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MOBILITY & INFRASTRUCTURE PARTNERSHIP

Findings and Recommendations

Spring 2024

Prepared by CivicSol

- 1. Opportunity**
- 2. Research Findings**
- 3. Strategy and Policy Considerations**

WORLD
AFRICA

1. The Opportunity

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

What are we working towards?



A robust, skilled labor force to deliver generational construction and infrastructure projects



Defining economic development opportunities in a new, different way

1

Understand the future skills needed to build and operate our transformational mobility investment.

2

Evaluate our construction and mobility training programs to understand capacity, approach, pipeline, and resources needed to scale.

3

Identify the obstacles preventing jobseekers from seeking these jobs and participating in training.

4

Develop an action plan to build a robust mobility and infrastructure workforce for the future.

2. Research Findings

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What is the current state of the M+I Workforce?

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Who will build and operate Austin's future infrastructure and mobility projects?

We defined the Mobility and Infrastructure (M+I) sector to include 5 groups of occupations:

Operations &
Supervision

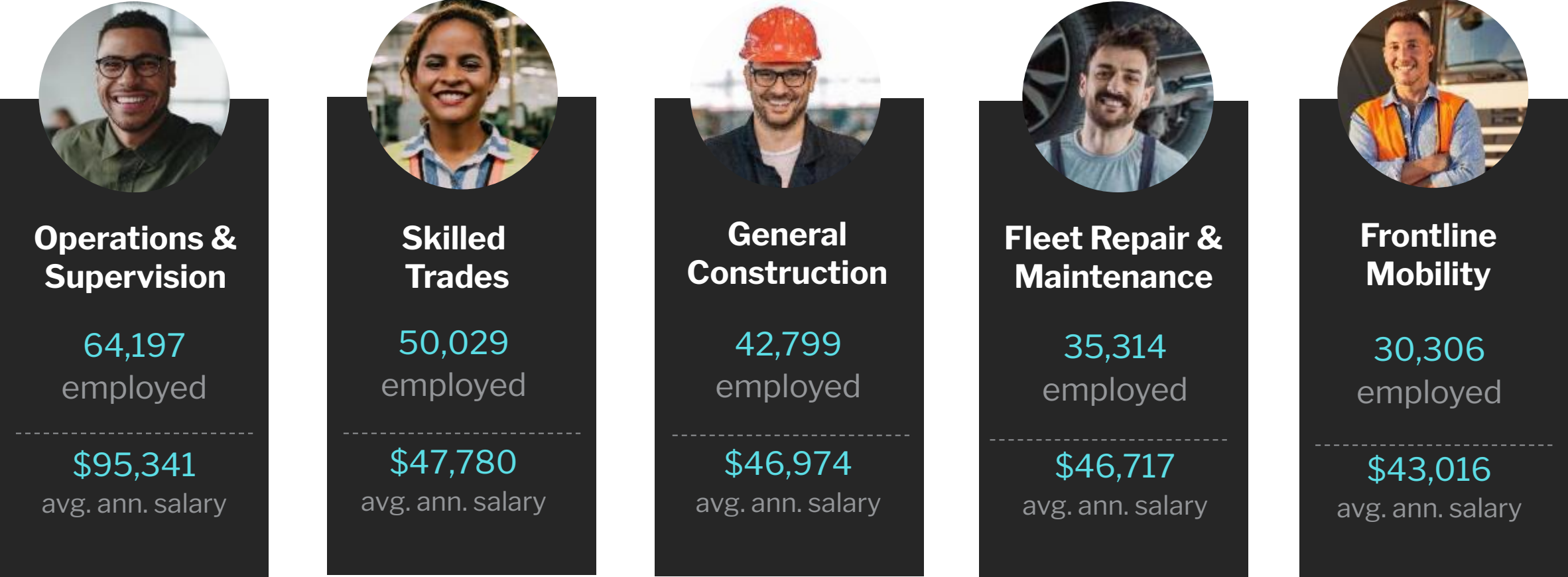
Skilled
Trades

General
Construction

Fleet Repair &
Maintenance

Frontline
Mobility

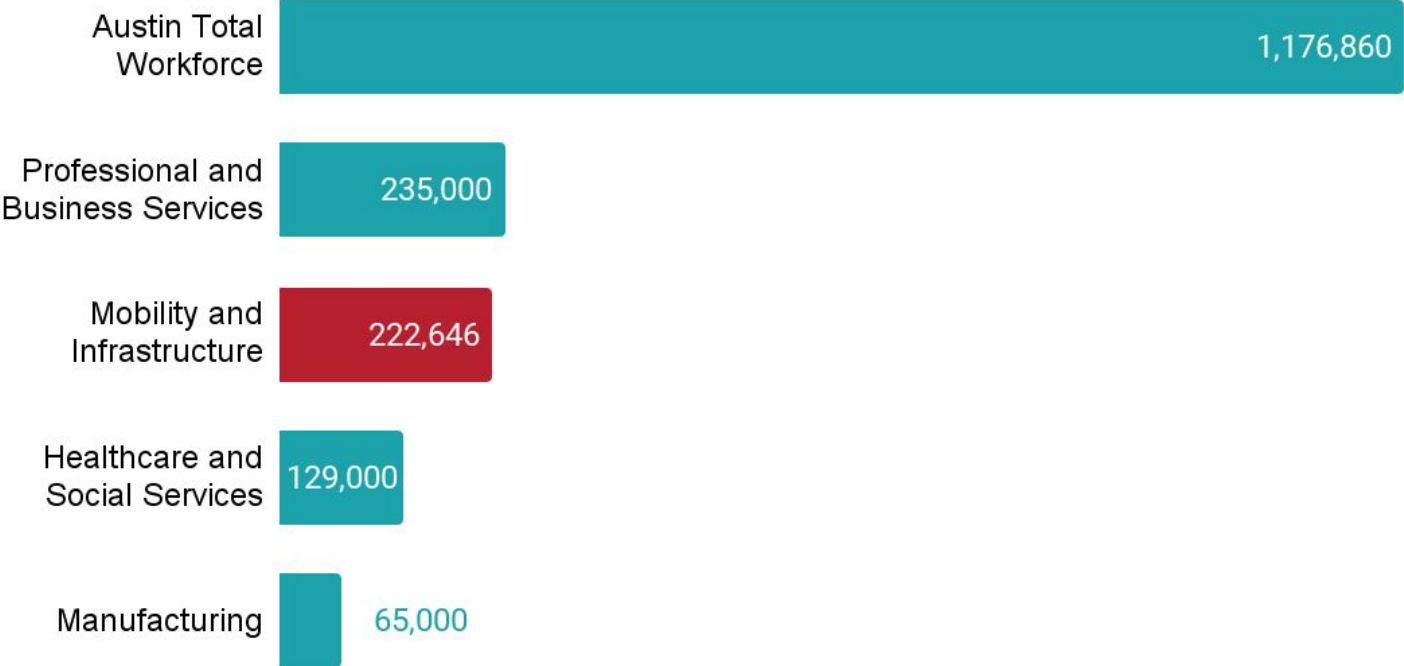
In 2022, 222,646 make up the region's M+I labor pool.



Sources: Lightcast for employment data, as of 2022Q4; Lightcast for wage data, as of 2022Q4.
Note: The average annual salary in Austin is \$63,890 (BLS, 2023). The prevailing wage is defined as \$22/hr. or approximately \$45,760 annually

The region's M+I sector is among its largest employment bases.

Austin Labor Force Comparison



Source: Lightcast Calculations; CivicSol Analysis

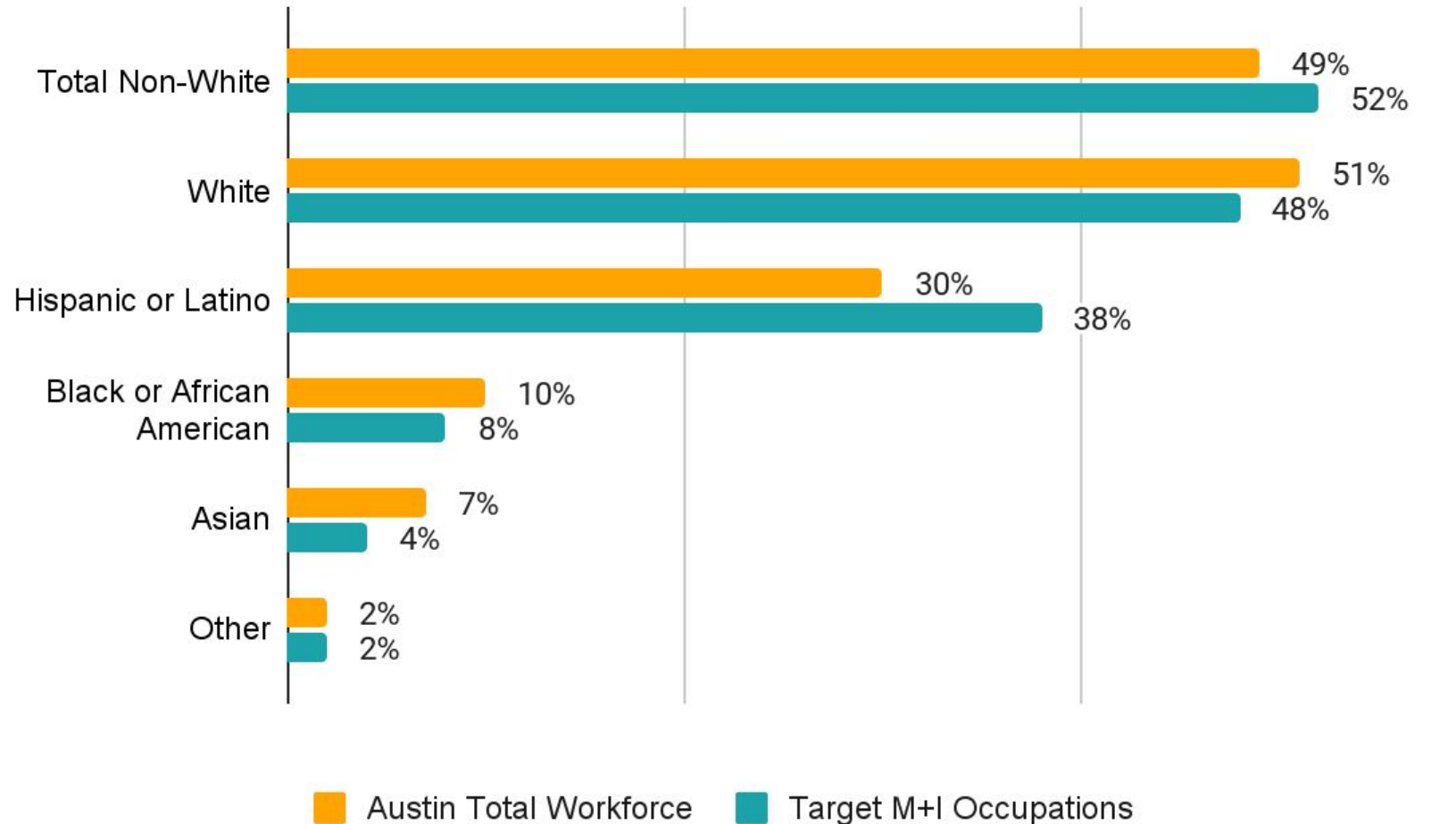
Who makes up the M+I workforce?

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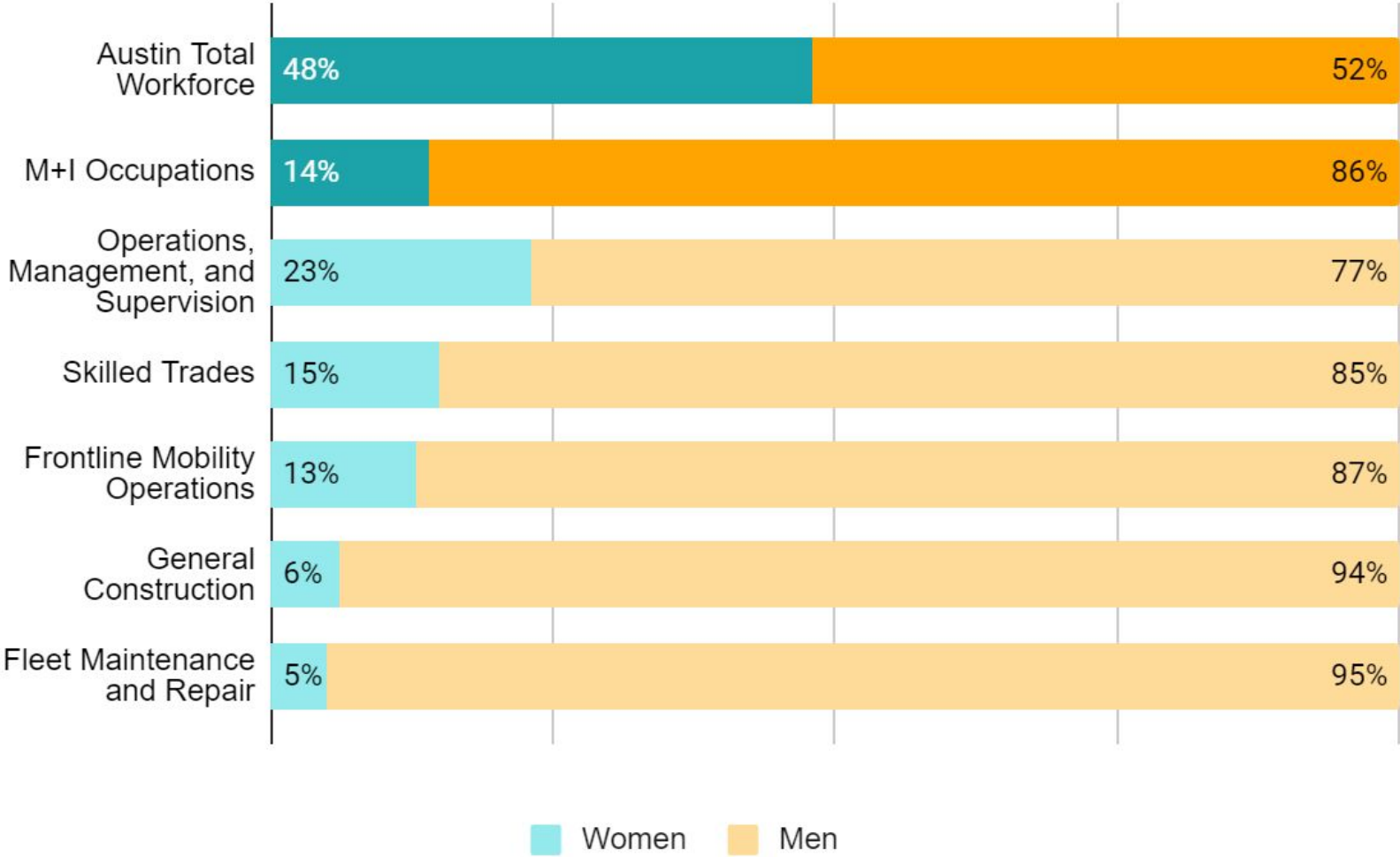
Hispanics represent nearly 4 in 10 M+I jobs, driving 52% BIPOC representation.

Austin Total Workforce vs. Target M+I Occupations, 2022



Women make up 48% of the Austin workforce, but they hold only 14% of M+I jobs.

Gender: Target M+I Occupations, 2022



Source: Lightcast Calculations; CivicSol Analysis

How will the M+I workforce change by 2040?

2040 Forecast

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We explored the impact of 5 major capital projects on the Austin metro.



**Project
Connect**

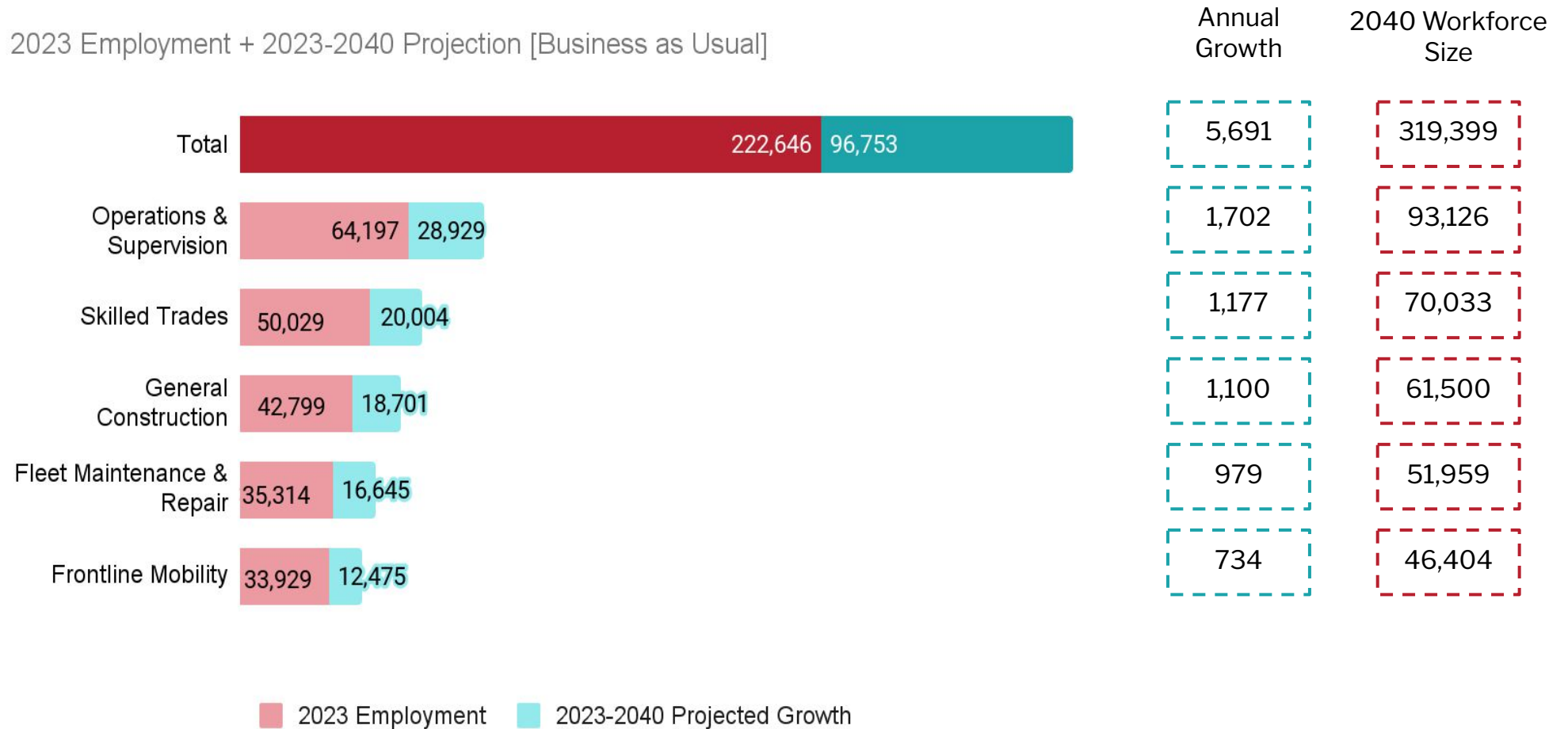
**Airport
Expansion**

**I-35
Expansion**

**Tesla
Gigafactory**

Samsung

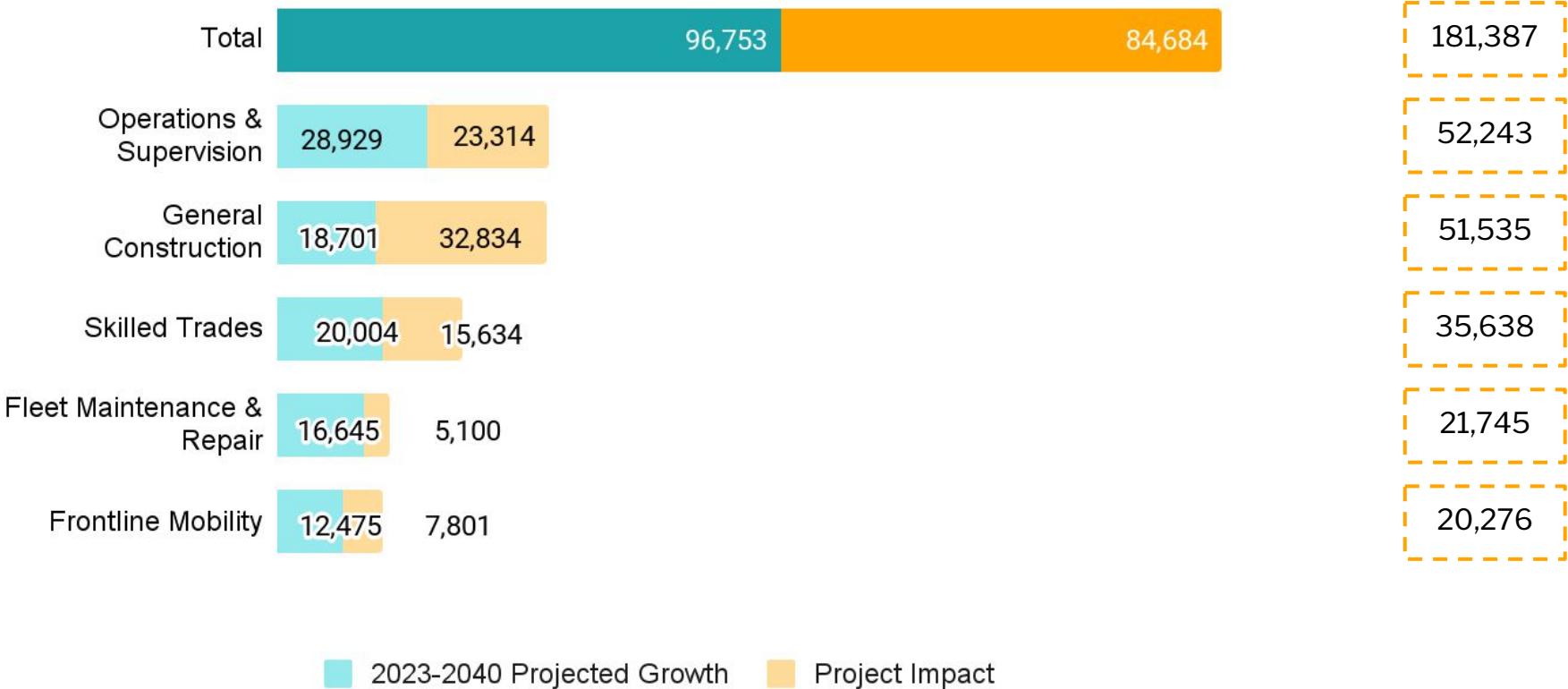
Even without pending capital projects, the region's M+I workforce will add 96,700 workers by 2040 – a 38% increase.



With regional capital projects added, M+I growth will top 181,000 – an 81% increase from 2023.

2023-2040 Projection + Project Impact

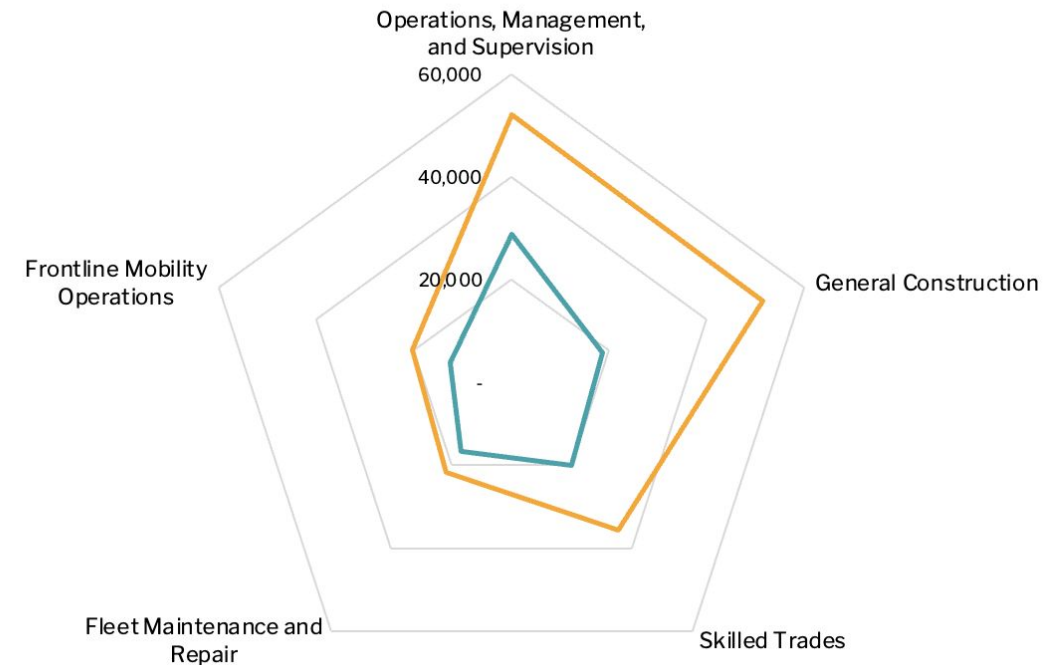
Total Forecasted Growth



Source: Lightcast Calculations; CivicSol Analysis

This will bring supercharged growth, far exceeding business as usual projections.

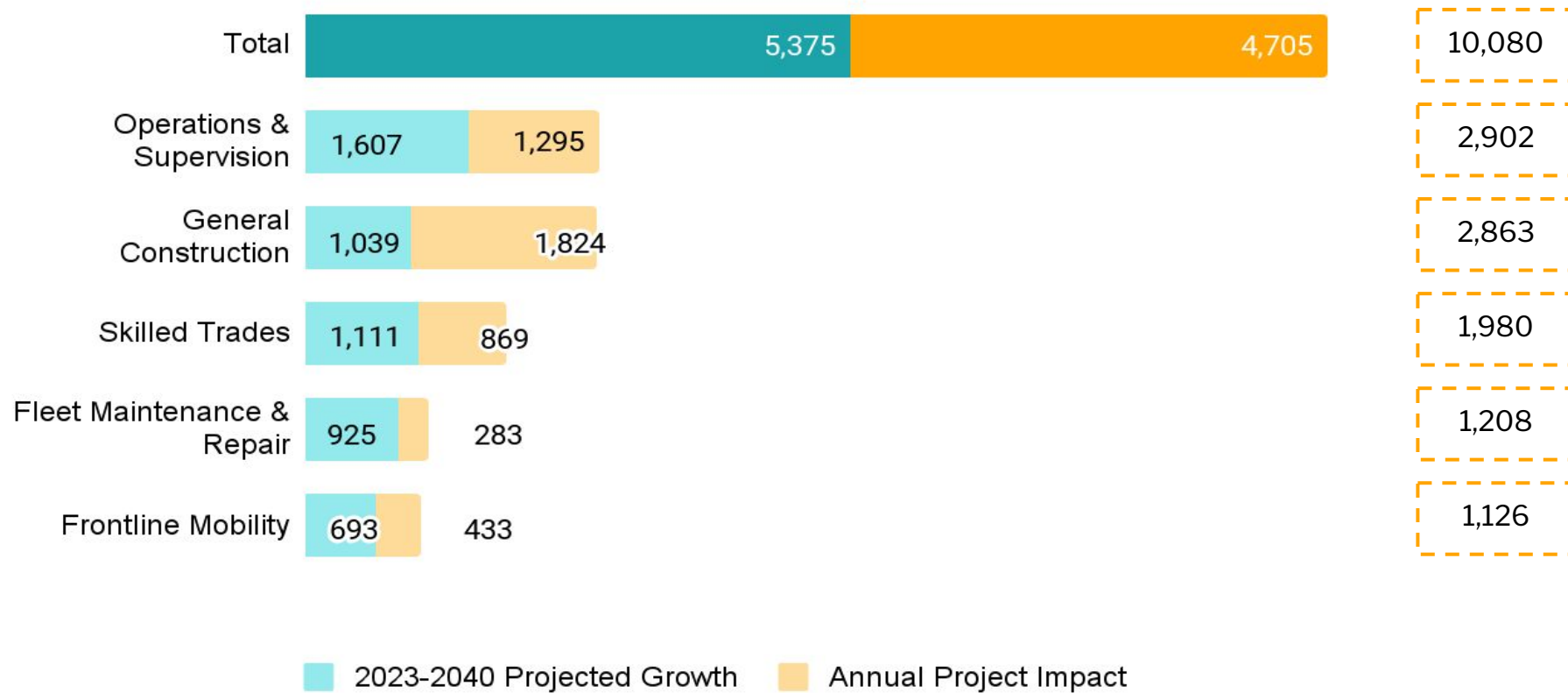
Occupations	2023-2040 Projection	2023-2040 Projection + Project Impact
Total	43%	81%
Operations, Management, and Supervision	45%	81%
General Construction	44%	120%
Skilled Trades	40%	71%
Fleet Maintenance and Repair	47%	62%
Frontline Mobility Operations	41%	67%



This equates to average annual growth that exceeds 10,000 M+I workers.

Average Annual Projection + Project Impact, 2023-2040

Annual Forecasted Growth



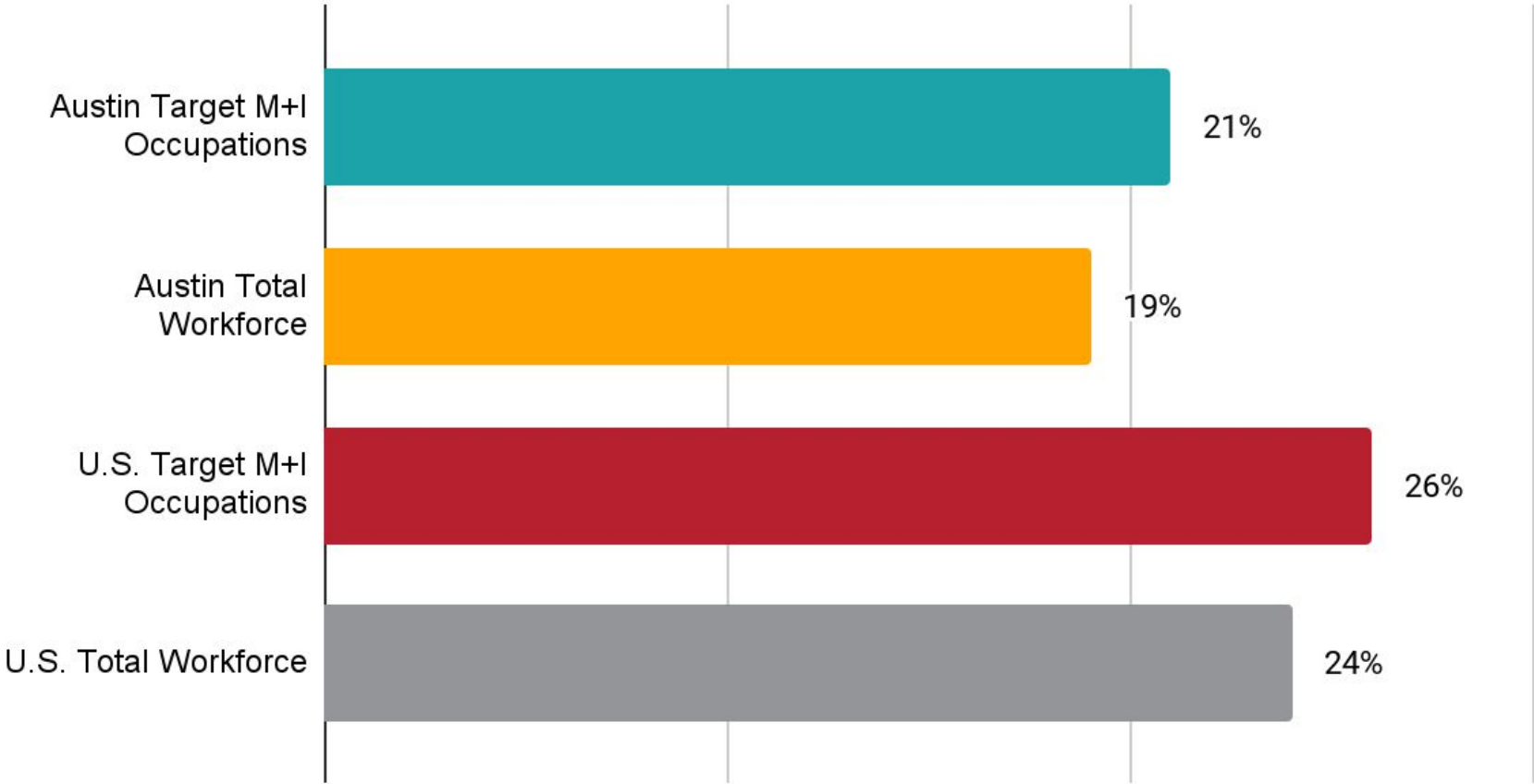
**What are the pressures that may impact our labor pool?
Retirement, Automation and Wages**

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1 in 5 M+I workers are 55 and older, compounding our workforce challenges.

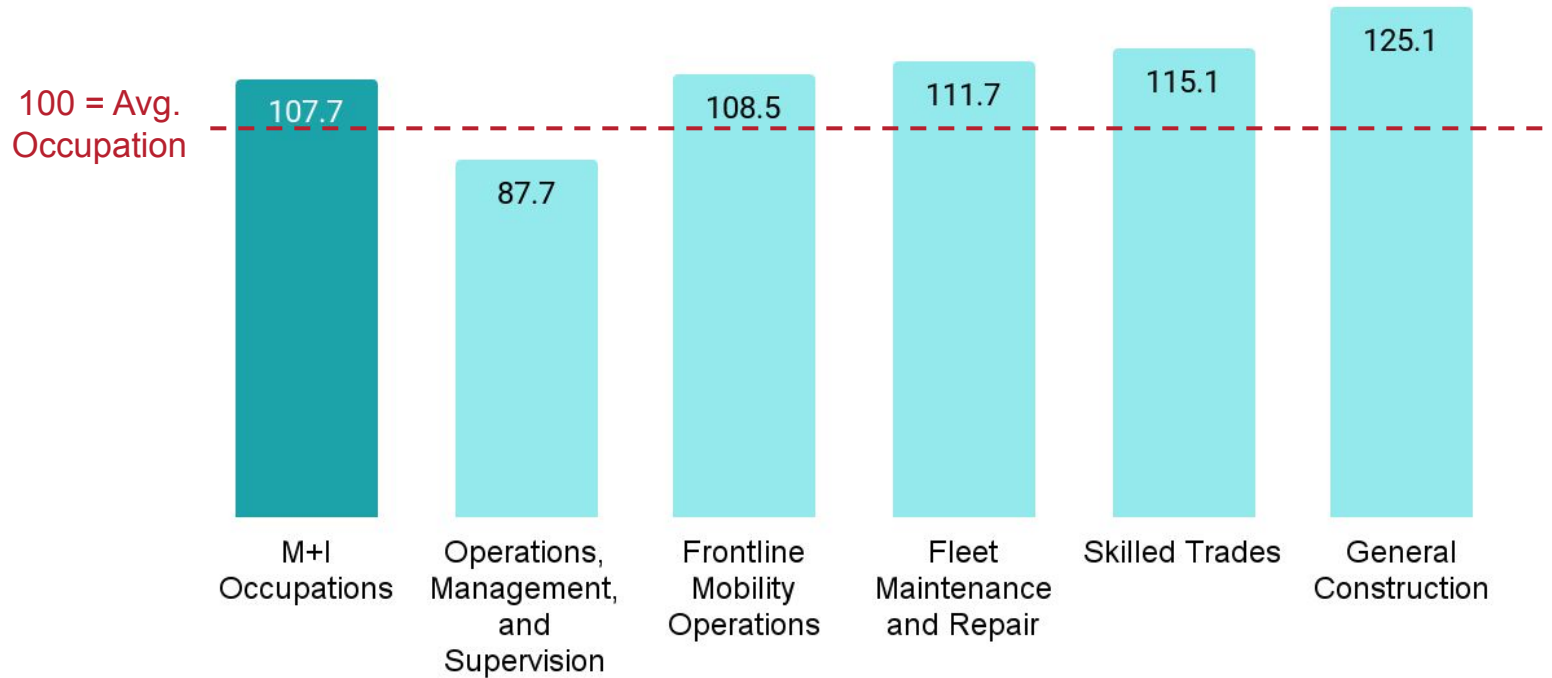
M+I Occupations: Retirement Risk (Share of Workers 55+), 2022



Source: Lightcast Calculations; CivicSol Analysis

At least two-thirds of M+I occupations are likely to be augmented by technology.

M+I Occupations: Automation Index, 2022



Implications:

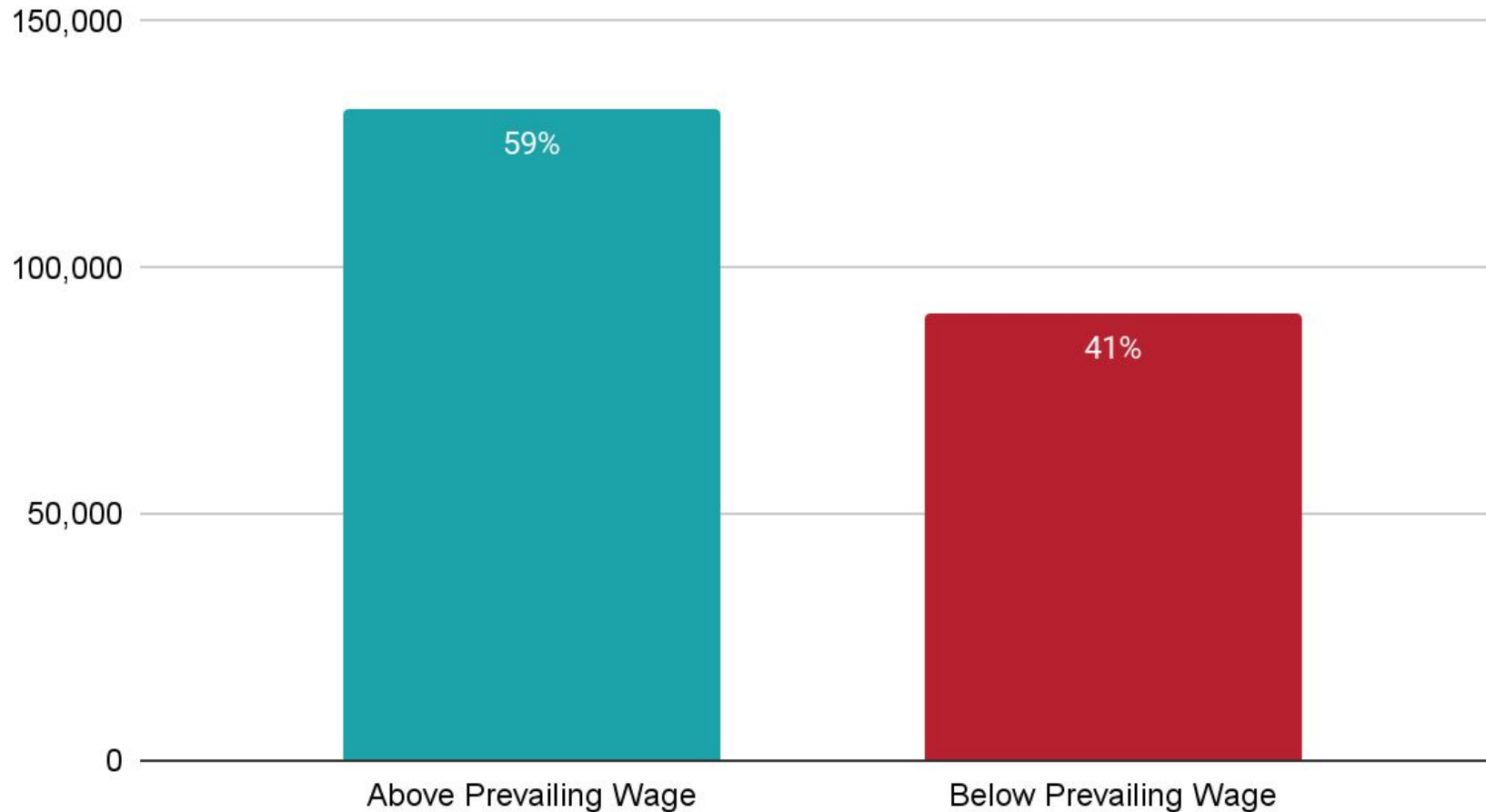
- **Change needed skills over time:** Robotics, drones, 3D printing, augmented reality, and more are likely to augment General Construction and Skilled Trades.
- Fleet electrification would change the work of repair and maintenance workers.
- **Reduced labor force needs:** Self-driving or AVs could dramatically change mobility occupations.

Source: Lightcast Calculations; CivicSol Analysis

Note: * For reference, occupations with near-average automation scores include Office Clerks, Healthcare Support Occupations, Bus and Truck Drivers, Bill and Account Collectors, and Transportation Inspectors. Methodology on the Automation Index can be found here: <https://kb.lightcast.io/en/articles/6957638-automation-index-methodology>. The methodology is based on how automatable the underlying tasks in a job are.

6 in 10 M+I occupations earn above the prevailing wage, leaving 90,500 jobs below.

M+I Occupations: Employment Above and Below Prevailing Wage (\$22/hr), 2022



How Will Austin Meet the Training Demand?

Training Program Inventory

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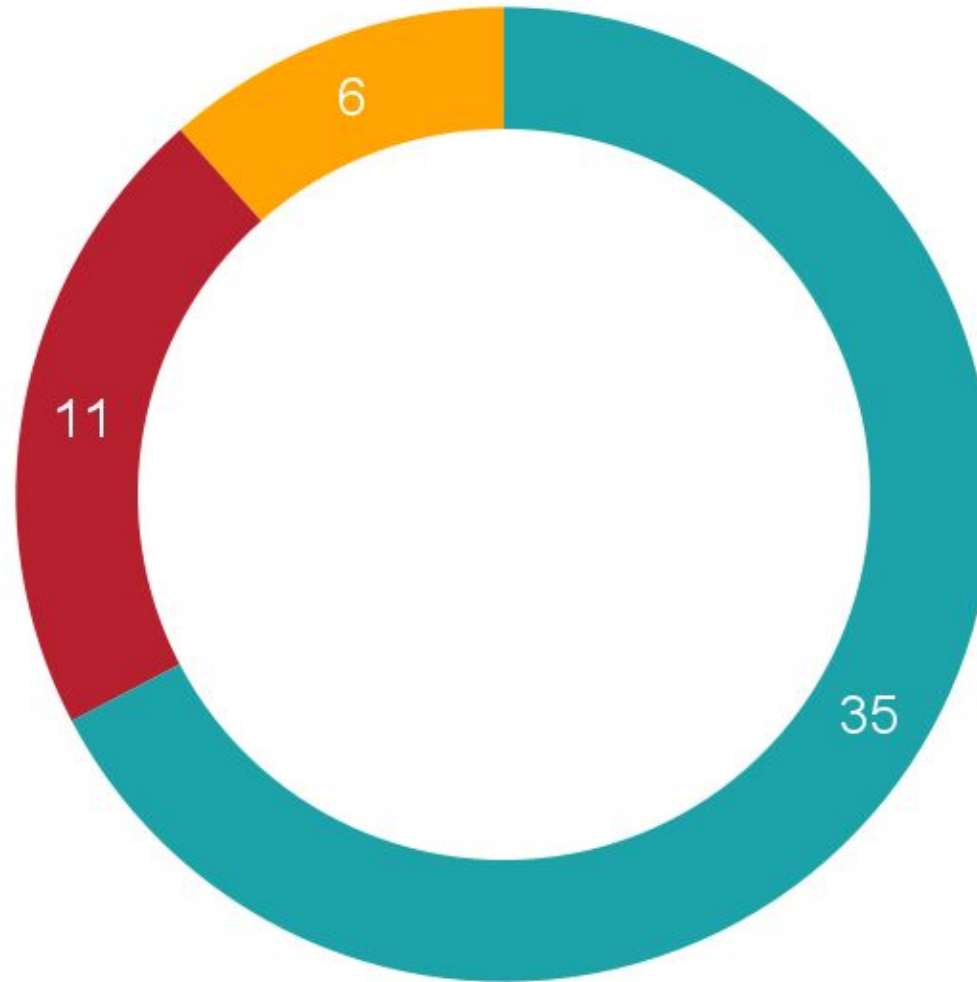


Over 50 regional training programs were inventoried.

1 Workforce Training Provider

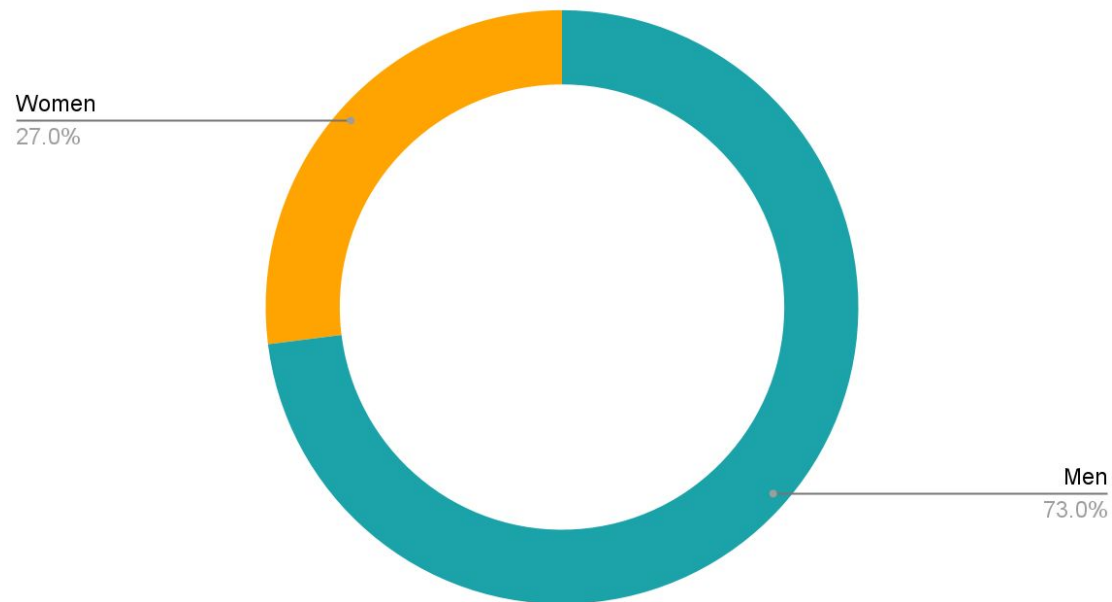
2 Job Creators

3 Infrastructure/
Mobility Partner

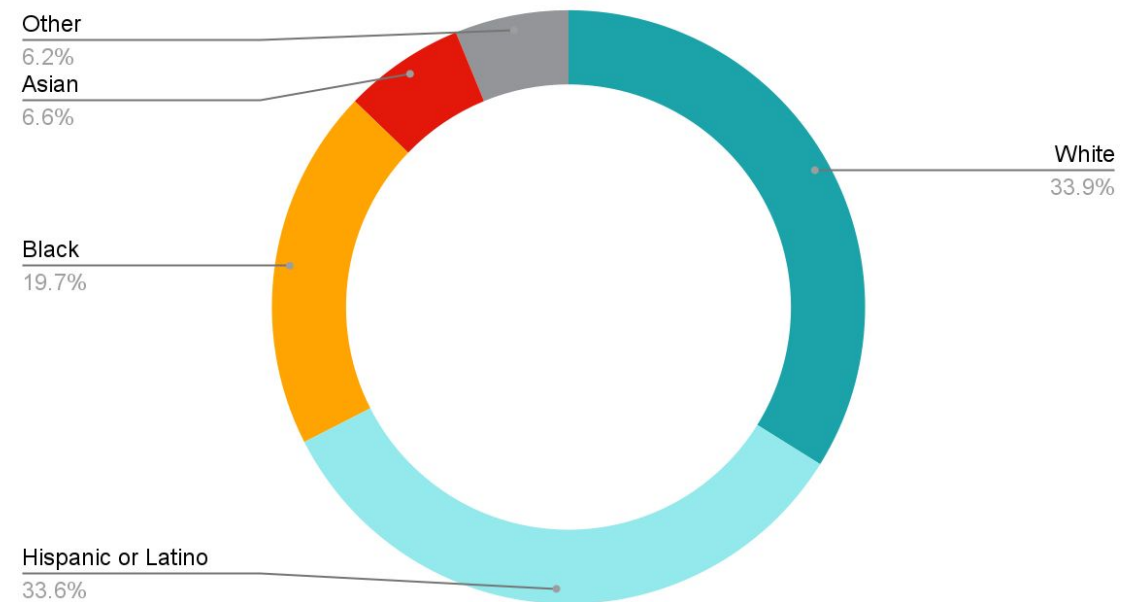


Training programs are male dominated but racially diverse.

Program Inventory - Demographics, by Gender

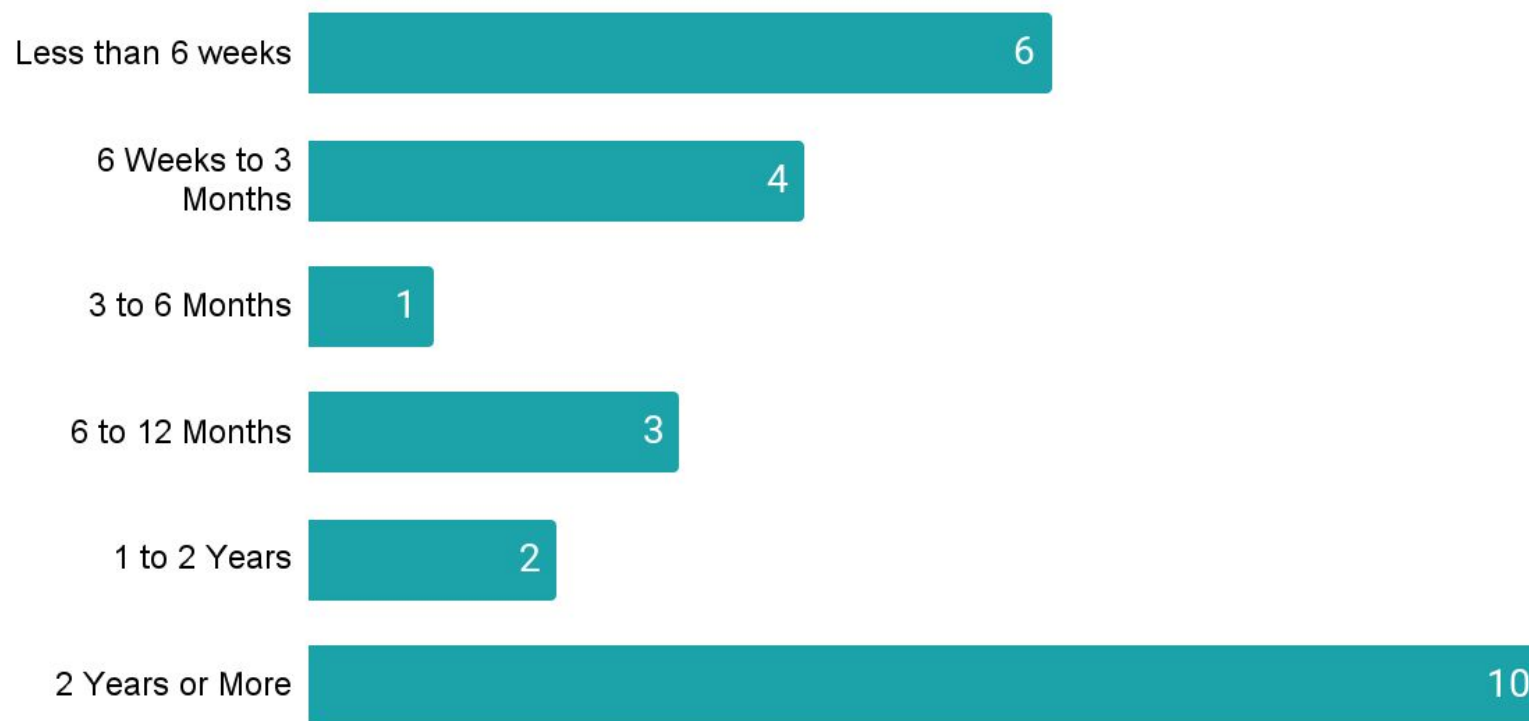


Program Inventory - Demographics, by Race



Programs vary in duration with little consistency.

Program Inventory - Duration



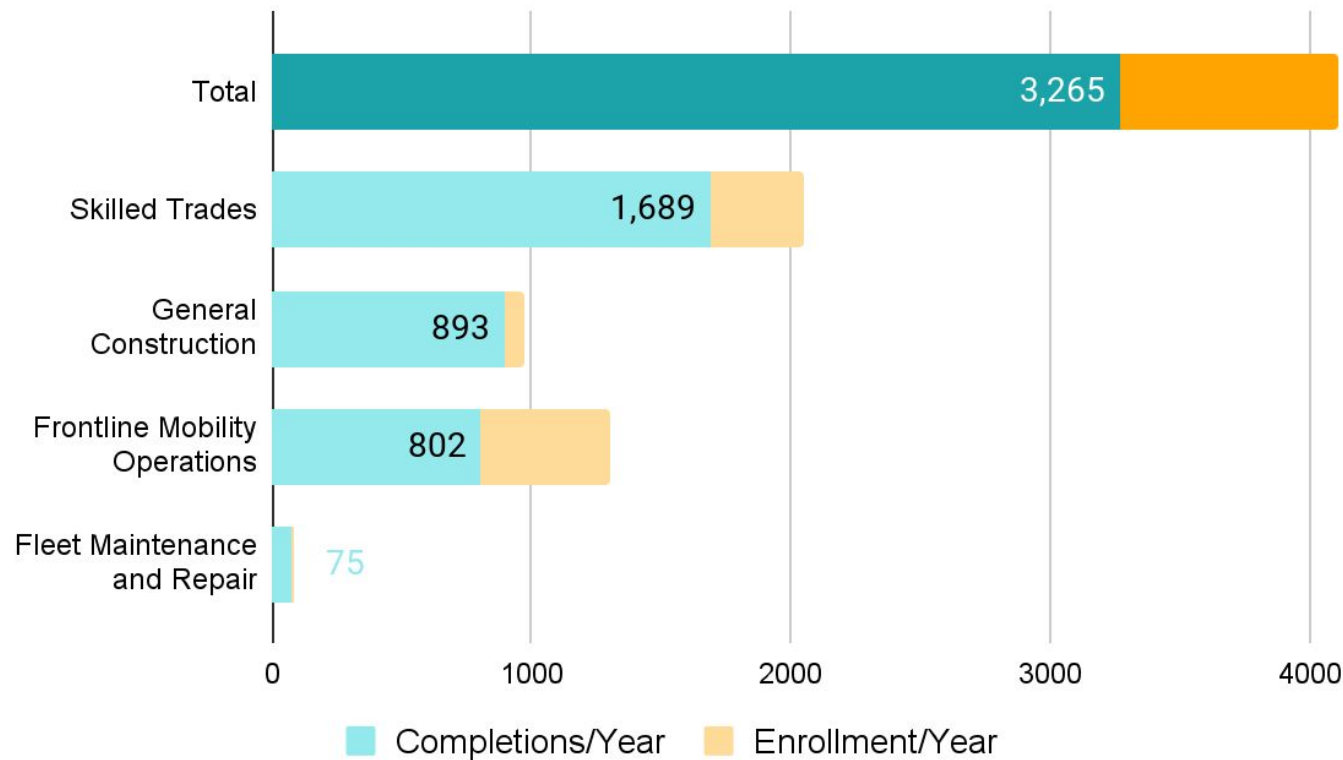
Source: CivicSol Analysis

Programs less than 3 months are flexible, offering Certificates, CTEs, Hands on training, and Pre-Apprenticeships

Programs longer than a year are almost exclusively earn-and-learn opportunities

Over 3,000 people per year complete inventoried training programs, 52% of them in skilled trades.

Program Completions by Skill Category



Total Enrollment	Completion Percentage
4,114	79%
2,048	82%
975	92%
1,306	61%
80	94%

The region needs to train an additional 4,000 M+I workers annually to meet demand.

Forecasted Annual Growth vs Program Completions



Top Recruiting Partners are Schools and Community-Based Organizations

Top Recruiting Methods are Marketing (fliers, social media) and Word of Mouth

Recruiting for training programs is a multi-pronged process.



What did we learn?

Key Takeaways

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Key Findings

#1

**10,000 M+I jobs
created annually.**

Large capital projects will double (2x) the number of opportunities in M+I occupations in the region, from 38% increase under business as usual to 81% with the large projects.

Key Findings

#2

Even the deepest wells of talent will be spread thin.

The region has a strong concentration of General Construction (1.28 LQ) but projected growth is highest for this occupation groups, respectively 120% over 2022 job levels.

Key Findings

#3

4,000 annual training gap will exacerbate skill shortages.

Programs being offered generally match Austin's needs, but they need to be scaled and connected.

Key Findings

#4

Career Pathways are possible.

Annually, 2,900 management and supervision openings will be created until 2040 – a total 52,000 opportunities.

Key Findings

#5

**6 in 10 M+I workers
earn a prevailing
wage.**

Improved prevailing wage policies can be used to attract and retain workers, especially in General Construction and Skilled Trades where half (52%) and a third (34%) of workers, respectively, are earning below the prevailing wage of \$22/hr.

Key Findings

#6

Women make-up just 14% of the M+I workforce.

Women hold 6% of General Construction roles and 15% of Skilled Trade roles, in line with long-standing gender norms in blue collar work. Increasing the share of women in these roles (14%) to their share in the overall regional economy would cover 41% of the total projected demand for new workers.

Key Findings

#7

Automation will change M+I jobs more than most.

At least two-thirds of M+I occupations are likely to be augmented by technology.

Key Findings

#8

Employers are disconnected from the skilled trade talent pool.

Skilled Trades have the smallest annual training gap (291), but the highest employer demand. That these skills were deemed the most difficult to recruit for despite their prevalence potentially demonstrates a disconnected pipeline.

Key Findings

#9

There's no consistent standard training period for M+I training.

Programs vary in duration with little consistency, ranging from as little as 6 weeks to more than 2 years.

Key Findings

#10

**Present day
recruiting methods
are limited.**

An over-reliance on word-of-mouth recruiting and a lack of consistency in school visits and community partnerships may hinder program growth and diversity.

3. Strategy and Policy Considerations

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Strategy and Policy Considerations

1.	Incentivize	Build economic development programs around M+I workforce development
2.	Recruiting	Modernize and invest in M+I skill training with an Infrastructure Academy
3.	Pipeline	Broaden the talent pipeline through reimagined recruitment efforts and stronger connections
4.	Harmonize	Rethink contracts to increase flexibility and match the growing demand
5.	Coordination	Align Austin and San Antonio efforts in the M+I industry to benefit the mega region.
6.	Funding	Identify federal and state funding streams to support sustainable training initiatives

1.

Build economic development programs around workforce development.

With over 222,000 workers, Austin's M+I sector makes up nearly 20% of the Austin workforce and is larger than Austin's Healthcare and Manufacturing sectors combined. Business as usual growth (43%) and growth from projects (38%) will add an additional 180,000 jobs to the sector, resulting in 81% growth by 2040. Creating programs to support the M+I workforce will be essential to deliver Austin's infrastructure projects.

Strategy 1.1

An **infrastructure economic development program** that funds or partially funds tuition and wrap-around services for job-seekers.

Strategy 1.2

A Local Hire policy that **incentivizes recruitment** from economically distressed areas.

Strategy 1.3

A bid credit program where employers can improve their likelihood of winning future projects by providing a clear plan to **provide childcare or transportation.**

Strategy 1.4

Evaluate mechanisms to incorporate and **incentivize workforce programs** in project contracts.

2.

Modernize and invest in M+I skill training with an Infrastructure Academy that is both virtual and physical.

Although the region is training over 3,000 M+I workers per year, 4,000 additional workers will be needed to fully meet the workforce demand. More than 7,000 workers will need to be trained annually, plus an additional 3,000 workers will need to be upskilled into Management positions. An infrastructure academy can connect trainees with employers, foster consistency in training programs, and serve as a front door welcoming all into the field.

Strategy 2.1

Explore space for an **Infrastructure Academy**, a place that teaches job seekers more advanced skills, connects employers to talent, and coordinates supportive services.

Strategy 2.2

Create a virtual tool where students can see **career growth opportunities in the M+I industry**. Explore an employer component where job creators pay for access.

Strategy 2.3

Develop a **standardized job training** program, branded under the Infrastructure Academy, with a consistent time frame, skill set, and certification. Include virtual options to make the training more accessible.

Strategy 2.4

Establish a pathway or employment pool that enables employees to **move easily from one project to the next**.

3.

Broaden the talent pipeline through reimagined recruitment efforts and stronger industry connections.

Nationwide, the M+I industry has been dominated by older, white male workers. Reaching non-traditional communities – students, women, people of color, justice involved individuals – is essential to meeting demand and providing people in these communities with prevailing wage jobs. In Austin, for example, women make up just 14% of the M+I workforce. Increasing female employment to Austin workforce levels (48%) would meet 41% of forecasted demand.

Strategy 3.1

Design a **comprehensive marketing program** aimed at schools so that anyone that is going into school to promote M+I careers is doing so with a **clear and unified message.**

Strategy 3.2

Partner with Community Based Organizations to **recruit non-traditional job seekers** – justice involved, women, etc. CBOs receive funding for hitting certain recruiting goals.

4.

Rethink contracts to increase flexibility and match the growing demand.

Job creators have frequently mentioned their frustration with contracts overly restrictive minimum qualifications and hiring parameters. Consistency and agreement over contracts will improve the efficiency of the sector.

Strategy 4.1

Harmonize contracts between the City, ATP, and TxDOT to standardize minimum requirements, employee counts, recruitment diversity, etc.

Strategy 4.2

Create flexibility in contracts for employers to hire **more apprentices and temporary workers.**

Strategy 4.3

Reimagine and **consolidate regional workforce and childcare contracts** supported by the public sector.

5.

Advance a super-regional plan that coordinates efforts in the Austin-San Antonio mega region.

Both major metropolitan areas in Central Texas are seeing rapid growth with transformational infrastructure investment. Rather than competing for talent and resources, collaborating will allow Austin and San Antonio to efficiently develop and maintain the M+I workforce, benefiting each City individually and the region as a whole.

Strategy 5.1

Align data and research
to improve the
understanding of
regional trends and
boost regional progress.

Strategy 5.2

Develop **parallel and
supportive programing**
to unify on policy efforts
and services offered.

6.

Identify federal and state funding streams to support sustainable training initiatives.

Three recent federal legislations, the Bipartisan Infrastructure Law, the Inflation Reduction Act, and the CHIPS and Science Act, combine to provide \$2.5 trillion in funding, with almost \$500 billion tied to workforce development. Accessing these funding streams will make innovation possible. Likewise, the region's private sector can help to catalyze these efforts through additional funding and engagement.

Strategy 6.1

Work with Federal partners to determine what kind of funding would be available.

Strategy 6.2

Map out and align Federal funding opportunities for workforce development, childcare, and transportation that are available for the major projects.

Strategy 6.3

Work with TxDOT to determine how **OTJ funding** can best be used.

Strategy 6.4


Engage the **private-sector and philanthropic organizations** to support the WFS Mobility Industry Sector Partnership, including training, marketing, and engagement.



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