

# TALENT PIPELINE MANAGEMENT

Greater San Antonio, Texas Region

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Q2 2023

greater:  
**SATX**

## Talent Pipeline Management Overview

May 2023 marked one year since greater:SATX embarked on implementing the U.S. Chamber of Commerce Foundation's Talent Pipeline Management (TPM) framework for the Greater San Antonio, Texas region. Since the [Q1 2023 TPM Snapshot](#), the region's 6 Industry Collaboratives have continued to advance through the strategic framework.

With an initial focus on Manufacturing and Healthcare Collaboratives, our San Antonio region has already seen the positive impact of aligning the collective employer voice in advancing workforce development strategies. The Manufacturing Collaborative has focused on increasing the number of Advanced Manufacturing Technician (AMT) training cohorts, validating occupations and related training under the City of San Antonio's [Ready to Work](#) program, and bridging the understanding of services and resources provided by workforce agencies to better meet employers' current and projected hiring needs and collectively addressing retention issues. The additional industry Collaboratives - Construction, Finance, and IT/Cyber - are at TPM Stage 2 which includes Demand Planning. The TPM Strategies and Stage phases are detailed in Figure 1. This Demand Planning process engages employers in projecting their future openings for their most critical jobs. There remain increased opportunities to ensure our future workforce is aligned with the growing operational needs of our region's target industries. greater:SATX will further the momentum of these Collaboratives to keep advancing them through the process.

This report details San Antonio's TPM updates through Q2 2023. The greater:SATX team will continue to provide regular updates throughout the TPM implementation stages.

## TPM Q2 2023 Update

Each TPM industry is organized into an employer Collaborative which meets on a pre-determined schedule to provide insights, data, and feedback. greater:SATX is actively engaging five industry Collaboratives, setting the pace for San Antonio to become a national leader in implementing the TPM framework.

- **Manufacturing:** Launched May 2022
- **Healthcare & Bioscience:** Launched May 2022
- **Construction & Skilled Trades:** Launched November 2022
- **Finance:** Launched December 2022
- **IT & Cybersecurity:** Launched December 2022
- **Education:** Ongoing partnership led by the Education Service Center-Region 20

## Framework Strategies and Timelines

The TPM model is a long-term investment in our community and industry training development. An industry Collaborative will typically meet over a 9-12-month period to discuss critical roles, align competencies and skillsets, and work with training providers to develop strategies and tactics that will address short-, mid-, and long-term talent solutions. Some of these may include career awareness and exploration, sector-based marketing and recruiting, training, and curriculum alignment. A sample timeline is provided in Figure 1.



Figure 1

## Active Industry Collaborative Overviews

### Manufacturing

The Manufacturing Collaborative entered into Stage 3 and is now focused on TPM Strategy 5 to develop two-way conversations with external stakeholders, including K-12, Higher Education and Training Providers, and Workforce Agencies to build talent supply chains. During conversations in March 2023 and May 2023, the Collaborative shared 2-year projections and competency analysis data for the two priority roles previously identified through the TPM process, **entry-level operator** and **maintenance technicians**. By facilitating these two-way conversations, this collective industry data will serve to improve student and jobseeker training curriculums and career awareness for jobseekers, while also supporting talent demand planning. Figure 2 details the two-year projections for these priority roles.

Role	New Positions 2-year projection	Replacement (Retiring)	Replacement (Upskilling)	Replacement (Other)	Total Replacement 2-year projection	Total Positions 2-year projection
<b>Maintenance Technician</b>	<b>197</b>	46	95	90	<b>231</b>	<b>428</b>
<b>Entry-Level Operator/ Assemble</b> (or equivalent)	<b>4,621</b>	107	338	5,895	<b>6,340</b>	<b>10,961</b>

Figure 2: The data are two-year projections (2022-2024), as captured from 13 manufacturing Collaborative participants.

### Competency Analysis – Entry-Level Operator

The entry-level operator competency survey reviewed 52 technical competencies aligned with the Manufacturing Skill Standards Council (MSSC) framework. Overall, *safety* and *maintenance awareness* were rated the most important factors of success.

#### Top Competencies

- Utilize effective, safety-enhancing workplace practices
- Communicate quality problems
- Suggest processes and procedures that support safety of work environment
- Identify unsafe conditions and take corrective action
- Work in a safe and productive manufacturing workplace
- Perform all housekeeping to maintain production schedule
- Suggest continuous improvements

- Monitor indicators to ensure correct operations

#### Education and Experience Requirements

- 83% of the responding employers indicated that no experience was *required* for entry-level operator hires, but just over half *prefer* at least 1 year of experience.
- Almost all employers require *at least* a high school diploma or equivalent, while having no significant preference of Associate Degrees or higher.

#### **Competency Analysis – Maintenance Technician Roles**

The maintenance technician role competency survey reviewed 72 technical competencies aligned with the National Urban Network framework. Overall, *safety* and *maintenance awareness* were rated most important factors of success.

#### Top Competencies

- Adheres to safety, health, and environmental rules and regulations
- Performs planned and unscheduled machine maintenance procedures in accordance with a company-approved maintenance plan
- Adheres to mechanical power transmission safety rules
- Performs preventative maintenance procedure for a given machine to extend machine life and minimize downtime
- Adheres to safety, health, and environmental rules and regulations for electronic power and control systems
- Performs machine operation, including start-up, emergency, and abnormal shutdown and manual functions to effectively and safely meet production and maintenance requirements (with operator present)
- Adheres to safety, health, and environmental rules and regulations for welding
- Monitors machine operation and verifies that performance meets production requirements
- Performs predictive maintenance on a given machine to extend machine life and minimize downtime
- Uses hand tools to inspect, adjust/tighten, and support assemble/disassemble equipment and support preventative maintenances, inspection, and troubleshooting activities
- Adheres to fluid power systems safety rules while understanding safety, health, and environmental rules and regulations

#### Education and Experience Requirements

- More than half of the responding employers indicated that 1 to 3 years' experience is *required* for maintenance technician hires, with *some need* for 3+ years.

- Almost all employers require *at least* a high school diploma or equivalent, while 75% *prefer* Associate Degrees or higher.
- Maintenance technician roles are typically seen as an upskilling opportunity for individuals that have entry-level work-related experience.

### **Key Takeaways: Employer and Training Partner Meeting**

The focused, two-way discussions with each group yielded numerous actionable takeaways. The following sections detail some of the key perspectives from the two-part session. An expanded view of the meeting discussions can be reviewed in the documented notes for [part 1](#) and [part 2](#).

#### K-12 Partners Meeting

##### Employer Perspective

4-year degrees are not the only entry into manufacturing or career development. Nor is there a divide between 4-year degree roles and “lesser than” positions. Career development opportunities are extensive and available through all entry-level roles, including the potential to begin a career pathway into high-wage and technical engineering roles after receiving a high school diploma or industry certification.

##### K-12 Partner Perspective

There is a need to engage directly with employers to provide externship, teacher/counselor job shadows, and/or industry provided instructors for educators to maintain role and technology familiarity.

Increase career exploration with outreach to middle and elementary schools, as students are already making decisions about specialty and magnet programs in middle school.

## Workforce Agencies Partners Meeting

### Employer Perspective

Childcare is always an issue but becomes a larger barrier during the non-traditional shifts. Desire to work together to address this disparity.

Make sure we are not just “selling jobs”, but career pathways. Work together to better tell the success stories.

### Workforce Agency Partner Perspective

Create opportunities for Case Managers to visit facilities to learn more about the roles and working environment.

Many agencies provide continued services to candidates even after job placement. Increase collaboration between the agencies and employers to identify where support can be offered for various retention barriers.

## Higher Education and Training Provider Partners Meeting

### Employer Perspective

Continuous feedback loop and training agility improves hiring success.

Commitment to find opportunities for employers and training providers to debrief on program completers and recent hires.

### Higher Education and Training Provider Partner Perspective

Engage in collaborative recruiting, meaning partner with employers to visit K-12 to tell the full story of education and hiring.

Instructor loan programs from industry would provide increased class offerings, improve current industry knowledge, and serve as a possible recruiting tool for employers.

### *Next Steps*

Employers will identify partnership and collaboration opportunities with each external partner group. This will include sharing occupational profiles and career pathways both for individual organizations and collectively as an industry. Additionally, the Collaborative will determine where work overlaps with each partner group to provide warm learner and jobseeker transitions through the education and workforce ecosystem. The Collaborative plans to have these defined deliverables and next steps developed by early Fall 2023.

## Healthcare

Similar to the Manufacturing Collaborative, the Healthcare Collaborative entered Stage 3 and is now focused on TPM Strategy 5 of the TPM framework to develop two-way conversations with external stakeholders, including K-12, Higher Education and Training Providers, and Workforce Agencies. During the initial conversations with external partners in March 2023 and May 2023, the Collaborative outlined the differences in the career pathway entry points for hospitals versus clinical work environments. With additional training and certifications, both entry points ultimately lead into nursing career pathways. Figure 3 details the two career pathway entry points.

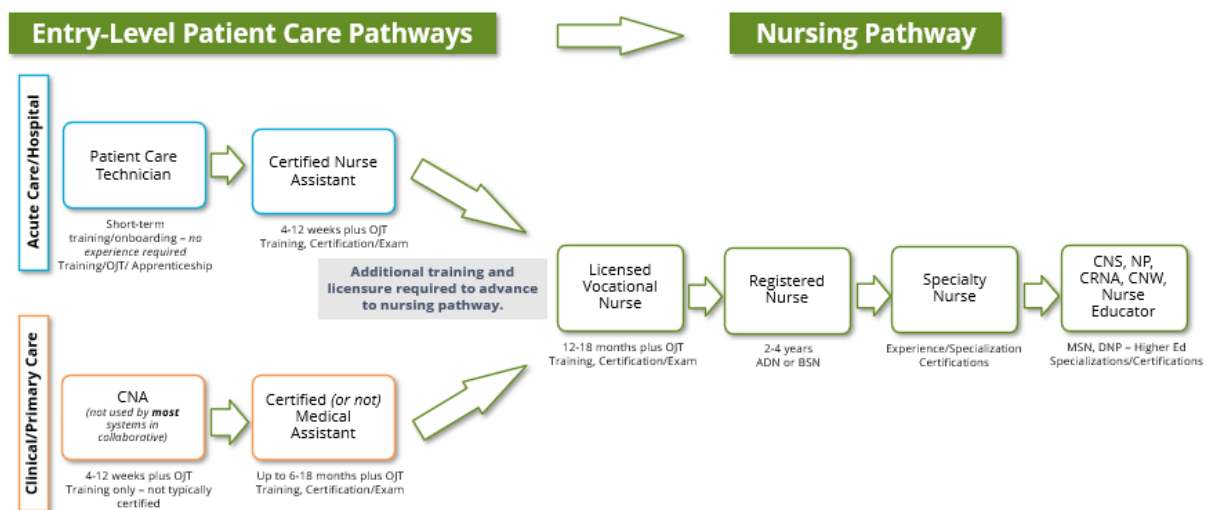


Figure 3

There are work environment nuances that differ between the two entry points for nursing career pathways, as noted below.

### Acute Care / Hospital Career Pathway

- May walk longer distances across hospital/campus
- Multiple shifts common – which can promote flexibility and increased pay
- Fast-paced, team environment, often addressing serious, complex illness/injury
- Variability in regularity of patient interaction based on where a role is in a hospital system (e.g., critical care/bedside roles versus operating room nurses)

### Clinical / Primary Care Career Pathway

- Often smaller teams, individual work, smaller office/less distance but still fast-paced
- More opportunities for shift regularity
- Variability in specialization/clinic type and often less serious illness and injury



- Shorter interaction with patients – outpatient, shorter visits, etc.—but longer-term and often higher patient loads per day

### **Key Takeaways: Employer and Training Partner Meeting**

The following notes outline major takeaways from focused discussions between the employers and each stakeholder group. The following sections detail some of the key perspectives from the two-part session. An expanded view of the meeting discussions can be reviewed in the documented notes for [part 1](#) and [part 2](#).

#### K-12 Partners Meeting

##### Employer Perspective

Healthcare is everywhere and the need will always be present, so job security is high. Not just hospital positions or clinical, these roles can even be data analytics, coding, front/back office, etc.

There are steady career opportunities with various options for growth and easily transferrable skills within the industry. This is rewarding work with immense community impact.

##### K-12 Partner Perspective

Students are extremely interested in job shadow and internship opportunities within Healthcare.

Education partners want to work together to best align high school students with work-based learning. There are needs for both in-person and virtual opportunities.

## Workforce Agencies Partners Meeting

### Employer Perspective

It is important that jobseekers understand the mission and culture of each employer. Identified opportunities for collaboration and partnership to best communicate that through the Workforce Partners.

Employers do not require prior experience or clinical rotations for many roles. It is critical to understand that many jobseekers want this experience, but it is not a requirement. This could be better communicated that this experience can be built into the onboarding process.

### Workforce Partner Perspective

Jobseeker clients are looking for work-based learning opportunities – externships, internships, and apprenticeships. Many are nervous to enter the field right after training and want to experience the role before being hired. Role exploration opportunities might reduce retention issues that employers are experiencing. This conflicts with what many employers require, so identified collaboration on requirement and job seeker/trainee preference will be an important next step.

## Higher Education and Training Provider Partners Meeting

### Employer Perspective

Need to elevate awareness of the general entry points into healthcare careers, as well as the pathways available through CNA, MA, and PCT training, dependent on the higher education provider and career trajectory.

Employers would like shared training completion projections to adjust hiring expectations and timing.

### Higher Education and Training Provider Partner Perspective

Training providers have identified the importance of general professional development skills in the coursework – leadership, communication, and customer service.

Need industry & employer collateral, career pathways, and candidate profile information to share with students.

## *Next Steps*

Employers will identify partnership and collaboration opportunities with each external partner group. This will include sharing occupational profiles and career pathways unique to employers and collectively as an industry. Additionally, the Collaborative will determine

where work overlaps with each partner group to provide better transitions for learners and job seekers through the education and workforce ecosystem. The Collaborative plans to have these defined deliverables and next steps developed by early Fall 2023.

## Construction & Skilled Trades

The Construction & Skilled Trades Collaborative is currently in Stage 2, focused on TPM Strategies 3 & 4. The initial Construction & Skilled Trades Collaborative conversations identified two critical issues for the industry: 1) general quantity of candidate interest for entry-level and trades roles and 2) a lack of experienced leaders. Specifically, the two critical experienced roles identified through employer surveys are **superintendents / assistant superintendents** and **specialized project managers**. While these roles require extensive career experience, the Collaborative is working to identify potential upskilling opportunities to help transition some middle-career individuals into management opportunities. The specific skillsets identified as priority for upskill training are team communication and management, blueprint reading, and project management software knowledge.

Additionally, the Collaborative held extensive discussions around general career awareness and exposure in the San Antonio region. Like Manufacturing, the perception of Construction & Skilled Trades careers anecdotally has a negative impact on interest from school-aged students and jobseekers, in general.

greater: SATX invited the Greater Houston Partnership to provide a virtual learning session for the TPM Construction & Skilled Trades Collaborative around Construction & Skilled Trades efforts made in the Houston region. Similar to San Antonio, Houston had a low quantity interest issue and worked to develop a campaign to combat the awareness and perception issues through shared career opportunity stories, citywide contests for K-12 students, and pre-apprenticeship & apprenticeship models to provide work-based learning experience to increase industry exposure and positive perception.

### *Next steps*

Encouraged by the success in the Houston region, the Collaborative plans to move forward on developing robust pre-apprenticeship models and partnerships, explore citywide industry career awareness efforts, and increase job shadows and other work-based learning opportunities. Additionally, the Collaborative will explore providing training and externship programs for the San Antonio region's K-12 school districts.

## Finance

The Finance Collaborative is currently in Stage 2, focused on TPM Strategy 4. Through an initial survey request, the Finance Collaborative identified that customer service roles serve as the best entry-level opportunity for many non-degreed jobseekers who want to start careers in the industry. These roles include call center, customer service, and membership representatives. Most finance employers do not require a background in finance or banking to enter these roles but offer extensive onboard training (6-12 weeks) to learn about the industry, regulations, and banking services.

With a focus on both front-office, customer-facing career pathways and back-office career pathways, this Collaborative seeks to look internally to advance customer service talent *either* through promotion into customer service or operations management roles *or* through upskilling and certification in a variety of finance career pathways.

The Collaborative explored the preferred skills and the initial career pathways available for an individual entering a career in finance, depicted in Figure 4. These pathways may be used by employers to guide their incumbent staff as well as career guidance tools for career counselors, case workers, students and adult learners, and other stakeholders navigating the various pathways and on-ramps to finance jobs, as well as their associated training, education, and certification requirements.

### Preferred Skillsets:

- Previous customer service, retail, or hospitality experience
- Basic math skills
- Digital and computer aptitude

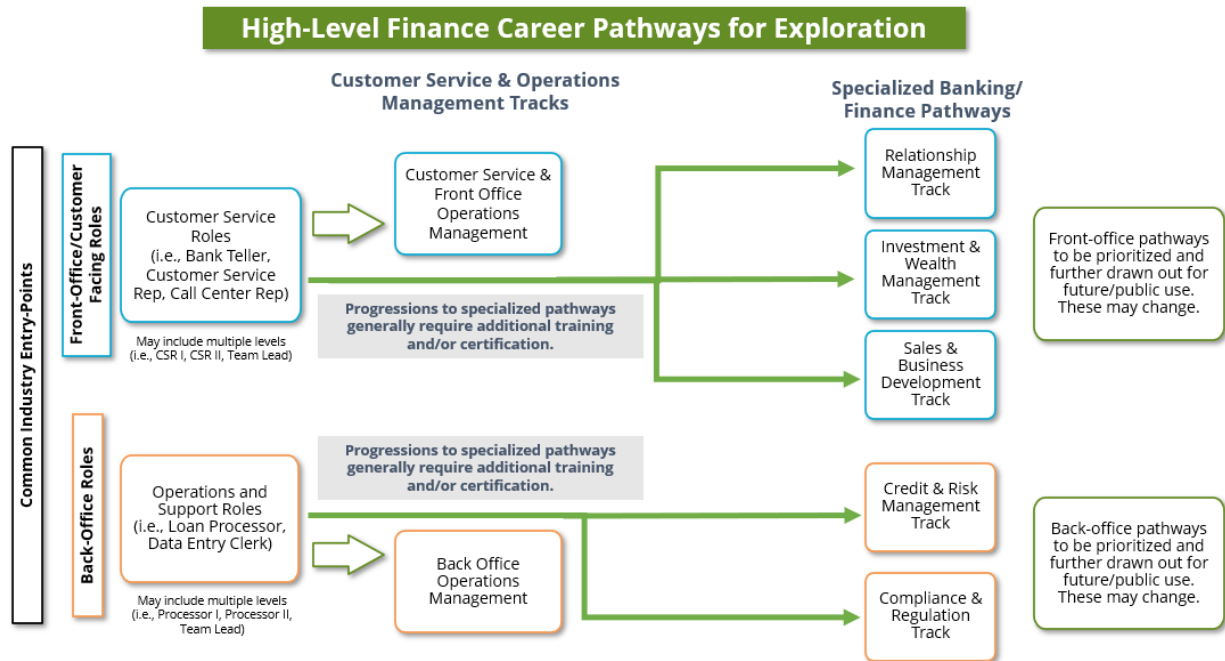


Figure 4

This initial career pathway was created in response to two initial employer Collaborative conversations about critical roles and pathways of opportunity for those in more entry-level jobs. This pathway will be further validated by employers and refined in the next two quarters. The Collaborative will continue to prioritize specialized pathways based on employer needs in alignment with the jobs available in the Greater San Antonio region.

### Next Steps

The Collaborative will further explore the career pathway drafts to better document the differences between “customer facing” and “back office” roles. Additionally, the Collaborative will compile details on upskilling requirements (internal or external), certification, licenses, and degrees necessary for career growth to support development through the career pathways.

A competency analysis survey will also establish the shared customer service role requirements and determine if pre-employment training for these requirements can better assist recruitment and reduce retention issues. While specific onboarding will still be necessary for most employers, candidates would be more prepared for the roles and expectations on Day 1 if they were provided pre-employment training.

## IT & Cybersecurity

IT & Cybersecurity Collaborative entered Stage 2, focused on TPM Strategies 3 & 4. Different than the other collaboratives, IT & Cybersecurity Collaborative employers have a greater need to hire **experienced** and **middle-career roles**, rather than entry-level roles. Certifications and training needed by employers vary, but candidates' aptitude to learn and adapt to new technologies is highly valued.

The industry's workforce challenges are compounded due in part, as identified by the Collaborative, to the specific needs and experience requirements for each employer. That said, reflecting on our region's IT & Cybersecurity workforce, the Collaborative collectively identified the following needs:

- Build employee skills of communication and teamwork. There is often a struggle to identify candidates with leadership skills and abilities.
- Understand that each organization likely uses some proprietary software/operating systems that will require extensive onboarding and learning processes, regardless of hiring for entry-level or middle-career roles.
- Improve regional focus on talent retention and attraction, especially with virtual and hybrid work models continuing to trend. There is an identified opportunity to elevate awareness of SATX as a destination for **IT talent** and to support building community within the industry to reduce the "talent flight risk," as referenced by Collaborative members.
- Explore ways to expand and develop tech/workforce ecosystem locally to improve regional affinity and keep talent local.

### *Next Steps*

The Collaborative continues to work toward identifying a collective occupational need for the region. Some next steps include validating education and experience requirements for top regional occupations, reviewing the quality of training programs, and confirming entry-level role needs for our region. Concurrently, the Collaborative will also focus on industry awareness for our region as a talent and operations destination.

## City of San Antonio's Ready to Work Program

The information gathered will be regularly aggregated (anonymously) and shared with partner organizations to inform workforce and training initiatives. Specifically, we are partnering with the City of San Antonio's Ready to Work initiative to ensure that future participants are fully aware of and trained specifically for our region's career opportunities. TPM Collaboratives will directly inform the target occupations and employer preferred training in support of the success of the \$200 million Ready to Work initiative.

## Join Us

The Talent Pipeline Management framework is built on industry best practices that provide an agile and structured workforce development process focused on employer return on investment. Across the nation, there are over 19 cohorts and 40 states participating.

To learn more and get involved in our regional industry collaboratives contact Christopher Mammen, Vice President of Workforce Development, at [Christopher@greatersatx.com](mailto:Christopher@greatersatx.com).



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