

Talent Pipeline Report

Metro Atlanta Core Counties

Prepared May 21, 2019 **For Discussion Purposes Only**YouScience Confidential - For Use By Recipient Only



Executive Summary

Metro Atlanta's economy is booming with nearly 60,000 new jobs created and more than 550,000 employment opportunities posted in 2018. The region's employers continue to focus on their growing demand for talent with employment expanding by 2.8 percent last year. The Metro Atlanta Chamber (MAC) is actively working to grow, attract and retain top talent with programs like Your Talent Your Future, Choose ATL, Choose ATL After 5, and by participating in Learn4Life. Adding the Talent Pipeline Report to the available resources and increasing connections between business and education, will help ensure Metro Atlanta is primed for long-term growth and prosperity.

Leveraging YouScience data, MAC analyzed the assessments of more than 21,000 students from 95 high schools in Clayton, Cobb, DeKalb, Fulton, and Gwinnett counties. The resulting Talent Pipeline Report provides insight into students' aptitude and interest in high-demand career fields. The report includes Atlanta's top industries: Information Technology, Healthcare, and Distribution and Logistics. MAC will use this data to develop and advocate for policies and practices that will guarantee a thriving, globally competitive workforce for many years into the future.

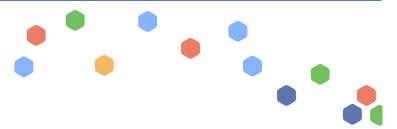
The report zeroed in on students who displayed both high aptitude and high interest in key occupational clusters. The report's findings include:

- The highest overlap of aptitude and interest in the Patient Care field at 30 percent.
- In all other fields analyzed, the overlap was 7 percent or less, with the lowest at 1 percent in the skilled trades.
- While male students showed more interest in all career fields listed except Patient Care, female students' aptitudes exceeded male students' in logistics, IT, computer programming, software development, manufacturing production and patient care. This divergence results from different interests, not abilities.
- The report found distinctions by race, as well, with African-American students showing strong potential as healthcare technologists/technicians, and Hispanic students doing well in the skilled trades. White students showed the highest aptitude in 7 of 10 career fields, suggesting a need for focus on closing the gap in access to high-quality education.

Atlanta's long-term economic success requires fully developing skills of all the region's students. The first step involves engaging the students with both the aptitude and the interest in high-demand fields and providing them with quality experiential learning experiences. The second priority focuses on growing interest with students that have high aptitudes in high-demand areas. Lastly, growing the aptitude of students who have an interest in high demand areas cannot be overlooked. Any successful plan for increasing Atlanta's workforce supply must address education inequities; therefore, these career awareness and engagement strategies require an inclusive approach by business and education to maximize the potential of Atlanta's richly diverse future workforce.







YouScience Platform Overview

YouScience is a aptitude-driven talent identification platform that uncovers and connects talent and opportunity.

YouScience is a revolutionary, aptitude based, career guidance platform. The YouScience Profile uses a series of game-like 5-11 minute exercises to measure a student's aptitudes or natural abilities. These aptitudes include areas such as spatial visualization, sequential reasoning, numerical reasoning, and inductive reasoning among others. YouScience provides up to 14 aptitude measures important to career choice. Additionally, YouScience provides an industry standard 60 item career interest survey based on the Department of Labor's O*Net career database. YouScience then uses a proprietary algorithm to match the student's aptitudes and interests to careers they are uniquely fit to succeed in based on their aptitudes, interests, or a combination of both.

To build self-efficacy and a language of self-advocacy, the YouScience Profile gives students affirmative feedback on their aptitudes. Students can then explore 500 careers uniquely organized for the students based on their personal aptitudes, interests, and the combination of aptitude and interests. This allows students to discover careers for which they may have natural abilities, but do not have the interest merely because of a lack of exposure to them.



Main Findings

The purpose of this Talent Pipeline Report is to demonstrate the alignment of the students in Metro Atlanta with key local industries. YouScience selected high demand careers in five industires: healthcare, information technology, manufacturing, construction, and distribution/logistics. The specific careers selected are listed in the report. Students that show a high aptitude and/or high interest fit for at least one of the careers in an industry category are counted in that category.

The talent pipeline analysis revealed the following:

- Far more students in Metro Atlanta have a high aptitude for these high demand careers than have initially expressed a self-reported interest. Most often this is caused by an "exposure gap" where students do not know enough about an industry, specific careers, or their potential talent in those careers to have developed an interest. This is a great opportunity for CTE, dual-enrollment, work-study, or other employer engagement to expose students to a particular career or industry.
- Metro Atlanta has a great opportunity to have a larger, more diverse workforce in these high demand areas. Far more female students demonstrated a high aptitude for these careers than expressed a self-reported interest. All ethnic groups showed a similar increase with a high aptitude for these high demand careers.

In short, Metro Atlanta may have a skills gap in some industries, but it **does not have a talent gap**. The students in Metro Atlanta have the ability to perform in these high demand careers.





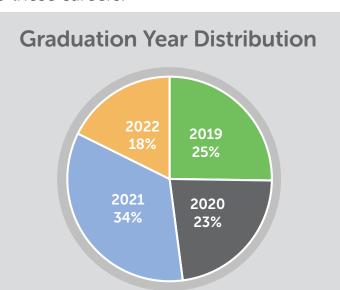
Table of Contents

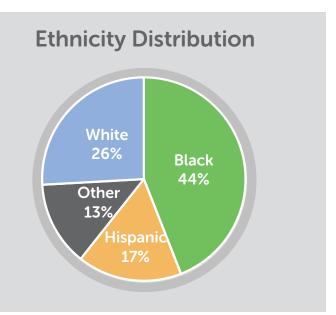
Demographics	5
How To Use This Report	6
Industry 1: Manufacturing	7
Industry 2: Information Technology	9
Industry 3: Healthcare	11
Industry 4: Construction	13
Industry 5: Distribution & Logistics	15



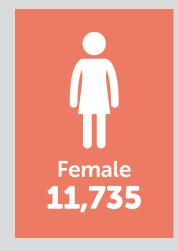
Demographics Metro Atlanta Core Counties

We have helped over **21,974** current Metro Atlanta high school students discover careers for which they are uniquely fit to succeed! What a great opportunity to guide these students toward CTAE, dual-degree, and post-secondary studies to further expose them to these careers!





Gender Distribution





Participating Districts

1,934
4,669
3,014
1,171
4,675
4,813
538
1,160

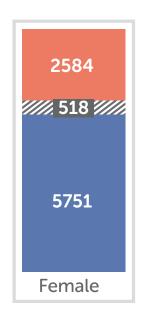
How To Read This Report

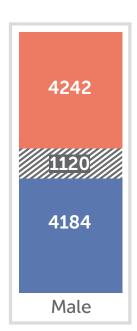
INTEREST: These are students who report a high interest in the career. Help them build their capacity and explore their best-fit matches.

BOTH: Represents students whose aptitudes and interests combined make them a high fit for this career. **Expose them to opportunities in this field.**

APTITUDE: These students have high aptitudes necessary for this field. Create interest by helping them explore this career.

InterestBothAptitude

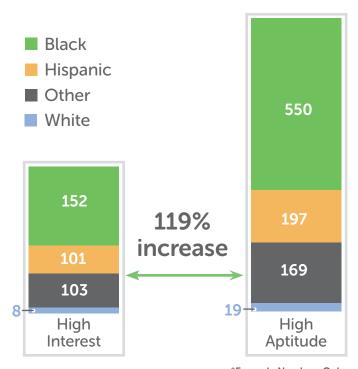




*Example Numbers Only

YouScience identifies students as **High-Fit** if they have a composite score of 8, 9, or 10 interest and/or aptitude for a particular career or set of careers, using YouSciences' **proprietary** scaled-fit methodology.

Identity more **high aptitude** students across **ALL ethnicities**.

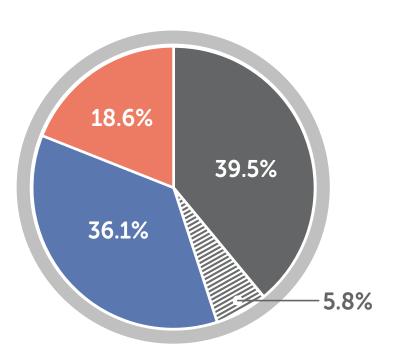


*Example Numbers Only



Industry 1 | Manufacturing

Engineering

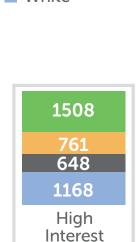


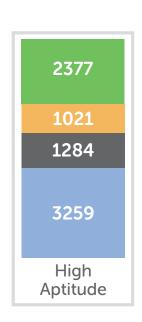
Careers Included in this Report **Electrical Engineers Product Safety Engineers** Mechatronics Engineers **Electrical Engineering Technicians** Industrial Engineering Technologists High Interest Fit High Aptitude Fit

■ Other Industry High Fits

Engineering Black Hispanic Interest Other ■ Both White Aptitude 3115 *////* 286 */////* 4602 3339

Male

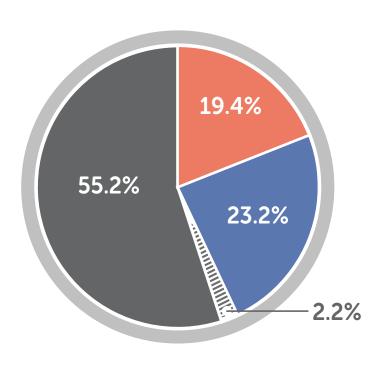




Female

Industry 1 Manufacturing

Production



Careers Included in this Report

Industrial Production Managers

Robotics Technicians

Manufacturing Production Technicians

Quality Control Analysts

Industrial Machinery Mechanics

Maintenance Workers, Machinery

Machinists

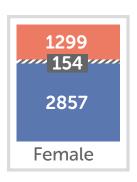
Computer Numerically Controlled

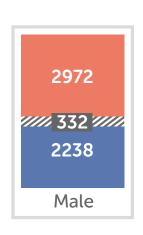
Machine Tool Programmers, Metal and Plastic

- High Interest Fit
- High Aptitude Fit
- Other Industry High Fits

Production

- Interest
- Both
- Aptitude

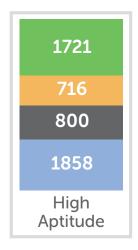






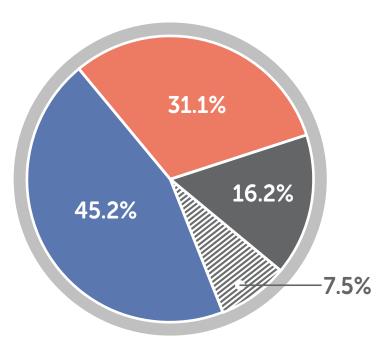
White

	1836
П	853
П	543
П	1039
Ľ	High Interest



Industry 2 Information Technology

Analyst & Admin



Careers Included in this Report

Computer and Information Systems Managers

Information Security Analyst

Database Administrators

Network and Computer Systems Administrator

Computer Network Architect

Computer User Support Specialists

Software Quality Assurance Engineers and Testers

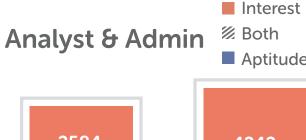
Computer Systems Engineers/Architects

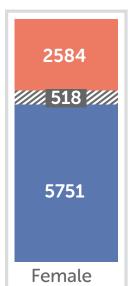
Web Administrators

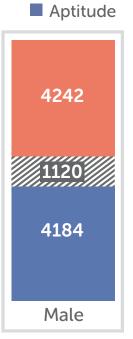
Business Intelligence Analysts

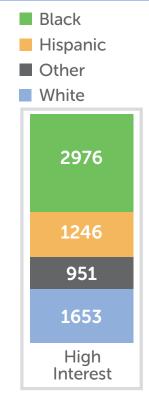
Information Technology Project Managers

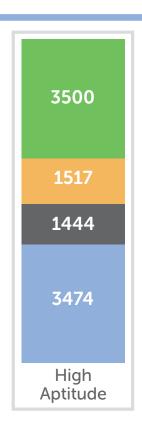
- High Interest Fit
- High Aptitude Fit
- Other Industry High Fits





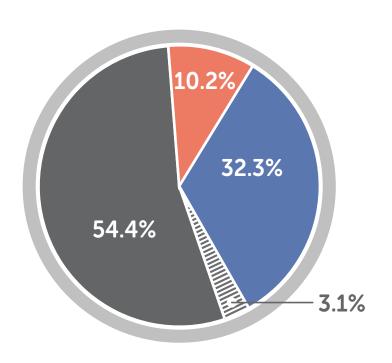






Industry 2 Information Technology

Programmer



Careers Included in this Report

Computer Programmer

Software Developers, Applications

Software Developers, Systems Software

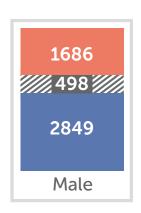
Web Developers

- High Interest Fit
- High Aptitude Fit
- Other Industry High Fits

Programmer

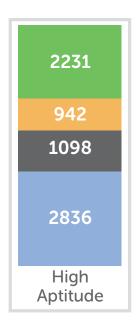
- Interest
- Both
- Aptitude





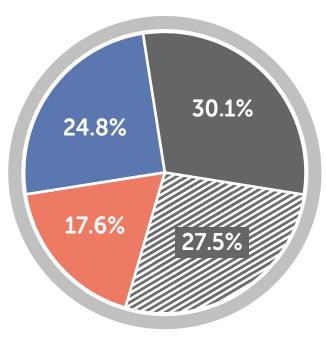
- Black
- Hispanic
- Other
- White





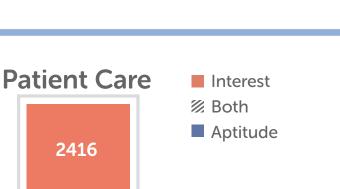
Industry 3 Healthcare

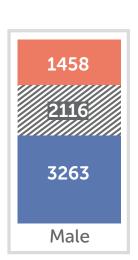
Patient Care

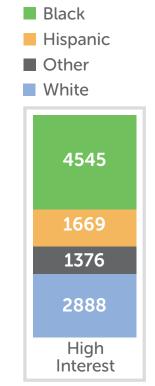


Careers Included in this Report Medical and Health Services Manager Mental Health Counselors Dietitians and Nutritionists Physical Medicine and Rehabilitation Physicians Physician Assistants Occupational Therapists Physical Therapist Registered Nurse Nurse Practitioners Dental Hygienists Licensed Practical and Licensed Vocational Nurses Physical Therapist Assistants

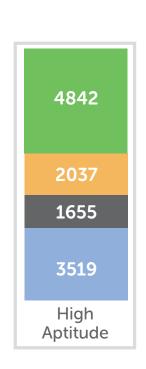
■ Other Industry High Fits







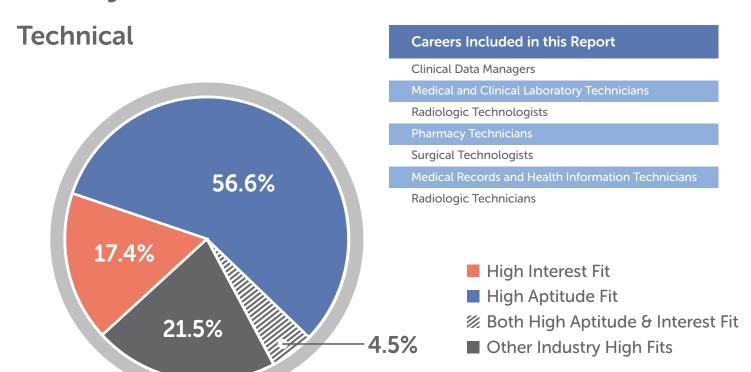
High Interest FitHigh Aptitude Fit

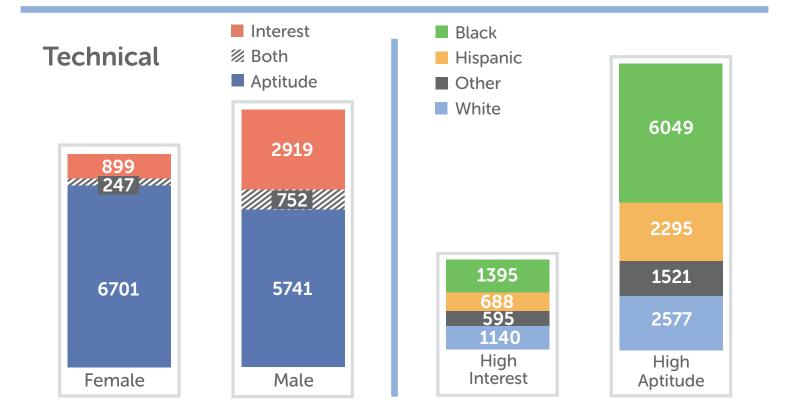


2186

Female

Industry 3 | Healthcare

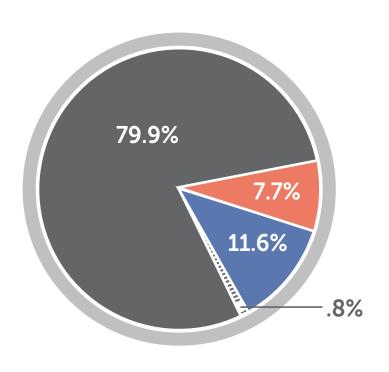






Industry 4 Construction

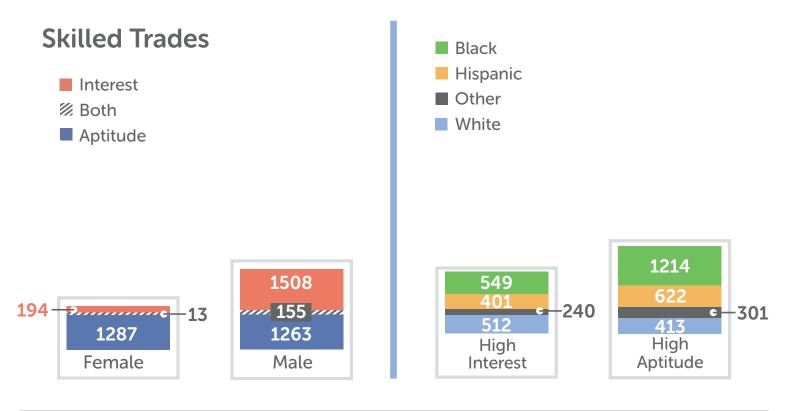
Skilled Trades





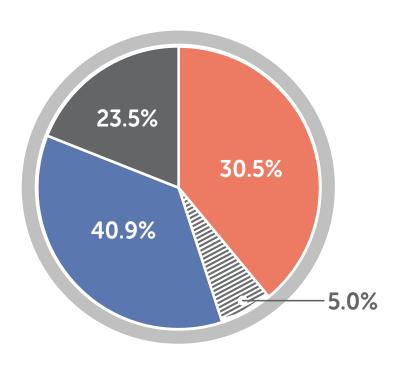


High Interest Fit



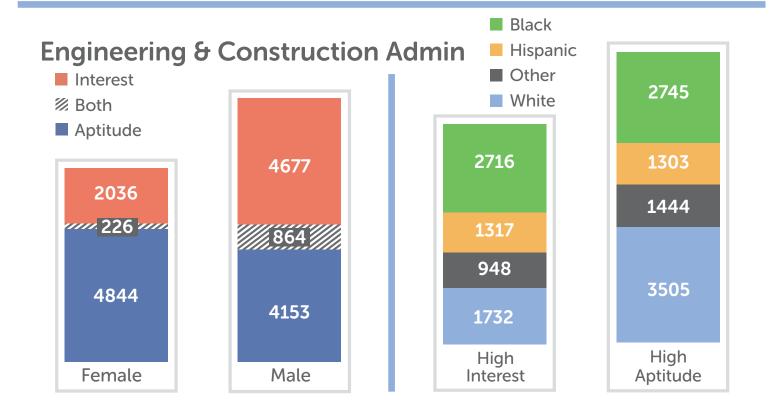
Industry 4 Construction

Engineering & Construction Admin



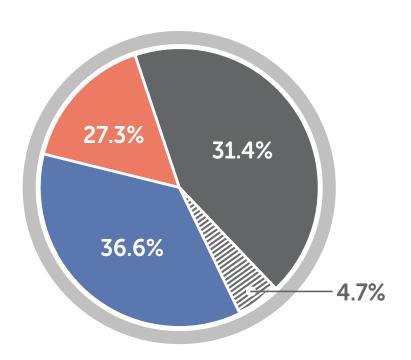
Careers Included in this Report Construction Managers Cost Estimator Architectural Drafters Surveyors Architect Landscape Architects Civil Drafters Construction and Building Inspectors Architectural and Engineering Managers Civil Engineer Civil Engineering Technicians High Interest Fit High Aptitude Fit Both High Aptitude & Interest Fit

■ Other Industry High Fits



Industry 5 Distribution & Logistics

Planning

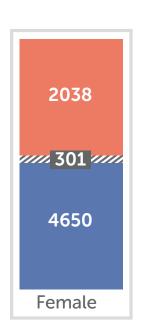




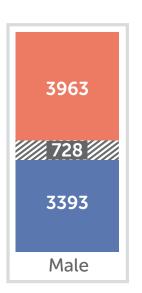
■ Other Industry High Fits

High Interest Fit

Planning



Aptitude

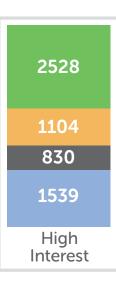


Black

Hispanic

Other

White



2798

1100

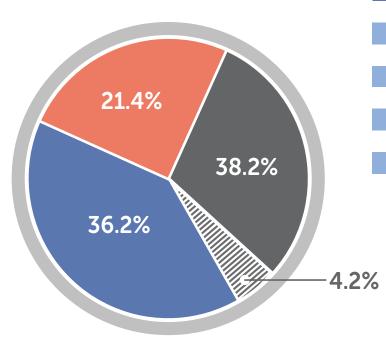
1236

2909

High Aptitude

Industry 5 Distribution & Logistics

Operations



Careers Included in this Report

Aerospace Engineering and Operations Technicians

Automotive Specialty Technicians

Bus and Truck Mechanics and Diesel Engine Specialists

Airline Pilots, Copilots, and Flight Engineer

Flight Attendants

Heavy and Tractor-Trailer Truck Drivers

Rail Yard Engineers, Dinkey Operators, and Hostlers

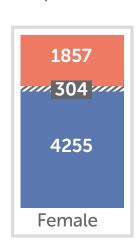
Railroad Brake, Signal, and Switch Operators

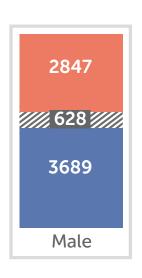
Railroad Conductors and Yardmasters

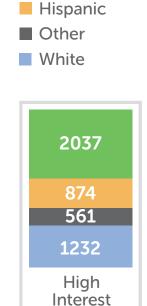
- High Interest Fit
- High Aptitude Fit
- Other Industry High Fits

Operations

- Interest
- Both
- Aptitude







Black

