

# Georgia Economic 2022 Outlook



Selig Center for  
Economic Growth

*Terry College of Business*

UNIVERSITY OF GEORGIA

# Georgia Economic 2022 Outlook

39th Annual Edition

---

Selig Center for Economic Growth

Terry College of Business  
The University of Georgia

**Benjamin C. Ayers**  
Dean

**Jeffrey M. Humphreys**  
Selig Center Director

**Lorena M. Akioka**  
Managing Editor

CONTRIBUTORS

**Jeffrey M. Humphreys**  
Selig Center Director

**Alexandra P. Hill**  
Senior Research Analyst

**Taylor P. Worley**  
Research Analyst

THE 2022 GEORGIA ECONOMIC OUTLOOK (ISSN 0884-1179) represents the personal views of the research team and not necessarily those of The University of Georgia or the Terry College of Business.

For more information on the Selig Center, visit our website at [www.selig.uga.edu](http://www.selig.uga.edu)

---

# C O N T E N T S

<b>Economic Outlook 2022</b>	
<b>National Outlook</b> _____	<b>4</b>
Jeffrey M. Humphreys	
<b>Georgia Outlook</b> _____	<b>12</b>
Jeffrey M. Humphreys	
<b>Prospects for MSAs</b> _____	<b>19</b>
Jeffrey M. Humphreys	
<b>Healthcare</b> _____	<b>29</b>
Alexandra P. Hill	
<b>Government</b> _____	<b>34</b>
Taylor P. Worley	

**O**nce effective vaccines became widely available in the second quarter of 2021, the economy settled into sustainable, above-average growth. The Delta variant of the virus kept demand from surging and supply chains from normalizing, but the U.S. economy continued to expand at an above-average pace. In 2021, we estimate that inflation-adjusted GDP increased by 5.5 percent, which substantially exceeds the U.S. economy's long run—1970 to 2020—rate of growth of 2.7 percent.

Our 2022 economic outlook calls for above-average GDP growth to continue due to a broadening of the U.S. economic expansion to more fully include even the most severely impacted industries and geographies. That broadening is possible because vaccinations and infections will provide a high level of herd immunity against severe infection and/or death from Covid. High-contact industries such as restaurants, hotels, and live entertainment will be able to operate more fully. Similarly, regional economies highly dependent on travel, hospitality, and tourism will begin to rebound. Consumer and business confidence will be high enough to support above-average economic growth, but sentiment will remain below pre-pandemic levels.

In 2022, we expect GDP to increase by 4 percent. (That compares to the 5.5 percent increase estimated for 2021 and the 3.4 percent decline reported for 2020.) Labor market conditions will improve, but the number of jobs will recover more slowly than GDP. On an annual average basis, total nonfarm employment will expand by 2.7 percent compared to the 2.3 percent increase estimated for 2021 and the 5.8 percent decline reported for 2020. The U.S. labor market will fully recover the 22.4 million job lost to the Covid recession in late 2022. At that time, the U.S. economy can be considered fully healed, but it will be a very different economy.

### Consumer Spending

We predict that the consumer to be the new economy's main strength. On an inflation-adjusted basis, personal consumption expenditures will increase at an above-trend rate of about 5 percent, which will be quite an accomplishment given that inflation-adjusted personal income is expected to decline due to a large drop in federal stimulus payments. The increase in consumer spending will be possible due to a drop in the personal savings rate as well as spending some of the excess savings that accumulated during the pandemic.

In 2022, the personal savings rate will decline to less than 7 percent from 13 percent in 2021 and from 16 percent in 2020. The drop in the savings rate amounts to about \$1 trillion in extra spending in 2022. As of mid-2021, American households had accumulated about \$2.5 trillion (12 percent of GDP) in unanticipated savings, but most of this money probably will be earmarked for retirement or for long-term investments. The demographics of the big savers therefore will spread the spending from accumulated savings over many years.

Job growth will power consumer spending. Improving labor market conditions will support growth in wages and salaries and bolster consumer confidence. Compensation per hour will rise by at least 3 percent and the number of hours worked also will rise, which will help to offset the wind down of the federal government's massive stimulus programs. Personal income derived from federal transfer payments will drop sharply, so overall inflation-adjusted personal income will decline even as wage and salary income climbs.

Fortunately, growth in consumer credit will contribute to the projected increase in consumer spending. In a repeat of 2021, credit will expand sharply, with non-revolving credit growing much faster than revolving credit. Lenders will loosen credit to most customers—even those with poor credit scores.

Job growth, the lower unemployment rate, and appreciated asset values will support credit growth.

Household balance sheets are in very good shape, which bodes well for credit growth. Due to fiscal stimulus, low interest rates, surging home prices, and forbearance, bankruptcy filings fell to historic lows in 2021. Credit will be more available and very inexpensive. As forbearance policies end, bankruptcies probably will increase, but will be curtailed by the improving economy and higher home prices.

Most consumers are well positioned to take on additional credit because their debt burdens are low. Specifically, the ratio of debt service payments to households' after-tax income was under 10 percent before the Covid recession and fell to 9 percent in 2021. The ratio is expected to rise slightly to 10 percent in 2022, which is low. In comparison, the debt service ratio was 13 percent leading up to the Great Recession.

Another positive for consumer spending is that many households have locked in historically low mortgage rates. Excellent housing market conditions will encourage homeowners to spend heavily for home improvements using accumulated savings, funds from mortgage refinancing, and funds obtained by taking on slightly more home equity debt. Such spending is high octane fuel for the economy. The proportion of homeowners who extract cash from the refinancing of their home mortgages will rise, but it will not surge like it did during the last housing boom.

Consumer confidence will support growth in consumer spending. In 2022, job growth should keep confidence from wavering, but concerns about inflation will prevent confidence from increasing further. Nonetheless, steady confidence will support stronger spending for leisure travel and personal services, which favors the use of bankcard credit.

Less positively, wealth-effect spending will probably be absent and could turn negative in 2022. Over the last two years, the global savings glut pushed up the prices of almost all types of assets. Many assets are overvalued, but housing is not.

People currently put a higher priority on homeownership than they did before the pandemic. We believe there's still some upside potential for single-family home prices given strong demand coupled with a limited supply of existing homes on the market, and the relative paucity of new homes under construction. Nonetheless, home price increases will be more modest and thus will not add enough to households' net worth to compensate for potentially lower prices for bonds and equities. By any historical measure, bonds and equities are very richly valued. Bond prices probably will weaken only slightly in 2022 but will be vulnerable to larger corrections a bit further out on the forecast horizon. Equity markets will be vulnerable to correction, however.

The absence of wealth-effect spending and the heightened possibility of reversal is a fundamental concern for consumer spending in 2022. Growth in household wealth has risen since 2009, exceeding income growth in most years. A downturn in stock markets would reduce financial equity wealth, which would be a negative for consumer spending. Still, due to the excess of savings accumulated over 2020-21, it would take a major stock market reversal to produce an outright decline in consumer spending. Since we do not see an obvious trigger for a major reversal, a moderate decline in equity prices is the most likely outcome. That would retard but not stop growth in consumer spending.

Spending for services will increase faster than spending for goods. In part, this represents easy comparisons to low prior-year bases as well as the satisfaction of deferred demand for services that were not purchased during the pandemic. Nonetheless, pent-up demand for services does not accumulate to the same degree that it does for durable goods due to the nature of services. Vaccinations and some degree of herd immunity will boost sales for many of the high-contact service businesses that are unable to fully normalize as long as people remain highly concerned about catching Covid. Among services, providers of healthcare will see above-average

growth in spending.

We believe that there is a strong possibility that the pandemic caused a structural shift in consumers' spending that favors goods over services. High-contact service businesses may never claim the percentage of GDP that they did prior to the pandemic. Full economic recovery for some types of service businesses therefore will take many years, and some may never recover.

Sales of both durable and nondurable goods are expected to increase in 2022, with spending for nondurables growing faster than spending for durable goods. Sales of durable goods would be significantly stronger if not for supply shortages. For example, vehicle sales will rise by about 15 percent, but the gain would be much sharper if not for shortages of many popular models. In addition, vehicles destroyed by hurricanes will need to be replaced and, due to shortages, many will be purchased in 2022.

There are some additional factors that bode well for future vehicle sales. In post-pandemic America, people will be less inclined to use public transportation. Similarly, vehicle sales will benefit from people's greater interest in traveling to destinations closer to home rather than to far-flung destinations by plane or cruise ship. Strong sales of boats, campers, and trailers will support sales of trucks and other personal vehicles capable of towing heavy loads. In addition, stronger preferences for homes in the suburbs or rural areas boosts demand for new vehicles, especially light trucks. Still, this sanguine outlook assumes that supply chain issues are resolved.

Strong housing markets will support sales of durable household equipment, building materials, fixtures, floor coverings, furniture and many other home-related goods and services. Price increases and demographic factors will underpin spending on pharmaceuticals and other medical products. Spending on groceries will rise only modestly because restaurants will reclaim market share from grocers. Spending on clothing and shoes also will increase although spending on luxury goods will be

very sensitive to the performance of the stock market

### Labor Market

Late in 2022, the U.S. labor market will fully recover the jobs lost to the Covid-19 recession. If so, full recovery will take about two and one-half years, which is about twice as fast as after the 2007-2008 recession (five years). One reason why the labor market is healing relatively quickly is massive federal fiscal stimulus that equaled about 25 percent of pre-pandemic GDP. It also helped that there were not many imbalances in the economy when the pandemic began.

Total nonfarm employment will increase by 2.7 percent, or by 3.9 million jobs. Job growth will be very broadly based across industries. Some of the industries that suffered the greatest job losses during the recession will post the largest percentage gains. The leisure and hospitality sector is probably the best example. The “other services” category, which includes many high-contact services, will also see fast job growth. Thanks

to the housing boom, construction will see solid job growth, which would be even faster if not for shortages of workers in construction trades. The information industry will add jobs due to the rapid digitization of the economy and the rollout of 5G networks. Transportation, utilities, and manufacturing will see solid employment growth, too. In fact, no major economic sectors are expected to lose jobs in 2022. The widespread availability of jobs suggests that the quit rate will remain quite high as workers feel confident in their ability to seek better opportunities.

The prospects for manufacturing are quite good and would be even better if not for shortages of critical inputs. Industrial production will increase by about 5 percent due to firming factory orders and very lean inventories. Manufacturing will add jobs despite lingering trade tensions, supply chain disruptions, and past appreciation of the dollar. Re-shoring production will be a minor factor behind manufacturing job growth in 2022, with the possible exception of pharmaceuticals and other medi-

cal goods where re-shoring could be more important.

As usual, GDP growth will be the most important factor that will sustain job creation, but it will help that financing will be easy to obtain. Venture capita—which fuels job creation—will be widely available on very favorable terms. Less positively, foreign direct investment will remain subdued.

One factor that will temper employment growth is a mismatch between available jobs and available workers. The pandemic accelerated the adoption of existing technologies and trends that made many job skills obsolete, or at least less valuable. Investments in automation, labor saving equipment and processes, online delivery of services, and online retail were especially heavy. Businesses took advantage of the shutdown to revamp their operations and business models, and as a result, many jobs were erased. Moreover, concerns about Covid prompted older workers to retire at a higher than normal rate.

Assuming that labor force

## UNITED STATES BASELINE FORECAST, 2021-2022

United States	2017	2018	2019	2020	2021	2022
Gross Domestic Product, Bil of 2012\$	18,079.1	18,606.8	19,032.7	18,384.7	19,395.9	10,171.7
Percent change	2.3	2.9	2.3	-3.4	5.5	4.0
Nonfarm Employment (Mil.)	146.6	148.9	150.9	142.2	145.6	149.4
Percent change	1.6	1.6	1.3	-5.8	2.3	2.7
Personal Income, Bil. of 2012\$	15,888.8	16,346.3	16,761.3	17,646.8	18,036.3	17,547.9
Percent change	2.8	2.9	2.5	5.3	2.2	-2.97
Personal Income, Bil. of \$	16,805.2	17,706.0	18,424.4	19,627.6	20,903.4	21,028.8
Percent change	4.7	5.1	4.1	6.5	6.5	0.6
Unemployment Rate (percent)	4.4	3.9	3.7	8.1	5.5	4.2
CPI-U, Annual Percent Change	2.1	2.4	1.8	1.2	4.2	3.4

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, September 2021.

participation remains somewhat depressed, net job creation will bring the unemployment rate down to 4.2 percent in 2022. This will keep upward pressure on wages, providing traction for some degree of wage-push inflation. The Federal Reserve will need to shift its current policy stance from stimulative to neutral, then make it restrictive by the end of 2022.

The low unemployment rate shifts the balance of power from employers to workers. Companies will struggle to increase staffing fast enough to keep pace with rising demand for the goods and services they produce. It will be very difficult to hire workers across many occupations and industries. Already severe shortages of many types of construction workers and truck drivers will worsen, but workers of nearly all types will be scarce.

In mid-2021, the prime-age employment-to-population ratio was 77.8 percent, which is 2.2 percent below the 80 percent ratio that typically associated with a strong labor market. It will rise in 2022, but it is likely to remain below 80 percent due to lingering fears about Covid as well as the family care responsibilities that many workers shoulder. Telecommuting arrangements will account for a substantially higher proportion of work arrangements than was the case prior to the pandemic. Demographic trends (e.g., low birth rates) suggest that unless foreign immigration increases, a shortage of workers could be a feature of the post-pandemic U.S. economy. That bodes well for a rebalancing of income from capital to labor, which should help to reduce inequalities in income.

Compensation per hour will rise by 3.5 percent. In essence, rising demand for labor will put upward pressure on wages and benefits. Faster productivity growth is likely to offset about half of the increase in hourly pay, which should keep unit labor costs from rising by more than 2 percent.

### **Housing Market**

The housing market will continue to drive growth, thanks to job

expansion, low mortgage rates, and cyclical factors. Demand that was not satisfied in 2020-21 (due to shortages of homes for sale) will support higher sales of new and existing homes. Millennials are reaching the age where they are likely to become home buyers, especially in the South and West where overall population growth is strong. Real estate investors will be more active, too.

It's likely that the pandemic caused a structural shift that favors owner-occupied housing over rental housing and low-density over high-density housing. The amount of time spent at home now—teleworking, online schooling, and caregiving—means a house is more important than ever and people are willing to pay more to have it. Homes are more valuable because they are scarce, a fact that will not change when the pandemic ends.

With demand high and supplies tight, the number of single-family housing starts for new construction will increase by about 10 percent in 2022. The increase would be even larger if not for shortages of construction workers, building materials, household equipment and appliances, and developed lots.

Home prices will rise by about 5 percent, exceeding the expected rate of inflation of 3.4 percent, but far less than the 15 percent increase in home prices estimated for 2021. Prices will continue to rise because demand will be strong, supplies will be tight, and the supply chain for new home construction is inadequate.

As always, the performance of the U.S. housing market depends on the performance of the labor market, changes in mortgage rates, and credit conditions. New jobs and bigger paychecks—plus appreciated home values—will give more people the wherewithal and the confidence to buy homes, sustaining the housing market's growth in 2022. Prevailing low mortgage rates will continue to be a strong driver of housing sales.

Supply constraints—the scarcity of developed lots and a shortage of lumber and construction tradespeople—will moderate rather than stop the growth of the homebuilding in-

dustry. In effect, these shortages will prolong the homebuilding upturn, providing support that the economy will need as fiscal and monetary stimuli fade. Financing for lot development and speculative homebuilding will be more available, reflecting appreciated home prices and very good prospects for new home sales.

As mentioned, affordability is a significant headwind for housing sales and new home construction. Housing affordability is expected to drop by about 8 percent in 2022, following the 7 percent drop estimated for 2021. Another negative for homebuilding is slower population growth and the reduced rate of household formation, which never fully rebounded from the lows reached after the Great Recession. Also, the eventual wind down of many mortgage forbearance programs launched during the Covid-19 recession will put more foreclosed homes on the market, but this influx will only dent a still-tight inventory.

### **Nonresidential Construction**

Spending for new nonresidential construction will be exceptionally strong. In the private sector, however, the upturn in nonresidential construction lacks vigor because rents are depressed, vacancy rates are elevated, and absorption is limited. Nonetheless, overvalued equity and bond markets will make investors interested in income-producing property as an asset class. In many markets, tenants will have the upper hand in lease negotiations. Trade tensions, dollar strength, and travel restrictions will continue to dampen foreign investors' interest in American real estate, but to a lesser degree than in 2020-21. But there will be a few very bright spots: private spending will increase to build data centers, communications infrastructure, R&D facilities, and warehouses. In addition, construction spending by federal, state, and local governments will soar.

Office and retail vacancy rates are very high and probably will not recede too much in 2022. Covid accelerated the trend towards remote work, which reduces office headcounts and the overall demand for

commercial office space, with the likely result being substantially less utilization of commercial office space per dollar of GDP. Demand for new commercial office space will be most resilient in lower-density urban and suburban markets, especially where high tech and healthcare industries are concentrated.

The glut of retail space will sharply limit new retail construction, but some will occur in places that benefited from heavy in-migration of teleworkers and retirees. Financing to build new retail space will be difficult to obtain but will be available for the repurposing of retail space in good locations. Competition from online retailers decreases the need to build stores but increases the need to build distribution centers. Industrial development will be focused on locations with logistical advantages.

Public sector spending will increase much faster than private spending for nonresidential construction because revenue collections by state and local governments held up much better throughout the pandemic than initially feared. In addition, federal government transfers to state and local governments were massive. Many state and local governments recognize that recent revenue gains are unlikely to be repeated and therefore will direct revenue surpluses to one-time uses, such as construction projects, rather than to continuing obligations such as hiring permanent staff. Construction spending by local governments probably will increase faster than such spending by state governments due to local governments' high reliance on property taxes. Thanks to the housing boom, many local governments' property tax digests are soaring and will continue to do so; nonresidential property tax digests probably will not.

Sales tax collections will support higher construction outlays by state and local governments. Spending on both durable and nondurable goods will exceed pre-pandemic levels, partially because consumers will spend a smaller proportion of their income on services. Unlike most retail goods, many services purchased by households are not subject to sales taxes. Thus, the reallocation of consumers'

expenditures from services towards goods favors sales tax collections.

### **Spending for Equipment**

The pandemic accelerated several tech-centric trends ranging from remote work, to online shopping, mobile banking, telemedicine, and video conferencing. These developments will boost spending for equipment and intellectual property and will probably make this type of spending slightly less cyclical than before. The accelerated adoption of many existing technologies, growth of end markets, tight labor markets, and competitive pressures means that businesses' spending for equipment and intellectual property will climb by about 7 percent in 2022. That increase could be even larger if trade tensions loosen appreciably.

Another positive development for businesses' spending for equipment and software is that there are many new small businesses. In addition, recent increases in home equity due to surging home prices will support higher spending for equipment and software by these startups.

One potentially negative development is that many companies took on a lot of debt during the pandemic. Low interest rates as well as the necessity to raise cash to survive the shutdown were responsible for much of the increase in corporate debt. Companies refinanced older debt to lower interest expenses and lengthen debt maturities, but bond issuance often exceeded the amount of debt retired. U.S. corporate bond issuance is at record levels, too.

Looking ahead, corporate deleveraging could reduce funds available for investment spending, but many companies are sitting on large accumulations of cash which could simultaneously allow for higher investment spending and deleveraging. Additional downside risks include lower stock prices, an escalation of the trade war, higher corporate taxes, and turmoil in the financial markets.

### **Corporate Profits**

Corporate profits rose substantially in 2021 and will climb by at least 3 percent in 2022. To a considerable extent, the expectation of

a more modest gain reflects higher costs for labor and materials as well as more difficult comparisons to profits reported for the previous year. In 2021, corporate profits not only fully recovered, but surpassed pre-pandemic levels.

The forecast for 4 percent inflation-adjusted GDP growth bodes well for domestically generated corporate profits. Businesses' pricing power will be fairly strong so many companies will be able to push through price increases to offset higher wages and raw materials costs. Strong growth in final demand and lingering shortages will help ensure that the price increases stick.

Low interest rates will support profit margins, especially for debt-heavy and capital-intensive businesses. Expense management and more broad-based growth in demand for goods and services will support profits. Cash flow will be good, and financing should still be inexpensive and reasonably easy to obtain.

Some high-contact industries that are taking a long time to recover from Covid will return to profitability in 2022, or at least post smaller losses. That will boost overall U.S. corporate profits. Air transportation, the cruise industry, live entertainment, and business travel are examples of industries where profits should be much higher in 2022 than in 2021.

On the negative side, tight labor markets will push up unit labor costs, which will be a headwind for corporate profits. Other headwinds include supply constraints and less efficient supply chains. Trade tensions and slower economic recoveries from Covid in the EU and other developed economies will limit overseas earnings growth. In addition, past appreciation of the dollar will make it expensive for companies to convert earnings in foreign markets to dollars. The dollar's value will moderate only slightly in 2022, which will not provide much help to profit growth based on overseas earnings. Also, financial institutions' profit margins will continue to be constrained by a flatter than normal yield curve.

## International Trade

Typically, the strength of international trade mirrors the strength of the global economy. In 2022, international trade will grow due to the broadening of the global economic recovery to include more developed and developing countries. U.S. GDP growth will continue to outpace foreign GDP growth, but the gap will narrow. The convergence of growth rates is a positive sign for exports, but real imports will continue to grow faster than real exports. Still, both will increase. Imports and exports of goods will grow more than twice as fast as imports and exports of services, reflecting the lingering effects of the pandemic. The 2022 trade gap will be larger than in 2021, measured in both absolute terms and as a percent of GDP.

Uncertainty about Covid-19 as well as U.S. trade policy adds some risk to the 2022 forecast for international trade, but less so than in 2021. The baseline forecast assumes that the U.S.-led trade war does not escalate, but it also assumes that trade tensions remain high and that tariffs remain in place. Protectionist trade policies will become more prevalent domestically and globally, which is bad for trade.

The main obstacles to faster U.S. export growth are lingering effects of the pandemic, the trade war (protectionist trade policies), and past appreciation of the dollar. In 2022, the dollar's value will be quite high, which limits prospects for U.S. exports. The dollar probably will depreciate slightly, but it will be minor compared to the appreciation that has recently occurred.

## Inflation and Monetary Policy

Consumer price inflation will increase by 3.4 percent in 2022, which is below the 4.2 percent rate estimated for 2021, but above the Federal Reserve's preferred average rate of 2 percent. The main reason why is that some of the factors that increased inflation in 2021 were transitory and will diminish. For example, the reopening of the economy allowed many businesses to raise prices that dropped during the pandemic (e.g., admissions tickets,

airfares, auto rentals, and lodging). Similarly, prices for some products got bid up due to temporary demand and supply imbalances (e.g., new and used cars). Another reason why inflation will moderate is that we expect faster productivity growth due to faster adoption of existing technologies and other factors.

But not all the inflation-causing factors are transitory. Some supply-side constraints will persist into 2022 and beyond. Labor markets will remain tight. Because it takes a long time to bring additional semiconductor chip manufacturing capacity online, computer chips will be more expensive and will remain in short supply. There aren't enough homes to meet demand, so higher home prices and rents will exert substantial upwards pressure on inflation for several years. In our view, most of the push to inflation from higher home prices has yet to show up in the official inflation estimates.

Another reason is that monetary policy has been very easy for a very long time. Short-term policy interest rates have been close to zero for most of the last 13 years. Quantitative easing has been on steroids since just after the pandemic began. In addition, unprecedented federal fiscal stimulus dramatically expanded the size of the national debt. That makes it more difficult politically for the Federal Reserve to tighten monetary policy because higher interest rates increase the federal government's debt service costs. Finally, we believe the Fed will continue to prioritize achieving and maintaining full employment above containing inflation. These considerations increase the chances that we will see sustained inflation well above the Federal Reserve's desired average rate of 2 percent.

Several long-term trends that were keeping a lid on inflation prior to the pandemic have reversed. For example, the recent retreat from globalization, including the trade war as well as proposals for protectionist trade and industrial policies, boost the prospects for inflation. The strong dollar has helped to keep inflation at bay, but that will change in the near future.

We expect the Federal Reserve to slowly shift from its very stimulative monetary policy stance towards a neutral one in 2022 and a restrictive stance in 2023. The initial move will slow the increase in the size of the Federal Reserve's balance sheet by reducing its monthly purchases of \$80 billion in treasuries and \$40 billion in mortgage-backed securities. These net purchases—known as quantitative easing—are expected to end by mid-2022. We think the Federal Reserve will keep short-term policy interest rates between 0 and 0.25 percent through most, if not all, of 2022, and begin to increase them in either the final quarter of 2022 or the first quarter of 2023. But the inflation risks are not evenly balanced: the risks of higher than desired inflation outweigh the risks that inflation will be lower than desired. So there is some concern that the Fed may raise its targeted rate from 2 percent to 3 percent in 2022, which could unmoor expectations for future inflation.

## Interest Rates

The first hike in the federal funds rate will occur in either late 2022 or early 2023. The yield on the 10-year treasury is currently too low given the prospects for U.S. GDP growth and inflation. We expect the yield on the 10-year note will to move higher throughout 2022, ending the year at about 2.5 percent. The 30-year fixed rate mortgage will rise to 3.75 percent at the end of 2022, up from about 3 percent in 2020-21. If the Federal Reserve is successful at holding inflation to an average annual rate of about 2 percent and the long-term growth rate of real U.S. GDP is about 1.75 percent, then the yield on the 10-year treasury should rise to about 3.75 percent within the next 3-5 years. If we are correct and inflation averages about 3 percent instead of 2 percent, then the yield on the 10-year treasury will rise to about 4.75 percent over the next 3-5 years. (This forecast is based on an assumption that over time the yield on the ten-year note tends to roughly match nominal U.S. GDP growth.)

## Crude Oil Markets

The basis of our forecast for crude oil prices is that the recovery in global oil consumption will be balanced by increases in production. If there are no significant supply interruptions, or additional price premiums due to political tensions, oil prices will be relatively stable in 2022. Prices are expected to trade close to the long-term equilibrium level of about \$60 per barrel, or slightly higher than the break-even price for new U.S. shale oil wells of about \$55 per barrel.

Although U.S. demand for oil fully recovered in 2021, oil production will take longer to recover. In 2022, global demand for oil is expected to increase as more countries reopen. OPEC+ decisions to boost production are expected to roughly match increases in global demand, but non-OPEC+ oil production will increase only slightly, thus giving OPEC+ more power to set prices than was the case before the Covid recession. Of course, a significant supply interruption could force oil to trade significantly higher. As always, there is no shortage of potential negative supply shocks. The downside risk is that disagreements among OPEC+ countries could lead to a price war. For example, the United Arab Emirates probably would like to boost production well beyond its quota in order to benefit from its recent heavy investments in productive capacity. Iran has plenty of spare capacity and most certainly would like to boost production, which would lower oil prices.

## Productivity

In the wake of most recessions, productivity increases. New businesses are started. Social distancing and remote work forced businesses to invest more in labor saving equipment and processes. Contagion fears forced businesses and their customers to use automation, digitization, and other high-tech solutions as never before.

Although often lamented, the slowness of the post-pandemic matching of workers to employers probably will make the post-pandemic economy more productive.

Generous unemployment benefits allowed workers to spend more time finding a better fit with employers, which should boost productivity. In addition, the labor shortages that appeared quickly as industries reopened encourage employers to use their existing workers more efficiently and to equip them with better technology, which boosts productivity growth.

Unfortunately, not all recent developments favor faster productivity growth. For example, there will be a payback from shutting down schools and from the forced substitution of virtual learning for in-person instruction. Pandemic-era students lost months of achievement. The step back from globalization, protectionist trends that favor certain industries, and onshoring to guard against supply chain disruptions will reduce productivity growth.

In addition, there are some long-term factors behind weak productivity growth that have probably intensified. The federal debt increased substantially. Government has grown in size and accounts for a larger share of the overall economy than it did before the pandemic. We are likely to see higher overall federal tax burdens and more regulations at every level of government, which will limit productivity growth. Another problem is that slower gains in educational attainment contribute to sub-par productivity growth. Finally, the aging of the population and a less liberal immigration policy are additional limiting factors.

## Forecast Risks

The risks to our baseline outlook for sustained, above-average inflation-adjusted GDP growth in 2022 are evenly balanced, with Covid-19 as the main risk. The virus will continue to mutate and a variant that avoids vaccines could develop. Even though we believe widespread lockdowns would be avoided, contagion fears could lower confidence and slow consumer spending. Supply chain disruptions could worsen. More older workers would retire, and more prime-age workers would stay home to care for family members, which would make the economy

grow more slowly but probably not cause a recession. A dramatic worsening of the pandemic, however, could lead to lockdowns again and push the economy into recession.

A large increase in long-term interest rates and/or inflation could trigger a recession through either a stock market correction or a corporate debt crisis. Stock prices are inflated and vulnerable to correction, so inflation might run much hotter than expected. In 2022, labor market conditions will strengthen further. Workers will be scarce in many occupations. The U.S. unemployment rate will soon fall to levels consistent with full employment, and then labor market conditions will begin to generate wage-push inflation. The Federal Reserve must shift to a more restrictive policy, but if it increases interest rates faster than financial markets are expecting, then stock and bond prices could crater.

We are concerned that inflation might gain traction because the Federal Reserve's purchases of treasuries and mortgage-backed securities created a lot of money even as the quantity of goods and services available for sale declined. The money supply, M2, grew by 25 percent in 2020 and probably increased by at least 5 percent in 2021. The main reason recent increases in the money supply have not been too inflationary is that the velocity of money—how fast it turns over relative to GDP—has fallen to historic lows. If the velocity of money were to quickly normalize, inflation would accelerate, and would be very difficult to contain without pushing up long-term interest rates substantially. Inflationary expectations could become unanchored. Cost-push inflation could gain traction. That said, the immediate danger of rapidly accelerating inflation is low, but it is increasing.

Recent rapid growth in lending to highly leveraged businesses is another risk to economic expansion. Corporate leverage is at historic highs. The ratio of non-financial corporate debt to GDP is 50 percent. The default risk is difficult to gauge, partially because a significant share of leveraged loans is held by

the “shadow banking” sector, which includes small funds and finance companies. Defaults there could spill over into the formal finance sector and create a financial crisis. As long as long-term interest rates remain low, leveraged lending to businesses is very unlikely to trigger a recession. An unexpectedly large increase in interest rates, however, could trigger a recession. A related risk is the size of the junk corporate bond market.

In addition to domestic risks, high levels of sovereign debt and trade tensions are two major geopolitical risks capable of triggering another. In 2022, the risk of a sovereign debt crisis will increase as central banks in developed economies begin to normalize monetary policies. Even if economic conditions do not justify tighter domestic monetary policies, these central banks must respond to tighter monetary policies. If not, developing countries will risk currency collapses and/or higher inflation. In developing countries, debts denominated in dollars or euros would become very difficult to service. A sovereign debt crisis that begins in developing economies could quickly

spread to other financial markets and take down the U.S. economy. In regard to the trade war, we assume that the higher tariffs enacted in 2018-19 will remain in place and will be an economic headwind, but not trigger a recession. A major escalation of the trade war, however, could be fatal to U.S. economic expansion.

In all, there is a relatively low 20 percent risk that a U.S. recession begins before the end of 2022. Fortunately, downside risks (20 percent) are roughly balanced by upside risks (20 percent) that may make the economy to perform better than expected. Upside risks include: (1) Covid-19 becomes less virulent and/or vaccines become more effective; (2) consumers spend more of their savings than expected; (3) the labor force grows faster than expected due to the re-entry of older persons and caregivers who left the labor force during the pandemic; (4) the population and the labor force grow faster than expected due to higher immigration (e.g., Afghan refugees); and (5) more federal economic stimulus is agreed upon than expected. ❖

**G**eorgia's economic recovery is expected to continue at an above-average pace in 2022, with the upside and downside risks evenly balanced. Of course, Covid-19 is the main risk to growth. On the positive side, consumer spending out of accumulated savings, the housing boom, federal stimulus, and economic development project announcements could be stronger than we expect, which would boost the pace of growth.

While the pandemic's damage was substantial, Georgia's economy was not hit as hard as the U.S. economy. For instance, Georgia's 13 percent peak-to-trough job loss was smaller than the U.S. peak-to-trough job loss of 15 percent. As of mid-2021, Georgia recovered 85 percent of the jobs lost to the recession whereas the U.S. recovered only 74 percent of the lost jobs.

State-specific forces that will sustain Georgia's rapid economic growth through 2022 include: (1) the build-out of many economic development projects; (2) competitive economic development incentives; (3) more foreign direct investment; (4) the housing boom; (5) higher vehicle sales; (6) strong performance of the transportation and logistics industry, especially Georgia's ports; (7) good prospects for Georgia's military bases; and (8) demographic trends.

The 2022 forecast calls for Georgia's inflation-adjusted GDP to increase by 4.3 percent, which is slightly more than the 4 percent rate expected for U.S. GDP. Nonfarm employment will rise by 3.2 percent, which exceeds the 2.7 percent national gain. The unemployment rate for 2022 will average 3.2 percent, or 0.5 percent lower than the 3.7 percent rate estimated for 2021. The state's nominal personal income will grow by only 1.9 percent in 2022, which is lower than the 7 percent gain estimated for 2021. This sharp slowdown in personal income reflects the winding down of federal stimulus programs that provided large transfer

payments to individuals rather than slower growth of Georgia's economy. In contrast, the wage and salary-based personal income will grow faster in 2022 than in 2021.

The pattern of job growth across Georgia's industries will be different than it was before the virus crisis. Several of the industries hit hardest by the pandemic—such as bars, restaurants, and airlines—will post fast growth, but the gains reflect rebounds off depressed levels as well as improving economic fundamentals. Some—such as movie theaters—may never recover. In contrast, logistics, distribution, warehousing, professional and business services, the information industry, and fintech recovered quickly. In addition, positive job growth will occur in manufacturing, financial activities, utilities, and education, but full recovery may take some time. Due to the strong housing market, building contractors will be hiring. Retailing will add jobs, and state and local governments will begin to add back some of the jobs lost to the recession. None of the state's major economic sectors will experience job losses, which has not happened since before the pandemic.

### Services

Georgia's major categories of services-related businesses will expand, thanks to the upturn in housing markets, growing demand for healthcare, education, business and professional services, and financial services, among others.

The large, well-established, cluster of fintech companies fared relatively well during the recession. The industry itself received a boost from the Covid crisis because contagion fears pushed people to adopt new mobile technologies, including mobile banking and touchless payment systems.

The fintech cluster of companies in the Atlanta MSA has grown rapidly. For example, in 2020, Deluxe announced that it will establish a new fintech and customer innova-

tion center in Sandy Springs, creating over 700 jobs. Toyota Financial Services will open a financial services center in Alpharetta that will be one of three national hubs and will create 150 jobs. Investment management company Invesco plans to add 500 jobs at its global headquarters in midtown Atlanta. BlackRock announced the creation of an innovation hub in Atlanta, creating 1,000 jobs over several years. Bolstering all of these efforts, the Georgia Fintech Academy—available at 15 of the University System of Georgia's 26 institutions—provides the talent needed to attract more financial technology companies to the state.

The Covid-19 crisis dramatically boosted the use of online and digital services, which increases the need for cybersecurity. Georgia's cybersecurity industry is located primarily in Atlanta and Augusta. Talent is the key to Atlanta's success whereas the presence of the U.S. Army Cyber Command at Fort Gordon and the Georgia Cyber Center are the foundations of Augusta's cybersecurity economy.

Healthcare IT and telemedicine will create thousands of high-paying jobs in Georgia over the next decade. The Covid crisis greatly accelerated the adoption of telemedicine by traditional healthcare providers, which helped people become accustomed to the online delivery of healthcare. Once the pandemic is over, it is likely that many patients will continue to use online healthcare, which bodes well for healthcare providers, healthcare IT companies, and cybersecurity companies. Georgia is attracting and growing healthcare IT companies. In late 2020, Path-Tec announced an expansion of their operations in Columbus that would create 350 jobs. BioIQ will create 500 jobs in Cobb County at its new headquarters in Cobb County, and Edifecs Inc. will bring 200 healthcare IT jobs to Atlanta over the next three years.

The build-out of headquarters projects is an important force pow-

ering Georgia's future economic growth. Vanderlande Industries, a logistics company, will expand of its North American headquarters in Cobb County, creating 500 new jobs in Marietta. Soliant, a healthcare staffing company, will expand its headquarters in Gwinnett County, creating 200 new jobs in Peachtree Corners. GreyOrange, which specializes in the use of AI-software/robotics for fulfillment automation, will relocate its global headquarters to Roswell, creating 200 new jobs. GCP Applied Technologies, a provider of construction products and technologies, will open a global headquarters in metro Atlanta, creating 80 jobs.

In addition to headquarters projected announced in 2021, projects announced earlier will spur growth, too. For example, Papa John's chose Georgia as the location of its new global headquarters in 2020, which adds about 200 jobs to the Atlanta MSA. Norfolk Southern Railway is relocating its corporate headquarters to midtown Atlanta and expects to move in late 2021; and Newall

Brands moved its headquarters back to Atlanta from New Jersey.

Hartsfield-Jackson International Airport and the state's ideal geographic location makes Georgia a good hub from which to serve operations in the Americas. In addition, access to talent and the strength of the business sector are very important drivers of headquarters locations in the Atlanta MSA. According to FEMA, Georgia has a very low risk for business disruption due to natural disasters, which is an important consideration for headquarters locations. Twenty-nine companies with headquarters in metro Atlanta rank among the 2021 *Fortune* 1000 and sixteen rank among the *Fortune* 500. Before the pandemic (2019), Atlanta was home to only 26 *Fortune* 1000 companies.

The outlook for Georgia's large healthcare industry is good, but its economic recovery from the virus crisis is far from complete. During the initial lockdown, many people postponed visits to healthcare providers, but rescheduled appointments

once the economy reopened, so the ambulatory healthcare services sub-sector recovered very quickly. In contrast, hospitals are still on a downward trend. Nursing and residential care facilities also lost jobs in 2021. Consequently, the number of healthcare jobs in Georgia will end 2021 well below its pre-pandemic peak.

Due to the essential need for healthcare and favorable demographic trends, the prospects for providers of ambulatory healthcare are very good. In 2022, we expect providers of nursing and residential care to benefit from an upturn in business that will lead to a sustainable recovery. The recovery may not be too vigorous, however, because family members will continue to provide more care to aged and ill relatives at home. On a more optimistic note, higher home prices will give homeowners who want to move into nursing and residential care facilities the means to do so. Assuming that the pandemic winds down, hospitals should see a solid, sustainable upturn in demand for their more profitable services.

## GEORGIA'S BASELINE FORECAST, 2021-2022

Georgia	2017	2018	2019	2020	2021	2022
Gross Domestic Product, Bil of 2012\$	519.5	538.7	547.2	533.6	564.5	588.8
Percent change	3.7	3.7	1.6	-2.5	5.8	4.3
Nonfarm Employment (thousands)	4,452.6	4,535.7	4,619.9	4,406.5	4,529.2	4,673.1
Percent change	1.9	1.9	1.9	-4.6	2.8	3.2
Personal Income, Bil of \$	467.4	493.6	512.1	548.0	586.3	597.5
Percent change	5.8	5.6	3.8	7.0	7.0	1.9
Housing Permits, Total	51,240	59,315	53,823	53,131	73,000	80,000
Percent change	-0.8	15.8	-9.3	-1.3	37.4	9.6
Unemployment Rate (percent)	4.8	4.0	3.5	6.5	3.7	3.2

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, September 2021.

Nonetheless, it will take many years for hospitals to fully replace the jobs that were lost over 2020–21, especially in rural areas of the state.

The upshot is that Georgia’s burgeoning older population will demand more healthcare services, which will broaden the industry’s overall economic recovery. Large numbers of baby boomers are reaching the age at which heart attacks, strokes, cancer, and other care-intensive problems begin to climb. Of course, there’s the question about who will pay the bills, which is a headwind for the healthcare industry’s growth.

Factors that will encourage providers of high-tech and highly specialized professional services to favor sites in Georgia—especially the Atlanta area—include the good business climate, logistical advantages in terms of serving far-flung clients, and the available professional workforce. For example, the Boston Consulting Group’s decision to create a new regional support center in Atlanta

reflects the ease of having a central geographic hub from which to serve clients throughout the Southeast.

Assuming that the overall economy continues to grow, and the trade war does not intensify, the prospects for Georgia’s transportation and logistics industry are excellent, thanks to the abundance of logistics and distribution projects already in the development pipeline. Improvements in the state’s transportation infrastructure will expand the state’s importance as a regional and national logistics and distribution center. In 2022, this highly cyclical industry will benefit from more spending by consumers, increases in industrial production, more online retailing, more homebuilding, and population growth.

In 2022, cargo volumes will outpace state and U.S. GDP growth—quite an accomplishment for an industry that typically moves in lock-step with the overall economy. The new Appalachian Regional Port is helping the Port of Savannah tap into

new markets and will help economic developers bring more projects to Georgia. The Mason Mega-Rail Terminal at the Port of Savannah is nearly complete and will provide more frequent and faster rail services to the Midwest and the Ohio Valley. When ready, the terminal will double the Port of Savannah’s rail capacity and it will be the largest on-dock rail terminal at any port in North America.

Meanwhile, Savannah’s harbor deepening project is about 90 percent complete. When finished, the high-tide depth of 54 feet will allow larger container ships to navigate the channel with fewer tidal and loading restrictions. The Ports Authority recently approved the addition of 650,000 TEUs of container yard capacity as well as the renovation of Berth 1, which will boost the Garden City Terminal’s annual berth capacity to 6 million TEUs. The Ports Authority is also working on a second inland container port near I-985 in Gainesville that will transport up to

### GEORGIA’S GROSS DOMESTIC PRODUCT, 2021-2022 (millions of dollars)

Year	Current \$	Constant (2012) \$	Percentage Change from Previous Year	
			Current \$	Constant (2012) \$
2011	427,826.9	438,060.2	3.2	1.7
2012	443,566.1	443,566.1	3.7	1.3
2013	459,578.7	449,796.1	3.6	1.4
2014	485,282.5	465,137.8	5.6	3.4
2015	515,753.0	484,378.4	6.3	4.1
2016	541,292.2	500,909.3	5.0	3.4
2017	568,398.9	519,452.6	5.0	3.7
2018	602,023.9	538,730.8	5.9	3.7
2019	625,713.6	547,422.7	3.9	1.6
2020	619,240.0	533,566.8	-1.0	-2.5
2021	679,925.5	564,513.7	9.8	5.8
2022	731,599.9	588,787.8	7.6	4.3

Source: Data through 2020 obtained from the Bureau of Economic Analysis, U.S. Department of Commerce. Data for 2021-2022 are from the Selig Center for Economic Growth, Terry College of Business, University of Georgia, September 2021.

200,000 containers per year by rail to the Port of Savannah.

Many of the major distribution and logistics project announcements in 2020-21 will be building out. Amazon will have a new fulfillment center in Savannah that will create 1,000 full-time jobs. Freshly Inc.'s new distribution center in Clayton County will employ 665 workers. Vanderlande Industries, a global logistics company, announced a 500-job expansion of its North American headquarters in Marietta, and Bluestem Brands will increase their e-commerce distribution center in Eatonton by 130 jobs. Avid interest in home improvement projects spurred Home Depot's decision to open three new warehousing facilities, creating 1,000 jobs in the metro Atlanta area.

Georgia's film industry ranked third to California and New York in the production of all feature films, and before the pandemic, was on pace to have a record-setting year in film production. Unfortunately, the

ensuing shutdown resulted in a direct spending decline from \$2.9 billion in FY 2019 to \$2.2 billion in FY 2020. Still, production recovered swiftly and prospects for 2022 are excellent, thanks in part to state incentives that help to ensure that nearly all studio space is booked, and to the variety of interesting locales for on-location filming.

The financial services industry also suffered during the pandemic, but several favorable trends suggest that Georgia's financial institutions will do very well in 2022. Demographic trends such as above-average population growth will help as will the upswing in residential real estate. Rising home prices favor banks' top- and bottom-line growth, but weak commercial property prices will hurt. The prospects for deposit growth are good, but an almost flat yield curve will limit financial institutions' ability to profit from borrowing short and lending long.

Higher demand for many types of loans will support banks' profits.

Consumers' credit scores are at decent levels and are not expected to deteriorate too much even as forbearance policies and eviction moratoriums end. Higher consumer spending will support growth of non-revolving credit, and home equity loans will rise. More auto loans will add to the bottom line, but substantially less mortgage refinancing will challenge the bottom line. Mobile banking should help traditional banks and credit unions cope with more competition from large retailers, venture capital funds, microfinance, and other nonbanks.

It will take many years for the hospitality industry to fully recover from changes wrought by the pandemic, but we can make some general observations about the prospects for various segments. First, leisure travel is recovering much faster than business travel. Within the business travel segment, trips to see clients and to make sales calls are coming back fairly quickly, especially when the trips can be made by car rather

## NEW RESIDENTIAL BUILDING UNITS AUTHORIZED FOR GEORGIA, 2021-2022

Year	Total New Residential	Percent Change from Previous Period	New Single-Unit Residential	Percent Change from Previous Period	New Multi-Unit Residential	Percent Change from Previous Period
2011	18,493	7.1	13,817	-6.5	4,676	88.1
2012	24,350	31.7	17,297	25.2	7,053	50.8
2013	36,174	48.6	24,810	43.4	11,364	61.1
2014	39,423	9.0	27,503	10.9	11,920	4.9
2015	45,549	15.5	32,621	18.6	12,928	8.5
2016	51,675	13.4	36,481	11.8	15,194	17.5
2017	51,240	-0.8	40,311	10.5	10,929	-28.1
2018	59,315	15.8	42,287	4.9	17,028	55.8
2019	53,823	-9.3	42,939	1.5	10,884	-36.1
2020	53,131	-1.3	45,984	7.1	7,147	-34.3
2021	73,000	37.4	64,000	39.2	9,000	25.9
2022	80,000	9.6	69,000	7.8	11,000	22.2

Source: The Selig Center for Economic Growth, Terry College of Business, The University of Georgia, September 2021.

than by plane or train. Second, domestic travel is coming back much faster than international travel. Third, prospects for the lodging industry vary by property type. Economy and mid-level properties that cater primarily to essential workers, construction crews, truckers, and extended-stay guests will fare best, but luxury properties catering to convention travelers, international visitors, and vacationers will not.

## **Manufacturing**

Production by Georgia's manufacturers will increase more quickly than GDP, but due to productivity gains, manufacturing jobs will increase more slowly than the total number of jobs across all industries. The main impetus to growth will be recovering global demand for manufactured goods. Persistent shortages of critical inputs and other supply chain problems means there's also a need to produce more to restock stores and warehouses. Inventories will be fully restored in 2022. Of course, Covid is the main downside risk, but an escalation of the U.S.-China trade war also could endanger the projected increases in industrial production.

Food processing—Georgia's largest manufacturing industry—fared relatively well during the pandemic but had to accommodate to higher sales to grocers and lower sales to restaurants and institutions. So, it is very good that many of the economic development projects announced over the last few years involved food processors such as Nestle Purina, Anheuser-Busch, Frito Lay, and General Mills.

Vehicle parts manufacturing will benefit from higher domestic demand for cars and trucks, but supply chain problems will limit the gains. Political pressures that encourage foreign manufacturers to invest more in American production facilities and to buy automotive parts from U.S. manufacturers will help. In addition, there are more assembly plants in the Southeast now.

Effective economic development policies, low electricity and natural gas prices, rising wages and production costs in China and elsewhere are

factors that support Georgia's manufacturing sector. Concerns about trade policies, product quality, and management of the risks associated with increasingly complex supply chains also make manufacturing in Georgia more attractive than manufacturing overseas. Additional factors include a superior transportation, logistics, and distribution infrastructure, low costs of doing business, a favorable tax structure, an educated workforce, and very competitive economic development incentives.

## **State and Local Government**

Before the pandemic, the state prepared for a substantial slowdown in revenue collections by cutting its budget for FY 2020 and FY 2021. At that time, the main threat was thought to be an escalation of the trade war. The cuts were timely and helped to reduce the fiscal impact of the Covid-19 crisis on the state's economy. Nonetheless, budget cuts reduced state government employment in 2020-21, but revenue collections held up far better than many expected. Large transfers from the federal government also helped to shore up state and local governments' balance sheets. In 2022, a combination of increasing revenue collections and federal largess will reverse the downturn in state and local government jobs, but the upturn in hiring will not be very vigorous because it is well understood that stimulus funds from the federal government have ended.

Another reason why state government will not hire too many new workers is that several long-term fiscal challenges loom, the biggest of which is uncertainty about federal funding for mandated programs, especially Medicaid. Mandatory spending on Medicaid is gradually crowding out spending on K-12 education, higher education, and infrastructure, three spending areas essential to boosting—or even maintaining—Georgia's competitiveness, productivity, and culture for innovation. The second challenge is an antiquated tax structure that does not align with the state's shifting economic structure. Consequently, when Georgia's economy expands state taxes do not

generate as much revenue as before. Pension liabilities and state retiree healthcare costs are the third and fourth challenges, and these will limit hiring and exacerbate the effects of the next recession.

The fiscal situation facing most local governments is better than the one facing state government, so most local jurisdictions will boost hiring more quickly. Compared to state government, local governments depend very heavily on property taxes and fees for services so the housing boom means most local governments will generate enough revenue to sustain and expand programs. In Georgia, residential real estate prices probably will rise by about 6 percent in 2022. Less positively, commercial real estate prices will increase only slightly and might decrease in some jurisdictions, which does not bode well for future property tax digests.

## **Federal Reserve Policy**

The shift in Federal Reserve policy from an extremely accommodative stance to a neutral, or slightly restrictive one poses a slightly stronger economic headwind for Georgia. That is because Georgians carry relatively more debt and have relatively less savings so higher interest rates will hurt. In addition, interest-sensitive economic sectors such as real estate development, home building, and building materials manufacturing will feel the impact.

## **Economic Development**

Georgia's economic development prowess will be a major driver of growth in 2022 and beyond. Foreign direct investment was very strong. In fact, Korea's nineteen projects account for the largest job creation due to investment in Georgia by a single country. Projects from Germany accounted for the second largest number of jobs created by foreign direct investment.

As national, state, and regional economic growth continues, Georgia will find that it is easier to capitalize on its many advantages. That is because the number of projects that states compete for will increase, improving Georgia's prospects for new landing economic development proj-

## GEORGIA'S BASELINE EMPLOYMENT FORECAST, 2021-2022

Georgia	2017	2018	2019	2020	2021	2022
<b>Nonfarm Employment<sup>1</sup></b>	4,452.6	4,535.7	4,619.9	4,406.5	4,529.2	4,673.1
Total Private	3,768.4	3,845.7	3,928.8	3,726.3	3,858.5	3,996.3
Goods Producing	592.2	609.5	620.3	596.0	604.6	614.2
Mining and Logging	9.5	9.5	9.5	9.5	9.5	9.5
Construction	186.7	195.5	204.7	201.2	204.4	208.5
Manufacturing	396.0	404.5	406.1	385.3	390.7	396.2
Services Providing	3,860.4	3,926.2	3,999.6	3,810.5	3,924.6	4,058.9
Trade, Trans., Utilities	915.2	931.3	946.7	922.6	960.4	992.1
Information	119.6	115.9	118.1	109.6	115.3	119.0
Financial Activities	241.0	245.8	250.4	250.7	251.0	252.5
Professional and Business Services	689.8	705.2	720.2	694.1	732.3	755.0
Education and Health Services	573.8	588.2	606.6	587.7	602.4	625.9
Leisure and Hospitality	478.6	489.5	500.8	415.2	438.9	478.8
Other Services	158.3	160.4	165.8	150.4	153.7	158.9
Government	684.2	690.0	691.1	680.2	670.7	676.7
<b>Percent Change</b>						
Nonfarm Employment	1.9	1.9	1.9	-4.6	2.8	3.2
Total Private	2.1	2.1	2.2	-5.2	3.5	3.6
Goods Producing	2.6	2.9	1.8	-3.9	1.4	1.6
Mining and Logging	0.0	0.0	0.0	0.0	0.0	0.0
Construction	3.8	4.7	4.7	-1.7	1.6	2.0
Manufacturing	2.1	2.1	0.4	-5.1	1.4	1.4
Services Providing	1.7	1.7	1.9	-4.7	3.0	3.4
Trade, Trans., Utilities	1.5	1.8	1.7	-2.5	4.1	3.3
Information	4.5	-3.1	1.9	-7.2	5.2	3.2
Financial Activities	1.7	2.0	1.9	0.1	0.1	0.6
Professional and Business Services	2.5	2.2	2.1	-3.6	5.5	3.1
Education and Health Services	1.7	2.5	3.1	-3.1	2.5	3.9
Leisure and Hospitality	2.6	2.3	2.3	-17.1	5.7	9.1
Other Services	0.6	1.3	3.4	-9.3	2.2	3.4
Government	0.6	0.8	0.2	-1.6	-1.4	0.9

<sup>1</sup>Indicates thousands of workers.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, September 2021.

ects that expand the economic base. Because it takes many years to build out the typical project, many already underway continue to provide a substantial tailwind to Georgia's economic growth in 2022 and beyond.

Among others, Intuitive, a manufacturer of robotic-assisted surgical systems, announced a 1,200-job expansion in Gwinnett County. Amazon plans to build a fulfillment center in Savannah that will bring 1,000 full-time jobs. Sports-tech entertainment company FanDuel will open a technology campus in Atlanta that will generate hundreds of jobs. Vanderlande Industries, a materials handling and logistics company, will expand its North American headquarters in Marietta, creating 500 new jobs.

Another reason Georgia will do well is that the U.S. automobile manufacturing industry is increasingly concentrated in the Southeast. When it comes to distribution and consumer markets, Georgia capitalizes on proximity to major assembly plants and suppliers, interstates, ports, and railroads. Due to cost, logistics, and tax advantages, Georgia is very competitive when it comes to luring companies. It also has the skilled workforce sought by specialized companies with high-paying jobs. Logistics, transportation, distribution, warehousing, software/technology, fintech, cybersecurity, and headquarters operations are good examples of industries where Georgia competes effectively.

### Housing Market

The outlook for the homebuilding industry is very good. Sales of homes, permits to build new single-family homes, and home repair and renovation activity will increase. Home price appreciation will continue slowly. Increases in demand for housing will stem from low mortgage rates, job growth, and population growth. In addition, investors will be active. The main negatives are supply constraints and decreased afford-

ability due to recent home price appreciation.

Housing and real estate development will be a driver of Georgia's economy. New single-family home construction will climb by 7.8 percent and new multi-unit homebuilding will increase by 22.2 percent. Georgia gets a five for one from the housing boom because: first, homebuilders and realtors benefit directly; and second, national demand is high for goods produced by Georgia's large floor covering and building materials industries. Third, our large transportation and logistics industry benefits from higher levels of activity in construction, which is transportation intensive. In addition, continuing increases in U.S. home prices will make it even easier for companies and people to relocate to Georgia. Finally, the home equity generated by home price appreciation will boost small business formation and expansion as well as consumer spending.

Georgia's housing market is responding to a more favorable balance of supply and demand that comes from people's increased preference for homeownership, continuing economic recovery, and low mortgage rates. New jobs and slightly bigger paychecks help, too. As of mid-2021, Georgia's existing home prices were 37 percent higher than before the Great Recession's peak. Inflation over that same period was 27 percent. The degree of home price recovery varied widely within the state, however. For example, on average, existing home prices in the Atlanta MSA were 44 percent higher than their pre-Great Recession peak; in rural Georgia, it was only 20 percent higher.

There some negatives. In 2022, supply-side constraints will continue to limit housing sales. The number of new homes is still constrained by years of underbuilding, a shortage of lots, and a scarcity of building materials, appliances, and construction workers. In addition, there are fewer

existing homes listed for sale, especially ones that are most affordable. In fact, the price of the average existing single-family home will rise by 6 percent in 2022.

### Demographics

Demographic forces are another factor behind Georgia's improving economic performance. The state's population will grow at a pace that exceeds the national average in 2022—0.8 percent for Georgia versus 0.5 percent for the U.S. Domestic net migration should increase to at least 40,000, some of whom are mid-career movers and retirees. In addition, its higher rate of population growth traditionally is dependent on net international migration of about 20,000 people, and that number should increase in 2022. ❖

From peak-to-trough the Atlanta MSA lost 13.6 percent of its jobs to the Covid recession but recovered 77 percent of its losses by mid-2021. Job losses were heavy in air transportation, hospitality, and transportation equipment manufacturing. In 2022, Atlanta's recovery from the virus crisis will outpace nation's recovery and will essentially pace that of the state as a whole. Business development, an educated workforce, an innovation and logistics hub, a tech hub, above-average population growth, and strong housing markets underpin Atlanta's economic recovery.

In 2022, the pace of job growth will be 3.6 percent which exceeds the 2.9 percent gain expected for the U.S. and the 3.2 percent gain expected for Georgia. The MSA's economy and its economic growth are very diverse, which decreases the economic risk associated with living and doing business in Atlanta. Leading high-wage industries include computer systems design, management of companies and enterprises, and doctors' offices. Mid-wage industry leaders include general medical and surgical hospitals and building equipment contractors. The leading low-wage industries are restaurants, employment services companies, and grocery stores.

In order, the Atlanta MSA's top ten employers are Delta Air Lines, Emory University and Emory Healthcare, Home Depot, Northside Hospital, Piedmont Healthcare, Publix, WellStar Health Systems, Kroger, AT&T, and UPS. The population's level of educational attainment exceeds the national average, providing essential talent to the area's innovation ecosystem. Prior to Covid-19, Atlanta's hospitality industry was thriving, but it is struggling to fully recover from the pandemic.

The Atlanta MSA is dependent on two highly cyclical industries – distribution and new construction, both of which will outperform the overall economy in 2022. Exports account for about 6.4 percent of

the area's GDP, so the MSA is not overly dependent on export markets. Immigrants account for 13.8 percent of the MSA's population, ranking 89 among all MSAs. Thus, changes in—or stricter enforcement of—U.S. immigration laws will affect economic performance. The MSA's main weakness is an overburdened infrastructure.

Atlanta has many high-tech jobs—6.1 percent of total employment in the Atlanta MSA versus 4.5 percent for Georgia and 5.3 percent for the nation. The area's high concentration of college-educated workers, business partners, cyber security, high-tech companies, innovation centers, and research universities will continue to attract high technology companies in life sciences, software development, research and development, healthcare IT, professional and business services, and advanced manufacturing. The CDC and nonprofits such as the national headquarters of the American Cancer Society and the Arthritis Foundation attract life sciences companies.

Atlanta's high-tech development depends on easy access to quality universities, especially university research centers that transfer new ideas and technologies to local businesses. For example, the innovation district that developed around Tech Square has achieved the critical mass needed to attract many high-tech companies and venture capitalists to Midtown Atlanta. Among the companies based here are sports-tech entertainment company FanDuel Group, robotics/AI software company GreyOrange, and Microsoft.

Compared to other large metropolitan areas with strong links to global markets the costs of living and doing business in the Atlanta MSA are low. Despite the limit that traffic congestion places on realistically accessible workers, many companies are attracted by the large and diverse pool of workers. In addition, the high concentration of colleges and universities ensures a large supply of expe-

rienced faculty, newly minted college graduates, and student interns. Less positively, stricter issuance of H-1B and H4 visas limits Atlanta's ability to attract international talent, which is a headwind for growth of Atlanta's high-tech industries.

On an annual average basis, the 29-county Atlanta MSA will add 99,600 jobs in 2022, a year-over-year increase of 4.3 percent. The pace of job growth in the MSA will exceed the pace expected for the state as a whole. Atlanta's high concentration of services-producing industries, IT companies, distribution companies, e-commerce fulfillment centers, universities, healthcare providers, life sciences companies, and headquarters operations will keep Atlanta's job recovery going.

Covid turned Atlanta's high dependence on air transportation into a negative economic factor in 2020-21, but planned improvements at Hartsfield-Jackson International Airport are a good sign for Atlanta's future growth. As the world's busiest for passenger traffic, the airport makes the Atlanta area an ideal location for corporate headquarters. Production sites and specialized storage facilities near the airport appeal to manu-

facturers of perishable biomedical products. Lightweight, highly perishable, or time-sensitive products are well suited to air transportation, so many high-tech production companies consider the extensive air cargo facilities at Hartsfield-Jackson to be essential to their operations. The airport also makes Atlanta an excellent hub from which to manage operations or provide business services to geographically dispersed clients.

Before the pandemic, Atlanta was the sixth most-visited city by U.S. tourists—behind only Orlando in the South—mostly due to business travelers. The metro Atlanta market ranks seventh among U.S. cities in number of hotel rooms. But business travel—and leisure travel in general—has fallen way off so the hospitality industry will be slow to recover.

The Atlanta MSA is highly specialized in transportation, logistics, warehousing, and wholesale trade, with employment concentrated these inherently cyclical industries. Fortunately, the continued growth in U.S. and global GDP will continue to support these industries. Atlanta also will continue to develop as a high-tech inland port thanks to the interstate system, rail, and air cargo facilities.

Given the federal budget situation, one major long-term plus is that the metro area is not very dependent on federal government jobs. The MSA's only sizable federal employer is the CDC with about 8,400 employees. Federal, state, and local government jobs combined account for only about 12 percent of total employment metro Atlanta versus 15 percent for the state and the nation, so public-sector restructuring should be less problematic than it will be elsewhere.

Due to above average growth in employment and population, the housing market is strong. As of mid-2021, Atlanta's home prices were 44 percent above their pre-Great Recession peak levels. The most recently posted year-over-year price increase (between 2020 Q2 and 2021 Q2) was 13.3 percent. In 2022, home prices will continue to increase, but the rate of home price appreciation will slow by about half. Atlanta's single-family homebuilding outlook is very good, driven by job growth, population growth, increasing rents, very low mortgage rates, and a scarcity of existing homes. Decreased affordability, worker shortages, and shortages of some building materials will be headwinds. ❖

## Albany

From its 2020 peak-to-trough, Albany lost 11.8 percent of its jobs to the Covid-19 recession, so its economy will grow more slowly than Georgia's economy, which mostly reflect pre-pandemic growth trends now that the bounce from reopening is over. Nonetheless, Albany has less economic wreckage to clear.

On an annual average basis, we expect the Albany area to add 600 jobs—a 1 percent increase. Woodgrain—Lee County's largest industrial employer—is expanding millwork operations and will add 150 new jobs. The completion of Georgia-Pacific's new lumber production facility will bring 140 jobs. Proximity to raw materials coupled

with Dougherty County's rail and highway infrastructure helped Albany compete for—and win—this advanced manufacturing project.

The MSA's top employers include Phoebe Putney Health Systems, the Marine Corps Logistics Base, Albany State University, Miller Brewing Company, Procter & Gamble, Walmart, Teleperformance USA, Tyson Foods, Coats & Clark, and AT&T. Leading high-wage industries include the federal government, doctors' offices, converted paper product manufacturing, and the military. Mid-wage leaders include general medical and surgical hospitals, architectural and engineering services, building equipment contractors,

and general freight trucking. The leading low-wage industries include local government, restaurants, state government, and farms. The Albany MSA includes Baker, Dougherty, Lee, Terrell, and Worth counties. Dougherty County accounts for 79 percent of the area's jobs and 58 percent of the area's population.

Compared to the state and the nation, Albany's economy is more dependent on government, retailing, health care, and agriculture. These industries suffered less than many others during the virus crisis, which limited jobs losses locally. In contrast, its economy is relatively less dependent on financial activities, manufacturing, and educational

services. The MSA has very few high-tech jobs: only 2 percent of total employment in Albany versus 4.5 percent for Georgia and 5.3 percent for the nation. Increased defense spending will help as will Albany's focus on the production of nondurable goods. Over time, that focus works to Albany's advantage because sales of nondurable goods are less cyclical than sales of durable goods. Consequently, the manufacturing sector is relatively stable.

Compared to the nation, Albany's economy is more dependent on domestic markets, which helped during the pandemic. Exports—primarily food products—account for only 4.1 percent of the area's GDP. Because South America and Asia are the top two export destinations, Albany faces some direct exposure to the trade war and the recent retreat from globalization, but the fallout should be manageable.

In addition to serving as a regional transportation hub, Albany's strengths include low business and living costs and low employment volatility. Its weaknesses include low educational attainment of the workforce, few high-tech jobs, low per capita incomes, weak demographic trends, and a high poverty rate. Population outmigration and weak household formation have hurt consumer industries, including retailing, homebuilding, and real estate development. The area's population generally is older, too.

One economic stabilizer is that most of the remaining manufacturing base produces basic consumer staples, which people continue to buy no matter what. Proctor and

Gamble, Miller Brewing, Mars, and Tyson Foods are good examples. Coats' decision to continue its manufacturing and distribution operations in Albany—after the destruction of its distribution center by a tornado in 2017—is a big plus.

Albany's assets include a low cost of living and doing business, an excellent telecommunications infrastructure, good highway access, the Marine Corps Logistic Base, a university, an excellent technical college, the new 4C Academy, and a reputation as a good place to live and raise a family.

The MSA's role as a regional center for healthcare weighs strongly in its favor, but Albany's sub-par population growth as well as Georgia's nonparticipation in the expansion of Medicaid limits the prospects for this industry's growth. To prosper, Albany's healthcare industry will have to pull many more patients from surrounding areas.

Albany will continue in its historic role as a regional retail-wholesale-distribution center, but automation and online competition will prevent retail trade from becoming a major source of job growth. Small numbers of retail jobs will probably be lost in 2022 even as retail sales expand. Although Albany's traditional role as a support center for agriculture is steady, high dependence on agriculture exposes it to trade tensions as well as vicissitudes of the weather, commodity markets, and federal farm policies. In addition, a high proportion of federal government jobs makes Albany vulnerable to the eventual restructuring of the government.

The Marine Corps Logistics Base is the area's top employer and immediate prospects for the base are good because DOD spending will probably increase in 2022. Future problems with the federal budget are looming, however, which is a long-term risk for the area's economy.

Another serious problem is that the area's population and labor force have been declining for many years. Compared to the state average, Albany has relative fewer people within the 25-to 49-age bracket, typically the most productive working years. Out-migration has dimmed the area's economic performance as well as its prospects for economic growth as the MSA's relatively low earnings and a scarcity of high-tech jobs push residents to look for opportunities elsewhere. Net migration has been negative and it is likely to remain so.

The slow recovery of the area's home prices reflects out-migration, fewer new households, and not enough high paying jobs. As of the second quarter of 2021, Albany's home prices were only 4 percent above the pre-Great Recession peak. The limited appreciation of single-family homes will restrain entrepreneurial activity and the growth of consumer spending, especially spending on home improvements. More positively, the housing boom is having an impact on Albany, pushing existing home prices up by a year-over-year 7.9 percent. Very low mortgage rates and 1.7 percent job growth will help sustain homebuilding activity through 2022, but the surge is unlikely to shift the area's economy onto a higher growth trajectory. ❖

From its 2020 peak-to-trough, the Athens MSA lost 13.8 percent of its jobs to the Covid recession, with the heaviest job losses occurring in state government, hospitality, and goods-producing manufacturing. The local economy does not depend heavily on inherently cyclical industries such as manufacturing, construction, or transportation and logistics, and it also is not very dependent on exports. So, Athens' economic structure is stable, which cuts the risks for businesses and households. Other strengths include, close proximity to Atlanta, population growth, a highly educated workforce, a very good innovation ecosystem, a healthcare hub, and low business and living costs.

In recent years, Athens landed several large economic development projects, which not only improves prospects for growth, but demonstrates that Athens can compete effectively for expansions and relocations. In 2020, RWCD Industries, a biotech company, announced that it would expand its operations in Athens, creating 200 jobs. This new company was founded at an innovation lab at UGA in 2015. ByoPlanet International announced an expansion of its manufacturing operations in Athens, adding 250 jobs. The electrostatic spray technology used in their disinfection system is based on original research conducted at UGA. Also, e-commerce retailer Wayfair will create 500 jobs in a call center in Athens.

The importance of Athens' proximity to and high economic integration with the Atlanta MSA is an advantage. For example, 7.7 percent of jobs held by Athenians are located in Atlanta and Atlanta commuters hold 9.9 percent of Athens' jobs.

Weaknesses include the lack of interstates, low economic diversity, a relatively narrow base of job growth, low per capita income, and a shrinking manufacturing industry. The area's largest employers are the

University of Georgia, Piedmont Athens Regional Hospital, St. Mary's Healthcare System, Caterpillar, Pilgrim's Pride, Boehringer Ingelheim, Power Partners, Carrier Transcold, ABB, and DialAmerica. The area's leading high-wage industries include doctors' offices, pharmaceutical and medicine manufacturing, and the federal government. Mid-wage leaders include local government, general hospitals, and animal slaughtering and processing. Leading low-wage industries include state government, restaurants, and grocery stores. The MSA includes Clarke, Madison, Oconee, and Oglethorpe counties. Clarke County accounts for 79 percent of the area's jobs and 60 percent of the population.

In 2022, employment will increase by 2 percent—about 1,900 jobs—which is below the 3.2 percent growth expected for the state. Several factors limit UGA's and Athens' immediate prospects for job growth. For example, state appropriations for higher education are not likely to increase dramatically and tuition also may not increase very much. Still, UGA's enrollment is holding up very well and students have returned to campus, which provides critical support to the local economy. Moreover, most UGA-related events will draw larger crowds now that most Covid restrictions have eased.

The outlook for health services is good because Athens is the regional medical services center for northeast Georgia. The establishment of UGA's Health Sciences Campus in partnership with Augusta University helps Athens' healthcare providers expand its reach into rural areas where the population skews older than in the core of the MSA. To address Georgia's growing shortage of physicians, the Augusta University/University of Georgia Medical Partnership is also training more med students.

UGA's College of Engineering contributes by spurring entrepreneurial development and the climate

for innovation that attracts high tech companies and venture capital. In fact, UGA ranks first in the nation for the number of new products brought to market and fourth among U.S. universities for the number of new intellectual property licenses to industry. Due to these and other considerations, Athens outperforms the state when it comes to starting new businesses.

In 2022, the economic contribution of hospitality industry will expand relative to the overall size of Athens' economy, but it will be some time before it is fully recovered from the Covid recession. Things will improve in the long term, however, because Athens is an affordable regional entertainment hub with an active music scene, college sports, and many cultural events.

Of course, the MSA has its challenges. The economy is not very diversified. Athens is extremely dependent on state government jobs due to UGA's presence. High dependence on state spending is an advantage when state revenues are up but not when revenues decline. The information, business services, construction, transportation, and manufacturing industries are undersized, which limits the impetus to the region's overall growth. Another concern is that Athens' role as a major regional retail hub has been declining for years and will remain under assault in 2022.

Record low mortgage rates, above-average population growth, positive net migration, and an expanding student population bode well for homebuilding and residential real estate markets. Because Athens is a college town, millennials and renters play an outsized role in the area's housing market—45 percent of which is renter occupied.

The year-over-year (2021 Q2 compared to 2020 Q2) increase in home prices was a very strong 13.4 percent. Single-family home prices will continue to rise through 2022, but at less than half the pace experienced in 2021. ❖

## Augusta

From its 2020 peak-to-trough, this MSA lost 13.2 percent of its jobs to the Covid-19 recession, but by mid-2021, had recovered 79 percent of its job losses, which is better than the 74 percent recovery experienced by the nation as a whole.

In 2022, Augusta's employment is expected to increase by 8,400 jobs, a good portion of which will be high-skilled, high-paying ones. The 3.5 percent pace of job growth is higher than the 2.9 percent gain expected for the nation and the 3.2 percent gain expected for the state. The build-out of the U.S. Army Cyber Command, the recent opening of the Georgia Cyber Training and Innovation Center, and the area's focus on clinical healthcare are major positives for Augusta's economic outlook. In addition, the MSA's economy is not very dependent on exports so it's not overly vulnerable to trade shocks. Population growth and net migration will continue to be solid.

Hundreds of permanent high-paying jobs in the energy industry will be available at Plant Vogtle once construction is complete on two nuclear reactors. In addition, Augusta is a hub for telecommunications services and call centers. The area is well-known for its healthcare industry and attracts many retirees.

Augusta's leading high wage industries include the federal government, doctors' offices, and architectural and engineering firms. Mid-wage leaders include the military, hospitals, local government, and state government. Low-wage industries include restaurants, grocery stores, and farms. The MSA includes Burke, Columbia, Lincoln, McDuffie, and Richmond counties in Georgia and Aiken and Edgefield counties in South Carolina. Richmond County—home to the city of Augusta—accounts for 45 percent of the area's

jobs and 33 percent of its population.

Fort Gordon adds substantially to the Augusta's prospects for growth, although the push arising from the move of the Army's Cyber Command will occur over many years. Many military contractors have congregated here to provide ancillary services, Unisys and cybersecurity company Parsons Corporation among them.

Although Augusta's undersized information and financial activities industries spared the region from the restructuring that has plagued these sectors, it also may limit opportunities for renewed growth in those industries. Low per capita personal income and low overall levels of educational attainment are also negatives.

The single-family housing situation looks good. Optimism for homebuilders and home prices reflects low mortgage rates, job growth, and very positive net migration. ❖

## Brunswick

As one of the most tourism-dependent areas in the nation, Brunswick was hit hard by the pandemic. By mid-2021, however, it had reversed 84 percent of its job losses, exceeding the 74 percent rebound posted by the U.S.

In 2022, employment will rise by 3.4 percent, largely due to the recovery of the area's large hospitality industry that focuses on wealthy vacationers. The Port of Brunswick, which specializes in roll-on/roll-off cargo (e.g., vehicles and machinery) is doing very well, but could do even better if not for supply constraints that are limiting automobile production and sales. Meanwhile, in-migration will continue to help the area's economic growth.

Due partially to the area's focus on tourism, Brunswick's economy

tilts towards retailing, a very cyclical industry that is undergoing massive restructuring. The port's presence means the local economy is dependent on international trade too, and thus quite sensitive to global economic conditions. Nonetheless, new investment at the port boosts the area's long-term prospects for trade-based economic growth.

The MSA's top employers, in order, are the Southeast Georgia Health System, Sea Island Company, Brunswick Cellulose, Walmart, Radial, Rich Products, GSI Commerce, Gulfstream Aerospace, King & Prince Seafood, International Auto Processing, and Pinova. The area's leading high-wage industries include the federal government, doctors' offices, and support activities for water transportation. Low-wage industries

are restaurants, hotels and motels, grocery stores, and state government. Because Brunswick is a small MSA, the actions of a major company, for the better or worse, can determine the area's actual economic performance, however. The MSA includes Brantley, Glynn, and McIntosh counties. Glynn County accounts for 90 percent of the area's jobs and 72 percent of its population.

It is especially encouraging that the most recent year-over-year data show that home prices rose by 9.8 percent. Job and population growth and low mortgage rates will underpin homebuilding activity in 2022, so prospects for the area's homebuilders are good. ❖

## Columbus

The forecast for Columbus is positive, reflecting continuing recovery from the Covid recession. Employment will increase 2,400 jobs, or 2 percent. In addition, several MSA-specific factors will promote the area's economic recovery: Fort Benning, Columbus State University, and the housing upturn. The cost of living is low, and the quality of the workforce is improving. The age structure of the population is very favorable for growth with larger than average proportions of Gen Z and millennials.

The presence of Fort Benning means that government accounts for over 20 percent of total nonfarm employment. The area's largest employers are Fort Benning, TSYS, Aflac, Piedmont Columbus Regional Hospital, St. Francis/Emory Healthcare, Pratt & Whitney, Anthem/ Blue Cross Blue Shield, Synovus, Columbus State University, and WestRock. The leading high-wage industries are the federal government, non-depository credit intermediation, insurance carriers, and doctors' offices. Leading mid-wage industries include local government, hospitals, and depository credit intermediation. Low-wage industries include restaurants and state government.

The main negatives include a paucity of net migration, subpar levels of educational attainment, and a relatively undiversified economy. The MSA includes Chattahoochee, Harris, Marion, and Muscogee counties in Georgia and Russell County in Alabama. Muscogee County accounts for 80 percent of the area's jobs and 63 percent of the area's population.

In recent years, defense-friendly politics favored Fort Benning. There has been quite a bit of good news in terms of expanding the base's mission and staffing levels. More specifically, the U.S. Army located its new Security Force Assistance Brigade at Fort Benning and would bring a special academy to train the necessary personnel.

Columbus derives much larger than average shares of economic activity from two private-sector industries: financial activities and hospitality. Loan growth, financial deregulation, and recent tax reforms favor top-line growth for firms that provide financial activities, but due to greater efficiency, the number of jobs may not increase very much. The area's hospitality industry will continue to recover, but prospects are better for leisure travel than for business travel.

The outlook for healthcare is good, but weak population trends limits the potential for rapid long-term growth. Nonetheless, the John B. Amos Cancer Center's expansion and renovation helps to ensure that cancer patients spend their healthcare dollars in Columbus. In addition, Mercer University's new medical school campus will support the growth of the health services economy.

Columbus State University is a pillar of the local economy and has been a reliable source of economic growth. Its annual crop of new graduates increases the pool of talent available locally and will help the area attract new high-tech businesses as well as spur entrepreneurial activity.

The shift of homebuilding from a significant economic headwind into a slight tailwind is a positive, notable development. Home prices were 8 percent higher in the second quarter of 2021 than in the second quarter of 2020 and further home price appreciation is expected. New home construction activity will increase moderately, thanks to job growth, low mortgage rates, and continuing recovery from the Covid recession. ❖

## Dalton

Structurally, the local economy is not very diversified and is extremely dependent on manufacturing. Fortunately, Dalton's manufacturers have recovered very well post-recession, regaining over 91 percent of the jobs lost—a surge prompted by the housing market's need for rugs and other floor coverings. Global companies Shaw Industries and Mohawk Industries are headquartered in this small MSA, which includes Murray and Whitfield counties. Whitfield County accounts for 87 percent of

the area's population and 72 percent of its jobs.

Beyond 2022, Dalton probably will need to diversify its economy to benefit fully from the economic expansion. Its proximity to Chattanooga may provide opportunities for creating high-paying jobs aside from manufacturing, but the local workforce must become better educated in order to meet employers' requirements.

In spite of the pandemic, Dalton's economic developers have

done very well. Two major projects are in the floor covering manufacturing industry and one is in the electric vehicle parts manufacturing industry. Lured by Dalton's extensive local support network, Huali Floors will build its first U.S. headquarters and manufacturing facility in Murray County, creating about 315 jobs. Novalis Innovative Flooring will build its first U.S. production facility in Dalton, right next to the company's new North American headquarters and innovation center.

The third economic development project shows that Dalton's appeal as a home for manufacturing industries goes beyond just flooring. In mid-2020 GEDIA Automotive Group announced that it would build an electric vehicle auto parts manufacturing facility here. Dalton is a good location for auto parts manufacturing due because it's accessible to four major automobile assembly plants—Volkswagen in Chattanooga, Mazda and Toyota in Huntsville, Mercedes-Benz in Tuscaloosa, and BMW in Spartanburg.

Transportation, logistics, and warehousing industry also plays a big part in the local economy. These companies thrive on Dalton's location on I-75 between Atlanta and fast-growing Nashville. The area's low costs of doing business also helps, as does the inland Appalachian Regional Port for cargo handling.

Dalton's proximity to and high degree of economic integration with the Chattanooga MSA will work to Dalton's advantage. In fact, Dalton residents hold 5.7 percent of Chattanooga's jobs, while people commuting from Chattanooga hold 9.3 percent of Dalton's jobs. Given relatively low levels of educational attainment and small population, access to deeper and broader pools of talent in Chattanooga should make it easier for Dalton to recruit high-tech manufacturing and services companies. At present, high-tech employment accounts for only 3.6 percent of the area's jobs, compared to 4.5 percent for the state and 5.3 percent for the nation. Dalton's leading high-wage industries include textile mills, fabric mills, resin, synthetic rubber, fibers and filament manufacturing, and aerospace product and parts manufacturing. Leading mid-wage industries include textile furnishing

mills, furniture and home furnishing merchandise wholesalers, computer systems design and related services, and doctors' offices. Low-wage industries include fiber, yarn, and thread mills, local government, and restaurants.

One challenge to economic growth is that the area's population is not growing. Dalton's relatively cyclical economy, low earnings, and a scarcity of high-tech jobs outside of manufacturing are probably pushing residents to go elsewhere. Foreign immigration to Dalton is positive, however.

Home price appreciation is good, with prices up 15 percent since the pandemic began. New home construction activity will increase modestly in 2022, thanks to job growth, low mortgage rates, and the fact that the pandemic made people relish their home's intrinsic value. ❖

## Gainesville

Gainesville's economic performance in the past decade was outstanding, but the area did not dodge the Covid recession. Now, however, this single-county MSA's recovery will outpace both the state and the nation by significant margins. In 2022, Gainesville-Hall County will add 3,200 jobs – a 3.4 percent gain. Top employers include Northeast Georgia Health Systems, Fieldale Farms Inc., Pilgrim's Pride Poultry, Kubota, Cottrell, Gold Creek Foods, and Mars Wrigley. The leading high-wage industries include doctors' offices, vehicle parts manufacturing, grocery wholesalers, and agricultural-construction machinery manufacturing. Mid-wage industries are local government, hospitals, building equipment contractors, and car dealers. Low-wage industries are animal slaughtering and processing, restaurants, state government, and employment services.

Good prospects for future economic expansion are predicated

on (1) the large number of expansion projects announced over the last decade; (2) growth in the medical, education, and tourism sectors; (3) favorable demographics; (4) a strong housing market; and (5) strong economic prospects for neighboring counties, especially Forsyth, North Fulton, and Gwinnett. The area is an increasingly popular bedroom community for the Atlanta MSA. The Georgia Ports Authority's decision to build an inland port in Hall County near I-985 improves the long-term prospects for the MSA, especially for manufacturing, distribution, and logistics. The costs of living and doing business are below average, migration trends are very favorable, and the housing market is very strong. Weaknesses include low per capita incomes, the lack of high-wage jobs, and a relatively small percentage of high-tech jobs.

The medical sector is an important economic driver because the highly rated Northeast Georgia

Medical Center draws patients from Gainesville and surrounding areas, including some metro Atlanta counties. Two universities and a technical college add to the MSA's appeal by attracting the talent pool that keeps the city vibrant.

Demographic forces supporting Gainesville's economic growth are very strong: Hall County's substantial population growth supports the expansion of local businesses and Gainesville is home for many who actually work in Atlanta. Retirees also are drawn here because it is close to the Smokey Mountains. Of course, a growing population means that the housing market is strong. House prices grew by 11.3 percent between the second quarter of 2020 and the second quarter of 2021, and low mortgage rates will support the upswing in new home construction. ❖

**BASELINE EMPLOYMENT FORECAST FOR  
GEORGIA'S METROPOLITAN AREAS, 2021-2022**

<b>Metro Area</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Nonfarm Employment<sup>1</sup></b>						
Albany	62.9	62.2	62.9	60.0	59.8	60.4
Athens	96.8	98.3	97.8	92.1	93.3	95.2
Atlanta	2,727.6	2,785.9	2,850.4	2,699.7	2,767.2	2,866.8
Augusta	236.2	239.6	243.3	234.8	241.1	249.6
Brunswick	43.4	44.1	44.0	41.7	43.4	44.9
Columbus	120.8	122.2	122.5	117.5	118.1	120.4
Dalton	66.8	67.7	66.6	63.7	65.5	66.9
Gainesville	89.9	92.3	93.9	92.0	94.4	97.6
Hinesville-Ft. Stewart	20.3	20.7	21.2	20.5	20.8	21.1
Macon	102.8	02.8	102.9	98.2	100.9	102.5
Rome	41.0	41.6	41.8	39.9	40.8	41.5
Savannah	180.8	185.8	189.9	180.5	192.6	201.3
Valdosta	55.8	56.1	56.6	55.0	56.9	58.4
Warner Robins	73.8	75.6	78.1	76.0	78.1	80.5
<b>Percent Change</b>						
Albany	1.5	-1.1	1.1	-4.6	-0.3	1.0
Athens	3.0	1.5	-0.5	-5.8	1.3	2.0
Atlanta	2.3	2.1	2.3	-5.3	2.5	3.6
Augusta	1.6	1.4	1.5	-3.5	2.7	3.5
Brunswick	0.9	1.6	-0.2	-5.2	4.1	3.4
Columbus	0.5	1.2	0.2	-4.1	0.5	2.0
Dalton	-0.1	1.3	-1.6	-4.4	2.8	2.2
Gainesville	3.7	2.7	1.7	-2.0	2.6	3.4
Hinesville-Ft. Stewart	2.5	2.0	2.4	-3.3	1.5	1.5
Macon	0.4	0.0	0.1	-4.6	2.8	1.5
Rome	1.0	1.5	0.5	-4.5	2.3	1.6
Savannah	1.7	2.8	2.2	-4.9	6.7	4.5
Valdosta	-0.4	0.5	0.9	-2.8	3.4	2.7
Warner Robins	1.7	2.4	3.3	-2.7	2.7	3.1

<sup>1</sup>Indicates thousands of workers.

Source: Selig Center for Economic Growth, Terry College of Business, University of Georgia, September 2021.

## Macon

From its 2020 peak-to-trough the Macon MSA lost 10.8 percent of its jobs to the Covid recession, with the heaviest losses occurring in the hospitality and state and local government sectors. By mid-2021, it had recovered 82 percent of these lost jobs, and an annual average 1.5 percent job growth is expected in 2022. The MSA includes Bibb, Crawford, Jones, Monroe, and Twiggs counties. Bibb County accounts for 84 percent of the area's jobs and 66 percent of the area's population.

Top employers GEICO, Navicent Health Medical Center, Coliseum Health Systems, Mercer University, Middle Georgia State University, Georgia Farm Bureau Federation, YKK Corporation of America, and Walmart are the heart

of the local economy. Macon's role as a center for transportation and logistics is vital, too, since Macon is located strategically at the intersection of I-75 and I-16, has two railroad lines, is home to the largest rail-switching center on the East Coast, and benefits from a good airport that serves local residents and others from throughout South Georgia. The Port of Savannah is accessible on relatively uncongested roads. In addition, it is a short drive to the air cargo facilities at Atlanta's Hartsfield-Jackson International Airport.

The MSA's role as a remote bedroom community for the southern portion of the Atlanta MSA will grow, further stimulating the development of Macon's northern

suburbs. Many who live in Macon commute to jobs in Atlanta and vice versa. As Atlanta becomes more congested, Macon will become more attractive to homeowners, private businesses, and state government operations.

Some factors will limit economic growth, however. Outmigration is a long-term problem as too many of those in their prime working years have left, in part because there are few high-tech jobs here. In addition, relatively low levels of educational attainment make it very difficult to attract the types of companies that are likely to create high paying jobs. On the positive side, the area's universities mint a new crop of graduates every year, so there is a tremendous opportunity and a challenge to create jobs that keep them in Macon. ❖

## Savannah

From peak-to-trough the Savannah MSA lost 16 percent of its jobs to the pandemic recession, taking a harder hit than the state's job market, but recovered all of the lost jobs by mid-2021. Still, many of the jobs added are not in the same industries from which they were lost. Logistics and port-related industries did very well. In 2022, the MSA will see 4.5 percent job growth, which will be higher than the 3.2 percent job growth expected for Georgia.

The large percentage gain in jobs reflects several factors: Savannah's large tourism industry will post impressive gains due to easy comparisons to a very depressed base of activity. It helps that Savannah's hospitality industry is tilted towards domestic leisure travel rather than business or international travel. Job growth would be even faster if not for labor shortages in low-wage industries such as hospitality and retailing. Savannah will benefit from

the expansion of the film industry, too. Recent and proposed infrastructure projects at the Port of Savannah will keep container traffic—and the supply chain—moving; and there's a reasonable chance that increases in defense spending will boost troop levels at Hunter Army Airfield.

Over the long term, Savannah's multi-faceted personality: that of a major tourist attraction, a major airbase, an aerospace manufacturing center, an extraordinarily successful deep-water port, and a retirement mecca are the basis for continued success. Population growth will be very strong. Gulfstream Aerospace is the area's largest employer, followed by Memorial Health University Medical Center, Fort Stewart/Hunter Army Airfield, St. Josephs/Candler Hospital, Walmart, Georgia Southern University, Savannah College of Art & Design, and the Georgia Ports Authority. Recent changes in the federal tax deductibility of corporate jet

purchases—a 100 percent write-off against earnings—bode well for Gulfstream, but Covid and the trade war reduce the short-term prospects for orders of business jets. Gulfstream laid off hundreds of workers in 2020.

The area's industrial diversification is relatively low. The leading high-wage industries include aerospace product and parts manufacturing, the federal government, and doctors' offices. Mid-wage leaders include state and local government, hospitals, and the military. The Savannah MSA includes Bryan, Chatham, and Effingham counties. Chatham County accounts for 89 percent of the area's jobs and 74 percent of its population.

Savannah's unique ambiance and transportation infrastructure make it an attractive place to live and do business. Retirees will continue to be an important force powering and diversifying the region's economic development, but the Savannah area

benefits from the fact that people of all ages want to live here.

Port operations support manufacturing and foster growth of Savannah's logistic, distribution, and warehousing industries. The thriving port itself supports over 51,000 jobs.

Once the pandemic is fully over, tourism and convention business will return and will again be one of the fastest growing sectors of Savannah's economy. The industry's growth reflects substantial investments in the area's infrastructure, including a large number of new

well-situated hotels as well as the Savannah International Trade and Convention Center on Hutchinson Island that is undergoing a major expansion.

As of the second quarter 2021, single-family home prices in the MSA were 26 percent above their pre-Great Recession peak. Existing single-family home prices in Savannah increased by 11.6 percent between the second quarter of 2020 and the second quarter of 2021. Sustained increases in home prices will support consumer spending—especially on home improvements—and

entrepreneurial activity. The 2022 outlook for homebuilders is very good, thanks to low mortgage rates, population growth, and the accelerating local economic growth.

The long-term economic outlook for Savannah is excellent, but any further retreat from globalization or moves towards protectionism could be very tough on it because of the area's extreme dependence on international trade. Exports account for 22 percent of the Savannah MSA's GDP, making it one of the nation's most export dependent metropolitan areas. ❖

## Valdosta

This MSA lost 10.5 percent of its jobs to the Covid recession but regained all of them by mid-2021. In 2022, Valdosta's employment will increase by 2.7 percent, or 1,500 jobs.

Structurally, the Valdosta metro area is extremely dependent on government jobs. The hospitality industry, retail trade, and the transportation sectors also account for a larger than average share of the area's nonfarm jobs. Valdosta is not overly dependent on manufacturing, with its share of these jobs slightly below both the national and Georgia averages. Industrial diversification is relatively low, which makes the overall business environment riskier. High-tech jobs account for only 2.7 percent of the area's total jobs. The Valdosta MSA includes Brooks, Echols, Lanier, and Lowndes counties. Lowndes County accounts for 90 percent of the area's jobs and 80 percent of its population.

Top employers are Moody Air Force Base, Valdosta State University, South Georgia Medical Center, Lowe's, Fresh Beginnings, Wild Adventures, Walmart, Wiregrass Georgia Technical College, Convergys, and Packaging Corporation of America. The leading high-wage industries include the federal government and doctors' offices. Mid-wage industries include local government, car dealerships, and building equip-

ment contractors. State government, restaurants, and warehousing/storage facilities pay the least.

In 2022, continued growth in consumer spending will ensure that Valdosta benefits from its traditional role as a retail hub for extreme Southwest Georgia. Retail jobs account for a somewhat higher share of economic activity here than in either the state or the nation. Like traditional retailers everywhere, Valdosta's retailers will face more competition from e-commerce, which will limit retail job growth from increases in consumers' spending.

Because Valdosta is a small MSA, the actions for the better, or for the worse, by one major company can determine the area's actual economic performance. In 2021, only two companies—boat manufacturer Correct Craft and food processor Bimbo QSR—indicated that they plan to open new facilities here. Meanwhile the outlook for hospitality and tourism calls for continuing economic recovery from depressed levels. Valdosta also will continue to leverage its location on I-75 as a convenient place for Florida-bound visitors to stay overnight.

Government jobs account for a high proportion of the Valdosta's nonfarm employment largely due to Moody Air Force Base, which is the MSA's largest employer. In addition

to a high dependence on federal military spending, Valdosta is extremely dependent on spending by state and local government. It is a college town and Valdosta State University attracts many students from outside the region, adding to student spending and to the supply of newly minted college graduates. In addition to generating university-related spending, the university raises the area's educational attainment—a big factor in recruiting new businesses.

In 2022, moderate home price increases are expected, which will help support higher consumer spending, entrepreneurial activity, and new home construction. Homebuilding activity will rise, reflecting low mortgage rates, recent strong increases in the prices of existing homes, and economic growth. Housing-related employment accounts for 10 percent of the Valdosta MSA's total employment, which roughly equals the U.S. average. ❖

## **This sector will not return to normal until vaccination rates rise significantly.**

**E**mployment in the health-care sector was growing nationwide before the Covid-19 pandemic hit. Healthcare made up 11 percent of U.S. employment as of February 2020. From peak to trough, employment in U.S. health-care fell by 10 percent. Employment is rebounding slowly. As of July 2021, year-over-year employment in U.S. health-care grew by 2 percent, but employment levels are still 3 percent below the pre-recession peak. Recovery looks very different across the three subsectors of health-care.

### **U.S. Outlook**

U.S. employment in ambulatory health-care services, which includes offices of physicians, dentists, and other health practitioners, grew by 5.5 percent year-over-year. Employment in this subsector is very close to recovery at just 0.4 percent below the pre-recession peak. Employment in hospitals grew by 0.9 percent over the past year but is still 1.6 percent below its pre-recession peak. Of all three health-care subsectors, nursing and residential care is furthest from recovery. As of July 2021, employment in this subsector has fallen by 4.8 percent year-over-year and falls short of its pre-pandemic peak by 11 percent.

The pandemic affected almost every category of consumer spending. Although demand for health-care is usually relatively stable, national spending on this category dropped dramatically during pandemic shutdowns. Annual growth rates in national health-care spending hovered very reliably between 4.5 percent and 5.5 percent for many years. In April 2020, national health spending

plummeted by -20 percent.

Six months after the first wave of pandemic shutdowns, spending was still depressed, though trends varied widely by category. Prescription drugs spending was least affected by the pandemic recession, though still took a small hit. Annual spending growth on prescription drugs was only 1.3 percent below 2019 levels as of September 2020. Home health-care was positively affected by the pandemic recession. It is likely that this industry benefitted as consumer demand shifted away from nursing home care. Annual spending growth on home health care increased by 1.4 percent from September 2019 to September 2020.

Most categories of health spending were negatively affected by the pandemic recession. U.S. spending on physician and clinical services decreased significantly—from 3 percent annual growth in September 2019 to 0.8 percent growth in September 2020. Hospital care took a bigger hit—from 5.1 percent annual growth in September 2019 to -2.2 percent growth in September 2020.

By far, the two health-care categories most affected by the pandemic recession were nursing home care and dental services. Nursing home care had annual spending growth of 1.3 percent as of September 2019 but fell to -9.1 percent a year later. Dental services experienced the largest decrease in spending of all health categories. In September 2019, annual spending growth was 1.4 percent, dropping to -13.1 percent in September 2020. National spending on health-care will likely not return to normal levels until 2023. The health-care industry will feel the impact of the pandemic recession on demand for another year or more.

Recent policy changes will impact the outlook for U.S. health-care. In March 2021, the American Rescue Plan was passed. Two key policies aimed at expanding health-care coverage were included in this plan: 1) temporary marketplace premium tax credit enhancements; and 2) enhanced federal medical assistance percentage for Medicaid expansion. Tax credit enhancements in 2021 and 2022 reduce the cost

of marketplace health insurance as a share of consumer income. Tax credits are now available to individuals with income over 400 percent of the poverty level.

The tax credit enhancements also filled some of the gaps in COBRA insurance, which is the main health insurance avenue for the unemployed. In addition, the American Rescue Plan enhanced the federal Medicaid funding match, which incentivizes states to expand Medicaid coverage to individuals making up to 138 percent of the federal poverty level. Making marketplace health insurance plans more affordable and expanding Medicaid should reduce the number of individuals who are uninsured and temper negative effects of the pandemic on the industry.

## Georgia Outlook

### Employment and GDP

The healthcare industry in Georgia experienced significantly slower growth during the pandemic recession compared to previous years. As of June 2021, year-to-date employment in Georgia's healthcare industry grew by 1.1 percent. This was just under total statewide employment growth of 1.4 percent. Compare that to 2.8 percent year to date healthcare growth as of June 2019 versus statewide employment growth of 1.9 percent. As of June 2021, statewide employment levels are still 2.8 percent below their pre-pandemic peak of 524,000 jobs. Employment growth in healthcare was outperforming the state average before Covid-19, but likely won't return to that level until 2023 or beyond.

Healthcare's contribution to Georgia's GDP also shrank due to the pandemic recession, though this trend tracked the nation. Healthcare's contribution to percent change in Georgia's real GDP was -0.11 percent from 2020 Q4 to 2021 Q1. Georgia's healthcare sector was on-par with the Southeast region which also fell by 0.11 percent. Healthcare's contribution to percent change in

U.S. real GDP was -0.10 percent, so Georgia and the Southeast closely tracked nationwide trends. Before the pandemic recession, Georgia's healthcare sector was outperforming the nation in terms of GDP growth. Average quarterly growth in contribution to real GDP from 2015 Q3 to 2019 Q3 was 0.23 percent in Georgia versus 0.18 percent in the U.S. From 2020 Q1 to 2021 Q1, average quarterly growth in contribution to real GDP was 0.16 percent in Georgia versus 0.14 percent in the U.S. This means that Georgia's healthcare sector has been slightly more resilient than that of the U.S. over the course of the pandemic recession.

Of the three healthcare subsectors, only ambulatory healthcare services had a 5.7 percent year-to-date employment growth increase over June 2020. Half of this growth was recovery to pre-pandemic employment levels. Still, employment growth of 2.4 percent since the pre-pandemic peak in February 2020 is a positive sign that ambulatory services are recovering. Other healthcare subsectors are still on a downward trend. Employment in hospitals was 0.6 percent below previous year-to-date levels as of June 2021. That means that hospital employment levels have shrunk even further in 2021 since shedding staff in 2020. All told, hospital employment is 3.3 percent below its pre-recession peak. The nursing and residential care facilities subsector is performing very poorly, with employment down by 5.3 percent over the past year and 8.4 percent below the pre-recession peak of 62,000 jobs as of February 2020. When factoring in all three subsectors, the healthcare industry in Georgia is performing significantly worse than predicted a year ago.

### Georgians' Health

High numbers of Covid cases are counterproductive to economic growth in the healthcare industry. At the time of this writing, statewide Covid cases are increasing at a rate on-par with January 2021, which was when Georgia's average new cases peaked at around 9,700. The 7-day average of new cases was hovering around 8,800 as of August 30, 2021.

All counties in Georgia had high community transmission. Georgia ranked 44 out of 50 states on percentage of fully vaccinated residents (40 percent).

When Covid hospitalization rates rise, hospitals must redirect staffing and other resources to their intensive care units, which are one of their least profitable services. Many patients and doctors postpone non-essential surgeries and other treatments when community spread of Covid is high. Due to Covid's spread in nursing homes, nursing and residential care facilities shed staff as demand for these facilities dropped. Georgia must emerge from the pandemic before the healthcare industry can return to normal, and that is unlikely to happen until vaccination rates rise significantly.

Although Georgia's healthcare industry typically outperforms that of the nation in terms of employment and GDP, average health of Georgia's residents is poor. In the United Health Foundation's 2020 report, Georgia is ranked 37 out of 50 states in terms of physical health of residents and 45 in terms of behavioral health. Georgia has high rates of nonmedical drug use, low birthweight, and chronic kidney disease compared to other states. One third of Georgians are obese. Sixteen percent of Georgians smoke; 38 percent don't get enough sleep. It is highly concerning, therefore, that Georgia ranks 49 out of 50 states in terms of access to care.

In 2020, 17.8 percent of Georgians avoided care due to cost, putting Georgia in the bottom two states in the nation. Georgia was also ranked in the bottom two states in terms of number of providers and percent uninsured. Thirteen percent of Georgians were uninsured as of the latest census statistics from 2019, compared to 9.2 percent uninsured at the U.S. level. A closer look at uninsured demographics yields even more concerning trends for Georgia. At the U.S. level, 28 percent of those unemployed but still looking for jobs are uninsured. In Georgia, that proportion is 45.5 percent. Another concerning statistic is the proportion of uninsured with income levels

below 100 percent of the federal poverty threshold. In Georgia, 25 percent of these residents are uninsured versus 16 percent in the U.S. Georgia clearly has room to improve in terms of insuring its most vulnerable residents.

### State Healthcare Budget

The state government is best positioned to improve Georgia's relatively high rate of uninsured residents. The state government determines Medicaid eligibility and runs other health programs such as PeachCare which aim to increase healthcare access for the lowest-income Georgians. Shrinking revenues at the state level can limit its ability to fund necessary public and community health initiatives. As the pandemic recession began, Covid-19 was predicted to reduce Georgia's state revenue by 2.7 percent to 4.7 percent. The effect was much less significant than predicted, all told. Georgia's state revenue only dropped by 0.3 percent in FY 2020. The governor's annual budget report estimated that revenue will be down more significantly in AFY (Amended Fiscal Year) 2021, by about 1.2 percent. However, the state expects revenues to climb above pre-pandemic levels in FY 2022, with growth of 2.6 percent and total revenues exceeding \$27 billion.

The governor's annual budget report listed public health as one of its top priorities for AFY 2021 and FY 2022. Significant budget line items for AFY 2021 include: 1) \$1.8 million for the implementation of the Patients First Act; and 2) \$35.7 million for the Indigent Care Trust Fund to ensure private hospitals benefit from the federal Disproportionate Share Hospital (DSH) program. The Patients First Act allows the governor to restructure the Medicaid program in Georgia to expand eligibility to 200,000 additional residents, though this act will not expand Medicaid eligibility to the full 138 percent of the federal poverty level that many states have adopted. The Indigent Care Trust Fund allows for some uninsured people to receive no-cost healthcare from participating community clinics or hospitals, including

some private hospitals. The state also estimates a savings of \$344.7 million from the enhanced Federal Medical Assistance Percentage (FMAP) during Covid-19.

Significant budget line items for FY 2022 include: 1) \$68 million for the implementation of the Patients First Act (including \$65 million for benefits); 2) \$329 million for Medicaid and PeachCare (including \$64 million in new funding for program growth); and 3) \$2.6 million for 188 new residency slots in primary care medicine as part of the Georgia Healthcare Workforce initiative. In FY 2022, the state recognized a savings of \$38.5 million due to the repeal of the federal Health Insurer Provider Fee. This allowed the state government to secure substantial funding to support health coverage, without increasing costs on consumers or the health care industry.

Total expenditures and appropriations for the Department of Community Health increased by 22 percent from AFY 2021 and FY 2022. This percentage increase greatly outpaces the overall state expenditures and appropriations increase of 2.5 percent and shows that Georgia is clearly invested in community health and increasing access to healthcare across the state. The hope is that increased funding from the state can help buffer some of the negative impacts of the Covid-19 recession on residents and the healthcare industry.

### Ambulatory Healthcare

Ambulatory healthcare—which includes the offices of physicians, dentists, and all other health practitioners' offices—is the largest healthcare subsector by employment in both Georgia and the U.S. The subsector also includes outpatient care centers, medical and diagnostic laboratories, and home healthcare services. Unlike hospitals, the facilities and equipment are usually not the most significant expense. Ambulatory healthcare also has more room for specialization than hospitals. Despite a peak-to-trough loss of 14 percent, employment in this subsector returned to pre-pandemic levels as of March 2021.

As of June 2021, ambulatory healthcare provided almost 232,000 jobs in Georgia. This figure has grown by 5.7 percent since June 2020. Half of this growth was recovery to pre-pandemic employment levels. Still, employment growth of 2.4 percent since February 2020 is a positive sign that ambulatory services are growing while other healthcare subsectors are still on a downward trend. (To examine employment trends in more specific industries, older data was utilized. The most recent industry-specific data available at the state level was from the fourth quarter of 2020. Employment numbers have likely increased further in most ambulatory categories since this data was released.)

Offices of physicians is the largest industry by far in the ambulatory healthcare subsector, employing 105,436 Georgians as of December 2020. Home healthcare services is the second-largest industry, with 28,652 employees. Offices of dentists is the third largest, employing 28,609 Georgians. Offices of other health practitioners, which include chiropractors, optometrists, mental health practitioners, and specialty therapists employed 26,990. Outpatient care centers employed 18,244. The smallest industry in the ambulatory healthcare subsector was medical and diagnostic laboratories, with 7,429 employees.

All high-level private ambulatory healthcare industries had employment growth above the state average (-4.1 percent) from December 2019 to December 2020. Employment in offices of physicians grew by 0.3 percent. Offices of other healthcare practitioners grew by 0.2 percent. Outpatient care centers grew the fastest, with employment gains of 4.1 percent from December 2019 to December 2020. Home healthcare services and offices of dentists shrank by 0.1 percent and 1.3 percent, respectively. Quarterly data show that establishments grew faster than the state average of 7.9 percent in outpatient care centers, home healthcare services, and medical and diagnostic laboratories. Of the major ambulatory healthcare industries, only employment in doctors' offices

is more geographically concentrated in the state, with an employment location quotient of 1.25 (25 percent more concentrated than the average state) in December 2020.

Wage growth in most ambulatory healthcare industries was below Georgia's privately-owned, all-industry average from December 2019 to December 2020. The growth in average weekly wages across all private industries in Georgia was 11.5 percent from December 2019 to December 2020. Average weekly wage growth in ambulatory healthcare services was 11.1 percent. Outpatient care centers saw the highest weekly wage growth at 18.9 percent followed by medical and diagnostic laboratories at 12.5 percent. Home healthcare services had the lowest wage growth at 9.1 percent.

### Hospitals

Industries in the hospitals subsector provide medical, diagnostic, treatment, and other health services to patients. Some hospitals also provide outpatient services. Specialized facilities and equipment are a major expense of hospitals. As of June 2021, hospitals provided 155,700 jobs in Georgia. Although the hospitals subsector was expected to recover by the end of 2021, year-to-date employment in hospitals shrank by 0.6 percent from June 2020 to June 2021, meaning that the industry continued shedding employees after the initial drop in employment that occurred from February to April 2020.

Although employment in hospitals across the nation is growing, the opposite is true in Georgia. In the August 20 state profile report, 27 percent of Georgia hospitals reported staff shortages compared to 15 percent of U.S. hospitals. A relatively low vaccination rate in Georgia is currently causing a spike in cases and consequently, many of the most profitable services offered by hospitals are being postponed.

Until the pandemic is under control in Georgia, hospitals will continue to struggle.

As of December 2020, 81 percent of employment in Georgia hospitals was in the private sector. Private hospitals employed 146,764 people across Georgia. Public hospitals employed 35,200 across federal, state, and locally owned establishments. Federally owned hospitals were the only publicly owned facilities to gain employment from December 2019 to December 2020. Employment in federal hospitals grew by 7.8 percent. Local- and state-owned hospitals shed employees, with state hospitals taking the brunt of the losses (-11.8 percent) from December 2019 to December 2020. Although the hospitals subsector was originally projected to return to pre-pandemic employment levels by the end of 2021, that likely won't occur until 2022.

Wage growth in this subsector varies greatly depending on ownership. Privately-owned hospitals saw average weekly wage growth of 12.2 percent from December 2019 to December 2020. Wages at locally owned hospitals grew by 10.7 percent. Federally owned hospitals saw slower wage growth of 8.5 percent. By contrast, state-owned hospitals saw wages shrink slightly by 0.1 percent. The shrinking employment and wages in Georgia's state-owned hospitals is quite worrying, as these facilities are often the only option within hundreds of miles for rural Georgians. Now these hospitals are losing their ability to attract doctors, nurses, and other staff. This trend was present before the Covid-19 recession, but the shift from more profitable services to resource-draining intensive care of Covid patients has further accelerated losses in state hospitals.

### Nursing and Residential Care

This subsector comprises facilities that provide inpatient nursing care, rehabilitative services, and other care. Often, care is provided for weeks, months, years, or even decades. As of June 2021, private nursing and residential care facilities provided over 56,000 jobs in Georgia, down from the pre-pandemic peak of 62,000 jobs—a 5.3 percent year-over-year employment loss since June 2020.

Privately-owned nursing and residential care facilities made up 94 percent of employment in Georgia as of December 2020. Local- and state-owned nursing and residential care facilities have experienced huge losses in employment since 2019 (-16.1 percent and -25.8 percent, respectively). A labor shortage has put some upward pressure on wages. Average weekly wages are up by 13.6 percent in private facilities from December 2019 to December 2020, exceeding Georgia's all-industry wage growth of 10.9 percent over the same period. Weekly wages at locally owned nursing and residential care facilities grew by a whopping 27.9 percent. Wages at state-owned facilities only grew by 6.6 percent, making it unlikely for these facilities to compete in a hot job market.

All four industry categories within the private nursing and residential care subsector saw wage growth above Georgia's all-industry average from 2019 to 2020. Skilled nursing facilities (30,500 employees) saw average weekly wages grow by 13.3 percent. Residential mental health facilities (4,500 employees) tracked skilled nursing facilities closely at 13.4 percent. Assisted living facilities (20,000 employees) saw slightly higher wage growth at 15.5 percent. Finally, other residential care facilities (2,400 employees) saw average weekly wages grow by 21.3 percent, twice the average wage growth of all industries in Georgia. It

is obvious that the increased demand for nurses and staff at these facilities is contributing to above-average wage growth across the subsector.

Within the private nursing and residential care subsector, assisted living facilities made up about 34 percent of employment as of December 2020. Employment in these facilities was growing quickly before the pandemic hit due to Georgia's popularity as a Sunbelt retirement state and the nation's aging population in general. The high death rate from Covid-19 among the elderly has temporarily reduced demand for assisted living facilities, however. Some facilities were forced to close due to outbreaks at the height of the pandemic. Still, the number of assisted living facilities in Georgia increased by 63 establishments from December 2019 to December 2020. Employment across the industry fell by 2.7 percent. A staffing shortage will continue to fuel concerns about the increasing ratio of residents-to-care staff. Even before the pandemic, staff at many assisted living facilities were overworked and at times struggled to keep up with round-the-clock care some residents need. So this particular industry will likely take longer to recover than others. ❖

## **In times of economic uncertainty, government efforts may play a more visible role.**

**A**ctivities of governments at all levels—federal, state and local—impact Georgians’ lives by providing roads, education, public safety, and other services funded by revenue received from our income, property, and sales taxes. Additionally, government jobs account for 15 percent of all nonfarm employment in Georgia. Many Georgians receive regular government payments such as Social Security, disability, and unemployment insurance. In 2019, 11.6 percent of Georgia households received public assistance income or food stamps (SNAP) in the previous 12 months. In recent years, around 17 percent of all personal income in Georgia came from government transfer payments, such as Social Security, unemployment, and VA benefits.

In times of economic uncertainty and hardship, government efforts may play a more visible role. Federal funds may flow through state and local governments or be paid directly to individuals and businesses. In the four fiscal quarters following the Covid epidemic, the proportion of Georgians’ personal income derived from government transfer payments grew from about one-sixth to nearly a quarter of total personal income. The third round of Coronavirus Economic Impact Payments made payments directly to more than 5 million Georgia households totaling over \$12.7 billion. According to the Governor’s Office of Planning and Budget, the CARE Act’s Coronavirus Relief Fund provided \$4.12 billion to the state and its local jurisdictions.

### **Government Employment**

Federal, state, and local governments affect the state’s economy by

employing Georgians. In fact, the state’s twenty top employers include five military bases, the Centers for Disease Control, the University of Georgia, and Georgia Tech. Together, these government institutions employ more than 133,000 people. Government jobs make up 15 percent of all nonfarm employment in Georgia. The bulk can be attributed to local governments. In June 2021 local government, which includes K-12 educators and police officers, constituted about 9 percent of all nonfarm employment in Georgia—meaning that more than 400,000 Georgians collect their paychecks from a local government.

Averaged across 2020, Georgia government jobs contributed only slightly more to the state’s total employment when compared to the rest of the country. However, in certain Metropolitan Statistical Areas (MSAs), government jobs account for an elevated proportion of both total number of jobs and total income. In the MSAs of Albany, Augusta, Brunswick, and Columbus, federal jobs contribute two to three times more jobs to the area’s employment than the typical location. In the Hinesville and Warner Robins MSAs, it is nine to ten times more. MSAs least affected by federal employment are Dalton, Gainesville, Macon, and Rome.

Often federal jobs offer high pay relative to other jobs in an area. In Albany, Augusta, and Columbus, federal jobs contributed between two and three times more to the area’s total wages than the typical location. In Brunswick, Hinesville, and Warner Robins, federal jobs contribute 4.1, 8.7, and 11.6 times more to their respective total wages than the typical location. State government jobs have the greatest impact on the MSAs of Athens and Augusta where they were 4.8 and 1.5 times more important to area employment. Although these areas benefit during times of government expansion, they suffer when governments trim their hiring or allow wages to stagnate.

Government employee pay raises not only inject money into the pockets of government employees, but into local economies as well.

Changes are most acutely felt in MSAs where government workers account for above-average portion of wages or jobs. At the federal level, pay raises were 1.4 percent in 2019, 2.6 percent in 2020, and 1 percent in 2021. Should a proposed 2.7 percent average increase go into effect in 2022, Georgia could see a cumulative increase in wages of \$230 million, based on average employment and wages in 2020. With its high number of federal employees, Atlanta’s 29-county MSA would receive over half of the state’s increased wages, followed by the MSAs of Warner Robins (\$31.5 million), Augusta (\$19.3 million), Columbus (\$10.5 million), Savannah (\$5.9 million), Brunswick (\$5.7 million), Hinesville (\$2.4 million), and Albany (\$5.2 million), Macon and Athens (around \$2.3 million each), Valdosta (\$1.5 million), Gainesville (around \$1 million), Dalton (\$480,000), and Rome (\$380,000).

Regarding distribution of federal employees, the Office of Personnel

Management issued guidance in the summer of 2021 suggesting that agencies review telework policies. Adjustments to these policies could result in a wider distribution of government employees and the impact of their spending. Communities with quality internet connections would be poised to benefit from increased teleworking in both the private and public sectors.

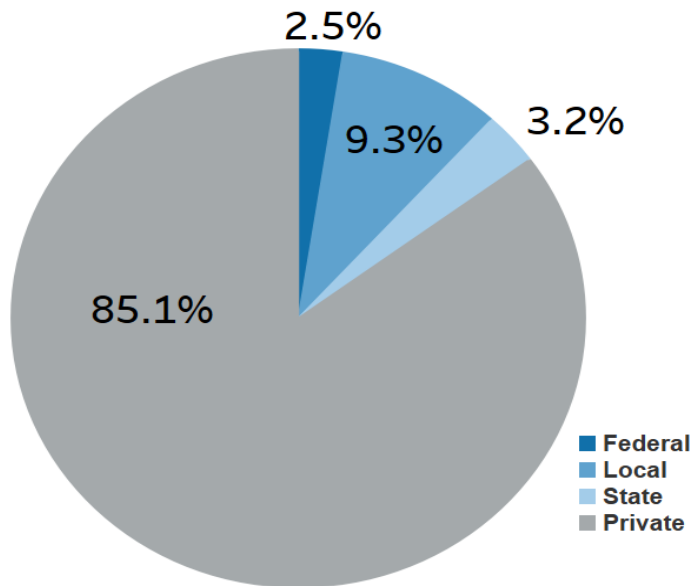
### State Budget

A government’s budget is not simply a list of items and dollar amounts, but a document that illustrates its priorities and values. The governor’s stated priorities for FY 2022 include supporting economic recovery, education and developing the labor force, transportation and logistics infrastructure, economic development for rural communities, and health. For K-12 education, the budget seeks to provide \$647 million for FY 2021 and \$573 million in 2020. It also acknowledges an estimated \$3.5 billion in federal monies

through the Education Stabilization Fund. The governor also highlights funds for the Georgia Department of Transportation to expand the system of roads partially funded by bonds secured with future toll collections. Additional funding will support repairing, replacing and upgrading roads, bridges, and rail lines.

Efforts to support the state’s rural communities include \$40 million in FY 2022 for the OneGeorgia Authority to establish a Rural Innovation Fund. Many of Georgia’s rural areas lack connection to quality internet to which access can be the deciding factor in business and industry site selection, determining whether an area enjoys the resulting jobs and other economic benefits. Quality internet connection is a prerequisite for attracting remote workers, and opens doors to innovation, entrepreneurship and education. The state budget included \$20 million in FY 2021 and an ongoing \$10 million per year for the OneGeorgia Authority to establish a broadband infrastructure grant

## GOVERNMENT ACCOUNTS FOR 15 PERCENT OF GEORGIA’S JOBS



Source: U.S. Bureau of Labor Statistics, QCEW 2020 Average.

program. However, some distribution of state funds may have been delayed in order to provide synergy between state initiatives and broadband-related funds stemming from the federal Infrastructure Investment and Jobs Act. Smart application of these funds can empower Georgia's rural communities to capitalize on economic development projects and expanded teleworking opportunities. Rural communities' low cost of living has potential to attract workers who no longer need to commute to the office daily.

The FY 2022 budget has estimated tax revenue of over \$24.2 billion, an estimated increase of 3.6 percent from 2021. Total revenues for FY 22 are projected to be \$27.2 billion. This is a 2.6 percent increase from the previous year, reversing the -1.2 percent and 0.3 percent declines experienced in 2021 and 2021, respectively.

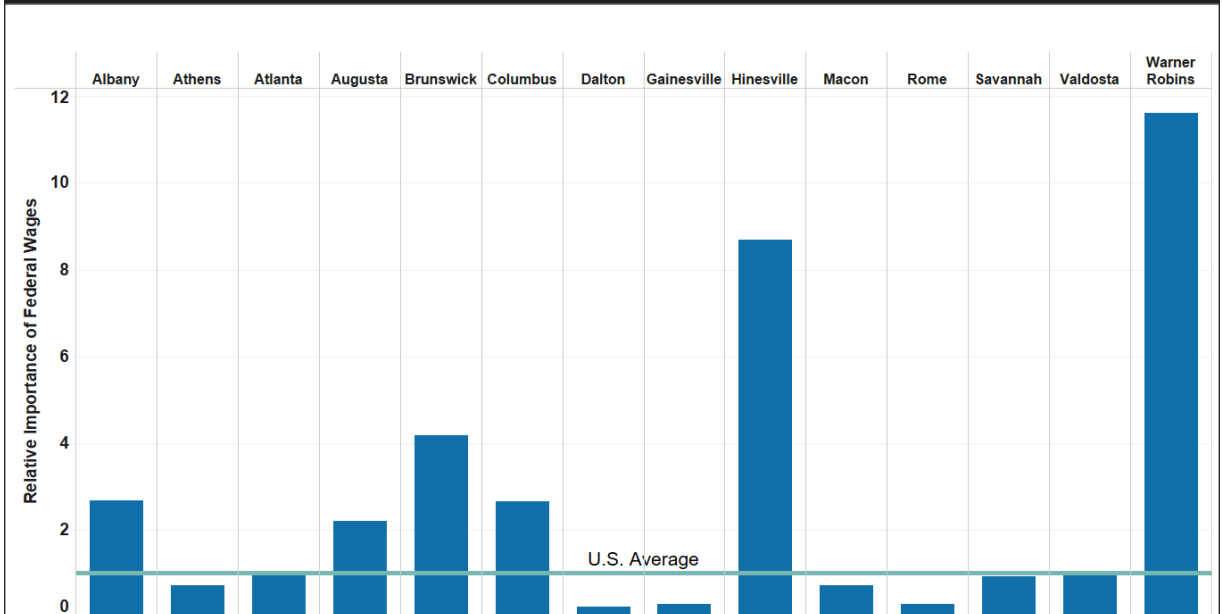
Although budgets for most departments change little from year to year, here are some notable changes.

The greatest percent change relates to the Department of Administrative Services, although it is explained by the elimination of \$3.7 million in one-time funds. The Department of Community Affairs saw a significant increase related to the OneGeorgia Authority's broadband and rural development initiatives noted earlier. The Department of Community Health displays the largest dollar increase equating to an 11 percent increase from FY 21's budget, partially explained by an additional \$4.8 million for inspection and licensing of long-term care and health facilities, \$35 million for the Indigent Care Trust Fund, and \$2.8 million for graduate-level medical education programs supporting 188 new residency slots in primary care medicine. The largest departmental appropriation is the Department of Education's \$10.2 billion—just shy of FY 21's amended budget, but above FY 21's original budget of \$9.6 billion. The Commissioner of Insurance is budgeted an additional \$2.4 million

to support insurance fraud deterrence. Although the Department of Public Safety's budget is nearly \$10 million lower than FY 21 amended levels, it is set to receive over \$3 million for a 75-person trooper training school. The Department of Revenue will receive \$25 million to offset foregone revenue related to forestland conservation.

The area receiving the largest cuts from FY 21's amended budget is the General Obligation Debt Sinking Fund (-\$122 million). The state's debt service limit is 10 percent of the previous year's receipts. This measure has been trending down from 8.1 percent in 2011 to around 5 percent in recent years. The state also maintains a Revenue Shortfall Reserve, or "rainy day fund" that it uses during times of hardship. In response to the Great Recession, the fund went to a low of \$103 million in 2009 from a previous high of over \$1.5 billion in 2007. It has been steadily replenished each year and since 2014 it has met its maximum allowable balance

## IMPACT OF FEDERAL EMPLOYEE WAGES



Wages from federal jobs are 11 times more important to Warner Robins than to Atlanta.

Source: U.S. Bureau of Labor Statistics, QCEW 2020 Average.

equal to 4 percent of the previous year's net revenue collections. This along with its capacity to handle additional debt is an indicator of the state's strong financial health.

### Government Borrowing

Governments borrow money in the form of bonds. Bonds at the state and local level are frequently referred to as municipal—or “muni”—bonds. Individuals and entities who purchase government debt are entitled to interest payments throughout the term of the bond, plus return of the principal at the end of the term. Depending on the nature of these bonds, interest income may be exempt from state and federal income taxes, making them an attractive investment. Additionally, governments are viewed as less likely to default on their debt than corporate bond issuers. (The last U.S. state to default on its bond was Arkansas in 1933.) Tax-exempt bonds are often backed by revenue from taxes, tolls or payments for services like water.

The combined effect of tax exemption and low rate of default is that governments pay a lower rate of interest, and have lower borrowing costs, than they would otherwise. The tax-exempt status of muni bonds increases their appeal to investors, particularly those in higher tax brackets. Even the threat of rising tax rates can increase the attractiveness of muni bonds to investors.

There have been signs illustrating the strength of the muni bond market and appetite of investors throughout the Covid recession and recovery. Throughout 2021, investment in muni bonds was at its highest levels since 2008. In October 2021, the Georgia Ports Authority issued a series of tax-exempt bonds totaling more than \$427 million. Plans include financing various capital improvement projects such as enhanced cargo ship docking space, expanded container storage and purchase and installation of specialized cranes for the loading and unloading of cargo. These bonds are secured by revenues derived from operation of port facilities, rather than by state tax revenue.

Competing East Coast ports are also capitalizing on bond market conditions. In August 2021, Florida's Miami-Dade County issued approximately \$1.4 billion in bonds backed by revenue from the Port of Miami. It is the largest port-related bond issuance since the Port Authority of New York and New Jersey's \$1.1 billion issuance in the summer of 2020. Revenue from these bond issuances has been slated to refinance higher-cost debt and to make improvements that make the ports more competitive for shipping and cruise traffic.

Georgia continues to enjoy the highest available bond rating by the three biggest ratings agencies—Moody's, Fitch, and Standard & Poor's. In June 2021, Moody's assigned its highest rating to the Georgia State Road and Tollway Authority's guaranteed revenue bonds. In justifying the triple A rating, Moody's cited Georgia's “strong finances and liquidity, robust fiscal management and governance,” as well as its “diverse economy and favorable demographic trends...that will contribute to long-term stability.” While local governments can be assigned credit ratings and issue bonds themselves, the Georgia Constitution allows the state to issue general obligation bonds to make loans to local entities for a variety of purposes. This allows local government entities of various sizes to access affordable credit.

### Government Spending

States receive different levels of federal funding. One way to look at the relationship between citizens, states, and the federal government is by the balance of payments—the difference between the flow of federal funding to a state versus the amount of revenue the federal government receives from a state. Based on analysis by the Rockefeller Institute of Government, between 2015 and 2019 Georgia received more than \$105 billion over what it contributed to the federal government, placing it number 14 between Mississippi and Michigan. In 2019, our state received approximately \$2,337 per Georgian more than the state paid to the federal government. Virginia ranked first, with a balance of payments more

than four times that of Georgia's. On the other end of the spectrum was New York, which contributed over \$142 billion more to the federal government than it received.

The federal government provides food-purchasing assistance to around 20 million households each year via the Supplemental Nutrition Assistance Program (SNAP). In Georgia, around 11 percent of households receive SNAP benefits. More than \$2.8 billion in benefits were distributed to around 1.5 million Georgians in FY 2020.

In 2018, Congress passed a law ordering the U.S. Department of Agriculture (USDA) to conduct a review of the SNAP benefits calculations. The years-long review concluded that the benefits were inadequate for providing a healthy diet and in August 2021 the Biden administration announced new rules that should result in the largest permanent increase to SNAP benefits in the program's history. USDA estimates that in Georgia this will result in an average annual increase of \$778 per participating household. Based on pre-pandemic household participation, this change could bring an additional \$487,656,624 in federal support to Georgia households. As the funds are spent by participants and injected into local economies, the multiplier effect should be strongest in the state's poorest communities.

Distribution of economic stimulus checks during the pandemic provided the federal government opportunities to develop new methods of injecting funds directly into taxpayers' bank accounts. The experience with newly developed tools will likely inform efforts in the future. For example, beginning in summer of 2021, the majority of households with children began receiving monthly payments from the IRS. For qualifying taxpayers who filed tax returns in 2019 or 2020, enrollment was automatic. Unlike a typical tax credit, taxpayers did not need to wait until tax filing season to receive the benefit. Instead, the tax credits were distributed via automatic monthly payments. Regardless of whether this program is extended

in its current form, it is a new tool in the federal government's belt with potential to be repurposed for other economic stimulus and social support situations.

Although infrastructure bills moving through Congress will impact Georgia's economy, the effects will likely not be felt in 2022. Infrastructure projects will increase productivity and boost GDP, although the bulk of the effects may take years to realize. Also, unlike stimulus payments that were injected directly into people's bank accounts, for infrastructure projects there is a lag between legal authorization of the projects and disbursement of funds into the economy. Some of this can be attributed to time for design, review, contracting, and construction inherent in infrastructure projects.

According to a recent report from the Congressional Budget Office, it is reasonable to expect that only \$120 billion of a hypothetical \$500 billion funding would be spent by fiscal year 2026. Effects of this type of spending on GDP will differ greatly depending on how the projects are funded. In its report, CBO explores two scenarios: 1) a deficit-neutral scenario, and 2) a scenario where spending is financed by federal borrowing. In the first scenario, funding comes from reduction in the government's noninvestment purchases. Although its boost to GDP is greater in the long run, it would not reach its full effect for close to 15 years.

In the second scenario, the impact on GDP would spike within the first two or three years. However, after the spike, the impact to GDP over time would be slower and achieve only about half the rate of the first scenario. In practice, a project would likely resemble a blend of the two scenarios.

Governments at all levels contract with private companies to procure services and materials. Contracts may be large, like the federal government purchasing military jets, the state government leasing office space, or a local government replacing a fleet of police cruisers. Contracts are often for smaller items like uniforms for police, latex gloves for health

workers, or peanut butter for school cafeterias. Governments may contract for services, like tree-trimming, engineering, and HVAC maintenance. Government contracts can be a reliable and lucrative source of income for Georgia businesses.

Governments must compete in the market, however, and when items are scarce, contracts may go unfulfilled. Supply chain issues will contribute to the scarcity of items like vehicles, electronics, and furniture and result in that spending being delayed. Rising costs of food and labor make contracts more expensive or over-budget. While governments have immediate needs that must be fulfilled, many are likely to delay some major projects—such as construction and purchases of heavy equipment and vehicles—until supply chains and prices stabilize.

### The 2020 Census

Every ten years the federal government conducts a census. In addition to providing valuable data used by businesses, economists, academics, and policymakers, it will impact distribution of federal funding as well as political power for the next decade. According to the U.S. Census Bureau, the country's population increased 7.4 percent between the 2010 and 2020 censuses—the slowest rate since the 1930s. Georgia outpaced the nation and increased by about 10.5 percent—a gain of just over 1 million residents. Three states—Illinois, Mississippi, and West Virginia—declined in population. At 18.4 percent, Utah gained the most population, followed by Idaho, Texas, North Dakota, and Nevada.

Georgia's population growth can be mostly attributed to the Atlanta area. The Atlanta-Sandy Springs-Roswell MSA increased its population by 15 percent, accounting for more than 800,000 of the state's 1 million net gain of residents. Of the Atlanta MSA's 29 counties, only Meriwether shrank.

The three counties that comprise the Savannah MSA grew their populations nearly 14 percent, or just over 48,000 residents. The Augusta MSA's growth of nearly 10 percent or 36,000 residents was mostly

centered in Columbia County. The Athens MSA experienced growth in all four of its counties, with Oconee growing 25 percent (over 8,300) and Clarke growing 9 percent (over 11,000). The Brunswick MSA's 6 percent growth came mostly from Glynn County's addition of nearly 6,000 residents. Three of Columbus MSA's counties shrank, but growth in Harris and Muscogee counties gave the MSA a net gain of 3.8 percent, or around 9,500 residents.

Two of Georgia's MSAs lost population. The Albany MSA has about 8,600 fewer residents, or 5.6 percent, than it had in 2010. Its bright spot is Lee County, which added nearly 7 percent or 2,000 residents. The second MSA to shed population was Macon at -1 percent, or about 2,400 residents. The 7.4 percent growth in Monroe County could not offset losses elsewhere. Bibb County's larger relative size means its 2 percent contraction contributed to about 2,800 residents leaving the MSA.

Of the 89 counties that experienced growth, Forsyth and Long grew by more than 40 percent—however Forsyth's population grew by more than 75,000 people while Long grew by about 5,700. Fulton and Gwinnett each grew by over 17 percent, or 156,821 and 137,821, respectively. They were followed by Forsyth, Cobb, and DeKalb, each of which grew by over 70,000.

Seventy-four of Georgia's 159 counties are part of a Metropolitan Statistical Area (including Dade, Walker, and Catoosa counties which are part of the Chattanooga, Tennessee's MSA). Of those, just over three-quarters experienced growth. Cumulatively, MSA-affiliated counties grew by over 12 percent (more than 980,000 residents), whereas non-MSA-affiliated counties grew by just over 2 percent. Of the non-MSA-affiliated counties, two stand out: Jackson County grew 26 percent (over 15,000 residents) and Bulloch County grew 15 percent (over 10,000 residents). The next tier of non-MSA-affiliated counties included Camden, Lumpkin, and Union which grew by between 4,000 and 5,000 residents.

Population increase creates demand for services and requires expenditure growth, whereas population decline can shrink the tax base and revenues. Declining population generally does not bode well for economic growth or for the fiscal health of a government. Of Georgia's 159 counties, 70 decreased in population between 2010 and 2020. Baker, Macon, Randolph, Turner, Dooly, Talbot, Sumter, Terrell, Warren, Twiggs, Taylor, and Clay counties declined in population by more than 10 percent. By sheer numbers, Dougherty County lost the most residents (8,088), followed by Sumter (3,537), Bibb (2,810) and Macon (2,028). Mitchell, Dooly, Worth, Jefferson, Crisp, Decatur, Dodge, Chattooga, Turner, Washington, Randolph, and Ben Hill counties lost between 1,000 and 2,000 residents.

Although population growth typically increases demand for government services, the age bracket of the population growth/decline can determine what services are impacted. Areas where growth skews younger will increase the need for education. Areas with aging populations may see issues with declining tax revenues, as senior citizens spend less in retirement (sales tax), earn less income (income tax), and may be exempt from certain property taxes.

### Tax Revenue

Government services are funded by revenue collected from taxes and fees. The quality and availability of the services relies in large part on the amount of economic activity. While population growth tends to increase demand for services, that growth broadens the tax base and generally corresponds with growth in revenue collection. Formation of businesses, new jobs, and wage growth also contribute to revenues and broaden the tax base. A broader tax base provides governments flexibility to provide higher quality services and/or lower tax rates. Identifying the right balance directly impacts Georgians' quality of life and attractiveness to business and jobs.

Different types of taxes can be evaluated not only on the amount of

money raised, but on other qualities, such as stability. Property taxes, on which local governments and school districts often rely, are impacted by the housing market, but provide relatively stable revenues from year to year. On the other hand, income taxes tend to fluctuate more with an area's economic conditions, so diversification of revenue sources is beneficial to governments. Another way to evaluate taxes is fairness or equity. Income tax rates are often described as progressive in nature, in that rates increase for individuals with higher ability to pay. Sales taxes are often regressive in nature. Even though two people may pay the same 4 percent sales tax on \$100 of goods, that \$4 in tax makes a bigger difference to a low-income individual than it does to a wealthier person.

In spite of its regressive attributes, sales taxes are effective at capturing immediate gains in economic activity. Additionally, sales taxes collect revenue from individuals who do not live or work in that locality, making these taxes a valuable tool for governments where significant economic activity comes from commuters or vacationers.

In Georgia, many goods and most services are exempt from sales tax. Although the exemption for food and food ingredients (most groceries) makes the tax less regressive and lessens the tax burden of low-income households, it does introduce more volatility. This is because during recessions income usually drops faster than consumption. People tend to use savings, unemployment payments, and borrowing to maintain consumption of necessities like groceries. Exemption of most services from sales tax tends to help high-income households, as high earners tend to purchase more services. In an effort to cultivate Georgia's business-friendly environment and support job creators, under certain conditions the state exempts items including manufacturing equipment, raw materials, energy used in manufacturing, pollution control equipment, and technology and software purchases. Expanding existing businesses and attracting new ones broadens the tax base and can allow for more revenue

to be collected at lower rates.

The state's largest sources of revenue are income tax (personal and corporate) and sales tax. In Georgia, personal income tax collections dwarf corporate income tax collections. In FY 2021, personal income tax revenues have been estimated to account for over \$12 billion, compared to the approximately \$770 million attributable to corporate income tax. Georgia's 4 percent sales tax is estimated to have brought in over \$6.27 billion dollars. Together, sales and income taxes accounted for nearly three-quarters of the state's revenue in FY 2021. About an eighth of the state's revenues comes from other taxes and fees including motor vehicle title tax, license fees, alcohol and tobacco sales, and insurance premiums. The last eighth can be attributed to designated funds like the Lottery, Fuel Tax and Tobacco Settlement Funds. Historically, Georgia levied a state property tax, but has not done so since 2016.

The mix of revenue sources on which local governments rely vary by location. Generally, property taxes make up the largest source of revenue for local governments. Based on their FY 2022 budgets, property tax accounts for nearly a third of Atlanta's general fund revenues, and just over a quarter of Valdosta's. In the city of Toccoa, property taxes account for less than 10 percent of its 2022 general fund revenues—less than the 13.7 percent of revenues attributed to its local option sales tax. In Savannah's FY 2021 budget, property taxes accounted for 38 percent and sales tax accounted for nearly 24 percent of general fund revenues. The fiscal health of a local government is directly impacted by how its tax structure interacts with economic conditions. This in turn affects the quality and availability of the services provided.

The rise of online shopping has posed a challenge to sales tax collections and the services that rely on those revenues. If taxes are not applied to a method of sale, sellers who are not collecting the tax are able to offer lower prices and have an advantage over sellers who do collect the tax. Additionally, the state,

local governments, and schools are deprived of that revenue. In recent years, the Georgia General Assembly has passed laws designed to ensure that a larger share of taxes is collected from online sales and remitted to the government. However, the situation is more nuanced than “If you buy an item online it is tax-free.” Not all online retailers have avoided collecting sales taxes—some, even the largest online retailers, have been collecting sales tax for years and paying it to the state.

One recent effort to capture more revenue from online sales involves a law that went into effect in the spring of 2020. This law requires “marketplace facilitators” to collect sales tax on sales from third-party sellers that utilize their marketplace. For example, some companies only sell their own products. On the other hand, marketplace facilitators allow individuals or businesses to sell products, but the marketplace facilitator does not own the product. When you purchase an item via eBay, you are not buying the item directly from eBay, you are buying it from a seller who is simply using eBay’s platform. Some major online retailers such as Amazon and Walmart act as hybrid marketplace facilitators, selling inventory of third parties in addition to that of their own.

Recent updates to the Georgia Code Annotated define marketplace facilitator and requires such facilitators to collect and remit the taxes. Without this change to the law, marketplace facilitators could potentially avoid collecting the taxes and put the responsibility on the third-party seller who might not be compelled to pay the tax. The timing of this bill’s effective date in spring of 2020 was very fortunate, because just as the pandemic shifted even more economic activity from brick-and-mortar to online, the law expanded the government’s ability to capture this revenue. Comparing gross sales and use tax collections FY 2021 to FY 2020 year-to-date through April, they were up 10.4 percent, or more than \$1 billion. Although available data does not make it possible to determine the amount of new revenue that can be attributed to the change,

it is safe to say it had a positive impact on revenues.

Nationwide, sales and purchases of goods rebounded much more quickly than services during the Covid era. In Georgia, many services are not subject to sales tax. While income derived from the sale of services is reflected in income taxes of corporations and workers in the service industries, the slower recovery of services has a lesser impact on Georgia’s revenues than would a slowdown in purchases of goods.

Commercial centers often have higher “daytime” populations who generate economic activity around offices. Daytime workers generate revenue for governments in the form of sales taxes when they spend money on lunches at restaurants, buy breakfast on the way to work, or shop for a few items on the commute home. In the evenings, these workers’ commutes take them into different tax jurisdictions. The degree to which Georgians continue to commute to work will impact revenues, as changes may shift daytime economic activity toward workers’ residences. The primary revenue source for many local governments is property tax. In cities where concentrated, high-value commercial space and office buildings are the primary feature, this revenue source may be at risk. Cities where public transit is funded by ridership fees may lose revenue and cut services.

## Conclusion

Government activities will continue to have a high impact on the lives of Georgians—but the impact is not uniform. The communities around Warner Robins, Hinesville, Columbus, Brunswick, and Albany will feel the impact of changes in federal employment and pay across their entire economies. The economies of Dalton, Rome, Gainesville, Macon, and Athens will be less affected by those changes. With the exception of Athens’ reliance on state jobs in higher education, state employee wages do not have an outsized impact. Atlanta with its strong and diversified private sector economy is much less reliant on government jobs. However, all Georgians are

impacted by changes in state government hiring, as it impacts the government’s ability to provide services across the state. Many Georgians live some distance from state government offices. Increasing access to quality internet, particularly in underserved rural areas, will help connect Georgians to government services like education and financial support. As more governmental functions move online, citizens enjoy those efficiencies by saving time and expense of physically traveling to a government office and waiting in line.

Georgia’s households, businesses, and municipalities received unprecedented financial stimulus from the federal government in 2020 and 2021. Although aid is unlikely to continue at these levels, these newly developed tools for delivering economic stimulus may be repurposed to address future crises, extending their impact to Georgians in 2022 and beyond. ♦



