

OPENING SESSION

The State of our State's Tech Talent

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RealTime Talent



About Us

- + An employer-led, public-private innovation hub that provides research, consulting and tools to increase the effectiveness and efficiency of the workforce/education ecosystem in Minnesota

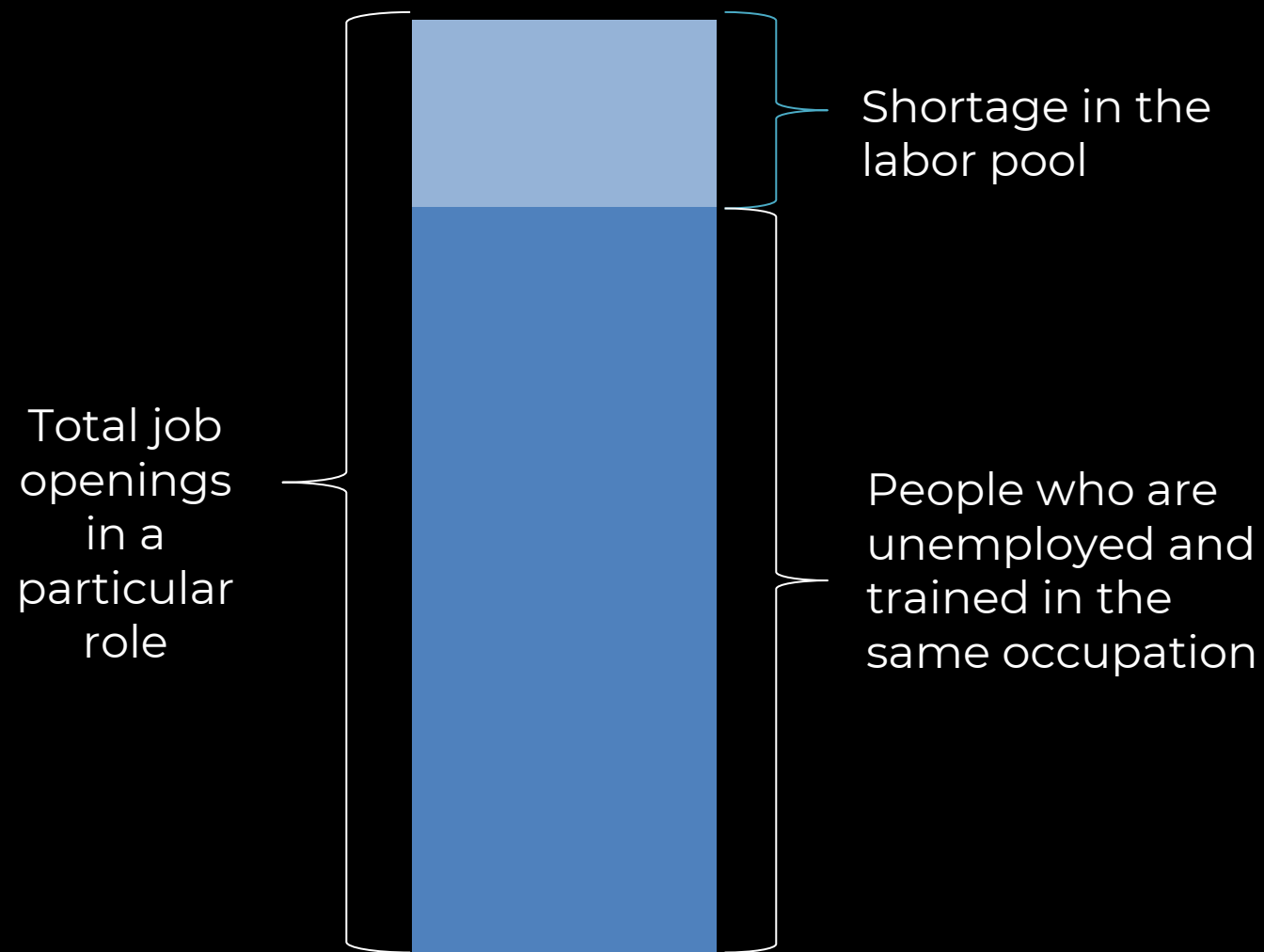
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Today

The Talent Shortage Remains One of Our Most Pressing Challenges

Demand > Supply



The Problems we Inherited

Insufficient Labor Pool

- Not enough eligible workers to maintain economic growth
- Geographic mismatch of talent and opportunities
- Misalignment between supply and demand at the skills level

Inefficient Labor Market

- Persistent employment disparities
- Low job satisfaction and high turnover
- Ineffective means of finding talent

Unjust Structures and Processes

- Systemic Inequality: Structures and processes that are inherently biased to privilege some over others. They are self-reinforcing, cumulative, durable, and often hidden.

COVID-19 Impacts

Labor Force Participation

- Acceleration in retirements
 - Earlier than planned exits
 - Migration from urban areas
 - Skilled Trades seeing lag in training
 - Strain on Social Security and other retirement benefits
- Black, Hispanic, and Female populations left labor force in high rates

Employment

- Labor Shortages
- Higher Wage Demands
- Talent recruited away before completion of programs

Diversity, Equity, and Inclusion

- Unequal impacts by race, ethnicity, gender, age, low-wage workers, and ability
 - Health-driven
 - Access-driven
 - Occupation-driven
 - Industry-driven



Job Vacancies, Unemployment, and Job Postings in the MSP Metro



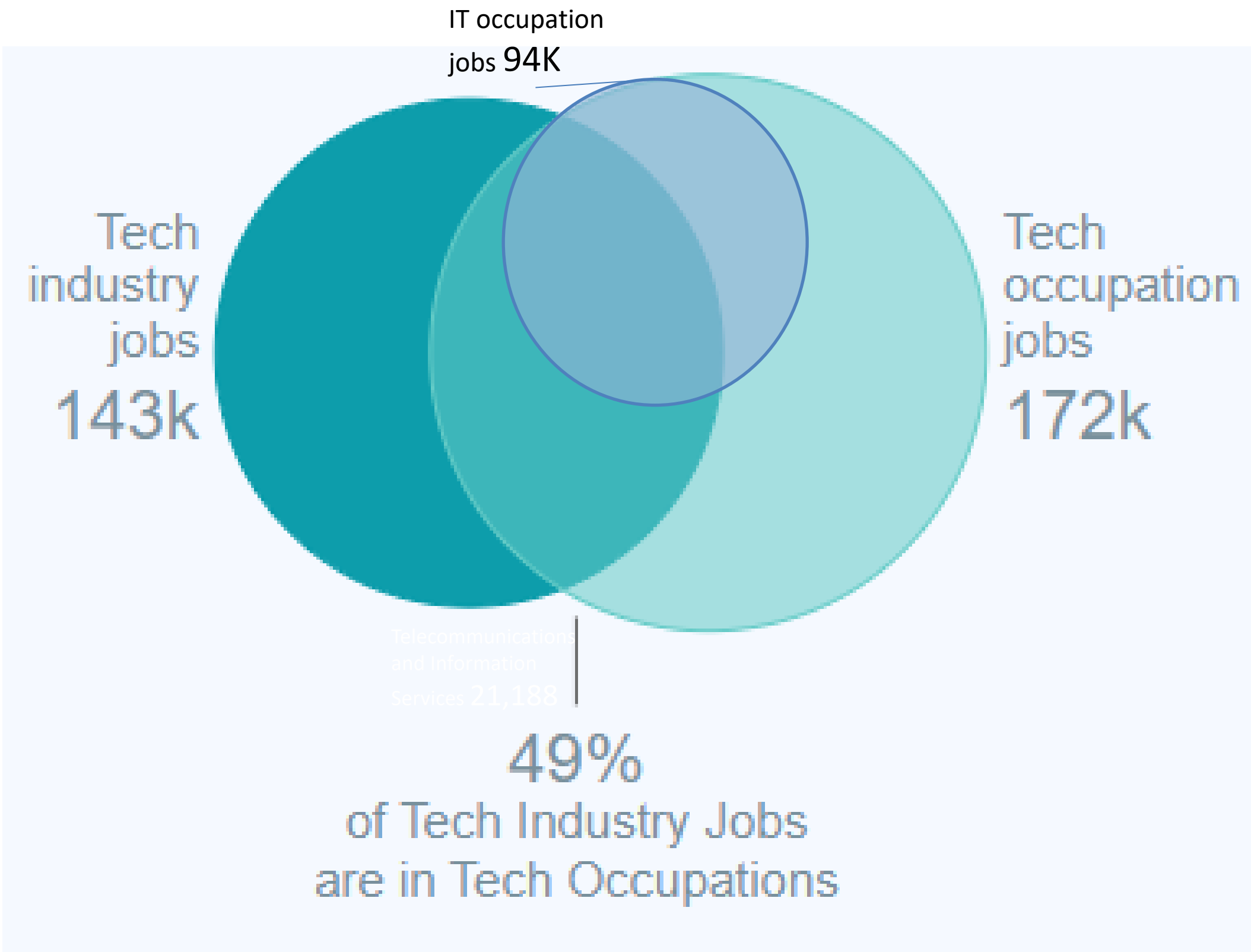
Mismatch between the skills and experience of talent recently unemployed and the available positions persists.

2021Q2: Minnesota had 205,714 job vacancies. 119,505 of these were in the MSP Metro.



Tech Employment Today

Minnesota



Tech Industry Employment

2021Q2 Statewide Employment: 245,587

Average Wage: \$85,322

Tech Business Establishments: 11,714

Economic Impact: \$32B (9.3%)

IT Occupation Employment

2021Q2 Statewide Employment: 93,702

Average Wage: \$94,400

Unemployment: 2.0%

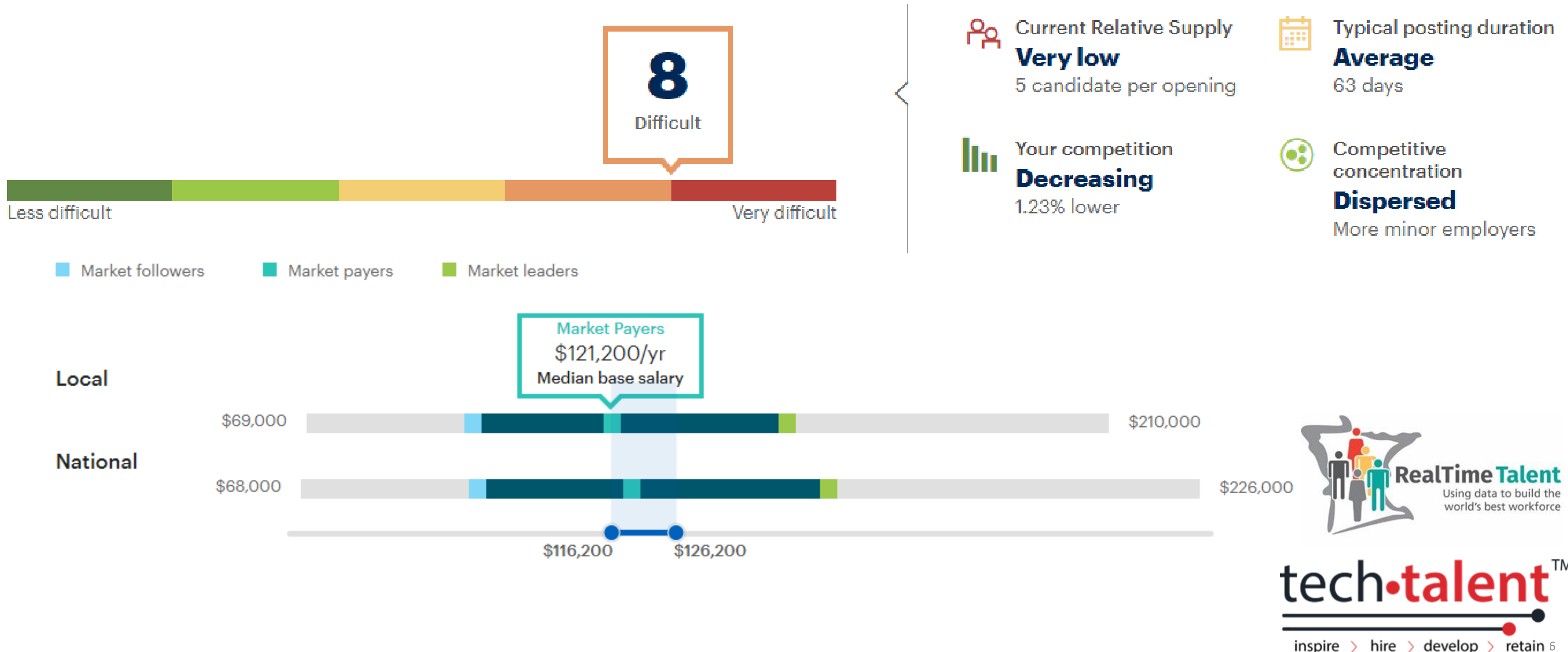
Forecasted Average Annual Growth: 0.9%



Demand: Recruitment is Getting Tougher

MSP Metro

Hiring Difficulty and Median Posted Wages for Information Technology Careers

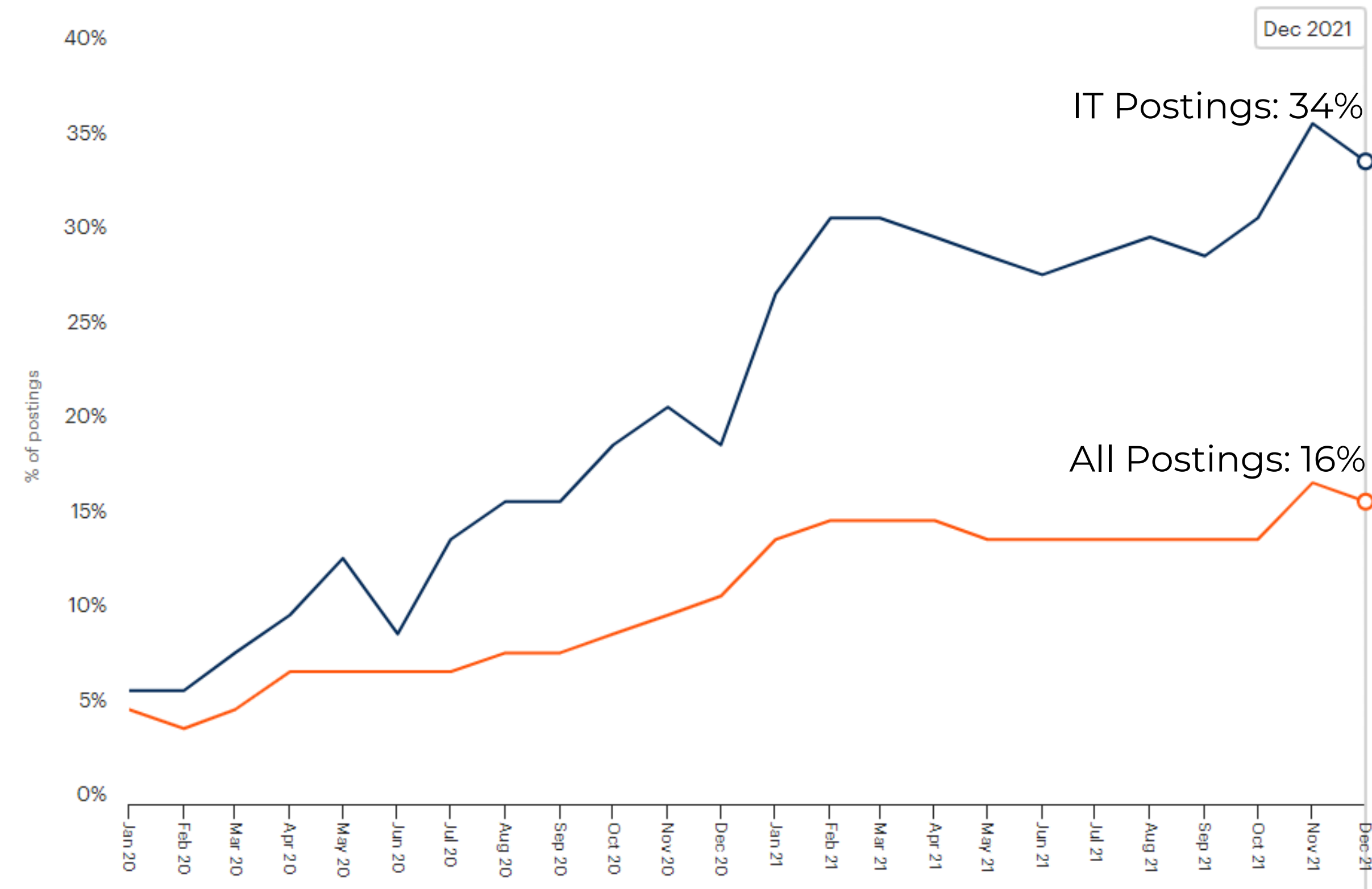


SOURCE: Gartner TalentNeuron Recruit, new jobs advertised online as of February 11, 2022.

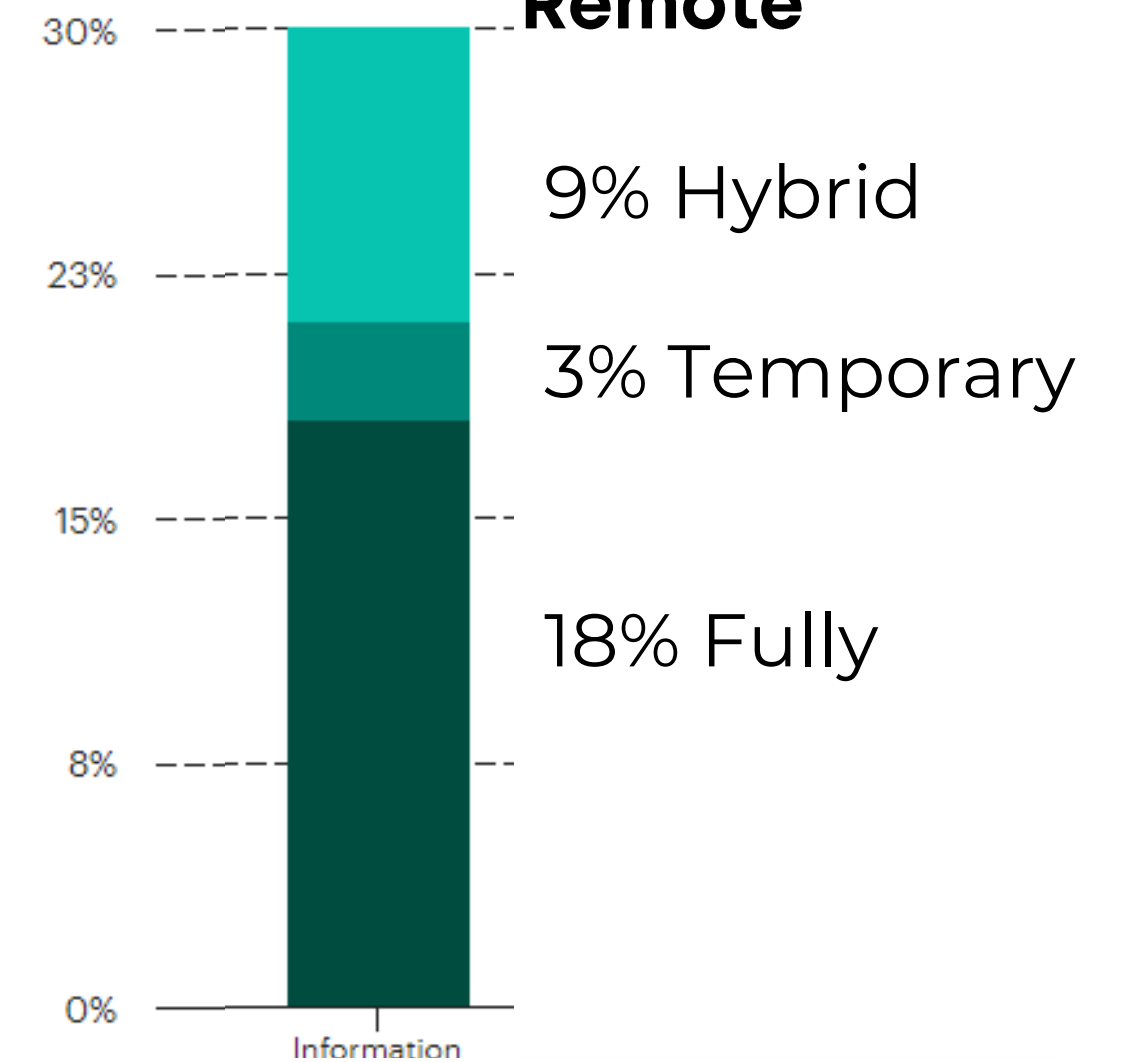
Demand: Hybrid & Remote Work Continue to Rise

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Share of All Job Postings and IT Job Postings for Hybrid or Remote Work



% of 2021 IT Job Postings Hybrid, Temporary, or Fully Remote



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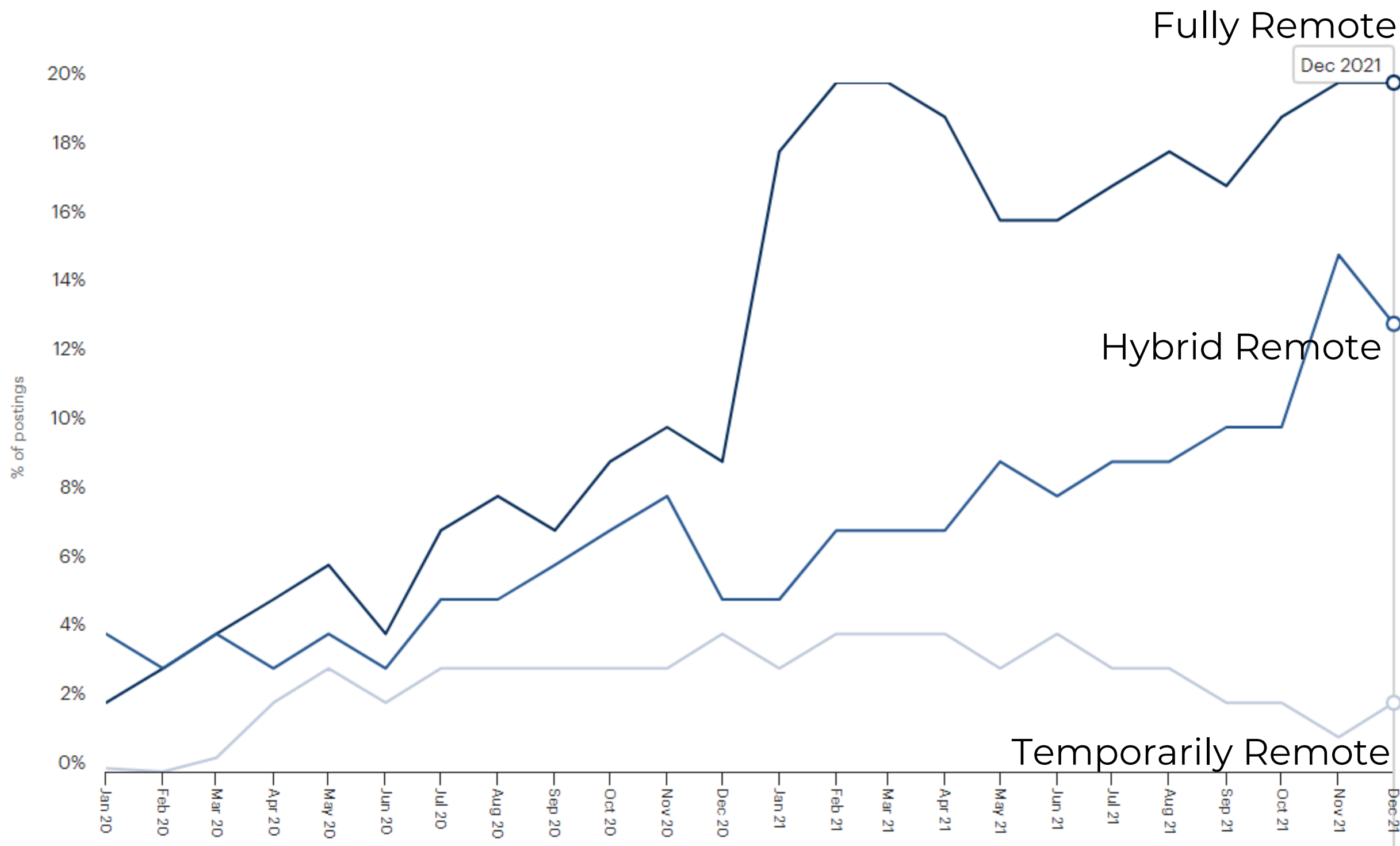
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SOURCE: Gartner TalentNeuron Plan, new jobs advertised online from January 2020 – December 2021. Includes Staffing and Temporary Agencies.

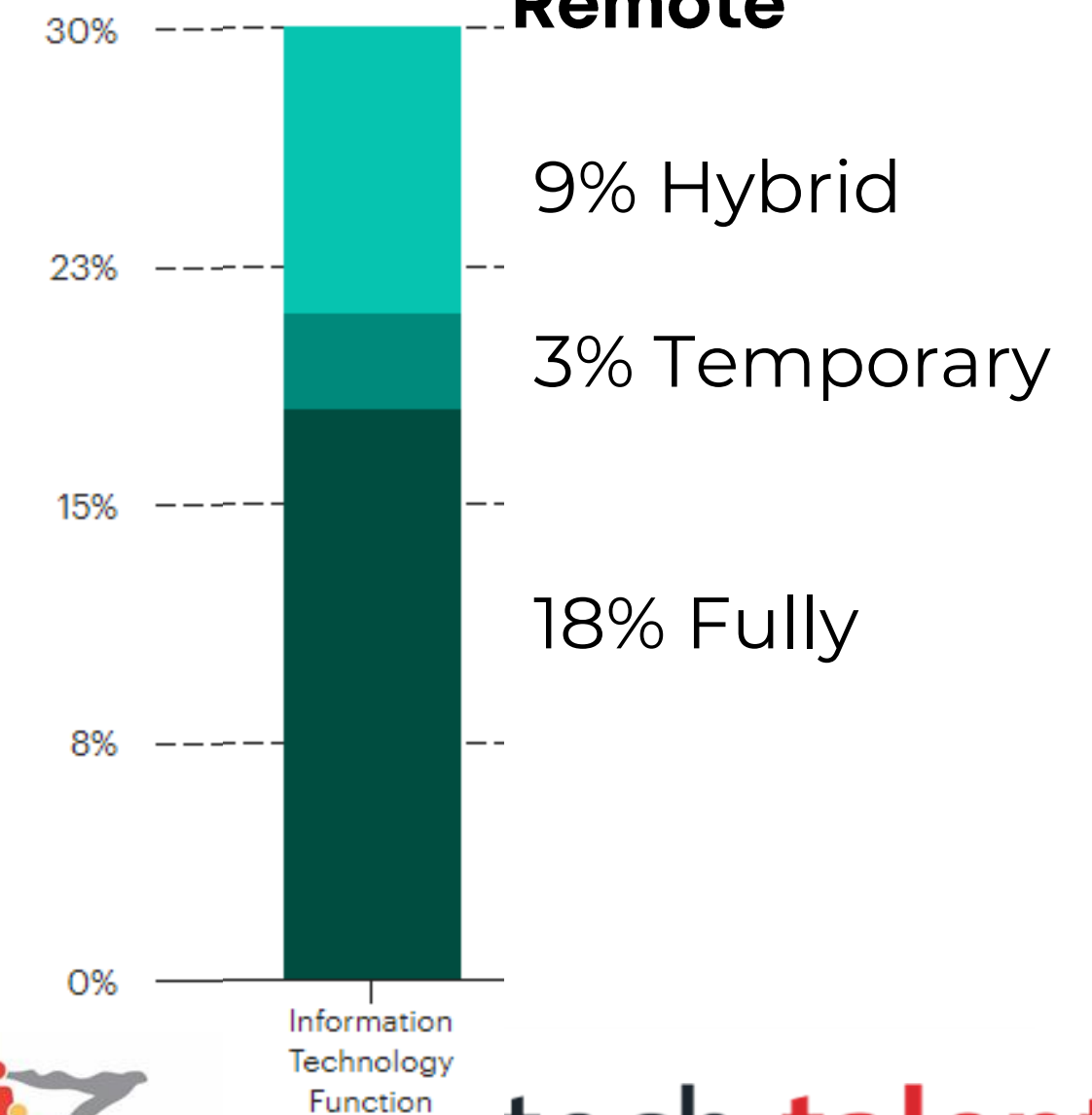
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Share of IT Job Postings for Hybrid or Remote Work



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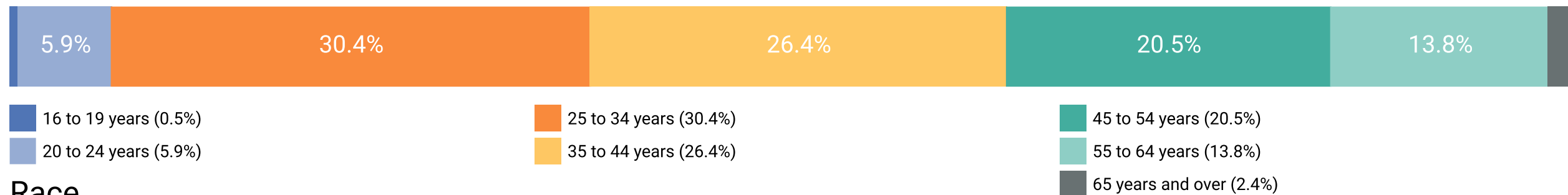
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SOURCE: Gartner TalentNeuron Plan, new jobs advertised online from January 2020 – December 2021. Includes Staffing and Temporary Agencies.

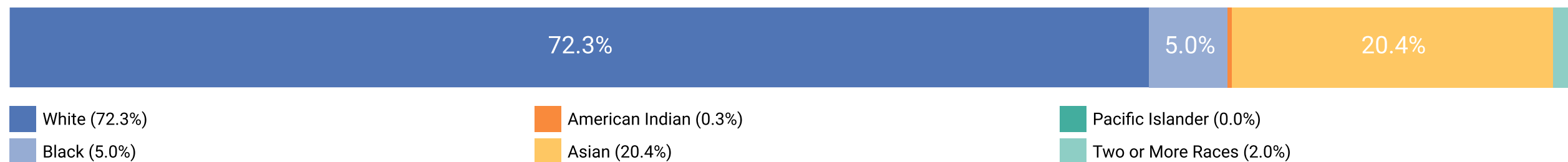
Tech Today: Talent Profile 2021Q2

MSP Metro

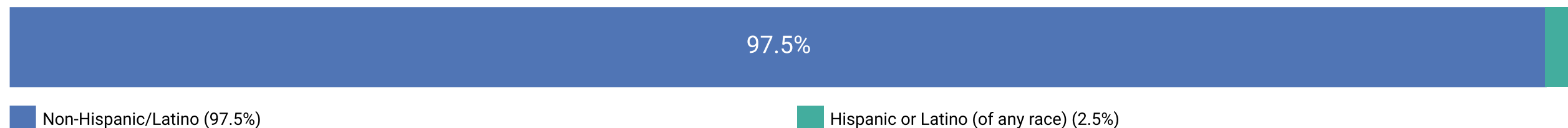
Age



Race



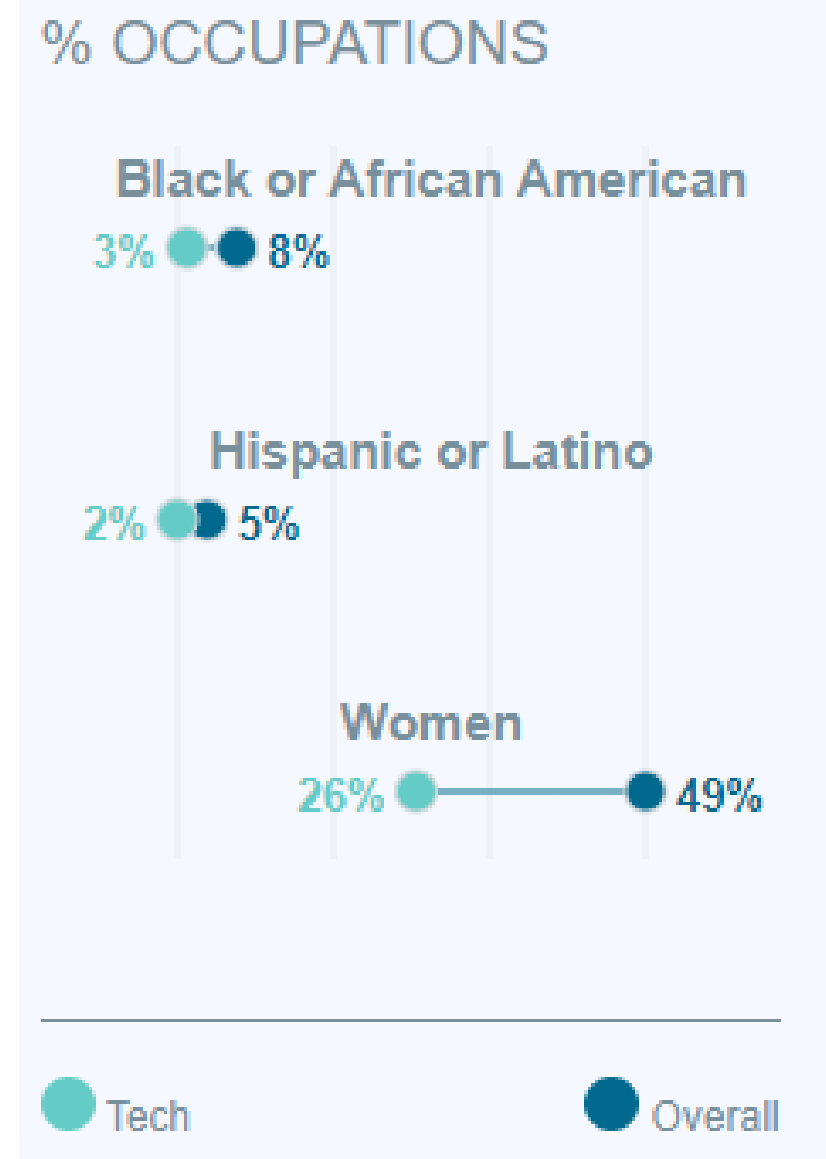
Ethnicity



Gender



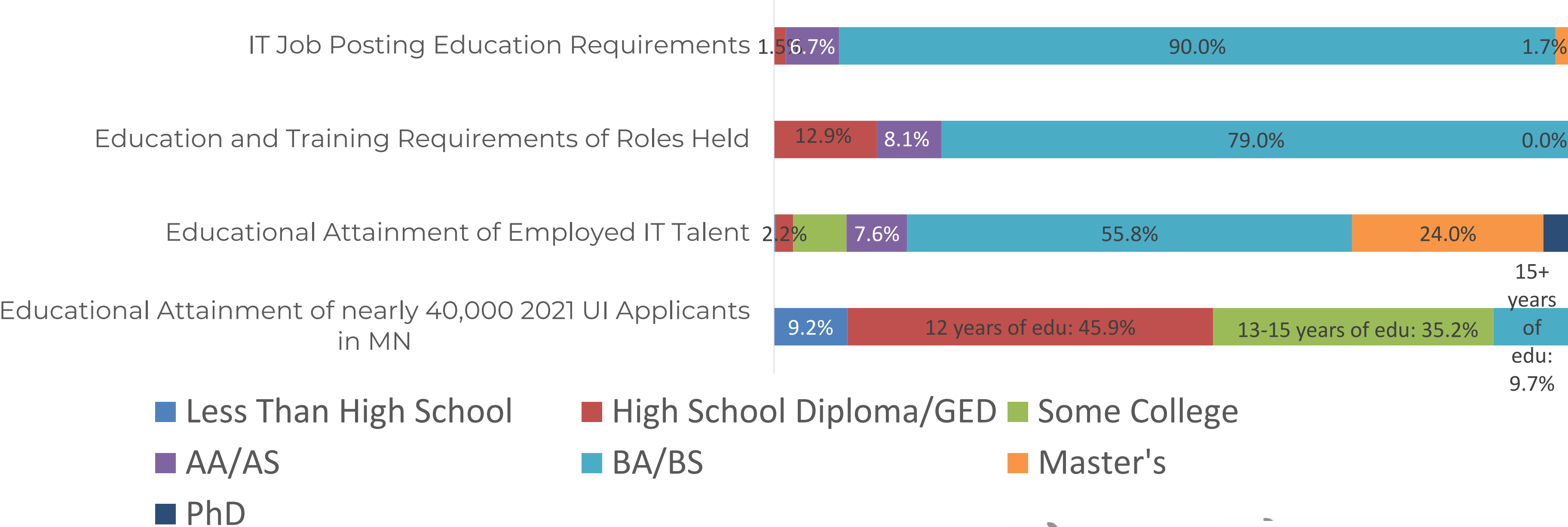
15-Cty MSA Broad Tech Occupation Diversity Index Score: 41 (MN: 39 - US: 57)



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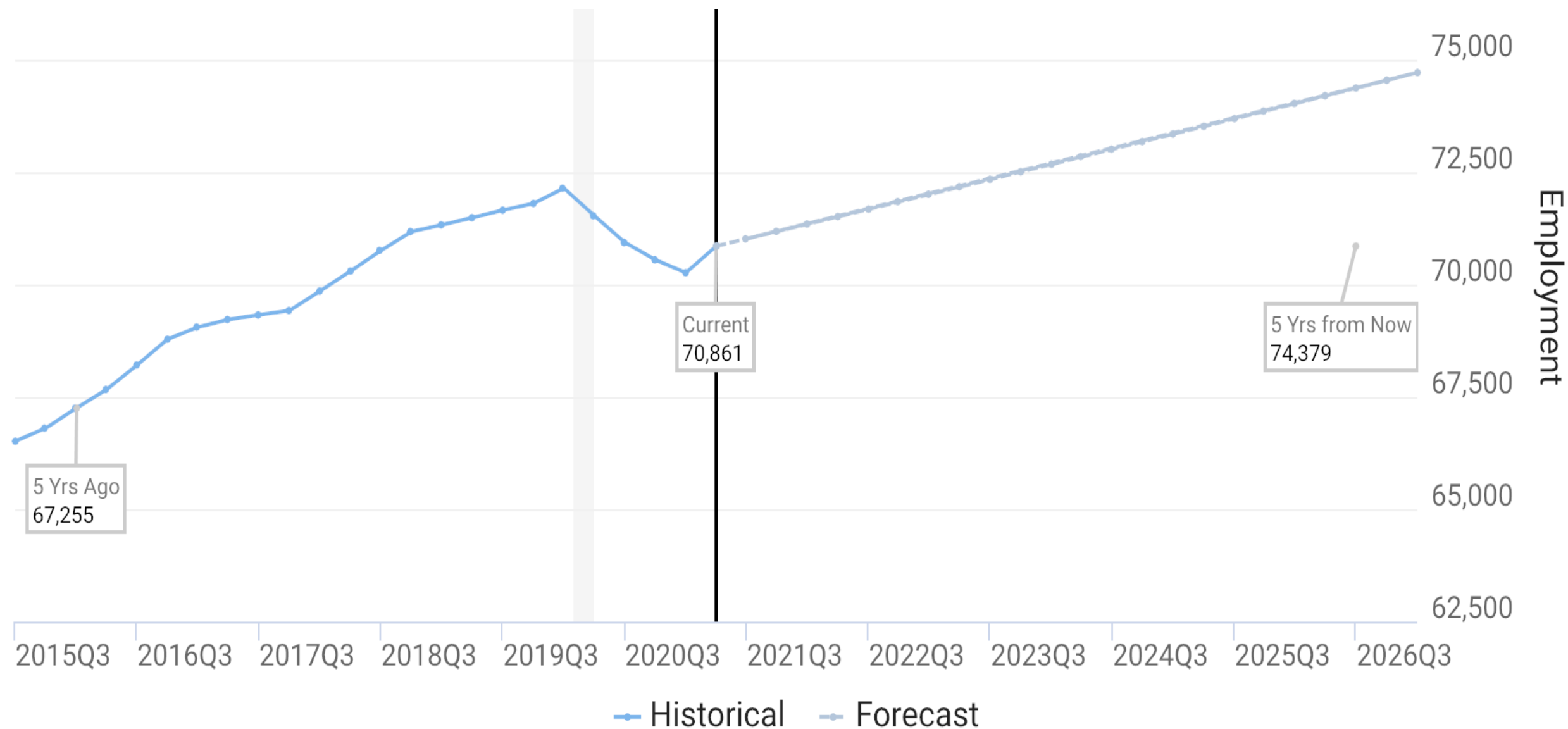
MSP Metro Information Technology Cluster Current Employee Educational Attainment, Job Requirements for Roles Currently Held, and Requirements Advertised in Online Job Postings



Future: Shortages in IT Talent

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Information Technology Cluster Forecast



Occupations in 5-Year Shortage

- Software Developers
- Computer Systems Analysts
- Information Security Analysts
- Computer Occupations (All Other)
- Network and Computer Systems Administrators
- Computer Network Support Specialists
- Database Administrators and Architects
- Web Developers and Digital Interface Designers
- Computer Network Architects

2020Q3 Employment: 70,861
LQ: 1.36

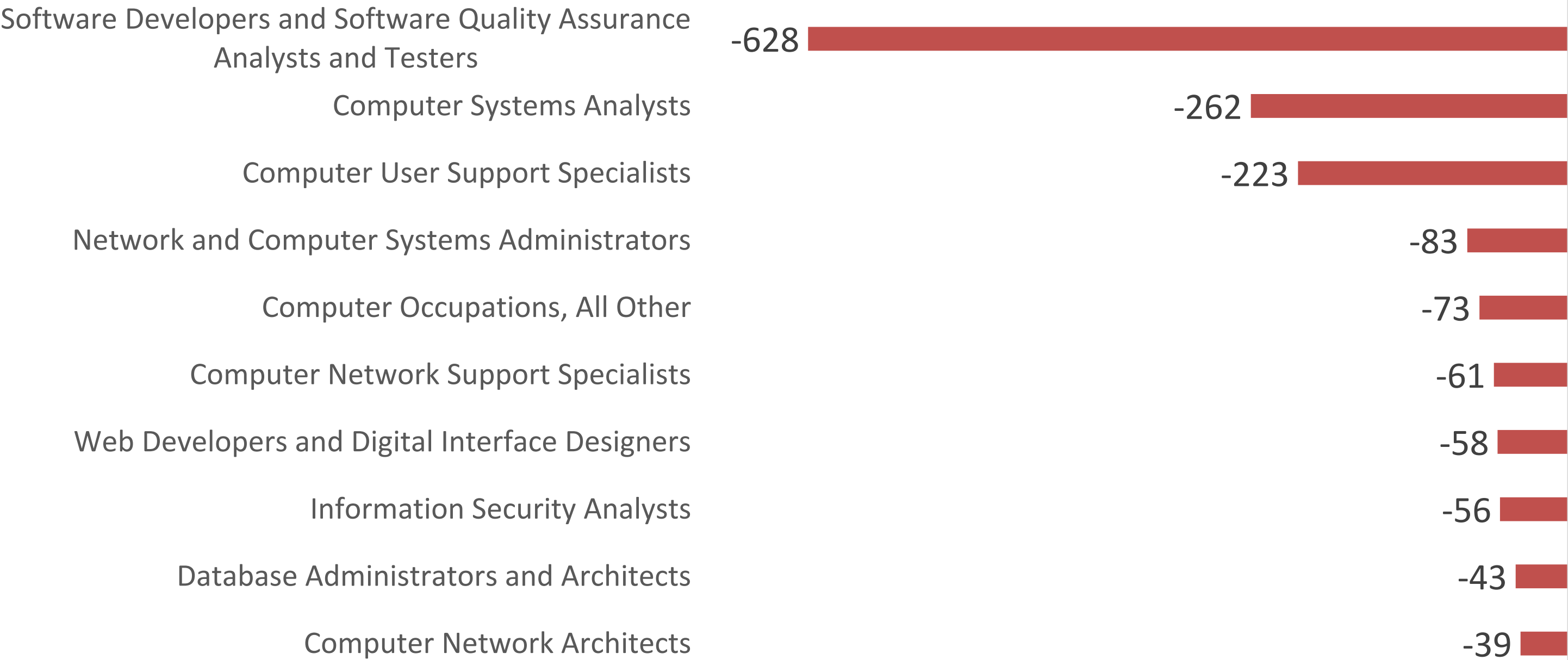
Unemployment: 2.0% (1,672)
Forecasted Annual Growth: 0.9%



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MSP Metro Information Technology Cluster Award Gaps Compared to National Benchmark



Postsecondary institutions continue to underproduce IT graduates at a rate to meet local demand.

■ Annual Award Gaps by Occupation



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Future: An Origin-Gateway-Target Model

Minnesota

[1] High-wage (at or above regional average wage), high-skill (require some form of postsecondary credential), and high-demand destination careers

Target Occupations (all HW, HD, HS, OG, AG)
Software Developers
Network & Computer Systems Administrators
Information Security Analysts

Other High-Wage, High-Skill IT Occupations with Occupation and/or Award Gaps

- Computer Systems Analysts
- Computer Occupations, All Other
- Computer Network Support Specialists
- Computer Programmers
- Web Developers
- Digital Interface Designers
- Computer Network Architects
- Database Administrators & Architects

Aligned Gateway Occupations with Related Skillsets

- Graphic Designers
- Printing Press Operators
- Telecommunications Equipment Installers & Repairers
- Audio & Video Technicians

[2] Mid-wage (\$42K/year to regional average wage), low-to-middle skill (typically a certificate, some college, or 2-year degree required), and moderate-demand steppingstone careers

Gateway Occupations

Computer User Support Specialists

Aligned Origin Occupations (Related Skillsets & Available Talent)

Customer Service Representatives
Library Technicians
Hosts & Hostesses
Print Binding and Finishing Workers
Photo Process Machine Operators

[3] Low-wage (<\$42K/year), high-volume entrypoints to the career field



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- **High Labor Shortage Persists**

- There are not enough people—even under perfect conditions—to fill our local talent needs
- All IT careers forecast shortages statewide, with Metro shortages continuing to grow since the start of the pandemic
- Remote work prevalence has changed workplace and recruitment dynamics
- National recruitment landscape has worsened, meaning Minnesota talent is being recruited away

- **High Talent Misalignment**

- Skills, educational attainment, geography, and bias present barriers to getting the talent that is available into roles
- Minnesota is last in the nation in access to foundational Computer Science education
- Educational requirements of positions do not match local talent skills
- Rapid upskilling and reskilling is required to keep pace with sector innovation

- **Low Sector Diversity**

- If extreme educational inequalities persist, inequalities in employment and wages will also persist
- Retention of talent of color remains lower than for the native-born White workforce
- Employers report that they are changing tactics and learning from past oversights, but data does not yet reflect these changes



Thank You!

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Insights: RealTime Talent Blog

www.realtimetalent.org/insights



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Questions?



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