Appendix F – Georgia Long-term Occupational Projections 2010-2020

GEORGIA

Workforce Trends

An Analysis of Long-term Employment Projections to 2020

Georgia DOL
Department of Labor
Mark Butler, Commissioner

Workforce Statistics &
Economic Research

Georgia Workforce Trends

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Georgia Workforce Trends – An Analysis of Long-term Employment Projections to 2020 was produced by the Georgia Department of Labor's Workforce Statistics and Economic Research (WS&ER) Division, under the general direction of Mark Watson, Director. The publication's charts, graphs, and analyses were prepared by Corey Smith, Statistical Program Operations Chief. Bill A. Webb, Employment Projections Unit Chief, produced the underlying employment projections, the component upon which the analyses in this publication are based. Research and findings were also produced by numerous WS&ER staff with graphics and layout being provided by Helen Kim.

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Additional Data

For a complete set of industry or occupational employment projections for the state or any of its workforce investment areas, please contact the Workforce Statistics & Economic Research Division of the Georgia Department of Labor at (404) 232-3875 or at workforce_info@dol.state.ga.us.

Table of Contents

Introduction 5
Industry Employment Highlights 7
Occupational Employment Highlights 8
Green Jobs Survey Highlights 10

Industry Employment 11

Industry Sectors Defined 12
Industry Employment By Supersector 13
Change in Employment by Industry Sector 14
Percent Change in Employment by Industry Sector 15
Industry Subsectors with the Most Job Growth 16
High-Technology Industries with the Most Job Growth 17
Fastest Growing Detailed Industries 18
Most Job Growth by Detailed Industry 19
Most Job Losses by Detailed Industry 20

Occupational Employment 21

Job Preparation Levels 22
Job Function Categories 23
Occupational Employment Shares by Major Job Preparation Level 24
Employment Shares by Major Occupational Group 25
Employment Growth by Job Preparation Level 26
Employment Growth by Occupational Group 27
Annual Openings by Job Preparation Level 28
Annual Openings by Occupational Group 29
Fastest Growing Occupations 30
Occupations with the Most Job Growth 31
Occupations with the Most Annual Openings 32
Occupations with the Most Job Losses 33

Continued

Occupational Employment (Continued)

Most Job Growth in Occupations that Require a Bachelor's Degree or More 34
Most Job Growth in Occupations that Require an Associate's Degree or Postsecondary Vocational Training 35
Most Job Growth in Occupations that Require a High School Diploma or Less 36
Most Job Growth in White Collar Occupations 37
Most Job Growth in Service Occupations 38
Most Job Growth in Blue Collar Occupations 39
Most Job Growth in Healthcare Technical & Support Occupations 40
Most Job Growth in Science, Technology, Engineering, & Mathematics (STEM) Occupations 41
Job Growth in Bio-Technology Occupations 42

Introduction

Deciding on a career is like anything else—a person is more likely to succeed if he or she has a solid plan. And if the planning involves education, training, or a career, it is imperative that good information about the job market is available. Concerns about things like the number of jobs that will exist in the future, their rate of pay, and the kind of education and training that will be required can be difficult to sort out. Fortunately for Georgians, this publication addresses these issues.

Georgia Workforce Trends – An Analysis of Long-term Employment Projections to 2020 provides a graphic summary of the latest trends in employment growth (or decline) covering the decade from 2010 to 2020. These projections are a key to good decision- making for career counselors, education program planners, and policymakers. In a changing economy, they help to glimpse into the future—and to prepare for it.

The graphs depict trends in two key areas: industries and occupations. The projections were developed using models that incorporated the latest available assumptions about changes in technology, employers' staffing patterns, and business practices. As such, they replace all statewide long-term employment projections previously released by the Georgia Department of Labor.

To help understand these projections, it is important to understand the difference between an industry and an occupation. An occupation refers to a method of classifying jobs according to the type of work performed. People who supervise children are in the occupation of childcare worker, for example. An industry, on the other hand, refers to a way of classifying jobs and businesses according to the type of goods produced or services provided. For example, any job in a childcare center—from childcare worker to cook—is classified as part of the child daycare services industry.

All of the graphs in this report provide answers to some basic questions about employment in Georgia: How many new jobs will there be? How fast are the number of jobs changing? and How many job openings will be available? Graphs that show numeric employment change illustrate how many new jobs there will be (the actual number of jobs gained or lost over the projections decade). In general, occupations and industries with the greatest numeric increases are those that already have large numbers of workers. Graphs showing percent change in employment illustrate how fast the number of jobs are changing (the rate of job growth or decline during the decade). It is important to remember that fast growth does not always mean many new jobs. Graphs that show annual job openings include not only openings from growth in the number of jobs, but also openings from the need to replace workers who retire or permanently leave an occupation for some other reason.

A Note about the Economy in 2010

For this set of employment projections, the base year, 2010, happened to follow one of the most significant downturns in Georgia's and the nation's economic history. The Great Recession, which lasted from December 2007 to June 2009, greatly affected the number of jobs in the economy. Though we were technically out of the Great Recession, 2010 continued to harbor many of the adverse effects of the recession. Employment in Georgia had fallen significantly over the duration of the economic downturn and had not rebounded as the economy slowly turned around. Construction, financial activities, and government, along with the occupations within those industries took a large brunt of the negative job growth in the state as a result of the hard economic times.

When developing long-term projections, however, our focus is on long-term employment trends. Georgia's population and labor force have been aging and their growth rates slowing. These long-term trends are expected to continue, regardless of the fluctuations in the economy. The projected changes in employment between 2010 and 2020 include regaining jobs that had been lost during the downturn and accounting for the needs of an increasingly older population.

In 2020

Industry Employment Highlights

- Total employment in Georgia is projected to grow to over 4.6 million in 2020, an increase of 11.7 percent from 2010 employment levels. The gain amounts to over 483,000 new jobs for the state.

- Industry employment growth will be concentrated in the service-providing sectors of the economy. Ninety-seven percent of the job growth will be in the service-providing sectors and three percent will be in the goods-producing sectors. The service-providing sectors will account for 4.1 million jobs and goods-producing sectors will account for nearly 550,000.

- Health care and social assistance will lead all industry sectors both in terms of new job growth and rate of growth. It will account for one-fourth of all new jobs created in the state through 2020.

- The construction industry will gain over 28,600 jobs over the projection period as it continues to regain jobs lost during the recent recession. This sector is poised for job growth if the state's green job initiatives are productive.

- Manufacturing jobs will decline at a slower pace, losing roughly 8,600 jobs over the projection period. Manufacturing jobs in the state peaked in 1997 when there were about 555,000 jobs in the sector, in 2010 there were about 343,000 manufacturing jobs and there will be around 334,000 through 2020.

- The health services and educational services sub-sectors will each show significant growth by 2020. The health services sub-sector will grow by 120,000 jobs and employ nearly 540,000. Educational services will add over 63,000 jobs and employ almost 445,000.

- The leisure and hospitality sector will see significant employment gains through 2020. The accommodation and food services sub-sector will grow by nearly 55,000 workers as employment will reach 388,000. The arts, entertainment, and recreation sub-sector will grow by about 10,000 over the projection period as employment tops 48,500.

- Government jobs are slated to contract over the projection period. Through 2020 government jobs (not including education) in Georgia will decline by just under 2,000 when employment will be just under 304,000 statewide.

In 2020

Occupational Employment Highlights

- 25.6 percent of new occupations in Georgia will generally require a bachelor's degree or more through 2020.

- Workers in occupations generally requiring a bachelor's degree or more will comprise 20.6 percent of all jobs through 2020, up from 20.0 percent in 2010. Workers in occupations generally requiring some formal postsecondary education but less than a bachelor's degree will comprise 11.1 percent of all jobs through 2020, up from 10.7 percent in 2010; while workers in occupations that generally require a high school diploma or less will comprise 68.3 percent of all occupations through 2020, down from 69.3 percent in 2010.

- Service occupations will grow by 16.6 percent over the projections period; adding about 122,000 workers and bringing total service occupational employment to about 855,000 in 2020. White collar occupations in the state will grow by 11.9 percent or about 293,000 from 2010 to 2020; as white collar employment reaches 2.76 million. Blue collar workers will increase by 7.4 percent as nearly 100,000 Georgians are projected to hold these jobs by 2020.

- Employment will grow in occupations at every educational level through 2020. More than 165,000 new jobs will be created in occupations that require a high school diploma or equivalent; nearly 124,000 new jobs will be created in occupations generally requiring less than a high school diploma; just under 93,000 new jobs will be in occupations generally requiring a bachelor's degree; 39,000 new jobs will be in occupations that generally require an associate's degree; about 31,000 new jobs will be in occupations requiring some college or postsecondary award; nearly 19,300 new jobs will be created in occupations that generally require a doctoral/professional degree; and 11,600 new jobs will be in occupations generally requiring a master's degree;

- With the exception of farming, fishing, and forestry occupations, all occupational groups will experience job growth over the projection period. Office and administrative support occupations will have the largest gains – almost 63,000 new jobs through 2020; followed by food preparation and serving occupations adding over 55,000 new jobs, healthcare practitioners & technical occupations adding nearly 49,000 new jobs and education, training, and library occupations adding about 48,000 new jobs.

- Occupations growing at the fastest rate through 2020 include healthcare support occupations growing by 26.6 percent to almost 108,000 jobs; healthcare practitioners & technical occupations growing by 25.1 percent

Occupational Employment Highlights Continued

to nearly 244,000 jobs; and personal care and service occupations growing by 23.5 percent to almost 116,000 jobs.

- Occupations generally requiring a high school diploma or equivalent account for the majority of all job openings. The openings will come from both employment growth—the creation of new jobs—and from replacements—filling positions of workers who retire or leave an occupation permanently for some other reason.

- Several of the twenty fastest growing occupations in Georgia will be healthcare related through 2020 and include occupations such as home health aides and dental hygienists; however, the list also includes meeting and convention planners, medical secretaries, interpreters and translators, and coaches and scouts.

- Combined food prep workers (22,000), registered nurses (21,000), retail salespersons (14,000), general office clerks (12,000), and waiters and waitresses (10,000) will gain the most new jobs through 2020.

- Retail salespersons, cashiers, combined food prep workers, waiters and waitresses, and customer service representatives will top the list of most annual job openings. Included in the top twenty list of most job openings in Georgia through 2020 are registered nurses, elementary school teachers, heavy and tractor-trailer truck drivers, teacher assistants, management analysts, stock clerks and order fillers, and executive secretaries and administrative assistants.

- Farming, fishing, and forestry occupations in Georgia will experience the most job losses through 2020; followed by postal service mail carriers, switchboard operators, data entry keyers, and shipping, receiving, and traffic clerks. Although declining, there will still be some job openings in these occupations due to job replacements.

- Job growth in occupations that generally require a master's degree or a doctoral/professional degree include postsecondary educators and administrators, medical and public health social workers, lawyers, family and general practitioners, dentists, and physical therapists.

- The majority of job growth in occupations that generally require a bachelor's degree or more will be in K-12 education, computer technology, and accounting. Almost all will be Hot for the projection period because of their rapid growth, high wages, and plentiful job openings.

Occupational Employment Highlights Continued

- Job growth through 2020 in occupations generally requiring some college, postsecondary non-degree award, or an associate's degree are dominated by jobs related to healthcare. The group includes registered nurses, dental hygienists, medical and clinical lab technicians, and licensed practical nurses but also includes occupations such as firefighters, computer support specialists, construction managers, hairdressers, and preschool teachers.

- Job growth in occupations that require a high school diploma or less will be heavily influenced by several large-employment service occupations. General office clerks, customer service reps, retail salespersons, cashiers, and teacher assistants will all add substantial new jobs over the decade.

- In terms of white collar jobs, healthcare occupations will grow at the fastest rate through 2020 while office and administrative support occupations will have the most absolute growth.

- Service occupations growing the fastest over the projection period are healthcare support occupations as well as personal care occupations. Food prep and serving related jobs are service occupations projected to have the most job growth through 2020. However, many of these jobs are low-skilled and will experience low wages and high turnover.

- Transportation and material-moving occupations are expected to add the most blue collar jobs in the state through 2020. Construction and extraction occupations are expected to grow the fastest. Both transportation and construction related occupations are expected to grow as a result of road, bridge, highway, and waterway upgrades and improvements expected in Georgia through 2020.

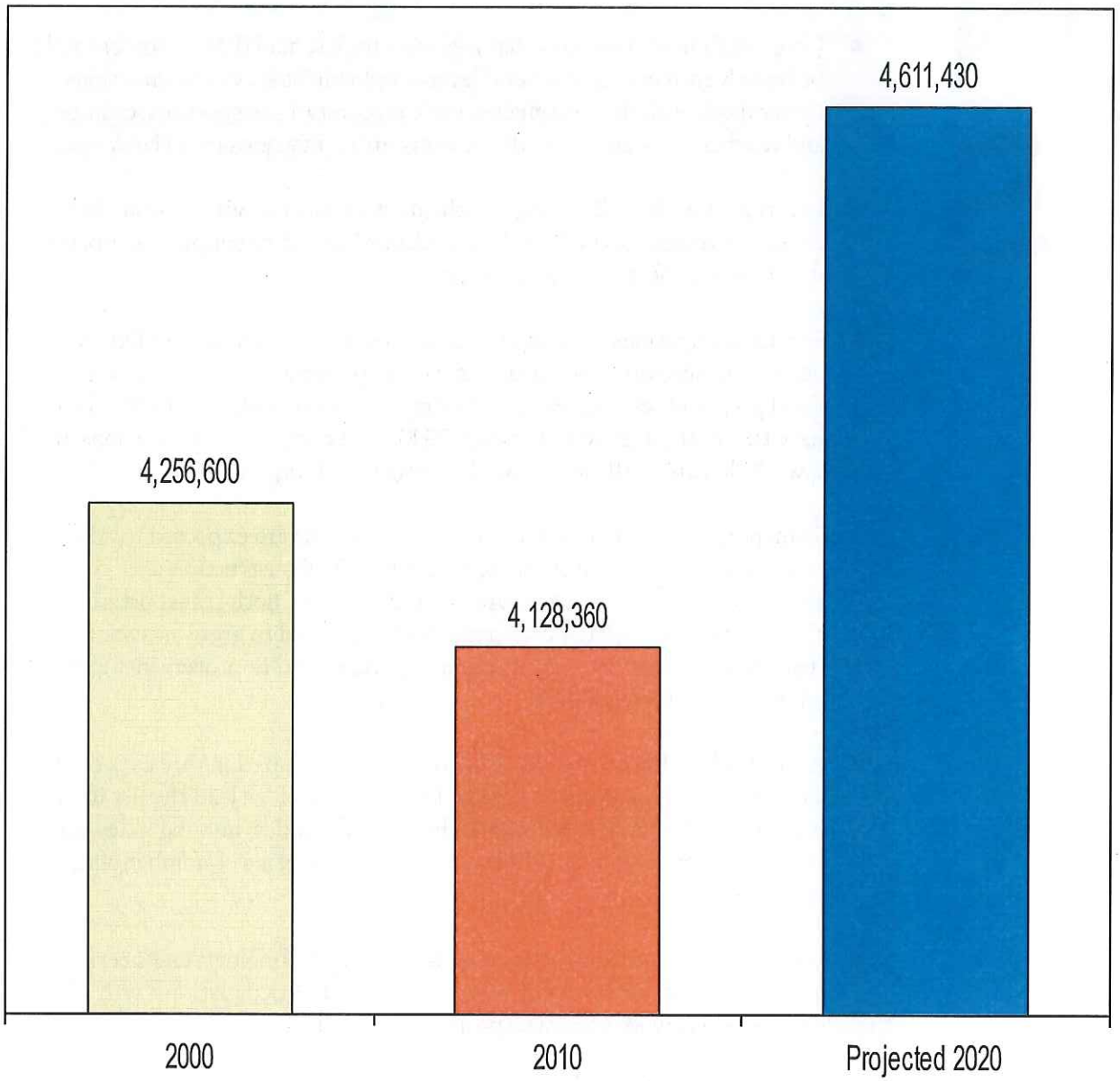
- Almost all healthcare and healthcare support occupations are expected to grow over the projection period. Home health aides lead the list in rate of growth while registered nurses, home health aides, nursing aides, and licensed practical nurses will lead healthcare in terms of number of new jobs.

- Careers in (natural/life) science, (information) technology, engineering, and mathematics, commonly referred to as STEM occupations, will add over 79,000 new jobs over the projection period.

- Biotechnology, the life sciences component of STEM occupations, is projected to add over 2,000 new jobs to Georgia's economy over the ten-year projection period. With the on-going statewide initiative to recruit biotech firms, jobs in this category could grow more than expected.

Industry Employment

By 2020, employment in Georgia is projected to climb past 4.6 million, as over 483,000 new jobs are expected to be added in the state. Over the ten-year projection period, 2010 to 2020, this equates to an average of over 48,300 jobs added per year and an annual growth rate of 1.1 percent.



Note: Employment data includes workers from the Current Employment Statistics survey and also includes self-employed, unpaid family workers, and agriculture, forestry, fishing, and hunting workers.

Industry Sectors Defined

Industries shown in the following graphs are defined primarily according to the North American Industry Classification System (NAICS), a system used by the U.S. Bureau of Labor Statistics to classify establishments into industry categories. Industries fall into either goods-producing or services-providing sectors.

Goods-producing Sectors

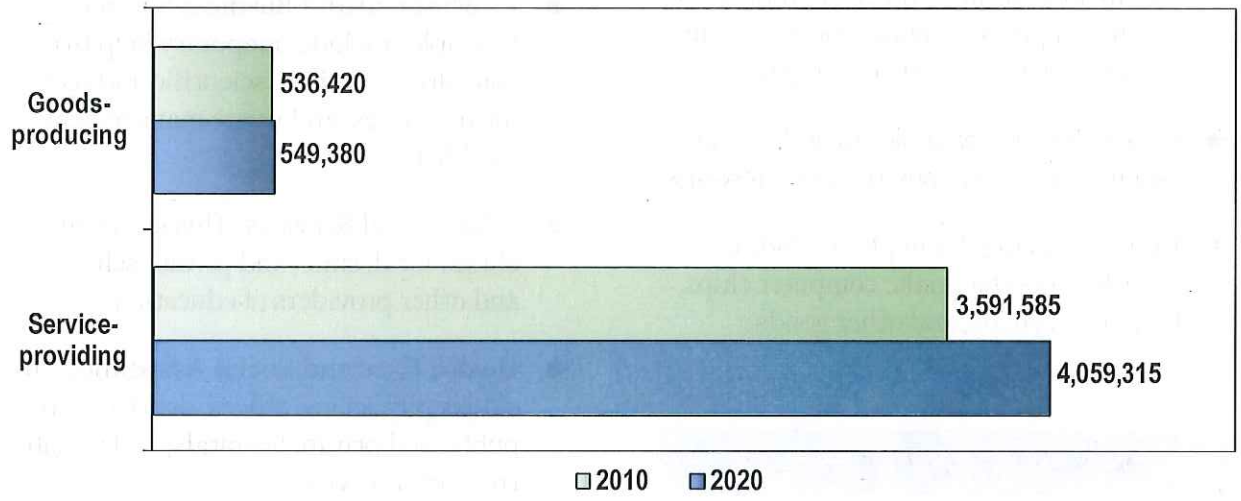
- **Natural Resources and Mining.** Examples include animal and crop production, logging, support activities for agriculture, and oil and gas extraction companies.
- **Construction.** Examples include bridge-building and home construction companies.
- **Manufacturing.** Examples include establishments that make computer chips, breakfast cereals, and other goods.

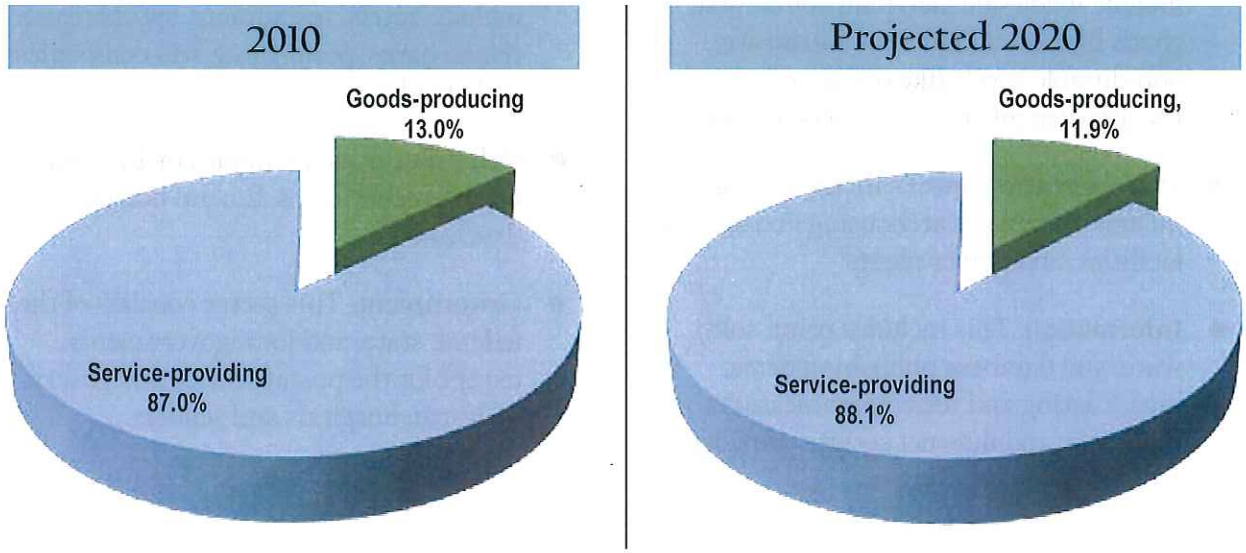
Services-providing sectors

- **Wholesale & Retail Trade.** Examples include wholesale merchants of durable goods like automobiles and furniture, non-durable goods like drugs and groceries, department stores, and gas stations.
- **Transportation and Utilities.** Examples include airports, warehousing and storage facilities, and power plants.
- **Information.** This includes print, software, and database publishing firms; broadcasting and telecommunications providers; and internet service providers.
- **Financial Activities.** Industries include finance, insurance, real estate, and rental services.
- **Professional and Business Services.** Examples include temporary help firms, consulting services, scientific and technical services, and waste management establishments.
- **Educational Services.** This sector includes local, state, and private schools, and other providers of education.
- **Health Care and Social Assistance.** Includes physicians' offices, dentists' offices, public and private hospitals, and privately run social services.
- **Leisure and Hospitality.** Examples include hotels, restaurants, sports teams, theme parks, performing arts companies and arcades.
- **Other Services.** Examples include automotive repair shops, funeral homes, and drycleaners.
- **Government.** This sector consists of the federal, state, and local governments, except for the postal service and government-run hospitals and schools.

Industry Employment By Supersector

Both the service-providing and goods-producing sectors will add jobs through 2020. Total employment in the service-providing sectors will increase slightly from 87.0 percent of total employment in 2010 to 88.1 percent by 2020. Goods-producing employment will decrease slightly as it moves from 13.0 percent of total employment in 2010 to 11.9 percent in 2020. Employment in the Georgia's service-providing sectors will grow by over 467,000 over the projection period while the goods-producing sectors will add just under 13,000 jobs

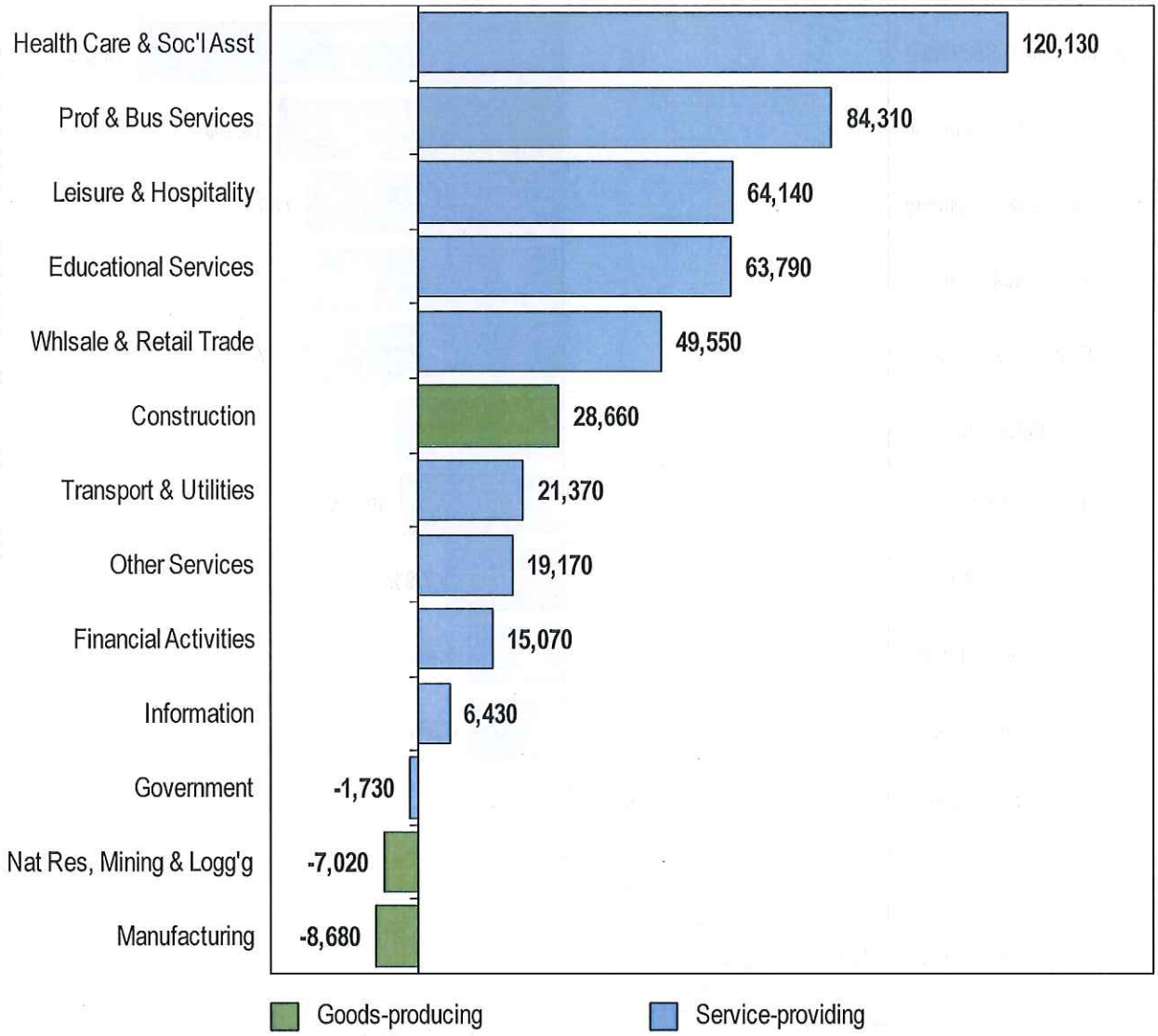




Industry Supersector Employment Shares, 2010-2020

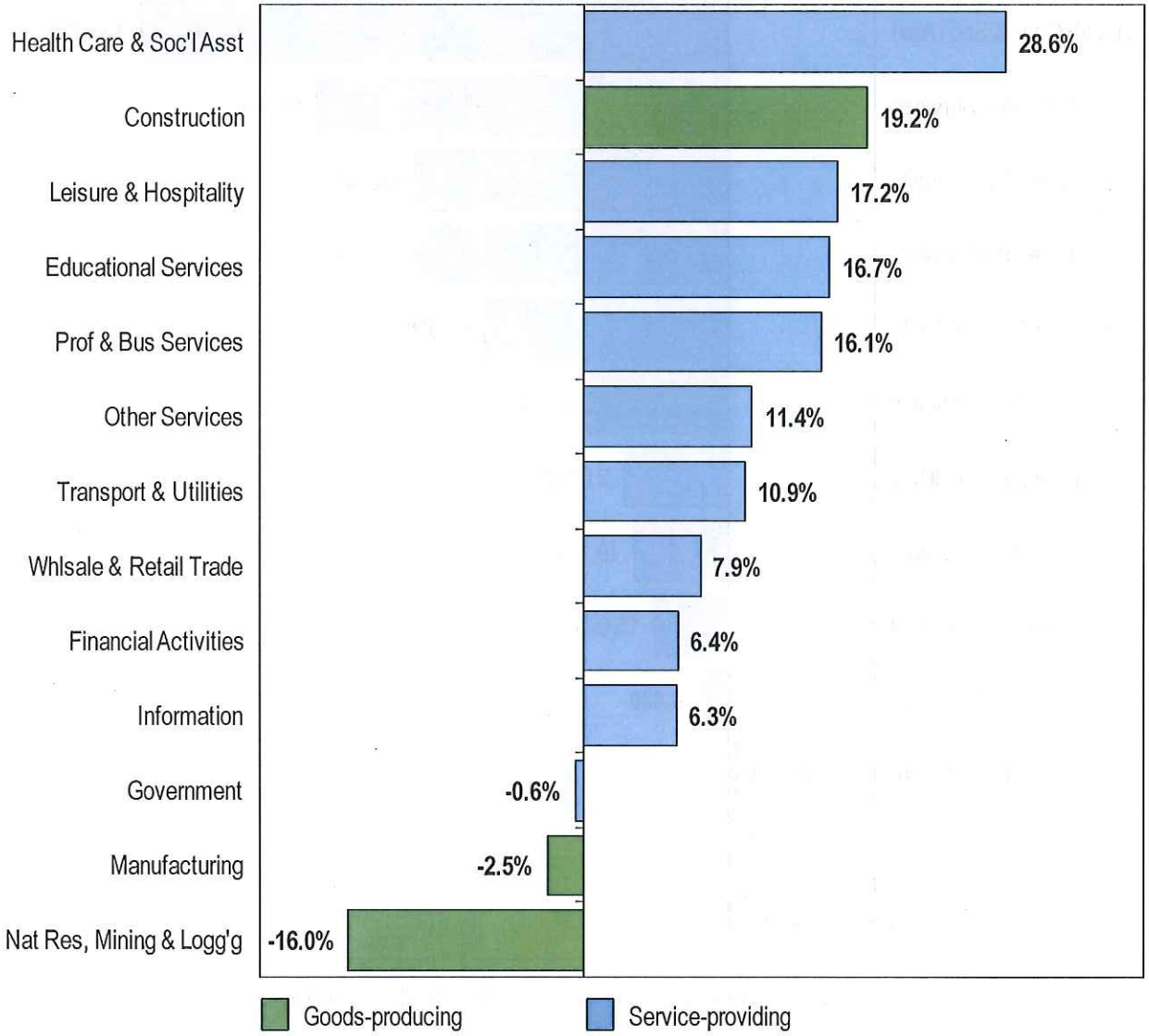
Change in Employment by Industry Sector

The health care and social assistance industry will add the most jobs through 2020 as it is projected to increase employment by over 120,000. This is the lone industry expected to add more than 100,000 jobs over the projection period. The growth in health care and social assistance jobs are driven by the aging of the population and the increased demand to care for them. Professional and business services, leisure and hospitality, and educational services will also grow significantly as new and emerging businesses in the state expand, a growing population continues to look for entertaining activities, and the demand to improve and expand educational opportunities for Georgians accelerate.



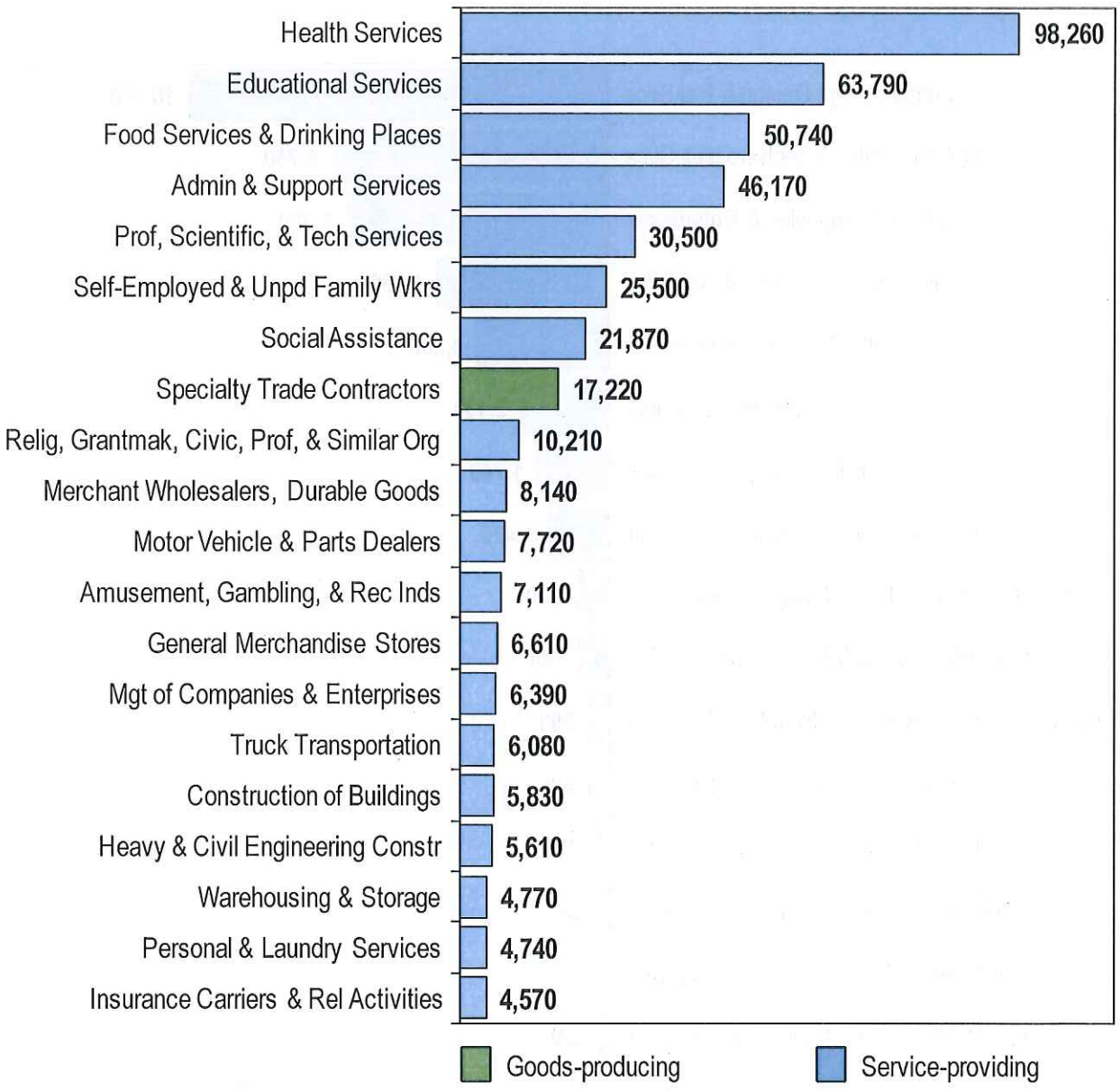
Percent Change in Employment by Industry Sector

Health care and social assistance is projected to have the highest rate of employment growth over the projection period. Through 2020, employment in the industry will grow by 28.6 percent in the state. Employment in construction will grow by 19.2 percent as Georgia continues its rebound from the economic downturn, coined the "Great Recession," that took thousands of jobs from the industry. Leisure and hospitality, educational services, and professional and business services will also lead in job growth. Natural resources, mining, and logging will lead the way in negative employment growth from 2010 to 2020 in Georgia, followed by manufacturing and government.



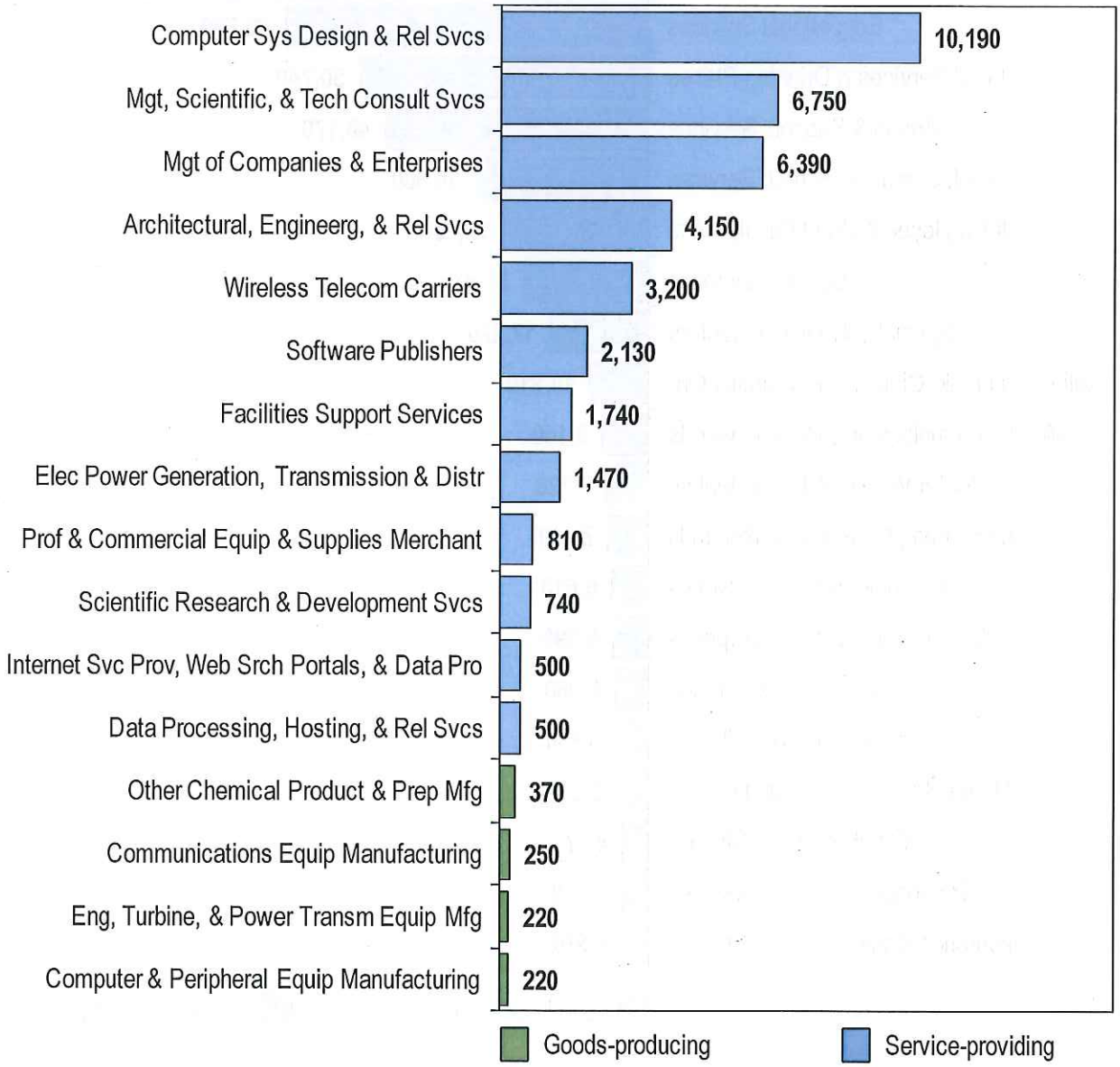
Industry Subsectors with the Most Job Growth

Listed are the top twenty industry subsectors for projected growth from 2010 to 2020. Ninety industry subsectors (components of industry sectors) were analyzed with health services projected to grow the most as it will add over 98,000 jobs over the projection period. Employment in educational services, food services and drinking places, administrative and support services, and professional and technical services round out the top five in terms of job growth.



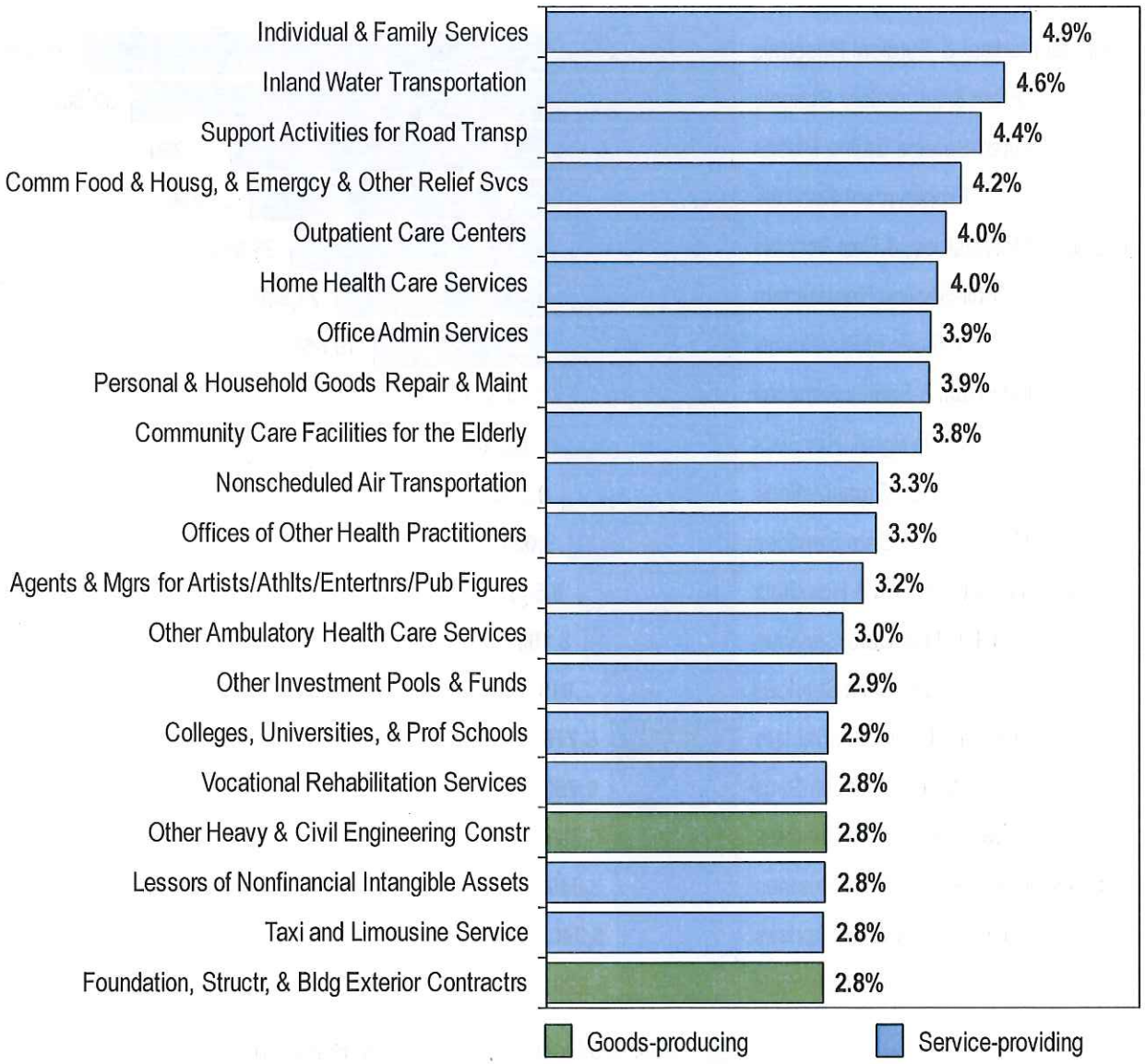
High-Technology Industries with the Most Job Growth

The high technology industry includes firms that design, develop, and introduce new products, processes and innovations by applying scientific and technical knowledge. High technology receives a good bit of attention due to its potential to create well-paying jobs. The high-tech industries will add nearly 38,000 new jobs to Georgia's economy over the projection period. High-tech includes computer system design & related services which will add over 10,000 jobs by 2020; management, scientific, and technical services will add nearly 6,800 jobs; and management of companies will grow by almost 6,400.



Fastest Growing Detailed Industries

Detailed industries growing at the fastest annual rate from 2010 to 2020 are highly focused in healthcare and social assistance. Eight of the top twenty fastest growing industries are in the healthcare and social assistance sector mainly due to an aging of Georgia's population and advances in medical technology. Eighteen of the top twenty fastest growing detailed industries are service-providing while only two are goods-producing. With Georgia poised to expand its ports and increase its presence in port and shipping related activities, two of the top three fastest growing detailed industries are transportation related.



Occupational Employment

The previous section analyzed projected growth and decline in industry employment. This section examines projected changes in a closely related area—that of occupational employment. The Georgia Department of Labor has analyzed several factors affecting employment growth for nearly 800 detailed occupations. Occupations in this publication are defined according to the Standard Occupation Classification (SOC) system, which is prescribed by the U.S. Bureau of Labor Statistics. Graphs of occupational trends are displayed by the educational level usually required for employment and by the kinds of tasks that workers typically perform. Educational levels include eight categories that range from a doctoral or professional degree to less than high school education.

Subsequent pages present graphical displays of occupational trends by percentage change, numerical change, and annual openings. Each of these is a useful measure of job quality. Occupations with fast growth, many new positions, or many job openings generally offer more favorable conditions for mobility and advancement. Hot jobs combine all of these attributes with high wages to produce the most attractive job opportunities in Georgia. Each occupation designated as Hot in this report meets all three of the following criteria:

- Annual job growth greater than the statewide average of 1.1 percent
- Annual wage greater than the 2012 statewide average of $43,200 per year
- At least 100 projected job openings per year to the year 2020

Education and Training Classification System

The Bureau of Labor Statistics (BLS) new education and training classification system consists of individual assignments to each occupation. The categories are 1) typical education needed for entry, 2) commonly required work experience in a related occupation, and 3) typical on-the-job training needed to obtain competency in the occupation. The objective of the system is to present a more complete picture of the education and training needed for entry into a given occupation and to become competent at performing the occupation. BLS assigns the following categories to each occupation:

Entry level education—represents the typical education level needed to enter an occupation. There are eight possible assignments for this category.

1. Doctoral or professional degree
2. Master's degree
3. Bachelor's degree
4. Associate's degree
5. Postsecondary non-degree award
6. Some college, no degree
7. High school diploma or equivalent
8. Less than high school

Work experience in a related occupation—indicates if work experience in a related occupation is commonly considered necessary by employers for entry into the occupation, or is a commonly accepted substitute for formal types of training. Assignments for this category will be more than 5 years, 1-5 years, less than 1 year, or none.

Typical on-the-job training—indicates the typical on-the-job training needed to attain competency in the occupation. Assignments for this category include internship/residency; apprenticeship; long-term, moderate-term, or short-term on-the-job training; or none.

System Codes

Workforce Statistics & Economic Research Division used the following system codes to represent the new education and training assignments.

Education Category

Education Code	Education Title	Education Code	Education Title
1	Doctoral or professional degree	5	Postsecondary non-degree award
2	Master's degree	6	Some college, no degree
3	Bachelor's degree	7	High school diploma or equivalent
4	Associate's degree	8	Less than high school

Job Function Categories

Job function categories include 14 groups, each of which belongs to one of the following three areas: blue collar, white collar, or service occupations. A description of each occupational group is presented below in the same order as used in the SOC system.

White collar occupational group

- Management, business, and financial operations occupations – workers in these jobs direct the activities of business, government, and other organizations and perform tasks related to finance and business.
- Professional and related occupations – workers in these occupations are in education, healthcare, science, information technology, the arts, and a variety of other jobs.
- Sales and related occupations – workers in this group are involved in the sale of goods and services, both to businesses and to consumers.
- Office and administrative support occupations – workers in this group prepare and file documents, interact with the public, and gather and distribute goods and information.

Service occupational group

- Healthcare Support Occupations – workers in these occupations are involved with supporting technical healthcare workers.
- Protective Service Occupations – this group of workers is entrusted with protecting the public.
- Food Preparation & Serving Related Occupations – these workers prepare and serve food.
- Building & Grounds Cleaning & Maintenance Occupations – workers in this group of occupations are involved with cleaning and maintaining buildings and grounds.
- Personal Care & Service Occupations – involved with providing care and service to the public.

Blue collar occupational group

- Farming, fishing, and forestry occupations – workers in this group tend and harvest renewable resources.
- Construction and extraction occupations – This group includes workers in construction and building trades and in oil and gas extraction and mining.
- Installation, maintenance, and repair occupations – workers in this group install and maintain all types of equipment.
- Production occupations – most people in these occupations work as assemblers or machine operators, primarily in manufacturing industries.
- Transportation and material-moving occupations – workers in these occupations move people or materials.

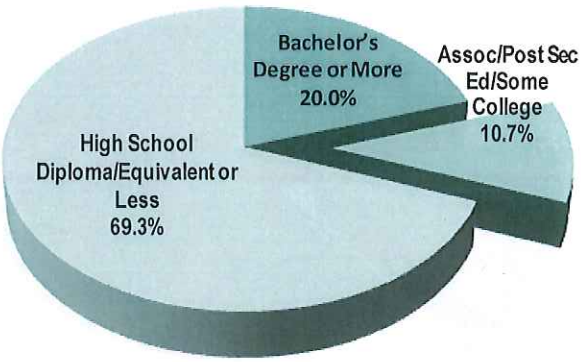
Occupational Employment by Educational Category

In 2010 there were over 4.1 million workers in various occupations throughout Georgia. In 2020, total statewide employment is projected to be more than 4.6 million. Nearly 2.9 million jobs in 2010 were in occupations typically requiring a high school diploma or less. In 2020, this category is projected to grow to nearly 3.2 million. While the group is expected to grow over the projection period and add nearly 290,000 jobs, its share of total jobs is expected to decline by 1.0 percent; from 69.3 percent in 2010 to 68.3 percent in 2020.

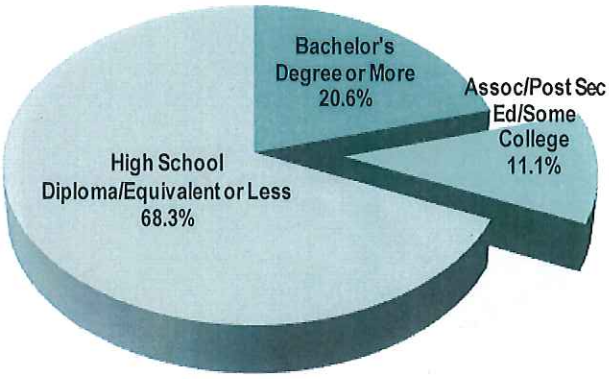
Occupations typically requiring an associate's degree or some form of postsecondary education less than a bachelor's degree will add about 70,000 jobs through 2020. This category will grow from about 441,000 in 2010 when the group made up 10.7 percent of all workers, to 511,000 in 2020 when it is projected to make up 11.1 percent of workers.

In 2010, occupations that usually require a bachelor's degree or higher were held by 20.0 percent of, or about 826,000, workers in the state. This group will grow to 20.6 percent, just under 950,000 workers, by 2020. Occupations requiring a bachelor's degree or higher will add about 124,000 jobs through the projection period.

2010



Projected 2020



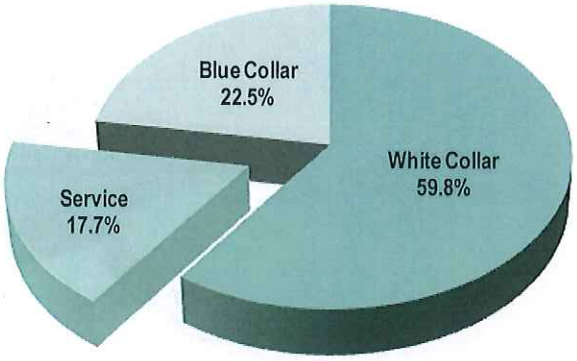
Employment by Major Occupational Group

Occupational employment can be classified by the type of work performed, i.e. white collar, blue collar, or service. White collar work regularly makes up the largest portion, about 60.0 percent of jobs. In 2010, there were 2.5 million white collar occupations in Georgia, about 59.8 percent of all jobs. By 2020 the number of white collar occupations in the state will grow by 11.9 percent or 293,000, when there are projected to be just under 2.8 million jobs in the classification which represents 59.9 percent of all jobs in the state.

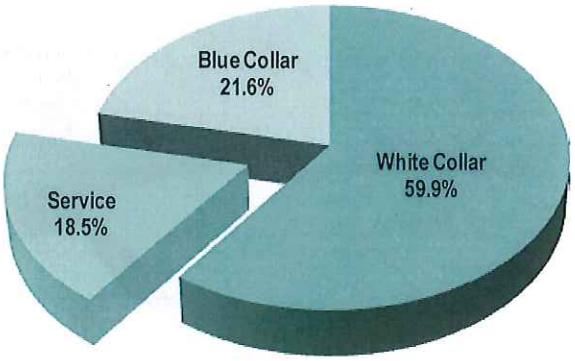
Blue collar occupations will have the least growth and grow at the slowest rate over the projection period. The occupational group will add about 68,000 jobs through 2020 as it grows by 7.4 percent. There were 929,000 blue collar jobs in 2010 representing 22.5 percent of total employment. The category is expected to grow to 997,000 jobs by 2020 and represent 21.6 percent of all jobs.

Service occupations are expected to grow the fastest over the projection period. The classification will grow by 16.6 percent or nearly 122,000 jobs by 2020. In 2010 just short of 733,000 service workers made up 17.7 percent of all jobs in the state. By 2020 there will be about 855,000 service workers in Georgia making up about 18.5 percent off all jobs.

2010



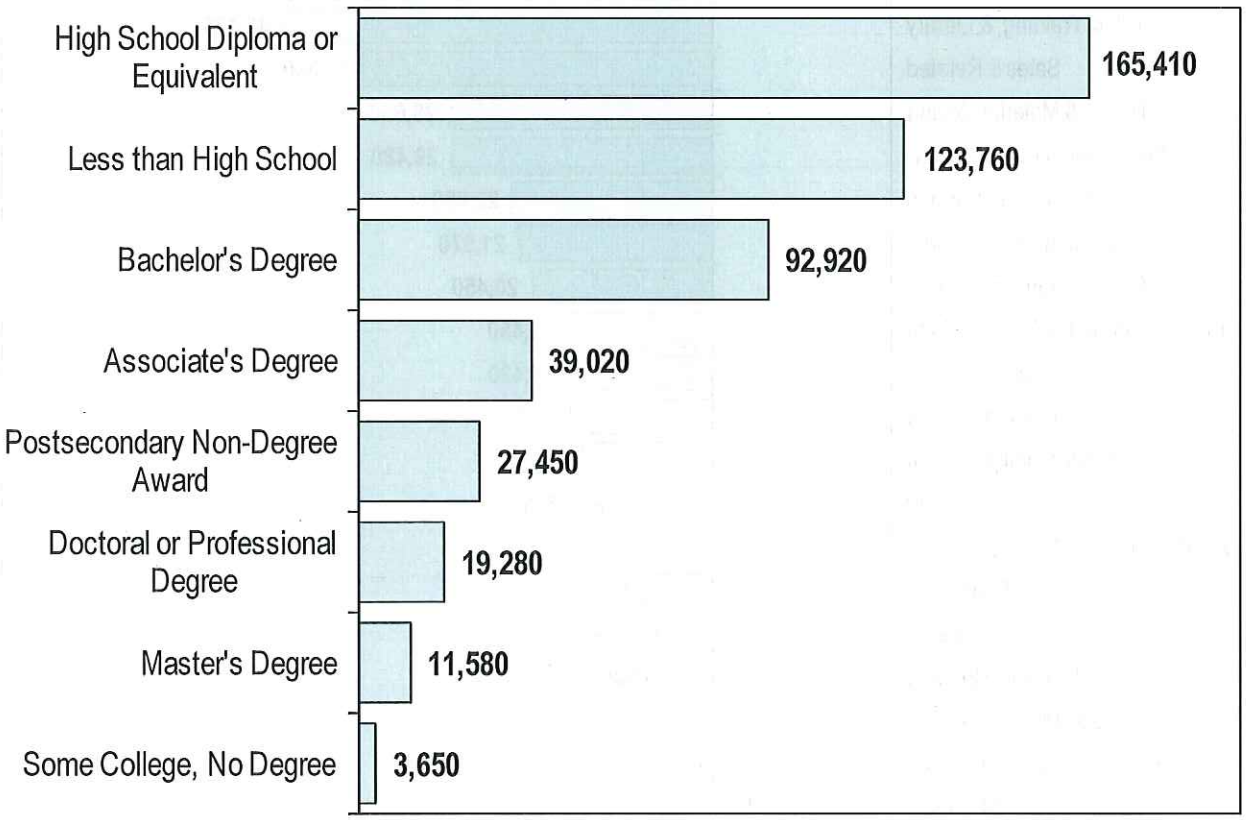
Projected 2020



Employment Growth by Educational Category

Employment in all education classifications will see job growth through 2020. Occupations requiring a high school diploma or equivalent will see the most growth with the group adding over 165,000 new positions, comprising 34.2 percent of the 483,000 jobs to be added in Georgia over the projection period. Occupations typically requiring less than high school education are projected to grow by nearly 124,000 by 2020.

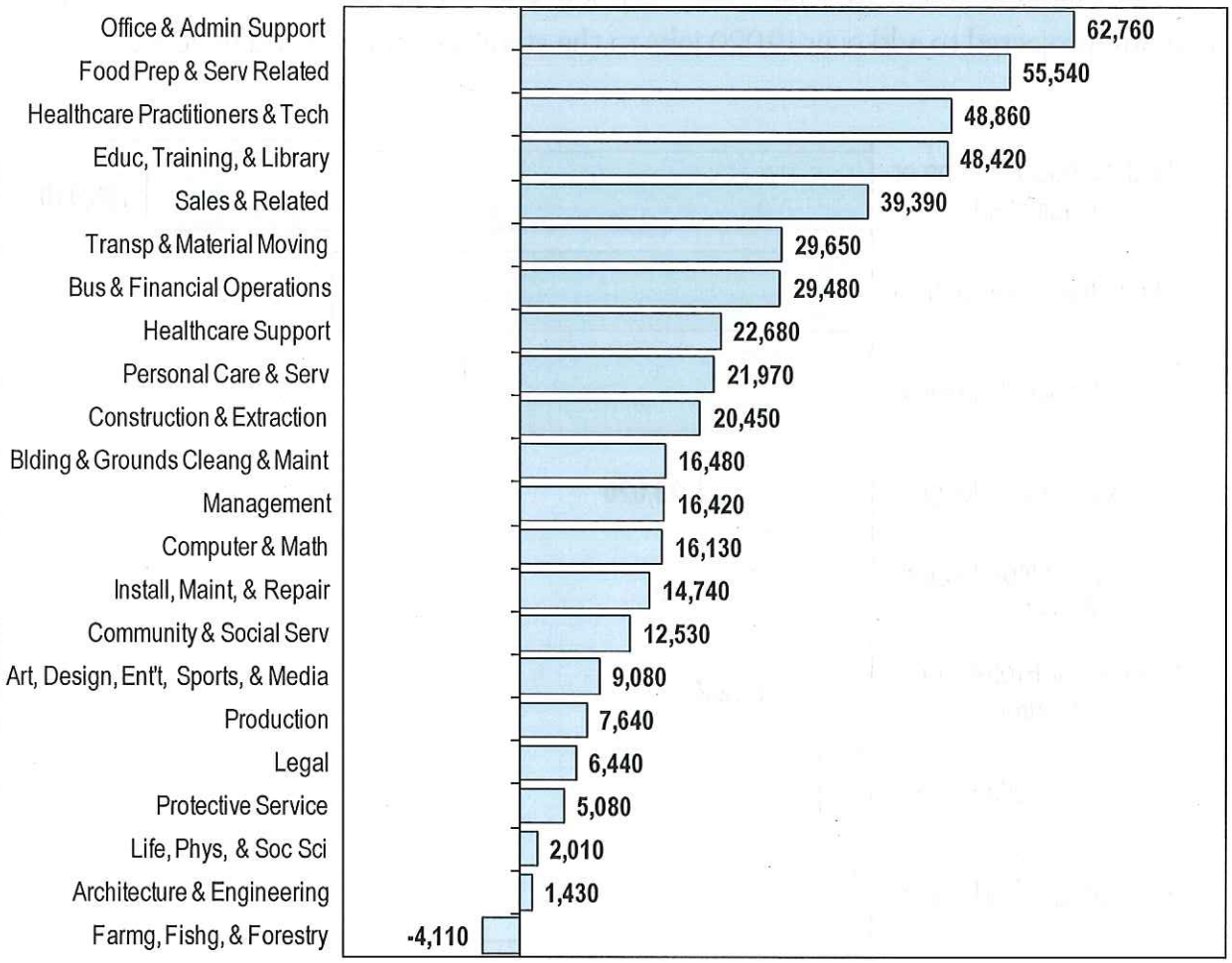
As the need for a more educated workforce in the state continues to grow, the occupational groups that include education after high school will increase. From 2010-2020, occupations in Georgia that generally require a bachelor's degree will grow by nearly 93,000 as over 780,000 Georgians will be employed in the group while occupations typically requiring an associate's degree will see employment levels rise by 39,000 with nearly 273,000 people working in those types of jobs. Occupations requiring a doctoral or professional degree, which have the highest average wage in the state at $98,000 per year, are projected to add over 19,000 jobs to the state's economy through 2020.



Employment Growth by Occupational Group

With the exception of farming, fishing, & forestry occupations which are slated to contract by over 4,000, all occupational groups will see job growth through the projection period. Employment growth in Georgia will be led by white collar occupations, as four of the top five occupational groups in job growth are white collar jobs. Office and administrative support occupations will grow the most over the projection period, as it is slated to add nearly 63,000 new jobs through 2020.

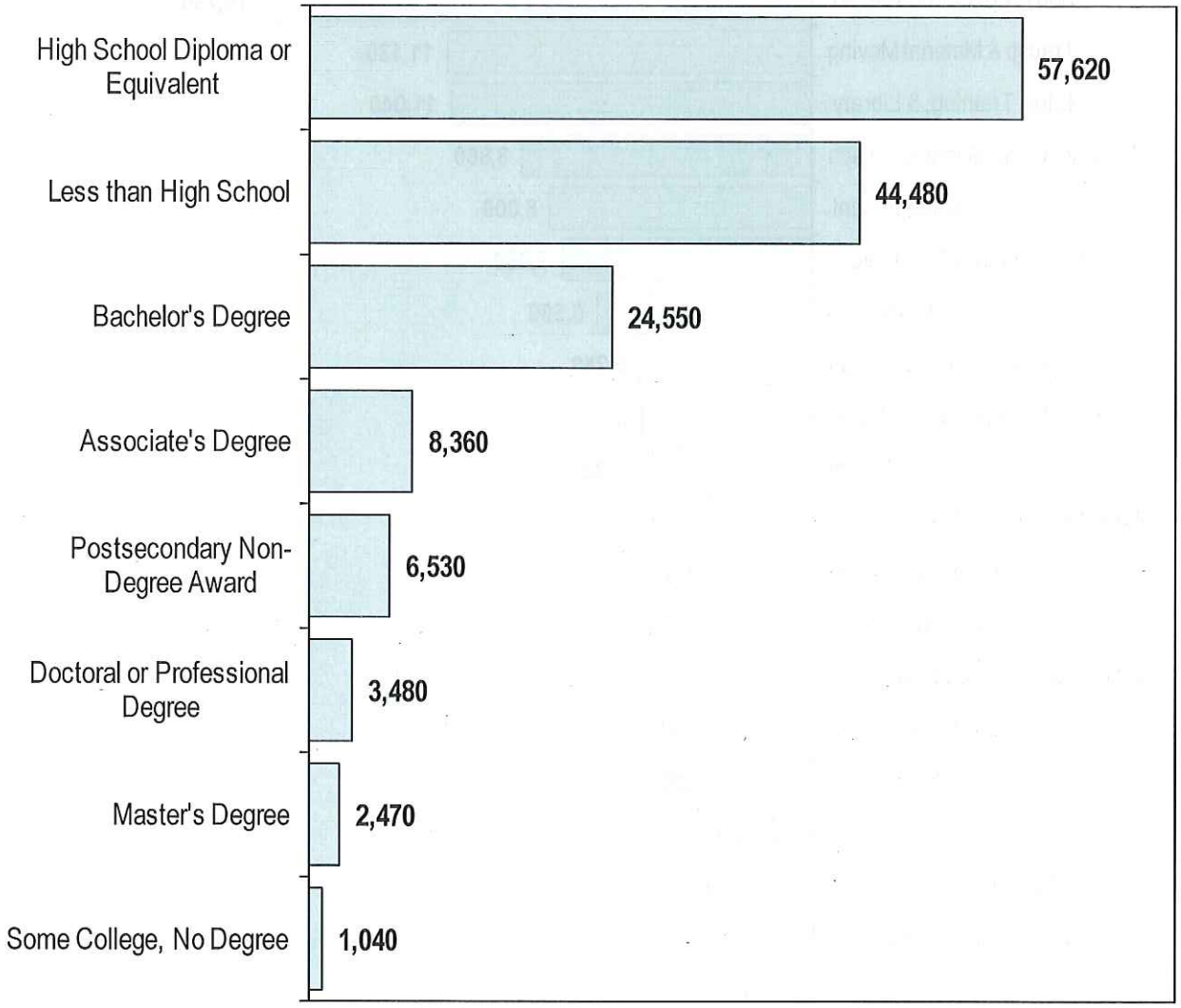
Food preparation and service related occupations will add the second most jobs in Georgia through the projection period. This service occupation will see employment increase by nearly 56,000 as it is a large volume occupational group and many of its occupations do not generally require education beyond high school.



Annual Openings by Educational Category

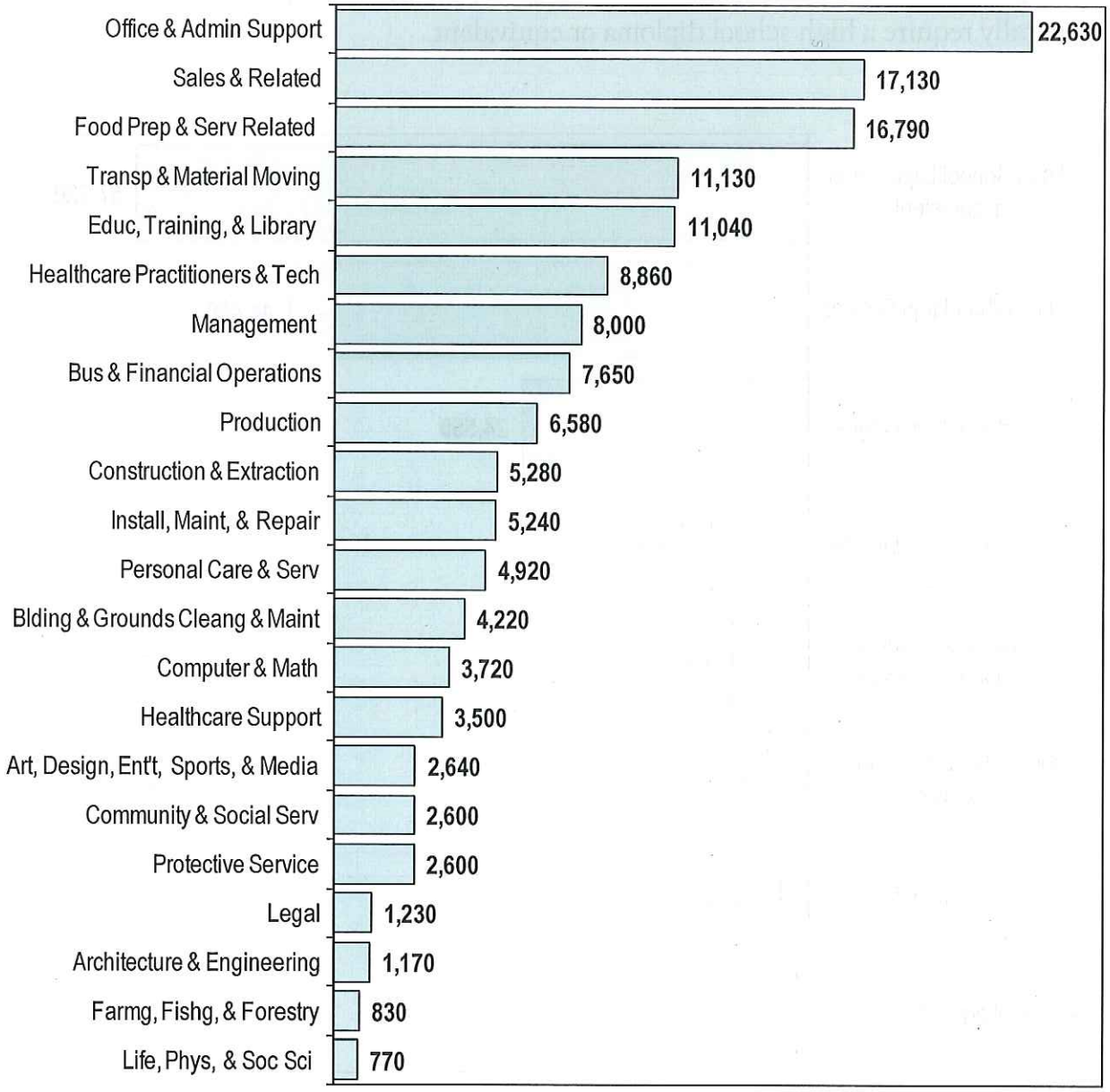
Job openings occur when more positions are added to the economy through new/expanding businesses or replacements due to workers that may have retired or who leave an occupation for some other reason. Of the nearly 149,000 annual openings projected in Georgia through 2020, nearly 98,000 or 65.9 percent of them will be due to the need to replace workers that have left an occupation. The other 51,000 or 34.1 percent will be due to new/expanding businesses.

Occupations that will have the most annual job openings through 2020 in the state will generally require a high school diploma or equivalent.



Annual Openings by Occupational Group

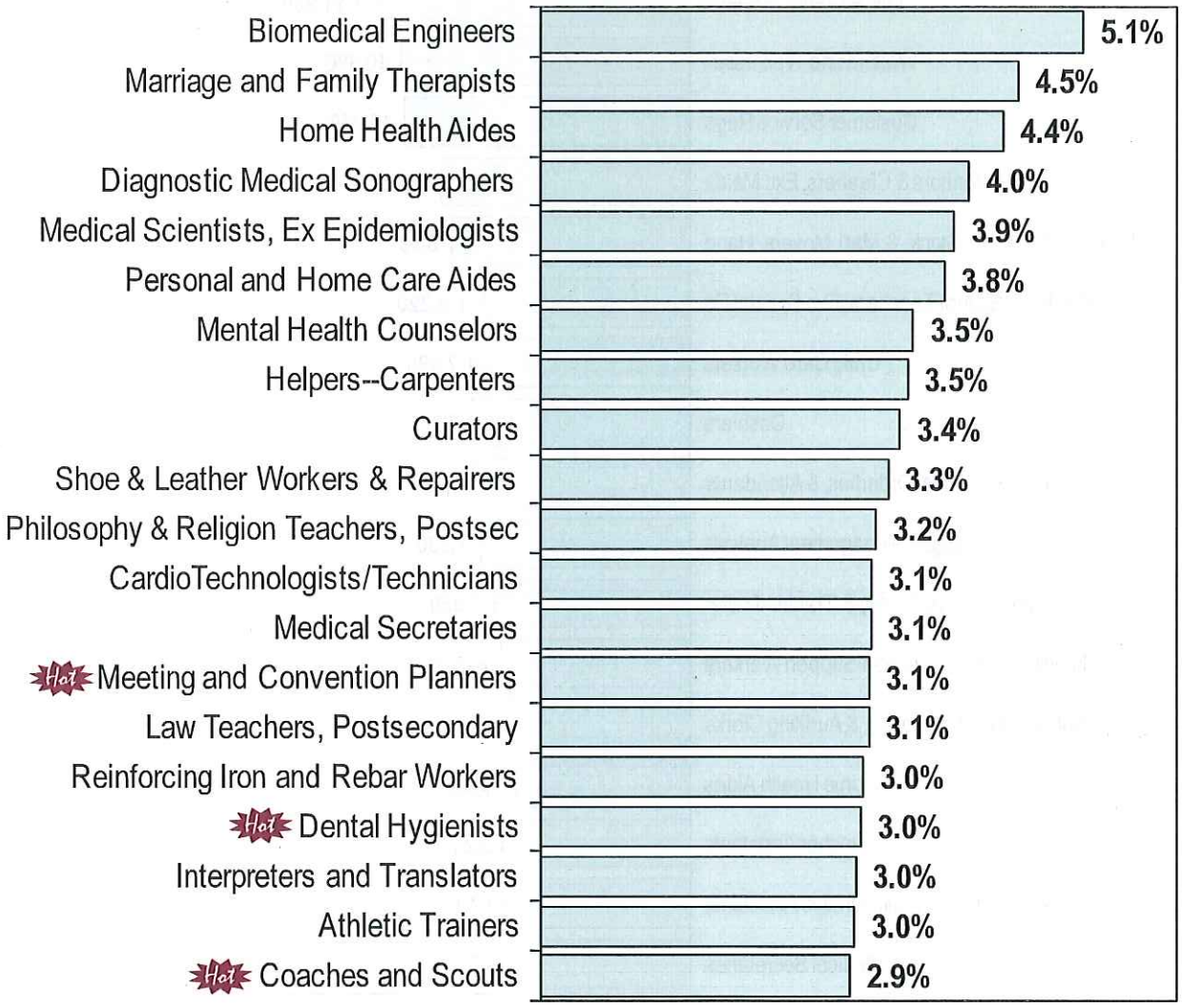
The top two occupational groups expected to have the most annual job openings in Georgia through 2020, office & administrative support and sales & related occupations, are from the white collar category. Only healthcare support, legal, and healthcare practitioners & technical occupations will see annual openings due to new job growth exceed openings due to the need to replace workers who leave the occupation. All the remaining occupational groups will see more job openings from replacements than from job growth.



Fastest Growing Occupations

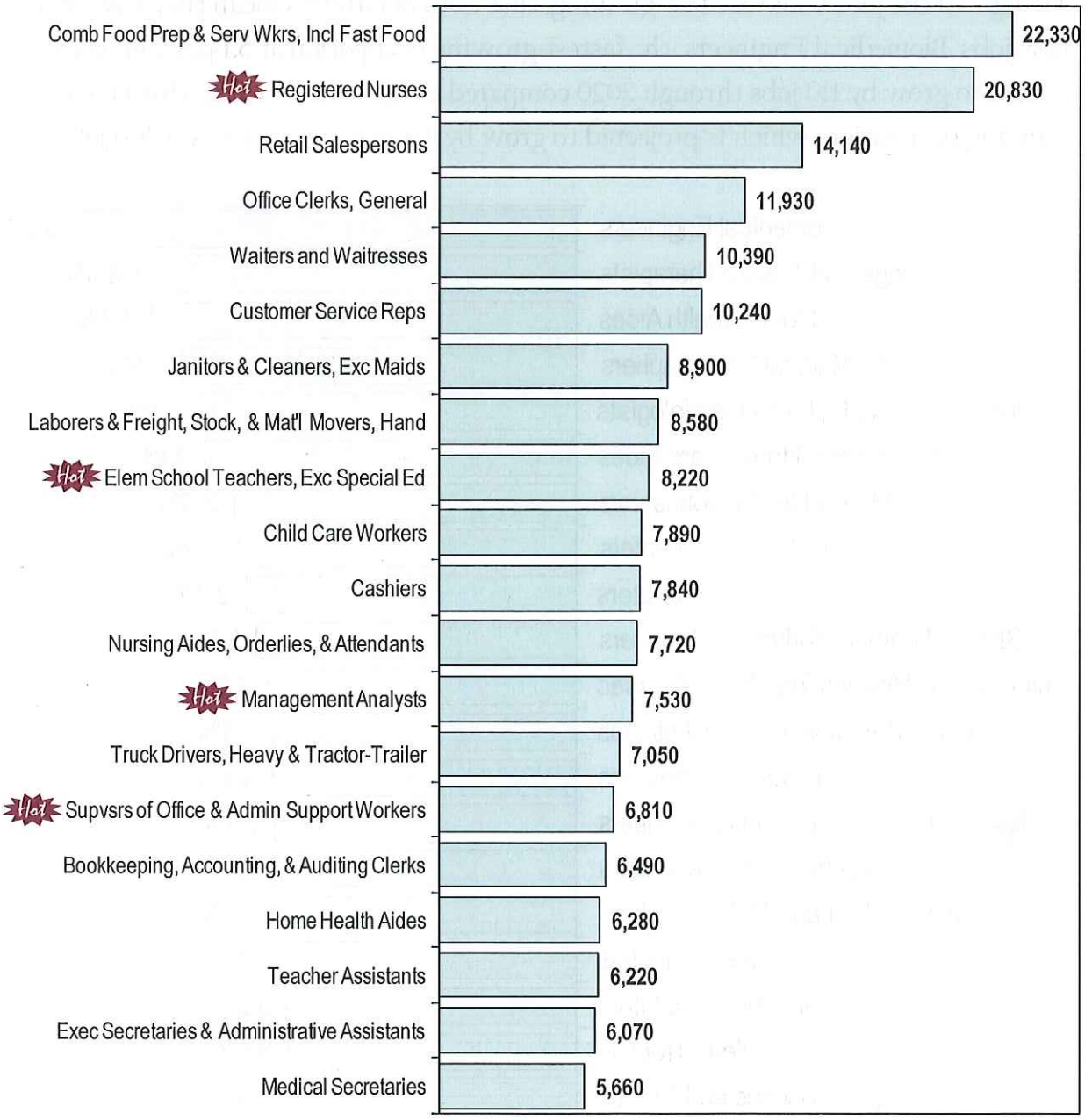
The 20 fastest growing occupations through 2020 in Georgia in terms of annual growth rate are dominated by healthcare and health related occupations, reflective of the strong projected growth in the health services industry over the projection period. Half of the occupations generally require a bachelor's degree or higher and 15 of the occupations are white collar.

Though all the jobs listed are fast-growing, that does not always mean they have many new jobs. Biomedical Engineers, the fastest-growing occupation at 5.1 percent, is expected to grow by 110 jobs through 2020 compared to home health aids, third fastest-growing occupation, which is projected to grow by 4.4 percent or nearly 6,300 jobs.



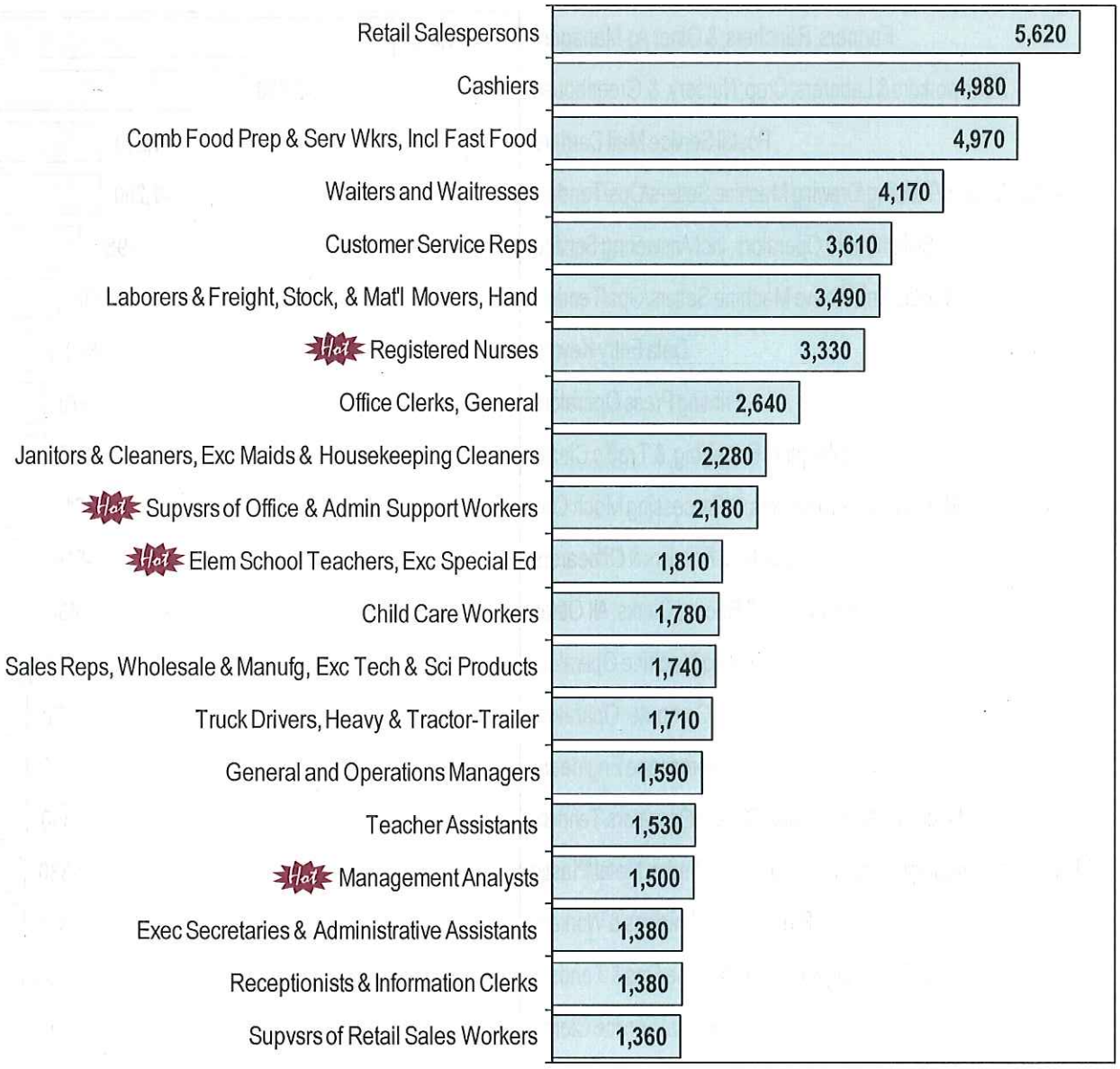
Occupations with the Most Job Growth

The 20 occupations with the most job growth through 2020 represent 39.6 percent of all the projected growth in the state. These occupations combine to create over 191,000 new jobs in Georgia over the projection period. Four of the occupations are Hot careers, 12 are white collar, two are blue collar, 16 generally require a high school diploma or less, and four generally require some form of education above high school.



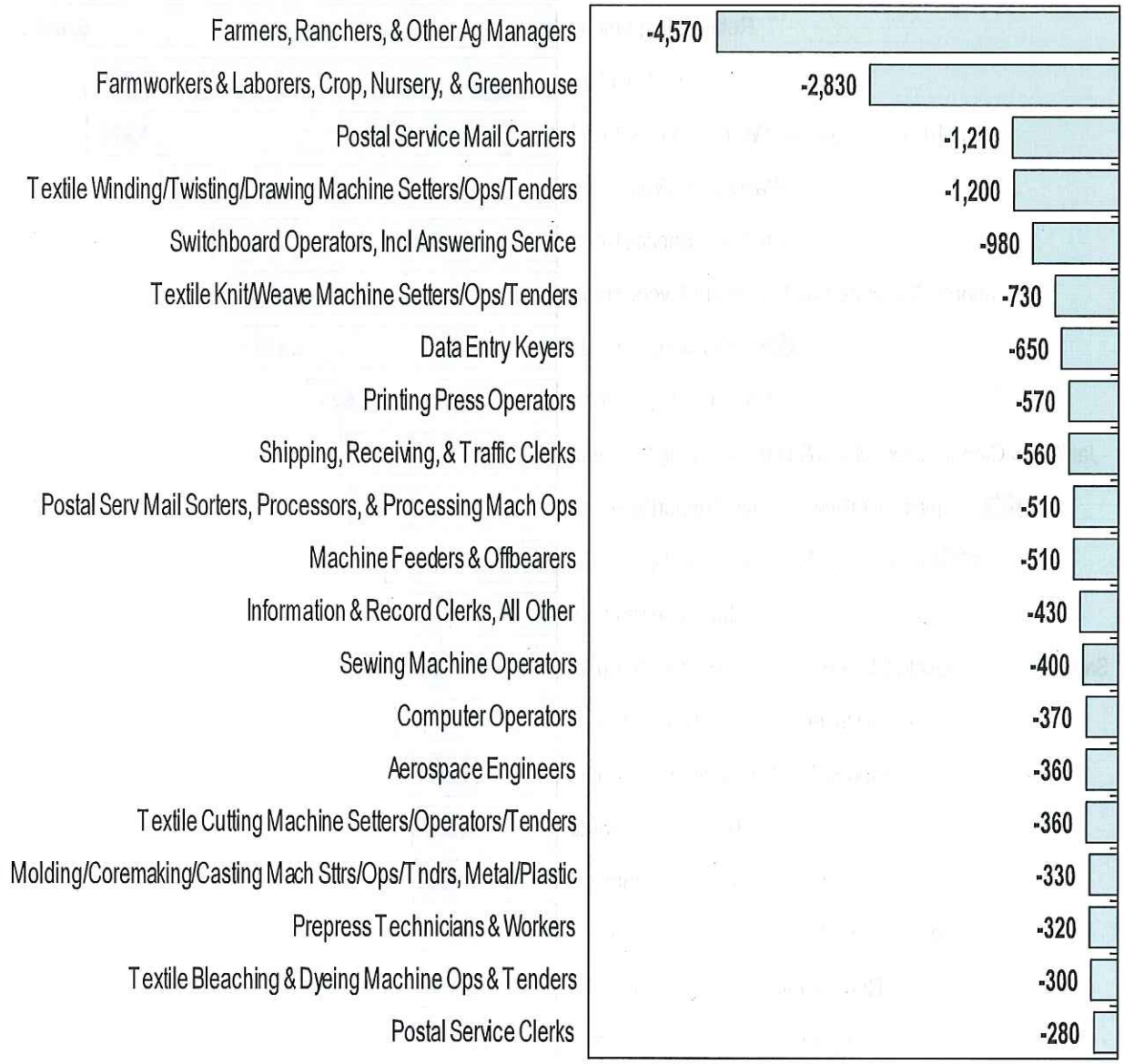
Occupations with the Most Annual Openings

The occupations with the most annual openings will be the ones most in demand over the projection period. The 20 occupations listed are projected to produce nearly 55,000 annual job openings and account for 35.7 percent of all annual openings in Georgia through 2020. For most of the occupations listed, the need to replace workers leaving an occupation is projected to create more openings than openings created by new/expanding businesses. Half of the occupations generally require a high school diploma, six require less than high school education, and four require an associate's or bachelor's degree.



Occupations with the Most Job Losses

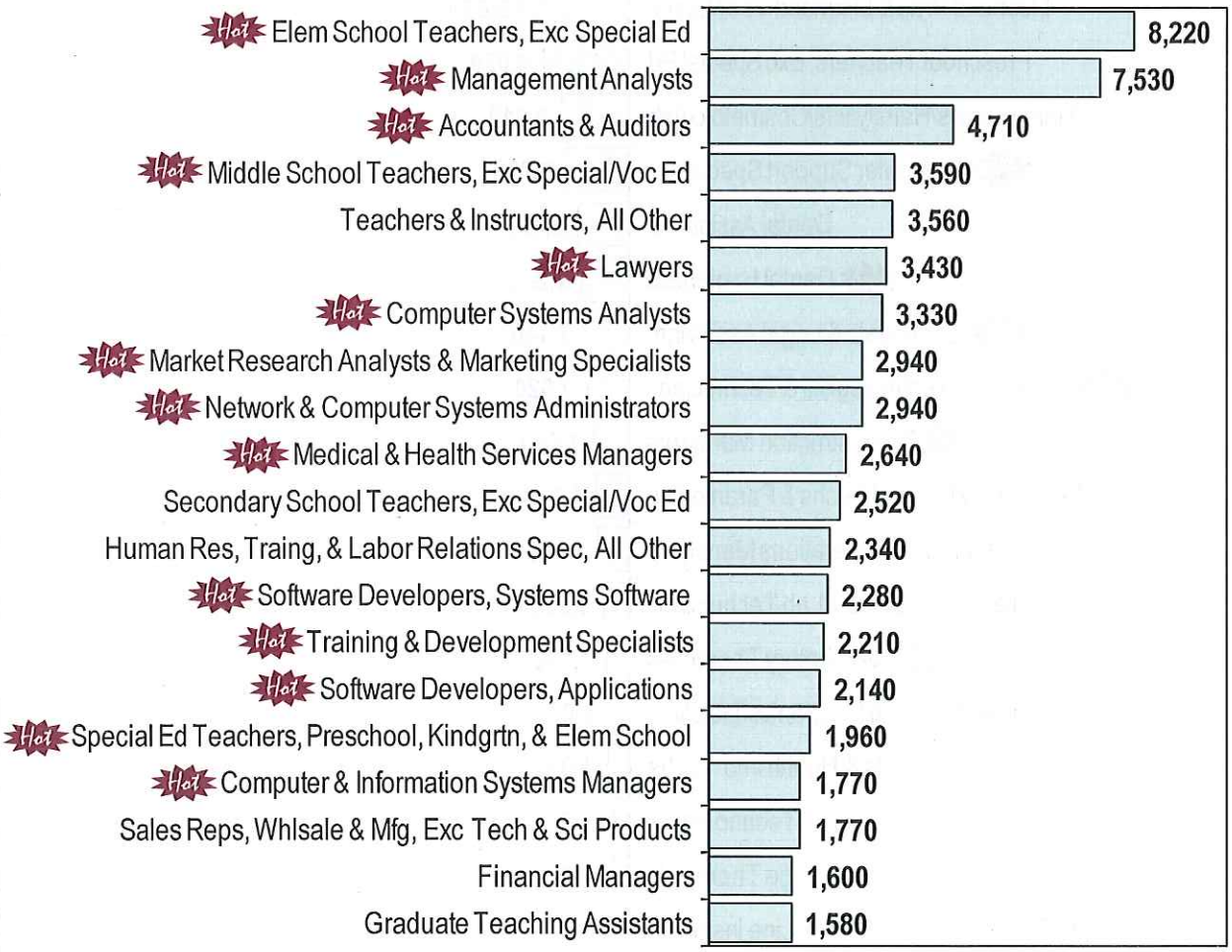
The 20 occupations projected to have the largest job losses by 2020 in Georgia combine to cut over 17,000 jobs from the economy and have a lot in common. Most of the occupations generally require a high school diploma or less, they nearly equally straddle white and blue collar work, and many are farming, outdated manufacturing, and clerical office and administrative support occupations. The occupations that will lose jobs over the projection period do, however, present some employment opportunities as the need to replace existing workers who leave positions come about.



Most Job Growth in Occupations that Require a Bachelor's Degree or More

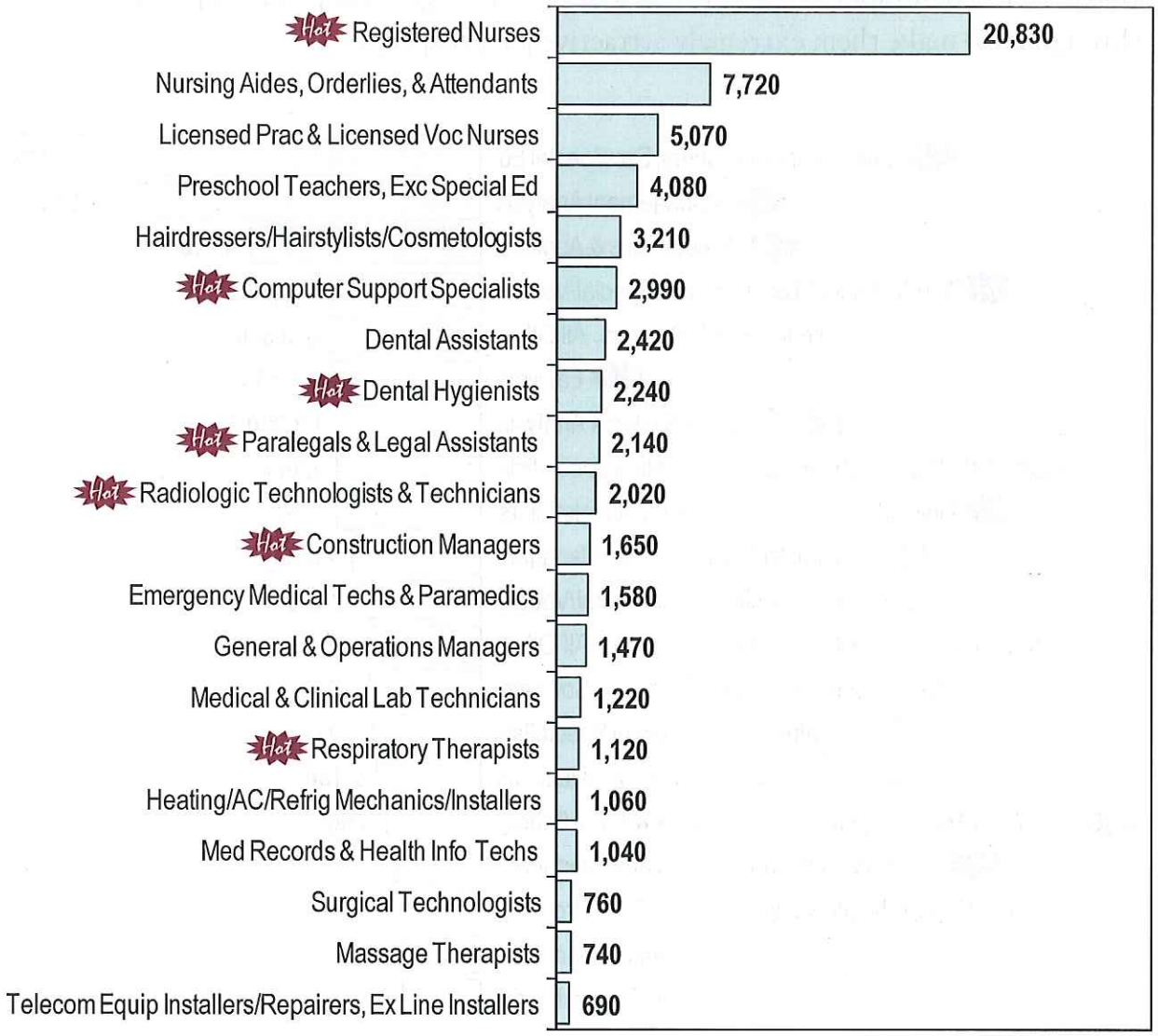
The occupations in Georgia that generally require a bachelor's degree or more are highly concentrated in education and computer related jobs. With the population in Georgia continuing to grow and the need to educate students in grades K-12 continues to be a priority in the state, the need for new teaching positions will rise. Information technology will continue to be a high demand area for jobs as businesses will rely on investment in these types of occupations to increase efficiency and raise productivity.

Almost all of these occupations have earned the distinction of being Hot for the projection period. Their rapid job growth, relatively high wages, and plentiful job openings through 2020 make them extremely attractive job prospects.



Most Job Growth in Occupations that Require an Associate's Degree, Postsecondary Award, or Some College

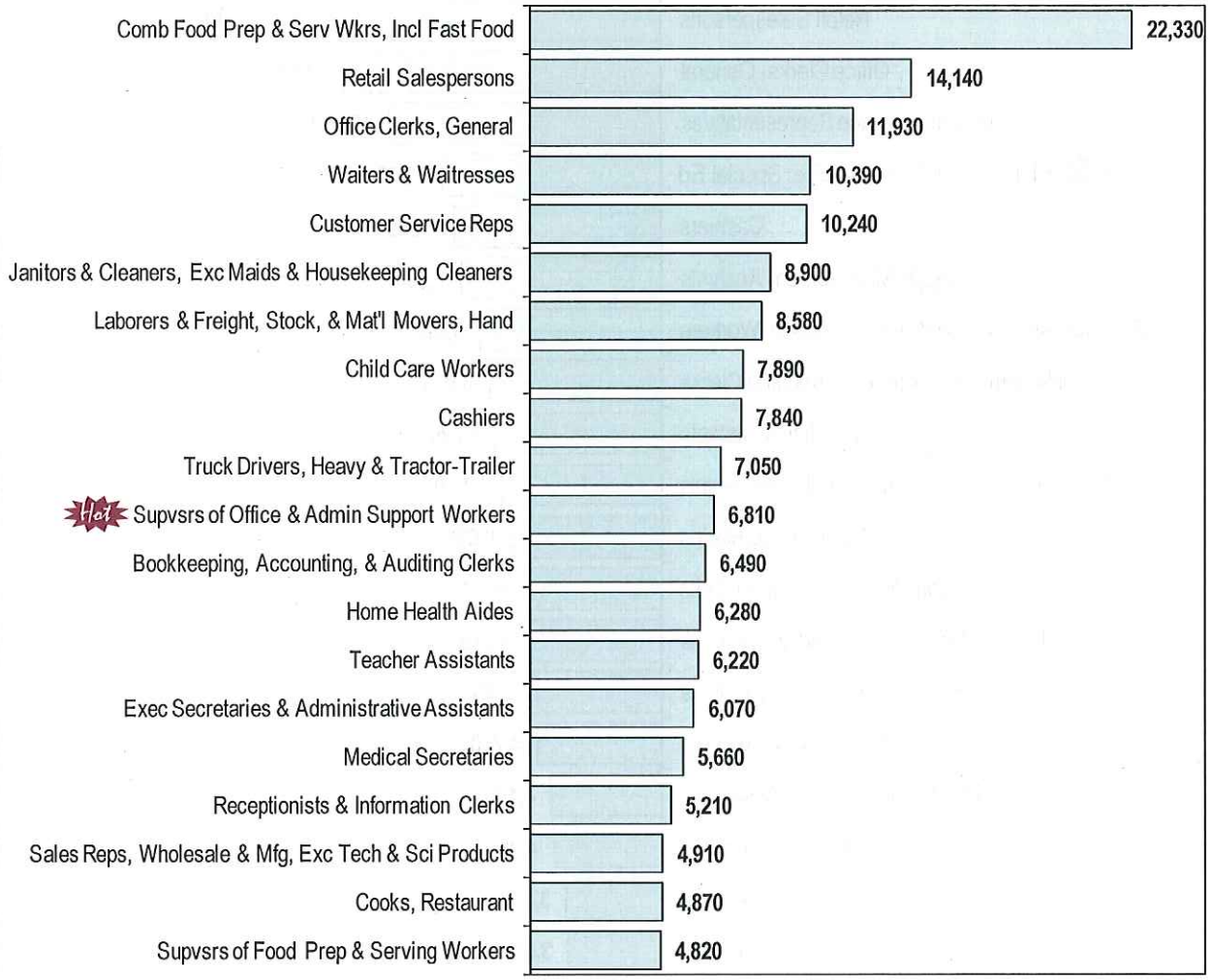
Healthcare related occupations account for more than half of the projected job growth in occupations that generally require an associate's degree, postsecondary award, or some college in Georgia. The number of registered nurses will lead this group as the state is projected to add nearly 21,000 more of them by 2020. As the population of the state continues to age and medical needs grow, it is revealed that the top three occupations in this group are nurses (registered nurses, licensed practical nurses, and nursing aids) and together they are projected to add nearly 34,000 jobs over the projection period.



Most Job Growth in Occupations that Require a High School Diploma or Less

The occupations requiring a high school diploma\equivalence or less that are projected to have the largest job growth by 2020 listed below represent nearly 35 percent of all job gains in the state. Sixteen of the occupations are also on the list of overall projected job growth in Georgia.

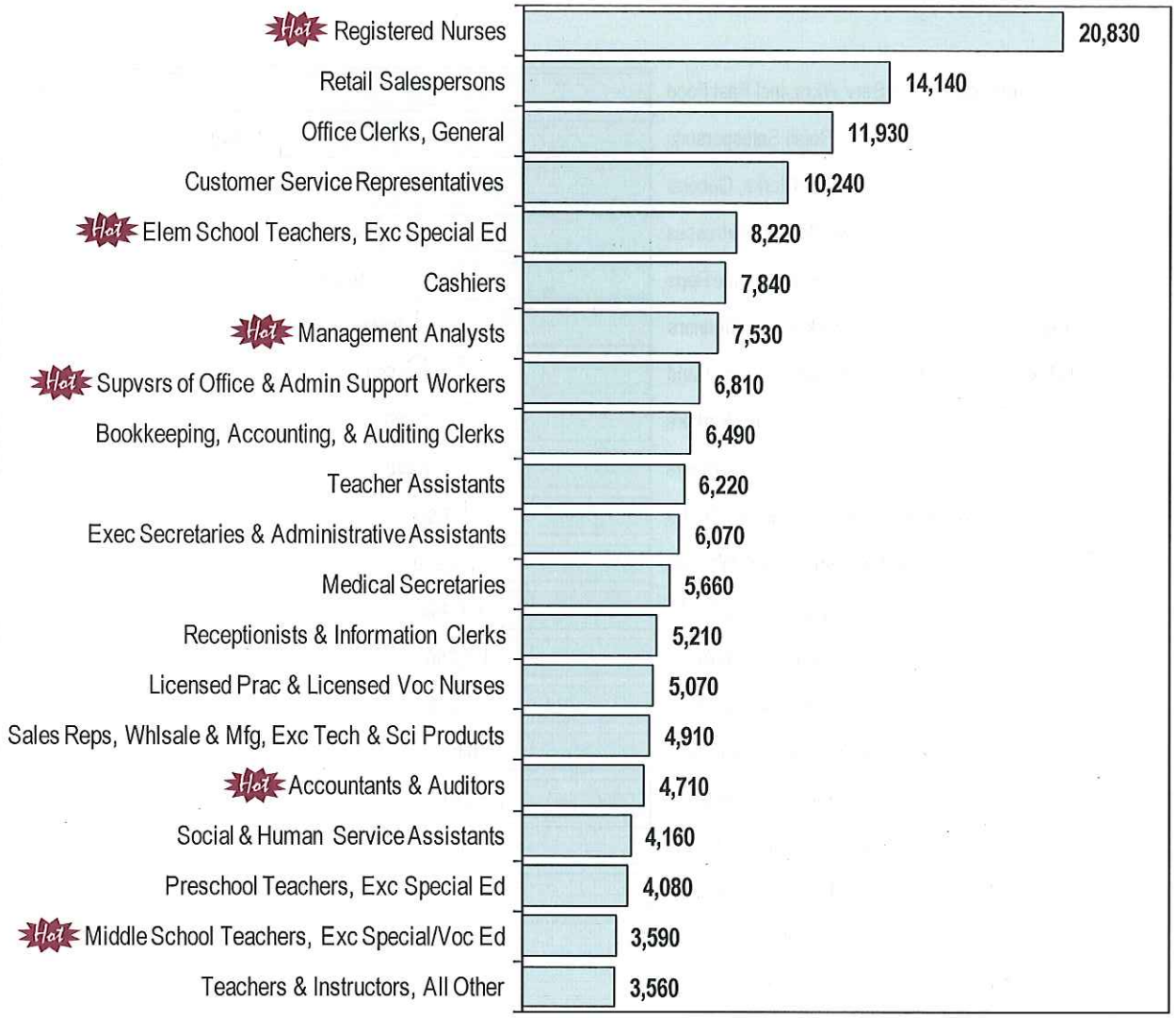
The occupations at the top of this list are generally high volume, relatively low-skilled, entry level jobs. Many of these occupations are also projected to add jobs at a fast rate through 2020 including home health aides, medical secretaries, cooks, child care workers, and food preparation workers.



Most Job Growth in White Collar Occupations

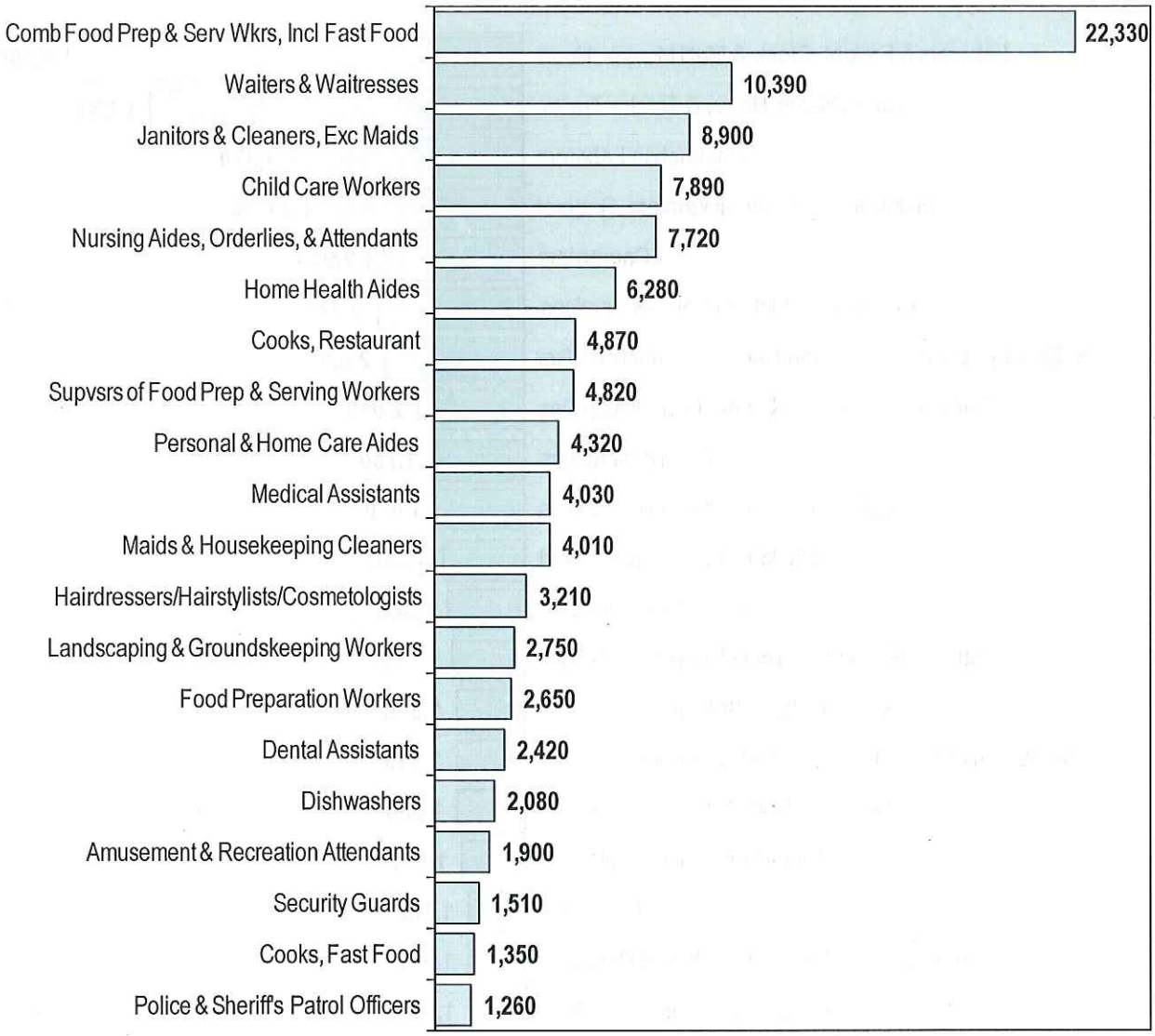
The occupations on this list of white collar jobs with the most job growth in Georgia have education requirements ranging from a bachelor's degree for accountants and teachers to generally requiring less than high school education for cashiers and retail salespersons. Several of the occupations are also on the list of Hot jobs as they have rapid job growth, high wages, and there are expected to be many job openings through 2020.

Healthcare, education, and administrative types of jobs comprise a large number of these occupations and are all projected to see significant growth by 2020. Six of the occupations listed are office and administrative support jobs and five are education occupations.



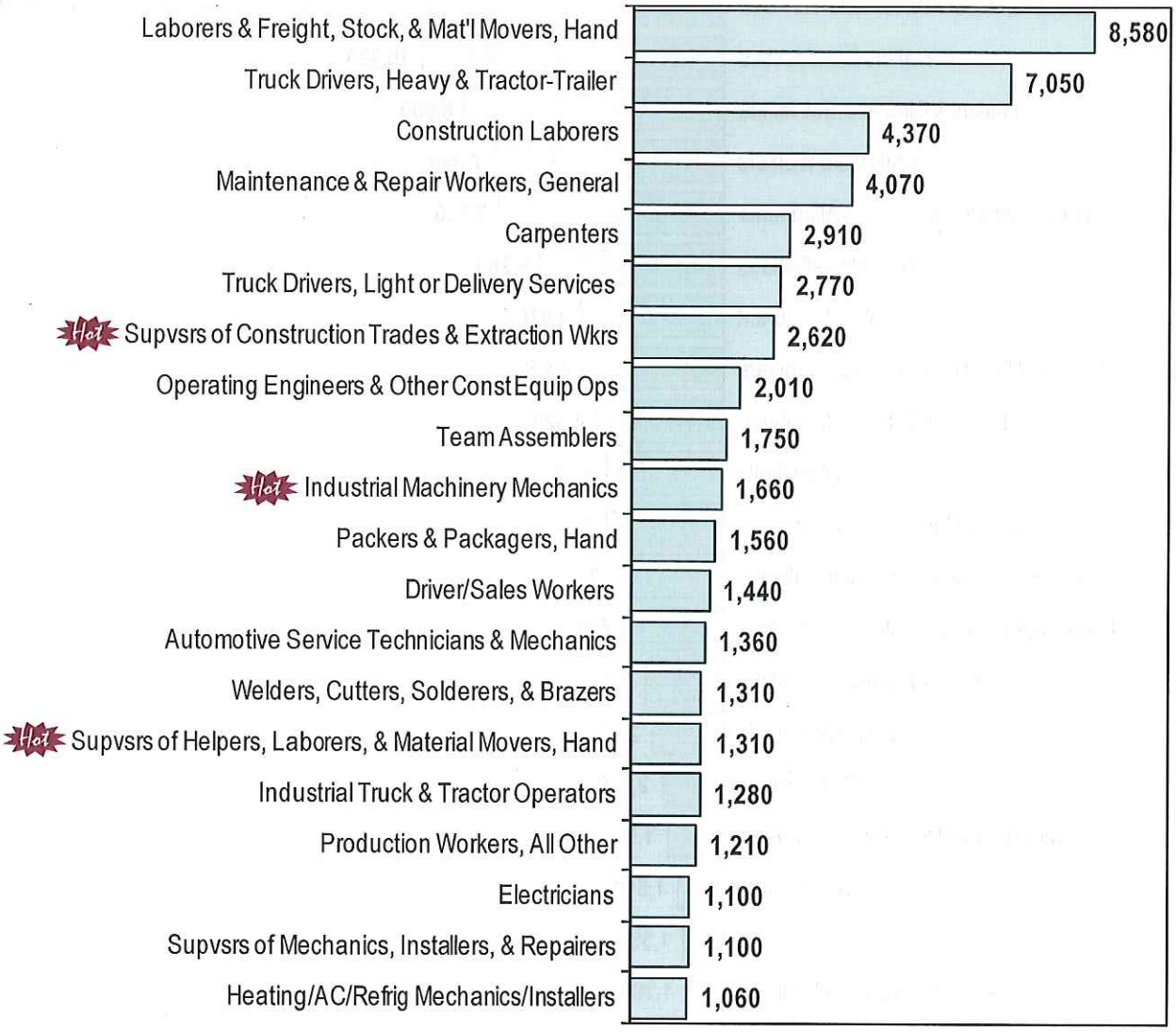
Most Job Growth in Service Occupations

Service occupations include jobs where people perform a variety of tasks and activities to assist others. Service jobs are projected to grow rapidly in Georgia through 2020. Service occupations expected to have the most job gains over the projection period include food preparation and serving workers, waiters and waitresses, janitors and cleaners, and child care workers. The top 20 occupations below account for nearly 105,000 new jobs in the state and will play a significant role in the job additions through 2020 as about 1 in 5 jobs created in Georgia will be from this list.



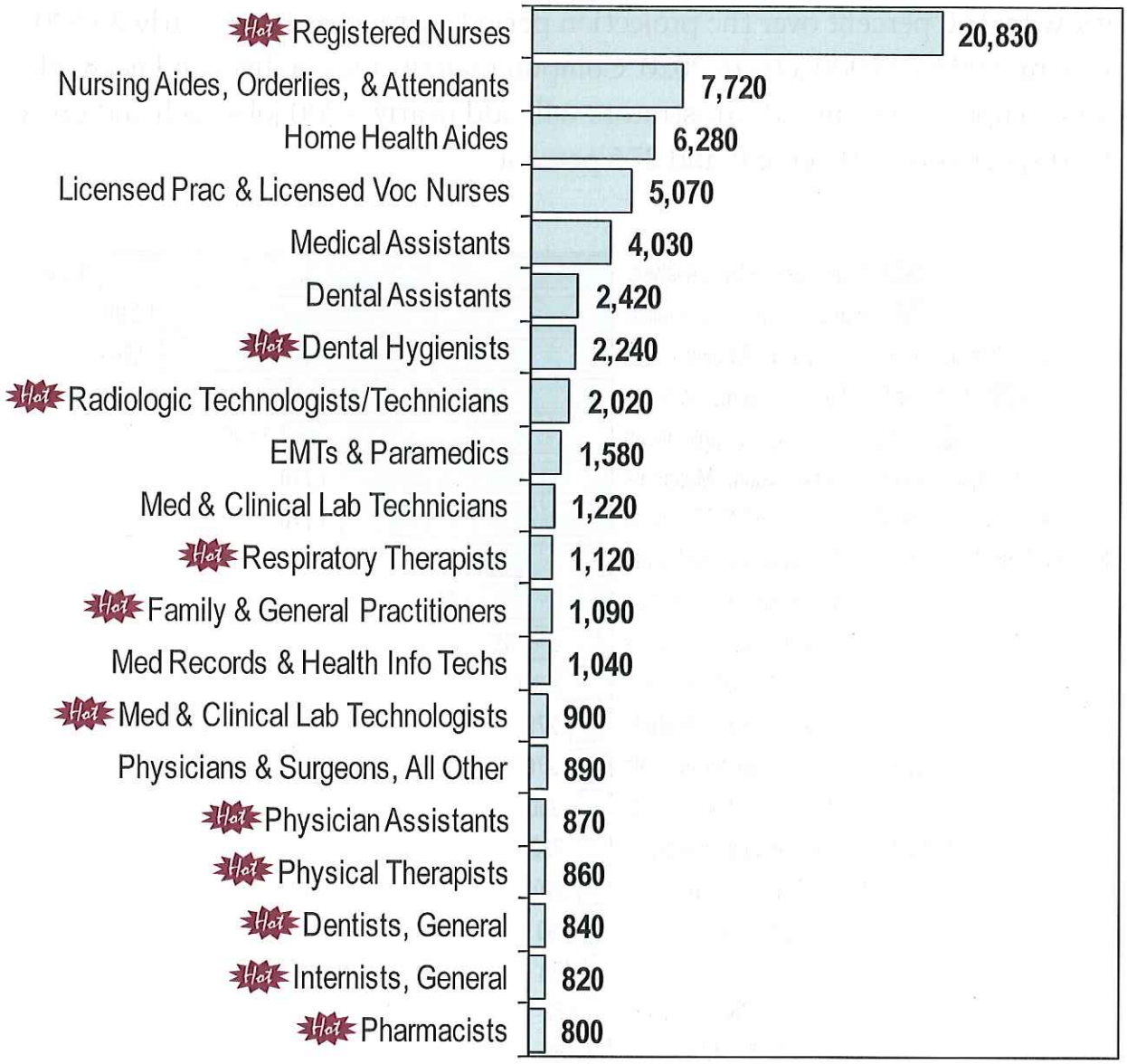
Most Job Growth in Blue Collar Occupations

Blue collar occupations are increasingly becoming more and more important to Georgia's economy as airports, highways, ports, and warehouses in the state experience growth. Transportation and material moving occupations top the list of blue collar occupations with the most job growth. Laborers and material movers top the list followed by heavy and tractor-trailer truck drivers. The growth in these occupations are directly related to such projects as increasing the capacity of Georgia ports and the need to load and transport an increasing amount of time-sensitive freight and cargo.



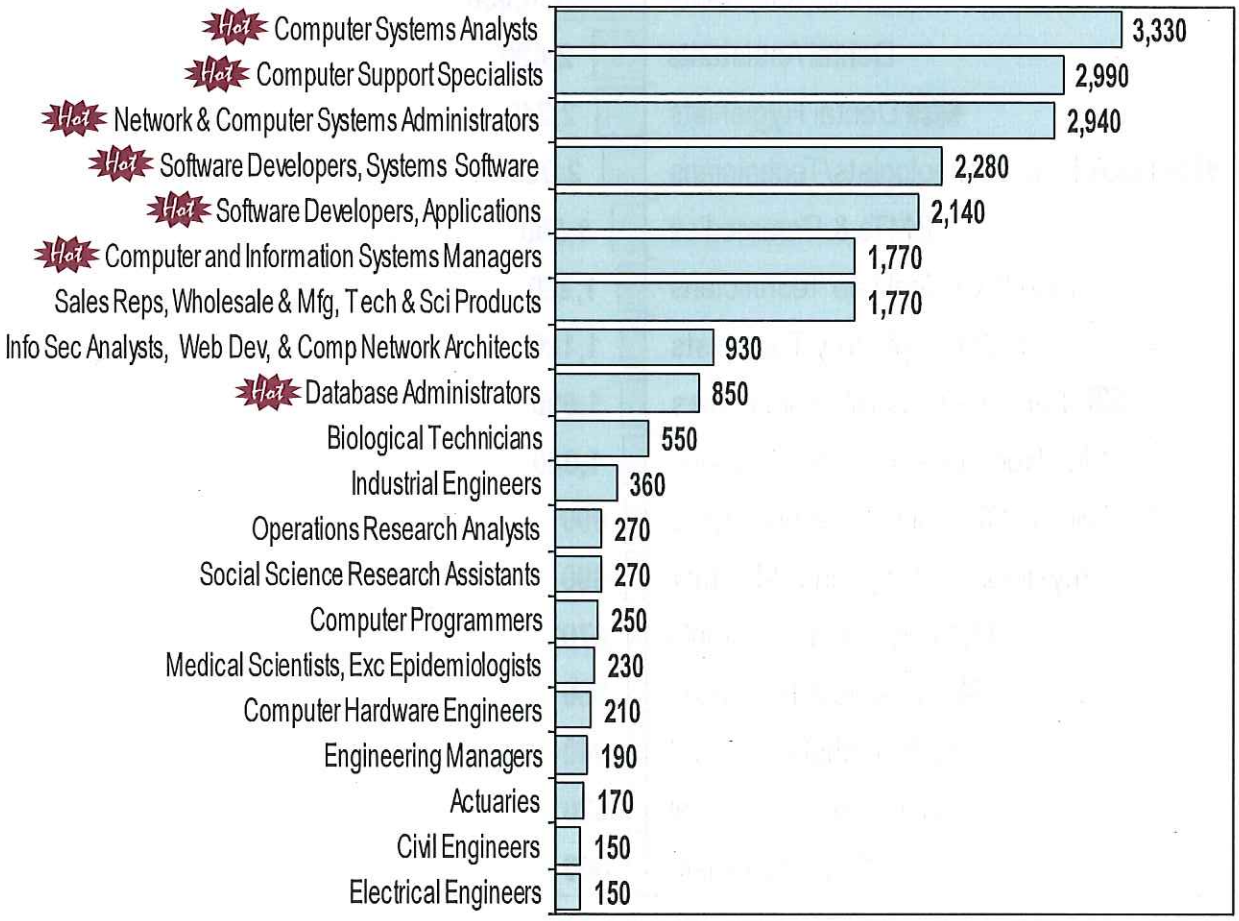
Most Job Growth in Healthcare Technical & Support Occupations

More than three of every four new healthcare jobs in Georgia through 2020 are projected to be in one of the occupations listed below. Registered nurses, the largest healthcare occupation, leads the list in job growth as it will add nearly 21,000 new jobs over the projection period and the total number of registered nurses will top 90,000 by 2020. All healthcare occupations listed are expected to grow faster than the state average.

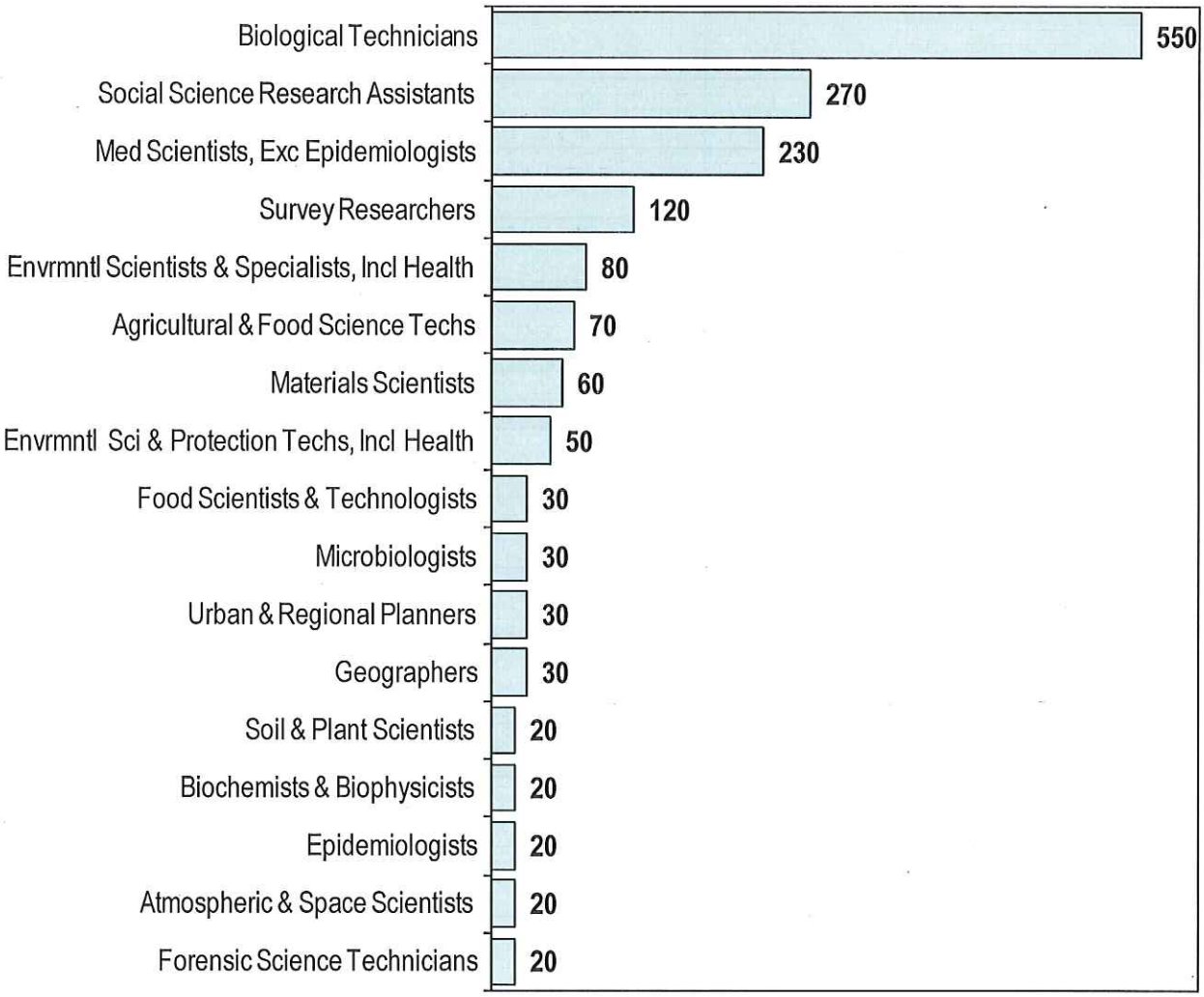


Job Growth in Selected Science, Technology, Engineering, & Mathematics (STEM) Occupations

Science, Technology, Engineering, and Mathematics (STEM) occupations are key to new products and discoveries being developed. STEM occupations are key elements in an innovative economy and Georgia is poised to expand in this area. Twenty STEM occupations are listed below and over the projection period they account for nearly 22,000 new jobs in the state. STEM occupations are popular because of their high salaries and usually require at least a bachelor's degree. Topping the list is computer systems analysts that will add over 3,300 jobs and grow by 13.0 percent over the projection period as it moves from nearly 25,600 jobs in 2010 to 28,900 jobs in 2020. Computer support specialists and network and computer systems administrators will add nearly 3,000 jobs each and grow by respectively, 14.9 percent and 27.6 percent.



Job Growth in Bio-Technology Occupations

Biotechnology fuses engineering and technology with the life sciences to create products for medicine, the environment, and the food supply. Biotechnology workers are becoming increasingly more in demand.

In Georgia, biotechnology occupations are projected to continue to gain footing as the state continues to attract biotech companies. Biological technicians, with an additional 550 jobs, is projected to grow the most over the projection period followed by social science research assistants which will add 270 new jobs, and Medical Scientists, Except Epidemiologists which is poised to grow by 230 new workers by 2020.