

TEXAS TALENT EXPERTS REPORT

MANUFACTURING LABOR MARKET OVERVIEW

PREPARED FOR

Economic development, workforce development, and industry leaders

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EXECUTIVE SUMMARY

Workforce Solutions Capital Area partnered with the Austin Regional Manufacturers Association (ARMA) to establish its manufacturing industry sector partnership, the Central Texas Manufacturing Partnership (CTMP), in 2018. ARMA – a regional leader working to strengthen the Central Texas manufacturing community through advocacy, workforce development, and networking – has deep links with manufacturers in the Central Texas region. Together, CTMP identifies the most in-demand job opportunities, creating training programs to support manufacturer's hiring needs and career pathways to higher-paying jobs for residents.

The CTMP addresses the pressing issue of workforce shortages. Among many strategies to tackle these shortages, this report focuses on the CTMP's innovative solutions within:

- K-12 initiatives to attract students to manufacturing careers; and
- Community collaboration to combat challenges associated with talent acquisition, skill development, and retention in this rapidly advancing field.

Local data and employer input underscore the urgency of the initiative. High demand for both technician- and entry-level semiconductor roles is largely due to the industry experiencing historic expansion. As a result, semiconductor suppliers are also expanding in the area.

Why it matters: By fostering collaborations between industry and education and investing in innovative training solutions, the CTMP is helping our region meet the growing demand for skilled manufacturing professionals.

- For workforce development: By connecting data to workforce service delivery, our region can increase residents' access to higher-paying jobs through in-demand career pathways.
- For economic development: Businesses and organizations can better understand the local business climate, particularly industry growth and expansion.
- For industry: Businesses can better understand the local employment landscape — who's hiring, the competition for talent in fast-growing industries, and where to look for strategies to attract and retain that talent.

GROW YOUR BUSINESS THROUGH TALENT: Workforce Solutions is uniquely positioned to help employers of all industries directly connect with local job seekers and talent. We're collaborative and can tailor services based on your company's needs. **Get started.**

PART 1

BACKGROUND

Strengthening the Workforce through Industry Sector Partnerships

Workforce Solutions Capital Area (WFS) regularly analyzes the regional labor market to identify the most in-demand industries and occupations. Armed with these insights, WFS convenes industry sector partnerships — a proven and employer-led workforce development strategy — where industry-specific executives within the Austin labor market work together to influence alignment around common solutions with career awareness, training, hiring, and upskilling.

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In November 2023, WFS and ARMA's manufacturing industry director convened a fireside chat with two Central Texas manufacturing employers across different industries – Rick Loofs, Chief Operating Officer at Cangshan Cutlery and John Nykaza, President at Toppan Photomasks Round Rock. Voices from manufacturing leaders and active CTMP contributors are included in this report.

WFS' industry directors have increased success for its industry sector partnerships in developing talent solutions to address critical hiring needs. To continue ensuring success in these workforce development efforts, WFS partnered with ARMA to hire a

joint director of manufacturing partnerships, a strategic collaboration to build up the industry partnership.

PART 2

THE NEED

Semiconductor Workforce Shortage Areas

The manufacturing sector is experiencing significant shortages in technician-level roles, such as manufacturing technician, process technician, and equipment technician. Technical-level roles are generally considered middle-skill jobs, requiring more than a high school diploma but less than a four-year degree, such as an industry certification. Entry-level semiconductor roles also experiencing significant demand include assemblers and operators.

Demand for both technician- and entry-level semiconductor roles is largely due to the industry experiencing historic expansion. As a result, semiconductor suppliers are also expanding in the area. Factors leading this rapid growth include:

- 1. The current geopolitical climate, which is driving companies to alter their strategic investments by reshoring operations and reconfiguring their supply chain to reduce their reliance on international markets, such as China; and
- Catching up on production as the supply chain stabilizes, which companies have expressed will linger for the next five to ten years and where wait times for needed materials can take two to three years.

"The nature of semiconductor manufacturing equipment is very specialized and requires significant training and expertise to keep large numbers of advanced equipment running at a high performance. Because of this, that talent is in high demand and will continue to be a critical factor for the success of our factories."

Darren Lewis

Director of Equipment Engineering, ATMC Fab, NXP Semiconductors; Board member, Workforce Solutions Capital Area

MANUFACTURING INDUSTRY EXPANSIONS & RELOCATIONS

Austin Metro, August 2023 – October 2023

ESTABLISHMENT	TYPE	JOBS CREATED	LOCATION
Tesla (HQ)	Electric automobile &	7500 / Expanded	Austin
	battery mfg.		
HBPO Plastic Omnium Modules	Automotive front end	800 / New	Austin
	modules mfg.		
Staccato (HQ)	Firearms mfg.	120 / Expanded	Florence
5F Mechanical Group (HQ)	HVAC, plumbing mfg.	115 / Expanded	Manor
	incl. metal fabrication		
Mosaic Housing	Modular buildings mfg.	100 / New	Elgin
Fat Quarter Shop (HQ)	Fabric quilting supplies	78 / Expanded	Kyle
	distribution & mfg.		
Caracol (HQ)	3D printers mfg., large	75 / New	Austin
	format		

Source: Austin Chamber

PART 3

LABOR MARKET INSIGHTS

There is currently a great need for manufacturing talent in Austin, which will only increase. Between 2024-2025, ARMA projects that our semiconductor industry ecosystem will need 4,000 more skilled employees, largely due to the opening of the Samsung plant in Taylor, TX and other major semiconductor manufacturers in the area increasing production. After 2025, ARMA projects an additional 2,000 more skilled employees will be needed every year. This projection is based on conversations with employers and their increased production projections.

WFS' labor market insights below show the projected growth ahead for the manufacturing industry.

OF NOTE: Manufacturing hiring demand is likely much greater than on paper. In the year up to October 2023, there were **four hires for every manufacturing job posting**, or 3,345 hires for every 753 openings. Most of these jobs were for laborers, first-line supervisors of mechanics, production clerks, industrial production managers, and commercial and industrial designers.

MANUFACTURING INDUSTRY SNAPSHOT

Austin Metro, as of October 2023

EMPLOYMENT

72K

Workers in manufacturing iobs

5.5% of the region's workforce

DEMAND

102K

Manufacturing jobs will need to be filled in the next 10 years

34K more compared to 10-year projections made in 2018

YEARLY CHANGE

3.5%

Manufacturing is among the top five industries with the most regional growth in the last year

Tied with professional & business services, private education, and health services.

AVG. ANNUAL SALARY

\$120K

\$39K more than other industries

ESTABLISHMENTS

2.2K

358 more than in 2019

GROWTH

1.9%

Projected annual growth rate

Sources: JobsEQ, Texas Workforce Commission Eligible Training Providers

PART 4

THE SOLUTION

"The lack of qualified skilled talent in the area is a significant regional issue. Any one employer may be able to lure a candidate or two away from another company, but the problem is still going to exist for all of us. We have to work together across industries and in collaboration with education, government, and organizations like ARMA and Workforce Solutions to do just that – find solutions!"

Rick Loofs

Chief Operating Officer, Cangshan Cutlery

K-12 AWARENESS

Without a robust and continuous pipeline of new and young talent, the experienced workforce will, over time, only reduce and create painful gaps in factories. By connecting industry to education, the CTMP has enabled and simplified the process for companies to access a broader talent pool. Below are a few of CTMP's innovative approaches to marketing and recruitment:

- Partnership with Austin Community College's Make It Center. The CMTP's strategic collaboration with Austin's largest community college system brought in over 300 students during the Fall 2023 semester to interact with a manufacturing presentation and get hands-on activity related to in-demand industry skills. For example, students assembled a Formula 1 car and practiced real-world assembly such as 3D printing, vacuum sealing, and more. In the Spring 2024 semester, CTMP is on target to double the number of students participating in this manufacturing career awareness program.
- Leveraging Manufacturing Day. CTMP connects manufacturing employers to Austin area school districts for Manufacturing Day so that students can tour their facilities and learn about in-demand careers. Employers continue to invest and work with schools to educate in areas such as welding, automotive, and more.
- Expanding regional workforce development coordination. CTMP is partnering with Workforce Solutions Rural Capital Area, which oversees workforce development efforts for the nine counties region outside of Austin-

Travis County. The partnership is expanding its work with companies and independent school districts in cities such as Georgetown, Round Rock, and Bastrop to either build or enhance their manufacturing career pathways for students while in high school.

"We realize that many companies are battling with the same challenges, and by increasing collaboration we get more input, better solutions, and continuous improvement. It is great to see 'Hire Local' efforts drive benefit to not only our company but the community around us, empowering the ecosystem our manufacturing programs enable. This collaboration also helps ensure that resources and programs in the community are aligned to business needs and can adapt to changing demand!"

Darren Lewis

Director of Equipment Engineering, ATMC Fab, NXP Semiconductors; Board member, Workforce Solutions Capital Area

COMMUNITY COLLABORATION

In the region, many CTMP partners are coming together – including Austin Community College, ARMA, and the five largest regional semiconductor employers (Samsung Austin Semiconductor, NXP, TEL, Infineon, and Applied Materials) – to collaboratively address the evolving workforce needs within the industry. The coalition, called the Semiconductor Taskforce, aims to collectively tackle the challenges associated with talent acquisition, skill development, and retention in this rapidly advancing field.

By fostering collaboration and knowledge-sharing among participating companies, the Taskforce seeks to develop strategies and initiatives that ensure a skilled and adaptable workforce capable of meeting the industry's growing demands. Through this collaborative endeavor, the aim is to cultivate a resilient semiconductor ecosystem for future success.

To address workforce challenges, below are common, scalable skills training programs for incoming employees created through CTMP leadership.



Semiconductor Training Academy Rapid Start (STARS). This program is a four-week technical training program developed with feedback from participating companies from the Taskforce. The training program aligns with the specific

needs of the semiconductor industry. STARS will be available to upskill existing employees and establish a pipeline for aspiring entry-level techs interested in pursuing careers in the semiconductor industry.

- Certified Production Technician (CPT) Training. Through industry input, CTMP launched this training program that aligned multiple company needs around the shortage of entry-level manufacturing technicians. Right now, it's one of WFS' most in-demand trainings to meet the call for manufacturing talent. WFS supports underemployed and unemployed individuals in training for the core competencies for front-line, advanced manufacturing occupations, leading to an industry-recognized credential. With partners like Samsung, Toppan Photomask, Applied Materials, NXP, ACC, and Skillpoint Alliance, WFS runs the gamut on preparing the talent pipeline from cradle to career.
- CNC Machinist Apprenticeship. Launched in January 2023 through efforts by the CTMP, this six-month program provides classroom and hands-on learning for machine trades print reading, CNC machining centers, and CNC turning centers. This apprenticeship allows employers to fill open positions and ensure their employee is trained to their standard and company culture. This program is funded through a Texas Workforce Commission apprenticeship expansion grant, with partnering employers such as Athena Manufacturing, OneSource Manufacturing, and NOV.

CPT IMPACTS: In the past four years of implementation (January 2020 – December 2023), WFS has enrolled **420** trainees in the CPT program. So far, **121** companies have hired our newly skilled CPT graduates. Learn more.

APPRENTICESHIP is an industry-driven, high-quality career pathway where employers can develop and prepare their future workforce, and individuals can obtain paid work experience, classroom instruction, and a nationally recognized, portable credential. Learn more.

About Workforce Solutions Capital Area (WFS):

WFS is the leadership and governing body for the Austin-Travis County workforce system. We are responsible for the data-driven planning, oversight, and evaluation of workforce development activities in Austin-Travis County. Simply put, we connect local people to the most in-demand industries with quality jobs.

By understanding where local employers see the greatest need for talent, WFS is helping focus our community's workforce development efforts to build the talent pool while addressing affordability and equity concerns through immediate economic advancement opportunities. We are proud to continue researching and sharing labor market information to drive workforce investment where it is needed most.

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