

Workforce Redefined

A PATH TO PROSPERITY STRATEGY

Workforce Redefined

The COVID-19 pandemic revealed a significant flaw in the Knoxville region's current workforce services efforts: the ability to bridge the gap between individuals who were forced to change occupations and the employers who were seeking to add to their workforces.

That flaw must be mended to drive regional economic prosperity in the changing occupational environment in the post-pandemic world.

Recently, the McKinsey Global Institute released "The Future of Work After COVID-19." The report aligns with the Knoxville Chamber's view of transformations within employment that are being accelerated by the pandemic and our community's obligation to address these changes.

The industry disruptions created by the pandemic has resulted in an urgency around helping workers find new jobs and develop additional skills. At the same time, there's increased awareness that development of a qualified talent pipeline needs to begin earlier and last longer to meet the demands of the dynamic job market.

While the Knoxville area has historically been driven by a machine- and government-powered economy, McKinsey indicates that the future lies in regions that are brain-powered.

The report points out that by 2030 U.S. jobs in the areas of health aides, techs, and care workers; health professionals; managers; and STEM professionals will increase between 0.1 percent and 2.7 percent. Meanwhile, employment in customer service and sales; food services; office support; and production and warehousing will decrease between 0.4 percent and 8.9 percent.

A coordinated response is required to ensure that our students and our neighbors will be prepared for such careers.

Because the pandemic accelerated trends in remote work, e-commerce and automation, McKinsey estimates "that up to 25 percent more workers than previously estimated potentially needing to switch occupations."

Applying these decreasing employment percentages to the Knoxville MSA will result in a cohort of unemployed people in the range of approximately 1,000 and 4,000 within the next 10 years.

Ensuring that these individuals have access to "re-skilling" options so that they can re-enter the workforce as well as grow the health-, management-, and STEM-related fields is a critical priority. The pandemic created a labor pool ripe for implementation of this strategy, if employers, nonprofit organizations, government agencies and education leaders collectively respond.

Estimated Change in Share of Total Employment, Post COVID Scenario



Source: McKinsey Global Institute

Workers ages 16 to 24 suffered the largest proportional losses in hiring volume last March and April but have only rebounded 2.8 percent since April, a much weaker recovery than other groups: prime-age worker hiring volume is up 17.5 percent and hiring volume for workers 55 to 64 is up 23.1 percent over the same period, reports the W.E. Upjohn Institute for Employment Research.

Likewise, the region's future workforce must be prepared for this new occupational environment, particularly in communities that continue to have inequitable access to career awareness, exploration and training opportunities, for Knoxville to thrive.

As our region again nears "full employment," a marker typically considered at under 5 percent, the disconnect between the supply and demand for skilled workers will only widen without a coordinated response from local stakeholders.

Insight with those stakeholders – employers, government leaders, economic development agencies, workforce service providers and education institutions – were the foundation on which this five-year workforce strategy, Workforce Redefined, was built. The roadmap used and the people consulted are included as an Appendices to this report.

The hard work of implementation, tracking, measuring and adjusting what Workforce Redefined means in practice lies ahead. Some of that work exists and needs to be amplified and scaled, while innovation will certainly be necessary to tackle new challenges, as well.

This strategy establishes priorities that have considerable consensus regarding their ability to yield the greatest results in individuals' lives and for the economic prosperity of the region.

The Big Picture

As with any strategy, funding is an issue, and that is why stakeholders agreed that a central component of the Workforce Redefined strategy is to take a holistic view of workforce development – understanding and eliminating barriers to employment not just related to education, but also around such issues as transportation, childcare and, even, food insecurity.

An important component to this coordination – and funding – is the East Local Workforce Development Board, through which federal and state aid is allocated to individuals who qualify to receive training and pursue education, as well as stipends to help with them transportation, childcare and other barriers to their employment in the 16-county region.

The board also is charged with operating the "front door" to employment, ideally higher-wage skilled employment, known as the American Job Centers.

In addition to the services offered to job-seeking individuals, American Job Centers assist employers with finding qualified employees, offer on-the-job training contracts and provide various other resources to businesses.

The central role this agency should play in workforce development is not understood within the region by service providers or businesses.

A survey of nearly 200 Knoxville-area businesses in September 2020, found three-quarters of respondents were not familiar with the American Job Centers and the respondents who are aware of the agency have not used any of their services.

This strategy envisions a coordinated campaign to better access and leverage these resources with the larger workforce development, education and employer communities. The region is entitled to a highly productive workforce investment board and American Job Center to ensure those funds are administered equitably, efficiently and creatively.

To do so will require better information sharing and collaboration, with the conversation driven by needs of the broader community, versus money and goals for individual organizations.

With the resources administered through a high-performing workforce investment board and better coordination among workforce services providers and other organizations, the critical mass exists to scale solutions for the region for shared challenges.

Recommendation: Adopt a holistic view of workforce development one that is more responsive and flexible, with better coordination and sharing of information among service providers.

- Push for a highly productive regional workforce investment board (i.e., American Job Center)
- Support better information sharing and collaboration among workforce service providers
- Pivot focus to needs and outcomes; not money and goals
- Expand labor pool by supporting populations with barriers



Engaged Employers

This work will be for naught, however, if employers do not articulate their needs for today's workforce, as well as that five and 10 years in the future. A workforce is no longer a commodity for employers that they can purchase on the open market as their needs arise.

This strategy rests on employers' willingness to engage more deeply in workforce development efforts by participating in efforts to expand their current labor pool, particularly for entry-level positions, and by helping to prepare workforce-ready graduates.

While the Chamber and partners will continue to identify data and other mechanisms to quantify need for skills and training, employers play a critical role in interpreting that data – and informing how it should be used – to meet the long-term needs of the regional business community.

Education leaders are actively seeking these partnerships, and the Chamber and its regional counterparts stand ready to intensify their efforts to recruit business and industry for these roles. Successful employers of the future will take an active role in building their own talent pipeline, by serving in industry-specific advisory roles within educational institutions, both secondary and post-secondary.

They will recruit and retain their workforce by creating onboarding processes that discuss internal pathways for career advancement to encourage employee growth and retention.

And finally, they will be purposeful in seeking to expand their labor talent pool through intentional efforts to hire more individuals of different races and ethnicities, as well as individuals who have been involved with the criminal justice system, have a disability or other obstacle to employment.

The Chamber will work diligently with education providers and employers to ensure that employers' input is meaningful and actionable.

Recommendation: Empower employers to participate in regional workforce development efforts to better meet the long-term needs of the regional business community.

- Assist education providers in the creation of industry-specific employer advisory roles
- Create employer-informed programs within post-secondary institutions
- Encourage employers to evaluate their wage offerings for skilled trades positions
- Participate in conversations with employers to hire minority populations and populations with barriers
- Encourage employers to create internal pathways and onboarding plans to encourage employee growth and retention
- Identify data and other mechanisms to quantify need for skills and training

You Can't Be What You Can't See

Knox County Schools' investment in YouScience, a career attitude and aptitude test, is intended to give students a wider view of career options they can pursue. While traditional career assessments have a bias toward steering students to careers of which they already have knowledge, YouScience helps students explore careers in which they may be naturally inclined but have never considered.

The Chamber partnered with Knox County Schools in 2021 to use those results to guide students to high-demand industry clusters during its first retooled Career Expo.

That represents just one activity in a continuum of activities that help students become aware and explore high-demand, high-wage careers to which they have never been exposed. The Expo will be expanded as the world moves into a post-pandemic environment, with an emphasis on career pathways within industry clusters and how students can attain the training to pursue those careers. Work-based learning is often equated with internships and apprenticeships. The Tennessee Department of Education defines work-based learning, however, as having employers speak in classrooms, offering tours of workplaces and creating practicum or project-based lessons aligned with an employer's needs.

This strategy envisions a website that matches local work-based options from willing employers and educators who are seeking these opportunities for their students.

While we know that jobs are going unfilled, particularly in skilled trades, we also know that the supply of willing high school interns – trained in soft skills by organizations like Project Grad and Boys & Girls Club of the Tennessee Valley -- outstrips demand.

These prospective interns are a valuable tool that employers should embrace to grow their own workforce.

A website where employers, organizations and students can find each other and the tools they both need to have successful internships is yet another tactic to be tackled within this strategy.

Recommendation: Prepare workforce-ready graduates by supporting more career awareness, exploration and training opportunities.

- Create continuum of activities and career pathways for high-demand occupational clusters as well as entrepreneurial skill and soft-skill development
- Increase awareness of opportunity and growth within skilled trades careers
- Engage employers in the creation of practicums that can be delivered in COVID-19 and post-pandemic environment
- Support educators' learning in local workplaces
- Advocate for continued and expanded use of YouScience
- Support creation of more internship, pre-apprenticeship and apprenticeship programs



Unpacking College Degrees

Among the troubling education-related statistics resulting from the COVID-19 pandemic is the drop in enrollment at community colleges. Nationwide enrollment is down 10 percent, while East Tennessee community colleges, Pellissippi State and Roane State, report declines of roughly 13 percent.

"Declines are particularly sharp among first-time students and students of color, raising critical concerns about increasing inequality in the coming years," writes Stephanie Cellini of the Brown Center on Education Policy for the Brookings Institution.

Loss of income, inability to find childcare during school closures and lack of broadband access for virtual learning with campuses closed are among the reasons cited for individuals foregoing community colleges during the pandemic.

The pandemic also resulted in the American Job Center moving to work-from-home status and a decline of services during the peak summer months. Officials reported a 15-20 percent decline in their caseload while pandemic-related business closures resulted in skyrocketing unemployment.

The Tennessee College of Applicated Technology-Knoxville (TCAT-Knoxville) responded, by putting together in summer 2021 a series of fast-path training opportunities (i.e. accelerated training), scheduled on nights and Saturdays, to "reskill" many laid-off or underemployed hospitality workers into higher-paying jobs.

Working closely with area employers, TCAT-Knoxville President Kelli Chaney elicited from them the most valuable industry certifications they sought in future employees and limited instruction to having students attain those. Employers also promised to interview those who completed the training in health sciences, plumbing and pipefitting, and welding, as well as fiber optic and HVAC installation and training.

TCAT's efforts are a model to upskill and reskill employees not only during times of economic disruption, but also when business processes change, i.e. more automation is introduced into the workplace.

While the state of Tennessee, through its Tennessee Promise and Tennessee Reconnect programs, is generous in covering tuition for TCAT and community college degrees, funding is limited for those seeking industry-recognized certifications, and equipment and testing costs can make them unaffordable for many to attain.

Funds distributed through the American Job Center can cover costs for some eligible individuals, and, again, points to the need for a state-funded apparatus that is nimble, responsive and entrepreneurial.

But more state policy needs to focus on getting individuals trained quickly in skills – and high-value industry certifications - that will allow them to attain immediate employment.



Recommendation: Create more targeted accelerated training opportunities that are responsive to economic conditions.

- Work with employers to identify common, frequently acceptable certifications
- Create rapid response teams to upskill and reskill displaced employees (e.g., COVID-19 pandemic)
- Provide opportunities to upskill and reskill employees when business processes change
- Support efforts to increase funding for completion of certifications

Eliminating Inequities

"Recommendations for Increasing Post-Secondary Completion and Student Success in Tennessee," the report issued in Spring 2020 by the State Collaborative for Reforming Education (SCORE), paints a harrowing picturing of how the education system is failing economically-disadvantaged students.

"Nearly nine out of 10 economically disadvantaged students in Tennessee are at risk of ending their education without a degree or credential," the report states. "Put another way, success within the current system is not a function of the design but the result of herculean individual student effort."

The education reforms that Tennessee has put in place over the past 10 years have yielded results in high school graduation rates, but those gains have not yet translated into students earning a high-value credential or post-secondary degree.

Tennessee students earning post-secondary credentials trails the national average, and that gap is wider for Black and Hispanic students, students from low-income households and first-generation college students, the report states.

Since then-Gov. Bill Haslam's 2013 launch of the "Drive to 55," a campaign to achieve 55 percent post-secondary completion and the creation of college-going scholarships that accompanied the program, only one group is nearing that goal – White students (at 54 percent).

The proportion of Tennessee individuals earning post-secondary credentials lags 10 percentage points behind the national average. The six-year completion rate for Hispanic students is 46 percent and Black students is just 35 percent.

While Tennessee's State Collaborative for Reforming Education (SCORE) recommends reforms and spending priorities at the state level, efforts to eliminate these inequities must also be undertaken at the local level.

Emphasis needs to be placed on delivering career awareness and exploration activities where the need is greatest, and college-going data shows where economic mobility is stymied.

In Knox County, the challenges can be found in both rural and urban settings, with data showing disparities in outcomes for Austin-East, Fulton, Carter and South-Doyle High Schools.

The work of the KC3 Collaborative, a state grant-funded effort, managed by Pellissippi State Community College, to increase information technology graduates, can serve as a model as its worked to engage non-traditional youth in high-demand information technology careers.

Students are being met where they are – during three-month long Saturday workshops and two-week summer coding camps at Boys & Girls Clubs; high-value certifications and digital literacy workshops through Centro Hispano; and IT fundamentals and coding summer workshops sponsored by Project Grad.

Industry partners are filming day-in-the life videos, discussing their careers and industry in classrooms and hosting summer interns.

Scaling this model with more students, more industries and more employers is essential to reach and inspire youth to careers that are satisfying and sustaining. The challenge will be to meet them where they are in and out of the classroom.

Recommendation: Support more equitable and accessible education, training and employment opportunities.

- Expand career awareness and exploration opportunities in underserved schools, including Austin-East, Fulton and Carter High Schools, as well as the Career Magnet Academy
- Encourage participation of women and minorities in STEM
- Actively seek to remove barriers to education, training and workplaces including transportation, broadband access and lack of access to information
- Support equitable educational opportunities for all students, including adult learners who
 did not complete a secondary education credential, to acquire a level of basic skills needed
 to enter the workforce
- Support efforts for more minority representation in education, training and workforce services

Strong Foundations

The science is out: what is learned between birth through third grade is key to academic achievement, workforce success and economic prosperity. That period is also when the fewest public resources are dedicated to education.

During the 2021 Special Session on Education, Gov. Bill Lee and the legislators essentially made third grade reading a benchmark akin to high school graduation rates, an important step to examining, studying, and improving learning from birth to 8 years old. Legislation was passed that targeted support and resources, including tutors and summer camps, to the estimated two-thirds of Tennessee third graders who are not proficient in reading.

Garnering little notice is the other funding that can be added to improving outcomes before these students – disproportionately economically-disadvantaged, Black and Hispanic – years before they reach the third-grade benchmark.

Bills currently in front of the 112th Tennessee General Assembly seek to direct some \$732 million of unspent Temporary Assistance for Needy Families (TANF) and \$191 million in expected annual funds to strategic initiatives that address two-generation – parent and child - approaches to economic prosperity.

These strategic initiatives should include aid that enables parents to either attain, or obtain better, employment, as well as assessments and resources to ensure children are developmentally on track.

While acknowledging the state's political and technological problems with the implementation these past five years of its TNReady tests in public education, assessments are imperative to determine that students need help.

Consider that without the standardized testing within public schools, policy makers would not know to react with urgency to the fact that two-thirds of third-grade students are not reading proficiently. Those students potentially represent generations of Tennesseans deprived of economic mobility and independence.

Poverty is the enemy of regional economic prosperity. And no better indicator for poverty exists than the lack of an education.

Recommendation: Champion top-tier reading and math skills for public education students as measure by national recognized standards.

- Support expansion of high-quality early education programs
- Promote continued implementation of state standards and assessments
- Support efforts intended to enhance the preparation, recruitment and retention of highquality teachers
- Advocate for increased funding of Knox County Schools, particularly to address learning loss resulting from the COVID-19 pandemic and the lack of Internet access and eliminate disparities among socioeconomic groups



Final Words

During numerous conversations as this strategy was being developed the talk often veered toward programming and efforts that were currently underway to address these priorities.

And that will be the work of the coming years: identifying when and how components of this strategy will be implemented, who will champion what tactic and what partners need to be at the table when those decisions are made.

Lots of good work is occurring in the workforce development arena in our region. Too often, however, that work is occurring in silos or on very small scale.

Building an infrastructure where stakeholders can share information, challenges and solutions is job one.

Building on its investor-led Talent Council, the Knoxville Chamber envisions itself as a convener, leader, supporter or cheerleader – wherever the organization is needed and wanted.

The act of creating the strategy itself has led to the creation of both formal and informal networks of individuals who are seeking to elevate the region's workforce development efforts knowing that getting this right is essential to regional prosperity.

Neither the Chamber nor any other individual or organization will have to do everything; but all of us need to do more.

This Workforce Redefined strategy serves to prioritize what needs to be done to ensure our region is ready for the future.

Appendix Roadmap to Workforce Redefined

Talent Council:

Rob Stivers, Chair | Regions Bank

Andrea Baker | Bush Brothers & Company

David Butler | Knoxville Museum of Art

Claudia Caballero | Centro Hispano de East Tennessee

Tom Cambron | Pipe Wrench Plumbing, Heating and Cooling, Inc.

Chris Carrizales | Keurig Dr. Pepper

Kathy Crookshanks | ShoffnerKalthoff MES

Ashley Geyer Jones | Talent, Pilot Companies

Rebecca Harmon | DeRoyal

CA Houston | Edison Electric

Mike Howard | EPRI

David Hunt | WBIR-TV

Dylan Jones | Boldsquare

Phyllis Nichols | Knoxville Area Urban League

Alica Shamblin | University of Tennessee

Izetta Slade | University of Tennessee

Jenny Swanson | Radio Systems Corporation

Kris Torgerson | UT-Battelle/ ORNL

Kristin Waldschlager | CNS/ Y-12

Debi Welch | Covenant Health

Purpose

This roadmap makes assumptions that are critical to its adoption:

- The growth of the Knoxville region hinges on its ability to create and maintain a qualified, available workforce.
- Development of a qualified talent pipeline needs to begin earlier and last longer, will require
 deeper engagement of business and industry, and committed partnerships with education
 providers.
- The industry disruptions created by the COVID-19 pandemic has resulted in urgency around helping workers find new jobs and develop additional skills.
- A system is needed to meet the current challenges wrought by COVID-19, but that also endures during the recovery.

Overview

Phase 1: Research

- Interviews with regional stakeholders
- Talent Assessment Survey
- Benchmarking

Phase 2: Create Outline

• Working sessions with Chamber groups

Phase 3: Regional Collaboration

• Interviews with regional stakeholders

Phase 4: Report

- Complete regional workforce development strategy
- · Presentation of strategy and recommendations for regional action

Timeline

Phase 1: Research (1 of 3)

Talent Assessment Survey

- Used to determine job skills and qualifications required by employers in the region over the next year, two to five years, and six to 10 years
- Analysis completed in December

Regional Stakeholder Interviews and Surveys

- Chamber team members have been holding one-on-one and group conversations with local workforce service providers, Knox County Schools, post-secondary institutions, community leaders and business stakeholders over the past year
- Surveyed workforce service providers
- Conversations and surveys consisted of services offered, opportunities and barriers for growth, regional opportunities for individual population groups

Benchmarking

- Researched other communities and their strategies
- Researched best practices in distributing state and federal workforce training funding (like Workforce Innovations and Opportunities Act funding)

Phase 1: Research (2 of 3)

Regional Stakeholder Interviews

- KC Talent Council Members
 - Listed on page 13
- KC Education Network Group
 - Knox County Schools
 - University of Tennessee
 - Tennessee College of Applied Technology, Knoxville
 - Pellissippi State Community College
 - Roane State Community College
 - Knox Education Foundation
- Regional Partners
 - Knox County Government
 - City of Knoxville
 - Blount Partnership
 - Oak Ridge Chamber
 - Anderson County Chamber
 - Tennessee Department of Economic and Community Development
- Workforce Service Providers
 - 4th Purpose Foundation
 - American Job Center Knoxville
 - Autism Breakthrough of Knoxville
 - Boys & Girls Clubs of the Tennessee Valley
 - Centro Hispano de East Tennessee
 - disABILITY Resource Center
 - East Tennessee Local Workforce Development Board
 - Emerald Youth Foundation
 - Family Promise of Knoxville
 - FOCUS Ministries
 - Friends of Literacy
 - Girl Scout Council of the Southern Appalachians, Inc.

Phase 1: Research (3 of 3)

Regional Stakeholder Interviews (cont.)

- Workforce Service Providers (cont.)
 - Girl Talk Inc.
 - Goodwill Industries Knoxville, Inc.
 - Greater Tennessee Associated Builders and Contractors (ABC)
 - Helen Ross McNabb Center
 - Junior Achievement of East Tennessee
 - Knox Area Rescue Ministries
 - Knoxville Knox County Community Action Committee
 - Knoxville Area Employment Consortium
 - Knoxville Area Urban League
 - Knoxville Center for the Deaf
 - Knoxville Entrepreneur Center
 - Knoxville Leadership Foundation
 - Michael Dunn Center
 - New Horizons Computer Learning Center
 - Project GRAD
 - Salvation Army
 - SEEED
 - Sertoma Center
 - Spark
 - Tennessee Association of Plumbing Heating Cooling Contractors, Inc.
 - Tennessee Small Business Development Center at Pellissippi State
 - Tennessee Small Business Development Center at Roane State
 - Tennessee Vocational Rehabilitation Services Knoxville
 - The Arc Knox County
 - The Change Center
 - YMCA of East Tennessee, Inc.

Phase 2: Create Outline

Compile priorities from interviews, conversations, and surveys

• Use these priorities to help form the outline

Use Chamber groups to help determine priorities and tactics under each priority

- Talent Council
- Education Network

Phase 3: Regional Collaboration

Discuss outline with regional stakeholders and request feedback

- City of Knoxville
- Chambers-economic development organizations in region
 - Anderson County Chamber of Commerce
 - Blount Partnership
 - Farragut West Knox Chamber of Commerce
 - Loudon County Economic Development Agency
 - Oak Ridge Chamber of Commerce
 - Sevier County Economic Development Association
- Knox County Government
- Knoxville Area Employment Consortium

Bring revised outline to talent council and education network

Phase 4: Report

Complete regional workforce development strategy

- Strategy should include:
 - Recommendations for broad, inclusive regional action over time
 - Emphasis on diverse, equitable and inclusive priorities
 - Direction for beneficial regional partnerships
 - Ways to maximize usage of current education and training programs to increase qualified workers within Path to Prosperity's strategic platforms

Timeline

