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 industries: 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.
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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!

![Graduation Year Distribution Pie Chart]

- 2019: 25%
- 2020: 23%
- 2021: 34%
- 2022: 18%

![Ethnicity Distribution Pie Chart]

- Black: 44%
- White: 26%
- Hispanic: 17%
- Other: 13%

![Gender Distribution]

- Female: 11,735
- Male: 10,239

<table>
<thead>
<tr>
<th>Participating Districts</th>
<th>Students</th>
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<tbody>
<tr>
<td>Atlanta Public Schools</td>
<td>1,934</td>
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<tr>
<td>Clayton County Public Schools</td>
<td>4,669</td>
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<tr>
<td>Cobb County Public Schools</td>
<td>3,014</td>
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<tr>
<td>Decatur City School District</td>
<td>1,171</td>
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<tr>
<td>DeKalb County School System</td>
<td>4,675</td>
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<td>Fulton County School System</td>
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<td>538</td>
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<td>Marietta City School District</td>
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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.

**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.

**Example Numbers Only**

<table>
<thead>
<tr>
<th>Identity</th>
<th>High Interest</th>
<th>High Aptitude</th>
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<tbody>
<tr>
<td>Black</td>
<td>103</td>
<td>550</td>
</tr>
<tr>
<td>Hispanic</td>
<td>101</td>
<td>197</td>
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<tr>
<td>Other</td>
<td>152</td>
<td>169</td>
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<tr>
<td>White</td>
<td>8</td>
<td>19</td>
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</table>

119% increase
Industry 1 | Manufacturing

Engineering

Careers Included in this Report
- Electrical Engineers
- Industrial Safety and Health Engineers
- Product Safety Engineers
- Industrial Engineers
- Mechatronics Engineers
- Electrical Engineering Technicians
- Industrial Engineering Technologists

High Interest Fit
High Aptitude Fit
Both High Aptitude & Interest Fit
Other Industry High Fits

Engineering

- Interest
- Both
- Aptitude

Female
- 4602
- 970
- 286
- 996
- 3339
- 3115
- 1508
- 761
- 648
- 1284
- 3259
- 1021

Male
- 2377
- 1021
- 1284
- 1168
- 648
- 761
- 1508
- 996
- 3339
- 3115
- 1508

High Interest
High Aptitude

Black
Hispanic
Other
White
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
Both High Aptitude & Interest Fit
Other Industry High Fits

Production

- Interest
- Both
- Aptitude

Female:
- High Interest: 1299
- High Aptitude: 154
- Total: 2857

Male:
- High Interest: 2972
- Total: 332

High Interest:
- Total: 1836
- Black: 1721
- Hispanic: 716
- Other: 800
- White: 1858

High Aptitude:
- Total: 853
- Black: 543
- Hispanic: 1039
- Other: 2238
- White: 853
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
- Both High Aptitude & Interest Fit
- Other Industry High Fits

Analyst & Admin

- Interest
- Both
- Aptitude

Female
- 2584 Interest
- 1120 Both
- 518 Aptitude
- 5751 Total

Male
- 4242 Interest
- 1246 Both
- 951 Aptitude
- 4184 Total

High Interest
- 2976 Black
- 1246 Hispanic
- 951 Other
- 1653 White
- 3500 Total

High Aptitude
- 1517 Black
- 1444 Hispanic
- 3474 Other

3500 Total

High Interest
- 1517 Black
- 1444 Hispanic
- 3474 Other

3500 Total

High Aptitude
- 1517 Black
- 1444 Hispanic
- 3474 Other

3500 Total
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
- Both High Aptitude & Interest Fit
- Other Industry High Fits

Programmer

- Interest
- Both
- Aptitude

Female
- 545 Black
- 186 Hispanic
- 4258 Other
- 2849 White

Male
- 1686 Black
- 498 Hispanic
- 2849 Other
- 659 White

High Interest
- 749 Black
- 418 Hispanic
- 2231 Other
- 942 White

High Aptitude
- 405 Black
- 2836 Other
- 2836 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

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

Patient Care

<table>
<thead>
<tr>
<th>Gender</th>
<th>Interest</th>
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<tbody>
<tr>
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<td>4488</td>
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<tr>
<td>Male</td>
<td>1458</td>
<td>2116</td>
<td>3263</td>
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<table>
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<tbody>
<tr>
<td>High Interest</td>
<td>4545</td>
<td>4842</td>
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<tr>
<td>High Aptitude</td>
<td>1669</td>
<td>2037</td>
</tr>
<tr>
<td>Both</td>
<td>1376</td>
<td>1655</td>
</tr>
<tr>
<td>Other</td>
<td>2888</td>
<td>3519</td>
</tr>
</tbody>
</table>
Careers Included in this Report

- Clinical Data Managers
- Medical and Clinical Laboratory Technicians
- Radiologic Technologists
- Pharmacy Technicians
- Surgical Technologists
- Medical Records and Health Information Technicians
- Radiologic Technicians

High Interest Fit
High Aptitude Fit
Both High Aptitude & Interest Fit
Other Industry High Fits

Technical

Interest
Both
Aptitude

Female
899
247
6701

Male
2919
752
5741

High Interest
1395
688
595
1140

High Aptitude
1521
2295
2577
6049

Black
Hispanic
Other
White
Industry 4 | Construction

Skilled Trades

Careers Included in this Report
- Brickmasons and Blockmasons
- Electricians
- Insulation Workers, Mechanical
- Operating Engineers and Other Construction Equipment Operators
- Pipe Fitters and Steamfitters
- Plumbers
- Sheet Metal Workers
- Welder
- Construction Carpenters

High Interest Fit
High Aptitude Fit
Both High Aptitude & Interest Fit
Other Industry High Fits

Skilled Trades

- Interest
- Both
- Aptitude

Female
- 1287
- 155
- 1263

Male
- 1508
- 401
- 549

High Interest
- 194
- 13
- 240

High Aptitude
- 1214
- 622
- 301

Black
Hispanic
Other
White
**Industry 4 | Construction**

**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

**Engineering & Construction Admin**

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

**Interest & Construction Admin**

- Interest
- Both
- Aptitude

**Female**
- 2036
- 226
- 4844

**Male**
- 4677
- 864
- 4153

**High Interest**
- 2716
- 1317
- 948
- 1732
- 3505

**High Aptitude**
- 2745
- 1303
- 1444
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 Engineers
- 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

Operations

- Interest
- Both
- Aptitude

Female

- Black: 4255
- Hispanic: 3689
- Other: 561
- White: 1232

Male

- Black: 2847
- Hispanic: 628
- Other: 874
- White: 2037

High Interest

- Black: 304
- Hispanic: 628
- Other: 874
- White: 2037

High Aptitude

- Black: 1857
- Hispanic: 3689
- Other: 1232
- White: 304