

Going from Data to Insights: Lessons from Higher Education

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Georgia Data Innovation Hub
Carl Vinson Institute of Government
UNIVERSITY OF GEORGIA



Georgia's Academic and Workforce Analysis and Research Data System

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Governor's Office of
Student Achievement



Background of GA•AWARDS

- **Early 2000's** - Alliance of Education Agency Heads (AEAH) identifies the need for cross-agency reporting.
- **2010** - Georgia receives \$18 million to build a P-20 longitudinal data system.
- **2015** - the General Assembly approved state appropriations in the amount of \$1.5 million to maintain GA•AWARDS.
- **GA•AWARDS Established** - GOSA tasked with housing the database while Chief Information Officers from participating GA•AWARDS agencies serve as the governing body.
- **GA•AWARDS Vision** - Link and provide meaningful, actionable education and workforce data to participating agencies that support research and informed decision-making.



What is GA•AWARDS?

- GA•AWARDS is Georgia's P-20W longitudinal data system that links individual level data from the entities listed below.
 - All eight of the state education agencies:

Department of Early Care and Learning	University System of Georgia
Georgia Department of Education	Technical College System of Georgia
State Charter Schools Commission	Georgia Professional Standards Commission
Georgia Student Finance Commission	Governor's Office of Student Achievement
 - Additional participating members:

Department of Labor (DOL)	Georgia Independent Colleges Association (GICA)
Georgia Military College (GMC)	
 - The system also includes data from the National Student Clearinghouse (nationwide postsecondary enrollment), College Board (SAT and AP), and ACT.
- GA•AWARDS does not replace or duplicate each agency's operational data warehouse. Instead, it broadens the data available for research and reporting for each organization.



Creation of a System

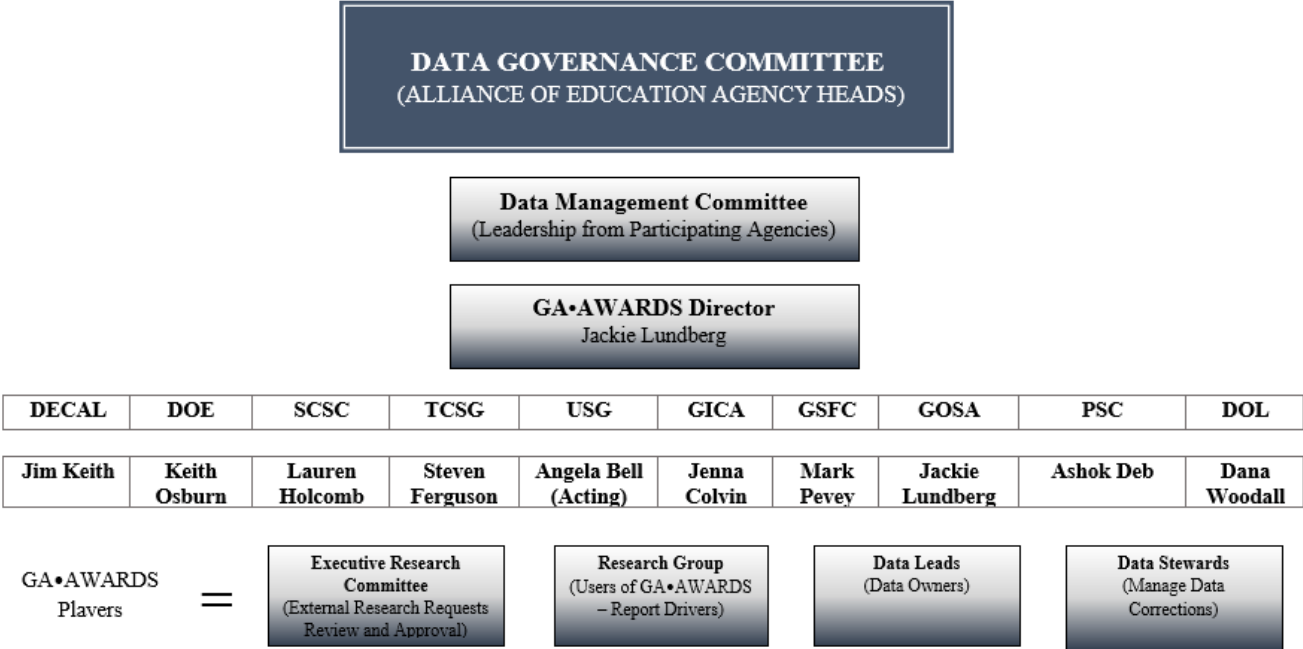
- **Pre-Development Activities**
 - Agreement of Purpose/Scope/Main Users of System and Data
 - Draft of Governance Structure Established (including high level roles and responsibilities)
 - Data Sharing Agreement
 - Rules of Engagement
 - Only agencies who contribute data can receive data (Participating Agencies)
 - Only data identified for specific use will be collected
 - Data Use Policy
 - Research questions developed - every element collected should link to one of the research questions
 - Must be cross-agency research questions
 - Mindset should be actionable and not just for compliance
 - Can be questions already being answered manually (system would provide efficiencies) or can be new questions
 - Governance Teams Identified



GA•AWARDS Governance

Governance Structure

All participating organizations signed a Data Sharing Agreement that governs participation. It was last amended in July of 2019.



Now the work begins!

- **Key Decisions/Activities**
 - Finalization and Agreement of Purpose/Scope – what the system *is* and what the system *isn't*
 - Project Management Type for Implementation (Waterfall, Iterative, etc.)
 - System Type (Transactional, Federated, or Centralized)
 - Agency responsible for administration and maintenance of system
 - Data Element List Creation (derived from research questions)
 - Identification of best source for each of the elements (best version of the truth)
 - Common Identifier(s) by source for person matching
 - Requirements gathering for data and functionality
 - For historical data, consider data quality, availability, and format to determine cutoff for historical data (least common denominator for data)



Overview of Data Available

The system currently holds 16 years of data, 2007-2022.

- Pre-K participation and number of months students attended
 - K-12 and postsecondary student characteristics
 - Demographics and classifications
 - Course-taking (enrollment, course information, grades)
 - HOPE eligibility and award
 - Diplomas, certifications, degrees, pathway completions (from GaDOE), and GED completions
 - Applicable state assessments (CRCT, EOCT, GHSWT, GAA, GAA 2.0, EOC, and GA Milestones)
 - Applicable national assessments (SAT, ACT, AP)
 - K-12 educators
 - Demographics
 - Credentials and assessments
 - Length of service
 - Unemployment data (industry type, quarterly wages)
-



Developing the System – Lessons Learned

Data quality, timeliness, and relevance are key to maintaining a useful system:

- Only collect data points that are going to be used for formalized research questions
- Always look for new elements that will be meaningful in answering the research questions
- Incorporate reusable components/models where applicable
- Tool Choice:
 - Business Intelligence, MDM, ETL, ELT, Storage, Security, Version Control, Cloud vs On-premise, etc.
 - Consider agency adaptability and learning curve
 - Ability for agencies to integrate into their current tool(s) for further agency-specific research
 - Budget consideration for implementation and ongoing maintenance



Maintaining System

Keys to maintaining a useful system:

- Continuous stakeholder engagement – governance teams
- Data Quality
 - Standardization of Data Terminology – Data Dictionary
 - Data Quality checkpoints implemented throughout process
- Timeliness
 - Streamline processes and automate where possible
 - Align outputs with federally/statutorily mandated reporting
- Relevance
 - New research questions – research questions document should be a living document



Looking Ahead

- Upcoming Dashboards:
 - Education to Career (ETC)
 - Growing Readers
 - Credentials of Value in Collaboration with the Strategic Data Project at Harvard University
- Elements in the Pipeline:
 - Additional Institution Characteristics (Title I)
 - Extended Services Indicator
 - Teacher-Course-Student Linkage
 - Learning Support indicators
 - Additional Elements for Teacher Workforce Report



Research and Data Usage

Examples of GA•AWARDS current uses include:

- GOSA Annual Report Card (Pre-K, K-12 and postsecondary)
- GaDOE High School Feedback Reports (postsecondary enrollment patterns by high school that are available to districts)
- Required reporting to the U.S. Department of Education
- Ad hoc research and reporting
- Public-facing dashboards
- Research studies
- Participating agency research, reporting and dashboards
- Support for GA Department of Audits for special examinations and performance reviews requiring cross-agency data



Research and Data Usage

GOSA uses GA•AWARDS and other education data to produce dashboards that provide stakeholders with concise, easy-to-understand information about Georgia students' education. These dashboards include:

High School Graduate Outcomes: Provides information on student progress after high school graduation.

Georgia Higher Learning and Earnings: Displays earnings information for Georgia technical college and college/university graduates who work in Georgia after earning their degrees.

K12 Discipline Dashboard: Summarizes discipline data at the school- and district-levels for all public schools in Georgia, including suspension rates and numbers of disciplinary incidents and actions.

Georgia School Grades Reports: Provides concise school performance reports using an A-F rating system for all Georgia public elementary, middle, and high schools.

Schools Like Mine: Allows parents, educators, and community members to find schools with similar student population characteristics for comparison to their local schools.



Research and Data Usage (Report Card)

ORACLE Business Intelligence

K-12 Public Schools Report Card

Please select to refresh the report

School District: (All Column Values) School: (All Column Values)

[Help](#)

[Report Card Navigation Tips](#)

[Receive Update Notice](#)

(Please disable pop-up blocker for this site.)

Under the federal Elementary and Secondary Education Act (ESEA), and as mandated by state law in O.C.G.A. § 20-14-26, Georgia is required to develop a Single Statewide Accountability System (SSAS).

Accountability

- Accreditation
- Assessment Participation
- CCRPI Indicators
 - Content Mastery
 - Graduation Targets
 - English Language

Georgia Assessments (Current)

- Georgia Milestones End of Grade (EOG) Tests
- Georgia Milestones End of Course (EOC) Tests
- Georgia Alternative Assessment (GAA 2.0)
- Georgia Milestones EOG/EOC 25th Percentile

Using the Report Card

- 1 Select a reporting category using the links in the left column (a new browser window will open so make sure pop-ups are allowed)
- 2 Use the tabs at the top of the window to navigate among reporting subsections
- 3 Use the filter at top of page to select individual districts, schools, and/or school year(s). Some sections have additional filter options for displaying different report types. To view all schools in a district or all districts in the state, select "All Column Values".
- 4 Use ? for more information on business rules and data sources.

Retired Georgia Assessments (Previous)

- 2011 to 2014
 - Criterion-Referenced Competency Tests (CRCT)
 - Criterion-Referenced Competency Tests - Modified (CRCT-M)
 - Eighth Grade Writing Assessment (EGWA)
 - End-of-Course Test (EOCT)
 - Georgia High School Writing Test (GHSWT)
 - CRCT/EOCT 25th Percentile
- 2011 to 2018
 - Georgia Alternative Assessment (GAA)

Indicators & Demographics

- Attendance
- Student and School Demographics
 - Enrollment by Grade
 - Enrollment by Subgroups
 - Enrollment by Programs
- Graduation & Dropout Rate
- Retained & High School Completer Student
- HOPE Eligibility

Personnel & Fiscal

- Certified Personnel
- Revenues & Expenditures
- Educator Professional Qualifications
 - Teachers teaching out of field
 - Inexperienced teachers and/or leaders
 - Teachers teaching with emergency or provisional credentials
- Per Pupil Expenditures & Financial Efficiency Star Ratings
- [School Improvement Funds Report \(Title I Section 1003\)](#)
- [Georgia Insights: Technology Inventory Dashboard](#)
- Not Highly Qualified Teachers

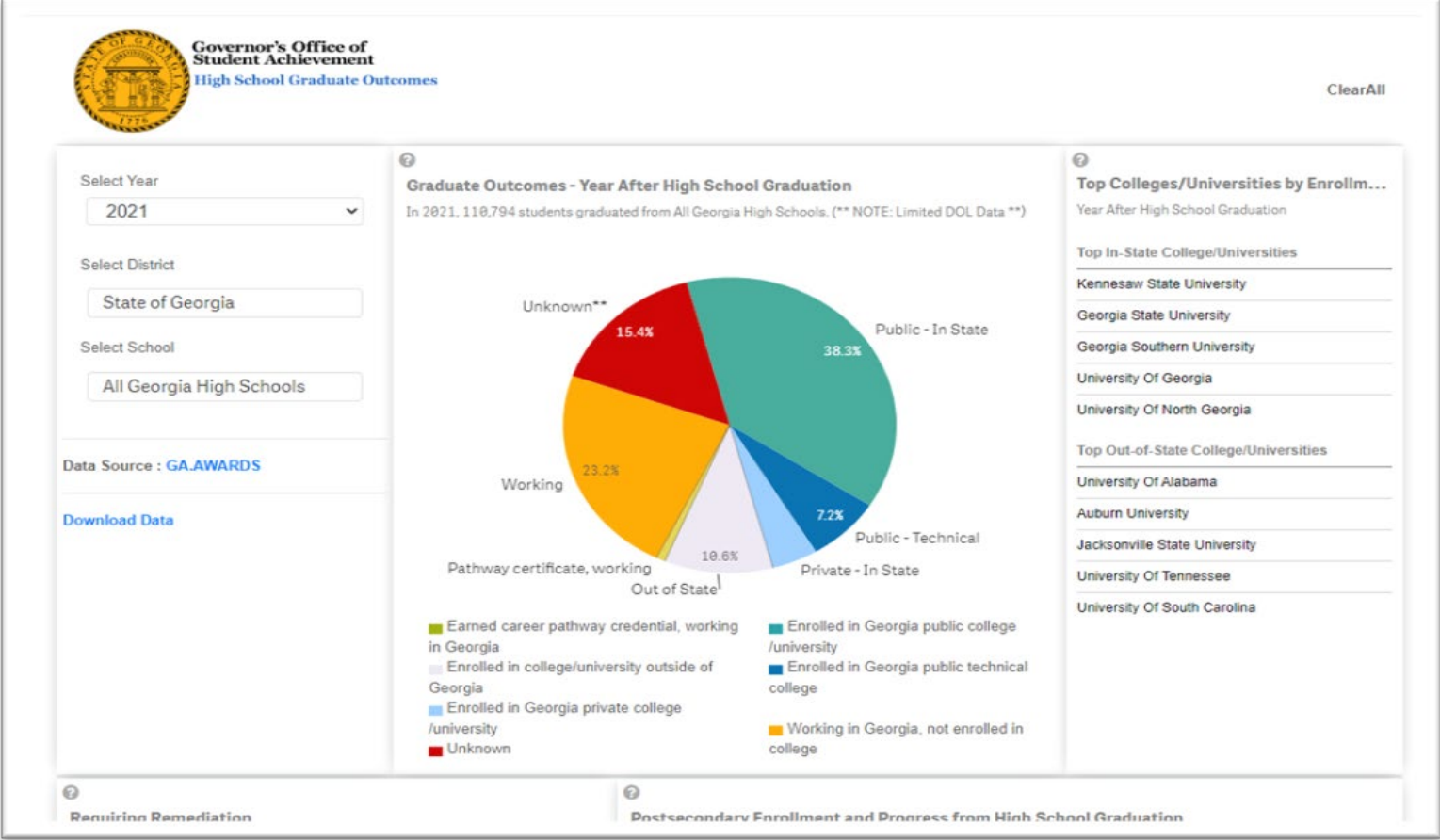
National Tests

- American College Testing (ACT)
- Advanced Placement (AP) exams
- Scholastic Assessment Test (SAT)
- National Assessment of Educational Progress (NAEP)


For additional details on reporting rules and data sources, visit <https://gosa.georgia.gov/contents/report-card>



Research and Data Usage (High School Outcomes)



Research and Data Usage (GHLE)



Governor's Office of Student Achievement
Georgia Higher Learning and Earnings

Earnings Tool Comparison Tool Program Finder

Degree Type:
Bachelor's

Program of Study:
Engineering
[Having trouble finding your program?](#)

College:
Statewide
**This list is now being filtered by both your degree and program selection*

Clear Selections

Subcategories of your selected program:

- Aerospace, Aeronautical, And Astronautical/Space Engineering
- Agricultural Engineering
- Architectural Engineering
- Biochemical Engineering
- Biological/Biosystems Engineering
- Biomedical/Medical Engineering
- Ceramic Sciences And Engineering
- Chemical Engineering
- Civil Engineering
- Computer Engineering
- Construction Engineering
- Electrical And Computer Engineering
- Electrical, Electronics, And Communications Engineering
- Electromechanical Engineering
- Energy Systems Engineering
- Engineering Chemistry
- Engineering Mechanics
- Engineering Physics

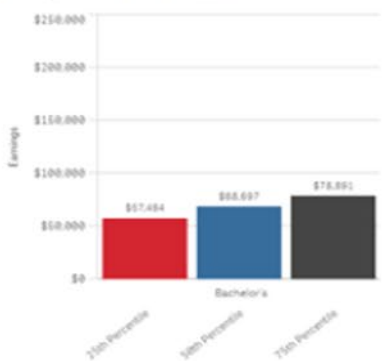
Bachelor's Degree in Engineering (Statewide)

Summary

- One year after graduation median earnings are: \$68,697
- Five years after graduation median earnings are: \$88,321
- Ten years after graduation median earnings are: \$116,779
- There is a \$48,082 increase in median earnings after ten years.
- One year after graduation, earnings are \$28,294 more than the statewide median for Bachelor's degrees.
- Five years after graduation, earnings are \$34,891 more than the statewide median for Bachelor's degrees.
- Ten years after graduation, earnings are \$51,612 more than the statewide median for Bachelor's degrees.

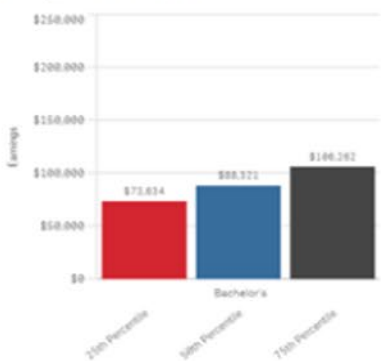
Please keep in mind that in addition to degree type, program, and college many factors (student ability/innovation, college selectivity, and job market conditions) affect earnings. The information on this site should not be interpreted as a guarantee of employment or earnings. The results should be seen as one piece of information that students and parents can use when making degree, major, and college choices.

Earnings One Year After Graduation




Percentile	Earnings
25th Percentile	\$57,484
Bachelor's	\$68,697
75th Percentile	\$78,891

Earnings Five Years After Graduation



Percentile	Earnings
25th Percentile	\$73,834
Bachelor's	\$88,321
75th Percentile	\$106,281

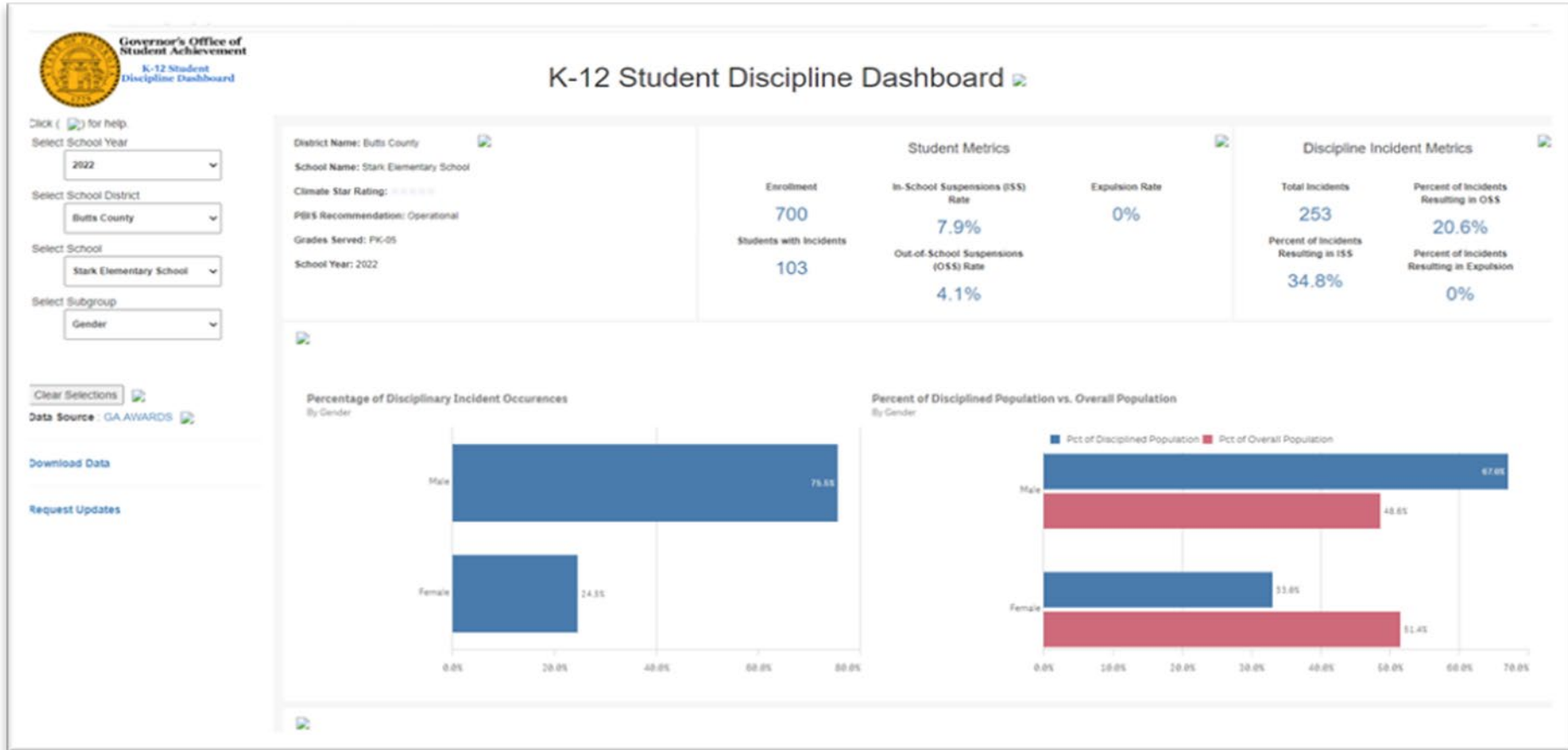
Earnings Ten Years After Graduation



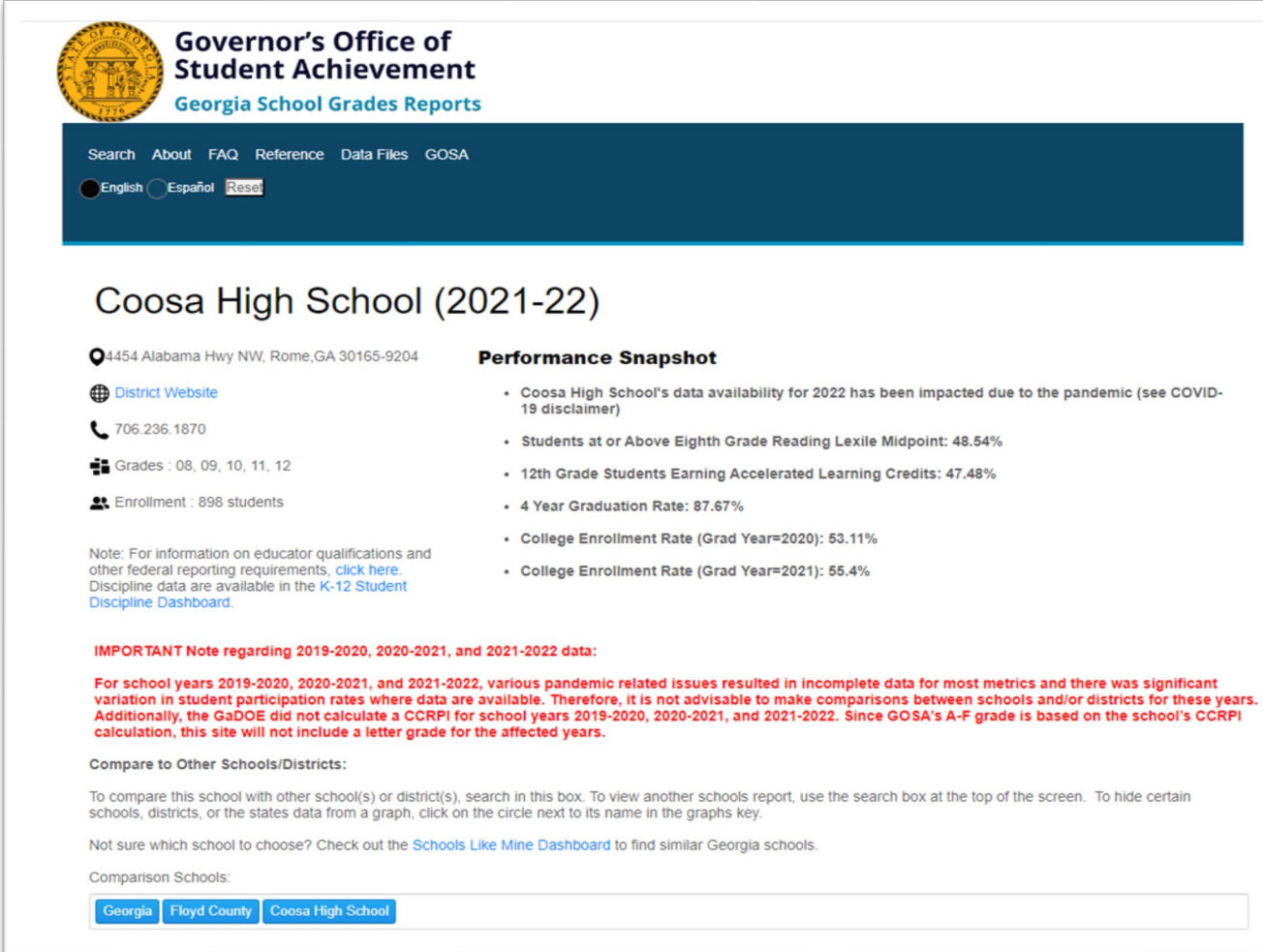
Percentile	Earnings
25th Percentile	\$91,287
Bachelor's	\$116,779
75th Percentile	\$168,911


*If data are not available for your selection the graph will not populate.

Research and Data Usage (Student Discipline)



Research and Data Usage (School Grades)





 **Governor's Office of Student Achievement**
Georgia School Grades Reports


Search About FAQ Reference Data Files GOSA


English Español


Coosa High School (2021-22)

 4454 Alabama Hwy NW, Rome, GA 30165-9204

 [District Website](#)

 706.236.1870

 Grades : 08, 09, 10, 11, 12

 Enrollment : 898 students

Note: For information on educator qualifications and other federal reporting requirements, [click here](#). Discipline data are available in the [K-12 Student Discipline Dashboard](#).

Performance Snapshot

- Coosa High School's data availability for 2022 has been impacted due to the pandemic (see COVID-19 disclaimer)
- Students at or Above Eighth Grade Reading Lexile Midpoint: 48.54%
- 12th Grade Students Earning Accelerated Learning Credits: 47.48%
- 4 Year Graduation Rate: 87.67%
- College Enrollment Rate (Grad Year=2020): 53.11%
- College Enrollment Rate (Grad Year=2021): 55.4%

IMPORTANT Note regarding 2019-2020, 2020-2021, and 2021-2022 data:

For school years 2019-2020, 2020-2021, and 2021-2022, various pandemic related issues resulted in incomplete data for most metrics and there was significant variation in student participation rates where data are available. Therefore, it is not advisable to make comparisons between schools and/or districts for these years. Additionally, the GaDOE did not calculate a CCRPI for school years 2019-2020, 2020-2021, and 2021-2022. Since GOSA's A-F grade is based on the school's CCRPI calculation, this site will not include a letter grade for the affected years.

Compare to Other Schools/Districts:


To compare this school with other school(s) or district(s), search in this box. To view another schools report, use the search box at the top of the screen. To hide certain schools, districts, or the states data from a graph, click on the circle next to its name in the graphs key.

Not sure which school to choose? Check out the [Schools Like Mine Dashboard](#) to find similar Georgia schools.

Comparison Schools:



Research and Data Usage (Schools Like Mine)



Governor's Office of Student Achievement
Georgia Schools Like Mine

IMPORTANT Note regarding 2019 through 2022 data:
For school years 2019 through 2022, various pandemic related issues resulted in a lack of data for most metrics and there was significant variation in student participation rates where data are available. Therefore, it is not advisable to make comparisons these years. Additionally, the GaDOE was unable to calculate a CCRPI for school years 2019 through 2022. Since GOSA's A-F grade is based on the school CCRPI calculation, this site will not include a letter grade for the affected years.

Select a district, school, grades served, and two comparison criteria to find Georgia public schools that are similar to yours.

Select a District

Carroll County

Select a School

Bowdon Middle School

Select Grades Served

Middle

Select Comparison Criterion #1

Enrollment

Select Comparison Criterion #2

Economically Disadvantaged

Display ONLY Schools with Higher CCRPI Score(s)

[Request Updates](#)

Similar schools for **Carroll County - Bowdon Middle School**, based on **Enrollment** and **Economically Disadvantaged**.

District	School	CCRPI Score	Enrollment#	Economically Disadvantaged%	Students with Disabilities%	English Language Learners%	Asian%	Black%	Hispanic%	Other%	White%
Carroll County	Bowdon Middle School	0	274	25.2	16.8	3	0.3	10.1	6.7	8.1	74.4
Floyd County	Armuchee Middle School	0	380	23.9	17.4	3.9	2	5.9	5.9	5.9	80.4
Bryan County	Bryan County Middle School	0	425	27.3	17.2	2.4	0.6	20	9	4.9	65.5
Grady County	Whigham Elementary School	0	398	23.9	11.9	3.6	0.5	12.1	8.3	2.7	75.7
Glascock County	Glascock County Middle School	0	341	22.6	14.5	0	0	7	0.3	2.5	89.1



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