at the level 3 or level 4 stage of their CTE program of study. A CTE practicum is an educational course or program that provides students with hands-on, practical experience in a specific career or technical field. This type of program typically involves a combination of classroom instruction and real-world work experience, allowing students to apply the skills and knowledge they have learned in a practical setting. The practicum is often a key component of CTE programs, aimed at preparing students for immediate employment or further education in their chosen field.

TEA requires LEAs to prepare a paid or unpaid training program for each student enrolled in a CTE practicum. Both types of training programs are prepared by the school CTE teacher assigned to the practicum. Required information includes the job skills students will be performing as aligned to the essential knowledge and skills for the course. If the position is a paid position, the teacher will use a paid training form. If the practicum position is job shadowing, or another experience where the student will not receive financial compensation, the unpaid training form is used. Completed forms are kept locally at the LEA where the student is enrolled. Data pertaining to the practicum being paid or unpaid experience is not currently reported to the state agency or tracked at a regional or state level.

During the 2022-2023 school year, approximately 24 (approximately 21%) NCTX School Districts offered a CTE practicum course. 32 NCTX teachers were assigned to teach a CTE practicum course, and 880 students were enrolled in these sections (TEA, 2023).

Career Exploration activities in this stage of the continuum are introductory and usually short-term. They provide participants with an opportunity to learn about industries and employers that may be unfamiliar.

Models include:

- Worksite Tours
- Job Shadowing
- Simulations
- Informational interviews with employers

Career Preparation activities in this stage of the continuum provide participants with extended opportunities to increase their knowledge of a field and gain employability skills and some entry-level technical knowledge or skills.

Models include:

- Internships
- Pre-Apprenticeships
- Cooperative Education
- Service Learning

Career Training activities in this stage of the continuum engage participants as paid employees to gain specific skills, in conjunction with classroom or lab instruction, in a specific industry or occupation.

Models include:

- Apprenticeships
- Youth Apprenticeships
- On-the-Job Training
- Transitional Jobs

2022-2023 # of CTE Practicum Courses Offered by NCTX DISTRICT

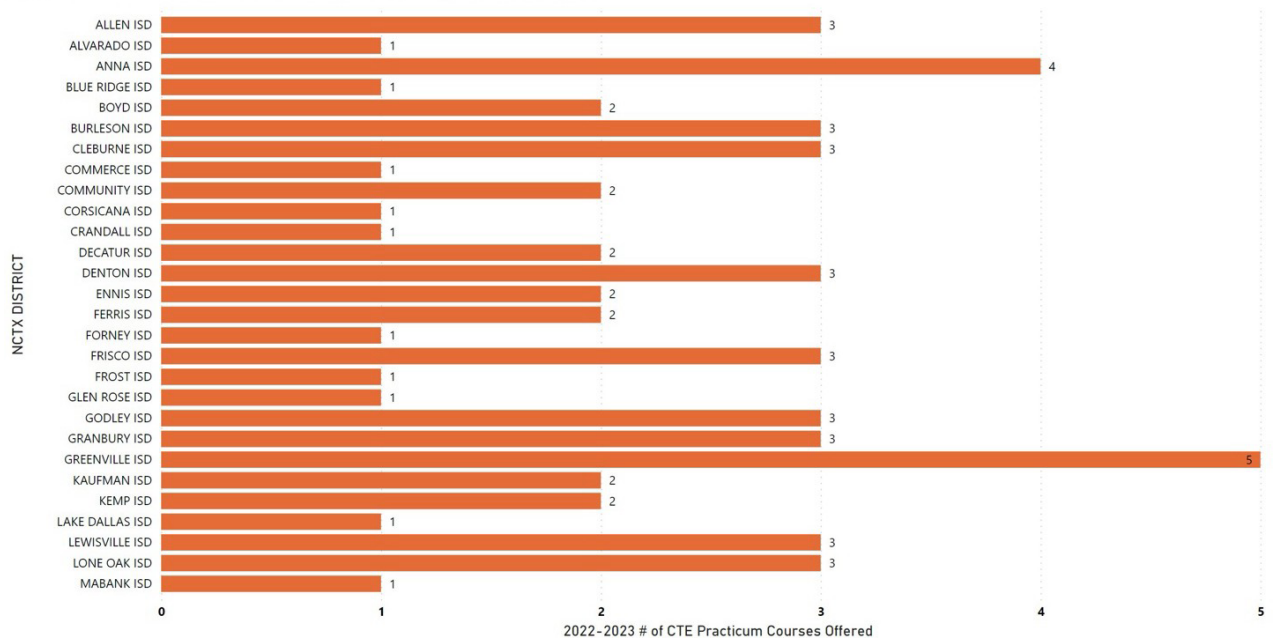


Table 17- 2022-2023 NCTX CTE Practicum Courses Offered by District

2022-2023 CTE Practicum Course Enrollment by NCTX DISTRICT

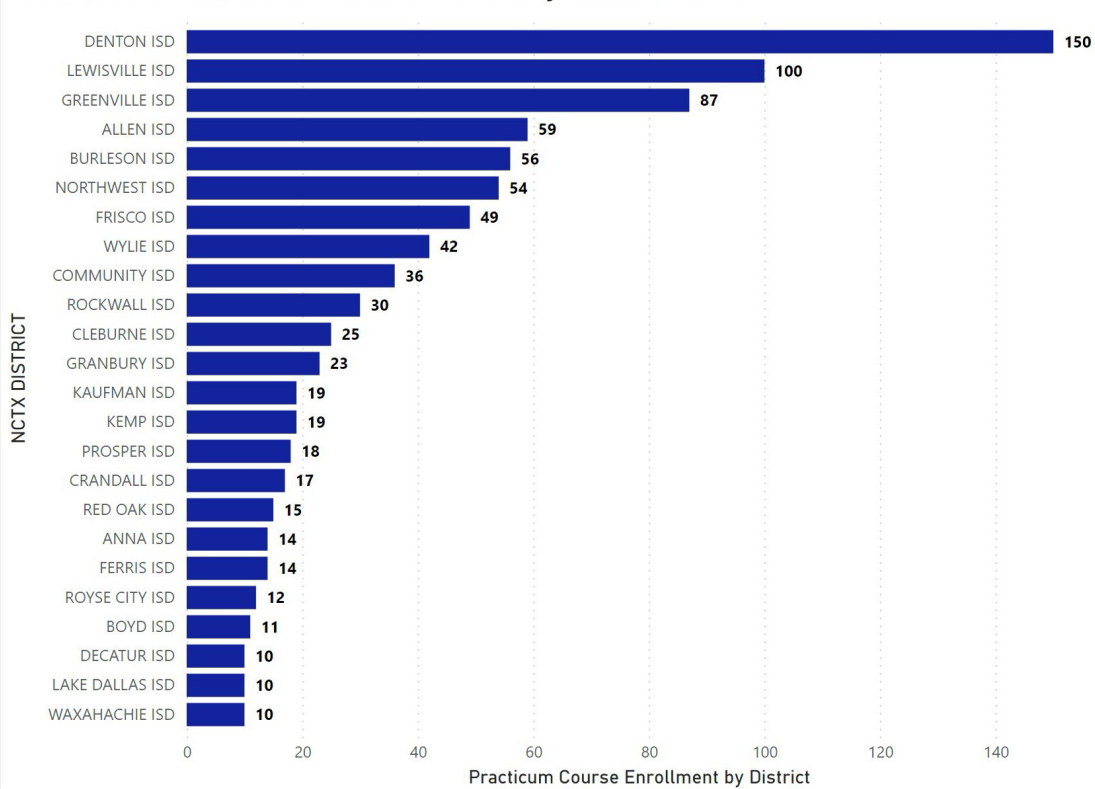


Table 18 - 2022-2023 NCTX CTE Practicum Course Enrollment by District

The distribution of CTE practicums by Career Cluster is displayed below. Surveying the practicum courses offered in schools during the 2022-2023 school year, none are aligned to high-wage, high-need career fields.

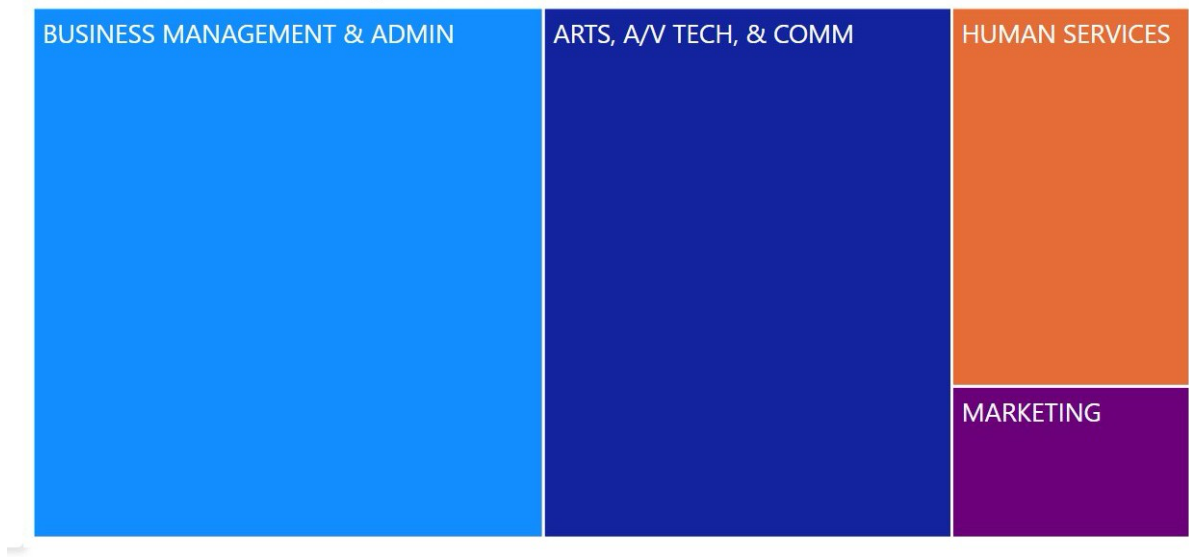


Table 19- 2022-2023 NCTX CTE Practicum Course Distribution by Career Cluster

Apprenticeships

Career apprenticeships are structured training programs that blend on-the-job learning with classroom education, offering a unique path for individuals to gain practical skills and knowledge in a specific trade or profession. Unlike traditional academic routes, apprenticeships emphasize hands-on experience, allowing apprentices to work alongside experienced professionals while also receiving related instruction. This approach not only facilitates the acquisition of specialized skills but also provides a real-world context for learning, enhancing the apprentice's employability and readiness for the workforce. Career apprenticeships often lead to certification or qualifications recognized in the industry, making them a valuable stepping stone for those looking to establish or advance their careers in various fields. Across NCTX, there are currently 2889 individuals learning at work through registered apprenticeships ([NCTX Apprenticeships at Work, 2024](#)).

Summer Opportunities

Over the past several years, TEA has published a competitive grant opportunity titled the CTE Summer Grant. Within the opportunity there are two focus areas: Focus Area 1 is to assist districts with providing high-quality CTE programs to students during the summer months. Focus Area 2 is to assist districts in facilitating and monitoring work-based learning experiences for students during the summer months. Eligible applicants are school districts, institutions of higher education, and education service centers. In the past, awardees have received up to \$100,000 to use for work-based learning experiences for students throughout the Summer.

Evaluating High Quality Work-Based Learning

Evaluating the quality of work-based learning is a crucial step to ensuring relevance, educational value, equity, accessibility, accountability, and identifying areas for improvement. The Tri-Agency published a framework by which work-based learning experiences may be measured for quality (Tri-

Agency, 2022). This framework includes the following key areas for consideration. Does the WBL experience:

- Align to career pathways,
- Incorporate meaningful job tasks,
- Identify and validate skills to be gained,
- Reward skill gains and offer compensation,
- Support academic progress and achievement,
- Integrate opportunities to develop professional networks, and
- Measure and monitor progress for all partners?

FACT Education as the NCTX Regional Convener has developed an online WBL quality reporting tool to assist educational organizations to perform a self-assessment. The tool is located at facted.org/wbl.

Exemplary Work-Based Learning Programs

Forney Independent School District

Forney Independent School District's Keith Bell Opportunity Central, or "The OC," is a career and college campus opened to student in the Fall of 2023.

The Opportunity Central (OC) campus is intentionally designed to:

- 1.) facilitate the development, training and upskilling of present and future career workforce
- 2.) provide access to innovative higher education programs and certifications, and
- 3.) accommodate successful business operations within the facility designed for student and community integration specifically for students to gain real-world experience.

As an innovative concept, The OC **requires** partners and business models to embrace purpose-driven education through student employment, training and mentorship.



The OC is an imaginative, creative and one-of-a-kind idea that will transform the way schools and communities educate future generations. Part career and college center, multi-purpose complex, student-run business hub, fine arts spaces and so much more, it's designed to create new opportunities for everyone in the Forney Family.

The 350,000 square foot facility operates seven days a week with evening hours to accommodate practices, night

classes, meetings and special events. The campus features retail and restaurant spaces, professional services and entrepreneurial offices, an early childhood development center, 600-seat theater, and a 7,000+ seat arena. The multi-purpose arena hosts a variety of special events, trade shows, athletic tournaments and competitions. Future FISD graduations will take place in this facility.

Approximately 2,000 high school students are transported from North Forney High School and Forney High School each school day to take advantage of classes and programs available at The OC. In addition, the facility's first floor is open to the public for access to The OC retail, professional service and eatery businesses. Students enrolled in CTE Programs of Study in Forney ISD are provided with opportunities to connect with the organizations who have leased space on the first floor for work-based learning. Businesses who provide opportunities for students can take advantage of a reduced rental rate in the facility. In fact, providing opportunities for students is a requirement to open a business there.

FISD partners with Dallas College, Trinity Valley Community College, and Texas Tech University to offer programs and courses in a variety of fields. High school students and adults can acquire college hours and/or take classes toward their degrees/certifications. Evening and night classes will also be available.

Visit www.theoc.net for more information.



Stakeholder Survey Responses – Continuum of Work-Based Learning

- Has your company provided work-based learning opportunities for high school and/or college students in the past? How was that structured and managed? What has gone well? Are there areas in which your company could use additional support to make sure that this is good use of your time and resources?
 - “Honestly, we are more inclined to reach out to community college programs. Students in these programs are essentially paying to be there and are more invested.”
 - “We have served as a preceptor site for EMT and paramedic students for years and we have seen dozens of high school students come through that program in partnership with the College.”
 - “Active monitoring and participation from the school is a must. We are moving toward requiring specific instructor participation at regular intervals. We have been involved in past things where the students were great, but the teacher did not hold up their end of the arrangement.”

- “Not so much support, but I think that conveners like what you are doing now can bridge gaps in communication and making sure students are qualified and prepared. We are willing to work with students. We do not have time to vet them.”

Areas Needing Further Exploration

*** Summer Career and Technical Education Grant**

Recommendations for future consideration include expanding eligible applicants to include designated Texas Regional Pathways Network Regional Conveners. These organizations are poised to provide unparalleled assistance to school districts who may not have capacity to offer summer opportunities.

Closing

Identifying and addressing the disparities between the skills present in the workforce and the skills demanded by employers in the North Central Texas region is a tremendously large task. While this report attempts to provide an asset map and a foundational gap analysis for the region, it in no way highlights all the stellar career training programs and implementation efforts across the 14-county area. All the stakeholders involved in this process over the last over the last 12 months play a critical role in addressing workforce gaps by providing training, resources, and support to job seekers and employers, and ensuring the workforce aligns with current and future market demands. The assistance in pinpointing areas where workforce development efforts should be concentrated to meet critical needs supporting the region’s economic development was invaluable to the North Central Texas Pathways Leadership Team’s work. The team is confident that partnership and collaboration will build and implement programs and services geared to creating a skilled workforce supporting the growth and competitiveness of North Central Texas in the global economy.

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