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BUILDING A ROBUST LABOR FORCE TO DELIVER GENERATIONAL INFRASTRUCTURE

A 2040 Forecast of Austin's
Mobility and Infrastructure

PREPARED FOR

Economic development, workforce
development, and industry leaders

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EXECUTIVE SUMMARY

The Opportunity

With the investment in transformational regional infrastructure, we can address Austin's affordability challenges by creating family-supporting jobs and sustainable career pathways, while improving regional mobility.

Austin, now the ninth-largest city in the nation, has grown by 14% in the past five years, sparking increased demand for new housing, improved roads, and other infrastructure enhancements. This rapid expansion underscores the critical need for a robust Mobility and Infrastructure (M+I) workforce, equipped to manage, supervise, and construct infrastructure projects. Currently, Austin's M+I sector employs over 222,000 workers, positioning it as the region's second-largest sector, surpassing both healthcare and advanced manufacturing.

This sector has gained significant national attention, with the implementation of the Bipartisan Infrastructure Law, the Inflation Reduction Act, and the CHIPS and Science Act, resulting in a historic investment of \$2.5 trillion. A significant portion of this funding, approximately \$500 billion, is allocated to infrastructure projects and is closely linked to workforce development.^[1] Consequently, the M+I industry urgently requires a forward-looking workforce development system. Nationally, approximately 1.7 million workers leave their positions annually, highlighting the substantial efforts needed to fill these vacancies. Moreover, the recent federal legislation is anticipated to generate an additional 1.5 million jobs annually.^[2] Notably, the industry has been criticized for its lack of inclusivity towards younger workers, women, and people of color. Therefore, inclusive training programs targeting non-traditional populations and providing access to well-paying jobs are imperative to meet the escalating demand for projects.

Considering the imminent arrival of several large-scale projects, Austin must prepare itself for the heightened demand for M+I workers. While the historic infrastructure investments pose several challenges, they also offer substantial opportunities for the city and the region. Through these investments, the region can address affordability issues by creating employment opportunities that support families and establish sustainable career paths, all the while enhancing regional mobility. Austin can cultivate a strong and skilled labor force capable of undertaking next-generation

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construction and infrastructure projects, thereby redefining economic development prospects to foster prosperity at all levels.

Our research provides crucial insights into the M+I sector by examining the existing capacity of Austin's M+I workforce, forecasting its growth trajectory until 2040, and presenting solutions that exist both nationally and within the region to fortify the workforce development ecosystem.

What We Learned

Our multifaceted research has revealed several trends and takeaways. The following are the ten most relevant trends for defining the current gaps and future opportunities in the M+I sector.

- 1. 10,000 mobility and infrastructure jobs created annually through 2040.** Austin's M+I workforce, currently comprising 222,646 workers, is projected to expand to 404,033 workers by 2040, representing an 81% increase. While 96,753 of these jobs are anticipated under a "business as usual" scenario, the development of Austin's large capital projects will fuel accelerated growth, leading to an additional 84,684 jobs.
- 2. The region's existing skill shortages could hamper project success.** Austin's skilled trades talent pool is 19% smaller than the U.S. average, potentially impeding the region's capacity to develop and construct future infrastructure projects. Similarly, the shortage of Frontline Mobility Operations (23% smaller than the U.S. average) and Fleet Maintenance and Repair workers (18% smaller than the U.S. average) may delay the implementation of an enhanced transit system.
- 3. Even the deepest wells of talent will be spread thin.** The region boasts a strong pool of General Construction workers, with an employment share that exceeds the U.S. average by 28%. Nevertheless, this occupational group is expected to experience the most substantial growth, surging from 42,799 jobs to 94,334 jobs by 2040, marking a 120% increase over the job levels in 2022. Over the next 17 years, Austin will need to fill an average of 3,000 new General Construction jobs annually.
- 4. A 4,000 annual training gap could exacerbate skill shortages.** The establishment and expansion of regional training programs will play a crucial role in nurturing the M+I workforce. Currently, Austin trains over 3,000 M+I workers annually, which falls short by 4,000 workers compared to the projected growth. This issue is especially critical for the General Construction group, which anticipates a training gap of nearly 2,000 workers, and the Fleet Maintenance and Repair group, which is facing a shortfall of 1,100 workers.
- 5. 6 in 10 mobility and infrastructure workers earn a prevailing wage.** Enhanced prevailing wage policies can serve as an effective tool to attract and retain workers, particularly in General Construction and Skilled Trades. Presently, half

(52%) of General Construction workers and a third (34%) of Skilled Trades workers are earning below the prevailing wage of \$22 per hour.

6. **Currently, women account for only 14% of the mobility and infrastructure workforce.** Within this workforce, women occupy 6% of General Construction roles and 15% of Skilled Trade roles, aligning with the longstanding gender norms in blue-collar work. Increasing the representation of women in these roles to align with their share in the overall regional economy (48%) would entail creating more than 4,000 new jobs annually.
7. **Automation is set to impact mobility and infrastructure jobs more significantly than most other sectors.** It is projected that at least two-thirds of M+I occupations will undergo augmentation through technology. Although often viewed as a challenge, automation can assist the region in managing the high growth rates, especially in the General Construction occupational group, which exhibits an automation index exceeding 125 (U.S. Average = 100).
8. **Employers seem to be disconnected from the skilled trade talent pool within the region.** According to our regional employer survey, employers rated Skilled Trades as the most challenging to recruit for (4.07/5) and the most in demand (4.07/5). Surprisingly, training in the Skilled Trades group is the most common (1,689 workers trained), and the group is projected to have the smallest annual training gap (291). The fact that these skills were identified as the most challenging to recruit for despite their prevalence suggests a disconnected pipeline.
9. **There is no consistent standard training period for the region's mobility and infrastructure training initiatives.** Programs vary in duration with little consistency, ranging from as little as 6 weeks to more than 2 years. This variation exists at both the overall industry level and within specific occupational groups. Half of general construction programs are less than 6 weeks, while the other half extend beyond 2 years.
10. **Present-day recruiting methods in the M+I sector are limited.** An over-reliant dependence on word-of-mouth recruiting, coupled with inconsistent school visits and community partnerships, may impede the growth and diversity of programs. Organizations focused on nurturing talent pipelines frequently highlight the need for improved and consistent communication as a means to enhance recruitment in the M+I workforce.

Methodology

The Mobility and Infrastructure Sector Partnership was initiated by the collaborative efforts of Austin Transit Partnership, CapMetro, and Workforce Solutions Capital Area. The primary objective was to establish a strategic action plan to expand the training capacity in Austin's Mobility and Infrastructure (M+I) sector. This partnership consists of a proficient leadership team led by Austin Mayor Kirk Watson and Travis County Judge Andy Brown, along with a policy team composed of industry leaders from

various sectors, including job creators, project sponsors, and talent pipeline organizations.

Through the partnership, we organized comprehensive roundtable discussions to assess the strengths, weaknesses, opportunities, and threats prevalent in the M+I industry. Furthermore, we engaged in a constructive dialogue to identify and understand the prevailing gaps and obstacles hindering training opportunities. Subsequently, action groups were formed to address critical challenges in two key areas: streamlining contract coordination and diversifying recruitment as well as work to retain workers from non-traditional demographics.

To complement the qualitative insights gathered from these discussions, we conducted an industry forecast to evaluate the anticipated changes in Austin's M+I sector. In this analysis, the term 'Austin' refers to the entire five-county metropolitan region. The M+I industry was classified into 75 different occupations categorized into five distinct groups: Operations and Supervision, Skilled Trades, General Construction, Fleet Maintenance and Repair, and Frontline Mobility. The economic forecast, provided by EMSI Lightcast, projected industry growth under both a business-as-usual scenario and a more accelerated 'supercharged' scenario, taking into account five major infrastructure projects in Austin, namely Project Connect, I-35 Expansion, Airport Expansion, Tesla Gigafactory, and Samsung.

A comprehensive survey was conducted to assess the current capacity of the M+I training programs in Austin. The survey received responses from over 80 project sponsors, talent pipeline organizations, and job creators, offering valuable insights into their respective training programs, capacity, costs, workforce requirements, recruitment strategies, and support services. Our best practice research focused on key concepts, including incentivizing skill training, diversifying the talent pipeline, enhancing system navigation, standardizing contracts, and exploring alternative funding sources. We drew upon similar examples from across the country to strengthen our findings and recommendations.

The culmination of our efforts was marked by Austin's inaugural Mobility and Infrastructure Workforce Summit, where we shared the results and key takeaways from our research and formulated the initial draft of an action plan. The final action plan will be released in early 2024.

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[1] Ross, Martha, Joseph Kane, Felix Laniyan, and Annelies Goger. "How State and Local Leaders Can Harness New Infrastructure Funding to Build a Stronger, More Inclusive Workforce." Brookings, March 24, 2023. <https://www.brookings.edu/research/how-state-and-local-leaders-can-harness-new-infrastructure-funding-to-build-a-stronger-more-inclusive-workforce/>.

[2] Kane, Joseph. "Seizing the U.S. Infrastructure Opportunity: Investing in Current and Future Workers