APPENDIX A: Cover Sheet

Tennessee College of Applied Technology Knoxville

RHCPE GRANT Union County Surgical Technology Apprenticeship Pathway

Lead Entity: Tennessee College of Applied Technology Knoxville
Fiscal Entity: *Tennessee College of Applied Technology Knoxville*

IN PARTNERSHIP WITH:

Higher Education Institutions
Tennessee College of Applied Technology Knoxville
Walters State Community College

LEA/School District
Union County Public Schools

Employer Partners
SunBridge Regency - Tennessee, LLC d/b/a Willow Ridge Center
Covenant Health

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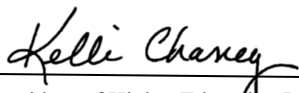Tennessee College of Applied Technology Knoxville
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Funding Requested:
$2,000,000

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Union County Surgical Technology Apprenticeship Pathway

1. Program Narrative

Overview

This proposal aims to secure funding from the Rural Health Care Pathways Expansion Grant (RHCPE) to develop a comprehensive apprenticeship pathway for Nurse Aide, Central Sterile Processing Technician, and Surgical Technician training in Union County, Tennessee. The pathway will enhance healthcare workforce development in rural areas by providing accessible training opportunities through a collaborative partnership with local education and healthcare institutions. This initiative will address existing barriers, such as travel to Knoxville, and utilize a newly constructed facility on the Union County Public Schools campus, opening in Spring 2026.

The pathway consists of three distinct levels:

1. **Nursing Aide Program:** This entry-level program will equip students with foundational skills necessary for basic patient care, including personal hygiene assistance, mobility support, and vital signs monitoring.

2. **Central Sterile Processing Technician Certification:** Building on the Nursing Aide training, this program will provide in-depth knowledge and hands-on experience in sterile processing techniques, infection control, surgical instrument sterilization, equipment maintenance, and the organization of sterile supply systems. Students will gain the skills required to ensure patient safety and support surgical and medical teams in various healthcare settings.

3. **Surgical Technician:** This advanced training will prepare students for assisting surgeons and other medical professionals during surgical procedures. Students will learn essential skills such as sterilizing equipment, maintaining a sterile field, handling surgical instruments, preparing patients for surgery, and ensuring adherence to strict safety and infection control protocols. Graduates will be equipped to work in hospitals, outpatient centers, and other surgical facilities.

The intended outcomes of the apprenticeship pathway include:

- Increased employment rates within the healthcare sector in Union County.
- A robust pipeline of qualified surgical professionals ready to meet local healthcare needs.
- Enhanced accessibility to healthcare training for rural residents, reducing barriers such as travel and cost.

Target Population

The primary audience for this apprenticeship pathway includes:

- Rural High School Students: These students will have the opportunity to participate in dual enrollment programs, allowing them to earn credits towards their Surgical certification while still in high school. This early exposure to healthcare careers aims to inspire and prepare the next generation of healthcare professionals.

- Adult Learners: This group includes individuals seeking to enter the healthcare workforce or advance their careers. Many adult learners may have work or family commitments that necessitate flexible training options. The apprenticeship model will provide them with the opportunity to gain practical experience while they learn.

By targeting these populations, the program aims to foster a diverse and skilled workforce capable of addressing the healthcare needs of Union County.

Curriculum Development

The curriculum for each training level is designed to meet the specific needs of students while

aligning with state and industry standards. Key components include:

Nursing Aide	Central Sterile Processing Technican	Surgical Technology
Curriculum Components: • Worker Characteristic • Intro to Health Care • Human Body Health and Disease • Safety • Patient and Resident Care • Special Care Patients • CNA Long Term Care Clinical	*Curriculum Components:* • Worker Characteristic • Medical and Surgical Terminology • Microbiology & Infection Control • Surgical Instrument & Equipment • Intro to CSP • Anatomy and Physiology • CSP Practices and Procedures • Clinical PracticumI	*Curriculum Components:* • Worker Characteristic • Vocational and Prof Relations • Med and Surgical Terminology • Anatomy & Physiology • Microbiology • Principles Of Asepsis • Supplies, Equipment, & Inst • Technological Sciences • Patient Care • Pharmacology • Basic Surgical Procedures • Clinical Practicum I • Advanced Surgical Procedures • Clinical Practicum II

- o **Dual Enrollment Opportunities:** High school students will be able to enroll in this program, allowing them to earn college credits and certifications while working towards their high school diploma.

- o **Articulation Agreement:** Graduates from TCAT Surgical Technology programs with an unencumbered TN LPN license can receive 33 Prior Learning Assessment (PLA) credit hours towards the A.A.S. Surgical Technology Program. Admission to the AAS program requires meeting specific academic and non-academic criteria, including Proof of graduation from an ARCSTSA/CAAHEP accredited program in Surgical Technology in good standing at the time of graduation, Proof of current certification from the National Board of Surgical Technology and Surgical Assisting (NBSTSA)through an existing articulation agreement with Walters State Community College, ensuring easy credit transfer for continuing education services. *(see Appendix F and Appendix G)*

Work-Based Learning (WBL) Experiences

The program will develop and implement collaborative, meaningful, and structured work-based learning (WBL) experiences that increase awareness of healthcare fields at the secondary level. Defined as a proactive approach to bridging the gap between secondary and postsecondary education, WBL aims to connect students with high-demand, high-skill careers in Tennessee.

TCAT KNOXVILLE UNION COUNTY

NURSING AIDE · CENTRAL STERILE PROCESSING · SURGICAL TECHNICIAN

APPRENTICESHIP PATHWAY

CAREER AWARENESS
ELEMENTARY SCHOOL (K-5th)

- Tammy and Tommy TCAT
- Career Camps
- Remake Learning Days

CAREER EXPLORATION
MIDDLE SCHOOL (6th to 8th)

- Remake Learning Days
- Campus Tours
- CTE Career Nights

CAREER PREPARATION
HIGH SCHOOL (9th to 12th)

- Clinical Tours
- Industry Certifications
- SkillsUSA Tennessee
- Pre-Apprenticeships
- Dual Enrollment

TRAINING EXPERIENCES

Certified Nursing Aide and Liscensed Practical Nurse training is available at TCAT Knoxville.

An articulation agreement is in place with **Walters State Community College** for an A.A.S. in Surgical Technology.

CERTIFICATIONS

- HESI Test Prep
- Basic Life Support CPR
- NCCT Certification Interactive Test Prep
- Clinicals
- Apprenticeships

CAREER

Covenant HEALTH
Certified Nursing Assistant
Licensed Practical Nurse
Registered Nurse

WILLOW RIDGE
REHABILITATION & LIVING CENTER
Certified Nursing Assistant

COMING SOON
NEW UNION COUNTY CAMPUS
SPRING 2026

Clinical Affiliations and Career Opportunities

The program will also establish clinical affiliations and career apprenticeship opportunities with local healthcare providers, including Covenant Health and SunBridge Regency - Tennessee, LLC d/b/a Willow Ridge Center. These partnerships will provide students with hands-on experience in real healthcare environments, enhancing their practical skills and employability. Students will have access to internships, co-ops, and clinical experiences that not only reinforce their academic learning but also offer insights into various healthcare roles. *(see Appendix H)*

The continuum of WBL experiences will provide students with concrete, coherent, and relevant opportunities, culminating in credit-bearing capstones such as internships, co-ops, pre-apprenticeships, registered apprenticeships, and clinical experiences. This structured approach

aims to equip students with essential academic, technical, and employability skills, ultimately enhancing their readiness for careers in healthcare. Overall, the apprenticeship pathway will ensure that graduates are well-equipped to excel in their roles, contributing to the improved health outcomes of their community.

2. Demonstration of Need

Overview of Workforce Needs in Union County

Union County, situated in a rural area of Tennessee, faces significant challenges in meeting the healthcare needs of its residents. The region has a high demand for healthcare professionals, specifically in surgical technology, due to an aging population and a shortage of qualified staff. Local healthcare facilities, including Covenant Health and SunBridge Regency - Tennessee, LLC d/b/a Willow Ridge Center, report difficulty in filling positions, which directly impacts the quality and accessibility of care for residents.

Localized Data Demonstrating the Need for Action

According to the Tennessee Higher Education Commission (THEC) Academic Supply and Occupational Demand Report, Tennessee colleges and universities are striving to meet the growing demand for healthcare professionals, as highlighted in the Health Sciences Cluster. For example, medical and clinical laboratory technicians in Tennessee have an employment rate of 76% for associate degree graduates, with an estimated first-year annual wage of $31,590. These professionals are critical for supporting diagnostic and preventative healthcare services in hospitals, outpatient clinics, and long-term care facilities. *(see Appendix A)*

The Tennessee Department of Labor and Workforce Development highlights the growing demand for healthcare professionals in Union County, with projections showing a significant rise

as local facilities expand services. The U.S. Bureau of Labor Statistics (BLS) confirms that roles such as Central Sterile Processors and Surgical Technicians are critical to healthcare operations. According to the BLS, Surgical Technicians, who require a postsecondary nondegree award for entry, earned a median annual wage of $49,710 in May 2023, with demand projected to grow by 3% from 2022 to 2032. These professionals play a vital role in preparing and maintaining surgical equipment, ensuring the safety and efficiency of surgical procedures. *(see Appendix K)* Union County's healthcare sector is growing, highlighting the demand for critical healthcare roles such as Central Sterile Processors and Surgical Technicians. With an average annual wage of $46,887 for healthcare roles, these positions are integral to maintaining the efficiency and safety of medical procedures in the county. As local healthcare facilities continue to expand, the need for trained professionals in these roles is expected to rise, aligning with Union County's broader workforce growth in healthcare services. *(see Appendix C)*

With 30.4% of children living in single-parent families and 23.5% of children living in poverty, there is a growing need for accessible and high-quality healthcare services. As healthcare facilities strive to address these community needs, the demand for skilled professionals, such as Central Sterile Processors and Surgical Technicians, becomes critical. These roles are essential for maintaining the quality and safety of medical care, supporting Union County's efforts to improve overall well-being and access to healthcare. *(see Appendix E)*

Clear Linkages Between Grant Activities and Local/Regional Needs

Currently, Union County offers limited healthcare training options, primarily through dual enrollment programs in partnership with local high schools. However, there are unmet workforce needs, particularly in the areas of surgical technology. Local healthcare providers have identified skillset deficits in critical areas such as central sterile processors in the surgical healthcare field.

Existing programs, while valuable, do not adequately prepare students for immediate employment in high-demand roles, leading to a reliance on out-of-county training programs. The proposed apprenticeship pathway will directly address these gaps by providing targeted training that aligns with local healthcare needs and career opportunities.

Proposed Expansion of Academic Programs and Work-Based Learning Opportunities

The proposed initiative will develop and expand the following academic programs and pathways:

- Nurse Aide Program: Expanding dual enrollment opportunities for high school students, providing foundational training and certifications for entry-level healthcare roles.
- Central Sterile Processing Technician Certification: Building on the Nursing Aide training, this program will provide in-depth knowledge and hands-on experience in sterile processing techniques, infection control, surgical instrument sterilization, equipment maintenance, and the organization of sterile supply systems. Students will gain the skills required to ensure patient safety and support surgical and medical teams in various healthcare settings.
- Surgical Technician: This advanced training will prepare students for assisting surgeons and other medical professionals during surgical procedures. Students will learn essential skills such as sterilizing equipment, maintaining a sterile field, handling surgical instruments, preparing patients for surgery, and ensuring adherence to strict safety and infection control protocols. Graduates will be equipped to work in hospitals, outpatient centers, and other surgical facilities.

(see Appendix F and Appendix G)

In addition to academic programs, the initiative will implement:

- Work-Based Learning (WBL) Opportunities: Structured internships and clinical placements in collaboration with local healthcare providers, allowing students to gain hands-on experience in real-world settings.
- Industry Certifications: Providing certifications in areas such as Basic Life Support (BLS) and OSHA to enhance employability.

Needed Equipment

To support the proposed programs, the following equipment will be essential:

- Simulation Manikins: For hands-on training in nursing skills, allowing students to practice in a controlled environment.
- Clinical Equipment: Basic medical supplies and technology to facilitate realistic training scenarios.

- Computers and Software: For theoretical learning and simulation-based training, enhancing digital literacy in healthcare.

CIP to SOC Crosswalk

A detailed Classification of Instructional Programs (CIP) to Standard Occupational Classification (SOC) crosswalk will be included to verify the alignment of the proposed academic programs with the identified workforce needs. For example:

- CIP 51.1012 - Sterile Processing Technology/Technician: Aligns with SOC 31-9093 - Medical Equipment Preparers.

- CIP 51.0909 - Surgical Technology/Technologist: Aligns with SOC 29-2055 - Surgical Technologists.

This alignment ensures that the educational pathways developed through this proposal will directly address the labor market demands and skill deficits identified in Union County and surrounding areas, ultimately enhancing the healthcare workforce in rural Tennessee.

3. Program Plan

Detailed Summary of Proposed Program

This proposal outlines the development of a comprehensive apprenticeship pathway for Central Sterile Process and Surgical Technology training in Union County, Tennessee, aimed at addressing workforce shortages in healthcare. The program aligns with workforce data indicating a critical need for qualified healthcare professionals in rural areas.

By providing accessible training opportunities through local education and healthcare partnerships, the program will create a clear pathway for students to earn health care credentials. The credentials earned will be stackable, allowing students to build upon their education as they progress through each level of training. This structured approach will produce job candidates

who not only possess the necessary skills but also hold recognized credentials that meet

employer needs.

Implementation Timeline

The program development will follow a detailed timeline from August 2025 through July 2029.

Timeline	Milestones	Activities
Q1 (Aug - Oct 2025)	Phase 1 Begins	Kickoff; order equipment; develop job descriptions; dual enrollment for Nursing Aide training (August); seek program development approval for the Central Sterile Processing and Surgical Technology from TBR and COE.
Q2 (Nov 2025 - Jan 2026)	Program Development Phase 1	Finalize program for Nursing Aide; start dual enrollment courses for Nursing Aide in January 2026; begin Surgical classes at Knoxville campuses in August 2025.
Q3 (Feb - Apr 2026)	Facility Renovation and Resource Allocation	Begin renovations on Union County Public Schools campus
Q4 (May 2026)	Work-Based Learning Events	Participate in Remake Learning Days and Dream It Do It events
Q1 (Jun 2026)	Tommie and Tammie Healthcare Career Camp	Conduct annual career camp for students
Q1 (Jul 2026)	Hiring Committee Formation	Establish committee and finalize job postings
Q2 (Aug - Oct 2026)	Training Delivery Preparation	Recruit instructors and finalize training materials; dual enrollment for Nursing Aide training (August)
Q3 (Nov 2026 - Jan 2027)	Full Program Launch	Commence full Surgical programs, pending approval
Q1 (May 2027)	Work-Based Learning Events	Participate in Remake Learning Days and Dream It Do It events
Q1 (Jun 2027)	Tommie and Tammie Healthcare Career Camp	Conduct annual career camp for students
Q2 (Jul - Sep 2027)	Continuous Improvement	Review program feedback and adjust curriculum as needed
Q3 (Oct - Dec 2027)	Additional Recruitment and Partnerships	Explore new partnerships and expand recruitment efforts
Q4 (Jan - Mar 2028)	Mid-Project Evaluation	Conduct evaluation of program outcomes and adjustments
Q1 (Apr 2028)	Work-Based Learning Events	Participate in Remake Learning Days and Dream It Do It events
Q1 (Jun 2028)	Tommie and Tammie Healthcare Career Camp	Conduct annual career camp for students
Q2 (Jul - Sep 2028)	Program Sustainability Planning	Develop strategies for sustaining program beyond grant funding
Q3 (Oct - Dec 2028)	Final Program Adjustments	Make final adjustments based on evaluations and feedback
Q4 (Jan - Mar 2029)	Final Evaluation and Reporting	Prepare final report on program outcomes and impact
Q1 (Apr 2029)	Work-Based Learning Events	Participate in Remake Learning Days and Dream It Do It events
Q1 (Jun 2029)	Tommie and Tammie Healthcare Career Camp	Conduct annual career camp for students
Q2 (Jul 2029)	Project Conclusion and Future Planning	Conclude project activities and plan for future initiatives

Quarterly Meetings

To ensure effective collaboration and communication among all partners, quarterly meetings will be held throughout the project duration. These meetings will focus on:

- Reviewing project progress and milestones
- Addressing challenges and identifying solutions
- Sharing updates and feedback from stakeholders
- Planning upcoming activities and initiatives

Training Components

The training will consist of three key components:

Classroom Instruction: Theoretical knowledge will be delivered through lectures, discussions, and multimedia presentations, covering essential topics in healthcare.

Hands-On Training: Students will engage in practical skills training in simulation labs, allowing them to practice techniques in a controlled environment before entering clinical settings.

Work-Based Learning (WBL): Structured WBL opportunities, including apprenticeships and clinical placements at local healthcare facilities, will provide students with real-world experience and enhance their employability.

Partnership Roles *(see Appendix H)*

The implementation of the apprenticeship pathway will involve collaboration between several

partners:

- Union County Public Schools: Responsible for facility management for the allied health building and dual student enrollment.
- Local Healthcare Providers (Covenant Health, SunBridge Regency - Tennessee, LLC d/b/a Willow Ridge Center): Provide clinical placements, mentorship for students, and input on curriculum relevance.
- Higher Education Institutions: Deliver the LPN and RN programs; TCAT will facilitate the grant.

Each partner will have clearly defined responsibilities to ensure the program's success, focusing

on program development, training delivery, and comprehensive student support.

Detailed Project Timeline and Overview

The project will be divided into phases, with key objectives for each phase:

Phase 1: Program Development (Aug - Oct 2025)
   Objective:

- Order necessary equipment.
- Develop and finalize the agreement for the Nursing Aide.

   Measurement: Completion of equipment orders, agreement finalization, and TBR/COE

approval.

Phase 2: Hiring and Facility Preparation (Nov 2025 - Jan 2026)
Objective:

- Form a hiring committee and finalize recruitment for teaching and staff positions.
- Prepare the facility for training.
- Start dual enrollment courses for Nursing Aide in January 2026.

- Continue Surgical classes at Knoxville campuses.

Measurement: Successful hiring of instructors and completion of facility

renovations.

Phase 3: Recruitment and Marketing (Feb - Jul 2026)

Objective: Recruit students and promote program awareness.

Measurement: Number of applications received and enrollment figures.

Phase 4: Program Implementation (Aug 2026 - Jul 2029)

Objective: Launch the full program and conduct comprehensive training for Nursing Aide,

Surgical programs, including the night LPN program pending approval.

Measurement: Student feedback and performance evaluations.

Project Governance and Accountability Plan

The governance structure will include:

- **Project Director:** The lead entity will employ a Project Director responsible for overall management and coordination.
- **Steering Committee:** A committee comprised of representatives from all partner organizations will oversee project progress. The committee will meet quarterly to assess milestones, address challenges, and ensure accountability.

Counties Served

The primary county served by this proposal is Union County. The project will benefit Union

County by increasing access to healthcare training, thereby enhancing the local workforce. By

developing a skilled pool of healthcare professionals, the program aims to improve health

outcomes and reduce barriers to obtaining quality care in this rural area.

This comprehensive approach ensures that the proposed apprenticeship pathway not only addresses immediate workforce needs but also builds a sustainable pipeline of qualified healthcare professionals for the future.

4. Strength of Partnership

Collaborative Framework: The partnership will have a structured approach with regular quarterly meetings to review progress, address challenges, and share updates. Communication will be facilitated through shared digital platforms for ongoing collaboration. *(see Appendix J)*

Commitment of Partners: Union County Public Schools will provide facility management and dual enrollment opportunities. Covenant Health and SunBridge Regency - Tennessee, LLC d/b/a Willow Ridge Center will offer clinical placements and mentorship. TCAT Knoxville will deliver essential nurse aid and central sterile processing and surgical technology programs, while Walters State Community College will provide AAS Surgical Technology program. The commitment of partners is detailed in the Grant MOU, Clinical Agreements, and current grant agreement in conjunction with Covenant Health and the Tennessee Hospital Association, found in *(see Appendix H)*. These documents show the strong commitment to workforce development partnerships in allied health.

Shared Resources: Partners will share facilities for training, qualified instructors for classroom and hands-on training, and clinical placements at local healthcare facilities. This collaboration will enhance resource utilization and maximize program impact.

5. Budget Plan

The budget for the Surgical Technology Apprenticeship Pathway is detailed in *Appendix B.* The total projected budget is designed to ensure the successful implementation and sustainability of the program. Below is a breakdown of the key budget categories:

Salaries, Benefits & Taxes: $900,000.00

This category includes salaries for essential positions such as the Instructor/Preceptor, adjunct instructor, and a Work-Based Learning Navigator/Campus Coordinator. These roles are critical for providing quality education, mentoring, and support to students throughout their training. The budget also accounts for benefits and taxes associated with these positions, ensuring competitive compensation and compliance with employment regulations.

Supplies, Telephone, Postage & Shipping, Printing Publications: $223,500.00

Funds in this category are allocated for supplies necessary for hands-on learning and work-based learning activities. Key items include:

- Simulated Call Button
- 24-Hour Wall Clock
- Table Paper, Smooth Finish
- Pneumatic Stool with Back
- Various carts and hampers (e.g., Stainless Steel Utility Cart)
- Patient gowns, linens, and towels
- Clinical models and training devices (e.g., Brain Model, AED Plus Trainer)

This includes materials for events such as Remake Learning Days, Dream It Do It, and the Tommie and Tammie Healthcare Career Camps. Additionally, this budget covers communication costs, printing of educational publications, marketing, and shipping of necessary materials, ensuring effective program outreach and engagement.

Travel, Conferences & Meetings: $40,000.00

This allocation supports travel expenses for staff attending conferences, workshops, and meetings relevant to nursing education and workforce development. Participation in these events will enhance professional development and foster networking opportunities with industry leaders, ultimately benefiting the program and its participants.

Special Assistance to Others: $100,000.00

This category provides financial support to students, covering costs such as books, tuition, and uniforms. By alleviating these financial burdens, the program aims to increase accessibility and encourage enrollment, particularly among underrepresented populations in the healthcare field.

Capital Purchases: $576,500.00

Capital purchases will fund essential equipment and resources for the Surgical and Nurse Aide Programs at the newly established Union County Allied Health Campus. This includes training simulators, medical supplies, and instructional technology, which are vital for delivering high-quality, hands-on training to students. The following items will be purchased:

- Synergy 1000 Multi-Position Bed Package
- Sapphire Functional Headwalls with accessories
- Exam Room Family Practice Table
- Manikin Storage Cart
- Stationary 7 Shelf
- Computer Desktop for Cart
- Various manikins and training models (e.g., Patient Care Manikin Pro, Deluxe Dual-Sex Torso Model)

Indirect Costs: $160,000.00

Indirect costs are included to cover administrative expenses associated with managing the program. This includes utilities, facility maintenance, and other overhead costs that support the overall operation of the apprenticeship pathway.

Overall, the budget outlined in *Appendix B* reflects a comprehensive approach to resource allocation, ensuring that all aspects of the program are adequately funded to achieve successful outcomes for students and the community.

6. Sustainability

Long-Term Viability: To ensure the program's sustainability beyond the grant period, plans include establishing revenue streams through student tuition and ongoing partnerships with local healthcare providers. Additionally, exploring grants and sponsorships from community organizations will help secure funding for future operations.

Evaluation Measures: The program's success will be evaluated using key metrics such as student enrollment numbers, completion rates, and job placement statistics. Regular assessments will be conducted at the end of each training cycle, and findings will be documented in annual reports to stakeholders.

Community Engagement: Ongoing community engagement strategies will include hosting informational sessions, career fairs, and open houses to showcase program achievements. Collaborating with local businesses and healthcare organizations will also foster support, ensuring that the community remains invested in the apprenticeship pathway.

ACADEMIC SUPPLY FOR OCCUPATIONAL DEMAND REPORT
2024

Cluster Seven: Health Sciences Occupations

Nationally, employment in the healthcare sector is projected to experience 1.8 million job openings annually from 2022 to 2032, attributable to the aging demographics.[46,47] Tennessee is 26th nationwide and fifth in the southeast for its proportion of residents aged 65 and older. This aging is indicative of broader trends necessitating increased healthcare services.[48] As the Baby Boomer cohort transitions into retirement and population growth decelerates, the difficulty of replenishing the workforce is compounded.[49]

A comparison of new business applications shows that Tennessee's healthcare sector business applications are up relative to the national average.[50] The state's health sciences occupations demonstrate a concentration within local service providers, including hospitals, outpatient clinics, and long-term care facilities. These roles commonly necessitate formal qualifications, such as degrees or certificates, and often a license for practice. Tennessee's demand for allied health professionals is on an upward trend, highlighting a sector comprising healthcare workers who support primary care providers.

TNECD's targeted life sciences industry sector encapsulates critical segments like biosciences logistics and distribution, medical devices and equipment, pharmaceuticals, and research and testing laboratories. Despite the exclusion of local healthcare services, there is a symbiotic relationship between these targeted segments and the broader healthcare industry, with each benefiting from shared regional assets. These assets include a network of tertiary institutions, premier research facilities, and a skilled workforce, which collectively underpin the state's life sciences infrastructure.

Statewide, there is a notable demand for mid-level technically skilled practitioners, specifically for licensed practical and licensed vocational nurses, physical therapist assistants, dental assistants, medical assistants, and phlebotomists. These roles are critical in the provision of patient care and functioning of healthcare facilities. They require specialized training, typically obtained through postsecondary nondegree awards or associate degrees. These professionals support the medical infrastructure by providing essential services to maintain patient health, aid in the management of chronic conditions, and contribute to the preventative care imperative in an era of demographic transition.

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[46] U.S. Bureau of Labor Statistics, Occupational Outlook Handbook, Healthcare Occupations

[47] Much of the state's population increase is driven by domestic net migration gains—more people moving into the state than moving out. -- Tennessee State Data Center TN 2022 Population Gains Pushed by Record Domestic Net Migration

[48] Consumer Affairs, Elderly Population in U.S. by State, 2023

[49] Boyd Center for Business and Economic Research, *An Economic Report to the Governor of the State of Tennessee*, 2023

[50] Boyd Center for Business and Economic Research, *An Economic Report to the Governor of the State of Tennessee*, 2024

The Tennessee Board of Regent's IDEAL Workforce Model

The Tennessee Board of Regents (TBR) delivers comprehensive, state-of-the-art training services for new and existing business and industry workforce partners to increase the number of workforce training hours produced by TBR, its institutions, and the number of companies served. This comprehensive approach ensures that TBR colleges are uniquely positioned to rapidly respond to the workforce needs of existing and emerging industries across the state.

TBR has created the **IDEAL Workforce Model**, Industry-Driven Education Aligned Learning, to scale regional or statewide training programs for industry partners that are referred to TBR by entities such as the Governor's Office, the Legislature, state agencies like Economic and Community Development or Department of Labor and Workforce Development, and the Chancellor's Office. This work is supported by collaborative efforts across TBR's External Affairs' Center for Workforce Development, the Office of Academic Affairs, and the Center for Apprenticeships divisions.
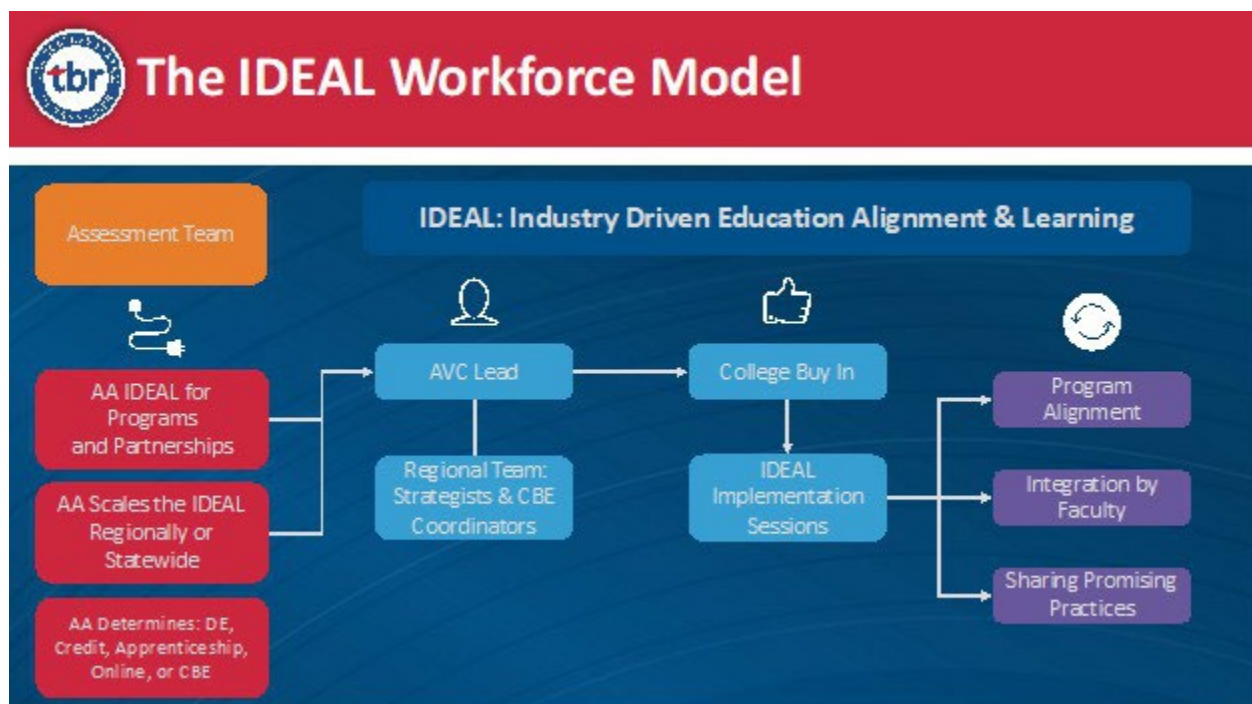
The Industry-Driven Education Aligned Learning (IDEAL) model is used by TBR after a regional assessment team completes the intake process with a referred company. That team works to assess industry needs, identify aligned training, or create custom training. This regional assessment team also identifies if the training can be provided as a traditional academic program, short-term workforce training, registered apprenticeship, dual enrollment opportunity, competency-based education, or as a multimodal approach that incorporates two or more of these strategies.

The workforce opportunity is presented to all college Presidents, Chief Academic Officers, and Directors for Workforce Development in a virtual statewide meeting. The industry partner is given time to present their workforce need, the in-kind contributions they will provide to catalyze the new training program, and the facility, equipment, and faculty requirements for training if they have offered it in another context (e.g., another state or region). A champion from TBR summarizes the viable training options to the colleges, such as apprenticeship or dual enrollment. Over subsequent weeks, college presidents are asked to signal their interest in exploring the opportunity further and to identify a campus lead. When a college chooses to participate in the effort, TBR's External Affairs and Academic Affairs staff lead them through a series of facilitated implementation sessions where faculty and workforce development staff work to embed or create new programs and/or training to meet the industry demand.

TBR has used this model to successfully create new training programs for Amazon and their AWS certifications, the National Tile Contractors Association in collaboration with the TN Department of Economic & Community Development, the TN Forestry Association in collaboration with the TN Department of Agriculture, the Direct Support Professional Program in collaboration with TennCare, the Floor Covering Education Foundation, Massage Therapy programs in collaboration with The Ingram Group, and the University of Tennessee's Grow Your Own Teacher Apprenticeship.

SOC Code	Occupation	In-Demand		Statewide Entry-Level Wage	Typical Entry-Level Education	Key to TNECD Industry	STEM
		TN	Total # Regions				
19-5011	Occupational Health and Safety Specialists		7	$50,877	Bachelor's degree	*	
29-1031	Dietitians and Nutritionists		2	$39,276	Bachelor's degree		
29-1071	Physician Assistants		6	$80,670	Master's degree		
29-1122	Occupational Therapists		2	$69,832	Master's degree		
29-1123	Physical Therapists		3	$70,626	Doctoral or professional degree		
29-1126	Respiratory Therapists		5	$48,462	Associate degree		
29-1127	Speech-Language Pathologists	X	7	$52,259	Master's degree		
29-1141	Registered Nurses		4	$54,486	Bachelor's degree		
29-1151	Nurse Anesthetists		1	$135,887	Master's degree		
29-1171	Nurse Practitioners		6	$62,741	Master's degree		
29-1292	Dental Hygienists		1	$47,693	Associate degree		
29-2031	Cardiovascular Technologists and Technicians		1	$33,216	Associate degree		
29-2032	Diagnostic Medical Sonographers		6	$54,196	Associate degree		
29-2042	Emergency Medical Technicians		2	$27,833	Postsecondary nondegree award		
29-2052	Pharmacy Technicians		8	$28,760	High school diploma or equivalent		
29-2055	Surgical Technologists	X	6	$40,456	Postsecondary nondegree award		
29-2057	Ophthalmic Medical Technicians		1	$30,187	Postsecondary nondegree award		
29-2061	Licensed Practical and Licensed Vocational Nurses	X	9	$36,873	Postsecondary nondegree award		
29-2081	Opticians, Dispensing		1	$29,024	High school diploma or equivalent		
31-1131	Nursing Assistants		3	$26,850	Postsecondary nondegree award		
31-2011	Occupational Therapy Assistants		3	$47,282	Associate degree		
31-2021	Physical Therapist Assistants	X	9	$46,871	Associate degree		
31-9011	Massage Therapists	X	3	$32,572	Postsecondary nondegree award		

SOC Code	Occupation	In-Demand		Statewide Entry-Level Wage	Typical Entry-Level Education	Key to TNECD Industry	STEM
		TN	Total # Regions				
31-9091	Dental Assistants	X	9	$32,692	Postsecondary nondegree award		
31-9092	Medical Assistants	X	9	$28,974	Postsecondary nondegree award		
31-9093	Medical Equipment Preparers	X	1	$26,101	High school diploma or equivalent		
31-9097	Phlebotomists	X	8	$29,229	Postsecondary nondegree award		
31-9099	Healthcare Support Workers, All Other		5	$26,002	High school diploma or equivalent		

Health Sciences Aligned Academic Programs

Postsecondary Health Sciences Degrees, 2021-22

CIP Code	Program Title	Educ. Award Level	Number of Grads	% Employed in TN	Estimated First Year Annual Wage
19.0501	Foods, Nutrition, and Wellness Studies, General.	BA	24	71%	$34,290
19.0504	Human Nutrition.	CPBA	*	*	*
30.1901	Nutrition Sciences.	BA	*	*	*
30.1901	Nutrition Sciences.	CPBA	*	*	*
30.1901	Nutrition Sciences.	MA	19	53%	$50,252
30.1901	Nutrition Sciences.	D	*	*	*
51.0202	Audiology/Audiologist.	D	38	21%	$74,319
51.0203	Speech-Language Pathology/Pathologist.	MA	47	55%	$55,912
51.0204	Audiology/Audiologist and Speech-Language Pathology/Pathologist.	MA	88	50%	$51,899
51.0204	Audiology/Audiologist and Speech-Language Pathology/Pathologist.	D	*	*	*
51.0299	Communication Disorders Sciences and Services, Other.	CPBA	12	42%	$59,631

CIP Code	Program Title	Educ. Award Level	Number of Grads	% Employed in TN	Estimated First Year Annual Wage
51.0601	Dental Assisting/Assistant.	C < 1 YR	*	*	*
51.0601	Dental Assisting/Assistant.	C 1-2 YR	122	81%	$29,788
51.0601	Dental Assisting/Assistant.	AA	17	82%	$29,017
51.0602	Dental Hygiene/Hygienist.	AA	45	82%	$54,350
51.0602	Dental Hygiene/Hygienist.	BA	73	70%	$57,539
51.0707	Health Information/Medical Records Technology/Technician.	C < 1 YR	29	52%	$24,045
51.0707	Health Information/Medical Records Technology/Technician.	C 1-2 YR	105	76%	$31,590
51.0801	Medical/Clinical Assistant.	C < 1 YR	27	74%	$28,046
51.0801	Medical/Clinical Assistant.	C 1-2 YR	85	69%	$30,979
51.0801	Medical/Clinical Assistant.	AA	*	*	*
51.0803	Occupational Therapist Assistant.	AA	59	76%	$33,482
51.0805	Pharmacy Technician/Assistant.	C < 1 YR	15	87%	$29,472
51.0805	Pharmacy Technician/Assistant.	C 1-2 YR	82	65%	$30,313
51.0806	Physical Therapy Assistant.	AA	79	81%	$42,688
51.0809	Anesthesiologist Assistant.	AA	*	*	*
51.0901	Cardiovascular Technology/Technologist.	AA	12	92%	$50,786
51.0904	Emergency Medical Technology/Technician (EMT Paramedic).	C < 1 YR	474	84%	$46,534
51.0904	Emergency Medical Technology/Technician (EMT Paramedic).	C 1-2 YR	149	84%	$61,942
51.0904	Emergency Medical Technology/Technician (EMT Paramedic).	AA	44	93%	$67,358
51.0905	Nuclear Medical Technology/Technologist.	C < 1 YR	*	*	*
51.0905	Nuclear Medical Technology/Technologist.	C 1-2 YR	10	40%	$65,484
51.0908	Respiratory Care Therapy/Therapist.	AA	77	84%	$59,695
51.0908	Respiratory Care Therapy/Therapist.	BA	41	63%	$57,801
51.0909	Surgical Technology/Technologist.	C 1-2 YR	95	73%	$48,405
51.0909	Surgical Technology/Technologist.	AA	42	83%	$44,677
51.0910	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician.	C 1-2 YR	19	89%	$65,493
51.0910	Diagnostic Medical Sonography/Sonographer and Ultrasound Technician.	BA	*	*	*
51.0912	Physician Associate/Assistant.	MA	222	27%	$87,321
51.1001	Blood Bank Technology Specialist.	C < 1 YR	18	83%	$32,153
51.1009	Phlebotomy Technician/Phlebotomist.	C < 1 YR	33	67%	$24,651
51.1012	Sterile Processing Technology/Technician.	C < 1 YR	13	100%	$46,194
51.1012	Sterile Processing Technology/Technician.	C 1-2 YR	*	*	*

CIP Code	Program Title	Educ. Award Level	Number of Grads	% Employed in TN	Estimated First Year Annual Wage
51.1801	Opticianry/Ophthalmic Dispensing Optician.	AA	17	88%	$34,770
51.1803	Ophthalmic Technician/Technologist.	AA	*	*	*
51.2202	Environmental Health	AA	*	*	*
51.2202	Environmental Health	BA	*	*	*
51.2202	Environmental Health	D	*	*	*
51.2306	Occupational Therapy/Therapist.	MA	128	50%	$59,335
51.2306	Occupational Therapy/Therapist.	D	23	61%	$60,650
51.2308	Physical Therapy/Therapist.	D	163	63%	$69,146
51.3101	Dietetics/Dietitian.	BA	14	21%	*
51.3101	Dietetics/Dietitian.	CPBA	13	23%	*
51.3102	Clinical Nutrition/Nutritionist.	MA	34	53%	$44,607
51.3203	Nursing Education.	CPBA	*	*	*
51.3501	Massage Therapy/Therapeutic Massage.	C < 1 YR	21	48%	$29,987
51.3501	Massage Therapy/Therapeutic Massage.	C 1-2 YR	*	*	*
51.3801	Registered Nursing/Registered Nurse.	AA	923	89%	$65,179
51.3801	Registered Nursing/Registered Nurse.	BA	2457	68%	$68,386
51.3801	Registered Nursing/Registered Nurse.	CPBA	10	50%	$88,744
51.3801	Registered Nursing/Registered Nurse.	MA	368	69%	$84,905
51.3804	Nurse Anesthetist.	D	25	8%	*
51.3805	Family Practice Nurse/Nursing.	CPBA	12	50%	$109,872
51.3805	Family Practice Nurse/Nursing.	MA	164	50%	$85,751
51.3805	Family Practice Nurse/Nursing.	EDS	20	10%	*
51.3805	Family Practice Nurse/Nursing.	D	43	65%	$100,835
51.3808	Nursing Science.	D	*	*	*
51.3809	Pediatric Nurse/Nursing.	CPBA	*	*	*
51.3809	Pediatric Nurse/Nursing.	MA	*	*	*
51.3810	Psychiatric/Mental Health Nurse/Nursing.	CPBA	19	37%	$111,350
51.3810	Psychiatric/Mental Health Nurse/Nursing.	MA	13	77%	$91,234
51.3810	Psychiatric/Mental Health Nurse/Nursing.	EDS	*	*	*
51.3810	Psychiatric/Mental Health Nurse/Nursing.	D	*	*	*
51.3818	Nursing Practice.	BA	35	66%	$46,244
51.3818	Nursing Practice.	D	147	56%	$104,036
51.3899	Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other.	BA	*	*	*
51.3901	Licensed Practical/Vocational Nurse Training.	C < 1 YR	114	61%	$30,354
51.3901	Licensed Practical/Vocational Nurse Training.	C 1-2 YR	1107	77%	$47,280
51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide.	C < 1 YR	51	71%	$25,824

Tennessee colleges and universities offer a myriad of academic programs to support the growing demand for skilled professionals in the Health Sciences Cluster. Like most states in the country, Health Sciences careers are a growing part of the Tennessee economy, but demand continues to run ahead of supply. Public and private institutions continue to expand their capacity to train more students to enter these needed occupations.

Beyond increasing individual capacity, institutions are also working strategically to create partnerships to meet the needs of Tennessee. The University of Tennessee Southern (UTS) and the University of Tennessee Health Sciences Center have a newly approved joint Bachelor of Science in Nursing (BSN) program that builds on the existing strengths of the BSNs at both schools to share resources more effectively across UT campuses. The partnership will strengthen UTS's program, which serves the Southern Middle region and provides nurses for rural and underserved populations.

High School CTE Health Sciences Concentrators, 2021-22

CIP Code	Program Title	Educ. Award Level	Number of Grads	% Employed in TN	Estimated First Year Annual Wage
51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide.	CTE HS	2,424	52%	$38,783

Over 2,400 high school CTE concentrators graduated in the nursing pathway in 2021-22 with over half found employed in Tennessee's workforce. This program offers high school students the opportunity to earn their CNA and LPN certifications in high school. The Health Science pathway is the most popular among high school students with 18,000 students enrolled across Diagnostic Services, Therapeutic Services, Emergency Services, Nursing Services, and Sport and Human Performance programs. In 2024-25, schools will have the option to offer a new program, Behavioral Health, to prepare for the growing mental health medicine needs. Elizabethton High School offers students opportunities in clinical settings as well as the opportunity to earn industry credentials as a Certified Nursing Assistant (CNA).

Health Sciences Apprenticeship Completers, 2022

CIP Code	Program Title	Number of Completers 2022
51.0707	Health Information/Medical Records Technology/Technician.	*
51.0801	Medical/Clinical Assistant.	22
51.0909	Surgical Technology/Technologist.	*
51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide.	26

APPENDIX B: Budget

GRANT BUDGET			
Rural Health Care Pathways Expansion Grant Union County Surgical Technology Apprenticeship Pathway			
The grant budget line-item amounts below shall be applicable only to expense incurred during the following			
Applicable Period: BEGIN: August 2025 END: August 2029			

POLICY 03 Object Line-item Reference	EXPENSE OBJECT LINE-ITEM CATEGORY [1]	GRANT CONTRACT	GRANTEE PARTICIPATION	TOTAL PROJECT
1. 2	Salaries, Benefits & Taxes	**$$900,000**	0.00	**$900,000**
4, 15	Professional Fee, Grant & Award [2]	0.00	0.00	0.00
5, 6, 7, 8, 9, 10	Supplies, Telephone, Postage & Shipping, Occupancy, Equipment Rental & Maintenance, Printing & Publications	**$223,500**	0.00	**$223,500**
11. 12	Travel, Conferences & Meetings	**$40,000**	0.00	**$40,000**
13	Interest [2]	0.00	0.00	0.00
14	Insurance	0.00	0.00	0.00
16	Specific Assistance To Individuals	**$100,000**	0.00	**$100,000**
17	Depreciation [2]	0.00	0.00	0.00
18	Other Non-Personnel [2]	0.00	0.00	0.00
20	Capital Purchase [2]	**$576,500**	0.00	**$576,500**
22	Indirect Cost	**$160,000**	0.00	**$160,000**
24	In-Kind Expense	0.00	0.00	0.00
25	**GRAND TOTAL**	**$2,000,000**	**0.00**	**$2,000,000**

[1] Each expense object line-item shall be defined by the Department of Finance and Administration Policy 03, *Uniform Reporting Requirements and Cost Allocation Plans for Subrecipients of Federal and State Grant Monies, Appendix A*. (posted on the Internet at: https://www.tn.gov/finance/looking-for/policies.html).

[2] Applicable detail follows this page if line-item is funded.

POPULATION & DEMOGRAPHICS

LOCATION

Time Zone	Eastern Time Zone
Grand Division	East Tennessee
Area (Square Miles)	223.6
County Seat	Maynardville
Metropolitan Area	Knoxville, TN
ECD Region	East

POPULATION

Population *(2020)*	19,802
Population *(2022)*	19,860
Population Change *(2020 - 2022)*	0.3%
Population Forecast *(2040)*	20,744
Foreign Born Population	81

RACE (PERCENTAGE OF POPULATION)

White Alone	95.60%
Black or African American, alone	0.50%
American Indian And Alaska Native, alone	0.00%
Asian, alone	0.00%
Native Hawaiian or Other Pacific Islander, alone	0.00%

Foreign Born Persons (Percentage of Population)	0.40%	
Language Other Than English Spoken At Home	1.90%	
Civilian Veteran Population	1,128	

Some Other Race, alone	0.30%
Two or More Races	3.50%
Hispanic or Latino	2.00%

AGE (PERCENTAGE OF POPULATION)	MALE	FEMALE	TOTAL
Under 5 Years Old	5.40%	0.047	5.10%
Under 18 Years Old	21.60%	21.40%	21.50%
18-64 Years Old	61.20%	59.40%	60.30%
65 Years and Over	17.20%	19.20%	18.20%
Median Age	42.6	42.2	42.8

HOUSING & INCOME

HOUSING & INCOME

Households	7,552
Homeownership Rate	80.5%
Persons Per Household	2.61
Living In Same House 1 Year & Over	92.1%
Median Home Value	$164,400
Annual Home Sales	166
Median Sale Price of Homes Sold	$280,000
Persons In Households With Income Below Poverty Level	15.9%
Total Personal Income	$835.7M
Personal Income Per Capita	$40,862
County Median Wage	$18.75

HOUSEHOLD INCOME & BENEFITS	PERCENT OF HOUSEHOLD
Less Than $10,000	4.7%
$10,000 to $14,999	6.4%
$15,000 to $24,999	10.6%
$25,000 to $34,999	7.9%
$35,000 to $49,999	16.7%
$50,000 to $74,999	18.6%
$75,000 to $99,999	12.6%
$100,000 to $149,999	13.8%
$150,000 to $199,999	4.6%
$200,000 or More	4.1%
Median Household Income	$57,094

PERCENTAGE OF HOUSEHOLDS BY INCOME RANGE

20	
18	
16	
14	
12	
10	
8	
6	
4	
2	
0	

Less Than $10,000 $10,000 to $14,999 $15,000 to $24,999 $25,000 to $34,999 $35,000 to $49,999 $50,000 to $74,999 $75,000 to $9...
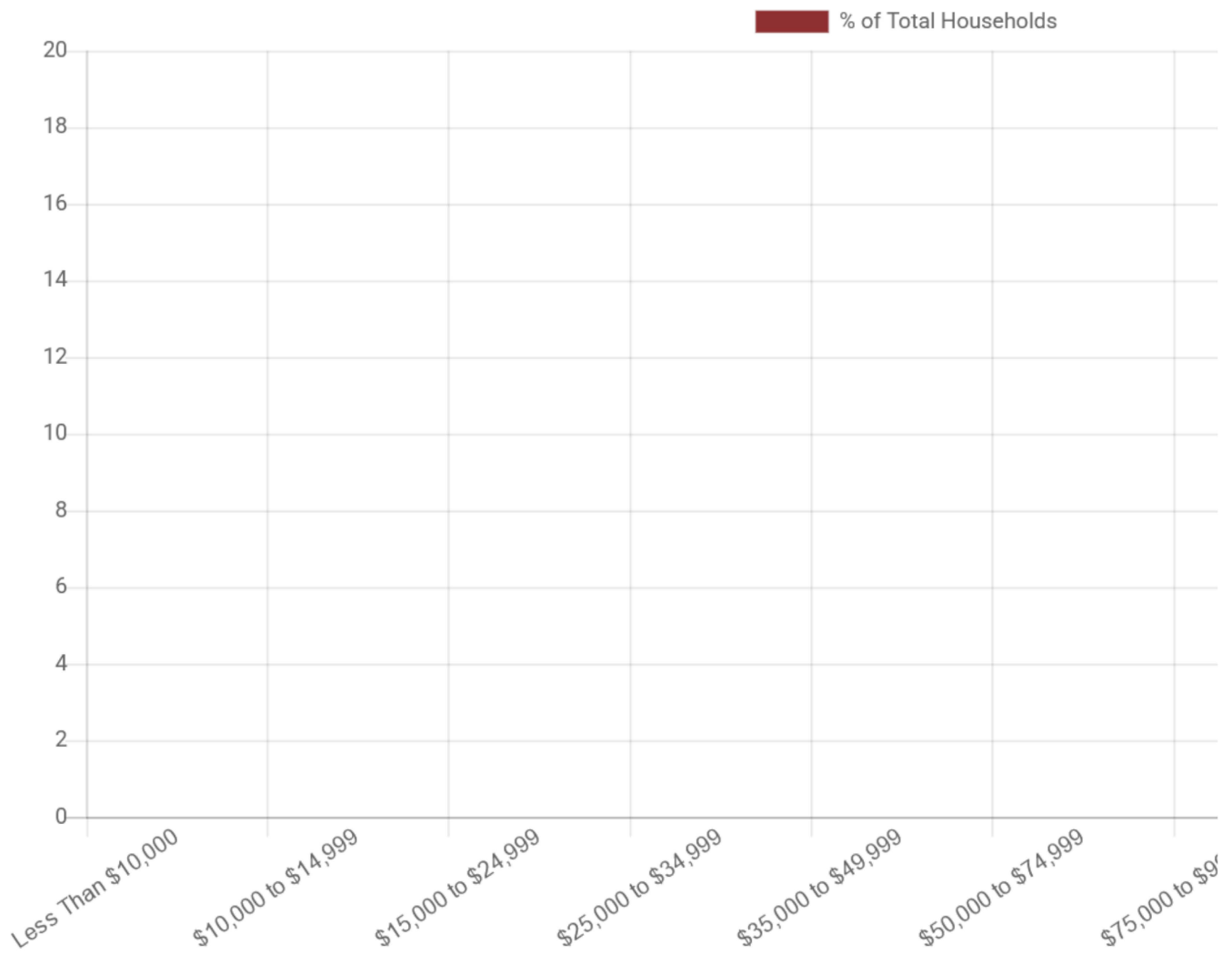
Sources:
U.S. Census Bureau, 2018-2022 5-Year American Community Survey
Tennessee Housing Development Agency (2023)
U.S. Bureau of Economic Analysis (2023)
Lightcast (2023)

TAX STRUCTURE

PROPERTY TAX

Property Tax Rate (County)	$1.8999
State Property Tax	None
Assessment Ratio: Residential Property	25%
Assessment Ratio: Farm Property	25%
Assessment Ratio: Commercial/ Industrial Property	40%
Assessment Ratio: Public Utility Property	55%
Assessment Ratio: Business Personal Property	30%

SALES TAX

State Sales Tax Rate	7.0%
County Sales Tax Rate	2.25%
Local Sales Tax Collections *(FY 2023)*	$3,808,005
Local Sales Tax Collections *(FY 2024)*	$3,751,853
Local Sales Tax Collections Growth *(FY 2023 - FY 2024)*	1.50%

STATE BOND RATINGS

Moody's	Aaa
Standard & Poor's	AAA
Fitch	AAA

STATE TAX

State Income Tax on Wages	None
State Income Tax: Interest from Bonds and Notes and Dividends from Stock	None (Hall Income tax was fully repealed January 1, 2021)
Excise Tax (State)	6.5% of Tennessee taxable income

DEBT PER CAPITA

State Debt per Capita	$988
County Debt Per Capita	$160

Franchise Tax (state)	0.25% of the greater of net worth or real and tangible property in Tennessee. The minimum tax is $100.
Unemployment Insurance Tax (state)	2.7% of the first $7,000 in wages for new employers

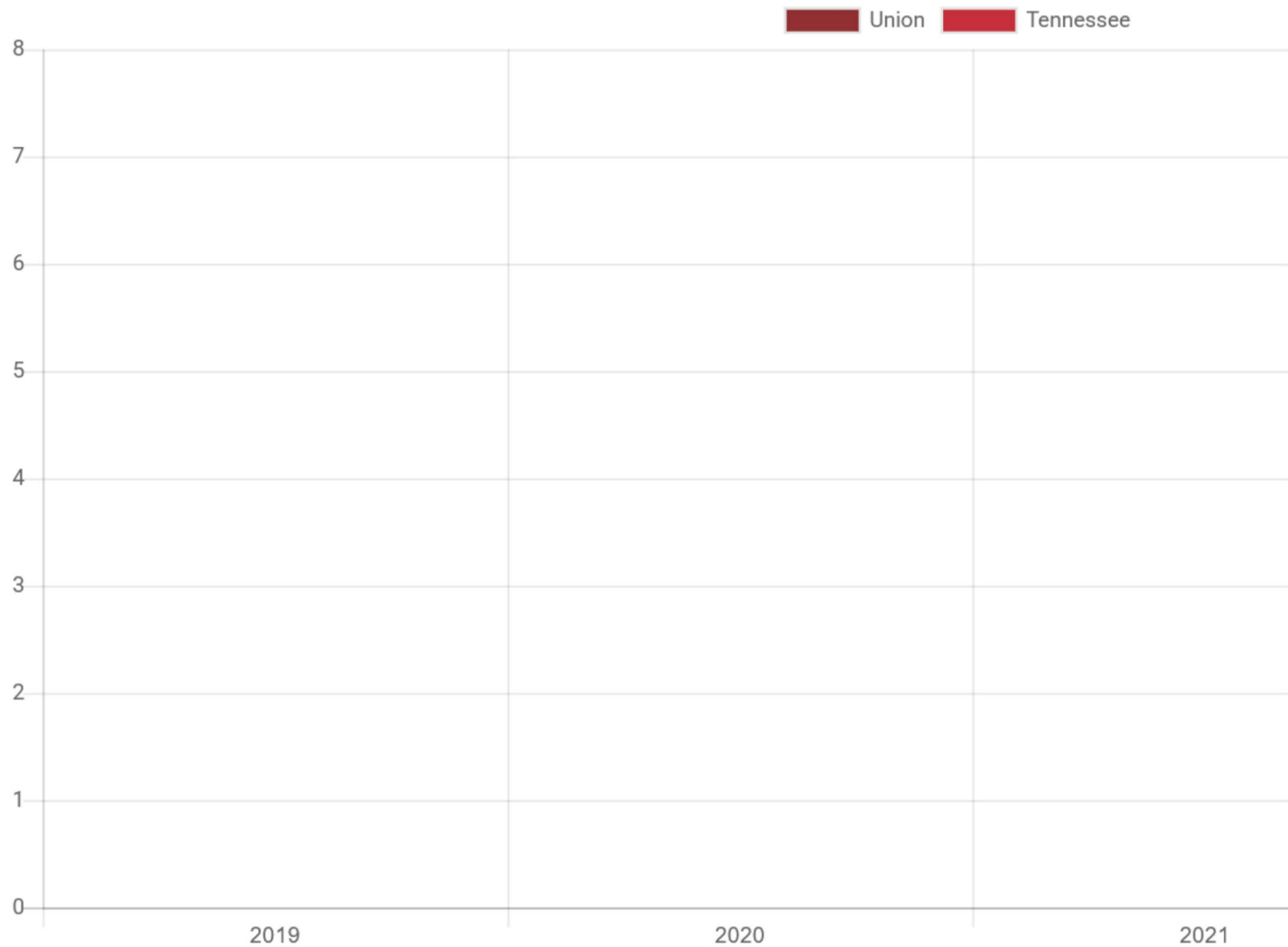**Sources:**
Tennessee Comptroller of the Treasury (2024)
Tennessee Department of Revenue (2024)
The Tax Foundation (2024)

LABOR FORCE

LABOR FORCE ESTIMATES (2023)	TENNESSEE	UNION
Labor Force	3,379,605	7,912
Employment	3,267,935	7,614
Unemployment	111,670	298
Unemployment Rate	3.30%	3.80%

UNEMPLOYMENT RATE*	TENNESSEE	UNION
2019	7.40%	6.80%
2020	4.50%	4.20%
2021	3.40%	3.80%
2022	3.30%	3.80%

UNEMPLOYMENT RATE (BY PERCENTAGE)

■ Union   ■ Tennessee

INDUSTRIES

INDUSTRY	EMPLOYMENT	ESTABLISHMENTS	AVG. ANNUAL WAGES
Crop and Animal Production	26	2	$33,493
Mining, Quarrying, and Oil and Gas Extraction	13	2	$54,032
Construction	140	30	$55,276
Manufacturing	473	19	$69,991
Wholesale Trade	117	15	$90,991
Retail Trade	376	42	$27,884
Transportation and Warehousing	51	16	$32,799
Information	34	4	$72,586
Finance and Insurance	38	18	$51,085
Professional, Scientific, and Technical Services	95	23	$51,838
Administrative, Support, Waste Management and Remediation	55	19	$25,931
Health Care and Social Assistance	176	31	$46,887
Arts, Entertainment, and Recreation	33	4	$21,222
Accommodation and Food Services	201	18	$15,661
Other Services (except Public Administration)	41	12	$34,128
Government	784	22	$38,587

Total	**2,664**	**280**	**$44,933**

UNIQUE OCCUPATIONS*	EMPLOYMENT	LOCATION QUOTIENT*
Sawing Machine Setters, Operators, and Tenders, Wood	15	17.06
Chemical Equipment Operators and Tenders	15	7.38
Kindergarten Teachers, Except Special Education	12	5.43
First-Line Supervisors of Police and Detectives	11	4.71
Production Workers, All Other	18	4.51

KEY CLUSTER	TOTAL EMPLOYMENT
Advanced Materials	0
Aerospace & Defense	0
Appliances & Electrical	0
Automotive	0
Business Services	85
Chemicals	32
Distribution & Logistics	109
Film, Music & Entertainment	0
Food & Beverage	0

TOP EMPLOYERS

TOP COUNTY EMPLOYERS	ESTIMATED EMPLOYEES	CITY
Union County Board of Education	471	Maynardville
Clayton Homes	200	Maynardville
Union County Government	150	Maynardville
Food City	114	Maynardville

TRANSPORTATION & LOGISTICS

TRANSPORTATION

Nearest Commercial Service Airport	McGhee Tyson (Knoxville)
Distance to Nearest Commercial Service Airport	38
Daily Flights At Nearest Commercial Service Airport	84
Nearest General Aviation Airport	Claiborne County Airport
Distance to Nearest General Aviation Airport	23.5
Runway Length at Nearest General Aviation Airport	5,208'
Mean Travel Time to Work (Minutes)	31.8
Access of Interstate	I-75 (7 miles)
U.S. Highways	NONE
State Highways	33, 61, 131, 144, 170, 370
Nearest Port (From County Seat)	Knoxville
Railroads Serving County	NS

EDUCATION

GENERAL STATS	UNION	TENNESSEE
Population Aged 25-64 With High School Degree Or Higher	81.3%	91.5%
Population Aged 25-64 With Associate's Degree Or Higher	19.4%	41.2%
Population Aged 25-64 With Bachelor's Degree Or Higher	10.5%	32.8%
High School Graduation Rate	89.9%	90.6%
College Going Rate	49.5%	56.7%
Average ACT Score	16.7	19.0

HIGH SCHOOL GRADUATION RATE
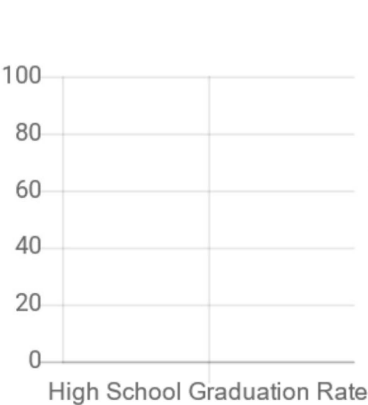
COLLEGE GOING RATE
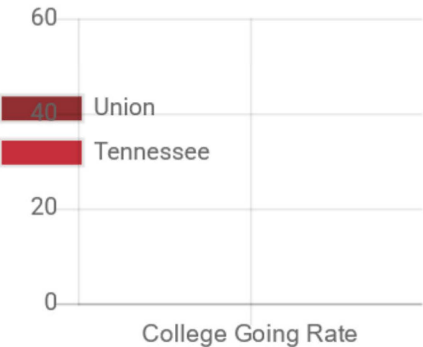
AVERAGE ACT SCORE
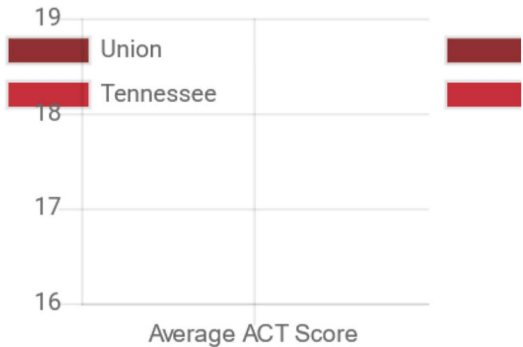
UNION COUNTY SCHOOLS	ENROLLMENT
Elementary Schools	3,008
Middle Schools	1,887

REGIONAL HIGHER EDUCATION INSTITUTIONS	CITY	ENROLLMENT
The University of Tennessee-Knoxville	Knoxville	33,805
Pellissippi State Community College	Knoxville	8,452
Lincoln Memorial University	Harrogate	5,418
Tennessee College of Applied Technology-Knoxville	Knoxville	1,157
Johnson University	Knoxville	939
Tennessee College of Applied Technology-Jacksboro	Jacksboro	328

Sources:
U.S. Census Bureau, 2022 1-Year American Community Survey,
U.S. Census Bureau, 2022 5-Year American Community Survey
Tennessee Department of Education (2022-2023)
National Center for Education Statistics
Tennessee Board of Regents and Tennessee Higher Education Commission
† Regional higher education institutions include those within the selected and surrounding counties.
Due to data availability, federal graduation rates were used for Clay, Fentress, and Haywood counties.

HEALTH & PUBLIC SAFETY

DOCTORS

Number of Doctors	5

OVERWEIGHT & OBESITY PREVALENCE

Adults*	27.9
Children (Grade 8)**	42.9

REGIONAL HOSPITALS	NUMBER OF BEDS	CITY

Sources:
American Medical Association (2023)
National Center for Chronic Disease Prevention and Health Promotion
Tennessee Department of Health
† Regional hospitals include those within the selected and surrounding counties.

CLIMATE

CLIMATE

Average High Temperature	68.7°F
Average Low Temperature	46.5°F
Average Annual Temperature	57.6°F
Annual Rainfall	56.90"
Elevation (at County Seat)	1,050'
Prevailing Winds	Southwest

Sources:
National Oceanic and Atmospheric Administration (2023)

COMMUNITY INFORMATION

LUTTRELL

Population (2022)	830
Charter Type	Private Act
Local Option Sales Tax Rate	2.25%
Phone Number	(865) 992-0870
Retire Tennessee Participant	No
Tennessee Downtowns Participant	No

Main Street Participant	No

MAYNARDVILLE

Population (2022)	2,526
Charter Type	General Law Manager-Commission
Local Option Sales Tax Rate	2.25%
Phone Number	(865) 992-3821
Retire Tennessee Participant	No
Tennessee Downtowns Participant	No
Main Street Participant	No

PLAINVIEW

Population (2019)	1,872
Charter Type	General Law Mayor-Alderman
Local Option Sales Tax Rate	2.25%
Phone Number	(865) 992-5841
Retire Tennessee Participant	No
Tennessee Downtowns Participant	No
Main Street Participant	No

ADDITIONAL COMMUNITY INFORMATION

ThreeStar Certified County	Yes

Sources:
Tennessee Municipal Technical Advisory Service
Tennessee Department of Revenue (2015)
Tennessee Comptroller of the Treasury (2015)
U.S. Census Bureau, 2010-2014 5-Year American Community Survey

East Tennessee

(Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, and Union Counties)

In Demand Occupations to 2026

Personal Skills and Abilities
- ● advanced skills required
- ○ moderate skills required
- A artistic/creative ability required

Job Title	2016-2026 Average Annual Openings	2018 Median Salary	Personal Skills: Reading (English)	Math Skills	Service Orientation	Persuasion Skills	Science Skills	Computer Programming Skills	Repairing Skills	Artist/Creative Ability
Doctoral or professional degree										
Lawyers	80	$100,947	●	○	●	●				A
Health Specialties Teachers, Postsecondary	75	n/a	●	●	●	●	●			
Master's degree										
Educational, Guidance, School, and Vocational Counselors	95	$48,276	●	○	●	●				A
Education Administrators, Postsecondary	90	$87,599	●	○	●	○	○			A
Education Administrators, Elementary and Secondary School	80	$81,360	●	●	●	●				
Nurse Practitioners	75	$95,168	●	○	●	●	●			
Bachelor's degree										
General and Operations Managers	825	$83,083	●	○	●	●	○			
Registered Nurses	605	$56,850	●	○	●	●	○			
Elementary School Teachers, Except Special Education	385	$49,360	●	○	●	●	○			A
Accountants and Auditors	320	$64,088	●	●	●	●				
Financial Managers	250	$80,047	●	●	●	●				
Secondary School Teachers, Except Special and Career/Technical Education	240	$50,515	●	○	●	●	○			A
Middle School Teachers, Except Special and Career/Technical Education	175	$50,131	●	●	●	●				A
Human Resources Specialists	165	$49,042	●	○	●	○				A
Child, Family, and School Social Workers	160	$42,335	●	○	●	●	○			A
Medical and Health Services Managers	150	$84,512	●	○	●	●	○			
Sales Managers	140	$99,215	●	●	●	●				
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	140	$67,244	●	○	●	●				A
Market Research Analysts & Marketing Specialists	125	$51,117	●	●	○	●	○	○		
Loan Officers	125	$60,790	●	●	●	○				
Management Analysts	115	$79,069	●	●	●	●				
Construction Managers	115	$70,177	●	●	●	●	○			

✓ Jobs in Demand ✓ Positive Job Growth ✓ At least 75 expected annual job openings

Department of Labor & Workforce Development

JOBS4TN.GOV

East Tennessee

(Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, and Union Counties)

In Demand Occupations to 2026

Personal Skills and Abilities
- ● advanced skills required
- ○ moderate skills required
- A artistic/creative ability required

Job Title	2016-2026 Average Annual Openings	2018 Median Salary	Personal Skills: Reading (English)	Math Skills	Service Orientation	Persuasion Skills	Science Skills	Computer Programming Skills	Repairing Skills	Artist/Creative Ability
Bachelor's degree continued										
Software Developers, Applications	115	$84,101	●	○	○	○	○	●		
Administrative Services Managers	110	$81,656	●	○	●	●				
Civil Engineers	105	$97,800	●	●	●	●	●	○	○	
Industrial Engineers	100	$85,927	●	●	○	○				A
Wholesale and Retail Buyers, Except Farm Products	100	n/a	●	●	●	●				
Training and Development Specialists	90	$52,511	●	○	●	●				A
Chief Executives	85	$146,321	●	●	●	●				A
Compliance Officers	80	$56,060	●	○	●	●				
Network and Computer Systems Administrators	80	$73,799	●	○	●	○	○	●	●	
Software Developers, Systems Software	80	$92,844	●	●	○	○		○		
Cost Estimators	75	$51,573	●	●	○	●				
Mechanical Engineers	75	$95,014	●	●	●	●	●	○		A
Kindergarten Teachers, Except Special Education	75	$49,582	●	○	●	●				A
Associate's degree			●	●	●					
Industrial Engineering Technicians	115	$46,790	●	●	○	○	○		○	
Physical Therapist Assistants	95	$58,500	●	○	●	○			○	
Paralegals and Legal Assistants	85	$40,824	●		●	○				
Medical and Clinical Laboratory Technicians	80	n/a	●	○	●	○	●		○	
Postsecondary non-degree award										
Heavy and Tractor-Trailer Truck Drivers	1,235	$42,519	●	○	○	○			○	
Licensed Practical and Licensed Vocational Nurses	350	$37,175	●	○	●	●	○			
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	215	$41,990	●	○	○	○			●	
Dental Assistants	130	$37,857	●	○	●	○	○			
Telecommunications Equipment Installers and Repairers, Except Line Installers	95	$40,451	●	○	○	○	○	○	●	

Jobs in Demand ✓ Positive Job Growth ✓ At least 75 expected annual job openings

Department of Labor & Workforce Development

JOBS4TN.GOV

East Tennessee

(Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox, Loudon, Monroe, Morgan, Roane, Scott, Sevier, and Union Counties)

In Demand Occupations to 2026

Personal Skills and Abilities
- ● advanced skills required
- ○ moderate skills required
- A artistic/creative ability required

Job Title	2016-2026 Average Annual Openings	2018 Median Salary	Personal Skills: Reading (English)	Math Skills	Service Orientation	Persuasion Skills	Science Skills	Computer Programming Skills	Repairing Skills	Artist/Creative Ability
Some college, no degree										
Computer User Support Specialists	180	$41,266	●	○	●	○	○	○	○	
High school diploma or equivalent										
First-Line Supervisors of Office and Administrative Support Workers	675	$49,639	●	○	●	●				
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	445	$48,646	●	○	●	●				
Food Service Managers	425	$46,888	●	○	●	●				
First-Line Supervisors of Production and Operating Workers	330	$57,876	●	○	○	●			○	
Electricians	275	$52,036	●	●	○	○	○		●	
Industrial Machinery Mechanics	270	$47,212	○	○	○	○	○	○	●	
First-Line Supervisors of Construction Trades and Extraction Workers	245	$52,846	●	○	●	●	○		○	
First-Line Supervisors of Non-Retail Sales Workers	230	$63,661								
First-Line Supervisors, Mechanics, Installers, Repairers	205	$60,192	●	●	●	●			●	
Police and Sheriff's Patrol Officers	180	$39,428	●	○	●	●				
Chefs and Head Cooks	160	$46,901	●	●	●	●				A
Property, Real Estate, and Community Association Managers	150	$43,032	●	○	●	●				
Welders, Cutters, Solderers, and Brazers	145	$37,817	●	○	○	○			○	
Bus and Truck Mechanics and Diesel Engine Specialists	140	$39,953	○	○	○	○			●	
Maintenance Workers, Machinery	140	$43,495	●	○	○	○			●	
Machinists	135	$45,531	●	○	○	○			○	
Operating Engineers and Other Construction Equipment Operators	130	$38,236	○	○	○	○			○	
Plumbers, Pipefitters, and Steamfitters	125	$44,121	●	○	●	○			●	

✓ Jobs in Demand
✓ Positive Job Growth
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Department of Labor & Workforce Development

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East Tennessee

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In Demand Occupations to 2026

Personal Skills and Abilities
- ● advanced skills required
- ○ moderate skills required
- A artistic/creative ability required

Job Title	2016-2026 Average Annual Openings	2018 Median Salary	Personal Skills: Reading (English)	Math Skills	Service Orientation	Persuasion Skills	Science Skills	Computer Programming Skills	Repairing Skills	Artist/Creative Ability
High school diploma or equivalent continued										
Executive Secretaries and Executive Administrative	115	$48,021	●	○	●	○				
Welding, Soldering, and Brazing Machine Setters, Operators, and	95	$36,688	○	○	○	○			○	
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	75	n/a	●	○	●	●			○	

For more information, please contact:
Workforce Insights, Research and Reporting Engine Division
Wired.Info@tn.gov; (615) 741-2284

✓ Jobs in Demand
✓ Positive Job Growth
✓ At least 75 expected annual job openings

Department of Labor & Workforce Development

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68th
UNION

Population Under 18: 20.8%

Child Population by Race

1.1% 0.1% 0.1%

96.2%

- White, Including Hispanic
- Black, Including Hispanic
- Native American/Alaskan
- Asian/Pacific Islander
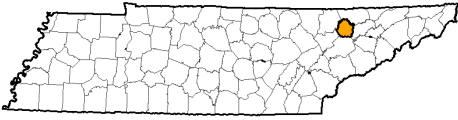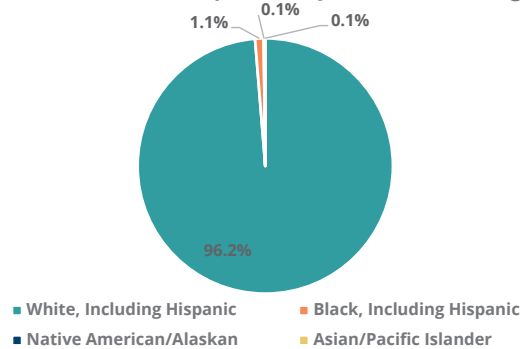
Child Population by Hispanic Ethnicity

3.3%

96.7%

- Hispanic, All Races
- Non-Hispanic
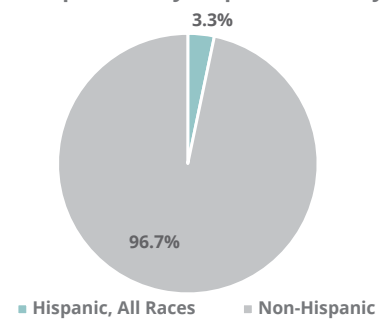
Published May 2023

ECONOMIC WELL-BEING 22ND	Rank	Previous Percent/Rate	Previous Rank
Children living in poverty 23.5%	66th	27.6%	88th
Severe housing cost burden 7.5%	7th	10.7%	65th
Child care cost burden 23.0%	31st	23.2%	61st

EDUCATION 90TH	Rank	Previous Percent/Rate	Previous Rank
3rd to 8th grade reading proficiency 20.1%	91st	18.0%	87th
3rd to 8th grade math proficiency 14.3%	92nd	13.2%	87th
Youth graduating high school on time 89.7%	80th	85.8%	86th

HEALTH 67TH	Rank	Previous Percent/Rate	Previous Rank
Children who are food insecure 14.0%	57th	18.6%	65th
Children who lack health insurance 7.4%	80th	5.4%	60th
Babies born at a low birthweight 8.4%	40th	8.1%	33rd

FAMILY & COMMUNITY 28TH	Rank	Previous Percent/Rate	Previous Rank
Children living in single parent families 30.4%	34th	18.4%	10th
Children who are chronically absent 13.2%	17th	12.4%	45th
Victims of abuse or neglect per 1,000 14.6	57th	13.7	55th

Union County

	Number	Rate	Tennessee Rate	County Rate as a percentage of State Rate	County Rank

Demographics

	Number	Rate	Tennessee Rate	County Rate as a percentage of State Rate	County Rank
Total population (state value is number not rate)	20,041	NA	6,975,170	0.3%	67
Population under 18 years of age (percent of total population)	4,176	20.8%	22.0%	94.7%	51

Economic Well-Being

	Number	Rate	Tennessee Rate	County Rate as a percentage of State Rate	County Rank
Youth unemployment	7	1.8%	12.9%	14.0%	6
Per capita personal income (state value is dollars not rate)	$40,349	NA	$56,560	71.3%	75
Median home sales price (state value is dollars not rate)	$208,000	NA	$283,410	73.4%	36
Children receiving Families First grants (TANF)	114	2.7%	1.5%	182.4%	81
Children receiving Supplemental Nutrition Assistance (SNAP)	1,275	30.5%	24.0%	127.1%	75
Fair market rent (percent of monthly median household income)	$1,287	30.2%	21.1%	143.5%	90

Education

	Number	Rate	Tennessee Rate	County Rate as a percentage of State Rate	County Rank
School age special education services	744	12.8%	12.2%	105.3%	31
TEIS participation (percent of children age 0 to 2)	28	4.6%	3.8%	121.5%	81
Cohort high school dropouts (percent of class cohort)	22	9.8%	6.7%	145.9%	88
Event high school dropouts (percent of students grade 9 to 12)	88	10.4%	4.0%	260.7%	93
Economically disadvantaged students	1,858	32.0%	30.0%	106.7%	46
School suspensions	85	1.5%	5.1%	28.9%	18
Graduating seniors scoring 21 or better on the ACT at least once	34	19.4%	35.3%	54.9%	85
Young adult college enrollment (percent of graduating seniors)	446	34.6%	52.8%	65.5%	94

Health

	Number	Rate	Tennessee Rate	County Rate as a percentage of State Rate	County Rank
Neonatal abstinence syndrome (per 1,000 live births)	*	*	6.6	*	*
Births to mothers who smoked during pregnancy	63	27.6%	9.1%	303.6%	91
Children on TennCare (Medicaid)	3,271	67.5%	55.3%	122.0%	77
Total TennCare (Medicaid) enrollees	6,098	30.4%	24.9%	122.2%	71
Births covered by TennCare (Medicaid)	162	70.7%	55.1%	128.5%	73
Children qualified for Medicaid/CHIP but uninsured	196	7.2%	7.6%	94.7%	50
Infant mortality (per 1,000 live births)	*	*	6.2	*	*
Neonatal death (per 1,000 live births)	0	0.00	3.2	0.0%	1
Child deaths (per 100,000 children age 1 to 14)	0	0.00	20.7	0.0%	1
Teen violent deaths (per 100,000 youth age 15 to 19)	0	0.0	69.7	0.0%	1
Adequate prenatal care	197	86.0%	73.9%	116.4%	3
Pediatric physicians (per 100,000 children)	1	23.9	76.5	31.3%	45
Public school students measured as overweight/obese	NA	*	42.8%	*	*
Teens with STDs (per 1,000 youth age 15 to 17)	5	6.9	16.6	41.4%	14
WIC participation (percent of children under 5)	828	80.3%	31.7%	253.3%	95
Dentists by county (per 100,000 residents)	2	10.0	41.4	24.1%	85

Family & Community

	Number	Rate	Tennessee Rate	County Rate as a percentage of State Rate	County Rank
Reported child abuse cases	264	6.3%	4.6%	137.7%	76
Commitment to state custody (per 1,000 children)	28	6.0	2.8	215.5%	79
Remaining in state custody (per 1,000 children)	54	11.7	5.3	220.2%	86
Juvenile court referrals	173	4.1%	1.8%	231.3%	88
Recorded marriages (per 1,000 residents)	140	6.9	6.6	105.1%	34
Recorded divorces (per 1,000 residents)	81	4.0	3.2	125.4%	74
Young driver accidents (percent of age 15-24 driver's licenses)	65	3.8%	12.3%	31.1%	8
Regulated child care spaces (percent of children age 0 to 12)	339	11.6%	28.9%	40.0%	88
Child care assistance (per 1,000 children age 0 to 12)	16	5.5	24.9	21.9%	22

Union

Overall

At 68th, Union County is in the bottom half of Tennessee counties in child well-being. The county's strongest area was Economic Well-Being.

Strengths

Union's strongest indicator is the percent of households in the county experiencing a severe housing cost burden, where the county ranks 7th. The county also performs well in the percent of chronic absenteeism among public school students at 13.2%.

Opportunities

The county's biggest challenge is the percent of students who scored "On Track" or "Mastered" in TCAP Math, where it ranks 92nd. There are opportunities for improvement in the percent of students who scored "On Track" or "Mastered" in TCAP Reading as well.

Policy/Practice/Program Options to Improve Outcomes

Many of these policies have multiple models for delivery, including public-private partnership, non-profit partners and community engagement.

Expanding pre-K access, allowing early assessment of reading skills coupled with appropriate interventions where needed, can improve reading proficiency in later grades. Pre-k access along with STEM opportunities in elementary and middle schools can improve math proficiency. Many local public libraries offer creative programming and contests to encourage children and youth to read more. The Tennessee State Library and Archives supports local libraries with training and materials for summer reading programs. The Tennessee STEM Innovation Network offers resources and support to help schools implement STEM programs locally. In addition, the Tennessee Department of Education supports summer learning camps for all students but especially to support those who have fallen behind.

Indicator Definitions and History

Children living in poverty - Percent of children living in a household below the federal poverty line. Source: US Census Bureau Small Area Income and Poverty Estimates (2021).

Severe housing cost burden - Percent of households spending 50% or more of their income on housing. Source: American Community Survey, 5-year estimates (2017-2021). New to the county profiles, it replaces Fair Market Rent. It is more closely aligned to a KIDS COUNT national indicator, does not apply only to rental housing, and is a rate rather than a dollar value.

Child care cost burden - Child care costs for a household with two children as a percent of median household income. Source: Produced by the University of Wisconsin Population Health Institute using The Living Wage Calculator (2022) and Small Area Income and Poverty Estimates (2021). This is new to the rankings and replaces Median Household Income (MHI). We wanted an indicator expressed as a percentage rather than a dollar amount as well as one that related to a common family expense. Income is already somewhat measured in poverty estimates. In addition, this indicator uses MHI in its calculation.

3rd to 8th grade reading proficiency - Percent of third- to eighth-grade students who scored "on-track" or "mastered" on the Tennessee Comprehensive Assessment Program (TCAP) reading and language test. Source: Tennessee Department of Education (2021-22).

3rd to 8th grade math proficiency - Percent of third- to eighth-grade students who scored "on-track" or "mastered" on the Tennessee Comprehensive Assessment program (TCAP) math test. Source: Tennessee Department of Education (2021-22).

Youth graduating high school on time - Percent of ninth-grade cohort that graduates in four years. Source: Tennessee Department of Education (2021-22).

Children who are food insecure - Percent of children who sometimes lack access to adequate food. Source: Map the Meal Gap (2021). This is new to the rankings and replaces child and teen death rates, which, because the Department of Health has tightened its data suppression rules, is no longer available for all counties. We did not have an indicator for all counties to line up with overweight/obesity data in the national ranking, so we searched for an one related to nutrition and healthy eating.

Children who lack health insurance - Percent of children who lack health insurance. Source: US Census Bureau Small Area Health Insurance Estimates (2020).

Babies born at a low birthweight - Percent of live births where baby weighs less than 2,500 grams (5.5 pounds), averaged over three years. Source: Tennessee Department of Health (2019-21), with three counties estimated using American Community Survey 5-year data (2015-19, 2016-20, 2017-21). It has been in our county profiles from the beginning, though it was previously just one-year data. The Department of Health has tightened its data suppression rules, and dozens of counties' data were unavailable with one-year numbers. Three-year numbers still left three counties suppressed. Those were estimated from 5-year American Community Survey data.

Children living in single parent families - Single-parent households as a percent of all households with children. Source: American Community Survey, 5-year estimates (2017-2021). New to the county profiles, it replaces births to unmarried females, which in turn replaced teen births. As the Tennessee Department of Health tightened its data suppression rules, teen birth data was no longer available for all counties. Children born to unmarried females was always an attempt to roughly estimate teen births using different data. In moving from actual counts to ACS 5-year estimates, we decided to use this indicator over teen births as it affects families with parents of all ages.

Children who are chronically absent - Children who are absent 10 percent or more of school days for any reason, including excused/unexcused absences and out-of-school suspensions. Source: Tennessee Department of Education (2021-22). New to the county profiles, it replaces school suspensions, which have suppressed data for many counties.

Victims of abuse or neglect per 1,000 - Child victims of abuse or neglect. In cases with multiple children each child is counted individually. The total is the number of children associated with substantiated cases of severe abuse and of determinations of "Services Court Ordered" or "Services Needed" in cases of non-severe abuse or neglect. Children with multiple cases during the year are counted only once. The rate is per 1,000 children. Source: Tennessee Department of Children's Services (2021). This has been in our county rankings from the beginning, but we have moved to counting children rather than cases.

Statewide Articulation Agreement Between The Tennessee Community Colleges and The Tennessee Colleges of Applied Technology For the Period of Fall 2020 through Fall 2023
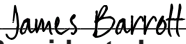**Program Area: <u>Surgical Technology</u>**

The Tennessee community colleges hereinafter referred to as the "CCs" and the Tennessee colleges of applied technology hereinafter referred to as the "TCATs" have entered into a statewide partnership which promotes student transfer and program articulation. The partnership is for the purpose of providing eligible TCAT students the opportunity to receive college credit upon successful completion of qualified programs of study at TCATs, as identified in APPENDIX A.

<u>OVERVIEW</u>

In accordance with the guidelines set forth by the Tennessee Board of Regents (TBR), the Tennessee Higher Education Commission (THEC), and the procedures established by the individual CCs, we hereby enter into this Agreement to provide the eligible TCAT students the opportunity to receive college credit upon successful completion of qualified programs of study at TCATs.

The CCs determine awarded credits within a successfully completed program based upon their course specific Student Learning Outcomes.

1. TCATs will indicate on student transcripts the specific coursework and program completed.
2. When evaluating student transcripts, the CC will award credit based on courses identified in APPENDIX A.
3. CCs will evaluate transcripts on a course-by-course basis within the completed TCAT program.
4. Graduates of programs other than the granting CC's program who wish to pursue an A.A.S in Surgical Technology must meet the criteria outlined in "APPENDIX B."
5. Students must meet the standards and follow the procedures of the receiving program and of the individual CC catalog for the year they enrolled in the articulated course/program or follow the current year CC catalog and program policies and procedures.
6. The awarding of any nontraditional credit (e.g. CLEP, AP credit-by-exam, military services, etc.) may be granted for coursework not identified in "APPENDIX A."
7. Upon an institution's request this agreement will be reviewed.
8. This agreement will remain in effect until modified or rescinded by the duly authorized signatories.
9. The CCs and the TCATs shall:
    a. Designate a responsible party to provide oversight of details and disseminate general program information to students.
    b. Determine the course(s) to award credit based upon the recommendation of content specialists.
    c. Agree to review every three years the courses and Student Learning Outcomes for which college credit will be awarded.
    d. Appoint representatives to serve on an advisory committee at the request of TBR to provide perspective to the program regarding the effective coordination between the individual CC(s) and TCAT(s). The advisory committee shall consist of representatives from both the CC(s) and the TCAT(s). The advisory committee shall converse and report annually to the Vice Chancellor for Academic Affairs.
10. This agreement will commence the semester following the signing thereof.

**Statewide Articulation Agreement Between
The Tennessee Community Colleges and The
Tennessee Colleges of Applied Technology
For the Period of Fall 2020 through Fall2023
Program Area: <u>Surgical Technology</u>**

APPROVAL SIGNATURES

TENNESSEE BOARD OF REGENTS:

Allana Hamilton   2020-05-26 | 1:19 PM CDT

Vice Chancellor for Academic Affairs, Allana Hamilton   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY CHATTANOOGA:

James Barrott   2020-05-26 | 1:47 PM CDT
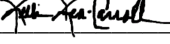
President, James Barrott   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY CROSSVILLE:

Cliff Wightman   2020-05-28 | 5:53 AM PDT
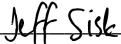
President, Cliff Wightman   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY HOHENWALD:

Kelli Kea-Carroll   2020-06-09 | 6:13 AM PDT
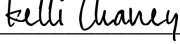
President, Kelli Kea-Carroll   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY JACKSON:

Jeff Sisk   2020-06-09 | 8:35 AM CDT

President, Jeff Sisk   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY KNOXVILLE:

Kelli Chaney   2020-06-09 | 6:57 AM PDT

President, Kelli Chaney   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY MURFREESBORO:

Carol G. Puryear   2020-06-09 | 7:02 AM PDT

President, Carol Puryear   **Date**

Statewide Articulation Agreement Between
The Tennessee Community Colleges and The
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For the Period of Fall 2020 through Fall2023
Program Area: <u>Surgical Technology</u>

APPROVAL SIGNATURES

NASHVILLE STATE COMMUNITY COLLEGE:
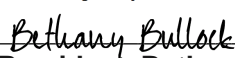
2020-06-09 | 7:07 AM PDT

President, Shanna Jackson   **Date**

NORTHEAST STATE COMMUNITY COLLEGE:
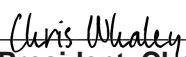
2020-06-09 | 10:02 AM CDT

President, Bethany Bullock   **Date**

ROANE STATE COMMUNITY COLLEGE:
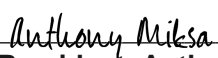
2020-06-18 | 8:52 AM CDT

President, Chris Whaley   **Date**

WALTERS STATE COMMUNITY COLLEGE:
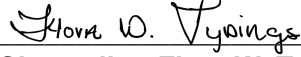
2020-06-18 | 1:09 PM EDT

President, Anthony Miksa   **Date**

TENNESSEE BOARD OF REGENTS:

2020-06-18 | 12:24 PM CDT

Chancellor, Flora W. Tydings   **Date**

**Statewide Articulation Agreement Between
The Tennessee Community Colleges and The
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For the Period of Fall 2020 through Fall2023
Program Area: <u>Surgical Technology</u>**

APPENDIX A

Awarding of College Credit to Surgical Technology graduates of Tennessee Colleges of Technology into the A.A.S. Surgical Technology Program

Course Title	Credit Hours	
BIOL 1000 – Medical Terminology	3	**up to 3 credit hours available to earn
SURG 1304 – Basic Anatomy/Physiology	3	**up to 3 credit hours available to earn
SURG 1102 – Orient. to Surgical	1	*
SURG 1305 – Surgical Pharmacology	3	*
SURG 1410 – Surg. Tech. & Patient Care	4	*
SURG 2310 – Surg. Microbiology &	3	*
SURG 2420 – Surgical Patient Care II	4	*
SURG 2321 – Surgical Procedures I	3	*
SURG 2330 – Surgical Procedures II	3	**up to 3 credit hours available to earn
SURG 2103 – Clinical Practicum I	1	**up to 6 credit hours available to earn
SURG 2201 – Clinical Practicum II	2	
SURG 2302 – Clinical Practicum III	3	
Total credit hours available to earn	33	

* Students earn credit hours as they enter the program with the following beingtrue:

- Proof of graduation from an ARCSTSA/CAAHEP accredited program in Surgical Technology in
good standing at the time of graduation

- Proof of current certification from the National Board of Surgical Technology and Surgical Assisting (NBSTSA)

** students can earn credit hours based upon faculty approval

Statewide Articulation Agreement Between
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For the Period of Fall 2020 through Fall2023
Program Area: <u>Surgical Technology</u>

APPENDIX B

Additional Recommendations for Faculty Consideration*
(For Use with Students Having Prior Work Experience)

Background
This appendix is for students articulating credit from:
1) A program within an institution other than a Tennessee College of Applied Technology

Education and Certification
- Proof of graduation from an ARCSTSA/CAAHEP accredited program in Surgical Technology in good standing at the time of graduation
- Proof of current certification from an agency validated through NCCA, and/or ANSI (for example, the National Board of Surgical Technology and Surgical Assisting (NBSTSA)
- No credit granted without proof of graduation and proof of current certification

Documentation of three years continuous and current employment (in the scrub role) in the past five years
- Institution determines appropriate minimum documentation in consultation with Advisory Committee
- Documentation requirement must include but not limited to:
  - Employment status (full-time/part-time/PRN, etc.)
  - Facility type (outpatient/inpatient/etc.)
  - Role definition (routine duties in role)

Three current professional references
- Must include current supervisor and supervisor at each facility documented above
- Must be dated within 60 days of application to receiving institution

Institution in consultation with Advisory Committee defines procedure to evaluate above
- Must address validity of documentation
- Must address what portion of Major Field Core is granted by receiving institution

If above are met, student enrolls in A.A.S. in Surgical Technology with advanced standing
- Institution grants course credit based on evaluation above
- Must complete Special Topics in Surgical Technology as graduation requirement in addition to meeting institutional graduation requirements

* Admission policies differ by institution and
  Faculty from degree granting institution may decide on other requirements than listed above

**Systemwide Articulation Agreement Between
Colleges in The College System of Tennessee
For the Period of Fall 2022 through Summer 2025**

**Articulation of <u>Nursing Aid Program</u> Delivered at the
Tennessee Colleges of Applied Technology to be Applied Toward
The <u>A.A.S. in Health Science</u> Delivered at Specified
Community Colleges in Tennessee**

The Tennessee community colleges hereinafter referred to as the "CC(s)" and the Tennessee colleges of applied technology hereinafter referred to as the "TCAT(s)" have entered into a statewide partnership which promotes student transfer and program articulation. The partnership is for the purpose of providing eligible TCAT students the opportunity to receive college credit upon successful completion of a qualified program at a TCAT and/or by earning recognized industry certification(s) as identified in "APPENDIX A" and "APPENDIX B."

<u>OVERVIEW</u>

In accordance with the guidelines set forth by the Tennessee Board of Regents (TBR), the Tennessee Higher Education Commission (THEC), and the procedures established by the individual CCs, we hereby enter into this Agreement to provide the eligible TCAT students the opportunity to receive college credit upon successful completion of a qualified program at a TCAT and by earning recognized industry certification(s) or meeting other criteria as identified in "APPENDIX A" OR "APPENDIX B."

The CCs determine awarded credits based upon the course completion(s), certification(s) earned, or other specified requirements.

1. TCATs will indicate on student transcripts the specific coursework completed and certifications taken and passed (if known).
2. When evaluating student transcripts, the CC will award credit based on criteria identified in "APPENDIX A" OR "APPENDIX B."
3. In addition, CCs may award credit based upon evaluation of transcripts on a course-by-course basis.
4. Pre-requisite courses must be considered prior to accepting credit via this agreement.
5. Students must meet the standards and follow the procedures of the individual CC catalog for the year they enrolled in the articulated course/program or follow the current year CC catalog.
6. The awarding of any nontraditional credit (e.g. CLEP, AP credit-by-exam, military services, etc.) may be granted for coursework not identified "APPENDIX A" OR "APPENDIX B."
7. Upon an institution's request this agreement will be reviewed.
8. This agreement will remain in effect until modified or rescinded by the duly authorized signatories, or until the term of the agreement has expired.
9. The CCs and the TCATs shall:
   a. Designate a responsible party to provide oversight of details and disseminate general program information to students.

b. Determine course(s) to award credit based upon recommendation of content faculty.
c. Agree to review every three years the certifications/courses and/or Student Learning Outcomes for which college credit will be awarded.
d. Establish a process to ensure effective coordination between the individual CC(s) and TCAT(s). The Statewide Articulation Committee shall serve as a resource for questions or concerns that may arise and will consist of representatives from both the CC(s) and the TCAT(s) that are faculty or curriculum coordinators for the discipline as appointed by the chief academic officer at the CC and the President at the TCAT.

10. The SACSCOC accredited institution agrees to accept specific course work from a non-SACSCOC accredited institution to be applied toward an award from a SACSCOC accredited institution. That course work may not be accepted by other colleges or universities in transfer, even if it appears on a student transcript. The decision to accept course work in transfer from any institution is made by the receiving institution, and the acceptance of credits or course work is based on the receiving institution's regulations and guidelines."

11. This agreement will commence the semester following the signing thereof.

Systemwide Articulation Agreement

**Systemwide Articulation Agreement Between
Colleges in The College System of Tennessee
For the Period of Fall 2022 through Summer 2025**

**Articulation of <u>Nursing Aid Program</u> Delivered at the
Tennessee Colleges of Applied Technology to be Applied Toward
The <u>A.A.S. in Health Science</u> Delivered at Specified
Community Colleges in Tennessee**

APPENDIX A

Awarding of College Credit to Nurse Aid program graduates of Tennessee Colleges of Technology into the A.A.S.in Health Science degree

Professional Licensure	Credit Hours	Community College Course Title
Certified Nursing Assistant (CNA)-State Licensure	3	ALHS 1010- Introduction to Health Sciences
	3	AHSC 1200-Certified Nursing Assistant
	3	AHSC 1210-Certified Nursing Assistant Lab
*Total credit hours available to earn	9	

*Students may earn credit hours for other courses based upon faculty approval. This pathway to the A.A.S. in Health Science is available **at Jackson State Community College.**
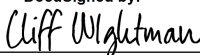
APPENDIX B

Systemwide Articulation Agreement

Awarding of College Credit to Nurse Aid program graduates of Tennessee Colleges of Technology into the A.A.S.in Health Science degree

Professional Licensure	Credit Hours	Community College Course Title
Nurse Aide Courses (120 hours)	3	ALHS 2316-Experiential Portfolio
Certified Nurse Aide (CNA)	3	ALHS 2316-Experiential Portfolio
*Total credit hours available to earn	6	

* Students earn credit hours based upon faculty approval after completing ALHS 2315, Experiential Learning, as part of the Health Science degree course requirements **at Roane State Community College or Chattanooga State Community College.**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY CROSSVILLE:

Cliff Wightman   2022-07-29 | 4:36 PM PDT

President   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY ELIZABETHTON:

[signature]   2022-07-29 | 8:03 PM CDT

President   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY HARRIMAN:

Danice Turpin   2022-08-01 | 5:04 AM PDT

President   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY HARTSVILLE:

Mae Wright   2022-07-29 | 3:03 PM PDT

President   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY JACKSBORO:

Debbie Petree   2022-07-30 | 11:43 AM CDT

President   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY KNOXVILLE

Kelli Chaney   2022-08-01 | 6:10 AM PDT

President   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY LIVINGSTON:

Myra West   2022-07-29 | 5:05 PM CDT

President   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY MEMPHIS:

Roland Rayner   2022-07-31 | 7:40 PM CDT

President   **Date**

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY MURFREESBORO:

Carol Puryear   2022-07-31 | 2:32 PM PDT

President   **Date**

Systemwide Articulation Agreement

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY NEWBERN:

Youlanda Jones

2022-07-29 | 5:07 PM CDT

President
Date

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY ONEIDA:

Dwight E. Murphy

2022-07-30 | 7:43 AM PDT

President
Date

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY PULASKI:

Mike Whitehead

2022-07-29 | 4:45 PM CDT

President
Date

TENNESSEE COLLEGE OF APPLIED TECHNOLOGY SHELBYVILLE:

Laura Monks

2022-07-29 | 2:32 PM PDT

President
Date

CHATTANOOGA STATE COMMUNITY COLLEGE:

Rebecca Ashford

2022-08-03 | 7:15 PM PDT

President
Date

ROANE STATE COMMUNITY COLLEGE:

Dr. Chris Whaley/MM

2022-07-29 | 4:20 PM PDT

President
Date

JACKSON STATE COMMUNITY COLLEGE:

George Pimentel

2022-08-01 | 6:17 AM PDT

President
Date

TENNESSEE BOARD OF REGENTS:

Jothany Blackwood

2022-08-03 | 9:42 PM CDT

Systemwide Articulation Agreement

Vice Chancellor, Academic Affairs   **Date**
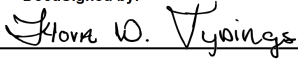
TENNESSEE BOARD OF REGENTS:

DocuSigned by:

Flora W. Tydings

1F5B44CDBEAC7429...

Chancellor   **Date**

DS

2022-08-04 | 5:57 AM CDT

AGREEMENT
BETWEEN
TENNESSEE COLLEGE OF APPLIED TECHNOLOGY KNOXVILLE
AND
EMPLOYER PARTICIPANTS(S)
AND
EDUCATIONAL PARTICIPANT(S)

This Agreement entered into this 19th day of January, 2025 by and between Tennessee College of Applied Technology Knoxville, (hereinafter referred to as the "College") and Covenant Health and SunBridge Regency - Tennessee, LLC d/b/a Willow Ridge Center, (hereinafter collectively referred to as the "Employer Participants") and Union County Public Schools and Walters State Community College, (hereinafter collectively referred to as the "Educational Participants"), is for the purpose of implementing the Rural Health Care Pathways Expansion Grant (RHCPE) Proposal, as further defined below.

PURPOSE

The purpose of this Agreement is to clearly identify the roles and responsibilities of each party as they relate to the Tennessee Higher Education Commission's (THEC) Rural Health Care Pathways Expansion Grant (RHCPE) proposal to implement the RHCPE program in the College's rural service areas. In particular, the Agreement is intended to establish expectations between the designated employer participants and the education participants to provide youth the opportunity to gain valuable vocational skills to address the labor shortage and skill deficits in the rural health care sector.

I. ROLES

    1.   **COLLEGE ROLE**:

The College agrees to the following responsibilities:
- Serve as the fiscal agent of the grant
- Coordinate dual enrollment and/or dual credit with identified Educational Participants
- Deliver health career educational opportunities to employees and students of the Educational Participants
- Coordinate work-based learning opportunities required by employers for students to work for Employer Participants upon completion of the respective program
- Create a Practical Nursing program in a rural county
- Create a Surgical Technology program in a rural county
- Lead the initiative to create a new state-wide articulation agreement for Surgical Technology

2. **EMPLOYER PARTICIPANTS:**

The Employer Participants are responsible for supporting the mission of the RHCPE. Employer participants agree to the following responsibilities:

- Alerting the College of job openings
- Development of youth interest in health careers
- Host tours for youth and adult program participants (no more than one per year per participant)
- Participate in school career exploration events (no more than one per year per participant)
- Consider graduates for employment
- Serve on occupational advisory boards upon request, and attend requested meetings

The Employer Participants agree that there is a need for these programs in their rural communities because of a lack of qualified candidates in health careers in their local geographic area. The benefits include an increased skilled pipeline to their organization and an overall benefit to the rural communities they serve by providing increased access to quality health care.

3. **EDUCATION PARTICIPANTS:**

Education Participants agree to the following responsibilities:
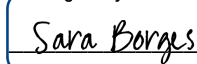
- Recruiting students to enroll in Health Career Pathways

- Providing students with WBL (Work-Based Learning) opportunities by engaging students and employers in meaningful activities

- Managing dual enrollment/dual credit with the College

- Providing students the opportunity to obtain industry credentials, including underrepresented groups of students (economically disadvantaged, students with disabilities, students in foster care; and students with parents that are in the armed forces or on active duty) as well as non-traditional

- Monitor Employer Participant engagement
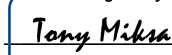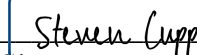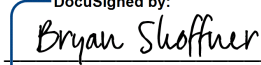
The Education Participants agree that there is a need for these programs in their rural communities because of a lack of overall awareness and access in secondary students regarding health careers in their local geographic

area. The benefits include a potentially increased employment rate and income for the rural communities they serve and providing increased access to quality health care.

II. MISCELLANEOUS:

1. Modification of roles/responsibilities and the sustainability of the program are collectively decided by the parties.

2. An Employer Participant or Educational Participant may terminate its relationship with the program at the end of an academic term with a 30-day written notice to the College.

3. Employer Participants and Educational Participants and may be added through written Amendment to this Agreement.

4. Term. The term of this Agreement shall be August 1, 2025 through July 31, 2029.

5. Counterparts. This Agreement may be executed in any number of counterparts, each of which together shall be deemed to be original, but all of which together shall constitute one and the same instrument. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such a facsimile or ".pdf" signature page was an original thereof.

COLLEGE:	EMPLOYER PARTICIPANT:
Tennessee College of Applied Technology	**Covenant Health**
Signed by:	Signed by:
Kelli Chaney	*Sara Borges*
4B76A4A792C1425...	212B63DAC7E2425...
Signature	Signature
Kelli Chaney, President	Dr. Sara Borges, DNP-FNP, RN
Name and Title	Name and Title
2025-01-20 | 9:11 AM PST	2025-01-20 | 9:37 AM CST
Date	Date

EDUCATIONAL PARTICIPANT: **Walters State Community College**	EMPLOYER PARTICIPANT: **SunBridge Regency - Tennessee, LLC d/b/a Willow Ridge Center**
DocuSigned by: *Tony Miksa* Signature 02A84DB91A684EA...	DocuSigned by: *Steven Cupp* Signature B81A06FC871B94C0...
Tony Miksa, President Name and Title	Steven Cupp Name and Title
2025-01-27 | 10:11 AM EST Date	2025-01-30 | 9:29 AM EST Date
EDUCATIONAL PARTICIPANT: **Union County Public Schools**	EMPLOYER PARTICIPANT:
DocuSigned by: *Bryan Shoffner* Signature 030F50A97EC64B2...	_____ Signature
Bryan Shoffner, CTE Director Name and Title	_____ Name and Title
2025-01-22 | 8:50 AM PST Date	_____ Date
EDUCATIONAL PARTICIPANT: _____ Signature	EMPLOYER PARTICIPANT: _____ Signature
_____ Name and Title	_____ Name and Title
_____ Date	_____ Date

Collaborative Framework

The partnership for the Surgical Technology Apprenticeship Pathway will operate within a structured and collaborative framework to ensure effective implementation and ongoing success. This framework will include the following key components:

Bi-Annual Meetings

- **Purpose:** Bi-annual meetings will serve as a platform for partners to review program progress, address challenges, and discuss updates.
- **Participants:** Representatives from each partner organization, including Covenant Health, Willow Ridge Rehabilitation and Living Center, TCAT Knoxville, Walters State Community College, and local high schools.
- **Agenda:** Topics will include student enrollment and retention, curriculum alignment, work-based learning opportunities, and program outcomes.
- **Outcomes:** Meetings will result in actionable steps to address identified challenges and ensure alignment with program goals.

Quarterly Narrative Reporting

- **Purpose:** Quarterly Narrative Reports will provide updates on program performance, milestones, challenges, and achievements.
- **Timing:** Reports will be sent via email following the completion of reimbursement reports for THEC.
- **Content:** Narrative reports will include data on enrollment, progress updates, and program objectives in alignment with grant requirements.

Continuous Improvement

The collaborative framework will incorporate a feedback loop where insights from bi-annual meetings and quarterly narrative reports are used to make data-driven improvements to the program. This structured approach will ensure transparency, accountability, and the achievement of shared goals.

By fostering strong communication and collaboration, this partnership will address workforce needs in Union County and contribute to the development of a skilled and sustainable healthcare workforce.

Surgical Assistants and Technologists

PRINTER-FRIENDLY 🖨

| Summary | What They Do | Work Environment | How to Become One | Pay | Job Outlook | State & Area Data | Similar Occupations | More Info |

Summary

Quick Facts: Surgical Assistants and Technologists	
2023 Median Pay ❓	$60,370 per year $29.03 per hour
Typical Entry-Level Education ❓	Postsecondary nondegree award
Work Experience in a Related Occupation ❓	None
On-the-job Training ❓	None
Number of Jobs, 2023 ❓	134,000
Job Outlook, 2023-33 ❓	6% (Faster than average)
Employment Change, 2023-33 ❓	7,900

What Surgical Assistants and Technologists Do

Surgical assistants and technologists help with surgical operations.

Work Environment

Most surgical assistants and technologists work in hospitals. They spend much of their time on their feet.

How to Become a Surgical Assistant or Technologist

Surgical assistants and technologists typically need a certificate or an associate's degree. Employers may require or prefer that workers have certification. Some states regulate these workers.

Pay

The median annual wage for surgical assistants was $59,160 in May 2023.

The median annual wage for surgical technologists was $60,610 in May 2023.