

# GEORGIA FORESTRY LABOR STUDY EXECUTIVE SUMMARY



# **STUDY OVERVIEW**

The Georgia Forestry Foundation partnered with the University of Georgia's Carl Vinson Institute of Government to conduct the Forestry Labor Study. This study is divided into three major subsectors of forestry and the wood product life cycle:



These three areas have distinct needs, but together they convey the significant labor market demand that the industry will face in the next five years to ensure that Georgia remains the number one forestry state in the US. Each of the three subsector analyses relies on a mix of consultation with subject matter experts like faculty members at the Warnell School of Forest Resources at the University of Georgia, interviews with industry leaders, and analysis of federal and local labor market data.

## FACTORS EXPECTED TO IMPACT LABOR ACROSS FORESTRY

### **AGING WORKFORCE**

One major factor affecting future needs of the forestry industry is the aging workforce. In all parts of the industry, a higher percentage of employees are over the age of 55 compared to all industries in Georgia. Without a concerted effort to build a workforce pipeline that includes young employees, the forestry industry in Georgia is in danger.

PERCENTAGE OF INDUSTRY EMPLOYEES 55+

28.6%

Trucking

22.7%

All industries

in GA

33.4%

26.1% Primary Mill

### TECHNOLOGY

Changes in forestry technology are likely to significantly impact labor force needs in the coming years. Few companies believe that automation and other technological advancements will replace employees. Rather, new skills will be needed, including the following:



Advanced maintenance for equipment operators



LIDAR and drone usage for foresters and forest technicians



Programming and automation for production and maintenance roles in mills

## HARVEST AND HAUL

Employment in the Harvest and Haul subsector is closely tied with the cyclical harvest volume of wood in Georgia. For this analysis, the subsector was assumed to follow historical trends in forest productivity. The figure below shows the general trend over the past two decades as well as the projected trend through 2025 (assuming no major changes such as a recession).



VOLUME (GREEN TONS) OF HARVESTED ROUNDWOOD IN GEORGIA OVER TIME | 1997-2025

Source: US Forest Service, timber product output data

The Harvest and Haul analysis includes major occupations needed to harvest timber and haul it to a mill for processing. The two major occupations in this subsector are CDL truck drivers and logging equipment operators, which includes anyone who operates equipment for harvesting timber, regardless of type (i.e., skidders, feller bunchers, etc.)

### **PROJECTED TRUCKER AND OPERATOR EMPLOYMENT** STATEWIDE | 2025

2,583 Approximate projected

2025 log truck driver

on truck weight limits)

3,483

Projected 2025 equipment operator employment (depending employment

To keep up with increasing turnover and maintain production, the forestry industry will need approximately

New truck drivers annually, up from 252 in 2020 (depending on weight limits)

New operators

annually, up from 257 annually in 2020

### **HOW WEIGHT LIMITS COULD** IMPACT EMPLOYMENT

Truck weight limits affect the number of truck drivers needed. In 2025, the industry is projected to employ:

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truck drivers if Georgia maintains the current

84,000 gross lbs/truck

2,4<u>0</u>8 truck drivers if Georgia increases the limit to 92,000 gross lbs/truck

# LAND MANAGEMENT

The Land Management analysis includes two main occupations required for public or private land management in Georgia: foresters and forestry technicians. These roles engage in activities such as inventory of property, appraisal of timber, wood procurement, and land monitoring. Typically, the forester role requires a bachelor's degree, and forestry technician positions tend to require a certificate or associate degree.

### SNAPSHOT OF LAND MANAGEMENT IN GEORGIA



The state has **21.5 million** acres of private land to manage.



According to industry sources, one forester can manage on average **30,000 acres**.

Additional land management workers are employed outside private forest management, including in agencies such as the **Georgia Forestry Commission, US Forest Service, and Department of Defense and Department of Natural Resources**.

### MAP OF FORESTRY DEGREE COMPLETIONS

BACHELOR'S AND ASSOCIATE DEGREES, 2020



#### ANNUAL DEMAND FOR FORESTERS AND FORESTRY TECHNICIANS | 2020 SUPPLY AND GAP IN GEORGIA

	2020 Employment (Public and Private)	Annual Demand to Fill Turnover (8.3%)	2020 GA Supply	Annual Gap
(bachelor's degree)	850	71	32	39
Forestry Technician (Less than a bachelor's degree)	581	48	11	37

Source: Carl Vinson Institute of Government analysis

# **INDUSTRIAL AND MILLS**

The Industrial and Mills analysis is limited to primary mills, which start with raw timber rather than using already-processed wood products. Primary mills include sawmills, paper mills, pulp mills, veneer and plywood manufacturing, and others. Employment in this subsector is expected to grow over the next five years, particularly jobs in production and logistics.

Occupational Group	2021 Employment	Projected 2026 Employment	Annual Projected Labor Demand (due to turnover and job growth)
Production	9,587	10,000	1,182
Logistics	4,624	4,823	650
Maintenance	2,198	2,293	230
Management	2,060	2,149	217
Others that employ less than 50	1,924	2,007	235
Total (all occupation groups)	20,394	21,271	2,514

#### STATEWIDE OCCUPATIONAL GROUP PROJECTIONS AND LABOR NEEDS OF PRIMARY MILLS

Note: The Industrial and Mills analysis does not focus on key occupations but rather occupation groups due to the wide variety of roles found throughout mills in Georgia.

Source: Carl Vinson Institute of Government analysis



Not only do the needs differ across different occupation groups, they also differ across regions. Middle and North Georgia are projected to need more workers to keep up with the growth and turnover that those regions have been facing recently. Also note that much of the workforce in this subsector overlaps with more traditional manufacturing roles; therefore, mills in the north half of the state may see more competition for employees than their South Georgia counterparts

#### PROJECTED ANNUAL EMPLOYMENT NEED FOR ALL PRIMARY MILL OCCUPATIONS, BY REGION | 2026



### **PROJECT PARTNERS**

GFA



GEORGIA FORESTRY

The Georgia Forestry Association (GFA) is the leading advocate for a healthy business and political climate for Georgia's forest environment, forest landowners and forestbased businesses.

The Georgia Forestry Foundation (GFF) supports GFA by providing outreach and education opportunities designed to reach a diverse statewide audience in support of the long-term environmental and economic health of our working forests. GFF sponsored the Georgia Forestry Labor Study.



Carl Vinson Institute of Government UNIVERSITY OF GEORGIA The Carl Vinson Institute of Government is a Public Service and Outreach Unit of the University of Georgia that informs, inspires, and innovates so that governments can be more efficient and responsive to citizens, address current and emerging challenges, and serve the public with excellence. Institute of Government faculty and staff conducted research and analysis as well as managed and produced the Georgia Forestry Labor Study.



Warnell School of Forestry & Natural Resources UNIVERSITY OF GEORGIA Warnell School of Forestry and Natural Resources at the University of Georgia is committed to providing teaching, research and outreach activities related to the conservation and management of our natural resources. Warnell faculty served as subject matter experts and topical resources for the Georgia Forestry Labor Study.